

**Oracle® Communications Data Model**

Reference

Release 11.3.1

**E28440-03**

April 2012

Oracle Communications Data Model Reference Release 11.3.1

E28440-03

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# Preface

The *Oracle Communications Data Model Reference* describes the data model structures for Oracle Communications Data Model. Since the needs of each Oracle Communications Data Model environment are unique, Oracle Communications Data Model is configurable so it can be modified to address each customer's needs.

## Audience

The audience for the *Oracle Communications Data Model Reference* includes the following:

- IT specialists, who maintain and adjust Oracle Communications Data Model. They are assumed to have a strong foundation in Oracle Database and PL/SQL, Oracle Warehouse Builder, which generates the data warehouse, AWM, and Oracle Business Intelligence Suite Enterprise Edition.
- Database administrators, who will administer the data warehouse and the database objects that store the data. They are assumed to understand Intra-ETL, which is used to transfer data from one format to another; Oracle Warehouse Builder, which generates the data warehouse, as well as PL/SQL and the Oracle Database.
- Business analysts, including information and data analysts, market analysts and sales analysts.

This document is also intended for data modelers, data warehouse administrators, IT staff, and ETL developers.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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## Related Documents

For more information about Oracle Oracle Communications Data Model, see the following documents in the Oracle Oracle Communications Data Model documentation set:

- *Oracle Communications Data Model Installation Guide*
- *Oracle Communications Data Model Release Notes*
- *Oracle Communications Data Model Implementation and Operations Guide*

## Conventions

The following text conventions are used in this document:

<b>Convention</b>	<b>Meaning</b>
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Part I

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## Logical and Physical Data Model

This part provides introductory information and details for the Oracle Communications Data Model Logical and Physical Data model.

Part I contains the following chapters:

- [Chapter 1, "Introducing Oracle Communications Data Model"](#)
- [Chapter 2, "Logical Data Model Foundation"](#)
- [Chapter 3, "Logical Data Model Dimensions"](#)
- [Chapter 4, "Oracle Communications Data Model Physical Data Model"](#)
- [Chapter 5, "Oracle Communications Data Model Logical to Physical Mapping"](#)
- [Chapter 6, "Oracle Communications Data Model Partitioning"](#)



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# Introducing Oracle Communications Data Model

This chapter introduces the Oracle Communications Data Model, which is a standards-based, pre-built approach to communications data warehousing.

This chapter includes the following sections:

- [What is Oracle Communications Data Model?](#)
- [What Are the Benefits of Using Oracle Communications Data Model?](#)
- [What Are the Components of Oracle Communications Data Model?](#)
- [Oracle Communications Data Model Concepts](#)
- [Oracle Products That Make Up Oracle Communications Data Model](#)
- [TM Forum Information Framework \(SID\) Conformance](#)

## What is Oracle Communications Data Model?

Oracle Communications Data Model is a standards-based, pre-built approach to communications data warehousing enabling a communications company to realize the power of *insight* more quickly. Oracle Communications Data Model reduces costs for both immediate and on-going operations by leveraging out-of-box Oracle based Data Warehouse and Business Intelligence solutions, making world-class database and business intelligence technology solutions available with a communications specific data model.

Oracle Communications Data Model offers a single-vendor solution package that is tightly integrated with the business intelligence platform. With pre-built data mining, Oracle Online Analytical Processing (Oracle OLAP) and dimensional models, Oracle Communications Data Model provides you with industry-specific metrics and insights that you can act on immediately to improve your bottom line. These business intelligence solution offerings take advantage of Oracle's scalability and reliability, using Oracle's familiar optimization, parallelism, and performance engineering within the database.

Oracle Communications Data Model can be used in any application environment and is easily extendable.

Oracle Communications Data Model includes an exhaustive set of embedded advanced analytics, using Oracle's OLAP and data mining technology. You can take advantage of pre-built and pre-tested solution sets designed by industry experts that deliver relevant insights, are actionable, and aimed at improving both top-line and

bottom-line results. You can see summarized, aggregated information or quickly navigate to drill-down transaction details to better understand business issues.

For example, with Oracle Communications Data Model's out-of-the-box reports, you can generate reports for network analysis and churn analysis. Network analysis provides air-time, subscription, roaming, load@busy hour, under utilization and patterns reports. With churn analysis you can gain improved insight into churning that provides switching and termination trends, payment and recharging patterns, subscribers life cycle and profiling. You can add your own reports as well. Oracle Communications Data Model, combined with Oracle technology, provides all of the components required for a complete and extendable Communications Data Warehouse and Business Intelligence framework to eliminate complex and costly integration requirements, all designed to reduce your total cost of ownership.

## What Are the Benefits of Using Oracle Communications Data Model?

With Oracle Communications Data Model, you can jump-start the design and implementation of a telecommunications data warehouse to quickly achieve a positive ROI for your data warehousing and business intelligence project with a predictable implementation effort.

Oracle Communications Data Model provides the following features:

- Query and Reporting for information: provides extraction of detailed and summary data.
- OLAP for data analysis: provides summaries, trends, and forecasts.
- Data Mining for insight and prediction: provides knowledge discovery of hidden patterns and insights.
- Oracle Communications Data Model is conformance certified with TM Forum's Information Framework (SID) version 8.1. For more information, see "[TM Forum Information Framework \(SID\) Conformance](#)".

Oracle Communications Data Model provides an off-the-shelf data warehouse framework that is both adaptable and extendable. Alignment with communications industry standards ensures interoperability with other systems. The pre-built, pretuned data model with intelligent insight into detailed communications and market data, allows you to quickly gain value from your data warehousing effort, supports diverse analytical requirements, and assists in building future analytical applications. Fast, easy and predictable implementation reduces risks and enables you to achieve strategic value more rapidly by eliminating deployment delays and expenses associated with built-from-scratch or proprietary data warehouse solutions.

## What Are the Components of Oracle Communications Data Model?

Oracle Communications Data Model includes the following components:

- Logical Model Foundation  
[Chapter 2, "Logical Data Model Foundation"](#) describes the logical data model.
- Logical Model Dimensions  
[Chapter 3, "Logical Data Model Dimensions"](#) describes the dimensions.
- Physical Model



[Chapter 4, "Oracle Communications Data Model Physical Data Model"](#) describes the physical data model. The logical to physical mapping is detailed in [Chapter 5, "Oracle Communications Data Model Logical to Physical Mapping"](#).

- Intra-ETL database packages and SQL scripts to extract, transform, and load (ETL) data from one layer of Oracle Communications Data Model to another.

The intra-ETL packages and SQL scripts are described in detail in [Chapter 7, "Oracle Communications Data Model Intra-ETL"](#).

- OLAP Models for Oracle Communications Data Model

[Chapter 8, "Oracle Communications Data Model OLAP Model Dimensions"](#) and [Chapter 9, "Oracle Communications Data Model OLAP Model Cubes"](#) describe the OLAP Models.

- Pre-defined Data Mining Models

These models are described in detail in [Chapter 10, "Oracle Communications Data Model Data Mining Models"](#).

- Utility Scripts

The utility scripts are described in [Chapter 11, "Oracle Communications Data Model Utility Scripts"](#).

- Reports and dashboards

[Chapter 12, "Oracle Communications Data Model Sample Reports"](#) shows the reports.

- Application Adapters

[Chapter 13, "Oracle Communications Data Model NCC Application Adapter"](#) describes the Oracle Communications Network Charging and Control application adapter.

[Chapter 14, "Oracle Communications Data Model BRM Application Adapter"](#) describes the Oracle Communications Billing and Revenue Management application adapter.

- Installation scripts

For more information on installation, refer to the *Oracle Communications Data Model Installation Guide*.

## Oracle Communications Data Model Concepts

Oracle Communications Data Model leverages several Oracle Database data warehouse and Business Intelligence concepts that need to be clarified to understand the structure and use of Oracle Communications Data Model.

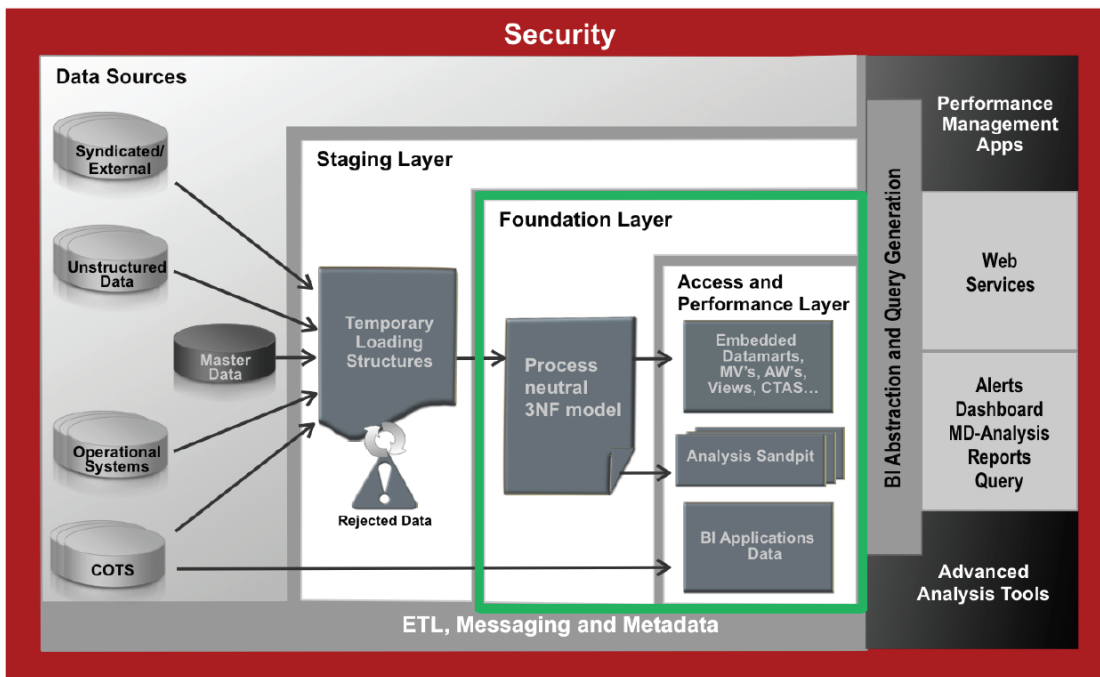
Oracle Communications Data Model provides "One Single True Vision of the Business". This unique architecture provides the Communications Service Provider (CSP) Flexibility, Agility, Scalability and Accuracy to obtain a real competitive advantage.

A typical enterprise data warehouse architecture, as shown in [Figure 1-1](#), is composed of several layers ordered by the growing actionable value of the information in the warehouse:

- The Data Source layer (operational systems, Commercial-Off-The-shelf solution, unstructured and syndicated data, with possibly a Master Data Management system).

- The Staging layer: Typically used for transformation and data cleansing. It is also sometimes used as Operational Data Store, in particular for real-time operational reporting.
- The Foundation layer: It is typically used to store all transactions and reference data at the most atomic level. Best practices require that this level is 3rd normal form, to avoid data redundancy.
- The Access and Performance or Analytical layer: this is the layer optimized for the business end-users. It usually contains the star schema to answer business questions, as well as OLAP tools and mining models.
- The Information (or Information Access) layer: This is the metadata layer and above, accessed by end-users via their Business Intelligence and/or reporting tools, or even external analytical tools (other OLAP or Mining tools). This layer is usually changeable by normal end-users (within their roles and responsibility). This is where the performance management applications provide their reports, where user roles, alerts, guided analytics, dashboards and reports are defined (usually by a specific BI administrator).
- The data movement from one layer to the other is run via ETL / ELT tools. One distinguishes the standard ETL/ELT (from data sources to foundation layer) from the intra-ETLs (from foundation layer up to the reporting).

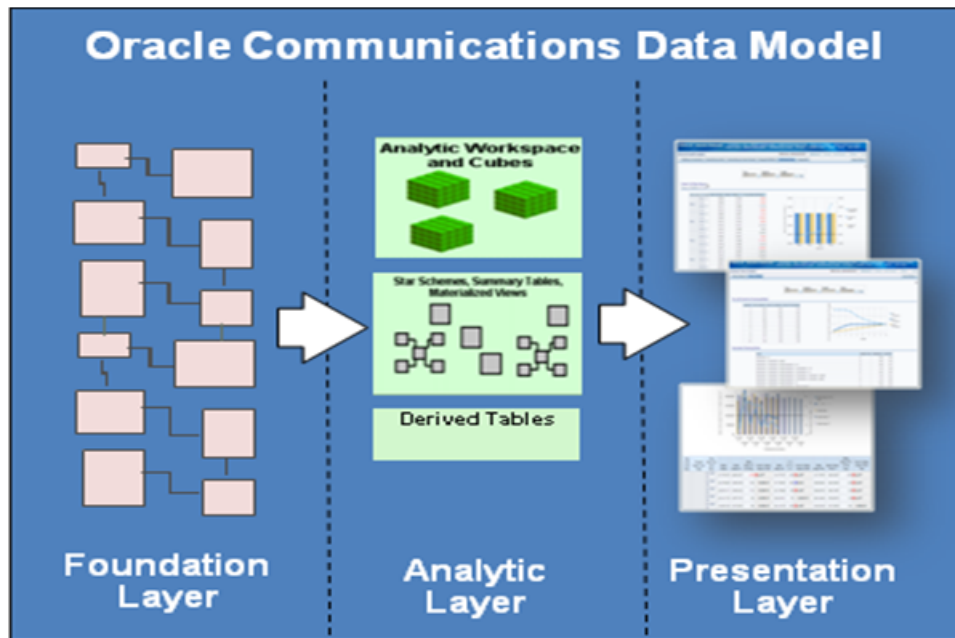
**Figure 1–1 Data Warehouse Reference Architecture with Oracle Communications Data Model (Green)**



Within a standard enterprise data warehouse architecture, as shown in [Figure 1–1](#), if an adapter is used, for example the NCC Adapter or the BRM Adapter, the Staging area is also provided. Oracle Communications Data Model covers Foundation Layer, plus the intra-ETL part, and includes parts of the reporting area if OBIEE is used (Oracle Communications Data Model also includes the pre-built OBIEE repository).

To summarize Oracle Communications Data Model includes the parts shown in [Figure 1–2](#).

Figure 1–2 Oracle Communications Data Model Inner Structure



The Oracle Communications Data Model Foundation Layer (FDL) is composed of the components shown in [Table 1–1](#).

Table 1–1 Oracle Communications Data Model Foundation Layer Components

Component	Usage
Reference entities and tables	<ul style="list-style-type: none"> <li>Used to store master reference entities required by a service provider's operation</li> <li>Non-changing infrequently-changing data</li> <li>These entities translate into dimensions and hierarchies</li> <li>Physically, table names start with "DWR_".</li> </ul>
Base entities and tables	<ul style="list-style-type: none"> <li>They are used to store transactions from systems of record (CRM, Billing, OSS, etc.)</li> <li>It contains data at atomic level with the lowest level of granularity possible</li> <li>Required to perform detailed analysis, and uncovering causal effects and associations</li> <li>Physically, table names start with "DWB_"</li> </ul>
Lookup entities and tables	<ul style="list-style-type: none"> <li>Hold descriptions for common code lookups (e.g. plan type, reason code, etc.)</li> <li>Their goal is to save space since one doesn't have to store long descriptions in each transaction record.</li> <li>Physically, table names start with "DWL_"</li> </ul>
Control tables	<ul style="list-style-type: none"> <li>These are only used and filled by the intra-ETLs.</li> <li>Physically, tables names start with "DWC_"</li> </ul>

The Analytic Layer serves as an abstraction layer to simplify analytical access; this layer is a subject oriented representation of data ("shellfish" model). The analytic layer is easily understood by end-users and is simpler to navigate. This layer consists of aggregates, summaries, hierarchical relationships, and so on. The analytic layer is composed of star schemas, materialized views, OLAP cubes, and so on and is

populated using intra-ETL processes from data in the Foundation Data Layer (FDL). The Oracle Communications Data Model Analytic layer is composed of the components shown in [Table 1–2](#).

**Table 1–2 Oracle Communications Data Model Analytic Layer Components**

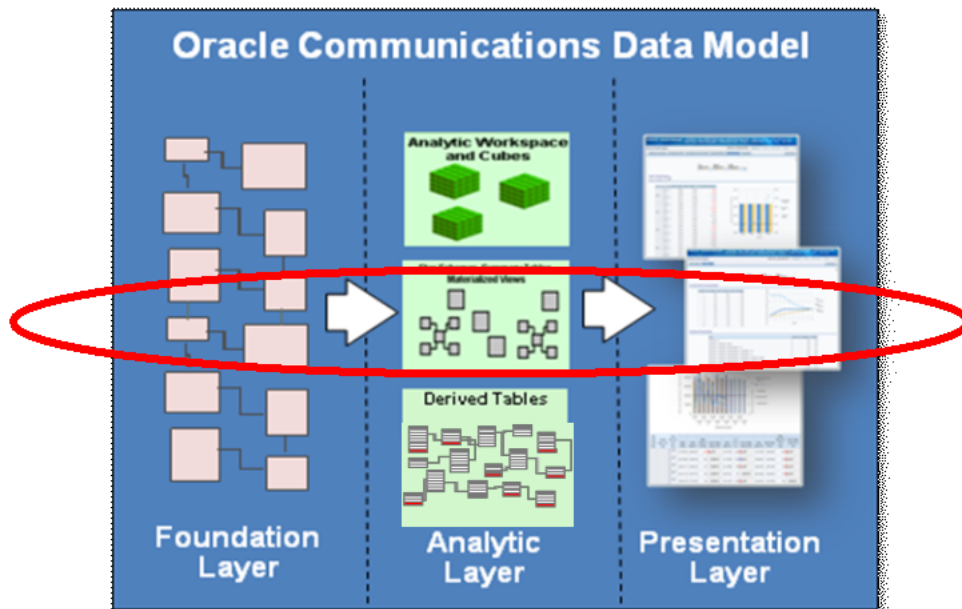
Component	Usage
DERIVED entities and tables	<p>Provide a transition level to STARS. This layer is denormalized and is typically used for operational reporting and data mining, to uncover new insights and predict the future and:</p> <ul style="list-style-type: none"> <li>■ Provides information that can only be derived from base data, usually at day level.</li> <li>■ Includes information such as churn factors, profiling and prediction, congestion or under utilization, and so on.</li> <li>■ Leverages data mining, advanced statistics, and complex queries.</li> <li>■ Physically, tables start with "DWD_".</li> </ul> <p>Examples of derived tables include: Account Debt per Day, Account Payments per Day, Call Center Calls per Day, Commissions per Day, Connections/Disconnections Day, Costs - Customer &amp; Organizational, Customer Mining, Market Share per Month, Network Availability per Day, Sales Campaign Summary, Sales Representative Statistics, and so on.</p> <p>There are also six mining models at this level: Customer profiling/segmentation, Lifetime value prediction, Customer sentiment, Churn prediction, Important churn factors, Cross-sell opportunity.</p>
AGGREGATE entities and tables	<p>Provide information to analyze and summarize, usually at the monthly level and:</p> <ul style="list-style-type: none"> <li>■ Leverages base and derived data models to provide aggregated data such as summaries, averages, and so on.</li> <li>■ Enables dimensional analysis on wide variety of subject areas.</li> <li>■ Leverages Oracle OLAP cubes (pre-built OLAP cubes are available. For more information, see <a href="#">Chapter 9, "Oracle Communications Data Model OLAP Model Cubes"</a>).</li> <li>■ Contains tables starting with "DWA_"; usually materialized views.</li> <li>■ Represents the information access layer: It covers all the metadata.</li> </ul>

## Business Areas and Subject Areas in Oracle Communications Data Model

A **Business Area** is a broad slice through Oracle Communications Data Model grouping where all tables that cover the associated business processes (reports, metadata, Mining, OLAP, 3NF) are all accessible through the same GUI (if OBIEE is used). A business area is a conceptual grouping, used at the default report level. The reports are organized by related subject areas gathered in "business areas".

[Figure 1–3](#) represents a Business Area: a broad slice through Oracle Communications Data Model covering all the entities and mapped business processes associated with the business area.

Figure 1–3 Business Area: A broad Slice through Oracle Communications Data Model



There are eight Business Areas in Oracle Communications Data Model:

- **Customer Management:** covers the complete customer lifecycle, from acquisition to churn, including the customer interaction. This area also contains the notion of account (shared with revenue), contract, subscription, and so on
- **Revenue:** covers all revenue sources (pre-paid/postpaid, equipment rental, or sales), the sales process, the debt, payment and refund/adjustment processes. This area is the accounting view of a customer or the sales process.
- **Product Management:** covers the complete product lifecycle, from creation to drop-off.
- **Provisioning and activation:** covers the complete order management and installation process. This area is also the place for a number portability, trouble ticketing (shared with Customer Management) and SLA management items.
- **Network:** covers all the network related subject areas that are not provisioning. In this area, the complete network of the Service Provider can be described and analyzed. This covers network usage, and network health.
- **Marketing:** covers all the loyalty, campaign, and promotion processes with the notion of prospect and contact list, as well as market share (common with Customer management).
- **Cost and Contributions:** is the financial perspective of the business, with all the costs associated with running a communications service provider business, whether as operator, MVNO, or simple content provider. This area intersects with all other business areas, but limits itself to cost and profitability measurements.
- **Partner Management:** this business area covers all types of partners, whether interconnection or roaming operators, content providers, dealers (sales), suppliers, external debt collection agencies, and so on.

A **Subject Area** is a thin slice through Oracle Communications Data Model grouping all tables, mainly at the foundation layer, that cover a specific (logical) concept,

business process or question. For example, the subject area PARTY defines the notion of a "PARTY". The "Individual" and "Organization" are both a subset of PARTY. The CUSTOMER, OPERATOR, and VENDOR are example of Party types. At the opposite of this abstract subject area, the subject area CALL CENTER, with pre-built aggregates provided in Oracle Communications Data Model on top of the foundation layer covers all the customer interactions that are done through a call center, whether inquiry, complaints, or change requests.

From an implementation perspective, Oracle Communications Data Model can be filled by subject or business area, without taking care of having to feed all tables in order to have tangible and usable results.

After filling all reports of a given business area with data, this does not mean that the whole business area is covered. Feeding all the tables needed to have all reports of a given business area probably also feeds some reports of other business areas. For example, some PRODUCT, COST and COLLECTION AGENCY entities are required in the Business Area Revenue (for the Revenue OLAP cube). This also partly covers the Product Management, Cost and Contribution, as well as the Partner Management business areas.

## Logical Data Model and Physical Data Model in Oracle Communications Data Model

A logical data model describes how to store information that defines business processes. The logical data model is an interface between business and technical staff, and allows these groups to provide a common understanding of business data elements and requirements.

The logical data model also provides the foundation for designing an Enterprise Data Warehouse. In Oracle Communications Data Model, the logical data model is designed to avoid data redundancy, as much as possible, without impacting performance, and thus prevent data and business transaction inconsistency. The idea is to facilitate data re-use and sharing, hence reducing development and maintenance cycle and cost.

The logical data model is a single source for the model definition, with its own naming conventions that are valid for both business and IT.

In describing the business processes independently of the data sources and the technology, the logical data model clarifies the functional specifications, while avoiding (unnecessary) assumptions.

This implies that, in principle, the logical data model of Oracle Communications Data Model could work on any platform. However, on top of the fact that it would not be supported by Oracle, such an implementation would not benefit from all the pre-built pre-integrated technologies leveraged with Oracle Communications Data Model, in particular in the analytical layer, such as Partitioning, OLAP, Mining models, and so on.

The Oracle Communications Data Model physical data model is the concrete implementation of the logical data model. It is fully technology dependent. The physical data model transforms business relationships into keys or indexes. It takes into account the infrastructure and technology to optimize the performance for end-users. The physical data model has its own naming convention in parallel to the one of the logical data model. Looking at the physical data model, one should be able to "build-back" the logical data model from the entity relationship, even if one could not have all the key understanding of a business process behind, unless one knows the business.

## Entity Relationships in Oracle Communications Data Model

### Relationship between two tables

A relationship between two entities should exist in the model only if there is a direct (business) relationship between those entities. You can categorize the relationships as:

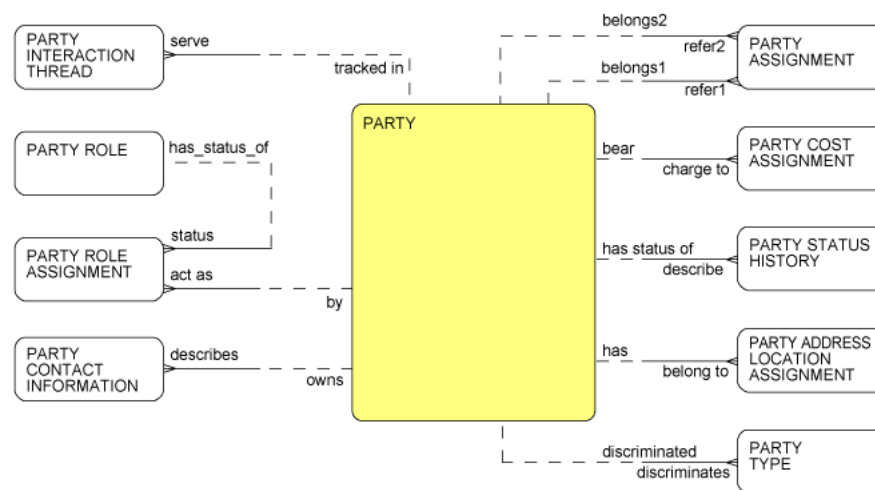
- Description or added information: (typically for Lookup tables) An entity contains codes that described and/or validates the various values that an attribute of the original entity possesses. Physically, the two entities are related via a Foreign Key.
- Direct relationship: Typically, when two entities are related from a business point of view, the model needs to make sure this relationship is explicitly present and described. A direct relationship contains a direct business link between the entities (typically serves, uses, owns, and so on). There must be a distinction between clear 1 to many (1:n) or 0 to many (0:n), and many to many (n:m) relationship.
  - 0:n or 1:n relationships: typically business types like "owns", "has got", "serves", "uses"... It is usually directly linked to an attribute (like description), and may be a foreign key link.
  - m:n relationships: If the relationship can be "many to many", use an "Assignment" Entity between the entities to transform this m:n relationship in m:1 (or 0) and (0 or) 1:n.

### Self-Relationship

Very often, two rows of a given entity (say "ENTITY") have to be related with one another. Most of the time, Oracle Communications Data Model uses a table named "ENTITY ASSIGNMENT".

Example: PARTY and PARTY ASSIGNMENT, as shown in [Figure 1–4](#).

**Figure 1–4** *PARTY and PARTY ASSIGNMENT Entities*



**PARTY ASSIGNMENT** represents the relationship between two parties uniquely identified in Oracle Communications Data Model, whatever the role they play within the model: As Customer, Employee, dealer or even all three for the same individual!

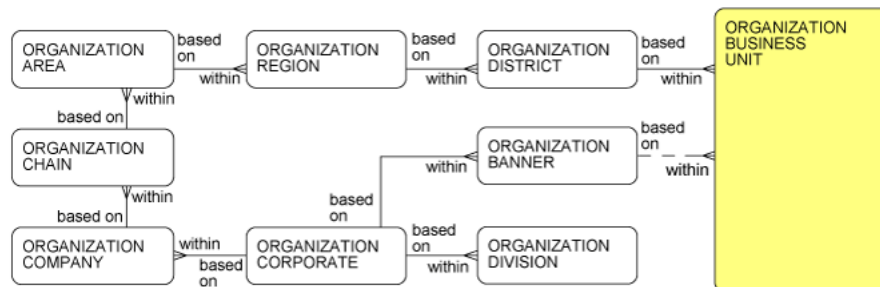
In Party, the *PARTY TYPE* is a "person", an "organization", or an "organization business unit". It is not "Customer". This is a Party role. A given Party can have several roles which are "chosen" depending on the type of business interaction that takes place. However, the type never changes.

The only exception to this rule is with ADDRESS LOCATION. One uses the "ADDRESS RELATED" table, for example to feed the fact that an alternative billing address has been given by customer when the first one fails or because he is in holiday.

## Named and Flexible Hierarchies

- A named hierarchy is a pre-built hierarchy of general interest, usually used/seen in the market, with fixed levels (with a specific name for each).
- A flexible hierarchy is a hierarchical structure that is freely definable: for levels, attributes per level, relationships and numbers of hierarchies (for the same base entity) with various possible versions.
- These hierarchies do the following
  - Follow Slowly Changing dimension Type II rules.
  - Have the same leaf level (Organization Business Unit for "Organization" and Address Location for "Geography")
  - Have pre-built tools to feed/change them easily (for implementation team).
  - Can be associated in parallel (for example, In an Organization, several hierarchies can be defined: Administrative Hierarchy and Sales Hierarchy)
- ORGANIZATION BUSINESS UNIT refers to lowest-level internal business unit of the organization that delivers a limited range of specific communications services or merchandise through any sales channel (Web site, store, and so on), as shown in Figure 1–5.

**Figure 1–5 Organization Business Unit Entity**



- ORGANIZATION BUSINESS ENTITY refers to any internal logical entity that is recognized as a part of the enterprise for business analysis and transactions. Classification for a business entity can include company, operation unit, store, or warehouse. This is part of "Flexible Hierarchy" of organization.
- Address Related is the only exception in Oracle Communications Data Model to relationship between the same entity.

## Calendar and Time in Oracle Communications Data Model

Oracle Communications Data Model includes five pre-defined calendars:

- Business: allows to define operator's own Calendar according to its business operation.)
- Gregorian: Standard 365-days calendar
- Fiscal: Follows Accounting or Legal Requirements
- Ad: Follows Ad Cycle



- Planning: Planning cycle calendar

In Oracle Communications Data Model, the business calendar is by default the same as the natural calendar (=Gregorian), since most of operators run billing process monthly according to natural calendar. Business calendar can be modified according to different business operations.

A flexible calendar script can populate the calendar based on input parameters.

### **Time Transformation**

A Time Transformation does the following:

- Relates the elements of time-based attributes to other elements of the same attribute and specify the relationship between elements for some time-based frame of reference.
- Supports both "one-to-one" and "many to many" Transformation ...
  - For every element in the table, there is one corresponding element for the time frame in question (for example, current week to the same week last year).
  - Supports "many-to-many" transformations for calculating year-to-date, season-to-date and similar totals. These tables specify all of the elements that are to be included in calculating a total from a given reference point.
- Time of Day allows granularity to the Quarter-hour level.
- Year-to-date transformation specifies all of the days or weeks that are included in the transformation from a given day or week since the beginning of the year.

### **Product and Product Instance: In Product Management and Provisioning Business Area**

**PRODUCT:** is what customer can get. It composes the offering:

- Sub-Types of PRODUCT are PRODUCT PACKAGE, SERVICE, ITEM, EQUIPMENT
- PRODUCT may have valid equipment functionality and versions.
- PRODUCT may be particularly offered only locally or in a limited region.

**PRODUCT INSTANCE:** represents the real instance of a given PRODUCT that a customer can purchase or rent. For example:

- Specified Song Corresponding to Product MUSIC DOWNLOAD
- TV channel Corresponding to Product PAY TV
- Product Instance could also be a physical instance of Equipment which customer can leverage to access the service from operator. It could be used for inventory management. For example:
  - Handset (with IMEI)
  - Land line phone (with serial number)
  - Set-top box
  - Cable modem

### **Concept: Business Interaction / Events in All business areas**

Business Interaction: "an arrangement, contract, or communication between an enterprise and one or more other entities such as individuals and organizations (or

parts of organizations). Interactions take on the form of requests, responses, and notifications". (TMF-SID definition)

Event: an interaction of any kind between at least two parties. There are two types of events:

- "Network" Event: A Call Data Record or a Traffic event on the network made by a customer, a partner, or someone else calling the customer (but not originated from the CSP itself)
- "Non-Network" Event: all other (business) interactions:
  - Customer interaction with the call center, the web interface...
  - SLA with partners
  - Interaction between Mediation and Order Management System

**Scenario 2: Product and Subscription**

For a Standard Offer with a two hundred dollar monthly fee that includes three products for customer, as in Figure 1–6.

**Figure 1–6 Product and Subscription Offer for Customer A**

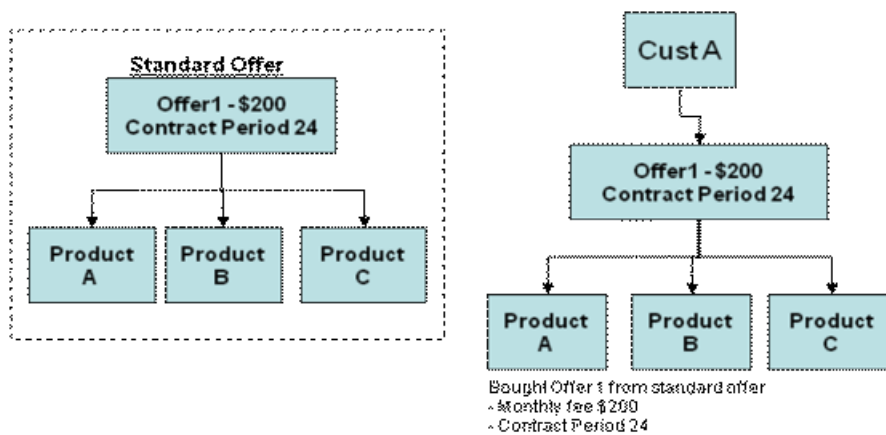
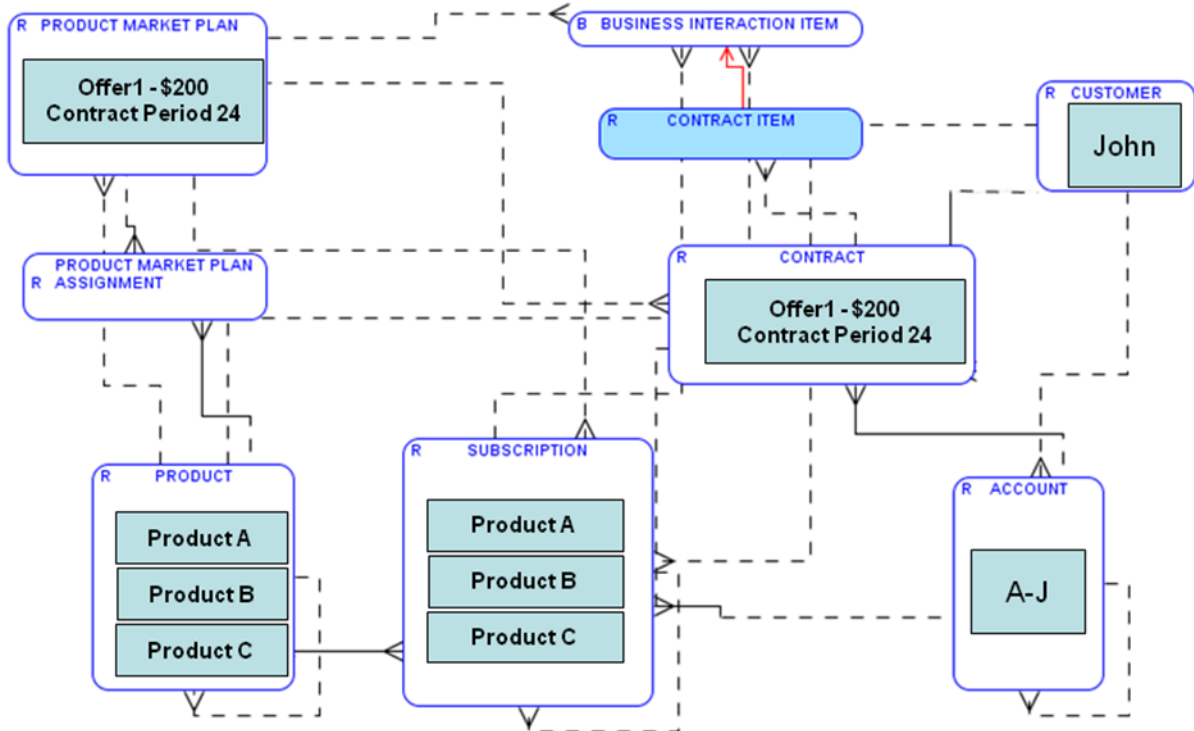


Figure 1–7 shows this relationship in Oracle Communications Data Model.

Figure 1–7 Product and Subscription Scenario



## Oracle Products That Make Up Oracle Communications Data Model

Several Oracle technologies are involved in building the infrastructure for telecommunications business intelligence.

### Oracle Database with OLAP, Data Mining and Partitioning Option

Oracle Communications Data Model utilizes a complete Oracle technical stack. It leverages the following data warehousing features of the Oracle database: SQL model, compression, partitioning, advanced statistical functions, materialized views, data mining, and online analytical processing (OLAP).

**Tip:** To achieve cost-effective scalability, availability, and reliability, you can consider using Oracle Real Application Clusters (Oracle RAC) and commodity hardware.

### Oracle Development Tools

Use the Oracle tools shown in Table 1–3 to customize the predefined logical and physical models provided with Oracle Communications Data Model, or to populate the target relational tables, materialized views, or OLAP cubes.

**Table 1–3 Oracle Development Tools Used with Oracle Communications Data Model**

Name	Use
Oracle SQL Data Modeler	To create the logical model
SQL Developer or SQL*Plus	To create or modify database objects
Oracle Warehouse Builder	For the process control of the Intra-ETL process

**Table 1–3 (Cont.) Oracle Development Tools Used with Oracle Communications Data**

Name	Use
Analytic Workspace Manager	To populate the target OLAP cubes

**Oracle Business Intelligence Suite Enterprise Edition Presentation Tools**

Oracle Business Intelligence Suite Enterprise Edition is a comprehensive suite of enterprise Business Intelligence products that delivers a full range of analysis and reporting capabilities. You can use Oracle Business Intelligence Suite Enterprise Edition Answers and Dashboard presentation tools to customize the predefined dashboard reports that are provided with Oracle Communications Data Model.

**TM Forum Information Framework (SID) Conformance**

Oracle Communications Data Model is conformance certified with TM Forum's Information Framework (SID) version 8.1. The TM Forum is the world's leading industry association focused on enabling best-in-class IT for service providers in the communications, media, and cloud service markets. The TM Forum provides business-critical industry standards and expertise to enable the creation, delivery, and monetization of digital services. For more information on TM Forum, see

<http://www.tmforum.org/>

The TM Forum's Information Framework (SID) provides a common reference model for enterprise information in the communications industry. The SID model does the following:

- Attempts to cover all information required in a Service Provider's operations.
- Provides an information reference model and a common vocabulary.
- Consists of business entities and their associated attribute definitions. Business entities describe items of interest to the business. For example, customer order, product offering, service specification, and so on. The attributes are facts that describe a business entity.

The Oracle Communications Data Model conformance certification with TM Forum's Information Framework (SID) version 8.1 does the following:

- Provides an independent review and audit of the self-assessment conducted by Oracle of Oracle Communications Data Model conformance to TM Forum's Information Framework (SID).
- Specifies that a TMF representative has conducted a detailed review of the assessment documents and determined a conformance level: SID provides seven levels of conformance.

The assessment documents provide a detailed attribute by attribute mapping between Oracle Communications Data Model and SID. The assessment documents are available to Oracle Communications Data Model customers by request. These documents facilitate ETL script development between Oracle Communications Data Model and other SID conformant applications.

For more information on conformance certification with TM Forum's Information Framework (SID) and for detailed certification results, see

<http://www.tmforum.org/BestPracticesStandards/CertifiedConformant/7629/Home.html#sid>

Oracle Communications Data Model achieved level 7 conformance for all Aggregate Business Entities (ABEs) that were certified in Customer, Product, Market\_Sales, Service, Resource, and Common Business Entities domains. For more detailed information on the ABEs certified, refer to the TM Forum Web site.



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## Logical Data Model Foundation

The logical data model of the Oracle Communications Data Model defines the business entities and their relationships and provides an understanding of the business and data requirements for the Oracle Communications Data Model data warehouse.

This chapter includes the following sections:

- [Major Subject Areas and Related Entities](#)
- [Logical Entities for Business Areas](#)
- [Logical Data Model Entity Dictionary](#)

### Major Subject Areas and Related Entities

The following describes the main entities related to some major or typical subject areas in Oracle Communications Data Model:

- [Subject Area: Account Simple](#)
- [Subject Area: Customer](#)
- [Subject Area: Dealer](#)
- [Subject Area: Geography](#)
- [Subject Area: Organization Business Unit](#)
- [Subject Area: Party](#)
- [Subject Area: Party \(Extended\)](#)
- [Subject Area: Product](#)
- [Subject Area: Product Instance](#)
- [Subject Area: Service](#)
- [Subject Area: Subscription](#)
- [Subject Area: Time Calendar](#)
- [Subject Area: Vendor](#)
- [Subject Area: Wireless Network](#)

---

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**Note:** The entity-relationship figures of the major reference entities in those subject areas are available with the Oracle Communications Data Model IP Patch. The IP Patch includes additional documentation. To obtain the IP Patch and for the latest information about Oracle Communications Data Model patch sets, go to My Oracle Support at <https://support.oracle.com>.

---

---

## Subject Area: Account Simple

Table 2–1 lists the entities associated with the subject area Account Simple.

**Table 2–1** *Entities of Subject Area: Account Simple*

---

### Account Simple Entity List

---

ACCOUNT  
ACCOUNT ASSIGNMENT  
ACCOUNT ASSIGNMENT REASON  
ACCOUNT PROFILE  
ACCOUNT TYPE

---

## Subject Area: Customer

Table 2–2 lists the entities associated with the subject area Customer.

**Table 2–2** *Entities of Subject Area: Customer*

---

### Customer Entity List

---

ACCOUNT  
ACCOUNT PAYMENT  
ADDRESS LOCATION  
ARPU BAND  
BARING REASON  
BLACK LIST HISTORY  
CALENDAR MONTH  
CONTRACT  
CUSTOMER  
CUSTOMER CLASS  
CUSTOMER INDIVIDUAL  
CUSTOMER MINING  
CUSTOMER OCCASION  
CUSTOMER OCCASION TYPE  
CUSTOMER ORGANIZATION  
CUSTOMER RESTRICTED INFO  
CUSTOMER REVENUE BAND  
CUSTOMER REVENUE BAND ASSIGNMENT



**Table 2–2 (Cont.) Entities of Subject Area: Customer****Customer Entity List**


---

CUSTOMER REVENUE TYPE  
 CUSTOMER SCORE  
 CUSTOMER SEGMENT  
 CUSTOMER SEGMENTATION MODEL  
 CUSTOMER SIC ASSIGNMENT  
 CUSTOMER SOURCE  
 CUSTOMER TYPE  
 DERIVED VALUE  
 EDUCATION  
 EVENT PARTY INTERACTION  
 EXTERNAL ORGANIZATION TYPE  
 GENDER  
 HOUSEHOLD  
 INDIVIDUAL DEMOGRAPHY VALUE  
 INITIATIVE RESULT TYPE  
 INITIATIVE TYPE  
 INVOICE  
 JOB  
 LANGUAGE  
 MEDIA OBJECT  
 NATIONALITY  
 PARTY PROMOTION RESPONSE  
 PARTY STATUS HISTORY  
 PARTY STATUS HISTORY  
 PROMOTION  
 PROSPECT  
 PROSPECT INDIVIDUAL  
 PROSPECT ORGANIZATION  
 SEGMENT CRITERIA  
 SOC JOB  
 VALUE MEASURE  
 VALUE TYPE

---

**Subject Area: Dealer**

Table 2–3 lists the entities associated with the subject area Dealer.

**Table 2–3 Entities of Subject Area: Dealer**

---

**Dealer Entity List**

---

CHANNEL  
DEALER  
DEALER DISCOUNT GROUP ASSIGNMENT  
DISCOUNT GROUP  
OTHER INDIVIDUAL  
PARTY  
SALES CHANNEL

---

**Subject Area: Geography**

Table 2–4 lists the entities associated with the subject area Geography.

**Table 2–4 Entities of Subject Area: Geography**

---

**Geography Entity List**

---

ADDRESS LOCATION  
ADDRESS RELATED  
ADDRESS RELATED REASON  
ADDRESS STATUS  
ADDRESS STATUS REASON  
ADDRESS TYPE  
ACCOUNT TYPE  
EMPLOYEE  
GEOGRAPHY CITY  
GEOGRAPHY COUNTRY  
GEOGRAPHY COUNTY  
GEOGRAPHY DEMOGRAPHIC GROUP  
GEOGRAPHY DEMOGRAPHY ATTRIBUTE  
GEOGRAPHY DEMOGRAPHY VALUE  
GEOGRAPHY ENTITY  
GEOGRAPHY HIERARCHY  
GEOGRAPHY HIERARCHY LEVEL  
GEOGRAPHY HIERARCHY LEVEL ASSIGNMENT  
GEOGRAPHY LEVEL  
GEOGRAPHY LEVEL ATTRIBUTE  
GEOGRAPHY LEVEL ATTRIBUTE VALUE  
GEOGRAPHY REGION  
GEOGRAPHY STATE

**Table 2–4 (Cont.) Entities of Subject Area: Geography****Geography Entity List**


---

GEOGRAPHY SUB REGION  
 GEOGRAPHY WORLD  
 PARTY ADDRESS LOCATION ASSIGNMENT  
 POSTCODE  
 TIME\_ZONE

---

**Subject Area: Organization Business Unit**

Table 2–5 lists the entities associated with the subject area Organization Business Unit.

**Table 2–5 Entities of Subject Area: Organization****Organization Entity List**


---

ORGANIZATION AREA  
 ORGANIZATION BANNER  
 ORGANIZATION BUSINESS UNIT  
 ORGANIZATION CHAIN  
 ORGANIZATION COMPANY  
 ORGANIZATION CORPORATE  
 ORGANIZATION DISTRICT  
 ORGANIZATION DIVISION  
 ORGANIZATION REGION

---

**Subject Area: Party**

Table 2–6 lists the entities associated with the subject area Party.

**Table 2–6 Entities of Subject Area: Party****Party Entity List**


---

ACCESS METHOD PARTY ASSIGNMENT  
 BLACK LIST HISTORY  
 BUSINESS LEGAL STATUS  
 CHANNEL  
 COST  
 CUSTOMER  
 CUSTOMER INDIVIDUAL  
 BUSINESS LEGAL STATUS  
 EVENT PARTY ASSIGNMENT  
 INDIVIDUAL DEMOGRAPHY VALUE  
 LANGUAGE  
 NATIONALITY  
 ORGANIZATION BUSINESS UNIT

**Table 2–6 (Cont.) Entities of Subject Area: Party**

---

**Party Entity List**

---

ORGANIZATIONAL DEMOGRAPHY VALUE  
PARTY  
PARTY ACCOUNT ASSIGNMENT  
PARTY ADDRESS LOCATION ASSIGNMENT  
PARTY ASSIGNMENT  
PARTY CONTACT INFORMATION  
PARTY CONTACT LIST PARTICIPATION  
PARTY COST ASSIGNMENT  
PARTY GEOGRAPHY ENTITY ASSIGNMENT  
PARTY IDENTIFICATION  
PARTY INTERACTION THREAD  
PARTY ORDER ASSIGNMENT  
PARTY ROLE ASSIGNMENT  
PARTY SIM CARD ASSIGNMENT  
PARTY STATUS HISTORY  
PARTY SUBSCRIPTION ASSIGNMENT  
PARTY TYPE  
SOURCE SYSTEM KEY MAPPING

---

**Subject Area: Party (Extended)**

Table 2–7 lists the entities associated with the subject area Party (Extended).

**Table 2–7 Entities of Subject Area: Party (Extended)**

---

**Party (Extended) Entity List**

---

ACCOUNT  
ANZSIC CLASSIFICATION  
BANK  
BLACK LIST HISTORY  
BUSINESS LEGAL STATUS  
COLLECTION AGENCY  
CONTACT ROLES  
CONTENT PROVIDER  
COST  
COST CENTER  
CUSTOMER  
CUSTOMER OCCASION  
CUSTOMER OCCASION TYPE  
CUSTOMER SIC ASSIGNMENT

**Table 2-7 (Cont.) Entities of Subject Area: Party (Extended)****Party (Extended) Entity List**

DEALER  
DEMOGRAPHY ATTRIBUTE  
DEMOGRAPHY GROUP  
EMPLOYEE  
EMPLOYEE JOB ROLE ASSIGNMENT  
EVENT  
EXTERNAL INFORMATION SOURCE  
EXTERNAL OPERATOR  
EXTERNAL ORGANIZATION TYPE  
INDIVIDUAL DEMOGRAPHY VALUE  
ISP  
JOB ROLE  
LANGUAGE  
NAICS CLASSIFICATION  
ORGANIZATION BUSINESS UNIT  
PARTY  
PARTY ADDRESS LOCATION ASSIGNMENT  
PARTY ASSIGNMENT  
PARTY ASSIGNMENT REASON  
PARTY ASSIGNMENT TYPE  
PARTY CONTACT INFORMATION  
PARTY CONTACT INFORMATION TYPE  
PARTY COST ASSIGNMENT  
PARTY GEOGRAPHY ENTITY ASSIGNMENT  
PARTY LOCATION REASON  
PARTY LOYALTY PROGRAM PARTICIPATION  
PARTY ROLE  
PARTY ROLE ASSIGNMENT  
PARTY ROLE STATUS  
PARTY STATUS CATEGORY  
PARTY STATUS CHANGE REASON  
PARTY STATUS HISTORY  
PARTY STATUS TYPE  
PARTY TYPE  
PROSPECT  
SIC ASSIGNMENT  
SIC ASSIGNMENT REASON

**Table 2–7 (Cont.) Entities of Subject Area: Party (Extended)**

---

**Party (Extended) Entity List**

---

SIC CLASSIFICATION  
SOURCE SYSTEM  
SOURCE SYSTEM KEY MAPPING  
VENDOR

---

**Subject Area: Product**

Table 2–8 lists the entities associated with the subject area Product.

**Table 2–8 Entities of Subject Area: Product**

---

**Product Entity List**

---

ACCESSORIES  
ADDITIONAL TEXT  
ADDRESS LOCATION  
BROADBAND  
BROADBAND RATING PLAN  
CABLE MODEM  
CALL FORWARD  
CALLER ID  
CONTENT  
DISCOUNT GROUP  
DOCUMENT CONDITION TYPE  
DOCUMENT TYPE  
DSL MODEM  
EQUIPMENT  
EQUIPMENT FUNCTIONALITY  
EQUIPMENT FUNCTIONALITY ASSIGNMENT  
EQUIPMENT INSTANCE  
EQUIPMENT INSTANCE STATUS HISTORY  
EQUIPMENT INSTANCE STATUS TYPE  
FIXED LINE  
FIXED LINE RATING PLAN  
GPRS SERVICE  
HANDSET INSTANCE  
HANDSET MODEL  
IDD  
ITEM  
LANGUAGE  
MARKET PLAN SUBSTITUTE BY DOC

**Table 2–8 (Cont.) Entities of Subject Area: Product****Product Entity List**

MARKET PLAN TERM VALUE  
 MUSIC DOWNLOAD  
 NETWORK TOUCHPOINT  
 ORGANIZATION ITEM SELLING PRICE  
 PARTY  
 PAY TV  
 POSTPAID WIRELESS  
 PREPAID WIRELESS  
 PRODUCT  
 PRODUCT ASSIGNMENT  
 PRODUCT ASSIGNMENT REASON  
 PRODUCT CAPABILITY  
 PRODUCT CAPABILITY TYPE  
 PRODUCT CAPABILITY VALUE  
 PRODUCT CHARGE TYPE  
 PRODUCT CHARGE TYPE RELATIONSHIP  
 PRODUCT CHARGE TYPE RLTN REASON  
 PRODUCT CHARGING REASON  
 PRODUCT FEATURE  
 PRODUCT FEATURE ASSIGNMENT  
 PRODUCT FUNCTIONALITY DEPENDENCY  
 PRODUCT GEOGRAPHY ASSIGNMENT  
 PRODUCT GROUP  
 PRODUCT GROUP ASSIGNMENT  
 PRODUCT GROUP TYPE  
 PRODUCT INSTANCE  
 PRODUCT MANAGEMENT HISTORY  
 PRODUCT MANAGEMENT REASON  
 PRODUCT MANAGEMENT ROLE  
 PRODUCT MARKET PLAN  
 PRODUCT MARKET PLAN ASSIGNMENT  
 PRODUCT MARKET PLAN ASSIGNMENT TYPE  
 PRODUCT MARKET PLAN GEOGRAPHY ASSIGNMENT  
 PRODUCT MARKET PLAN GROUP  
 PRODUCT MARKET PLAN GROUP ASSIGNMENT  
 PRODUCT MARKET PLAN GROUP TYPE  
 PRODUCT MARKET PLAN TYPE

**Table 2–8 (Cont.) Entities of Subject Area: Product**

---

**Product Entity List**

---

PRODUCT NETWORK ASSIGNMENT  
PRODUCT PACKAGE  
PRODUCT PACKAGE ASSIGNMENT  
PRODUCT PACKAGE CHARGE TYPE  
PRODUCT RATING PLAN  
PRODUCT RATING PLAN DETAIL  
PRODUCT RATING PLAN TYPE  
PRODUCT STATUS HISTORY  
PRODUCT STATUS TYPE  
PRODUCT TYPE  
PRODUCT VERSION  
RATING METHOD TYPE  
RINGTONE  
SERVICE  
SET TOP BOX  
SET TOP BOX MODEL  
SIM CARD HANDSET ASSIGNMENT  
SMS RATING PLAN  
SUPPLEMENTARY SERVICE  
TV CHANNEL  
VALUE ADDED SERVICE  
VOICE MESSAGE SERVICE  
WIRELESS RATING PLAN

---

**Subject Area: Product Instance**

Table 2–9 lists the entities associated with the subject area Product Instance.

**Table 2–9 Entities of Subject Area Product Instance**

---

**Product Instance Entity List**

---

ACCESS METHOD EQUIPMENT ASSIGNMENT  
ADDRESS LOCATION  
CABLE MODEM  
CONTENT  
CONTENT DELIVERY EVENT  
CONTENT PRICE  
CONTENT PRICING TYPE  
CONTENT PROVIDER  
CONTENT TYPE



**Table 2–9 (Cont.) Entities of Subject Area Product Instance****Product Instance Entity List**


---

CUSTOMER ORDER LINE ITEM  
 DSL MODEM  
 EQUIPMENT INSTANCE  
 EQUIPMENT INSTANCE RENTING CONTRACT  
 EQUIPMENT INSTANCE STATUS HISTORY  
 EVENT EQUIPMENT INSTANCE  
 HANDSET INSTANCE  
 NETWORK TOUCHPOINT  
 PARTY  
 PRODUCT  
 PRODUCT INSTANCE  
 SERVICE  
 SERVICE EQUIPMENT ASSIGNMENT  
 SET TOP BOX  
 SIM CARD HANDSET ASSIGNMENT  
 SUBSCRIPTION  
 VALUE ADDED SERVICE

---

**Subject Area: Service**

Table 2–10 lists the entities associated with the subject area Service.

**Table 2–10 Entities of Subject Area: Service****Service Entity List**


---

BROADBAND  
 CONTENT  
 FIXED LINE  
 GPRS SERVICE  
 IDD  
 MUSIC DOWNLOAD  
 PAY TV  
 POSTPAID WIRELESS  
 PREPAID WIRELESS  
 SERVICE  
 VALUE ADDED SERVICE  
 VOICE MESSAGE SERVICE

---

**Subject Area: Subscription**

Table 2–11 lists the entities associated with the subject area Subscription.

**Table 2–11 Entities of Subject Area: Subscription****Subscription Entity List**

---

ACCESS METHOD SUBSCRIPTION ASSIGNMENT  
ACCOUNT  
ACCOUNT CREDIT LIMIT  
CAMPAIGN CHANNEL  
CHANNEL  
CONTRACT  
CUSTOMER  
EQUIPMENT INSTANCE  
EQUIPMENT INSTANCE RENTING CONTRACT  
EVENT SUBSCRIPTION CHANGE  
HANDSET INSTANCE  
ORGANIZATION BUSINESS UNIT  
PARTY SUBSCRIPTION ASSIGNMENT  
PARTY SUBSCRIPTION ROLE  
PRODUCT  
PRODUCT MARKET PLAN  
SALES CHANNEL REPRESENTATIVE  
SIM CARD SUBSCRIPTION ASSIGNMENT  
SUBSCRIPTION  
SUBSCRIPTION ASSIGNMENT  
SUBSCRIPTION ASSIGNMENT TYPE  
SUBSCRIPTION PMP ASSIGNMENT  
SUBSCRIPTION STATUS  
SUBSCRIPTION STATUS CATEGORY  
SUBSCRIPTION STATUS HISTORY  
SUBSCRIPTION STATUS REASON  
SUBSCRIPTION TERM TYPE  
SUBSCRIPTION TERM VALUE  
SUBSCRIPTION TYPE  
VAS SUBSCRIPTION

---

**Subject Area: Time Calendar**

Table 2–12 lists the entities associated with the subject area Time Calendar.

**Table 2–12 Entities of Subject Area: Time Calendar****Time Calendar Entity List**

---

CALENDAR HALF MONTH  
CALENDAR HALF YEAR

**Table 2–12 (Cont.) Entities of Subject Area: Time Calendar****Time Calendar Entity List**


---

CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 DAY  
 TIME SLOT

---

**Subject Area: Vendor**

Table 2–13 lists the entities associated with the subject area Vendor.

**Table 2–13 Entities of Subject Area: Vendor Entity****Vendor Entity List**


---

APPOINTMENT TYPE  
 DEAL  
 DEAL VENDOR ITEM ASSIGNMENT  
 FACTOR COMPANY  
 ORGANIZATION BUSINESS UNIT  
 VENDOR  
 VENDOR APPOINTMENT  
 VENDOR CLASS  
 VENDOR CONTRACT  
 VENDOR FACTOR COMPANY ASSIGNMENT  
 VENDOR RATING  
 VENDOR SITE  
 VENDOR SITE COURIER ASSIGNMENT

---

**Subject Area: Wireless Network**

Table 2–14 lists the entities associated with the subject area Wireless Network.

---



---

**Note:** Oracle Communications Data Model also covers Wireline (PSTN) and cable type of network. Wireless Network is here taken as an example of the types of supported networks.

---



---

**Table 2–14 Entities of Subject Area: Wireless Network****Wireless Network Entity List**


---

ADDRESS LOCATION  
 BASE STATION CONTROLLER  
 BASE TRANSCEIVER STATION  
 CELL

---

**Table 2–14 (Cont.) Entities of Subject Area: Wireless Network**

---

**Wireless Network Entity List**

---

CELL SECTOR  
CELL SITE  
CELL SITE TYPE  
CELL TYPE  
CIRCUIT CATEGORY  
CIRCUIT COMPONENT  
CIRCUIT TRAFFIC  
CIRCUIT TYPE  
EQUIPMENT CENTER  
EXTERNAL OPERATOR  
IN PLATFORM  
MOBILE SWITCHING CENTER  
NETWORK  
NETWORK SERVICE COVERAGE ASSIGNMENT  
NETWORK TOUCHPOINT  
NETWORK TOUCHPOINT CLASS  
NETWORK TOUCHPOINT TYPE  
NETWORK TYPE  
PARTY  
RF CARRIER  
ROUTING DEVICE  
SERVICE COVERAGE AREA  
SERVICE COVERAGE AREA TYPE  
SERVICE COVERAGE GEO DETAIL  
SWITCH  
SWITCH CAPABILITY  
SWITCH CAPABILITY TYPE  
SWITCH ROUTING DEVICE ASSIGNMENT  
SWITCH TYPE  
TECHNOLOGY  
TECHNOLOGY TYPE

---

## Logical Entities for Business Areas

These business areas lists contain the logical entities in the data model grouped by business area.

---



---

**Note:** The notion of a business area is not strict. That is, some business areas are overlapping. Thus, a logical entity can belong to, or be needed in, several business areas. Some logical entities are not explicitly listed because they either only represent a relationship between tables, are not critically important to any business area, or are simply lookup entities. For more information, see [Section , "Business Areas and Subject Areas in Oracle Communications Data Model"](#).

---



---

The following are the business area logical data model entities:

- [Business Area: Cost](#)
- [Business Area: Customer Management](#)
- [Business Area: Marketing](#)
- [Business Area: Network](#)
- [Business Area: Partner Management](#)
- [Business Area: Product Management](#)
- [Business Area: Provisioning and Service](#)
- [Business Area: Revenue](#)

---



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**Note:** The business area figures showing complete diagrams with attributes and entities are available with the Oracle Communications Data Model IP Patch. The IP Patch includes additional documentation. To obtain the IP Patch and for the latest information about Oracle Communications Data Model patch sets, go to My Oracle Support at <https://support.oracle.com>.

---



---

### Business Area: Cost

[Table 2–15](#) lists the logical entities for Cost.

**Table 2–15 Cost Business Area Logical Entities**

---

#### Cost Entity List

---

ACCOUNT COST  
 BUSINESS HALF MONTH  
 BUSINESS HALF YEAR  
 BUSINESS MONTH  
 BUSINESS QUARTER  
 BUSINESS WEEK  
 BUSINESS YEAR  
 CALENDAR HALF MONTH  
 CALENDAR HALF YEAR

**Table 2–15 (Cont.) Cost Business Area Logical Entities**

---

**Cost Entity List**

---

CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 CAMPAIGN COST  
 COURIER COST  
 CELL SITE COST  
 CHANNEL COST  
 CONTACT LIST COST  
 COST  
 COST CENTER BUDGET  
 COST REASON  
 COST SUBTYPE  
 COST TYPE  
 CUSTOMER  
 CUSTOMER CLASS  
 CUSTOMER CLASS ASSIGNMENT  
 CUSTOMER COST  
 CUSTOMER SCORE  
 CUSTOMER SEGMENT  
 CUSTOMER SOURCE  
 CUSTOMER TYPE  
 DAY  
 EMPLOYEE ACTUAL LABOR HOURLY  
 EMPLOYEE ACTUAL LABOR SALARIED  
 EMPLOYEE COST  
 EMPLOYEE TYPE  
 EQUIPMENT  
 EQUIPMENT CENTER COST  
 EVENT COST  
 EVENT EMPLOYEE PAYROLL  
 FISCAL HALF MONTH  
 FISCAL HALF YEAR  
 FISCAL MONTH  
 FISCAL QUARTER  
 FISCAL WEEK  
 FISCAL YEAR

**Table 2-15 (Cont.) Cost Business Area Logical Entities****Cost Entity List**

---

HANDSET MODEL  
INVOICE PAYMENT ASSIGNMENT  
MEDIA OBJECT COST  
NETWORK ELEMENT COST  
ORGANIZATION AREA  
ORGANIZATION BANNER  
ORGANIZATION BUSINESS UNIT  
ORGANIZATION BUSINESS UNIT COST  
ORGANIZATION CHAIN  
ORGANIZATION COMPANY  
ORGANIZATION CORPORATE  
ORGANIZATION DISTRICT  
ORGANIZATION DIVISION  
ORGANIZATION REGION  
ORGANIZATION WAREHOUSE  
PARTY ORDER ASSIGNMENT  
PAY CATEGORY  
PAY TYPE  
PLANNING PERIOD  
PLANNING QUARTER  
PLANNING SEASON  
PLANNING WEEK  
PLANNING YEAR  
PRODUCT  
PRODUCT COST  
PRODUCT MARKET PLAN COST  
PRODUCT PACKAGE  
PRODUCT TYPE  
PROMOTION COST  
SALES CHANNEL  
SELLING LOCATION TYPE  
SUBSIDY TYPE  
TIME SLOT  
TIME STANDARD BY DAY  
TIME STANDARD BY WEEK

---

## Business Area: Customer Management

Table 2–16 lists the logical entities for Customer Management.

**Table 2–16 Customer Management Business Area Logical Entities**

---

### Customer Management Entity List

---

ACCESS METHOD ACCOUNT ASSIGNMENT  
 ACCESS METHOD ASSIGNMENT  
 ACCESS METHOD ELEMENT  
 ACCESS METHOD EQUIPMENT ASSIGNMENT  
 ACCESS METHOD GEOGRAPHY ASSIGNMENT  
 ACCESS METHOD PARTY ASSIGNMENT  
 ACCESS METHOD POOL  
 ACCESS METHOD SEGMENT  
 ACCESS METHOD STATUS HISTORY  
 ACCESS METHOD SEGMENT PROD CAPABILITY RL  
 ACCESS METHOD SUBSCRIPTION ASSIGNMENT  
 ACCESS METHOD TYPE  
 ACCOUNT ADJUSTMENT REASON  
 ACCOUNT ASSIGNMENT  
 ACCOUNT ASSIGNMENT REASON  
 ACCOUNT BALANCE ADJUSTMENT  
 ACCOUNT BALANCE ADJUSTMENT TYPE  
 ACCOUNT BALANCE HISTORY  
 ACCOUNT BALANCE TYPE  
 ACCOUNT BILLING CYCLE HISTORY  
 ACCOUNT BILLING FREQUENCY HISTORY  
 ACCOUNT BILLING PERIOD HISTORY  
 ACCOUNT CONTRACT RELATIONSHIP  
 ACCOUNT CREDIT LIMIT  
 ACCOUNT DEBT WRITE OFF  
 ACCOUNT EVENT TYPE  
 ACCOUNT MANAGEMENT HISTORY  
 ACCOUNT PARTY PMP RELATIONSHIP  
 ACCOUNT PAYMENT METHOD STATUS  
 ACCOUNT PAYMENT METHOD STATUS REASON  
 ACCOUNT PAYMENT METHOD STATUS TYPE  
 ACCOUNT PMP PARTICIPATION HISTORY  
 ACCOUNT PREFERRED INVOICE DELIVERY  
 ACCOUNT PROFILE



**Table 2–16 (Cont.) Customer Management Business Area Logical Entities****Customer Management Entity List**

ACCOUNT REFUND REASON  
ACCOUNT SEGMENT  
ACCOUNT SEGMENT ASSIGNMENT HISTORY  
ACCOUNT SEGMENTATION MODEL  
ACCOUNT STATUS HISTORY  
ACCOUNT STATUS REASON  
ACCOUNT STATUS TYPE  
ACCOUNT SUBSCRIPTION ASSIGNMENT  
ACCOUNT SUBSCRIPTION ASSIGNMENT REASON  
ACCOUNT TYPE  
ACCOUNTING CYCLE  
ACCOUNTING ITEM CATEGORY  
ADDRESS LOCATION  
ADDRESS RELATED  
ADDRESS STATUS  
AGE BAND  
AGE ON NET BAND  
ARPU BAND  
AWARD LEVEL  
BANK  
BANK DIRECT DEBIT CHANNEL  
BARING REASON  
BILLING CYCLE  
BILLING FREQUENCY  
BILLING PERIOD  
BILLING STATUS CATEGORY  
BILLING STATUS TYPE  
BLACK LIST HISTORY  
BUSINESS HALF MONTH  
BUSINESS HALF YEAR  
BUSINESS MONTH  
BUSINESS QUARTER  
BUSINESS UNIT JOB ROLE  
BUSINESS UNIT SHIFT  
BUSINESS WEEK  
BUSINESS YEAR  
CALENDAR HALF MONTH

**Table 2–16 (Cont.) Customer Management Business Area Logical Entities**

---

**Customer Management Entity List**

---

CALENDAR HALF YEAR  
 CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 CALL CENTER AGENT  
 CALL CENTER AGENT TYPE  
 CALL CENTER CASE SUB TYPE  
 CALL CENTER CASE TITLE  
 CALL CENTER CASE TYPE  
 CALL CENTER SERVICE CAPABILITY  
 CHANGE PROPOSED BY TYPE  
 CHURN PREDICT SOURCE DERIVED  
 CHURN REASON  
 CONTRACT  
 CONTRACT APPROVAL  
 CONTRACT ASSIGNMENT  
 CONTRACT ASSIGNMENT REASON  
 CONTRACT ASSIGNMENT TYPE  
 CONTRACT CHANGE INITIATOR TYPE  
 CONTRACT CHANGE TYPE  
 CONTRACT DOCUMENT  
 CONTRACT PRODUCT ASSIGNMENT  
 CONTRACT STATUS  
 CONTRACT STATUS TYPE  
 CONTRACT TERM TYPE  
 CREDIT CATEGORY  
 CURRENCY GEOGRAPHY ENTITY ASSIGNMENT  
 CUSTOMER  
 CUSTOMER CLASS  
 CUSTOMER CLASS ASSIGNMENT  
 CUSTOMER COST  
 CUSTOMER FIELD INSTALLATION  
 CUSTOMER FIELD SERVICE ACTIVITY  
 CUSTOMER FIELD SERVICE DETAIL  
 CUSTOMER FIELD SUPPORT  
 CUSTOMER INDIVIDUAL

**Table 2–16 (Cont.) Customer Management Business Area Logical Entities****Customer Management Entity List**

CUSTOMER OCCASION  
CUSTOMER OCCASION TYPE  
CUSTOMER ORDER  
CUSTOMER ORDER LINE ITEM  
CUSTOMER ORDER LINE ITEM STATE ASSIGN  
CUSTOMER ORDER PAYMENT  
CUSTOMER ORDER STATE ASSIGNMENT  
CUSTOMER ORGANIZATION  
CUSTOMER RESTRICTED INFO  
CUSTOMER REVENUE BAND  
CUSTOMER REVENUE BAND ASSIGNMENT  
CUSTOMER REVENUE TYPE  
CUSTOMER SCORE  
CUSTOMER SEGMENT  
CUSTOMER SEGMENTATION MODEL  
CUSTOMER SIC ASSIGNMENT  
CUSTOMER SOURCE  
CUSTOMER TYPE  
DATA SERVICE EVENT  
DAY  
DAY ACTUAL CONDITION  
DAY TODATE TRANSFORMATION  
DAY TRANSFORMATION  
DEBT AGING BAND  
DERIVED VALUE  
EDUCATION  
EMPLOYEE  
EMPLOYEE DESIGNATION  
EMPLOYEE DISCOUNT GROUP ASSIGNMENT  
EMPLOYEE JOB ROLE ASSIGNMENT  
EMPLOYEE JOB ROLE TYPE  
EMPLOYEE DESIGNATION  
EMPLOYEE RESTRICTED INFO  
EMPLOYEE SCHEDULE  
EMPLOYEE TRAINING RECORD  
EMPLOYEE TYPE  
EQUIPMENT

**Table 2–16 (Cont.) Customer Management Business Area Logical Entities**

**Customer Management Entity List**

---

EQUIPMENT INSTANCE RENTING CONTRACT  
 EVENT ACCOUNT  
 EVENT GEOGRAPHY  
 EVENT LOCATION  
 EVENT PARTY INTERACTION  
 EVENT PARTY INTERACTION CALL  
 EVENT PARTY INTERACTION EMAIL  
 EVENT PARTY INTERACTION VISIT  
 EVENT PARTY PROFILE  
 EVENT PARTY ROLE  
 EVENT RESOLUTION  
 EXTERNAL INFORMATION SOURCE  
 EXTERNAL ORGANIZATION TYPE  
 FACTOR COMPANY  
 FISCAL HALF MONTH  
 FISCAL HALF YEAR  
 FISCAL MONTH  
 FISCAL QUARTER  
 FISCAL WEEK  
 FISCAL YEAR  
 FRAUD PROFILE CLASS  
 GENDER  
 GEOGRAPHY CITY  
 GEOGRAPHY COUNTRY  
 GEOGRAPHY COUNTY  
 GEOGRAPHY DEMOGRAPHIC GROUP  
 GEOGRAPHY DEMOGRAPHY ATTRIBUTE  
 GEOGRAPHY DEMOGRAPHY VALUE  
 GEOGRAPHY ENTITY  
 GEOGRAPHY ENTITY ASSIGNMENT  
 GEOGRAPHY ENTITY HIER LEVEL ASSIGNMENT  
 GEOGRAPHY HIERARCHY  
 GEOGRAPHY HIERARCHY LEVEL  
 GEOGRAPHY HIERARCHY LEVEL ASSIGNMENT  
 GEOGRAPHY LEVEL  
 GEOGRAPHY LEVEL ATTRIBUTE  
 GEOGRAPHY LEVEL ATTRIBUTE VALUE

**Table 2–16 (Cont.) Customer Management Business Area Logical Entities****Customer Management Entity List**

GEOGRAPHY REGION  
 GEOGRAPHY STATE  
 GEOGRAPHY SUB REGION  
 GEOGRAPHY WORLD  
 GPRS SERVICE  
 HALF HOUR  
 HALF MONTH TODATE TRANSFORMATION  
 HALF MONTH TRANSFORMATION  
 HALF YEAR TODATE TRANSFORMATION  
 HALF YEAR TRANSFORMATION  
 HOUR  
 HOUSEHOLD  
 INITIATIVE RESULT TYPE  
 INITIATIVE TYPE  
 INTERACTION ANSWER CHOICE  
 INTERACTION CHANNEL  
 INTERACTION DIRECTION  
 INTERACTION QUESTION RESPONSE  
 INTERACTION REASON  
 INTERACTION RESULT TYPE  
 INTERACTION STATUS  
 INTERACTION TYPE  
 INVOICE  
 IP ADDRESS POOL  
 JOB  
 JOB ROLE  
 LANGUAGE  
 LEGAL PROCESS STATUS TYPE  
 LETTER TYPE  
 MAILBOX  
 MANAGE ACTION TYPE  
 MARITAL STATUS  
 MEDIA OBJECT  
 MUSIC DOWNLOAD  
 NAICS INDUSTRY SUBSECTOR  
 NATIONALITY  
 NP MOBILE MSISDN

**Table 2–16 (Cont.) Customer Management Business Area Logical Entities**

---

**Customer Management Entity List**

---

NP REQUEST HEADER  
 NP REQUEST LINE ITEM  
 NP REQUEST LINE ITEM STATE HISTORY  
 NP REQUEST LINE ITEM STATE TYPE  
 NP REQUEST STATE HISTORY  
 NP REQUEST STATE TYPE  
 NP REQUEST TYPE  
 NP STEP  
 NUMBER AREA  
 NUMBER COUNTRY  
 ORDER LINE ITEM STATE  
 ORDER LINE ITEM STATE  
 ORDER STATUS  
 ORDER TYPE  
 ORGANIZATION AREA  
 ORGANIZATION BANNER  
 ORGANIZATION BUSINESS UNIT  
 ORGANIZATION CHAIN  
 ORGANIZATION COMPANY  
 ORGANIZATION CORPORATE  
 ORGANIZATION DISTRICT  
 ORGANIZATION DIVISION  
 ORGANIZATION REGION  
 OTHER INDIVIDUAL  
 PARTY ACCOUNT ASSIGNMENT  
 PARTY ACCOUNT ASSIGNMENT TYPE  
 PARTY ADDRESS LOCATION ASSIGNMENT  
 PARTY ASSIGNMENT  
 PARTY CONTACT INFORMATION  
 PARTY CONTACT LIST ROLE  
 PARTY CONTRACT ASSIGNMENT  
 PARTY CONTRACT ASSIGNMENT ROLE  
 PARTY CONTRACT ASSIGNMENT TYPE  
 PARTY EVENT TYPE  
 PARTY GEOGRAPHY ENTITY ASSIGNMENT  
 PARTY IDENTIFICATION  
 PARTY IDENTIFICATION TYPE

**Table 2-16 (Cont.) Customer Management Business Area Logical Entities****Customer Management Entity List**

PARTY ORDER ASSIGNMENT TYPE  
PARTY PROMOTION RESPONSE  
PARTY ROLE ASSIGNMENT  
PARTY ROLE STATUS  
PARTY SEGMENTATION METHOD  
PARTY SIM CARD ASSIGNMENT  
PARTY STATUS CHANGE REASON  
PARTY STATUS HISTORY  
PARTY SUBSCRIPTION ASSIGNMENT  
PAYMENT CHANNEL  
PERIOD TO DATE TRANSFORMATION  
PERIOD TRANSFORMATION  
POSTAL SERVICE TYPE  
POSTCODE  
POSTPAID WIRELESS  
PREPAID WIRELESS  
PRICE DERIVATION RULE  
PRODUCT  
PRODUCT PACKAGE  
PRODUCT TYPE  
PROMOTION  
PROMOTION RESULT TYPE  
PROMOTION TERM TYPE  
PROSPECT  
PROSPECT INDIVIDUAL  
PROSPECT ORGANIZATION  
PTV FULL CHANNEL ACTIVATION  
PUBLICATION TYPE  
QUARTER HOUR  
QUARTER TO DATE TRANSFORMATION  
QUARTER TRANSFORMATION  
REDEMPTION TYPE  
RINGTONE  
ROLES HIERARCHY  
SCRIPT  
SCRIPT QUESTION  
SCRIPT QUESTION TYPE

**Table 2–16 (Cont.) Customer Management Business Area Logical Entities**

---

**Customer Management Entity List**

---

SEASON  
SECOND  
SEGMENT CRITERIA  
SEGMENT TYPE  
SERVICE REQUEST  
SIC ASSIGNMENT  
SIC DIVISION  
SIC INDUSTRY GROUP  
SIM CARD SUBSCRIPTION REASON  
SOC JOB  
SOC JOB CATEGORY  
SOC JOB GROUP  
SOC JOB MAJOR GROUP  
SOURCE SYSTEM  
SOURCE SYSTEM KEY MAPPING  
SUBSCRIBER ACTIVATION REASON  
TAX EXEMPT  
TIME SLOT  
TIME STANDARD BY DAY  
TIME STANDARD BY WEEK  
USER  
VALUE MEASURE  
VALUE TYPE  
VENDOR FACTOR COMPANY ASSIGNMENT  
VIRTUAL TEAM  
WEATHER CONDITION  
WEEK TODATE TRANSFORMATION  
WEEK TRANSFORMATION  
YEAR TRANSFORMATION

---



## Business Area: Marketing

Table 2–17 lists the logical entities for Marketing.

**Table 2–17 Marketing Business Area Logical Entity**

---

### Marketing Entity List

---

ACCOUNT PMP PARTICIPATION HISTORY  
 ADVERTISING PERIOD  
 ADVERTISING QUARTER  
 ADVERTISING WEEK  
 ADVERTISING YEAR  
 AWARD LEVEL  
 BUSINESS HALF MONTH  
 BUSINESS HALF YEAR  
 BUSINESS MONTH  
 BUSINESS QUARTER  
 BUSINESS WEEK  
 BUSINESS YEAR  
 CALENDAR HALF MONTH  
 CALENDAR HALF YEAR  
 CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 CAMPAIGN  
 CAMPAIGN CHANNEL  
 CAMPAIGN CHANNEL TYPE  
 CAMPAIGN MANAGEMENT HISTORY  
 CAMPAIGN MESSAGE  
 CAMPAIGN MESSAGE CREATIVE  
 CAMPAIGN MESSAGE DEPICTION  
 CAMPAIGN PURPOSE TYPE  
 CAMPAIGN STATUS  
 CAMPAIGN TYPE  
 CONTACT LIST  
 CONTACT LIST CHANGE REASON  
 CONTACT LIST RECURRENCE TYPE  
 COST  
 DAY  
 DEMOGRAPHY ATTRIBUTE

**Table 2–17 (Cont.) Marketing Business Area Logical Entity**

---

**Marketing Entity List**

---

DEMOGRAPHY GROUP  
 DSL MODEM  
 EMPLOYEE DESIGNATION  
 EMPLOYEE JOB ROLE TYPE  
 EMPLOYEE TYPE  
 EQUIPMENT  
 EVENT GIFT REDEMPTION  
 EVENT LOCATION  
 EVENT RESPONSE REASON  
 FISCAL HALF MONTH  
 FISCAL HALF YEAR  
 FISCAL MONTH  
 FISCAL QUARTER  
 FISCAL WEEK  
 FISCAL YEAR  
 GEOGRAPHY LEVEL ATTRIBUTE  
 INDIVIDUAL DEMOGRAPHY PROFILE  
 INDIVIDUAL DEMOGRAPHY VALUE  
 INITIATIVE TYPE  
 INTERACTION DIRECTION  
 INTERACTION REASON  
 INTERACTION RESULT TYPE  
 INTERACTION STATUS  
 INTERACTION TYPE  
 LETTER TYPE  
 LOYALTY PROGRAM PARTY ROLE  
 MANAGE ACTION TYPE  
 MARKET AREA  
 MARKET AREA LEVEL  
 MARKET PLAN MANAGEMENT  
 MARKET PLAN SUBSTITUTE BY DOC  
 MARKET PLAN TERM VALUE  
 MEDIA OBJECT  
 MEDIA OBJECT ASSIGNMENT  
 MINUTE ALLOWANCE  
 ORGANIZATION AREA  
 ORGANIZATION BANNER

**Table 2-17 (Cont.) Marketing Business Area Logical Entity****Marketing Entity List**

ORGANIZATION BUSINESS UNIT  
ORGANIZATION CHAIN  
ORGANIZATION COMPANY  
ORGANIZATION CORPORATE  
ORGANIZATION DISTRICT  
ORGANIZATION DIVISION  
ORGANIZATION REGION  
PARTNER PROMOTION PROGRAM  
PARTY CONTACT LIST PARTICIPATION  
PARTY CONTACT LIST ROLE  
PARTY GEOGRAPHY ENTITY ASSIGNMENT  
PARTY MANAGEMENT ROLE  
PRODUCT  
PRODUCT MARKET PLAN  
PRODUCT PACKAGE  
PRODUCT TYPE  
PROMOTION  
PROMOTION CLUSTER USAGE  
PROMOTION CONTACT LIST UTILIZATION  
PROMOTION MANAGEMENT HISTORY  
PROMOTION MARKET PLAN ASSIGNMENT  
PROMOTION MESSAGE RENDERING  
PROMOTION RESULT TYPE  
PROMOTION TERM VALUE  
PUBLICATION  
PUBLICATION TYPE  
RETAIL STORE  
SCRIPT QUESTION TYPE  
SEASON  
SELLING LOCATION  
SOURCE SYSTEM TYPE  
TARGET ACCESS METHOD  
TARGET ACCOUNT  
TARGET CONTRACT  
TARGET GEOGRAPHY AREA  
TARGET TYPE  
TIME SLOT

**Table 2–17 (Cont.) Marketing Business Area Logical Entity**

---

**Marketing Entity List**

---

TIME STANDARD BY DAY  
 TIME STANDARD BY WEEK  
 WEATHER CONDITION  
 WEEK TODATE TRANSFORMATION  
 WEEK TRANSFORMATION  
 WEEKDAY  
 YEAR TRANSFORMATION

---

**Business Area: Network**

Table 2–18 lists the logical entities for Network.

**Table 2–18 Network Business Area Logical Entity**

---

**Network Entity List**

---

ACCOUNT BALANCE ADJUSTMENT  
 ADDRESS LOCATION  
 ANZSIC CLASSIFICATION  
 BASE STATION CONTROLLER  
 BASE TRANSCEIVER STATION  
 BER FER TYPE  
 BROADBAND  
 BROADBAND RATING PLAN  
 BROADBAND USAGE EVENT  
 BUSINESS HALF MONTH  
 BUSINESS HALF YEAR  
 BUSINESS MONTH  
 BUSINESS QUARTER  
 BUSINESS WEEK  
 BUSINESS YEAR  
 CALENDAR HALF MONTH  
 CALENDAR HALF YEAR  
 CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 CALL DIRECTION  
 CALL FORWARD  
 CALL OTHER TYPE  
 CALL RECYCLED REASON

**Table 2-18 (Cont.) Network Business Area Logical Entity****Network Entity List**

CALL SUCCESS FAILURE TYPE  
CALL SURCHARGE  
CALL TERMINATION REASON  
CELL  
CELL OUTAGE REASON  
CELL SITE  
CELL SITE TYPE  
CELL TYPE  
CIRCUIT CATEGORY  
CIRCUIT COMPONENT  
CIRCUIT RENTAL  
CIRCUIT RENTAL EVENT TYPE  
CIRCUIT TRAFFIC  
CIRCUIT TYPE  
CONTENT DELIVERY EVENT  
DAY  
DESTINATION TYPE  
DISTANCE BAND  
DIVERT RETRIEVE REASON  
DIVERT RETRIEVE TYPE  
EQUIPMENT CENTER  
EVENT  
EVENT ACCESS METHOD ACTIVITY  
EVENT ASSIGNMENT  
EVENT ASSIGNMENT REASON  
EVENT ASSIGNMENT TYPE  
EVENT CATEGORY  
EVENT CIRCUIT RENTAL  
EVENT CLASS  
EVENT GEOGRAPHY  
EVENT PARTY INTERACTION EMAIL  
EVENT PARTY INTERACTION LETTER  
EVENT PARTY INTERACTION VISIT  
EVENT PREPAID MOBILE  
EVENT PRODUCT PACKAGE  
EVENT STATUS  
EVENT SUBSCRIPTION

**Table 2–18 (Cont.) Network Business Area Logical Entity**

---

**Network Entity List**

---

EVENT SUBSCRIPTION CHANGE  
 EVENT WEB REGISTRATION  
 EXTERNAL OPERATOR  
 FAULT RESOLUTION TYPE  
 FAULT TYPE  
 FISCAL HALF MONTH  
 FISCAL HALF YEAR  
 FISCAL MONTH  
 FISCAL QUARTER  
 FISCAL WEEK  
 FISCAL YEAR  
 FIXED LINE CALL EVENT  
 FIXED LINE PORT  
 GEOGRAPHY CITY  
 GEOGRAPHY COUNTRY  
 GEOGRAPHY REGION  
 GEOGRAPHY STATE  
 GEOGRAPHY SUB REGION  
 GEOGRAPHY WORLD  
 IDD CALL EVENT  
 IN PLATFORM  
 INTERACTION DIRECTION  
 INTERACTION REASON  
 INTERACTION RESULT TYPE  
 INTERACTION STATUS  
 INTERACTION TYPE  
 INTERNET ACCESS EVENT  
 LETTER TYPE  
 LOYALTY PROGRAM  
 MEDIATED CALL EVENT  
 MMS EVENT  
 MOBILE SWITCHING CENTER  
 MONTH TODATE TRANSFORMATION  
 MONTH TRANSFORMATION  
 NETWORK  
 NETWORK ELEMENT  
 NETWORK ELEMENT COST

**Table 2–18 (Cont.) Network Business Area Logical Entity****Network Entity List**

NETWORK EVENT  
NETWORK EVENT STATUS  
NETWORK EVENT TYPE  
NETWORK FAULT  
NETWORK SERVICE COVERAGE ASSIGNMENT  
NETWORK TOUCHPOINT  
NETWORK TOUCHPOINT CLASS  
NETWORK TOUCHPOINT STATUS  
NETWORK TOUCHPOINT TYPE  
NETWORK TYPE  
NOTIFICATION TYPE  
NUMBER NETWORK TYPE  
ON OFF NET TYPE  
PARTY  
PARTY INTERACTION THREAD  
PCU OUTAGE REASON  
PEAK OFFPEAK TIME  
PREPAID MOBILE EVENT TYPE  
PROMOTION RESULT TYPE  
PROMOTION TERM TYPE  
PTV QPI SERVICE EVENT  
PUBLICATION TYPE  
RETAIL STORE  
RF CARRIER  
ROUTING DEVICE  
SCRIPT QUESTION TYPE  
SEASON  
SERVICE CLASS  
SERVICE CLASS TYPE  
SERVICE COVERAGE AREA  
SERVICE COVERAGE AREA TYPE  
SERVICE COVERAGE GEO DETAIL  
SERVICE EQUIPMENT ASSIGNMENT  
SERVICE REQUEST  
SMS EVENT  
SWITCH  
SWITCH CAPABILITY

**Table 2–18 (Cont.) Network Business Area Logical Entity**

---

**Network Entity List**

---

SWITCH CAPABILITY TYPE  
 SWITCH COMMAND  
 SWITCH ROUTING DEVICE ASSIGNMENT  
 SWITCH TYPE  
 TCH TYPE  
 TECHNOLOGY  
 TECHNOLOGY TYPE  
 TELEPHONE NUMBER POOL  
 TIME BAND  
 TIME SLOT  
 TIME STANDARD BY DAY  
 TIME STANDARD BY WEEK  
 UMS ACCESS TYPE  
 UMS EVENT  
 VAS SUBSCRIPTION  
 VOIP CALL EVENT  
 VOLUME BAND  
 WIRELESS CALL EVENT  
 WIRELESS CONTENT DOWNLOADING EVENT  
 WIRELESS NETWORK ELEMENT  
 YEAR TRANSFORMATION

---

## Business Area: Partner Management

Table 2–19 lists the logical entities for Partner Management.

**Table 2–19 Partner Management Business Area Logical Entity**

---

**Partner Management Entity List**

---

ACCESS METHOD PORTING HISTORY  
 APPOINTMENT TYPE  
 CALENDAR HALF MONTH  
 CALENDAR HALF YEAR  
 CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 COLLECTION AGENCY  
 CONTENT  
 CONTENT PRICE



**Table 2-19 (Cont.) Partner Management Business Area Logical Entity****Partner Management Entity List**

CONTENT PRICING TYPE  
CONTENT PROVIDER  
CONTENT TYPE  
DEAL  
DEAL VENDOR ITEM ASSIGNMENT  
DEALER  
DEALER DISCOUNT GROUP ASSIGNMENT  
DISCOUNT GROUP  
EVENT PARTY ASSIGNMENT  
EVENT PARTY PROFILE  
FISCAL HALF MONTH  
FISCAL HALF YEAR  
FISCAL MONTH  
FISCAL QUARTER  
FISCAL WEEK  
FISCAL YEAR  
ISP  
ISP BUSINESS  
ISP BUSINESS ASSIGNMENT  
ISP BUSINESS TYPE  
ISP TYPE  
ISP USER  
NP REQUEST LINE ITEM STATE TYPE  
NP REQUEST STATE TYPE  
NP REQUEST TYPE  
NP STEP  
OPERATOR GROUP  
OPERATOR TYPE  
ORGANIZATION BUSINESS UNIT  
PARTNER SETTLEMENT REASON  
PARTY  
PARTY EVENT TYPE  
PARTY IDENTIFICATION  
PARTY ORDER ASSIGNMENT TYPE  
PROMOTION  
SIC INDUSTRY GROUP  
TIME SLOT

**Table 2–19 (Cont.) Partner Management Business Area Logical Entity**

---

**Partner Management Entity List**

---

TIME STANDARD BY DAY  
 TIME STANDARD BY WEEK  
 VENDOR  
 VENDOR APPOINTMENT  
 VENDOR CLASS  
 VENDOR CONTRACT  
 VENDOR RATING  
 VENDOR RATING TYPE  
 VENDOR SITE  
 VENDOR SITE COURIER ASSIGNMENT  
 VENDOR SITE TYPE

---

**Business Area: Product Management**

Table 2–20 lists the logical entities for Product Management.

**Table 2–20 Product Management Business Area Logical Entity**

---

**Product Management Entity List**

---

ACCESSORIES  
 ADDITIONAL TEXT  
 BRAND  
 BROADBAND RATING PLAN  
 BUSINESS HALF MONTH  
 BUSINESS HALF YEAR  
 BUSINESS MONTH  
 BUSINESS QUARTER  
 CABLE MODEM  
 CALENDAR HALF MONTH  
 CALENDAR HALF YEAR  
 CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 CALLER ID  
 CELL  
 CELL SECTOR  
 CELL SITE  
 CHANGE PROPOSED BY TYPE  
 CHANNEL

**Table 2–20 (Cont.) Product Management Business Area Logical Entity****Product Management Entity List**

CHANNEL TYPE  
CONTENT  
DISCOUNT GROUP  
DOCUMENT CONDITION TYPE  
DOCUMENT TYPE  
EQUIPMENT  
EQUIPMENT FUNCTIONALITY  
EQUIPMENT FUNCTIONALITY ASSIGNMENT  
EQUIPMENT INSTANCE  
EQUIPMENT INSTANCE STATUS HISTORY  
EQUIPMENT INSTANCE STATUS TYPE  
EVENT PRODUCT PACKAGE  
EVENT SIM CARD  
FISCAL HALF MONTH  
FISCAL HALF YEAR  
FISCAL MONTH  
FISCAL QUARTER  
FISCAL WEEK  
FISCAL YEAR  
FIXED LINE  
FIXED LINE RATING PLAN  
GIVE AWAY TYPE  
HANDSET INSTANCE  
HANDSET MODEL  
IDD  
ITEM  
ITEM TYPE  
LANGUAGE  
MARKET PLAN SUBSTITUTE BY DOC  
MARKET PLAN TERM VALUE  
MINUTE  
MMS  
MODEL TYPE  
NAICS CLASSIFICATION  
NAICS INDUSTRY  
NAICS INDUSTRY GROUP  
NAICS INDUSTRY SECTOR

**Table 2–20 (Cont.) Product Management Business Area Logical Entity**

---

**Product Management Entity List**

---

NAICS INDUSTRY SUBSECTOR  
 NETWORK TOUCHPOINT  
 ORGANIZATION BUSINESS UNIT  
 ORGANIZATION ITEM SELLING PRICE  
 ORGANIZATION WAREHOUSE  
 PARTY  
 PAY TV  
 PPA CATEGORY  
 PPA DEDUCTION TYPE  
 PREPAID VOUCHER INSTANCE  
 PREPAID WIRELESS  
 PRODUCT  
 PRODUCT ADDITIONAL TEXT  
 PRODUCT ASSIGNMENT  
 PRODUCT ASSIGNMENT REASON  
 PRODUCT CAPABILITY  
 PRODUCT CAPABILITY TYPE  
 PRODUCT CAPABILITY VALUE  
 PRODUCT CHARGE TYPE  
 PRODUCT CHARGE TYPE RELATIONSHIP  
 PRODUCT CHARGE TYPE RLTN REASON  
 PRODUCT CHARGING REASON  
 PRODUCT FEATURE  
 PRODUCT FEATURE ASSIGNMENT  
 PRODUCT FUNCTIONALITY DEPENDENCY  
 PRODUCT GEOGRAPHY ASSIGNMENT  
 PRODUCT GROUP  
 PRODUCT GROUP ASSIGNMENT  
 PRODUCT GROUP TYPE  
 PRODUCT INSTANCE  
 PRODUCT MANAGEMENT HISTORY  
 PRODUCT MANAGEMENT REASON  
 PRODUCT MANAGEMENT ROLE  
 PRODUCT MARKET PLAN  
 PRODUCT MARKET PLAN ASSIGNMENT  
 PRODUCT MARKET PLAN ASSIGNMENT TYPE  
 PRODUCT MARKET PLAN GEOGRAPHY ASSIGNMENT

**Table 2–20 (Cont.) Product Management Business Area Logical Entity****Product Management Entity List**

---

PRODUCT MARKET PLAN GROUP  
PRODUCT MARKET PLAN GROUP ASSIGNMENT  
PRODUCT MARKET PLAN GROUP TYPE  
PRODUCT MARKET PLAN TYPE  
PRODUCT NETWORK ASSIGNMENT  
PRODUCT PACKAGE  
PRODUCT PACKAGE ASSIGNMENT  
PRODUCT PACKAGE CHARGE TYPE  
PRODUCT RATING PLAN DETAIL  
PRODUCT RATING PLAN TYPE  
PRODUCT STATUS HISTORY  
PRODUCT STATUS TYPE  
PRODUCT TYPE  
PRODUCT VERSION  
RATING METHOD TYPE  
SECURITY REQUIRED TYPE  
SERVICE  
SERVICE CLASS  
SERVICE CLASS TYPE  
SET TOP BOX  
SET TOP BOX MODEL  
SIM CARD  
SIM CARD ACCESS METHOD ASSIGNMENT  
SIM CARD HANDSET ASSIGNMENT  
SIM CARD SUBSCRIPTION ASSIGNMENT  
SMS  
SMS RATING PLAN  
SUPPLEMENTARY SERVICE  
TIME BAND  
TIME SLOT  
TIME STANDARD BY WEEK  
TV CHANNEL  
VALUE ADDED SERVICE  
WIRELESS RATING PLAN  
YEAR TRANSFORMATION

---

## Business Area: Provisioning and Service

Table 2–21 lists the logical entities for Provisioning and Service.

**Table 2–21 Provisioning and Service Business Area Logical Entity**

---

**Provisioning and Service Entity List**

---

ACCESS METHOD  
ACCESS METHOD ASSIGNMENT TYPE  
ACCESS METHOD ELEMENT TYPE  
ACCESS METHOD PARTY ASSIGNMENT  
ACCESS METHOD STATUS REASON  
ACCESS METHOD STATUS TYPE  
ACCESS METHOD TYPE  
ACCOUNT  
ADDRESS LOCATION  
APPOINTMENT CALENDAR  
BLACK LIST HISTORY  
BUSINESS HALF MONTH  
BUSINESS HALF YEAR  
BUSINESS MONTH  
BUSINESS QUARTER  
BUSINESS WEEK  
BUSINESS YEAR  
CALENDAR HALF MONTH  
CALENDAR HALF MONTH  
CALENDAR HALF YEAR  
CALENDAR QUARTER  
CALENDAR WEEK  
CALENDAR YEAR  
CALL CATEGORY  
CALL CENTER  
CALL CENTER AGENT TYPE  
CALL CENTER CASE SUB TYPE  
CALL CENTER CASE TITLE  
CALL CENTER CASE TYPE  
CALL FORWARD  
CALL ROUTING TYPE  
CALL SOURCE DESTINATION  
CALL TYPE  
CHANGE PROPOSED BY TYPE

**Table 2–21 (Cont.) Provisioning and Service Business Area Logical Entity****Provisioning and Service Entity List**

CONTRACT  
CONTRACT TERM VALUE  
COURIER  
COURIER COST  
CUSTOMER  
CUSTOMER CLASS  
CUSTOMER CLASS ASSIGNMENT  
CUSTOMER ORDER  
CUSTOMER SCORE  
CUSTOMER SEGMENT  
CUSTOMER SOURCE  
CUSTOMER TYPE  
DAY  
EQUIPMENT  
EVENT ASSIGNMENT REASON  
EVENT ASSIGNMENT TYPE  
EVENT CATEGORY  
EVENT GEOGRAPHY  
EVENT RESPONSE REASON  
FIELD ACTIVITY RESULT TYPE  
FIELD ACTIVITY TYPE  
FISCAL HALF MONTH  
FISCAL HALF YEAR  
FISCAL MONTH  
FISCAL QUARTER  
FISCAL WEEK  
FISCAL YEAR  
GEOGRAPHY CITY  
GEOGRAPHY COUNTY  
GEOGRAPHY REGION  
GEOGRAPHY STATE  
GEOGRAPHY SUB REGION  
GEOGRAPHY WORLD  
INTERACTION DIRECTION  
INTERACTION REASON  
INTERACTION RESULT TYPE  
INTERACTION STATUS

**Table 2–21 (Cont.) Provisioning and Service Business Area Logical Entity**

---

**Provisioning and Service Entity List**

---

INTERACTION TYPE  
 ISP USAGE EVENT  
 ITEM  
 LETTER TYPE  
 MANAGE ACTION TYPE  
 MARKET PLAN MANAGEMENT  
 MARKET PLAN SUBSTITUTE BY DOC  
 MARKET PLAN TERM VALUE  
 NETWORK EVENT  
 NP REQUEST LINE ITEM STATE HISTORY  
 NP REQUEST STATE TYPE  
 NP REQUEST TYPE  
 NP STEP  
 ORDER STATUS  
 ORDER TYPE  
 ORGANIZATION AREA  
 ORGANIZATION BANNER  
 ORGANIZATION BUSINESS UNIT  
 ORGANIZATION CHAIN  
 ORGANIZATION COMPANY  
 ORGANIZATION CORPORATE  
 ORGANIZATION DISTRICT  
 ORGANIZATION DIVISION  
 ORGANIZATION REGION  
 OTHER INDIVIDUAL  
 PARTY AM PMP ASSIGNMENT HISTORY  
 PARTY AM PMP ASSIGNMENT STATUS  
 PARTY CONTACT LIST ROLE  
 PARTY SIM CARD ROLE  
 PMP ORGANIZATION AVAILABILITY  
 PREPAID VOUCHER  
 PREPAID WIRELESS  
 PRODUCT  
 PRODUCT MARKET PLAN  
 PRODUCT MARKET PLAN ASSIGNMENT  
 PRODUCT MARKET PLAN GEOGRAPHY ASSIGNMENT  
 PRODUCT PACKAGE



**Table 2–21 (Cont.) Provisioning and Service Business Area Logical Entity****Provisioning and Service Entity List**


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PRODUCT RATING PLAN  
 PRODUCT RATING PLAN DETAIL  
 PRODUCT TYPE  
 PROMOTION RESULT TYPE  
 PROMOTION TERM TYPE  
 PTV USAGE EVENT  
 PUBLICATION TYPE  
 SCRIPT QUESTION TYPE  
 SEASON  
 SERVICE  
 SERVICE CLASS  
 SERVICE CLASS TYPE  
 SERVICE REQUEST  
 SIM CARD ACCESS METHOD REASON  
 SIM CARD ACTIVATION REASON  
 SIM CARD ACTIVATION TYPE  
 SIM CARD SUBSCRIPTION REASON  
 SIM CARD TYPE  
 SUBSCRIBER ACTIVATION REASON  
 SUBSCRIPTION  
 TIME SLOT  
 TIME STANDARD BY DAY  
 TIME STANDARD BY WEEK  
 UMS ACCESS TYPE  
 VOICE MESSAGE SERVICE  
 WIRELESS NETWORK ELEMENT  
 YEAR TRANSFORMATION

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**Business Area: Revenue**

Table 2–22 lists the logical entities for Revenue.

**Table 2–22 Revenue Business Area Logical Entities****Revenue Entity List**


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ACCESS METHOD  
 ACCESS METHOD TYPE  
 ACCOUNT ACCOUNTING CYCLE HISTORY  
 ACCOUNT PAYMENT  
 ACCOUNT PREFERRED PAYMENT METHOD

**Table 2–22 (Cont.) Revenue Business Area Logical Entities**

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**Revenue Entity List**

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ACCOUNT REFUND  
 ADDRESS LOCATION  
 BUSINESS HALF MONTH  
 BUSINESS HALF YEAR  
 BUSINESS MONTH  
 BUSINESS QUARTER  
 BUSINESS WEEK  
 BUSINESS YEAR  
 CALENDAR HALF MONTH  
 CALENDAR HALF YEAR  
 CALENDAR MONTH  
 CALENDAR QUARTER  
 CALENDAR WEEK  
 CALENDAR YEAR  
 CAMPAIGN  
 CAMPAIGN TYPE  
 CELL  
 CELL SITE  
 COLLECTION AGENCY  
 COMMISSION TYPE  
 CONTRACT  
 CURRENCY EXCHANGE RATE  
 CUSTOMER  
 CUSTOMER CLASS  
 CUSTOMER CLASS ASSIGNMENT  
 CUSTOMER SCORE  
 CUSTOMER SEGMENT  
 CUSTOMER SOURCE  
 CUSTOMER TYPE  
 DAY  
 DEBT AGING BAND  
 DEBT COLLECTION  
 DEBT COLLECTION ASSIGNMENT  
 DEBT COLLECTION ASSIGNMENT BATCH  
 DIRECT DEBIT STATUS REASON  
 EQUIPMENT  
 EVENT FINANCIAL

**Table 2–22 (Cont.) Revenue Business Area Logical Entities****Revenue Entity List**

EVENT INVOICE DELIVERY  
 EVENT LOYALTY PROGRAM  
 EVENT LOYALTY PROGRAM ACCUMULATION  
 EVENT LOYALTY PROGRAM REDEMPTION  
 FACTOR COMPANY  
 FISCAL HALF MONTH  
 FISCAL HALF YEAR  
 FISCAL MONTH  
 FISCAL QUARTER  
 FISCAL WEEK  
 FISCAL YEAR  
 FRAUD PROFILE CLASS  
 GEOGRAPHY CITY  
 GEOGRAPHY COUNTRY  
 GEOGRAPHY COUNTY  
 GEOGRAPHY REGION  
 GEOGRAPHY STATE  
 GEOGRAPHY SUB REGION  
 GEOGRAPHY WORLD  
 GL REFERENCE  
 INVOICE  
 INVOICE ADJUSTMENT  
 INVOICE ADJUSTMENT QUOTA  
 INVOICE ADJUSTMENT REASON  
 INVOICE ADJUSTMENT TYPE  
 INVOICE DELIVERY TYPE  
 INVOICE DISCOUNT  
 INVOICE DISCOUNT REASON  
 INVOICE DISCOUNT TYPE  
 INVOICE ITEM  
 INVOICE ITEM DETAIL  
 INVOICE ITEM DETAIL TYPE  
 INVOICE ITEM TYPE  
 INVOICE PAYMENT TERM  
 INVOICE PAYMENT TERM TYPE  
 INVOICE TYPE  
 IP ADDRESS POOL

**Table 2–22 (Cont.) Revenue Business Area Logical Entities**

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**Revenue Entity List**

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LANGUAGE

LOYALTY PROGRAM CHANNEL

LOYALTY PROGRAM EVENT CATEGORY

LOYALTY PROGRAM EVENT TYPE

LOYALTY PROGRAM PARTY ROLE

LOYALTY PROGRAM POINTS BALANCE

NETWORK

NETWORK ELEMENT

NETWORK TYPE

ORGANIZATION AREA

ORGANIZATION BANNER

ORGANIZATION BUSINESS ENTITY

ORGANIZATION BUSINESS UNIT

ORGANIZATION BUSINESS UNIT TYPE

ORGANIZATION CHAIN

ORGANIZATION COMPANY

ORGANIZATION CORPORATE

ORGANIZATION DISTRICT

ORGANIZATION DIVISION

ORGANIZATION HIERARCHY

ORGANIZATION HIERARCHY LEVEL

ORGANIZATION HIERARCHY LEVEL ASSIGNMENT

ORGANIZATION HIERARCHY VERSION

ORGANIZATION ITEM SELLING PRICE

ORGANIZATION LEVEL

ORGANIZATION LEVEL ATTRIBUTE VALUE

ORGANIZATION LEVEL ATTRIBUTES

ORGANIZATION MARKET DATA

ORGANIZATION REGION

ORGANIZATION SERVICE WEBSITE

ORGANIZATIONAL DEMOGRAPHY VALUE

PARTY LOYALTY PROGRAM PARTICIPATION

PAYMENT METHOD TYPE

PAYMENT TRANSACTION TYPE

PREPAID RECHARGE

PRODUCT

PRODUCT CHARGE TYPE

**Table 2–22 (Cont.) Revenue Business Area Logical Entities****Revenue Entity List**


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PRODUCT PACKAGE  
 PRODUCT RATING PLAN  
 PRODUCT TYPE  
 PROMOTION  
 PROMOTION TYPE  
 RECHARGE REVENUE SLAB  
 SALES CHANNEL  
 SALES CHANNEL REPRESENTATIVE  
 SALES COMMISSION DETAIL  
 SALES COMMISSION PAYROLL  
 SALES COMMISSION PLAN  
 SALES COMMISSION PLAN DETAIL  
 SUBSCRIPTION  
 SUBSCRIPTION ASSIGNMENT  
 SUBSCRIPTION ASSIGNMENT TYPE  
 SUBSCRIPTION EVENT TYPE  
 SUBSCRIPTION PMP ASSIGNMENT  
 SUBSCRIPTION SERVICE CLASS ASSIGNMENT  
 SUBSCRIPTION STATUS  
 SUBSCRIPTION STATUS CATEGORY  
 SUBSCRIPTION STATUS HISTORY  
 SUBSCRIPTION STATUS REASON  
 SUBSCRIPTION TERM TYPE  
 SUBSCRIPTION TERM VALUE  
 SUBSCRIPTION TYPE  
 TAX EXEMPT  
 TIME SLOT  
 TIME STANDARD BY DAY  
 TIME STANDARD BY WEEK  
 YEAR TRANSFORMATION

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**Logical Data Model Entity Dictionary**

Table 2–23 through Table 2–29 list the logical data model entities, in alphabetical order.

**Table 2–23 A to C Entity Descriptions**

Entity Name	Type	Description
ACCESS METHOD	Reference	Methods that a customer accesses or utilizes a service. For example: <ul style="list-style-type: none"> <li>■ Fixed Line telephone numbers</li> <li>■ Wireless telephone numbers</li> <li>■ xDSL account</li> <li>■ IDD Calling card number</li> </ul>
ACCESS METHOD ACCOUNT ASSIGNMENT	Reference	Assigns <a href="#">ACCESS METHODS</a> to an account.
ACCESS METHOD ASSIGNMENT TYPE	Lookup	Type of relationship between two <a href="#">ACCESS METHODS</a> . For example: <ul style="list-style-type: none"> <li>■ Replace</li> <li>■ Bind together</li> </ul>
ACCESS METHOD ASSIGNMENT	Reference	Assignment of an <a href="#">ACCESS METHOD</a> to a related <a href="#">ACCESS METHOD</a> .
ACCESS METHOD ELEMENT	Reference	The <a href="#">ACCESS METHOD</a> may be split into multiple elements for better management. Each element is a segment in the <a href="#">ACCESS METHOD</a> , which represents a group of access methods. For example, for the access method for a phone number, where access method elements are: <ul style="list-style-type: none"> <li>■ Country code</li> <li>■ Area code</li> <li>■ Local number</li> </ul>
ACCESS METHOD ELEMENT TYPE	Lookup	Lookup for type of <a href="#">ACCESS METHOD ELEMENT</a> . For example: <ul style="list-style-type: none"> <li>■ Country code of phone number</li> <li>■ Area code of phone number</li> </ul>
ACCESS METHOD EQUIPMENT ASSIGNMENT	Reference	How the access method binds to an equipment instance. For example: <ul style="list-style-type: none"> <li>■ Cell phone number binds onto a cell phone</li> <li>■ Login code binds to a modem</li> </ul>
ACCESS METHOD GEOGRAPHY ASSIGNMENT	Reference	Assigns the access method to a geographic region.
ACCESS METHOD PARTY ASSIGNMENT	Reference	Assigns access method to a party.
ACCESS METHOD PARTY ASSIGNMENT TYPE	Lookup	Lookup for type of relationship between <a href="#">ACCESS METHOD</a> and <a href="#">PARTY</a> . For example: <ul style="list-style-type: none"> <li>■ Management</li> <li>■ Owned by</li> </ul> The management type of access method party relationship specifies that an employee may be responsible for the maintenance of a group of access methods.
ACCESS METHOD POOL	Reference	The logical network resources. For example: <ul style="list-style-type: none"> <li>■ Telephone number</li> <li>■ IP address</li> </ul>
ACCESS METHOD PORTING HISTORY	Base	The history of access methods that the customer brought to the operator from another telecom operator, according to the number porting scheme.
ACCESS METHOD SEGMENT	Reference	Segments of <a href="#">ACCESS METHODS</a> defined for usage tracking. For example: <ul style="list-style-type: none"> <li>■ Phone number may have the segments: Country_Code + Area_Code + Local_Number</li> <li>■ IP address may have the segments: Type A, B, C, D, E subnetwork</li> </ul>
ACCESS METHOD SEGMENT PROD CAPABILITY RL	Reference	The relationship between <a href="#">ACCESS METHOD SEGMENT</a> and <a href="#">PRODUCT CAPABILITY</a> to define which product capabilities require which access method segment.
ACCESS METHOD SERVICE ASSIGNMENT	Reference	Defines the relationship between a <a href="#">SERVICE</a> and an <a href="#">ACCESS METHOD</a> . For example, which service (gsm voice) is using which mobile number.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
ACCESS METHOD STATUS HISTORY	Base	The status of an <a href="#">ACCESS METHOD</a> . Defines both current status and historical status. For example: <ul style="list-style-type: none"> <li>■ Active</li> <li>■ Suspended</li> <li>■ Deactivated</li> </ul>
ACCESS METHOD STATUS REASON	Lookup	Lookup for available reasons an <a href="#">ACCESS METHOD</a> may have a change in status. For example: <ul style="list-style-type: none"> <li>■ Customer relocation</li> <li>■ Suspension due to late-payment</li> </ul>
ACCESS METHOD STATUS TYPE	Lookup	Lookup for available <a href="#">ACCESS METHOD</a> status types and descriptions. For example: <ul style="list-style-type: none"> <li>■ Active</li> <li>■ Inactive</li> <li>■ Suspended</li> <li>■ Future Activated</li> </ul>
ACCESS METHOD SUBSCRIPTION ASSIGNMENT	Reference	Assigns <a href="#">ACCESS METHOD</a> (s) to a <a href="#">SUBSCRIPTION</a> .
ACCESS METHOD TYPE	Lookup	Lookup for <a href="#">ACCESS METHOD</a> type: Defines the types of methods by which a customer may use or access services or products. For example: <ul style="list-style-type: none"> <li>■ Fixed Line telephone numbers</li> <li>■ Wireless telephone numbers</li> <li>■ xDSL account</li> <li>■ IDD Calling card number</li> </ul>
ACCESSORIES	Reference	The accessories that may be purchased from the service provider in addition to the item, product, or service. For example: <ul style="list-style-type: none"> <li>■ Handset chains</li> <li>■ Starter kit</li> <li>■ Headset (earphones)</li> <li>■ USB Cable</li> </ul>
ACCOUNT	Reference	The account is generated by a contract between service provider and customer. For the service provider hosting different network, including CDMA, GSM, broadband, and others, one customer may have a different account for a different network or can be unified.  Once set up, a customer can use account for self service from the Web site or from a Service Provider terminal. In this case the account is normally protected by a password.
ACCOUNT ASSIGNMENT TYPE	Reference	The type of relationship between two <a href="#">ACCOUNTS</a> . For example, a corporate account has several affiliated accounts.
ACCOUNT ACCOUNTING CYCLE HISTORY	Base	Billing cycle status history for <a href="#">ACCOUNTS</a> .
ACCOUNT ADJUSTMENT REASON	Lookup	Lookup of all the reasons for adjustments. For example: <ul style="list-style-type: none"> <li>■ Goodwill</li> <li>■ Agreement after complaint</li> </ul>
ACCOUNT ASSIGNMENT	Reference	Relationship assignments between <a href="#">ACCOUNTS</a> . For example, parent and child accounts.
ACCOUNT ASSIGNMENT REASON	Lookup	Lookup for available reasons <a href="#">ACCOUNTS</a> may be related.
ACCOUNT BALANCE ADJUSTMENT	Base	Contains the list of all adjustments to any account balance. These are pure adjustments and not just additional payments or costs. An account balance adjustment is usually related to the party interaction thread.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
ACCOUNT_BALANCE_ADJUSTMENT_TYPE	Lookup	Lookup of all the types of adjustments. For example: <ul style="list-style-type: none"> <li>■ Free Monthly Fee</li> <li>■ Free Service</li> <li>■ Direct credit amount</li> </ul>
ACCOUNT_BALANCE_BUCKET	Base	Tracks the expire date and recharge date for each “Bucket” of the prepaid balance.
ACCOUNT_BALANCE_GROUP	Reference	The balance group concept allows one account to have multiple balance groups, which applies to different groups of services. For example, some special discounts, or monetary balance, can be given for wireless calls, but not for fixed line service.
ACCOUNT_BALANCE_HISTORY	Base	Balance history of <a href="#">ACCOUNT</a> subjected to the primary currency. The balance value was classified by the balance type. For example: <ul style="list-style-type: none"> <li>■ Monetary value deposit</li> <li>■ Free allowance minutes balance over wireless call</li> </ul>
ACCOUNT_BALANCE_IMPACT	Base	The account balance change details, because of a specific event. For example: <ul style="list-style-type: none"> <li>■ Account payment</li> <li>■ Rated network event</li> </ul>
ACCOUNT_BALANCE_MONTH_DRVD	Derived	Daily aggregate of free minutes allowance (PPA) for <a href="#">ACCOUNT</a> and <a href="#">PRODUCT MARKET PLAN</a> .
ACCOUNT_BALANCE_TRANSFER	Base	The Peer to Peer balance transfer between two <a href="#">ACCOUNTS</a> . One <a href="#">ACCOUNT</a> can transfer credit, including free minutes, into another <a href="#">ACCOUNT</a> .
ACCOUNT_BALANCE_TYPE	Lookup	Type of account balance. For example: <ul style="list-style-type: none"> <li>■ Broadband</li> <li>■ PTV</li> <li>■ Wireless free call allowance</li> </ul>
ACCOUNT_BILLING_CYCLE_HISTORY	Reference	Billing cycle status history for <a href="#">ACCOUNTS</a> .
ACCOUNT_BILLING_FREQUENCY_HISTORY	Reference	Billing frequency history for <a href="#">ACCOUNTS</a> .
ACCOUNT_BILLING_OCCURRENCE	Reference	Specifies each billing occurrence for an <a href="#">ACCOUNT</a> . A billing occurrence may be triggered by a predefined billing cycle or some other event such as account termination. In a single account billing occurrence there may be multiple invoices generated.
ACCOUNT_BILLING_PERIOD_HISTORY	Reference	Billing period history for <a href="#">ACCOUNTS</a> .
ACCOUNT_BUSINESS_INTERACTION_ROLE	Reference	The business interaction role which can be assigned by a Customer Account.
ACCOUNT_CONTRACT_RELATIONSHIP	Reference	Assignment of <a href="#">ACCOUNT</a> to a <a href="#">CONTRACT</a> .
ACCOUNT_COST	Base	Subtype of <a href="#">COST</a> , which associates a specific incurred cost to an <a href="#">ACCOUNT</a> (through an <a href="#">EMPLOYEE</a> ).
ACCOUNT_CREDIT_LIMIT	Base	Credit limit assigned to an account, subscription, or contract.
ACCOUNT_DEBT_DAY_DRVD	Derived	The summarized daily debt status for each account.
ACCOUNT_DEBT_MONTH_AGGR	Aggregate	Derived from <a href="#">ACCOUNT_DEBT_DAY_DRVD</a> . The summarized monthly debt status for each <a href="#">CUSTOMER_TYPE</a> .
ACCOUNT_DEBT_WRITE_OFF	Base	The transaction to write off debt, and clear it out from accounts receivable.
ACCOUNT_EVENT_TYPE	Lookup	Lookup for account event types.
ACCOUNT_MANAGEMENT_HISTORY	Base	Subtype of <a href="#">PARTY_ACCOUNT_ASSIGNMENT</a> . The account management history tracks the management relationship from employee to the accounts, including account creation, through sales channel, and accounts update or termination.
ACCOUNT_PARTY_PMP_RELATIONSHIP	Reference	Assigns accounts and parties to <a href="#">PRODUCT MARKET PLAN</a> .



**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
ACCOUNT PAYMENT	Base	Allocations of funds from a receipt made by a party to an account. The receipt of a single sum from a party as a credit against an outstanding balance for the provision and supply of products or services.
ACCOUNT PAYMENT BALANCE IMPACT	Base	The <a href="#">ACCOUNT BALANCE IMPACT</a> originated from <a href="#">ACCOUNT PAYMENTS</a> .
ACCOUNT PAYMENT DAY DRVD	Derived	Daily aggregation of payments made by all customers.
ACCOUNT PAYMENT METHOD STATUS	Base	Status history of each account preferred payment method. For example: <ul style="list-style-type: none"> <li>■ Active</li> <li>■ Inactive</li> <li>■ Invalid</li> </ul>
ACCOUNT PAYMENT METHOD STATUS HIST AGGR	Aggregate	Collects all changes to the payment method status and the reason of the changes over time.
ACCOUNT PAYMENT METHOD STATUS HIST DRVD	Derived	Collects the changes on payment method status.
ACCOUNT PAYMENT METHOD STATUS REASON	Lookup	Lookup for specific status of the account payment method. For example: <ul style="list-style-type: none"> <li>■ Activated</li> <li>■ Deactivated</li> <li>■ Disabled</li> </ul>
ACCOUNT PAYMENT METHOD STATUS TYPE	Lookup	Lookup for types of <a href="#">ACCOUNT PAYMENT METHOD STATUS</a> . For example: <ul style="list-style-type: none"> <li>■ Active</li> <li>■ Inactive</li> <li>■ Payment Rejected</li> </ul>
ACCOUNT PAYMENT MONTH AGGR	Aggregate	Monthly summary of payments made by all customers.
ACCOUNT PMP PARTICIPATION HISTORY	Base	Defines the history of how account uses the <a href="#">PRODUCT MARKET PLAN</a> .
ACCOUNT PREFERRED INVOICE DELIVERY	Reference	The preferred invoice delivery type history for account.
ACCOUNT PREFERRED PAYMENT METHOD	Reference	Contains preferred payment methods for the account.
ACCOUNT PROFILE	Reference	Records more details about the account.
ACCOUNT RECHARGE	Base	The recharge (refill) made into the customer account.
ACCOUNT REFUND	Base	The customer refund is the money transferred back to customer account, which is normally based on an invoice adjustment.
ACCOUNT REFUND DAY DRVD	Derived	The daily summary of refund to customers and the impacts to revenue.
ACCOUNT REFUND MONTH AGGR	Aggregate	The monthly summary of refunds to customers and the impacts to revenue.
ACCOUNT REFUND REASON	Lookup	Lookup for the reasons why a refund may occur. For example: <ul style="list-style-type: none"> <li>■ Invoice Adjustment</li> <li>■ Tax Refund</li> </ul>
ACCOUNT ROLE TYPE	Lookup	The type of <a href="#">ACCOUNT ROLES</a> , for example, primary account, secondary account, and so on.
ACCOUNT SEGMENT	Reference	The segments identifying distinct groupings of accounts with similar characteristics. The account segments are typically generated from the data mining analysis.
ACCOUNT SEGMENT ASSIGNMENT HISTORY	Reference	Assign account segment to each account.
ACCOUNT SEGMENTATION MODEL	Reference	Used to cluster the account.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
ACCOUNT STATISTIC DRVD	Derived	Account statistics for each account. One account normally has multiple <a href="#">SUBSCRIPTIONS</a> , and <a href="#">CONTRACTS</a> , all values on which are summed into the account level. Any deleted or blocked accounts are also included and are deemed as Churned, regardless of whether the deletion or block was voluntary.
ACCOUNT STATISTIC TYPE AGGR	Aggregate	Account statistical information at higher level by <a href="#">CUSTOMER TYPE</a> .
ACCOUNT STATUS DRVD	Derived	The status change information about all accounts at every month.
ACCOUNT STATUS HISTORY	Base	The history of account status change, including activation, suspension, and so on.
ACCOUNT STATUS REASON	Lookup	Lookup for account status reasons, or possible reasons a given account status has been changed.
ACCOUNT STATUS TYPE	Lookup	Lookup for account status types.
ACCOUNT STATUS TYPE AGGR	Aggregate	Account statistical information at a higher level by customer type.
ACCOUNT SUBSCRIPTION ASSIGNMENT	Reference	History of subscriptions by an account.
ACCOUNT SUBSCRIPTION ASSIGNMENT REASON	Lookup	Each account to subscription relationship may have a reason associated with it. For example: <ul style="list-style-type: none"> <li>■ Warrant account</li> <li>■ Payment account</li> </ul>
ACCOUNT TYPE	Lookup	Lookup for account type. For example: <ul style="list-style-type: none"> <li>■ Prepaid</li> <li>■ Postpaid</li> </ul>
ACCOUNTING CYCLE	Lookup	Internal Billing cycle which is used to calculate the usage amount and update the account balance for accounting GL purpose.
ACCOUNTING ITEM CATEGORY	Lookup	Lookup for categories that can be associated with incurred costs. For example: <ul style="list-style-type: none"> <li>■ Operations</li> <li>■ Staffing</li> <li>■ Supplies</li> </ul>
ADDITIONAL TEXT	Reference	Additional text can save multiple lingual notes or comments for products, parties, and other information.
ADDRESS LOCATION	Reference	Address details for physical or mailing address.
ADDRESS LOCATION NAME	Reference	Tracks other names used by the same <a href="#">ADDRESS LOCATION</a> .
ADDRESS RELATED	Reference	Entity associates addresses with other addresses. Addresses can be associated in many ways. For example, one address is an alternate for another address for those locations with multiple addresses.
ADDRESS RELATED REASON	Lookup	Lookup for reasons addresses may be related.
ADDRESS RELATED TYPE	Lookup	Lookup for the type of relationship between two addresses.
ADDRESS STATUS	Base	Current status of an address location. For example: <ul style="list-style-type: none"> <li>■ Active</li> <li>■ Current</li> <li>■ Changed</li> <li>■ Old address</li> </ul>
ADDRESS STATUS REASON	Lookup	Lookup for the reason for a change to the current <a href="#">ADDRESS STATUS</a> .
ADDRESS TYPE	Lookup	Lookup for address types. For example: <ul style="list-style-type: none"> <li>■ Home</li> <li>■ Office</li> <li>■ Warehouse</li> <li>■ Billing</li> </ul>
ADVERTISING PERIOD	Reference	Defines an advertising period.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
ADVERTISING QUARTER	Reference	Defines a quarter in an advertising calendar.
ADVERTISING WEEK	Reference	Defines a week in an advertising calendar.
ADVERTISING YEAR	Reference	Defines a year in an advertising calendar.
AGE BAND	Lookup	Lookup to bin the customer into different groups according age. For example: <ul style="list-style-type: none"> <li>■ 0~20 years</li> <li>■ 20~30 year</li> <li>■ 40-50 years</li> <li>■ 50-60 years</li> </ul>
AGE ON NET BAND	Lookup	Defines subscriber life cycle ranges. For example: <ul style="list-style-type: none"> <li>■ 0-1 month</li> <li>■ 1-2 months</li> </ul>
AGGREGATION INTERFACE	Reference	Defines a <a href="#">DEVICE INTERFACE</a> that functions as an Aggregation Interface; that is, an interface on the aggregation portion of the network. The objective of this role is to enable the definition of <a href="#">POLICYs</a> such that all Aggregation Interfaces in a particular Domain can receive the same common configuration commands.
ALLOWANCE SBPR PRICE ALTERNATION	Reference	An allowance, a number of something allowed before charging begins, for a <a href="#">SUBSCRIPTION</a> .
AMERICAN PROPERTY ADDRESS	Reference	The Property Address format used in USA.
ANZSIC CLASSIFICATION	Reference	The SIC code used in Australia and New Zealand.
APPOINTMENT	Base	The appointment between two parties to define a future time for conducting businesses. For example: <ul style="list-style-type: none"> <li>■ A customer visit appointment, between a sales representative and a customer.</li> <li>■ A technical support appointment between a customer and an engineer.</li> </ul>
APPOINTMENT CALENDAR	Base	Appointments assigning times for vendor or provider to deliver or provide a service.
APPOINTMENT TYPE	Lookup	Lookup for appointment types. For example: <ul style="list-style-type: none"> <li>■ Recurring</li> <li>■ Scheduled</li> </ul>
ARPU BASE CUSTOMER TYPE AGGR	Aggregate	The monthly summary of revenue values for ARPU calculation on <a href="#">CUSTOMER TYPE</a> level.
ARPU BASE DRVD	Derived	The monthly summary of revenue values and revenue value components along with the subscriber base count; used to calculate the ARPU values.
ARPU BAND	Lookup	Average Revenue per Unit Band definitions. For example: <ul style="list-style-type: none"> <li>■ \$0-100</li> <li>■ \$101-200</li> </ul>
ASSET	Reference	Any tangible or intangible economic resource, owned by the operator, which may be of interest to the financial status of the operator. For example, an asset may be a network element, for example routers, switches, or a business asset like land, building, or patent, and so on.
ASSET APPRAISAL HISTORY	Base	The valuation history of the <a href="#">ASSET</a> .
ASSET CONDITION HISTORY	Base	The condition history of an <a href="#">ASSET</a> , as inspected by an internal employee or a contractor. This is important for vehicles or buildings.
ASSET DEPRECIATION HISTORY	Base	The financial depreciation history of a given <a href="#">ASSET</a> .
ASSET PARTY ASSOCIATION	Reference	The relationship between a <a href="#">PARTY</a> and an <a href="#">ASSET</a> .
ASSET SITE ASSIGNMENT	Reference	The history of locations of each <a href="#">ASSET</a> . An <a href="#">ASSET</a> may be moved among different <a href="#">SITES</a> in its life cycle.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
ASSET TYPE	Lookup	The Type of <a href="#">ASSET</a> . For example: <ul style="list-style-type: none"> <li>■ Land</li> <li>■ Building</li> <li>■ Computer</li> </ul>
ATM INTERFACE	Reference	Asynchronous Transfer Mode (ATM), is a network technology based on transferring data in cells of a fixed size. The cell used with ATM is relatively small compared to that used with older technologies. In principle, the small, constant cell size allows ATM equipment to transmit video, audio, and computer data over the same network, and assure that no single type of data can dominate network traffic. ATM creates a fixed route between two points whenever data transfer begins. This differs from TCP/IP, in which messages are divided into packets and each packet can take a different route from source to destination. This difference makes it easier to track and bill data usage across an ATM network, but it makes it less adaptable to sudden surges in network traffic.
AUTONOMOUS SYSTEM	Reference	An Autonomous System (AS) provides a structured view of routing by segregating the system that is using routing. For example: <ul style="list-style-type: none"> <li>■ The Internet</li> <li>■ A corporate intranet</li> <li>■ Company extranet</li> </ul> This segregates the system into a set of separately administered domains and each has its own independent routing policies. This is defined in RFC1771.
AUXILIARY COMPONENT	Reference	This entity represents managed entities, such as power supplies, fans, and cables, which are required for the proper operation of the Device but have a primary function that is different than the primary end-user function(s) of the Device.  The difference between Auxiliary Components and other subclasses of <a href="#">EQUIPMENT</a> are whether the physical object performs a function intrinsic to the main function of the Device. For example, consider a <a href="#">ROUTER</a> . The routers main function is to route and forward packets. A Power Supply is an Auxiliary Component, because even though it is needed for the proper operation of the <a href="#">ROUTER</a> , it does not directly help in routing and forwarding packets. A Line Card, that provides routing functionality, is a subclass of <a href="#">EQUIPMENT</a> because its purpose is to route and forward packets. Similar examples exist for different types of equipment, where their criteria may be different. For example, instead of whether it routes or forwards packets, the criterion "does it carry signal" may be useful to appropriately classify components.
AWARD LEVEL	Lookup	The level of customer's loyalty, based on the <a href="#">LOYALTY PROGRAM</a> and ability to contribute to the revenue of the carrier. For example: <ul style="list-style-type: none"> <li>■ Platinum</li> <li>■ Gold</li> <li>■ Silver</li> <li>■ Bronze</li> </ul>
BANK	Reference	Bank information that may be used in transactions.
BANK DIRECT DEBIT CHANNEL	Reference	Subtype of the <a href="#">PAYMENT CHANNEL</a> , which tracks various bank channels where customers can pay by direct debt method.
BARING REASON	Lookup	Lookup defining reasons a customer may be banned from using a service.
BASE DAY	Reference	The abstracted information about a day, which serves as a base for <a href="#">DAY</a> .
BASE STATION CONTROLLER	Reference	Subtype of <a href="#">NETWORK ELEMENT</a> , which lists the Base Station Controller (BSC) of the network. The Base Station Controller provides, classically, the intelligence behind the <a href="#">BASE TRANSCEIVER STATION</a> (BTS)s. Typically a BSC has tens or hundreds of BTSs under its control. The BSC handles allocation of radio channels, receives measurements from the mobile phones, and controls handovers from BTS to BTS.
BASE TRANSCEIVER STATION	Reference	Base Transceiver Station (BTS) is the equipment which facilitates the wireless communication between User Equipment (UE) and the network.
BER FER ERROR RATIO DAY DRVD	Derived	Daily BER (Bit Error Rate) and FER (Frame Error Rate) statistics about the network elements.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
BER FER ERROR RATIO MONTH AGGR	Aggregate	Monthly BER (Bit Error Rate) and FER (Frame Error Rate) statistics about the network elements. Derived from <a href="#">BER FER ERROR RATIO DAY DRVD</a> .
BER FER TYPE	Lookup	Lookup to indicate the statistics value for BER (Bit Error Rate) or FER (Frame Error Rate).
BILLING CYCLE	Lookup	Documents each billing run/cycle. Typically the billing cycle is per month. Sometimes a customer may be billed at a different date inside the billing cycle. For example: <ul style="list-style-type: none"> <li>▪ The first day of month</li> <li>▪ 10th day of month</li> </ul>
BILLING FREQUENCY	Lookup	The billing frequency specifies the number of billing periods that comprise the billing cycle.
BILLING OCCURRENCE TYPE	Lookup	Type of billing occurrence which could be classified by the trigger type. For example: <ul style="list-style-type: none"> <li>▪ Triggered by customer inquiry.</li> <li>▪ Triggered by automatic billing cycle.</li> </ul>
BILLING PERIOD	Lookup	The billing period specifies the unit to be used to calculate the billing cycle (such as days or months).
BILLING STATUS CATEGORY	Lookup	Lookup for category of billing status. For example: <ul style="list-style-type: none"> <li>▪ Successfully Billed</li> <li>▪ Failure to Bill</li> </ul>
BILLING STATUS REASON	Lookup	Lookup for reasons why the <a href="#">NETWORK EVENT</a> is at certain billing status. For example: <ul style="list-style-type: none"> <li>▪ Wrong format</li> <li>▪ Missing account information</li> </ul>
BILLING STATUS TYPE	Lookup	Lookup for the status type of billing result, including the reasons. For example: <ul style="list-style-type: none"> <li>▪ Incorrect_data_failed</li> <li>▪ Incorrect_user_not_found</li> <li>▪ Successful</li> </ul>
BLACK LIST HISTORY	Base	History of all black-listed customers.
BRAND	Reference	The brands associated with hardware (usually this applies for handsets, but also for <a href="#">ITEMS</a> ).
BRIDGING PROTOCOL	Reference	Bridging Protocols operate at the data link layer of the OSI model, and are used to define communications over different types of homogeneous and heterogeneous local area networks.
BROADBAND	Reference	Broadband is subtype of <a href="#">PRODUCT</a> service. Describes the characteristics specific to the broadband product.
BROADBAND RATING PLAN	Reference	Subtype of <a href="#">PRODUCT RATING PLAN</a> applied to <a href="#">BROADBAND</a> product.
BROADBAND SERVICE	Reference	Broadband service is subtype of <a href="#">SERVICE</a> , to track the broadband services used by the user.
BROADBAND USAGE EVENT	Base	The broadband network usage event, normally implemented as a period while customer is connected to the network. This is charged based on time usage. Some internet connection product might charge by data volume.
BROWSER TYPE	Lookup	Lookup for brand of client browser. For example: <ul style="list-style-type: none"> <li>▪ Internet Explorer</li> <li>▪ Firefox</li> </ul>
BROWSER VERSION	Reference	Version of customer browser, such as Internet Explorer 6.0, Firefox 3.6, and so on.
BUNDLED NETWORK EVENT	Base	A detailed product bundle usage event. A bundled network event is comprised of other Product Usage event(s), that may be either Product Bundle Usage or Product Component Usage.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
BUSINESS ASSET	Reference	Any business asset that may be of financial interest to the operator. For example: <ul style="list-style-type: none"> <li>■ Land</li> <li>■ Buildings</li> <li>■ Equipment, such as office computers</li> </ul> <p>Note: the equipment which is part of the network is in the entity: <a href="#">NETWORK ELEMENT</a></p>
BUSINESS HALF MONTH	Reference	Defines month-in-half in a business calendar.
BUSINESS HALF YEAR	Reference	Defines half year in a business calendar.
BUSINESS INTERACTION	Reference	Describes an arrangement, contract, communication, or joint activity between one or more <a href="#">PARTY ROLES</a> , Element Roles, or Customer Accounts. A Business Interaction may consist of one or more <a href="#">BUSINESS INTERACTION ITEMS</a> . A <a href="#">BUSINESS INTERACTION ITEM</a> may refer to a Product, Service, Element, or one of their specifications. A Business Interaction is further defined by one or more Places. One Business Interaction may reference another Business Interaction and one <a href="#">BUSINESS INTERACTION ITEM</a> may reference another <a href="#">BUSINESS INTERACTION ITEM</a> on the same or different Business Interaction.
		There are five types of Business Interactions: <ul style="list-style-type: none"> <li>■ Requests</li> <li>■ Responses</li> <li>■ Notifications</li> <li>■ Agreements</li> <li>■ Instructions</li> </ul>
BUSINESS INTERACTION ASSIGNMENT	Reference	Defines the relationship between two <a href="#">BUSINESS INTERACTIONS</a> .
BUSINESS INTERACTION ASSIGNMENT TYPE	Lookup	Interaction type such as subordinate business interaction.
BUSINESS INTERACTION CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a <a href="#">BUSINESS INTERACTION</a> .
BUSINESS INTERACTION CHARACTERISTIC TYPE	Lookup	Type of <a href="#">BUSINESS INTERACTION CHARACTERISTIC</a> .
BUSINESS INTERACTION CHARACTERISTIC VALUE	Reference	A value of a <a href="#">BUSINESS INTERACTION CHARACTERISTIC</a> .
BUSINESS INTERACTION ITEM	Base	The purpose for the Business Interaction expressed in terms of a Product Type, <a href="#">PRODUCT MARKET PLAN</a> , Service Type, or <a href="#">NETWORK ELEMENT TYPE</a> or may refer to a Product, Service, or <a href="#">NETWORK ELEMENT</a> . The detail items included in the <a href="#">BUSINESS INTERACTION</a> .
BUSINESS INTERACTION ITEM PRICE	Base	This is the actual price charged to the <a href="#">BUSINESS INTERACTION ITEM</a> , despite the original list and discount price from product setting. An amount associated with a <a href="#">BUSINESS INTERACTION ITEM</a> that is valued by the associated PMP Price
BUSINESS INTERACTION LOCATION ASSIGNMENT	Reference	The <a href="#">BUSINESS INTERACTION ROLE</a> which can be assigned to an address. For example: <ul style="list-style-type: none"> <li>■ Billing address</li> <li>■ Shipment address</li> </ul>
BUSINESS INTERACTION PAYMENT ASSIGNMENT	Base	The association between a payment and <a href="#">BUSINESS INTERACTION</a> . For example, a payment for a contract or a customer order.
BUSINESS INTERACTION ROLE	Reference	The roles which can be played by <a href="#">PARTY</a> or other business interaction elements like Resource, and so on.
BUSINESS INTERACTION STATUS HISTORY	Base	The status history of a <a href="#">BUSINESS INTERACTION</a> . For example: <ul style="list-style-type: none"> <li>■ Submitted</li> <li>■ Closed</li> <li>■ Cancelled</li> </ul>

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
BUSINESS INTERACTION STATUS REASON	Lookup	The reason to explain why a <a href="#">BUSINESS INTERACTION</a> has had a change in status.
BUSINESS INTERACTION STATUS TYPE	Lookup	Lookup for available <a href="#">BUSINESS INTERACTION</a> status types and descriptions. For example: <ul style="list-style-type: none"> <li>■ Active</li> <li>■ Closed</li> </ul>
BUSINESS INTERACTION TYPE	Lookup	Type of <a href="#">BUSINESS INTERACTION</a> . For example: <ul style="list-style-type: none"> <li>■ Customer Order</li> <li>■ Contract</li> </ul>
BUSINESS INTERACTION VERSION	Reference	Represents the ability to distinguish between different instances of ElementSpecifications. It represents a particular form or variety of a ElementSpecification that is different from others or from the original. The form represents differences in attributes, methods, relationships, or constraints that characterize this particular ElementSpecification, but which are not enough to warrant creating a new ElementSpecification.
BUSINESS LEGAL STATUS	Lookup	The legal status of the company. For example, a Public Company, Private, and so on.
BUSINESS MONTH	Reference	Defines month in a business calendar.
BUSINESS QUARTER	Reference	Defines quarter in a business calendar.
BUSINESS UNIT JOB ROLE	Reference	Assigns job roles to a business unit within the organization.
BUSINESS UNIT SHIFT	Reference	Work shift associated with the Business Unit, mapped to the Employee job roles for the allocation for these shifts.
BUSINESS WEEK	Reference	Defines week in a business calendar.
BUSINESS YEAR	Reference	Defines year in a business calendar.
CABLE	Reference	A container of conductors or fibres. At least two connectors are attached to a cable.
CABLE MODEM	Reference	Subtype of <a href="#">EQUIPMENT INSTANCE</a> , which collects all cable modem instances installed at customer's site connecting to the network of the Communications Service Provider.
CALENDAR HALF MONTH	Reference	Defines month-in-half in a Gregorian or Normal Calendar.
CALENDAR HALF YEAR	Reference	Defines half year in a Gregorian or Normal Calendar.
CALENDAR MONTH	Reference	Defines month in a Gregorian or Normal Calendar.
CALENDAR QUARTER	Reference	Defines quarter in a Gregorian or Normal Calendar.
CALENDAR WEEK	Reference	Defines weeks in a Gregorian or Normal Calendar.
CALENDAR YEAR	Reference	Defines years in a Gregorian or Normal Calendar.
CALL CATEGORY	Lookup	Lookup for call categories. For example: Data, Fax, or Voice.
CALL CENTER	Reference	Defines call centers for a carrier or provider.
CALL CENTER AGENT	Reference	Agents of a call center.
CALL CENTER AGENT TYPE	Lookup	Lookup for call center agent types. For example: Employee or IVR.
CALL CENTER CALL DAY DRVD	Derived	The daily aggregate of customer call statistics from the call center. The customer calls are analyzed for the time of the call, duration of the call, subscriber or non-subscriber calling, and the call direction.
CALL CENTER CALL MONTH AGGR	Aggregate	Monthly summary of customer call statistics for the call center.
CALL CENTER CASE DAY DRVD	Derived	Statistics for all the cases initiated or resolved by the call center. For example: <ul style="list-style-type: none"> <li>■ Customer Compliant</li> <li>■ Customer Inquiry</li> </ul>
CALL CENTER CASE MONTH AGGR	Aggregate	Monthly summary of statistics for all the cases initiated or resolved by the call center.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CALL CENTER CASE SUB TYPE	Lookup	Lookup to further characterizes the type of cases from the call center. The case subtype helps to split a given case type into various subtypes. For example, for the case type, "Srv: Service Request", the subtype could be classified as "Package Upgrade", "Package Downgrade", "Simple Contract Renewal", or "Onsite Support".
CALL CENTER CASE TITLE	Lookup	Further classifies the <a href="#">CALL CENTER CASE SUB TYPE</a> . For example, for call center case type "Service Request", and call center case subtype "Technical Support", the call center case title could be: <ul style="list-style-type: none"> <li>■ Handset Technical Support</li> <li>■ Product Usage Technical Support</li> <li>■ Network Fault Technical Support</li> </ul>
CALL CENTER CASE TYPE	Lookup	Lookup for type of call center cases. For example: <ul style="list-style-type: none"> <li>■ Cmpl: Complaint</li> <li>■ Inqry: Inquiry</li> <li>■ Srv: Service Request</li> </ul>
CALL CENTER SERVICE CAPABILITY	Reference	Assigns to the <a href="#">CALL CENTER</a> , the languages, products, or geographical areas which the call center can serve.
CALL DIRECTION	Lookup	To indicate incoming call or outgoing call.
CALL FORWARD	Reference	A type of phone service. The calling party can be on hold if receiving party is in a call.
CALL OTHER TYPE	Lookup	This is to record any other characteristics of the call, such as, 3-party call, or any user defined special type of call.
CALL RECYCLED REASON	Lookup	Lookup for reasons why the voice carrying channel is being recycled during the call.
CALL ROUTING TYPE	Lookup	Lookup to define how the call was routed. For example: <ul style="list-style-type: none"> <li>■ Calling from external carrier</li> <li>■ From Wireless to Land Phone</li> </ul>
CALL SERVICE TYPE	Lookup	Lookup for service types that could be used in a call. For example: <ul style="list-style-type: none"> <li>■ Toll-Free number such as 800/400</li> <li>■ Emergency Call such as 911, 112, 110</li> </ul>
CALL SOURCE DESTINATION	Reference	Entity represents all the possible zones associated with a combination of any sources and destinations. Those call sources or destinations classify the calls into different groups, such as local call, long distance domestic call, or internal call.  Note: it is not the purpose of this entity to reproduce the A-B number mapping (this is a billing operation). This entity only represents the result of such a mapping.
CALL SUCCESS FAILURE TYPE	Lookup	Lookup to classify calls into successful calls or unsuccessful due to various reasons or causes. Call success failure, along with the call direction helps in facilitating the required analysis for roaming calls.
CALL SURCHARGE	Lookup	Any extra charge on the call in addition to the normal rating.
CALL TERMINATION REASON	Lookup	Lookup for the reasons a call may be terminated. For example: <ul style="list-style-type: none"> <li>■ Dropped</li> <li>■ Successful End</li> </ul>
CALL TYPE	Lookup	Lookup to further classify call category into call types. For example: <ul style="list-style-type: none"> <li>■ Voice Voice</li> <li>■ SMS and MMS</li> <li>■ Data and FAX</li> <li>■ Information services</li> <li>■ GPRS services for Data and Fax</li> </ul>
CALLER ID	Reference	Subtype of <a href="#">PRODUCT</a> , with specific information about <a href="#">CALLER ID</a> service.



**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CAMPAIGN	Reference	Campaigns are the entire communication strategy for a specific marketing communications program. The marketing communications program is frequently in support of promotional events and individual promotions but can be standalone. A campaign is always associated with a <a href="#">MEDIA OBJECT</a> , such as a television campaign.
CAMPAIGN CHANNEL	Reference	Channel by which a <a href="#">CAMPAIGN</a> is exposed to a customer. For example: News group or media company which issues newspaper, television affiliate, and so on. A piece of newspaper of a block/slot on the paper is a publication/media object. The campaign channel can be categorized by <a href="#">CAMPAIGN CHANNEL TYPE</a> .
CAMPAIGN CHANNEL ASSIGNMENT	Reference	The assignment to define which <a href="#">CAMPAIGN</a> is lunched at which <a href="#">CAMPAIGN CHANNEL</a> .
CAMPAIGN CHANNEL TYPE	Lookup	Lookup for campaign channel type. For example: newspaper, Television, Magazine.
CAMPAIGN CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a <a href="#">CAMPAIGN</a> . The characteristic can take on a discrete value, such as the number of press releases, can take on a range of values, for example the number of prospects reached is 50,000 - 100,000, or can be derived from a formula, for example, the number of brokerage house pickups = the sum of all brokerage house instance characteristics.
CAMPAIGN CHARACTERISTIC VALUE	Reference	A number or text that can be assigned to a <a href="#">CAMPAIGN CHARACTERISTIC</a> .
CAMPAIGN COST	Base	Subtype of <a href="#">COST</a> which can apply to a <a href="#">CAMPAIGN</a> .
CAMPAIGN DOCUMENT	Reference	The customer documents provided during campaign activities.
CAMPAIGN MANAGEMENT HISTORY	Reference	The history of campaign party role about management of a <a href="#">CAMPAIGN</a> . The party here can be not only the sales or marketing employee at TELCO operator, it can also be campaign partner.
CAMPAIGN MESSAGE	Reference	Details regarding message broadcast or sent during a <a href="#">CAMPAIGN</a> .
CAMPAIGN MESSAGE CREATIVE	Base	Information about the creative content of the message.
CAMPAIGN MESSAGE DEPICTION	Reference	Details about how the execution message is depicted for a <a href="#">CAMPAIGN</a> .
CAMPAIGN PURPOSE TYPE	Lookup	Lookup for types of campaign purposes. For example: <ul style="list-style-type: none"> <li>■ Acquire new customers</li> <li>■ Consolidate existing customers</li> <li>■ Retention existing customers</li> </ul>
CAMPAIGN RELATIONSHIP	Reference	Defines the relationship between two <a href="#">CAMPAIGN</a> s. For example: <ul style="list-style-type: none"> <li>■ Replace/upgrade</li> <li>■ Enhance</li> </ul>
CAMPAIGN STATUS	Lookup	Status of <a href="#">CAMPAIGN</a> .
CAMPAIGN TERM VALUE	Reference	The term value for a given campaign.
CAMPAIGN TYPE	Lookup	Lookup for type of campaign. For example: <ul style="list-style-type: none"> <li>■ A targeted promotion (to specific individuals, account or group of accounts)</li> <li>■ A mass market promotion (to a massive audience usually through radio, Television and newspaper)</li> </ul>
CANNIBALIZATION DETAIL DAY DRVD	Derived	The calculated detail information related to the tariff/package change of customers. For prepaid customers, usually it is impossible to track customer movement between products due to lack of customer identification. For some customers, they may change at the next "beginning of the month".
CANNIBALIZATION DETAIL MONTH AGGR	Aggregate	The calculated tariff or package change summary of all customers at the month level. For prepaid customers, usually it is impossible to track customer movement between products due to lack of customer identification.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CAPACITY	Reference	This is an abstract base entity that is the parent for both the <a href="#">PHYSICAL CAPACITY</a> and the <a href="#">LOGICAL CAPACITY</a> . These entities define the minimum and maximum requirements, limits, or other variable features of another entity.
CARD	Reference	Represents a type of physical container that can be plugged into a <a href="#">SLOT</a> . A card may represent a primary function, for example, a networking card, or an auxiliary function, for example, a memory card, that supports another card. All objects of this type are capable of carrying electrical and optical signals. A card also provides a mounting point for other types of Managed Physical Elements, such as Chips or Cards.
CARD RELATIONSHIP	Reference	This association entity represents the semantics of the Card On Card aggregation. The Card Relationship defines an attribute that describes how the <a href="#">CARD</a> is mounted on or plugged into another <a href="#">CARD</a> .
CELL	Reference	The cell in a wireless network such as GSM, which is an area serviced by the <a href="#">BASE TRANSCIVER STATION (BTS)</a> .
CELL OUTAGE REASON	Lookup	Lookup for reasons a cell outage could occur. For example: <ul style="list-style-type: none"> <li>■ Power failure</li> <li>■ Natural disaster</li> <li>■ Theft</li> </ul>
CELL SECTOR	Reference	Most cells are split into sectors or individual areas to make them more efficient and to let them to carry more calls. The cell site equipment provides each sector with its own set of channels.
CELL SITE	Reference	This is where the base station radio equipment and their antennas are located. A cell site gives radio coverage to a cell.
CELL SITE COST	Base	Subtype of <a href="#">COST</a> which could apply to a <a href="#">CELL SITE</a> . For example: <ul style="list-style-type: none"> <li>■ Expenses for the cell site building</li> <li>■ Rent</li> <li>■ Maintenance</li> </ul>
CELL SITE TYPE	Lookup	Lookup for type of <a href="#">CELL SITE</a> . For example: the cell site type can be classified by GSM/CDMA/PHS/broadband/Pay TV.
CELL STATISTIC DAY DRVD	Derived	The network parameters and runtime statistics captured at the cell level.
CELL STATISTIC MONTH AGGR	Aggregate	The network parameters and runtime statistics for all <a href="#">CELL SITES</a> aggregated at the month and certain geography level.
CELL TYPE	Lookup	Lookup for all possible cell types. For example, Macro, Micro, and Pico: <ul style="list-style-type: none"> <li>■ Macro cells are large geographical area where subscriber base is less dense.</li> <li>■ Micro cells are small cells in side the macro cells to cover high subscriber density and uneven distribution.</li> <li>■ Pico cells are used in large buildings, where signals from ground towers are poor.</li> </ul>
CFS SPEC VERSION DETAIL	Reference	Defines the relationship of the CFS Type aggregation. Specifically, it enables an application to define which set of versions of this <a href="#">CUSTOMER FACING SERVICE</a> Type are appropriate for a given task.
CHANGE PROPOSED BY TYPE	Lookup	Lookup for who proposed the changes for a customer tariff change. For example: <ul style="list-style-type: none"> <li>■ By customer</li> <li>■ By operator</li> </ul>
CHANNEL	Reference	Identifies all the channels through which customers interact with the telco provider for sales or services purposes.
CHANNEL COST	Base	Subtype of <a href="#">COST</a> , which collects all costs specifically related to a given sales channel.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CHANNEL TYPE	Lookup	Lookup for types of channels as defined by their functions. For example: <ul style="list-style-type: none"> <li>■ Sales channel</li> <li>■ Payment channel</li> <li>■ Debt collection channel</li> <li>■ Loyalty program channel (where to join/change/redeem loyalty program)</li> </ul>
CHASSIS	Reference	A Chassis is a type of Secure Holder that encloses other Managed Physical Entities and provides a definable functionality in its own right, such as a desktop or a network device. For example, a router or a switch.
CHASSIS POSITION	Reference	Represents the semantics of the Chassis In Rack aggregation. Defines two attributes: Position and Location, to define where the CHASSIS is located in the RACK.
CHURN PREDICT SOURCE DERIVED	Derived	Monthly statistics regarding each account, which acts as source material for training the Churn Predict Mining Model.
CHURN REASON	Lookup	Lookup for reasons an account may churn.
CIRCUIT CATEGORY	Lookup	Lookup for categories to classify the type of circuit. For example: <ul style="list-style-type: none"> <li>■ Analogue Voice</li> <li>■ Digital Data Services (DDS)</li> <li>■ ATM</li> </ul>
CIRCUIT COMPONENT	Reference	Describes each component of each circuit. Typically a circuit will include several components. For example, a Digital Data Services circuit linking two customer sites may include three components: <ol style="list-style-type: none"> <li>1. From the customer site to the exchange/switch</li> <li>2. From the switch to another switch</li> <li>3. From the second switch to the second customer site</li> </ol> There are two scenarios: <ul style="list-style-type: none"> <li>■ The circuit component links two switches.</li> <li>■ The circuit component links a switch with a customer site</li> </ul> For the first scenario, where two switches are linked, the switch_id and secondary_switch_id attributes will identify the two switches. The site_id attribute will be null. If the circuit component links a switch with a customer site, then the switch_id attribute will identify the switch and the site_id attribute will identify the customer site. The secondary_switch_id attribute will be null.
CIRCUIT RENTAL	Base	Business activities of renting some circuits to other operators, in return for a monthly, or fixed, revenue.
CIRCUIT RENTAL EVENT TYPE	Lookup	Lookup for types of rental events. For example: <ul style="list-style-type: none"> <li>■ Rental Initial</li> <li>■ Monthly Charge</li> <li>■ Maintenance Charge</li> <li>■ Termination</li> </ul>
CIRCUIT TRAFFIC	Base	The traffic volume statistics over certain periods, where periods are implementation dependent but generally hourly, for each CIRCUIT COMPONENT.
CIRCUIT TYPE	Lookup	Lookup for type of detailed circuit types. For example: <p>For interconnect:</p> <ul style="list-style-type: none"> <li>■ T1 or E1, carry 1.5mbps</li> <li>■ T2 6.312 Mbit/s</li> <li>■ T3 44Mbit/s</li> </ul> <p>For customer connection ADSL:</p> <ul style="list-style-type: none"> <li>■ ADSL 1: Normally 1Mbit/s</li> <li>■ ADSL 2x</li> </ul>

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
COLLECTION	Reference	This entity represents collections of Managed Entity objects. A Collection enables common attributes, methods, relationships, and other semantics to be applied to different types of Collections of Managed Entity objects. These can then be refined in the subclasses of Collection.
COLLECTION AGENCY	Reference	Subtype of a <a href="#">PARTY</a> , who collects the customer debt on behalf of the operator under a financial agreement. For example: <ul style="list-style-type: none"> <li>■ Debt collection</li> <li>■ Roaming settlement collection</li> </ul>
COMMISSION DAY DRVD	Derived	Statistics of all commissions granted to the sales agents because of the sales of products and services in the given period.
COMMISSION MONTH AGGR	Aggregate	Monthly aggregation of all commissions granted to the sales agents because of the sales of products and services in the given period.
COMMISSION TYPE	Lookup	Lookup for commission types that may be paid to sales representatives. For example: <ul style="list-style-type: none"> <li>■ FLAT: flat rate</li> <li>■ PERCENTAGE: percent of transaction amount</li> </ul>
COMMUNICATION SERVICE	Reference	The service type of product, including fixed line phone call, wireless phone call, and so on.
COMP INTEL CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a <a href="#">COMPETITOR INTELLIGENCE</a> . The characteristic can take on a discrete value, such as number of press releases, can take on a range of values, for example, number customers within a <a href="#">MARKET SEGMENT</a> (50,000 - 100,000), or can be derived from a formula, for example, number of products offered in a <a href="#">MARKET SEGMENT</a> = the number of the <a href="#">COMPETITOR</a> 's Product instances associated to the <a href="#">MARKET SEGMENT</a> .
COMP INTEL CHARACTERISTIC VALUE	Reference	A number or text that can be assigned to a <a href="#">COMP INTEL CHARACTERISTIC</a> .
COMP INTEL MARKET SEGMENT	Reference	A <a href="#">MARKET SEGMENT</a> in which a <a href="#">COMPETITOR</a> makes Product available.
COMP PROD CRRL CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a <a href="#">COMPETITOR PRODUCT CORRELATION</a> . The characteristic can be take on a discrete value, such as geographic disbursement (central, national, cascading). The characteristic can take on a range of values, (for example, Competitor Product Offering revenue of \$500,000 - \$1,000,000), or can be derived from a formula (for example, number of <a href="#">MARKET SEGMENTS</a> in correlation = number of <a href="#">MARKET SEGMENTS</a> related to this correlation).
COMP PROD CRRL CHARACTERISTIC ASSIGNMENT	Reference	Assign the <a href="#">COMP PROD CRRL CHARACTERISTIC</a> to the related <a href="#">COMPETITOR INTELLIGENCE</a> characteristic.
COMP PROD CRRL CHARACTERISTIC RELATIONSHIP	Reference	Defines the relationship between two <a href="#">COMP PROD CRRL CHARACTERISTICS</a> .
COMP PROD CRRL CHARACTERISTIC VALUE	Reference	A number or text that can be assigned to a <a href="#">COMP PROD CRRL CHARACTERISTIC</a> .
COMPETITIVE TIER	Reference	A classification of a <a href="#">COMPETITOR</a> , such as by size, product lines offered, and so on.
COMPETITOR	Reference	A <a href="#">PARTY</a> that offers <a href="#">PRODUCT</a> similar to the enterprise's <a href="#">PRODUCT</a> in a <a href="#">MARKET SEGMENT</a> .
COMPETITOR INTELLIGENCE	Reference	Facts gathered about a <a href="#">COMPETITOR</a> 's plans and activities. These facts perform <a href="#">COMPETITOR SWOT</a> analysis to better understand a <a href="#">COMPETITOR</a> .
COMPETITOR INTELLIGENCE PARTY ROLE	Reference	The <a href="#">PARTY</a> who developed the <a href="#">COMPETITOR INTELLIGENCE</a> .
COMPETITOR MARKET SEGMENT ASSIGNMENT	Reference	A <a href="#">MARKET SEGMENT</a> served by a <a href="#">COMPETITOR</a> .
COMPETITOR MARKET SEGMENT SWOT	Reference	Specifies a Strength, Weakness, Opportunity, or Threat in a <a href="#">MARKET SEGMENT</a> served by a <a href="#">COMPETITOR</a> .

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
COMPETITOR PRODUCT CORRELATION	Reference	A comparison or relationship between an enterprise-s <a href="#">PRODUCT</a> with a <a href="#">COMPETITORS'</a> Product. Information about the correlation may include <a href="#">MARKET SEGMENTS</a> , Product Offering life cycle stage, Jurisdiction, or definable <a href="#">COMP PROD CRRL CHARACTERISTICS</a> .
COMPETITOR SWOT	Reference	General (non- <a href="#">MARKET SEGMENT</a> specific) Strength, Weakness, Opportunity, or Threat when compared to a <a href="#">COMPETITOR</a> .
COMPETITOR TIER ASSIGNMENT	Reference	A classification of a <a href="#">COMPETITOR</a> , such as by size, product lines offered, and so forth.
COMPLEX ADDRESS	Reference	Complex Address describes the internal address for a complex (for <a href="#">GEOGRAPHY COMPLEX</a> ). For example, the internal road, building number, and so on.
COMPONENT SUBSCRIPTION PRICE	Reference	Part of a Product Price representing a single element of the price.
COMPOSITE COMP PROD CRRL CHARACTERISTIC	Reference	A type of <a href="#">COMP INTEL CHARACTERISTIC</a> that is formed by aggregating other <a href="#">COMP INTEL CHARACTERISTIC</a> , which may be Composite or Atomic <a href="#">COMP INTEL CHARACTERISTIC</a> .
COMPOSITE PRODUCT RATING PLAN	Reference	A special type of <a href="#">PRODUCT RATING PLAN</a> to represent a group of rating plans together forming another new rating plan.
COMPOSITE PRODUCT RATING PLAN ASSIGNMENT	Reference	Defines the relationship of which <a href="#">PRODUCT RATING PLAN</a> each <a href="#">COMPOSITE PRODUCT RATING PLAN</a> contains.
COMPOSITE SERVICE	Reference	A group of services together forming a new service.
COMPOSITE SERVICE INCLUSION	Reference	Defines the relationship between <a href="#">COMPOSITE SERVICE</a> and atomic service. Composite service inclusion defines how the <a href="#">COMPOSITE SERVICE</a> is formed.
COMPOSITE SERVICE TYPE INCLUSION	Reference	Tracks the relationship of which atomic service type each composite service type includes.
COMPOSITE SUBSCRIPTION PRICE	Reference	A Product Price that is made up of parts. The parts may be other Composite Prod Prices or Component Prod Prices.
COMPOUND ELEMENT	Reference	This is the abstract base entity for all composite entities that are inherently manageable and form a <a href="#">PRODUCT</a> .  The key difference between network element and <a href="#">COMPOUND ELEMENT</a> is that network element describes either a Physical or a Logical entity. In contrast, <a href="#">COMPOUND ELEMENT</a> describes managed entities that are collections of other managed entities. A key point is that each managed entity that is part of a <a href="#">COMPOUND ELEMENT</a> can be individually managed as either a <a href="#">PHYSICAL ELEMENT</a> or a <a href="#">LOGICAL ELEMENT</a> .
COMPOUND ELEMENT COLLECTION	Reference	An entity that is individually manageable.  A Compound Element Collection is an aggregate entity consisting of <a href="#">NETWORK ELEMENT</a> and optionally Compound Element Collection entities. As such, a Compound Element Collection represents a set of <a href="#">PHYSICAL ELEMENTS</a> and <a href="#">LOGICAL ELEMENTS</a> that collectively represent a managed entity. For example, a Network is a subclass of Compound Element Collection. A Network can be made up of other Networks and SubNetworks. Each Network or SubNetwork can be made up of physical and logical components, gathered and represented by an Element Collection. Each node in the network can be represented by a <a href="#">NETWORK ELEMENT</a> .
COMPOUND ELEMENT COMPOUND DETAIL	Reference	Defines the semantics of aggregating <a href="#">COMPOUND ELEMENT</a> into a <a href="#">COMPOUND ELEMENT</a> .
COMPOUND ELEMENT DETAIL	Reference	Defines the semantics of the <a href="#">COMPOUND ELEMENT</a> aggregation. Compound Element Detail is abstract, because only its subclasses should be instantiated. There are three concrete subclasses of this class, which are used to represent the aggregation of <a href="#">PHYSICAL ELEMENT</a> , <a href="#">LOGICAL ELEMENT</a> , and <a href="#">COMPOUND ELEMENT</a> into this particular <a href="#">COMPOUND ELEMENT</a> .
COMPOUND ELEMENT LOGICAL DETAIL	Reference	This is a concrete entity that defines the semantics of aggregating <a href="#">LOGICAL ELEMENT</a> into a <a href="#">COMPOUND ELEMENT</a> .
COMPOUND ELEMENT PHYSICAL DETAIL	Reference	This is a concrete entity that defines the semantics of aggregating <a href="#">PHYSICAL ELEMENT</a> into a <a href="#">COMPOUND ELEMENT</a> .

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
COMPOUND ELEMENT ROLE	Reference	This entity is a role that is defined by the interaction between <a href="#">PHYSICAL ELEMENT ROLES</a> and <a href="#">LOGICAL ELEMENT ROLE</a> . There must be at least one or more <a href="#">PHYSICAL ELEMENT ROLES</a> and one or more <a href="#">LOGICAL ELEMENT ROLE</a> to form a Compound Element Role. However, neither a <a href="#">PHYSICAL ELEMENT ROLE</a> nor a Logical Element Role has to belong to a Compound Element Role.
COMPOUND ELEMENT ROLE ASSIGNMENT	Reference	Implements the relationship between <a href="#">COMPOUND ELEMENT</a> and network element role.
COMPOUND ELEMENT ROLE SPEC	Reference	Implements the relationship between <a href="#">COMPOUND ELEMENT</a> and network element role.
COMPOUND ELEMENT SPEC	Reference	This is the abstract base entity that defines the invariant characteristics and behavior, attributes, methods, constraints, and relationships, of a <a href="#">COMPOUND ELEMENT</a> . The key difference between a Compound Element Spec and either a <a href="#">PHYSICAL ELEMENT SPEC</a> and a <a href="#">LOGICAL ELEMENT SPEC</a> is that a <a href="#">PHYSICAL ELEMENT SPEC</a> and <a href="#">LOGICAL ELEMENT SPEC</a> define templates for specifying the invariant characteristics and behavior of <a href="#">PHYSICAL ELEMENTS</a> and <a href="#">LOGICAL ELEMENTS</a> , respectively. In contrast, a Compound Element Spec describes templates that contain at least one <a href="#">PHYSICAL ELEMENT SPEC</a> and at least one <a href="#">LOGICAL ELEMENT SPEC</a> . Optionally, one or more Compound Element Specs may also be specified. Thus, a Compound Element Spec is in effect a "shorthand notation" for specifying complementary <a href="#">PHYSICAL ELEMENT SPECS</a> and <a href="#">LOGICAL ELEMENT SPECS</a> .
COMPOUND ELEMENT SPEC ATOMIC	Reference	<p>This entity describes specific attributes, behavior, relationships, constraints, and semantics for building <a href="#">COMPOUND ELEMENT</a> objects. The purpose of this entity is to track specifications of <a href="#">COMPOUND ELEMENTS</a> separately from other types of Element Specifications. This entity inherits the Modifies Element Spec aggregation, and therefore can be used with the corresponding <a href="#">COMPOUND ELEMENT</a> entity. The key difference between a <a href="#">COMPOUND ELEMENT SPEC</a> and either a <a href="#">PHYSICAL ELEMENT SPEC</a> and a Logical Element Type is that a <a href="#">PHYSICAL ELEMENT SPEC</a> and Logical Element Type define templates for specifying the invariant characteristics and behavior of <a href="#">PHYSICAL ELEMENTS</a> and <a href="#">LOGICAL ELEMENTS</a>, respectively. In contrast, a <a href="#">COMPOUND ELEMENT SPEC</a> describes templates that contain at least one <a href="#">PHYSICAL ELEMENT SPEC</a> and at least one Logical Element Type. Optionally, one or more <a href="#">COMPOUND ELEMENT SPECS</a> may also be specified. The difference between a Compound Element Spec Atomic entity and a <a href="#">COMPOUND ELEMENT SPEC COMPOSITE</a> entity is that a Compound Element Spec Atomic entity is designed to be a standalone entity.</p> <p>Note that it still aggregates at least one <a href="#">PHYSICAL ELEMENT SPEC</a> and at least one Logical Element Type; however, the result is that this Compound Element Spec Atomic entity can be used by itself.) In contrast, a <a href="#">COMPOUND ELEMENT SPEC COMPOSITE</a> entity is made up of one or more <a href="#">COMPOUND ELEMENT SPECS</a>, one of which must be a Compound Element Spec Atomic entity.</p>
COMPOUND ELEMENT SPEC COMPOSITE	Reference	<p>This entity describes specific attributes, behavior, relationships, constraints, and semantics for building composite <a href="#">COMPOUND ELEMENT</a> objects. The purpose of this entity is to track specifications of <a href="#">COMPOUND ELEMENTS</a> separately from other types of Element Specifications.</p> <p>This entity inherits the modifies Element Spec aggregation, and therefore can be used with the corresponding <a href="#">COMPOUND ELEMENT</a> entity. The key difference between a <a href="#">COMPOUND ELEMENT SPEC</a> and either a <a href="#">PHYSICAL ELEMENT SPEC</a> and a Logical Element Type is that a <a href="#">PHYSICAL ELEMENT SPEC</a> and Logical Element Type define templates for specifying the invariant characteristics and behavior of <a href="#">PHYSICAL ELEMENTS</a> and <a href="#">LOGICAL ELEMENTS</a>, respectively. In contrast, a <a href="#">COMPOUND ELEMENT SPEC</a> describes templates that contain at least one <a href="#">PHYSICAL ELEMENT SPEC</a> and at least one Logical Element Type. Optionally, one or more <a href="#">COMPOUND ELEMENT SPECS</a> may also be specified. The difference between a <a href="#">COMPOUND ELEMENT SPEC ATOMIC</a> entity and a Compound Element Spec Composite entity is that a <a href="#">COMPOUND ELEMENT SPEC COMPOSITE</a> entity is designed to be a standalone entity. (Note that it still aggregates at least one <a href="#">PHYSICAL ELEMENT SPEC</a> and at least one Logical Element Type; however, the result is that this <a href="#">COMPOUND ELEMENT SPEC ATOMIC</a> entity can be used by itself.) In contrast, a Compound Element Spec Composite entity is made up of one or more <a href="#">COMPOUND ELEMENT SPECS</a>, one of which must be a <a href="#">COMPOUND ELEMENT SPEC COMPOSITE</a> entity.</p>

Table 2–23 (Cont.) A to C Entity Descriptions

Entity Name	Type	Description
COMPOUND ELEMENT TP DETAIL	Reference	Concrete entity that links <a href="#">TERMINATION POINT</a> to <a href="#">COMPOUND ELEMENT</a> . For example, it will describe characteristics and behavior of the <a href="#">TERMINATION POINTS</a> that comprise this particular Element Port in terms of dependencies and how a <a href="#">TERMINATION POINT</a> interacts with other <a href="#">TERMINATION POINTS</a> .
COMPOUND ELEMENT UNIT	Reference	A Element Unit is an entity that is individually manageable. The Compound Element Unit is an aggregate entity consisting of both physical and logical aspects of a managed Element. For example, a <a href="#">ROUTER</a> is a Element Unit. Different <a href="#">PHYSICAL ELEMENT</a> objects can model the physical aspects of the <a href="#">ROUTER</a> in detail. For example, its <a href="#">CARDS</a> , the number and type of <a href="#">PHYSICAL PORTS</a> that are on each <a href="#">CARD</a> , and so forth), and different <a href="#">LOGICAL ELEMENT</a> objects can model the logical aspects of the <a href="#">ROUTER</a> in detail (For example, what Software it is running, how many <a href="#">DEVICE INTERFACES</a> of what type are currently enabled, if there are any outstanding Faults or Alarms, and so forth). Resource Element aggregates all <a href="#">PHYSICAL ELEMENT</a> and <a href="#">LOGICAL ELEMENT</a> objects, enabling a high-level view of the physical and logical aspects of the Element to be provided.
CONNECT DISCONNECT DAY DRVD	Derived	Statistics about all connections and disconnections from each <a href="#">ACCESS METHOD</a> on the network per day. This is related to the network usage or traffic. This entity is not related to counting "subscriptions" to a given service.
CONNECT DISCONNECT MONTH AGGR	Aggregate	Monthly aggregation of all connections and disconnections on the network per day, for network usage or traffic analysis.
CONNECTION	Reference	This is a class of managed objects responsible for the transparent transfer of information between <a href="#">CONNECTION TERMINATION POINTS</a> . A Connection is a component of a Trail. Several connections can be bundled into a higher rate trail. A sequence of one or more Connections are linked to form a Trail. A Connection may be either uni- or bi-directional.
CONNECTION TERMINATION POINT	Reference	This is an actual or potential end point of a Network connection. For example, this can represent a logical channel or a timeslot on a physical link. All <a href="#">PHYSICAL PORTS</a> connect to at least one type of CTP.
CONSEQUENCE PERFORMANCE NOTIFICATION	Reference	A communication that occurs as part of a <a href="#">PERFORMANCE CONSEQUENCE</a> . A Notification is typically one-sided, in that no Response is expected. For example, an alert be raised as the result of a <a href="#">PERFORMANCE OBJECTIVE</a> being violated.
CONSEQUENCE PERFORMANCE NOTIFICATION SPEC	Reference	The invariant characteristics that define a communication (notification) that occurs as part of a <a href="#">PERFORMANCE CONSEQUENCE</a> . A Notification is typically one-sided, in that no Response is expected. For example, an alarm may be raised as the result of a <a href="#">PERFORMANCE OBJECTIVE</a> being violated.
CONTACT LIST	Reference	Lists of potential and existing <a href="#">CUSTOMERS</a> for <a href="#">CAMPAIGNS</a> . Contact lists can be created by the TELCO from marketing activity, running certain models, or obtained from another organization.
CONTACT LIST CHANGE REASON	Lookup	Lookup for possible reasons for changing the <a href="#">CONTACT LIST</a> .
CONTACT LIST COST	Base	Subtype of <a href="#">COST</a> , which applies to a specified <a href="#">CONTACT LIST</a> (usually this is a cost associated with the purchase and maintenance of a contact list).
CONTACT LIST RECURRENCE TYPE	Lookup	A categorization of the recurrence of a <a href="#">CONTACT LIST</a> . For example: <ul style="list-style-type: none"> <li>■ W = Once a Week</li> <li>■ M = Once a Month</li> <li>■ Y = Once a Year</li> <li>■ MI = Once a Month with Invoice.</li> </ul>
CONTACT ROLES	Lookup	Describes the various roles a contact individual may play in the relationship with the operator.
CONTENT	Reference	Keeps all downloadable content provided to the customer through the operator's network. For example: <ul style="list-style-type: none"> <li>■ Weather reports</li> <li>■ Constellation</li> <li>■ Jokes</li> </ul>
CONTENT DELIVERY EVENT	Base	<a href="#">EVENT</a> in which content was downloaded.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CONTENT PRICE	Reference	Price for downloading/ordering the content. This price is for individual content clip. There might be other contents priced as a flat rate rather than different price for each content. In this case, the pricing information should be in <a href="#">PRODUCT RATING PLAN</a> .
CONTENT PRICING TYPE	Lookup	Lookup for types of content pricing. For example: <ul style="list-style-type: none"> <li>■ Charge per download</li> <li>■ Monthly fixed rate</li> </ul>
CONTENT PROVIDER	Reference	Provider for content that would be consumed by end user. The contents could be video, audio clips, or text content.
CONTENT TYPE	Lookup	Lookup for content types. For example: <ul style="list-style-type: none"> <li>■ Constellation</li> <li>■ Jokes</li> <li>■ Weather report</li> </ul>
CONTRACT	Reference	Legal agreement between a Communications Service Provider and an account.
CONTRACT APPROVAL	Base	Approval for the <a href="#">CONTRACT</a> from the operator's authorized employee, if the contract requires higher level approval or review.
CONTRACT ASSIGNMENT	Reference	Defines relationship(s) between contracts.
CONTRACT ASSIGNMENT REASON	Lookup	Lookup for reasons of why two contracts are related. For example: The reason for one contract to be replaced by another: <ul style="list-style-type: none"> <li>■ CNRT-END: The first contract was naturally terminated</li> <li>■ DLT-Delete:</li> <li>■ CUST-CHNG: Voluntary change by customer</li> <li>■ OP-INIT: Service Provider, operator, solicited the contract change, normally to increase the ARPU value</li> </ul> The reason for one contract to depend on another: <ul style="list-style-type: none"> <li>■ Equipment dependency</li> <li>■ Network dependency</li> </ul>
CONTRACT ASSIGNMENT TYPE	Lookup	Lookup for types of assignment between two contracts. For example: <ul style="list-style-type: none"> <li>■ RPLC: a new contract replaces the original contract</li> <li>■ UPGRADE: a new contract replace original one with upgraded product</li> <li>■ DEPEND: a contract depends on existence of another contract</li> </ul>
CONTRACT CHANGE INITIATOR TYPE	Lookup	Lookup to classify the initiator of the contract change.
CONTRACT CHANGE TYPE	Lookup	Lookup of all the type of contract changes. For example: <ul style="list-style-type: none"> <li>■ Contract Renew</li> <li>■ Contract Terminate</li> </ul>
CONTRACT CHANGED DRVD	Derived	Derived information about a customer's current/future contract for analytical purpose. This entity captures only changed, current or future, contracts.
CONTRACT DOCUMENT	Reference	The document(s) provided by the customer when a contract was signed. For example: <ul style="list-style-type: none"> <li>■ Photocopy image of customer ID</li> <li>■ The contract itself</li> <li>■ Any other documents attached to the contract</li> </ul>
CONTRACT DRVD	Derived	Derived information about a customer's current/future contract for analytical purpose. The entity only contains changed contract (current or future).
CONTRACT ITEM	Reference	Detail items for the <a href="#">CONTRACT</a> . Each item may use a different <a href="#">PRODUCT</a> .
CONTRACT MONTH AGGR	Aggregate	Derived information about a customer's current/future contract for analytical purpose. The entity only contains changed contract (current or future).
CONTRACT PRODUCT ASSIGNMENT	Reference	To accommodate special link or additional usage of product in contract.



**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CONTRACT STATUS	Base	The status history of the <a href="#">CONTRACT</a> .
CONTRACT STATUS REASON	Lookup	Lookup for description of the contract status change. For example: <ul style="list-style-type: none"> <li>■ Customer originated product change</li> <li>■ Customer originated churn</li> <li>■ Provider originated: Bad payment (leading to suspension)</li> <li>■ Customer originated: Debt paid (leading to reactivation)</li> <li>■ Customer originated: Banqueroute</li> </ul>
CONTRACT STATUS TYPE	Lookup	Lookup for all possible types of <a href="#">CONTRACT STATUS</a> . For example: <ul style="list-style-type: none"> <li>■ Newly created for new account</li> <li>■ Renewed automatically</li> <li>■ Naturally expired or terminated</li> </ul>
CONTRACT TERM TYPE	Lookup	Lookup for all possible terms which may be attached to a <a href="#">CONTRACT</a> . For example: <ul style="list-style-type: none"> <li>■ Monetary amount</li> <li>■ Period</li> <li>■ Premium</li> <li>■ Initial points</li> <li>■ Cancellation policy</li> <li>■ Subsidy</li> </ul>
CONTRACT TERM VALUE	Base	The value of terms attached to the <a href="#">CONTRACT</a> . For example: <ul style="list-style-type: none"> <li>■ Monetary amount</li> <li>■ Period</li> <li>■ Premium</li> <li>■ Initial points</li> </ul> <p>The value can vary at different time period of contract. For example, the monthly fee might be 100 for the first six months and 80 for the last six months. A penalty calculation can also be based on the months left in contract.</p>
CONTRACT TYPE	Lookup	Lookup for contract types.
CORE INTERFACE	Reference	Defines a <a href="#">DEVICE INTERFACE</a> role that functions as a Core Interface, that is, an interface in the core of the network. The objective of this role is to enable the definition of <a href="#">POLICYs</a> such that all Core Interfaces in a particular Domain can receive the same common configuration commands.
COST	Base	Costs that have been incurred from operations and events at trackable levels. For example: <ul style="list-style-type: none"> <li>■ Gift offer expense</li> <li>■ Employee salary</li> <li>■ Commission</li> <li>■ Promotion delivery cost</li> <li>■ Carrier billing charge (for roaming/LAC/and so on)</li> </ul>
COST CENTER	Reference	Cost Center of a <a href="#">COURIER</a> or provider to which costs can be charged.
COST CENTER BUDGET	Base	The budget of each <a href="#">COST CENTER</a> at a specific financial period.
COST CUSTOMER MONTH AGGR	Aggregate	Statistics of various costs incurred to the customer. These details are important for analysis such as: <ul style="list-style-type: none"> <li>■ Subscriber retention cost</li> <li>■ Subscriber acquisition cost</li> </ul>
COST CUSTOMER DRVD	Derived	Monthly aggregation of various cost incurred to the customer. These details are important for analysis such as: <ul style="list-style-type: none"> <li>■ Subscriber retention cost</li> <li>■ Subscriber acquisition cost</li> </ul>

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
COST ORGANIZATIONAL MONTH AGGR	Aggregate	Monthly aggregation of all expenses by each business unit inside the carrier.
COST ORGANIZATIONAL DRVD	Derived	Statistics of all expenses by each business unit inside the carrier. These values can be useful for auditing and budgeting purposes.
COST REASON	Lookup	Lookup of all possible reasons why the cost occurred. For example: <ul style="list-style-type: none"> <li>■ Natural disaster</li> <li>■ Operator error</li> </ul>
COST SUBTYPE	Lookup	Lookup to further classify <b>COST TYPES</b> . For example: <ul style="list-style-type: none"> <li>■ Acquisition cost</li> <li>■ Retention cost</li> <li>■ Salary</li> <li>■ Damaged</li> <li>■ New machine</li> <li>■ Repair fee</li> </ul>
COST TYPE	Lookup	Lookup for types of costs. For example, the cost is to the <b>CUSTOMER</b> , <b>CHANNEL</b> , <b>COURIER</b> , or to the <b>EMPLOYEE</b> (Mobile Monthly Claim or Purchase).
COURIER	Reference	The party who provides the Courier service for the Telecom Operator.
COURIER COST	Base	Subtype of <b>COST</b> which applies to a <b>COURIER</b> for delivering products or invoices to the customer.
CPE LOGICAL DEVICE ROLE	Reference	Defines required logical features to implement the specific role of a CPE (Customer Premise Edge) device, as used in a <b>PRODUCT</b> or <b>SERVICE</b> .
CREDIT CATEGORY	Reference	List of credit categories available that may be assigned to customers. For example: <ul style="list-style-type: none"> <li>■ Excellent</li> <li>■ Good</li> <li>■ High risk</li> </ul>
CREDIT CATEGORY MONTH AGGR	Aggregate	Credit category aggregation over all customers at each month.
CREDIT CATEGORY DRVD	Derived	Credit category assigned to each customer at each month. The credit categories are defined in the credit category dimension.
CREDIT SCORE PROVIDER	Reference	Provides reference financial rating scores for each customers to the service provider. This information is also called the "Credit Rating Agency".
CURRENCY	Lookup	Lookup for currencies that may be used in a transaction.
CURRENCY EXCHANGE RATE	Base	Exchange rate against the primary currency, as determined by exchange rate type and value date.
CURRENCY GEOGRAPHY ENTITY ASSIGNMENT	Reference	Assigns currency usage to a geographic area.
CUSTOMER	Reference	Information pertaining to customers.
CUSTOMER ACQUISITION SUMMARY DAY DRVD	Derived	Aggregate daily new customer count by <b>PRODUCT</b> .
CUSTOMER ACQUISITION SUMMARY MONTH AGGR	Aggregate	Monthly summary of newly acquired customers by <b>PRODUCT</b> .
CUSTOMER CALL SOCIAL NETWORK	Derived	Defines which <b>CUSTOMER</b> belongs to which <b>CUSTOMER COMMUNITY</b> .
CUSTOMER CLASS	Lookup	Lookup for Customer Classification codes. For example: <ul style="list-style-type: none"> <li>■ HLCU-High Local Call Usage Customers</li> <li>■ HNCU-High National Call Usage Customers</li> <li>■ HINCU-High InterNational Call Usage Customers</li> </ul>
CUSTOMER CLASS ASSIGNMENT	Reference	Assign customer to a customer class. A customer may belong to different customer classes because of their usage behavior at different times, therefore customer to customer class is a many to many relationship.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CUSTOMER COMMUNITY	Reference	The Customer Communities identified by mining algorithm.
CUSTOMER COMMUNITY ASSIGNMENT	Base	Defines which CUSTOMER belongs to which CUSTOMER COMMUNITY.
CUSTOMER COST	Base	Subtype of COST which applies to a customer. For example, the cost of a gift that is sent to a customer.
CUSTOMER DEBT COLLECTION MONTH AGGR	Aggregate	Statistics on Customer fraud and debt collection.
CUSTOMER DEBT COLLECTION DRVD	Derived	Monthly summary of customer fraud and debt collection.
CUSTOMER DOCUMENT	Reference	Various types of customer proof documents provided for a CUSTOMER ORDER, contract, and so on.
CUSTOMER EQUIPMENT INSTALLATION DAY DRVD	Derived	Statistics related to customer equipment installation activities for each customer. These statistics typically include: modems, routers, or DSL boxes for internet and Television equipment
CUSTOMER EQUIPMENT INSTALLATION MO AGGR	Aggregate	Monthly summary of customer equipment installation activities. These statistics typically include: modems, routers, or DSL boxes for internet and Television equipment.
CUSTOMER FACING SERVICE	Reference	This is the base entity for defining CUSTOMER FACING SERVICES. A CUSTOMER FACING SERVICE is an abstraction that defines the characteristics and behavior of a particular SERVICE as seen by the Customer or other appropriate PARTY ROLE. Thus, this PARTY ROLE purchases, leases, uses, and/or is otherwise directly aware of this type of SERVICE. This is in direct contrast to RESOURCE FACING SERVICES which support CUSTOMER FACING SERVICES but are not seen or purchased directly by the Customer. For example, a VPN is an example of a CUSTOMER FACING SERVICE, while the sub-services that perform different types of routing between network devices making up the VPN are examples of RESOURCE FACING SERVICES.
CUSTOMER FACING SERVICE ROLE	Reference	Defines a SERVICE in terms of a set of SERVICE ROLES for a CUSTOMER FACING SERVICE. This entity defines SERVICE ROLES that represent the variable characteristics of a CUSTOMER FACING SERVICE in terms of the roles that this SERVICE plays. This entity enables the CUSTOMER FACING SERVICE to be managed abstractly using SERVICE ROLES. The Customer Facing Service Role also helps define the SERVICE in terms of the functions that it has or provides.
CUSTOMER FACING SERVICE SPEC	Lookup	This is the base entity for defining Customer Facing Service Specifications. A Customer Facing Service Specification is an abstraction that defines the invariant characteristics and behavior of a particular CUSTOMER FACING SERVICE as seen by the Customer. The invariant portion serves as a single common basis to build a set of variable CUSTOMER FACING SERVICES that all use this common Customer Facing Service Specification.
CUSTOMER FACING SERVICE SPEC ATOMIC	Lookup	This entity defines CUSTOMER FACING SERVICE SPECS that do not have any subordinate CUSTOMER FACING SERVICE SPECS. In other words, a Customer Facing Service Spec Atomic is a standalone CUSTOMER FACING SERVICE SPEC, and does not require any supporting CUSTOMER FACING SERVICE SPECS to define the invariant characteristics (that is, non-changing attributes, methods, relationships, and constraints) of any CUSTOMER FACING SERVICES that it serves as a template for.
CUSTOMER FACING SERVICE SPEC COMPOSITE	Lookup	This entity defines an integrated set of CUSTOMER FACING SERVICES that collectively meets the needs of a SERVICE requested by a Customer. For example, the Customer may have requested GoldService, which is a SERVICE PACKAGE that defines a set of SERVICE BUNDLES, each of which has its own QoS. Each individual CUSTOMER FACING SERVICE that is part of the SERVICE PACKAGE can be derived from a CUSTOMER FACING SERVICE SPEC. In this case, a Customer Facing Service Spec Composite will aggregate all of the individual CUSTOMER FACING SERVICE SPECS into a single named object. This object is a standalone object. However, it consists of other Customer Facing Service Spec Composite and/or the CUSTOMER FACING SERVICE SPEC ATOMIC entities. That is the primary difference between this entity and the Customer Facing Service Spec Atomic entity.

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CUSTOMER FACING SERVICE SPEC ROLE	Reference	Defines a Service Specification, in terms of a set of Service Specification Roles, for a <a href="#">CUSTOMER FACING SERVICE</a> . This is the base entity for defining Service Specification Roles that are used to represent the invariant characteristics of a <a href="#">CUSTOMER FACING SERVICE</a> . This entity enables the <a href="#">CUSTOMER FACING SERVICE</a> to be managed abstractly using Service Specification Roles. The Customer Facing Service Spec Role also helps define the Service Specification in terms of the functions that it has or provides.
CUSTOMER FACING SERVICE SPEC VERSION	Reference	Keeps the historical versions of <a href="#">CUSTOMER FACING SERVICE SPEC</a> .
CUSTOMER FIELD INSTALLATION	Base	The activities to install services at the customer site. For example: <ul style="list-style-type: none"> <li>■ Broadband model installation (xDSL modem, cable modem)</li> <li>■ Pay TV (Digital) installation with set-top box</li> </ul>
CUSTOMER FIELD SERVICE ACTIVITY	Base	On site installation for the customer with particular equipment instance.
CUSTOMER FIELD SERVICE DETAIL	Base	Details regarding customer service.
CUSTOMER FIELD SUPPORT	Base	The activities of providing on site support to a customer.
CUSTOMER GROUP	Lookup	The lookup code for grouping the customers based on criteria defined by the service operator.
CUSTOMER GROUP ASSIGNMENT	Reference	A grouping of the customers based on criteria defined by the service operator.
CUSTOMER INDIVIDUAL	Reference	Subtype of <a href="#">CUSTOMER</a> (and <a href="#">PARTY</a> ), which contains details of individuals as opposed to organizations.
CUSTOMER LTV BAND	Lookup	The band of customer life time value that is predicted from the data mining model. For example, 0~100 USD, 100~200 USD, and so on.
CUSTOMER MINING	Derived	The result measures from mining analysis, including churn probabilities, Life Time Value (LTV) mining, and other result measures.
CUSTOMER OCCASION	Reference	Event celebrated or observed by a customer. For example: <ul style="list-style-type: none"> <li>■ Birthday</li> <li>■ Anniversary</li> <li>■ Company establishment day</li> </ul>
CUSTOMER OCCASION TYPE	Lookup	Lookup for occasion type. For example: Wedding Anniversary, Birthday, Company founding anniversary, and so on.
CUSTOMER ORDER	Base	Orders placed by customers. This customer order is currently for service providers shop service, where a customer can place an order for a handset, a broadband installation request, or make some other order.
CUSTOMER ORDER DOCUMENT	Reference	The document provided while submitted <a href="#">CUSTOMER ORDER</a> .
CUSTOMER ORDER LINE ITEM	Base	Details regarding items in the <a href="#">CUSTOMER ORDER</a> .
CUSTOMER ORDER LINE ITEM STATE ASSIGN	Base	Current state of an order line item.
CUSTOMER ORDER PAYMENT	Base	Payments applied to a <a href="#">CUSTOMER ORDER</a> .
CUSTOMER ORDER PRIORITY TYPE	Lookup	Lookup for possible priorities which can be assigned to a <a href="#">CUSTOMER ORDER</a> .
CUSTOMER ORDER STATE ASSIGNMENT	Base	Current state of a <a href="#">CUSTOMER ORDER</a> .
CUSTOMER ORDER STATE CHANGE REASON	Lookup	All type of reason for customer order state and customer order line item state changes.
CUSTOMER ORGANIZATION	Reference	Subtype of <a href="#">CUSTOMER</a> (and <a href="#">PARTY</a> ), which contains details of organizations as opposed to individuals. An organization can also consist of one individual only (for example: independent).

**Table 2–23 (Cont.) A to C Entity Descriptions**

Entity Name	Type	Description
CUSTOMER RESTRICTED INFO	Reference	Detail information about a customer that may be deemed private.
CUSTOMER REVENUE BAND	Lookup	Entity contains a customer classification in revenue terms. For example: Customer with charges between \$100 to \$200.
CUSTOMER REVENUE BAND ASSIGNMENT	Reference	Assigns a revenue band to a customer.
CUSTOMER REVENUE TYPE	Lookup	Lookup for types of revenue a customer may bring to the operator. For example: <ul style="list-style-type: none"> <li>▪ Recharging</li> <li>▪ Rent fee</li> <li>▪ One time equipment purchase</li> </ul>
CUSTOMER SCORE	Reference	Scores or Score ranges that may be assigned to a customer based on credit, behavior, or other criteria. For example: <ul style="list-style-type: none"> <li>▪ 1, 2, 3, 4, 5</li> <li>▪ 1-10, 11-20</li> </ul>
CUSTOMER SEGMENT	Reference	Market or customer segments to which customer may be assigned.
CUSTOMER SEGMENTATION MODEL	Reference	The segmentation model used to profile the customers. For example: <ul style="list-style-type: none"> <li>▪ KMeans by Revenue from Market Department</li> <li>▪ O-Clustering by IT department</li> </ul>
CUSTOMER SENTIMENT	Lookup	Lookup for the various customer feelings as reported during a party interaction (on the phone, as email, or from simple mail). The value can be used for text mining. For example: <ul style="list-style-type: none"> <li>▪ Angry</li> <li>▪ Happy</li> <li>▪ Neutral</li> </ul>
CUSTOMER SIC ASSIGNMENT	Reference	Assigns SIC/NASIC code to customers.
CUSTOMER SOURCE	Reference	Initial source or contact with customer. For example: <ul style="list-style-type: none"> <li>▪ Sales campaign</li> <li>▪ Advertisement</li> <li>▪ Call center</li> <li>▪ Dealer</li> </ul>
CUSTOMER TYPE	Lookup	Lookup for type of customer. For example: Individual or Corporate.

**Table 2–24 D to F Entity Descriptions**

Entity Name	Type	Description
DATA SERVICE EVENT	Base	Data Service Events. For example <ul style="list-style-type: none"> <li>▪ Fixed Line modem dial</li> <li>▪ Broadband access</li> <li>▪ GPRS service</li> </ul>
DATA USAGE DAY DRVD	Derived	Daily aggregate of data usage.
DATA USAGE MONTH AGGR	Aggregate	Monthly aggregate of data usage.
DAY	Reference	Defines day, the lowest level of all calendars.
DAY ACTUAL CONDITION	Reference	Weather, external and internal conditions that may have impacted performance on a given day at a given location.
DAY TODATE TRANSFORMATION	Reference	Documents how todate transformation can be implemented at day level.
DAY TRANSFORMATION	Reference	Transformation for a day. For example, maps a day last year to a corresponding day this year, or a day last year, to a day last month, and so on.

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
DEAL	Reference	A deal refers to a special offer from a supplier to the telecom provider. The deal generally provides allowances, discounts, special favorable terms of payment or other incentives to motivate the service provider to buy more products or services from a supplier.
DEAL LINE ITEM	Reference	Identifies a specific product or service that is offered as part of a deal to the service provider and defines how the deal cost is to be handled.
DEAL VENDOR ITEM ASSIGNMENT	Reference	Identifies a specific product or service that is offered as part of a deal to the service provider and defines how the deal cost is to be handled.
DEALER	Reference	The <a href="#">PARTY</a> who resells products from the operator.
DEALER DISCOUNT GROUP ASSIGNMENT	Reference	Assigns <a href="#">DEALER</a> to a discount group(s).
DEBT AGING BAND	Lookup	Ranges of time used to group debt based on the age of the debt. For example: <ul style="list-style-type: none"> <li>▪ 0-90 days</li> <li>▪ 91-180 days</li> </ul>
DEBT COLLECTION	Base	A special type of interaction to collect defaulted payment from a customer by the in-house debt collector.
DEBT COLLECTION ASSIGNMENT	Base	The assignment of a debt collection case to an external debt collection agency.
DEBT COLLECTION ASSIGNMENT BATCH	Base	Grouping of collection assignments sent to collector.
DEMOGRAPHIC CHARACTERISTIC	Reference	A feature or quality used to make recognizable or to define somebody or something, such as age, income, education, revenue, and so forth.
DEMOGRAPHIC CHARACTERISTIC VALUE	Reference	A single value or range of values that defines a <a href="#">DEMOGRAPHIC CHARACTERISTIC</a> .
DEMOGRAPHY ATTRIBUTE	Reference	User defined demographic attributes that can be assigned values.
DEMOGRAPHY GROUP	Reference	The domain of classifications used to group profile information about a <a href="#">PARTY</a> . For example: <ul style="list-style-type: none"> <li>▪ CH - Credit History</li> <li>▪ ED- Education</li> <li>▪ EM - Employment</li> <li>▪ EQ- Equipment</li> <li>▪ HB - Hobbies</li> <li>▪ HH - Household</li> <li>▪ OR - Organization</li> </ul> And other relevant demographics and psychographics.
DERIVED VALUE	Reference	Derived value of the customer based on predetermined criteria.
DESTINATION TYPE	Lookup	Lookup for the types of destination associated with <a href="#">CALL SOURCE DESTINATION</a> . For example: <ul style="list-style-type: none"> <li>▪ National Fixed</li> <li>▪ National Mobile</li> <li>▪ International Fixed</li> <li>▪ International Mobile</li> </ul>
DEVICE INTERFACE	Reference	This is a concrete entity that represents the (logical) interface or sub-interface of a device. This entity is not a transmission entity; rather, <a href="#">DEVICE INTERFACES</a> are used to program <a href="#">SERVICES</a> and <a href="#">LOGICAL ELEMENTS</a> on a Device. For example, use a Device Interface to program a logical connection from a device to a network medium. Different types of Device Interfaces exist for the different types of network media. For example IP compared with ATM, that are used in a network to enable such media to be programmed. The combination of a <a href="#">LOGICAL DEVICE</a> and a Device Interface is what a developer programs to define <a href="#">SERVICES</a> that run on the device.

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
DEVICE INTERFACE DETAIL	Reference	In general, there are multiple ways to manage a <a href="#">DEVICE INTERFACE</a> . The first distinction lies in what is being managed, the model defines two types of management commands categories: configuration and operational. Configuration commands are used to configure the <a href="#">DEVICE INTERFACE</a> (and also the <a href="#">LOGICAL DEVICE</a> for commands that affect multiple specific <a href="#">DEVICE INTERFACES</a> ). Operational commands are used to monitor and troubleshoot the software, network connectivity, and the Device itself.
DEVICE INTERFACE PHYSICAL PORT ASSIGNMENT	Lookup	Defines which <a href="#">PHYSICAL PORT</a> can support which <a href="#">DEVICE INTERFACE</a> .
DEVICE INTERFACE ROLE	Reference	Represents different types of roles that can be associated with a particular <a href="#">DEVICE INTERFACE</a> .
DEVICE INTERFACE TP ASSIGNMENT	Reference	Defines the relationship between <a href="#">DEVICE INTERFACE</a> and <a href="#">TERMINATION POINT</a> .
DIRECT DEBIT STATUS REASON	Lookup	Lookup for the various reasons the current status is direct debit payment. For example: <ul style="list-style-type: none"> <li>▪ Customer preferred choice: when the customer does not want to use a credit card.</li> <li>▪ Customer imposed: which means the CSP imposes this status after problems with credit card or cash payments.</li> </ul>
DISCOUNT GROUP	Reference	Discount groups that employees or partners may be a part of.
DISCOUNT SBPR PRICE ALTERATION	Reference	A discount, a reduction of price, for a <a href="#">SUBSCRIPTION</a> .
DISTANCE BAND	Lookup	Distance ranges to characterize network events by geographical distance.
DIVERT RETRIEVE REASON	Lookup	Lookup for all reasons for diverting a call or retrieving a call from a Mailbox. For example: <ul style="list-style-type: none"> <li>▪ Line busy (divert)</li> <li>▪ Line off (divert)</li> <li>▪ No answer (divert)</li> <li>▪ Customer originated (divert / retrieve)</li> <li>▪ Mailbox originated (retrieve only)</li> </ul>
DIVERT RETRIEVE TYPE	Lookup	Lookup for types for diverting a call or retrieving a call. For example: <ul style="list-style-type: none"> <li>▪ Divert</li> <li>▪ Retrieve</li> </ul> Subscriber's calls are diverted to voice mail or to a Unified Messaging Service (UMS) mailbox as specified by the subscriber instructions or settings. For example, calls can be diverted when a subscriber is busy on another call, or when the subscriber has switched off the handset, or when a subscriber is not reachable. The subscriber can later retrieve all calls that are stored on the mailbox by accessing the mailbox through specified numbers or using the Internet, in case of UMS. All this traffic generated by diverted calls and retrieved calls is to be analyzed based on the type of call such as diverted or retrieved. The Divert Retrieve type helps in achieving this analysis by organizing calls as diverted or retrieved calls.
DOCUMENT CONDITION TYPE	Lookup	Lookup for possible document condition types. For example: <ul style="list-style-type: none"> <li>▪ Complete</li> <li>▪ Incomplete</li> <li>▪ Unavailable</li> </ul>
DOCUMENT TYPE	Lookup	Lookup for document types. For example: <ul style="list-style-type: none"> <li>▪ Driver license photocopy</li> <li>▪ Address certification</li> <li>▪ Bank card photocopy</li> </ul>

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
DOCUMENT TYPE GROUP	Lookup	The group of <a href="#">DOCUMENT TYPES</a> of which customer may provide to service provider for identification. For example: <ul style="list-style-type: none"> <li>▪ Mandatory Document</li> <li>▪ Legal Requirement</li> <li>▪ Income Proof Document</li> </ul>
DOCUMENT TYPE GROUP ASSIGNMENT	Reference	Assigns different <a href="#">DOCUMENT TYPES</a> into different <a href="#">DOCUMENT TYPE GROUPS</a> .
DSL MODEM	Reference	The xDSL modem to implement Broadband on copper wire (router).
EDGE INTERFACE	Reference	Defines a <a href="#">DEVICE INTERFACE</a> role that functions as an Edge Interface; that is, an interface on the edge of the network. The objective of this role is to enable the definition of <a href="#">POLICYS</a> such that all Edge Interfaces in a particular Domain can receive the same common configuration commands.
EDUCATION	Lookup	Demographic education levels that may be assigned to customers.
ELEMENT CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of an Element Specification. The characteristic can take on a discrete value, such as color, can take on a range of values, for example, sensitivity of 100-240 mV, or can be derived from a formula for example, usage time (hrs) = 30 - talk time *3. Certain characteristics, such as color, may be configured during the ordering or some other process.
ELEMENT CHARACTERISTIC ASSIGNMENT	Reference	A use of the Element Spec Characteristic by an Service Specification to which additional properties (attributes) apply or override the properties of similar properties contained in Element Spec Characteristic.
ELEMENT CHARACTERISTIC RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between or among Element Spec Characteristics.
ELEMENT CHARACTERISTIC VALUE	Reference	A number or text that can be assigned to an Element Spec Characteristic.
ELEMENT CHARACTERISTIC VALUE ASSIGNMENT	Reference	A use of the Element Spec Characteristic Value by an Entity Specification to which additional properties (attributes) apply or override the properties of similar properties contained in Element Spec Characteristic Value.
ELEMENT CHARACTERISTIC VALUE RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between or among Element Spec Characteristic Values.
EMAIL SERVICE	Reference	Specifies all the Email mail boxes allocated to <a href="#">CUSTOMER</a> .
EMPLOYEE	Reference	Subtype of individual indicating an employee of the provider.
EMPLOYEE ACTUAL LABOR HOURLY	Base	Worked shifts by hourly employees.
EMPLOYEE ACTUAL LABOR SALARIED	Base	Worked shifts by salaried employees.
EMPLOYEE COST	Base	Subtype of <a href="#">COST</a> , which applies to employee. For example, salary and bonus for employee.
EMPLOYEE DESIGNATION	Lookup	The various designations present in an organization for the employees. For example: <ul style="list-style-type: none"> <li>▪ Call Center Agent</li> <li>▪ Manager Customer Care</li> <li>▪ Consultant</li> <li>▪ Principal Consultant</li> </ul>
EMPLOYEE DISCOUNT GROUP ASSIGNMENT	Reference	Assigns <a href="#">EMPLOYEE</a> to <a href="#">DISCOUNT GROUP</a> (s).
EMPLOYEE EXPENSE REPORT	Base	The expense reports submitted by employees, including contractors, to claim their business expenses. The <a href="#">EMPLOYEE</a> (Party) and <a href="#">PAYMENT CHANNEL</a> (channel) are captured by its super entity <a href="#">EVENT</a> . The expense submit date is the event begin date.
EMPLOYEE EXPENSE REPORT ITEM	Base	The detail line item of each <a href="#">EMPLOYEE EXPENSE REPORT</a> .



**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
EMPLOYEE EXPENSE REPORT STATE	Base	The different state of a given <a href="#">EMPLOYEE EXPENSE REPORT</a> . For example: <ul style="list-style-type: none"> <li>■ Submitted</li> <li>■ Pending Approval</li> <li>■ Approved</li> <li>■ Paid</li> </ul>
EMPLOYEE JOB ROLE ASSIGNMENT	Reference	Assigns <a href="#">EMPLOYEE</a> to <a href="#">JOB ROLE(s)</a> .
EMPLOYEE JOB ROLE TYPE	Lookup	Relevance of job role assignment to employee. For example: Primary, Secondary, and so on.
EMPLOYEE LANGUAGE CAPABILITY	Reference	Specifies the languages the employee can use to serve customers, especially for call center agents and sales representatives.
EMPLOYEE RESTRICTED INFO	Reference	Detail information about the <a href="#">EMPLOYEE</a> that may be deemed private.
EMPLOYEE SCHEDULE	Reference	Planned staffing schedule of location, role, shift, and employees.
EMPLOYEE TRAINING RECORD	Base	List the trainings an employee has received. The employee training record is normally meant to apply to the call center agent, who is trained on specific products and or services.
EMPLOYEE TYPE	Lookup	Lookup of employee type. For example: <ul style="list-style-type: none"> <li>■ Part-Time</li> <li>■ Contractual</li> <li>■ Full-Time</li> </ul>
ENTITY	Reference	This entity represents entities that cannot be directly managed. For example, a hub.
ENTITY ROLE	Reference	This is an abstract base entity that defines the concept of various types of roles for entities that describe the function of the entities.
ENTITY SPECIFICATION	Reference	This is an abstract base entity that defines the invariant characteristics, attributes, methods, constraints, and relationships, of another entity.
EQUIPMENT	Reference	The devices, delivered by <a href="#">COURIER</a> or collected at the <a href="#">DEALER</a> shop, that a <a href="#">CUSTOMER</a> can use to access services. The device might be Cell Phone, Fixed Line Phone, Fax Machine, and so on. The devices might be lent or sold to the customer. The equipment entity is a subtype of <a href="#">PRODUCT</a> .
EQUIPMENT CENTER	Reference	Facility housing devices.
EQUIPMENT CENTER COST	Base	Subtype of <a href="#">COST</a> , which collects all costs that are specifically related to a given <a href="#">EQUIPMENT CENTER</a> (facility rent, taxes, and so on).
EQUIPMENT FUNCTIONALITY	Reference	The function of the <a href="#">EQUIPMENT</a> . For example: <ul style="list-style-type: none"> <li>■ Make wireless calls</li> <li>■ Send SMS</li> <li>■ Send MMS</li> </ul>
EQUIPMENT FUNCTIONALITY ASSIGNMENT	Reference	Assigns functionality to <a href="#">EQUIPMENT</a> .
EQUIPMENT HOLDER	Reference	Represents physical objects that are both manageable and able to host, hold, or contain other physical objects. Examples of physical objects that can be represented by instances of this object class are <a href="#">RACKS</a> , <a href="#">CHASSISs</a> , Shelves, and <a href="#">SLOTS</a> . The difference between subclasses of Equipment Holder, such as a <a href="#">SLOT</a> or a <a href="#">CHASSIS</a> , and subclasses of <a href="#">EQUIPMENT</a> that have a Holder role, such as a <a href="#">CARD</a> , is that the subclasses of Equipment Holder are dedicated to holding other Hardware. The subclasses of <a href="#">EQUIPMENT</a> that have a holder role have a holding capability as a secondary capability, usually for expansion. Their primary function, however, is not to hold other objects.

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
EQUIPMENT INSTANCE	Reference	Implement communications. For example: <ul style="list-style-type: none"> <li>■ Handset (with IMEI)</li> <li>■ Land line phone (with serial number)</li> <li>■ Set-top box</li> <li>■ Cable modem</li> </ul>
EQUIPMENT INSTANCE RENTING CONTRACT	Reference	Subtype of <a href="#">CONTRACT</a> in which customers lease some <a href="#">EQUIPMENT</a> . This equipment still belongs to the service provider. When a contract terminates the device should be returned to the service provider. For example: <ul style="list-style-type: none"> <li>■ ADSL modem lease</li> <li>■ Handset short term renting</li> </ul>
EQUIPMENT INSTANCE STATUS HISTORY	Base	A history of the status for an <a href="#">EQUIPMENT INSTANCE</a> . For example: <ul style="list-style-type: none"> <li>■ New</li> <li>■ Broken</li> <li>■ Returned</li> <li>■ Lost</li> <li>■ Reserved (for VIP loyalty program customer)</li> </ul>
EQUIPMENT INSTANCE STATUS TYPE	Lookup	Lookup for type of specific equipment instance status type. For example: <ul style="list-style-type: none"> <li>■ Purchased from vendor</li> <li>■ In inventory</li> <li>■ In customer</li> <li>■ Broken</li> <li>■ Reserved</li> </ul>
EQUIPMENT SUBSCRIPTION	Reference	A subtype of <a href="#">SUBSCRIPTION</a> to track tangible device usage by the customer.
EQUIPMENT TYPE	Lookup	The lookup code for type of (customer side) equipment. For example: <ul style="list-style-type: none"> <li>■ ADSL Modem</li> <li>■ 3G data card</li> </ul>
ERRORED MEDIATED CALL EVENT	Base	The errored/recycled mediated event record from billing engine.
ERRORED RATED WIRELESS CALL EVENT	Base	The errored/recycled rated event record from billing engine.
ERRORED RAW WIRELESS CALL EVENT	Base	The errored/recycled/rejected raw event record from the mediation process.
EVENT	Base	Describes the interactions with the Communications Service Provider. Event contains only "non-network" events (anything other than a call data record).  An event can occur related to a provider. For example, for equipment down or a service disruption. An event can occur related to a <a href="#">CUSTOMER</a> . For example, for a service order or a bill payment.  Events store customer behavior to make special campaigns or to analyze the cost of customers. Normally an event incurs some cost and may generate revenue for the operator.  The information specific to the type of event, or event interaction, is stored in corresponding event subtypes.
EVENT ACCESS METHOD ACTIVITY	Base	Occurrence of Access Method Usage.
EVENT ACCOUNT	Base	Events occurring on an account. For example: <ul style="list-style-type: none"> <li>■ Account create</li> <li>■ Account suspension/resume</li> <li>■ Line (account) termination attempted (convinced back by representatives)</li> <li>■ Line termination</li> </ul>
EVENT ASSIGNMENT	Base	Describes relationship between unique events.

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
EVENT ASSIGNMENT REASON	Lookup	Lookup for all possible reasons why a relationship exists between two <a href="#">EVENTS</a> . For example: <ul style="list-style-type: none"> <li>▪ Premise</li> <li>▪ Result in</li> </ul>
EVENT ASSIGNMENT TYPE	Lookup	Lookup for all types of relationships between two <a href="#">EVENTS</a> .
EVENT CATEGORY	Lookup	Lookup for <a href="#">EVENT CATEGORY</a> which is further grouped into <a href="#">EVENT TYPE</a> . For example: <ul style="list-style-type: none"> <li>▪ Loyalty Program Event</li> <li>▪ Access Method Event</li> </ul>
EVENT CHAT	Base	The chat history between the service representative and the <a href="#">CUSTOMER</a> .
EVENT CHAT DETAIL	Base	The chat history details between the service representative and the <a href="#">CUSTOMER</a> . Each chat message is saved as one record.
EVENT CIRCUIT RENTAL	Base	Subtype of "Non Network Events", corresponding to the rental of a fixed line (broadband or phone line). The rental normally incurs charges for various type of activities. For example: <ul style="list-style-type: none"> <li>▪ Initial Installation</li> <li>▪ Maintenance Check</li> <li>▪ Termination</li> </ul>
EVENT CLASS	Lookup	Lookup for the classification for the types of <a href="#">EVENTS</a> that can occur. For example: <ul style="list-style-type: none"> <li>▪ IN: involves only Communications Service Provider</li> <li>▪ OUT: involves customer</li> </ul>
EVENT CONTRACT	Base	<a href="#">EVENT</a> that happened in a <a href="#">CONTRACT</a> . For example, an agreement breach event.
EVENT COST	Base	Subtype of <a href="#">COST</a> , which is specifically related to a given <a href="#">EVENT</a> . This cost is usually for a non-network event such as an interaction with a customer. For example, for on-site maintenance after a service issue or a break-down.
EVENT EMIT DETAIL	Reference	The expressions that determine what, if any, constraints are to be applied to this Policy Event Set. This entity also defines additional semantics to help identify the type of this event.
EVENT EMPLOYEE PAYROLL	Base	Event in which payroll payment was made to an employee (excludes sales commission). Subtype of <a href="#">EVENT</a> .
EVENT EQUIPMENT INSTANCE	Base	Events per instance of <a href="#">EQUIPMENT</a> . Subtype of <a href="#">EVENT</a> .
EVENT FINANCIAL	Base	Financial event involving an account or billing statement. Subtype of <a href="#">EVENT</a> .
EVENT GEOGRAPHY	Base	Events affecting a Geographic Area that may have an impact on a provider's business. Subtype of <a href="#">EVENT</a> . For example: <ul style="list-style-type: none"> <li>▪ Earthquake</li> <li>▪ Power Outage</li> <li>▪ Labor Strike</li> </ul>
EVENT GIFT REDEMPTION	Base	A gift redemption event occurred for a contract or subscription; normally because of a product market plan promotion. Operators may also give away gift items because of events such as a wrong billing. The redemption does not involve a <a href="#">LOYALTY PROGRAM</a> .
EVENT INVOICE DELIVERY	Base	The delivery of invoice to customer. For example: <ul style="list-style-type: none"> <li>▪ Printed letter</li> <li>▪ Email</li> <li>▪ Duplicate printed letter on request</li> </ul>
EVENT LOCATION	Reference	Assigns an address location to the <a href="#">EVENT</a> .

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
EVENT LOYALTY PROGRAM	Base	Events associated with each event or transaction on a customer loyalty program. For example: <ul style="list-style-type: none"> <li>▪ Loyalty points earned by the customer</li> <li>▪ Bonus points awarded to the customer</li> <li>▪ Points redeemed by the customer</li> </ul>
EVENT LOYALTY PROGRAM ACCUMULATION	Base	Subtype of <a href="#">EVENT LOYALTY PROGRAM</a> , where a customer receives loyalty program points, a credit, based on network usage, a payment, or some other event.
EVENT LOYALTY PROGRAM REDEMPTION	Base	Subtype of <a href="#">EVENT LOYALTY PROGRAM</a> , where a customer uses loyalty program points, a credit, to redeem gift items including cash placed in their account balance or some other redemption gift item such as a toy.
EVENT PARTY ASSIGNMENT	Base	Many to many relationship assigning a party or multiple parties to event(s).
EVENT PARTY INTERACTION	Base	Interactions or communications with the customer. For example: <ul style="list-style-type: none"> <li>▪ Faults</li> <li>▪ Inbound and outbound telemarketing</li> <li>▪ Direct mail</li> <li>▪ SMS</li> <li>▪ Email</li> <li>▪ Service calls</li> <li>▪ Complaints</li> <li>▪ Debt collection</li> </ul>
EVENT PARTY INTERACTION CALL	Base	Subtype of <a href="#">EVENT PARTY INTERACTION</a> which represents all phone call interactions from the customer with detailed information including: <ul style="list-style-type: none"> <li>▪ Hold time</li> <li>▪ Queue time</li> <li>▪ Interaction time</li> <li>▪ Run by the Automated Voice Response (AVR)</li> </ul>
EVENT PARTY INTERACTION EMAIL	Base	Subtype of <a href="#">EVENT PARTY INTERACTION</a> which represents email interaction from customers.
EVENT PARTY INTERACTION ITEM	Base	When multiple threads are discussed in a single <a href="#">EVENT PARTY INTERACTION</a> , this line item lists the involved threads and other information including accounts, subscriptions, and so on. This is also the M:M relationship between the <a href="#">PARTY INTERACTION THREAD</a> and the event.
EVENT PARTY INTERACTION LETTER	Base	Subtype of <a href="#">EVENT PARTY INTERACTION</a> which represents the interaction with customers through letters.
EVENT PARTY INTERACTION PARTICIPATION	Base	Tracks multiple employees who participate in a same interaction with a customer
EVENT PARTY INTERACTION VISIT	Base	Visits to a store by a customer. Subtype of <a href="#">EVENT</a> .
EVENT PARTY PROFILE	Base	Event in which party profile information was modified or updated.
EVENT PARTY ROLE	Reference	Role played by a <a href="#">PARTY</a> in an <a href="#">EVENT</a> . For example: <ul style="list-style-type: none"> <li>▪ Customer who reported the event</li> <li>▪ Customer affected by event</li> <li>▪ Party who caused the event</li> </ul>
EVENT PREPAID MOBILE	Base	Actions involving <a href="#">PREPAID MOBILE EVENT TYPE</a> account. Subtype of <a href="#">EVENT ACCOUNT</a> . For example: <ul style="list-style-type: none"> <li>▪ Initial activation</li> <li>▪ Recharges</li> <li>▪ Adjustments</li> <li>▪ Deactivation</li> </ul>
EVENT PRODUCT PACKAGE	Base	Events associated with an offer or <a href="#">PRODUCT PACKAGE</a> . Subtype of <a href="#">EVENT</a> .

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
EVENT REASON	Lookup	Lookup for event reasons. For example: arrearage.
EVENT REASON CATEGORY	Lookup	Lookup for event reason categories. Categories are further grouped into event reasons.
EVENT RESOLUTION	Reference	The domain of results that may occur in the resolution of an <a href="#">EVENT</a> .
EVENT RESPONSE REASON	Lookup	Lookup for possible response reasons that may be used in an <a href="#">EVENT</a> .
EVENT RESULT	Lookup	Lookup for the description of a result or any events. For example: <ul style="list-style-type: none"> <li>▪ Successfully processed</li> <li>▪ Escalated</li> <li>▪ Refused by CSP</li> <li>▪ Refused by customer</li> <li>▪ Failed – Impossible</li> <li>▪ Failed – process error</li> </ul>
EVENT SIM CARD	Base	Events associated with a <a href="#">SIM CARD</a> . Subtype of <a href="#">EVENT</a> .
EVENT STATUS	Base	Lookup for event status. For example: <ul style="list-style-type: none"> <li>▪ Completed</li> <li>▪ Pending</li> <li>▪ In-Progress</li> <li>▪ Suspended</li> <li>▪ Cancelled</li> <li>▪ Abandoned</li> </ul>
EVENT STATUS REASON	Lookup	Lookup for event status reasons. For example: <ul style="list-style-type: none"> <li>▪ Insufficient funds</li> <li>▪ Stolen card</li> </ul>
EVENT STATUS TYPE	Lookup	Lookup for <a href="#">EVENT STATUS</a> . For example: <ul style="list-style-type: none"> <li>▪ Complete</li> <li>▪ Pending</li> <li>▪ In-Progress</li> <li>▪ Suspended</li> <li>▪ Cancelled</li> <li>▪ Abandoned</li> </ul>
EVENT SUBSCRIPTION	Base	Events associated with a subscription. Subtype of <a href="#">EVENT</a> . For example: <ul style="list-style-type: none"> <li>▪ Subscription activation</li> <li>▪ Reimbursement on prepaid account</li> <li>▪ Termination</li> <li>▪ Suspension because of insufficient deposit</li> </ul>
EVENT SUBSCRIPTION CHANGE	Base	Events involving temporal provisioning and relinquishment of products and services to current subscription base.
EVENT TRIGGER DETAIL	Reference	Tracks the execution, evaluation of <a href="#">POLICY RULE</a> on each <a href="#">POLICY EVENT</a> .
EVENT TYPE	Lookup	Lookup for event type. For example: <ul style="list-style-type: none"> <li>▪ In Loyalty Program Event <ul style="list-style-type: none"> <li>1.1 Points Accumulation</li> <li>1.2 Redemption</li> </ul> </li> <li>▪ Access Method Event <ul style="list-style-type: none"> <li>2.1 Access Method Login (connect)</li> <li>2.2 Access Method Logout (disconnect)</li> <li>2.3 Access Method Suspension (because of late payment or other reason)</li> </ul> </li> </ul>
EVENT WEB REGISTRATION	Base	The event of a customer registering at Web site to apply for service.

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
EVENT WEB VISIT	Base	Subtype of Customer Interaction event, to track the customer visit on a service provider Web site.
EXCLUDE PORT DETAIL	Reference	The attribute exclusionFunction is designed to be populated from an external management system, and represents the criteria for excluding one or more Element Ports. A predefined exclusion function is to limit the role that a Element Port plays to an edge role. However, this entity enables additional functions to be used to exclude Element Ports.
EXPENSE REPORT PARTY ASSIGNMENT	Base	The involvement of different PARTYS in a given EMPLOYEE EXPENSE REPORT. For example: <ul style="list-style-type: none"> <li>■ The employee who claims the expense</li> <li>■ The employee who approves the expense</li> <li>■ The customer involved in the expense adjusification</li> </ul>
EXPENSE REPORT STATE TYPE	Lookup	Lookup for the types of STATE which an EMPLOYEE EXPENSE REPORT may be in. For example: <ul style="list-style-type: none"> <li>■ Submitted</li> <li>■ Pending approval</li> <li>■ Approved</li> <li>■ Paid</li> </ul>
EXPENSE TYPE	Lookup	Lookup for type of expense being claimed. For example: <ul style="list-style-type: none"> <li>■ P = expense was pre-paid by the company</li> <li>■ C = Cash advance</li> <li>■ E = Actual expense incurred by requestor</li> </ul>
EXTERNAL CREDIT PROFILE	Reference	A source of information that helps define the credit worthiness of the customer.
EXTERNAL CREDIT PROFILE ASSIGNMENT	Reference	Indicate which external agency or institute provided the credit profile for the given customer.
EXTERNAL DEBT COLLECTION DAY DRVD	Derived	Daily collections by external collector.
EXTERNAL DEBT COLLECTION MONTH AGGR	Aggregate	Monthly collections by external collector.
EXTERNAL INFORMATION SOURCE	Reference	Source from which the demographic information or customer information is obtained.
EXTERNAL OPERATOR	Reference	All operators the Service Provider does business with, including inland competitors or roaming partners.
EXTERNAL ORGANIZATION TYPE	Lookup	Lookup for types of external organizations.
FACTOR COMPANY	Reference	Stores the information about the factor company, which is the financial instrument holding the receivables.
FAULT RESOLUTION TYPE	Lookup	Lookup for available types of network fault resolution.
FAULT TYPE	Lookup	Lookup for available types of faults.
FDA	Reference	The FDA is the Fibre Distribution Area. The FDA is an aggregated fiber broadband geographical area served. Each area served is one "Network Site".
FIELD ACTIVITY RESULT TYPE	Lookup	Lookup for available result types for customer field activities that are performed by support engineers. For example: <ul style="list-style-type: none"> <li>■ S - Successful</li> <li>■ F - Failed</li> </ul>
FIELD ACTIVITY TYPE	Lookup	Lookup for types of customer field activities that may be performed by support engineers. For example: <ul style="list-style-type: none"> <li>■ Installation</li> <li>■ Troubleshooting</li> <li>■ Upgrade</li> </ul>
FISCAL HALF MONTH	Reference	Defines half-month in a fiscal calendar.

**Table 2–24 (Cont.) D to F Entity Descriptions**

Entity Name	Type	Description
FISCAL HALF YEAR	Reference	Defines half-year in a fiscal calendar.
FISCAL MONTH	Reference	Defines month in a fiscal calendar.
FISCAL QUARTER	Reference	Defines quarter in a fiscal calendar.
FISCAL WEEK	Reference	Defines week in a fiscal calendar.
FISCAL YEAR	Reference	Defines year in a fiscal calendar.
FIREWALL ROLE	Reference	Abstracts the different routing capabilities necessary for a <a href="#">LOGICAL DEVICE</a> to have. This helps simplify the modeling of (especially) network devices, which have many different sets of capabilities. For example, most routers can do routing, forwarding, and firewalling of traffic. By modeling these capabilities as three roles, router functionality is both abstracted and categorized, so that the differences between firewalling done by a router and firewalling done by a dedicated firewall device can be differentiated.
FIXED LINE	Reference	Subtype of <a href="#">PRODUCT</a> that provides detailed information on the fixed line service.
FIXED LINE CALL EVENT	Base	Event involving a call made on a Fixed Line telephone.
FIXED LINE PORT	Reference	The port ID associated with the telephone plug that provides a customer with fixed line service. The Fixed Line Port connects a customer's phone to a <a href="#">SWITCH</a> .
FIXED LINE RATING PLAN	Reference	Subtype of <a href="#">PRODUCT RATING PLAN</a> associated only with Fixed Lines.
FIXED LINE SERVICE	Reference	Subtype of <a href="#">SERVICE</a> for detail information on the fixed line service.
FLEXIBLE CHARACTERISTIC	Reference	An abstracted entity to provide common structure for all types of characteristics. All of the various types of characteristics may be applicable to the subject, including product, service, network element, and so on. This entity provides a flexible way to define additional attributes for those entities with complex features.
FLEXIBLE CHARACTERISTIC ASSIGNMENT	Reference	Assigns the characteristic to the subject.
FLEXIBLE CHARACTERISTIC ASSIGNMENT TYPE	Reference	Lookup of ASSIGNMENT TYPE. For example: <ul style="list-style-type: none"> <li>■ Depending on</li> <li>■ Having feature of</li> <li>■ Conflict with</li> </ul>
FLEXIBLE CHARACTERISTIC RELATIONSHIP	Reference	Relationship between characteristics, for example, one characteristic may conflict with another.
FLEXIBLE CHARACTERISTIC TYPE	Reference	Lookup of <a href="#">FLEXIBLE CHARACTERISTIC</a> types.
FLEXIBLE CHARACTERISTIC VALUE	Reference	Possible values that a characteristic may take, including predefined choices or free numeric values.
FLEXIBLE CHARACTERISTIC VALUE ASSIGNMENT	Reference	Assigns the characteristic value to the applicable subject.
FLEXIBLE CHARACTERISTIC VALUE RELATIONSHIP	Reference	Relationship between two flexible characteristic values. For example, exclusiveness, same as, and so on.
FRAUD PROFILE CLASS	Lookup	Lookup for all possible classes of fraud profile that customers or dealers may commit.
FSAM	Reference	FSAM (Fibre Serving Area Module) is an aggregation of <a href="#">FDAs</a> . The FSAM is a group of served areas by the operators of the service, mostly FTTH, or Optical Fiber Broadband.

**Table 2–25 G to J Entity Descriptions**

Entity Name	Type	Description
GENDER	Lookup	Lookup for gender.
GEOGRAPHY BUILDING	Reference	Building level in <a href="#">GEOGRAPHY HIERARCHY</a> .
GEOGRAPHY CITY	Reference	Cities defined in a Geography.

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
GEOGRAPHY COMPLEX	Reference	Specifies the complex level in <a href="#">GEOGRAPHY HIERARCHY</a> . The complex includes the complexes, a few building forming an enclosed area, in a city, at Universities, or industrial parks, and so on.
GEOGRAPHY COUNTRY	Reference	Countries defined in a Geography.
GEOGRAPHY COUNTY	Reference	Counties defined in a Geography.
GEOGRAPHY DEMOGRAPHIC GROUP	Reference	User-defined classification for <a href="#">DEMOGRAPHY ATTRIBUTES</a> .
GEOGRAPHY DEMOGRAPHY ATTRIBUTE	Reference	User defined attributes to describe demographic information for a given Geography.
GEOGRAPHY DEMOGRAPHY VALUE	Reference	User defined values corresponding to the <a href="#">DEMOGRAPHY ATTRIBUTES</a> .
GEOGRAPHY ENTITY	Reference	User defined geographic units.
GEOGRAPHY ENTITY ASSIGNMENT	Reference	Assignment of <a href="#">GEOGRAPHY ENTITIES</a> to a user defined hierarchy level.
GEOGRAPHY ENTITY HIER LEVEL ASSIGNMENT	Reference	Assigns <a href="#">GEOGRAPHY ENTITIES</a> to <a href="#">GEOGRAPHY HIERARCHY LEVELS</a> .
GEOGRAPHY HIERARCHY	Reference	User defined geographic hierarchies.
GEOGRAPHY HIERARCHY LEVEL	Reference	User defined levels within a geographic hierarchy.
GEOGRAPHY HIERARCHY LEVEL ASSIGNMENT	Reference	Assignment of a <a href="#">GEOGRAPHY HIERARCHY</a> level to a <a href="#">GEOGRAPHY ENTITY</a> .
GEOGRAPHY LEVEL	Reference	User defined name and descriptions for <a href="#">GEOGRAPHY HIERARCHY LEVEL</a> .
GEOGRAPHY LEVEL ATTRIBUTE	Reference	User defined attributes associated with a <a href="#">GEOGRAPHY LEVEL</a> .
GEOGRAPHY LEVEL ATTRIBUTE VALUE	Reference	Values assigned to the <a href="#">GEOGRAPHY LEVEL ATTRIBUTES</a> .
GEOGRAPHY NEIGHBORHOOD	Reference	Defines a neighborhood in <a href="#">GEOGRAPHY HIERARCHY</a> .
GEOGRAPHY REGION	Reference	Defines a region in a Geography.
GEOGRAPHY STATE	Reference	Defines a state in a Geography.
GEOGRAPHY STREET	Reference	Defines a city in <a href="#">GEOGRAPHY HIERARCHY</a> .
GEOGRAPHY SUB REGION	Reference	Defines a subregion in a Geography.
GEOGRAPHY WORLD	Reference	Top level of Geography.
GIVE AWAY ITEM DAY DRVD	Derived	Statistics of all give away items to the customer for promotion or retention purposes.
GIVE AWAY ITEM MONTH AGGR	Aggregate	Monthly aggregation of all give away items given to customers for promotion or retention purposes.
GIVE AWAY TYPE	Lookup	Lookup for types of give-aways.
GL ACCOUNT	Reference	The GL accounts are defined to track financial status from a specific angle. All GL Journals are posted to various GL Accounts to reflect financial impact of each business transaction. Each account is defined by certain codes and flags, including whether the account is enabled, whether detail posting or detail budgeting is allowed, and others.
GL ACCOUNT ASSIGNMENT	Reference	Defines the relationship between two <a href="#">GL ACCOUNTS</a> to form an Account Hierarchy. It stores lists of the detail accounts associated with each summary account.
GL ACCOUNT SEGMENT	Reference	Defines different types of <a href="#">GL ACCOUNT</a> , including: Cash, Bank, Equipment, and so on.
GL ACCOUNT TYPE	Lookup	Lookup for types of <a href="#">GL ACCOUNTS</a> . For example: <ul style="list-style-type: none"> <li>▪ Asset</li> <li>▪ Liability</li> <li>▪ Equity</li> </ul>



**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
GL BALANCE	Base	Specifies actual, budget, and encumbrance balances for detail and summary accounts.
GL COST CENTER SEGMENT	Reference	Subtype of <a href="#">GL SEGMENT</a> linking <a href="#">GL ACCOUNT</a> to a specific <a href="#">COST CENTER</a> .
GL JOURNAL ENTRY	Base	Specifies journal entries.
GL JOURNAL ENTRY BATCH	Base	Specifies journal entry batches.
GL JOURNAL ENTRY CATEGORY	Lookup	Lookup for journal entry categories. Specifies the category name and description. Each journal entry in the General Ledger is assigned a journal entry category to identify its purpose. For example: <ul style="list-style-type: none"> <li>▪ Purchase Invoices</li> <li>▪ Receiving</li> </ul>
GL JOURNAL ENTRY LINE	Base	Specifies the journal entry lines to track changes to each <a href="#">GL ACCOUNT</a> made by a certain <a href="#">GL JOURNAL ENTRY</a> . There is a one-to-many relationship between <a href="#">GL JOURNAL ENTRIES</a> and journal entry lines.
GL JE LINE SUBLEDGER ASSIGNMENT	Base	Defines the relationship between <a href="#">GL JOURNAL ENTRY LINES</a> and <a href="#">GL SUBLEDGER JOURNAL ENTRY LINES</a> . Represents individual transactions from subledgers that have been summarized into General Ledger journal entry lines.
GL LEDGER	Reference	Defines information about the ledgers and the ledger sets defined in the Financial system. A GL Ledger is defined by 4C, chart of accounts (COA), functional currency, accounting calendar, and Accounting method.
GL LEDGER ACCOUNT ASSIGNMENT	Reference	Assigns the <a href="#">GL ACCOUNTS</a> to <a href="#">GL LEDGERS</a> to form the Chart Of Account (COA).
GL ORG BSNS UNIT SEGMENT	Reference	Assigns the <a href="#">GL ACCOUNT</a> to corresponding <a href="#">ORGANIZATION BUSINESS UNIT</a> .
GL PERIOD	Reference	Specifies information about the accounting periods defined with an Accounting Calendar.
GL PRODUCT SEGMENT	Reference	Assigns the <a href="#">GL ACCOUNT</a> to corresponding <a href="#">PRODUCT</a> .
GL PROJECT SEGMENT	Reference	Assigns the <a href="#">GL ACCOUNT</a> to corresponding <a href="#">PROJECT</a> .
GL REFERENCE	Reference	Groups or Categories referred from General Ledger to classify all revenue related activities.
GL SEGMENT	Reference	Each <a href="#">GL ACCOUNT</a> contains a few independent segments, which are determined by the Financial System setup. For example, telecom operators may setup their GL Account in this format: <pre>&lt;Country, Cost Center, Account, SubAccount&gt;</pre> <pre>1 Y3G1 US 1001 2000</pre> <pre>2 Y1C1 JP 1001 3000</pre> <pre>3 Y2C1 CN 2001 4000</pre> <p>In this example, Country, Cost Center, and so on, are all different GL Segments. Account 1001 may stand for Cash, while 2001 stands for Bank, and 4000 stands for a specific bank account, and so on. Each of the <a href="#">GL ACCOUNTS</a> may be linked (rolled up) to a specific business entity (Concept), such as organization business unit, project, and so on, through the subtentities of GL Segment.</p> <p>Note: Do not confuse Account in this description with <a href="#">ACCOUNT</a>, which is customer account.</p>
GL SEGMENT TYPE	Lookup	Lookup for type of <a href="#">GL SEGMENT</a> . For example: <ul style="list-style-type: none"> <li>▪ Project</li> <li>▪ Account</li> <li>▪ Project</li> </ul>
GL SUBLEDGER	Reference	Specifies the subsidiary ledger, and represents original business transaction information that varies depending on the application.
GL SUBLEDGER JOURNAL ENTRY	Base	Represents subledger journal entries. The subledger Journal Ledger records the transaction at original level, that is each invoice, or each Purchase Order should have one entry in subledger journal entry.

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
GL SUBLEDGER JOURNAL ENTRY LINE	Base	Represents the subledger journal entry lines. There is a one-to-many relationship between subledger journal entry headers and subledger. The GL Subledger Journal Entry Line breaks down the GL SUBLEDGER JOURNAL ENTRY into different GL ACCOUNTS.
GPRS PCU DAY DRVD	Derived	Statistics on the PCU (Packet Control Unit) for the GPRS (General Packet Radio Service) such as bytes sent, bytes received, the transferred data volume, and so on.
GPRS PCU MONTH AGGR	Aggregate	Monthly aggregation of statistical values on PCU (Packet Control Unit) for the GPRS (General Packet Radio Service). For example: <ul style="list-style-type: none"> <li>■ Bytes sent</li> <li>■ Bytes received</li> </ul>
GPRS SERVICE	Reference	Subtype of <a href="#">PRODUCT</a> , with more information about GPRS (General Packet Radio Service).  The service provider provides various services such as Internet, WAP to its customers or subscribers over GPRS. The information about the usage of these services is to be analyzed at individual and aggregate level. The GPRS service dimension organizes all GPRS services.
GPRS SERVICES DAY DRVD	Derived	Daily summation regarding GPRS services provided to subscribers.
GPRS SERVICES MONTH AGGR	Aggregate	Monthly summation regarding GPRS services provided to subscribers.
GPRS USAGE EVENT	Base	Specifies the GPRS Session Event. This describes most of the fields you find in the GPRS S-CDRs and G-CDRs as defined by ETSI.
HALF HOUR	Reference	Half-hours defined as part of time.
HALF MONTH TODATE TRANSFORMATION	Reference	Todate transformation information at the half-month level.
HALF MONTH TRANSFORMATION	Reference	Transformations with respect to half-month. For example: <ul style="list-style-type: none"> <li>■ This half-month last year</li> <li>■ This year last half-month</li> </ul>
HALF YEAR TODATE TRANSFORMATION	Reference	Cumulative time transformations at the half-year level.
HALF YEAR TRANSFORMATION	Reference	Transformations with respect to half-year. For example: <ul style="list-style-type: none"> <li>■ This half-year last year</li> <li>■ This year last half-year</li> </ul>
HANDSET INSTANCE	Reference	Instance of a handset.
HANDSET MODEL	Reference	Models of handsets.
HANDSET STOCK DAY DRVD	Derived	Daily Aggregate of Handset Stock statistics by <a href="#">CUSTOMER</a> , <a href="#">SALES CHANNEL</a> , and <a href="#">SALES CHANNEL REPRESENTATIVE</a> .
HANDSET STOCK MO AGGR	Aggregate	Monthly Summary of Handset Stock statistics by <a href="#">SALES CHANNEL</a> and <a href="#">SALES CHANNEL REPRESENTATIVE</a> .
HANDSET SUBSIDY DAY DRVD	Derived	Daily summation of handset distributions involving gift, discount, or loyalty voucher points.
HANDSET SUBSIDY MONTH AGGR	Aggregate	Monthly summation of handset distributions involving gift, discount, or loyalty voucher points.
HARDWARE	Reference	This entity represents any type of hardware entity that exists as an atomic unit that is not a <a href="#">PHYSICAL LINK</a> or a <a href="#">PHYSICAL CONNECTOR</a> . Hardware is defined as any component that has a distinct physical identity and can be a component of a <a href="#">PHYSICAL DEVICE</a> . An object has a physical identity if it has a physical manifestation that enables it to be held and have a label attached to it. Thus, software, files, protocols, and policies are not physical objects.
HOLDER ATOMIC	Reference	Represents atomic holders of <a href="#">EQUIPMENT</a> that are individually manageable and do not form composite, or nested, Equipment Holders. Each Holder Atomic object can be a FRU.

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
HOLDER COMPOSITE	Reference	Represents Equipment Holders that are made up of other Equipment Holders (that is, instances of this entity and the Holder Atomic entity). This provides the semantics of collecting a set of components, each of which is individually manageable, and being able to manage the set of objects as a whole. This containment is modeled using the Has Holders aggregation.
HOME SUBSCRIBER SERVER	Reference	The server holding customer account information in Intelligent Network (IN), or Internet Multimedia System (IMS). For example: <ul style="list-style-type: none"> <li>■ Home Subscriber Server (HSS) from IMS</li> <li>■ Service Control Point (SCP)</li> </ul>
HOUR	Reference	Hours defined as part of time.
HOUSEHOLD	Reference	Captures household information for the household that the individual customer may belong to.
IDD	Reference	Subtype of <a href="#">PRODUCT</a> that provides information about IDD service.
IDD CALL EVENT	Base	Event involving an International Direct Dial ( <a href="#">IDD</a> ) call.
IN PLATFORM	Reference	IN (Intelligent Network) platforms operated by the telecom service provider. The Prepaid mobile or toll-free business normally relies on IN platform.
IN PLATFORM DAY DRVD	Derived	Daily summation of parameters related to the <a href="#">IN PLATFORM</a> functioning and performance on a daily level.
IN PLATFORM MONTH AGGR	Aggregate	Monthly summation of parameters related to the <a href="#">IN PLATFORM</a> functioning and performance on a monthly level.
IN ROUTING DEVICE	Reference	Specifies all the different types of devices, such as VLR, HLR, and SCP servers, which are utilized in a network to decide the call routing in IN Network or Wireless IN Network (IN is Intelligent Network).
INDIVIDUAL DEMOGRAPHY PROFILE	Reference	The demographic values for individual customer and customer household.
INDIVIDUAL DEMOGRAPHY VALUE	Reference	Values assigned to user-defined <a href="#">DEMOGRAPHY ATTRIBUTES</a> .
INDIVIDUAL NAME	Reference	Records all names used by the individual party along the history.
INITIATIVE RESULT TYPE	Lookup	Lookup for all possible results of initiatives. For example, the result is: <ul style="list-style-type: none"> <li>■ Becomes a customer</li> <li>■ Does not become a customer</li> </ul>
INITIATIVE TYPE	Lookup	Lookup for available initiative types.
INSTALLMENT CONTRACT	Base	The installment payment scheme for customer bills.
INTERACTION ANSWER CHOICE	Base	Defined answers, choices, corresponding to initiative questions.
INTERACTION CHANNEL	Reference	Channels used for Provider or Customer interactions. For example: <ul style="list-style-type: none"> <li>■ Call center</li> <li>■ Online business system</li> <li>■ Counter</li> </ul>
INTERACTION DIRECTION	Lookup	Lookup for available directions for initiatives. For example: <ul style="list-style-type: none"> <li>■ Inbound</li> <li>■ Outbound</li> </ul>
INTERACTION NAVIGATION ASSIGNMENT	Reference	The navigation path between each two navigation items. For example, from Welcome Page to Log in page, or from Hot Offering to a specific Product Market Plan advertisement page, and so on. The navigation may change over the time, for example, a product may be on the Hot Offering page for only a short period.

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
INTERACTION NAVIGATION HISTORY	Base	The history of customer navigation path in each interaction call, or web visit. For example, in an IVR call, a customer may go through the following steps: <ol style="list-style-type: none"> <li>1. Welcome</li> <li>2. Broadband</li> <li>3. Account balance query</li> </ol> These actions are realized as three records in the history.
INTERACTION NAVIGATION ITEM	Reference	Specifies all the possible places where customer may go to in the IVR or Web service context.
INTERACTION NAVIGATION ITEM TYPE	Lookup	Lookup for the type of Interaction Navigation. For example: <ul style="list-style-type: none"> <li>■ IVR Main Menu</li> <li>■ Home Page</li> <li>■ Account Activation</li> <li>■ Account Balance Query</li> <li>■ Network Fault Request</li> </ul>
INTERACTION NAVIGATION LEVEL	Lookup	Lookup for the level of Interaction Navigation according to the path depth the item is in.
INTERACTION NAVIGATION TYPE	Lookup	Lookup for the type of <a href="#">INTERACTION NAVIGATION ITEM</a> . For example: <ul style="list-style-type: none"> <li>■ IVR</li> <li>■ Web Page</li> </ul>
INTERACTION NAVIGATION TYPE VERSION	Reference	Historical versions of <a href="#">INTERACTION NAVIGATION ITEMS</a> .
INTERACTION PRIORITY TYPE	Lookup	Lookup for the different priorities which can be assigned to each <a href="#">EVENT PARTY INTERACTION</a> .
INTERACTION QUESTION RESPONSE	Base	Responses provided by <a href="#">CUSTOMER</a> to interaction questions.
INTERACTION REASON	Lookup	Lookup for interaction reasons. For example: <ul style="list-style-type: none"> <li>■ Debt collection</li> <li>■ Service call</li> <li>■ Inbound marketing</li> <li>■ Outbound marketing</li> <li>■ Customer complaints</li> </ul>
INTERACTION RESULT TYPE	Lookup	Lookup for possible responses to customer interaction. For example: <ul style="list-style-type: none"> <li>■ Showed interest without decision</li> <li>■ Offer accepted</li> <li>■ Never call again</li> </ul>
INTERACTION STATUS	Lookup	Lookup for available interaction status. For example: <ul style="list-style-type: none"> <li>■ Planned</li> <li>■ In-progress</li> <li>■ Executed</li> <li>■ Closed</li> </ul>
INTERACTION TRANSFER HISTORY	Base	The history of interaction transfers.
INTERACTION TRANSFER REASON	Lookup	Lookup for reasons that an interaction is transferred from one agent to another one. For example: <ul style="list-style-type: none"> <li>■ Wrong routing</li> <li>■ Another business interaction</li> <li>■ To supervisor</li> </ul>

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
INTERACTION TYPE	Lookup	Lookup for types of interactions between company and <a href="#">CUSTOMER</a> . For example: <ul style="list-style-type: none"> <li>▪ Email</li> <li>▪ Call Center Inbound</li> <li>▪ Call Center Outbound</li> <li>▪ Walk-In to the shop</li> <li>▪ Letter</li> </ul>
INTERNAL DEBT COLLECTION DAY DRVD	Derived	Daily summary of payment and collection by internal collector.
INTERNAL DEBT COLLECTION MONTH AGGR	Aggregate	Monthly summary of payment and collection by internal collector.
INTERNET ACCESS EVENT	Base	Subtype of <a href="#">NETWORK EVENT</a> , which captures customer internet surfing history with detailed URL and time information.
INVENTORY ITEM STATE	Base	Specifies a unit record of a particular stock <a href="#">ITEM</a> , held in a particular Inventory Location, in a particular Inventory State and controlled or managed by a particular Revenue Center.
INVOICE	Base	Invoices issued to accounts representing request for payment for goods and services for a specified period.
INVOICE ADJUSTMENT	Base	Adjustments made on the <a href="#">INVOICE</a> .
INVOICE ADJUSTMENT MONTH AGGR	Aggregate	Monthly aggregation of calculated measures for all adjustments made on the <a href="#">INVOICES</a> .
INVOICE ADJUSTMENT DRVD	Derived	Calculated measures for all adjustments made on the <a href="#">INVOICES</a> .
INVOICE ADJUSTMENT QUOTA	Reference	Quota of <a href="#">INVOICE ADJUSTMENTS</a> assigned to <a href="#">EMPLOYEE</a> .
INVOICE ADJUSTMENT REASON	Lookup	Lookup for the possible reasons for an adjustment on a customer's or on a partner's bill. For example: <ul style="list-style-type: none"> <li>▪ Service Activation Error</li> <li>▪ Billing Error</li> <li>▪ Goodwill</li> <li>▪ VIP, Loyalty Program, Customer</li> <li>▪ Promotion Event</li> <li>▪ Service downgrade/fault compensation</li> <li>▪ Customer complain</li> </ul>
INVOICE ADJUSTMENT TYPE	Lookup	Lookup for available adjustment types that may be applied to customer invoices. For example: <ol style="list-style-type: none"> <li>1. Direct Total Amount Adjustment</li> <li>2. Discount Total Bill Amount Adjustment</li> <li>3. Monthly Fee Adjustment</li> <li>4. Recharge Fee Adjustment (Prepaid)</li> <li>5. Activation Fee Adjustment</li> <li>6. Free-Unit Amount Adjustment</li> <li>7. Item Charge Adjustment</li> <li>8. Loyalty Points Adjustment</li> <li>9. Others</li> </ol>
INVOICE CUSTOMER TYPE AGGR	Aggregate	Monthly aggregation of all <a href="#">INVOICES</a> to post paid customers at customer type level.
INVOICE DELIVERY FORMAT	Reference	The format specification, including header, font, and so on, of each invoice delivered to the customer.

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
INVOICE DELIVERY TYPE	Lookup	Lookup for available delivery types of <b>INVOICE</b> to customer. For example: <ul style="list-style-type: none"> <li>■ Printed letter</li> <li>■ Email</li> <li>■ Duplicate printed letter on request</li> </ul>
INVOICE DISCOUNT	Base	Discount applied to <b>INVOICE</b> .
INVOICE DISCOUNT REASON	Lookup	Lookup for available discount reasons.
INVOICE DISCOUNT TYPE	Lookup	Lookup for available discount types that may be applied to customer invoice.
INVOICE DRVD	Derived	Statistics on Invoices for further aggregation.  Postpaid customers are billed/invoiced for the usage of services on monthly basis, that is, bill for every subscriber based on his package, category, and usage is calculated, printed and sent to the customer account address for payment.
INVOICE ITEM	Base	Any line that appears on the <b>INVOICE</b> which is specific to the product components a customer has. The invoice item is not necessarily associated with a monetary charge or a credit (but invoice item usually does have an associated monetary charge or credit). The invoice item is usually a billable item to a given account, onto which usage or other events are charged. The unbillable items that could be part of the invoice item are "Loyalty Points", "Free Unit Amount/Rollover", and so on.  For example: <ul style="list-style-type: none"> <li>■ Wireless Call</li> <li>■ Ringtone Downloading</li> <li>■ Monthly Fixed Rate</li> </ul>
INVOICE ITEM DETAIL	Base	Additional details regarding <b>INVOICE ITEM</b> including Product Usage Level.
INVOICE ITEM DETAIL TYPE	Lookup	Lookup for invoice item detail types (item detail is the description of each column of a given item in a bill). The invoice item detail type may be classified in a mobile line. For example: <ul style="list-style-type: none"> <li>■ Call Date</li> <li>■ Duration</li> <li>■ Dialed Digits</li> <li>■ Units</li> <li>■ Direction</li> <li>■ Zone</li> <li>■ Charge Net</li> <li>■ VAT</li> <li>■ Total Charge</li> </ul>
INVOICE ITEM RELATIONSHIP	Base	Define the relationship between <b>INVOICE ITEMS</b> .
INVOICE ITEM TYPE	Lookup	Lookup for invoice item types. For example: <ul style="list-style-type: none"> <li>■ 1 = Long Distance Minutes of Usage</li> <li>■ 2 = Access Charge</li> <li>■ 3 = Monthly Fee</li> <li>■ 4 = Equipment Charge</li> <li>■ 5 = Roaming Minutes of Usage</li> <li>■ 6 = Equipment Rental</li> <li>■ 7 = Installation Charge</li> <li>■ 8 = Adjustment or Discount</li> <li>■ 9 = Call Record Detail</li> </ul>
INVOICE PAYMENT ASSIGNMENT	Base	Matches the payment to an <b>INVOICE</b> .
INVOICE PAYMENT TERM	Base	Payment terms of each <b>INVOICE</b> . For example: <ul style="list-style-type: none"> <li>■ Payment days</li> </ul>

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
INVOICE PAYMENT TERM TYPE	Lookup	Lookup for available types of payment terms.
INVOICE STATUS HISTORY	Base	Status history for an <a href="#">INVOICE</a> , for example, the invoice may experience a status change from open to closed, or from open to extended.
INVOICE STATUS TYPE	Lookup	Type of <a href="#">INVOICE</a> status. For example: <ul style="list-style-type: none"> <li>▪ Open (not paid)</li> <li>▪ Closed (paid)</li> <li>▪ Extended (due date is changed)</li> </ul>
INVOICE TAX ITEM	Base	The Tax item applied to the <a href="#">INVOICE</a> .
INVOICE TYPE	Lookup	Lookup for type of <a href="#">INVOICE</a> according to invoice generation process. For example: <ul style="list-style-type: none"> <li>▪ Summary Invoice for hierarchical account</li> <li>▪ Standard Invoice</li> <li>▪ Trial Billing Invoice</li> </ul>
IP ADDRESS	Reference	Represents an IP address. The IP Address can be either in v4 or v6 form, and can be formatted as dotted decimal or CIDR. One or more host aliases can also be supplied.
IP ADDRESS POOL	Reference	Subtype of <a href="#">ACCESS METHOD POOL</a> , which lists all IP addresses available to customers.
IP SUBNET	Reference	A portion of a network that shares a common address component. On TCP/IP networks, subnets are defined as all devices whose IP addresses have the same prefix. For example, all devices with IP addresses that start with 100.100.100 would be part of the same subnet.
IPV4 ADDRESS	Reference	Refines the generic <a href="#">IP ADDRESS</a> to add formatting capabilities that are specific to IPv4.
ISP	Reference	Internet Service Provider (ISP).
ISP BUSINESS	Reference	The business that the <a href="#">ISP</a> may provide. For example: <ul style="list-style-type: none"> <li>▪ Company   Services</li> <li>▪ A \$ 45.00 Broadband DSL Access 20Mbps Down, 896Kps Up</li> <li>▪ A \$ 25.00 Broadband DSL Access 7Mbps, 896Kps Up</li> <li>▪ A \$ 19.99 Broadband DSL Access 1.5Mbps, 896Kps Up</li> <li>▪ A \$ x.xx Wireless Broadband or cable modem Access</li> </ul> This only covers ISP specific business (not Application Provider business).
ISP BUSINESS ASSIGNMENT	Reference	Relates an <a href="#">ISP</a> to the Communications Service Provider through a "business" relationship. This entity assigns the definition of the relationship, in entity <a href="#">ISP BUSINESS</a> , with the corresponding <a href="#">ISP</a> .

**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
ISP BUSINESS TYPE	Lookup	<p>Lookup for high level of ISP business type. For example, Cooper Line Internet Connection (may further divided as DSL, ISDN), Colocation, DNS Name, and so on. For example:</p> <ul style="list-style-type: none"> <li>▪ Virtual private server</li> <li>▪ Dedicated hosting</li> <li>▪ Colocation center</li> <li>▪ Web hosting</li> <li>▪ Free hosting</li> <li>▪ Shared hosting</li> <li>▪ Clustered hosting</li> <li>▪ Reseller hosting</li> <li>▪ Application-specific</li> <li>▪ Blog hosting</li> <li>▪ Image hosting</li> <li>▪ Video hosting</li> <li>▪ Wiki farms</li> <li>▪ File hosting</li> <li>▪ Remote backup service</li> <li>▪ Game server hosting</li> <li>▪ DNS hosting</li> <li>▪ E-mail hosting</li> </ul>
ISP TYPE	Lookup	Lookup for types of <b>ISPs</b> .
ISP USAGE EVENT	Base	Records traffic details of each session the user conducts with the Internet Service Provider <b>ISP</b> . The entity documents the connect and disconnect date and time and the number of local and international bytes downloaded, and uploaded. There will typically be multiple rows for each long running session. The entity will be implementation dependent, but normally there will be a record generated each hour, all records for the one session will have the same connect and disconnect date times, but the event start/end datetimes will identify the period that the usage (bytes) covers.
ISP USER	Reference	Identifies the user names associated with the Internet Service Provider ( <b>ISP</b> ) subscription.
ITEM	Reference	Details describing the item or <b>PRODUCT</b> .
ITEM TYPE	Lookup	Lookup for type of item ( <b>PRODUCT</b> ).
IVR INTERACTION NAVIGATION HISTORY	Base	Specifies the IVR interaction navigation history.
IVR MENU ITEM	Lookup	The <b>IVR MENU ITEM</b> , which can be used to construct the whole IVR navigation system. Each <b>IVR MENU ITEM</b> represents a group or a specific business function.
JOB	Reference	The occupation of the customer, which is the principal activity the customer performs to earn money.



**Table 2–25 (Cont.) G to J Entity Descriptions**

Entity Name	Type	Description
JOB ROLE	Reference	Job Roles defined in the company that may be assigned to employees. For example: <ul style="list-style-type: none"> <li>▪ Sales representative</li> <li>▪ Support</li> <li>▪ Product manager</li> <li>▪ Customer representative</li> <li>▪ Call center agent</li> </ul>
JOURNAL ENTRY LINE CUSTOMER ORDER ITEM ASSIGNMENT	Base	Cross-Reference from <a href="#">GL SUBLEDGER JOURNAL ENTRY LINE</a> to <a href="#">CUSTOMER ORDER LINE ITEM</a> .
JOURNAL ENTRY LINE INVOICE ITEM ASSIGNMENT	Base	Cross-Reference from <a href="#">GL SUBLEDGER JOURNAL ENTRY LINE</a> to <a href="#">INVOICE ITEM</a> .

**Table 2–26 K to N Entity Descriptions**

Entity Name	Type	Description
KEY PERFORMANCE INDICATOR SLS PARM	Reference	A measure of a specific aspect of the performance of a <a href="#">SERVICE</a> (network or non-network) or a group of <a href="#">SERVICES</a> of the same type.
KEY QUALITY INDICATOR SLS PARM	Reference	A measure of a specific aspect of the performance of a product, subscription, or a service. A Key Quality Indicator (KQI) draws data to compute the measure from several sources, including KPIs.
LAN	Reference	A Local Area Network (LAN) is a computer network covering a specific local area, such as a home, office, or small group of buildings. The LAN provides communication between computers and devices.
LAN PROTOCOL	Reference	LAN Protocols operate at the lowest two levels of the OSI model, that is, physical and data link, and are used to define communications over different types of local area media.
LAND PARCEL ADDRESS		
LANGUAGE	Lookup	Languages spoken or written within the company or in interactions with <a href="#">CUSTOMERS</a> .
LANGUAGE DIALECT	Reference	A special type of speaking or written language dialect.
LAYER NETWORK	Reference	A Layer Network is defined by the complete set of Access Groups of the same type that may be associated for transferring information. The information transferred is characteristic of the layer network and is termed characteristic information. The associations of the trail terminations, that form a trail, in a layer network may be made and broken by a layer network management process thus changing its connectivity. A separate, logically distinct layer network exists for each trail termination type. The topology of a layer network is described by access groups, subnetworks, and the links between them.
LEGAL PROCESS STATUS TYPE	Lookup	Lookup for various states which a legal process could be in, as part of a party interaction (usually after an inability to find an agreement to pay debts).
LETTER TYPE	Lookup	Lookup for available types of letters that may be sent to <a href="#">CUSTOMERS</a> . For example: <ul style="list-style-type: none"> <li>▪ Direct marketing</li> <li>▪ Legal letter</li> <li>▪ Contract confirmation letter (Welcome)</li> </ul>
LINE ACTIVATION TERMINATION DAY DRVD	Derived	Statistics for the number of lines activated and terminated every day for each <a href="#">ORGANIZATION BUSINESS UNIT</a> .
LINE ACTIVATION TERMINATION MONTH AGGR	Aggregate	Monthly aggregation of numbers of lines activated and terminated for each <a href="#">ORGANIZATION BUSINESS UNIT</a> .
LOCAL ADDRESS LOCATION	Reference	The local place within a given geographical address location to locate a specific object, such as a <a href="#">NETWORK ELEMENT</a> .
LOGICAL CAPACITY	Reference	This entity represents the minimum and maximum requirements, limits, or other variable features of different types of Managed Entities.

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
LOGICAL DEVICE	Reference	<p>This entity represents logical concepts and services that can be managed that are associated with the device as a whole. Logical Device represents a convenient aggregation point for combining different aspects of a device (For example, software contained in the device, protocols that the devices runs, the set of services that it offers, and so forth). The Logical Device also enables the device itself to have a single logical manifestation. Conceptually, this represents the "brains" of the Device.</p> <p>For example, the Logical Device represents the set of entities required for a <a href="#">ROUTER</a> to know how to route packets.</p>
LOGICAL DEVICE ATOMIC	Reference	<p>Entity for representing logical concepts and services that can be managed which are associated with the device as a whole. Represents a convenient aggregation point for combining different aspects of a device (For example, software contained in the device, protocols that the devices runs, the set of services that it offers, and so forth).</p> <p>The Logical Device Atomic also enables the device itself to have a single logical manifestation. Represents all logical devices that are atomic in nature (For example, not made up of multiple distinct logical devices that can be separately managed).</p>
LOGICAL DEVICE COMPOSITE	Reference	<p>Entity for representing logical concepts and services that can be managed which are associated with the device as a whole. Represents a convenient aggregation point for combining different aspects of a device (For example, software contained in the device, protocols that the devices runs, the set of services that it offers, and so forth).</p> <p>The Logical Device Composite also enables the device itself to have a single logical manifestation. Represents all logical devices that are composite in nature (For example, made up of multiple distinct logical devices that can be separately managed). The composite pattern enables Logical Device Composite objects to be made up of <a href="#">LOGICAL DEVICE</a> objects (that is, either <a href="#">LOGICAL DEVICE ATOMIC</a> and/or Logical Device Composite objects).</p>
LOGICAL DEVICE OS ASSIGNMENT	Reference	<p>This is an association class, and defines the semantics of the Logical Device Uses OS association. This is a complex class, and consequently only a few simple attributes are shown in this viewpoint in order for the reader to get a flavor of the types of parameters defined in this class.</p>
LOGICAL DEVICE ROLE	Reference	<p>Defines required logical features to implement the different roles played by different <a href="#">LOGICAL DEVICES</a> that are used in a <a href="#">PRODUCT</a> or <a href="#">SERVICE</a>.</p>
LOGICAL DEVICE ROLE SPEC	Reference	<p>Entity for all Logical Device Role Specifications. The Logical Device Role Spec entity enables relationships to be defined between it and other classes in the core model. This helps prevent relationship explosion. The Logical Device Role Spec defines the invariant attributes, methods, relationships, and constraints of various types of roles associated with <a href="#">LOGICAL DEVICES</a> in the model.</p>
LOGICAL ELEMENT	Reference	<p>This entity describes different logical aspects of devices (For example, <a href="#">DEVICE INTERFACES</a>) that constitute a <a href="#">PRODUCT</a>. The Logical Element has two main purposes.</p> <ol style="list-style-type: none"> <li>1. To collect common attributes and relationships for all logical entities.</li> <li>2. To provide a convenient, single point where relationships with other managed objects can be defined.</li> </ol>
LOGICAL ELEMENT PHYSICAL SUPPORT	Reference	<p>This is an association entity defined in the <a href="#">LOGICAL ELEMENT</a> model. The Logical Element Physical Support represents the semantics. For example, depends on, uses, and other relationships, that exist when one or more <a href="#">LOGICAL ELEMENTS</a> are used to support a <a href="#">PHYSICAL ELEMENT</a>. This entity should be extended to model the particular semantics involved. When extended, the type OfDependency attribute must be included, since it is a mandatory attribute. However, new values may be added to its enumerated list of values.</p>
LOGICAL ELEMENT ROLE	Reference	<p>This entity defines the concept of various types of roles that can be associated with <a href="#">LOGICAL ELEMENTS</a>.</p>
LOGICAL ELEMENT ROLE ASSIGNMENT	Reference	<p>Implements the semantics of the Roles Describe Logical Element aggregation.</p>

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
LOGICAL_ELEMENT_ROLE_SPEC	Reference	Entity for all <a href="#">LOGICAL_ELEMENT_ROLE_SPEC</a> specification subclasses. The Logical Element Role Spec enables relationships to be defined between it and other classes. This helps prevent relationship explosion. The Logical Element Role Spec defines the invariant attributes, methods, relationships, and constraints of various types of roles associated with <a href="#">LOGICAL_ELEMENTS</a> .
LOGICAL_ELEMENT_SPEC	Lookup	This entity defines the invariant characteristics and behavior (attributes, methods, constraints, and relationships) of a <a href="#">LOGICAL_ELEMENT</a> .
LOGICAL_ELEMENT_SPEC_ATOMIC	Lookup	This entity describes specific attributes, behavior, relationships, constraints, and semantics for building <a href="#">LOGICAL_ELEMENT</a> objects. The purpose of this entity is to track specifications of <a href="#">LOGICAL_ELEMENT</a> s separately from other types of Element Specifications. This entity inherits the Modifies Element Spec aggregation, and therefore can be used with the corresponding <a href="#">LOGICAL_ELEMENT</a> entity. The difference between this entity and the Logical Element Type Composite entity is that this entity represents standalone specifications of <a href="#">LOGICAL_ELEMENT</a> objects. The Logical Element Type Composite entity represents a hierarchy of specifications of <a href="#">LOGICAL_ELEMENT</a> objects.
LOGICAL_ELEMENT_SPEC_COMPOSITE	Lookup	This entity describes specific attributes, behavior, relationships, constraints, and semantics for building <a href="#">LOGICAL_ELEMENT</a> objects. The purpose of this entity is to track specifications of <a href="#">LOGICAL_ELEMENT</a> separately from other types of Element Specifications. This entity inherits the Modifies Element Spec aggregation, and therefore can be used with the corresponding <a href="#">LOGICAL_ELEMENT</a> entity. The difference between this entity and the Logical Element Type Atomic entity is that this entity represents a hierarchy of specifications for <a href="#">LOGICAL_ELEMENTS</a> . The Logical Element Type Atomic entity represents a single standalone specification of a <a href="#">LOGICAL_ELEMENT</a> .
LOGICAL_ELEMENT_SPEC_PHYSICAL_SUPPORT	Reference	This defines the invariant attributes, methods, constraints, and relationships that exist between a particular Logical Element Type and the <a href="#">PHYSICAL_ELEMENT_SPEC</a> that it depends on.
LOGICAL_ELEMENT_TYPE_VERSION	Reference	The purpose of this entity is to track Logical Element Type specifications separately from other types of Element Specifications. This entity inherits the modifiesElementSpec aggregation, and therefore can be used with the corresponding Logical Element Type specification entity.
LOGICAL_INTERFACE	Reference	An abstract entity that serves as the superclass for all virtual interfaces. Logical interfaces are also called virtual interfaces. This is because a logical interface has no hardware associated with it, and a logical interface is not physically connected to a network. A logical interface serves as a convenient aggregation point for running different relationships that affect its subclasses, thereby avoiding having to instantiate multiple relationships that are essentially the same.
LOOKUP	Lookup	Abstract <a href="#">ENTITY</a> for all lookup entities.
LOYALTY_PROGRAM	Reference	Loyalty programs available to which customers may be members of.
LOYALTY_PROGRAM_CHANNEL	Reference	Channel through which a customer can join, change, or redeem the loyalty program. For example: <ul style="list-style-type: none"> <li>■ Online service</li> <li>■ Call center</li> <li>■ Shops</li> </ul>
LOYALTY_PROGRAM_DAY_DRVD	Derived	Daily aggregate of <a href="#">LOYALTY_PROGRAM</a> statistics by <a href="#">CUSTOMER</a> , <a href="#">PRODUCT</a> , <a href="#">SALES_CHANNEL</a> , <a href="#">LOYALTY_PROGRAM_CHANNEL</a> , <a href="#">SALES_CHANNEL_REPRESENTATIVE</a> , <a href="#">AGE_ON_NET_BAND</a> , <a href="#">CREDIT_CATEGORY</a> .
LOYALTY_PROGRAM_EVENT_CATEGORY	Lookup	Lookup for the types of award updates that can be given to the <a href="#">PARTY</a> . For example: <ul style="list-style-type: none"> <li>■ E = Earnings</li> <li>■ R = Redemption</li> </ul>
LOYALTY_PROGRAM_EVENT_TYPE	Lookup	Lookup for types of <a href="#">LOYALTY_PROGRAM</a> events that could be used in a <a href="#">LOYALTY_PROGRAM</a> .
LOYALTY_PROGRAM_MO_AGGR	Aggregate	Monthly summary of <a href="#">LOYALTY_PROGRAM</a> statistics by <a href="#">PRODUCT</a> , <a href="#">SALES_CHANNEL</a> , <a href="#">LOYALTY_PROGRAM_CHANNEL</a> .

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
LOYALTY PROGRAM PARTY ROLE	Lookup	Lookup for available roles or responsibilities that may be assigned to a <a href="#">PARTY</a> participant of a <a href="#">LOYALTY PROGRAM</a> . For example: <ul style="list-style-type: none"> <li>▪ Customer Member</li> <li>▪ Internal Officer</li> <li>▪ Manager</li> </ul>
LOYALTY PROGRAM POINTS BALANCE	Base	Balance points awarded to a <a href="#">PARTY</a> in a <a href="#">LOYALTY PROGRAM</a> .
LOYALTY PROGRAM TERMINATION REASON	Lookup	Reasons why a customer terminated the participation of a given <a href="#">LOYALTY PROGRAM</a> .
MAILBOX	Reference	Mailbox allocated to a <a href="#">CUSTOMER</a> .
MANAGE ACTION TYPE	Lookup	Lookup for type of management action that can be performed on a product market plan. For example: <ul style="list-style-type: none"> <li>▪ Marketing Manager</li> <li>▪ Creation</li> <li>▪ Marketing Research</li> </ul>
MANAGED ENTITY	Reference	This is an abstract entity that represents entities in a managed environment that have the following semantics in common: <ul style="list-style-type: none"> <li>▪ An <a href="#">ENTITY</a> owns or is otherwise responsible for them.</li> <li>▪ Management of the <a href="#">ENTITY</a> is critical for providing a service and/or maintaining the environment.</li> <li>▪ The <a href="#">ENTITY</a> is important from a management point-of-view.</li> </ul>
MANAGED HARDWARE	Reference	This entity adds additional semantics to the Hardware base entity. These semantics provide management information on the hardware. For example, attributes defined by this entity can provide the administrative and operational state of the entity, and tell whether it has any alarms.
MANAGED TRANSMISSION ENTITY	Reference	This entity describes different types of logical entities that are or help form connections that transmit and/or receive information. This represents a superclass to various ITU specs (For example, G.805 and M.3100) and the IETF concepts, such as those found in various RFCs, so that it can unite ITU and IETF concepts.
MANAGEMENT DOMAIN	Reference	Represents a special grouping of <a href="#">ENTITIES</a> that has two important properties. First, it is used to partition managed objects into a meaningful logical grouping. Second, it provides a means to show how management functions are distributed and scaled.
MANAGEMENT PROTOCOL	Reference	A Management Protocol is an abstract superclass for protocols that are dedicated to exchanging management information between network devices. This type of protocol is an application layer protocol, and is used for configuring, monitoring, and gathering information about devices.
MARITAL STATUS	Lookup	Lookup for marital status that may be assigned to an individual.
MARKET AREA	Reference	A geographic area or region or other connotation for which demographic data are available.
MARKET AREA LEVEL	Reference	Hierarchical levels of market area.
MARKET OPERATOR PORTING DERIVED	Derived	Monthly porting count between operators. Provides summary information about succeeded Number Porting between operators.
MARKET PLAN DOCUMENT REQUIREMENT	Reference	Defines the customer document requirements of each <a href="#">PRODUCT MARKET PLAN</a> .
MARKET PLAN MANAGEMENT	Base	The management history of market plan by the employee.
MARKET PLAN SUBSTITUTE BY DOC	Reference	Stores the document that allows the customer to access a market plan specific to a certain category of customers (such as Students, Seniors, or unemployed). These market plans usually require a document that proves the validity of the request (for example, income certification or identification documents) that this entity stores.
MARKET PLAN TERM VALUE	Reference	The detail term value according to each term for the market plan, including monthly charge.

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
MARKET_SEGMENT	Reference	A grouping of Parties, Geographic Areas, Sales Channels, and so forth. <a href="#">MARKET SEGMENTS</a> are the target of Marketing Campaigns, <a href="#">PRODUCT MARKET PLAN</a> , Product Promotions, Product Placements, and Product Programs from both internal and external, <a href="#">COMPETITORS</a> , and other Providers, perspective.
MARKET_SEGMENT_CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a <a href="#">MARKET_SEGMENT</a> . The characteristic can be take on a discrete value, such as sex, can take on a range of values, (for example, household income of \$50,000 - \$100,000), or can be derived from a formula (for example, number of households = number of customer party roles).
MARKET_SEGMENT_CHARACTERISTIC_VALUE	Reference	A number or text that can be assigned to a <a href="#">MARKET_SEGMENT_CHARACTERISTIC</a> .
MARKET_SEGMENT_INCLUSION	Reference	The inclusion relationship between two <a href="#">MARKET_SEGMENTS</a> .
MARKET_SHARE_AGGR	Aggregate	Defines the market information. Monthly summation of Geographic Market Share for a <a href="#">PRODUCT MARKET PLAN</a> .
MARKET_SHARE_DRVD	Derived	Defines the market information. Sales Revenue by Month, Address, and Business Unit.
MARKET_STATISTICS	Reference	A categorization of performance measures by <a href="#">MARKET_SEGMENT</a> . <a href="#">PERFORMANCE</a> is measured for the Service Provider and a Service Provider's <a href="#">COMPETITORS</a> in the market place.
MARKET_STATISTIC_INCLUSION	Reference	Relationship between two market statistics.
MEDIA_INTERFACE	Reference	This entity serves as the superclass for all virtual interfaces. Logical Interfaces are also called virtual interfaces. This is because a Logical Interface has no hardware associated with it, and it is not physically connected to a network. The Media Interface serves as a convenient aggregation point for running different relationships that affect its subclasses, thereby avoiding having to instantiate multiple relationships that are essentially the same.
MEDIA_OBJECT	Reference	Any form of media in which a <a href="#">CAMPAIGN_MESSAGE</a> may appear. For example: <ul style="list-style-type: none"> <li>▪ Newspaper page</li> <li>▪ Television time slot</li> </ul>
MEDIA_OBJECT_ASSIGNMENT	Reference	Relation of one <a href="#">MEDIA_OBJECT</a> to another <a href="#">MEDIA_OBJECT</a> .
MEDIA_OBJECT_COST	Base	Costs incurred in the usage of a <a href="#">MEDIA_OBJECT</a> . Subtype of the <a href="#">COST</a> that collects all costs related to a specific media (Newspaper, Television spots, Fliers, and so on).
MEDIA_OBJECT_TYPE	Lookup	Lookup for available types of <a href="#">MEDIA_OBJECTS</a> . For example: <ul style="list-style-type: none"> <li>▪ Newspaper</li> <li>▪ Television</li> </ul>
MEDIATED_CALL_EVENT	Base	The mediated call event with original device information, dropped call, and missed call information, which is normally ignored by rating engine. The call event are collected before the calls are rated by rating engine.
MEDIATION_STATUS_CATEGORY	Lookup	Lookup for category of mediation status, such as successfully mediated or failed.
MEDIATION_STATUS_REASON	Lookup	Lookup for reasons why the network event is at certain mediation status. For example: <ul style="list-style-type: none"> <li>▪ Corrupted File</li> <li>▪ Missing record</li> </ul>
MEDIATION_STATUS_TYPE	Lookup	Lookup of the mediation status of a given raw network event. For example: <ul style="list-style-type: none"> <li>▪ &lt;Rejected&gt;</li> <li>▪ &lt;Successful&gt;</li> </ul>
MINUTE	Reference	Defines minutes as part of time.
MINUTE_ALLOWANCE	Base	Subtype of Account Balance describing the number of 'Free' or 'Prepaid' minutes allocated to Subscriber in a given month.

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
MMS	Reference	Subtype of <a href="#">VALUE ADDED SERVICE</a> and <a href="#">PRODUCT</a> , which contains the information relative to the Multimedia Messaging Service (MMS). Do not confuse with the <a href="#">MMS EVENT</a> itself.
MMS EVENT	Base	Subtype of <a href="#">NETWORK EVENT</a> , which collects all information of calls of type Multimedia Messaging Service (MMS).
MOBILE SWITCHING CENTER	Reference	The Mobile Switching Center (MSC) is a sophisticated telephone exchange which provides circuit-switched calling, mobility management, and GSM services to the mobile phones roaming within the area that it serves. This includes voice, data and fax services, and SMS and call divert services.
MODEL TYPE	Lookup	Lookup for the model types of items. There may be different "types" for a given model. For example, for a handset a model may allow "Bluetooth" or not.
MONTH TODATE TRANSFORMATION	Reference	Defines related calendar elements for performing to-date time transformations.
MONTH TRANSFORMATION	Reference	Transformations with respect to a month. For example: <ul style="list-style-type: none"> <li>■ This month last year</li> <li>■ This year last month</li> </ul>
MSC TRAFFIC DAY DRVD	Derived	Parameters, configurations, and runtime statistics related to the MSC (Mobile Switch Center) functioning and performance.
MSC TRAFFIC MONTH AGGR	Aggregate	Monthly aggregation of parameters, configurations, and runtime statistics related to the MSC (Mobile Switch Center) functioning and performance.
MUSIC DOWNLOAD	Reference	Subtype of <a href="#">VALUE ADDED SERVICE</a> and <a href="#">PRODUCT</a> , which contains the information relative to the music downloading service.
NAICS CLASSIFICATION	Reference	Specifies classifications in the North American Classification System (NAICS).
NAICS INDUSTRY	Reference	Lowest level classification for Industry in the North American Industry Classification System (NAICS).
NAICS INDUSTRY GROUP	Reference	Lookup for Classification Groups in the North American Industry Classification System (NAICS).
NAICS INDUSTRY SECTOR	Reference	Lookup for Industry Sectors in the North American Industry Classification System (NAICS).
NAICS INDUSTRY SUBSECTOR	Reference	Lookup for Industry Sub-sectors in the North American Industry Classification System (NAICS).
NATIONALITY	Lookup	Lookup for available nationalities.
NEGOTIATED SERVICE LEVEL SPEC	Reference	The negotiated service level spec, compared to predefined SLA spec.
NETWORK	Reference	Names and Service Providers for relevant Networks. The full details of a service provider are found in the <a href="#">PARTY</a> and Organizations entities.  A Network is a managed object that represents an aggregation of interconnected telecommunications and management objects capable of exchanging information. The reason that a Network is subclassed from Element Collection is that it is important that a Network represents physical and logical characteristics and behavior of this collection of telecommunications and management objects. A Network has the additional semantics of having one or more common characteristics and/or behavior. For example, a network may be owned by a single customer or provider, or be associated with the delivery of a specific set of services. A network may be nested within another (larger) network, thereby forming a containment relationship. An example of a network that is contained in another network is a transmission sub-network. The Network is owned by a single Administration and can only perform transmission functions.
NETWORK ADDRESS	Reference	Represents the generic concept of a network address. The Network Address subclasses define different types of addresses of different technologies, such as an <a href="#">IP ADDRESS</a> or an <a href="#">IPXAddress</a> . The use of a Network Address lies in its ability to serve as a convenient point for sourcing and terminating relationships. This eliminates undue duplication of relationships that interact with the subclasses of <a href="#">NETWORK ADDRESS</a> .

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
NETWORK ADDRESS INTERFACE BINDING	Reference	Defines the semantics of how this <a href="#">NETWORK ADDRESS</a> is contained in this particular <a href="#">DEVICE INTERFACE</a> .
NETWORK ADDRESS TYPE	Lookup	Lookup for the type of network addresses, that is, the invariant characteristics that define a <a href="#">NETWORK ADDRESS</a> . For example, IPv4, IPv6, IPX, and so on.
NETWORK ASSIGNMENT	Reference	Defines the relationship between <a href="#">NETWORKS</a> . For example: <ul style="list-style-type: none"> <li>■ One network relies on another network to function.</li> <li>■ One network belongs to another network.</li> </ul>
NETWORK ASSIGNMENT TYPE	Lookup	Lookup for type of network relationship. For example: <ul style="list-style-type: none"> <li>■ Composition (one network include another one)</li> <li>■ RELY (one network relies on another one)</li> </ul>
NETWORK ATOMIC	Reference	Represents a standalone Network. Network Atomics may be combined into larger Networks by aggregating them into an appropriate Network Composite object.
NETWORK AVAILABILITY DAY DRVD	Derived	Statistics of network availability measures and all outages that happened to the operator's network.
NETWORK AVAILABILITY MONTH AGGR	Aggregate	Monthly aggregation of network availability statistics and all outages that happened to the operator's network.
NETWORK CAPACITY	Reference	The network capacity of a given network route, trail, or connections.
NETWORK COMPOSITE	Reference	Represents an aggregation of Network Atomic and possibly Network Composite objects. Each Network Atomic object represents a standalone Network; these can be combined to build larger Networks by choosing the appropriate type of Network Composite object to aggregate Network Atomic objects. Note that a Network Composite object can also aggregate Network Composite objects.
NETWORK DOMAIN	Reference	A Network Domain represents a set of Managed Physical Entities that share a common set of administrative and operational characteristics. Primary among these is the use of a common naming methodology. A Network Domain partitions Managed Entity instances into logical groupings. For example, operational and/or administrative groups, that are controlled by one or more common managers. Network Domains provide one way to administer and control the operational characteristics of a set of Managed Entities.
NETWORK DOMAIN ASSIGNMENT	Reference	Assigns <a href="#">NETWORK ELEMENT</a> into <a href="#">NETWORK DOMAIN</a> .
NETWORK ELEMENT	Reference	All elements belonging to the network (normally, only of the Communications Service Provider) to deliver the communication services.
NETWORK ELEMENT BUSINESS INTERACTION ROLE	Reference	The business interaction role which can be assigned by a <a href="#">NETWORK ELEMENT</a> .
NETWORK ELEMENT CATEGORY	Lookup	Category of network elements to further classify <a href="#">NETWORK ELEMENT TYPES</a> .
NETWORK ELEMENT COST	Base	Subtype of the <a href="#">COST</a> , which associate a specific cost to a given <a href="#">NETWORK ELEMENT</a> (purchase, maintenance, recycling, and so on).
NETWORK ELEMENT FAULT ASSIGNMENT	Base	Assignment of a <a href="#">NETWORK FAULT</a> to a <a href="#">SUBSCRIPTION</a> .
NETWORK ELEMENT PARTY ASSOCIATION	Reference	Defines the semantics of the Owns Element association. In contrast with the Administers Element association, this can be any type of <a href="#">PARTY ROLE</a> , because the issue is ownership, not administration. Administration involves a specific skill set, whereas ownership does not. The semantics of this association includes specifying the time period that this <a href="#">PARTY ROLE</a> can own the Element, along with granting permission to a Value Network Role to administer the Element.
NETWORK ELEMENT PARTY MANAGEMENT	Reference	Defines the relationship between party and its managed <a href="#">NETWORK ELEMENT</a> .
NETWORK ELEMENT PARTY MANAGEMENT HISTORY	Reference	Defines the semantics of the Administer Element association. This defines that a Value Network Role, and not just any type of <a href="#">PARTY ROLE</a> , is allowed to Administer a Device. The semantics of this association includes specifying the time period that this Value Network Role can administer the Element, along with gaining permission from the Owner of the Element for being able to administer the Element.

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
NETWORK ELEMENT RELATIONSHIP	Reference	The relationship between two <a href="#">NETWORK ELEMENT</a> s. For example, in GSM, multiple BTSs are connected to a BSC, in Broadband, several customer lines may be connected to a DSLAM.
NETWORK ELEMENT RELATIONSHIP TYPE	Lookup	The Type of <a href="#">NETWORK ELEMENT RELATIONSHIP</a> . For example: <ul style="list-style-type: none"> <li>■ Pair Connected</li> <li>■ Master-Subordinate</li> <li>■ Primary-Backup</li> </ul>
NETWORK ELEMENT ROLE	Reference	This entity defines the concept of various types of roles associated with Resources (both physical and logical).
NETWORK ELEMENT ROLE ASSIGNMENT	Reference	Implements the semantics of the Network Element Takes On Roles relationship. The Network Element Role Assignment also serves as the parent entity for defining the classes that implement the Roles Describe Physical Element, Roles Describe <a href="#">LOGICAL ELEMENTS</a> , and Roles Describe Compound Element relationships.
NETWORK ELEMENT ROLE PARTY ASSIGNMENT	Reference	Defines the semantics of the Element Roles Managed By Party Role association. The Element Roles Managed By Party Role association defines the set of Element Roles that are managed by a particular <a href="#">PARTY ROLE</a> . Oftentimes, there are important functional differences between different types of Elements that require very different skill sets, methods, and so forth to be used by the <a href="#">PARTY ROLE</a> that is managing that Element. For example, different management personnel may be assigned to manage core routers compared to edge routers. This applies not just to the router as a whole, but to its physical, for example, line cards, and logical. For example, <a href="#">DEVICE INTERFACES</a> , components. The Network Element Role Party Assignment entity captures these semantics.
NETWORK ELEMENT ROLE SPEC	Reference	This is the abstract base entity for all Element Role Specification subclasses. The Network Element Role Spec enables relationships to be defined between it and other network element roles. This helps prevent relationship explosion. The Network Element Role Spec defines the invariant attributes, methods, relationships, and constraints of various types of roles associated with Elements (both physical and logical).
NETWORK ELEMENT STATE HISTORY	Base	Network element State History tracks the state history of each <a href="#">NETWORK ELEMENT</a> , for example, power off, in use, decommissioned, and so on.
NETWORK ELEMENT STATE REASON	Lookup	Lookup for reasons why the <a href="#">NETWORK ELEMENT</a> is at certain state. For example: <ul style="list-style-type: none"> <li>■ Power failure</li> <li>■ Earthquake</li> <li>■ New purchase</li> </ul>
NETWORK ELEMENT STATE TYPE	Lookup	Lookup of the NETWORK ELEMENT STATE of a given <a href="#">NETWORK ELEMENT</a> . For example: <ul style="list-style-type: none"> <li>■ Power off</li> <li>■ Installed</li> <li>■ Decommissioned</li> </ul>
NETWORK ELEMENT TYPE	Reference	This entity defines the invariant characteristics and behavior (attributes, methods, constraints, and relationships) of a Managed Element.
NETWORK ELEMENT TYPE VERSION	Reference	Represents the ability to distinguish between different instances of Element Specifications. The Network Element Type Version represents a particular form or variety of a Element Specification that is different from others or from the original. The form represents differences in attributes, methods, relationships, and/or constraints that characterize this particular Element Specification, but which are not enough to warrant creating a new Element Specification.
NETWORK ELEMENT TYPE VERSION USAGE	Reference	Defines the semantics of the modifiesElementSpec aggregation. Specifically, it enables an application to define which set of versions of this Element Specification are appropriate for a given task.
NETWORK ELEMENT USAGE	Reference	An occurrence of employing a Element for its intended purpose.
NETWORK ELEMENT USAGE EVENT TYPE	Lookup	A detailed description of a network element usage event (for example, a purchase or a lease of a resource).
NETWORK EVENT	Base	Abstracted event for all events that happened to the operator network because of customer usage; network events are usually the basis for customer billing.



**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
NETWORK EVENT ACCOUNT BALANCE BUCKET IMPACT	Base	The balance impact of a given <a href="#">NETWORK EVENT</a> on <a href="#">ACCOUNT BALANCE BUCKET</a> . For example, one voice call leads to deduction of 10 cents from the account balance bucket of: "USD 100 effective 20110101, expire 20120101".
NETWORK EVENT ACCOUNT BALANCE IMPACT	Base	How the <a href="#">NETWORK EVENT</a> impacts the account balance. For example, one voice call leads to a deduction of 10 cents from Cash Account balance.
NETWORK EVENT ASSIGNMENT	Base	Defines the relationship between one <a href="#">NETWORK EVENT</a> and another <a href="#">NETWORK EVENT</a> .
NETWORK EVENT CHARACTERISTIC	Reference	A detailed description of an attribute that defines a particular type of <a href="#">NETWORK EVENT</a> , described by its name, category, type, presence, and a set of allowed values.
NETWORK EVENT CHARACTERISTIC ASSIGNMENT	Reference	How the <a href="#">NETWORK EVENT</a> type utilize a characteristic.
NETWORK EVENT CHARACTERISTIC RELATIONSHIP	Reference	The relationship between <a href="#">NETWORK EVENT CHARACTERISTICS</a> , such as aggregation, migration, substitution, dependency, or exclusivity.
NETWORK EVENT CHARACTERISTIC TYPE	Reference	A category representing a high-level aspect of the network event information described by the characteristic.
NETWORK EVENT CHARACTERISTIC VALUE	Reference	A value of a <a href="#">NETWORK EVENT CHARACTERISTIC</a> that represents an attribute value for the event.
NETWORK EVENT CHARACTERISTIC VALUE ASSIGNMENT	Reference	A use of the Characteristic Value by a <a href="#">NETWORK EVENT</a> to which additional properties, attributes, apply or override the properties of similar properties contained in <a href="#">NETWORK EVENT CHARACTERISTIC VALUE</a> .
NETWORK EVENT CHARACTERISTIC VALUE RELATIONSHIP	Reference	The relationship between or among <a href="#">NETWORK EVENT CHARACTERISTIC VALUES</a> , such as aggregation, migration, substitution, dependency, or exclusivity.
NETWORK EVENT STATUS	Lookup	Lookup for possible status of <a href="#">NETWORK EVENTS</a> . For example: <ul style="list-style-type: none"> <li>■ Mediated</li> <li>■ Billed</li> </ul>
NETWORK EVENT TYPE	Lookup	Lookup for available types of <a href="#">NETWORK EVENTS</a> .
NETWORK EVENT TYPE VERSION	Reference	A particular form or variety of a <a href="#">NETWORK EVENT TYPE</a> that is different from others or from the original. The form represents differences in properties that characterize a <a href="#">NETWORK EVENT TYPE</a> , that are not enough to warrant creating a new <a href="#">NETWORK EVENT TYPE</a> .
NETWORK FAULT	Base	Records each registered fault.
NETWORK FAULT PRIORITY TYPE	Lookup	The different priorities which can be assigned to each <a href="#">NETWORK FAULT</a> .
NETWORK FAULT SERVICE ASSIGNMENT	Base	The services may be affected by the <a href="#">NETWORK FAULT</a> .
NETWORK FAULT STATUS HISTORY	Base	The status history of a <a href="#">NETWORK FAULT</a> . For example: <ul style="list-style-type: none"> <li>■ Opened</li> <li>■ Solved</li> <li>■ Pending confirmation</li> </ul>
NETWORK FAULT SUBSCRIPTION ASSIGNMENT	Base	Links a network issue to all subscriptions impacted, which allows you to list the customer and service impacted by a network fault.
NETWORK ROUTE	Reference	Defines a series of locations a network route may pass.
NETWORK ROUTE POINT	Reference	The points a <a href="#">NETWORK ROUTE</a> may pass through.
NETWORK ROUTE POINT ASSIGNMENT	Reference	Assignment of <a href="#">NETWORK ROUTE POINTS</a> to their <a href="#">NETWORK ROUTE</a> . Multiple <a href="#">NETWORK ROUTES</a> may share the same <a href="#">NETWORK ROUTE POINT</a> .
NETWORK SERVICE COVERAGE ASSIGNMENT	Reference	Defines the relationship between <a href="#">NETWORK TOUCHPOINT</a> and <a href="#">SERVICE COVERAGE AREA</a> .
NETWORK SITE	Reference	Specifies a place where <a href="#">NETWORK ELEMENTS</a> are located or installed.

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
NETWORK TOUCHPOINT	Reference	Point of service site for a subscriber to access a <a href="#">CELL SITE</a> or <a href="#">FIXED LINE PORT</a> . The site is a geographical point instead of area, therefore, it belongs to some geographical entity. For example, a city or a town rather than a type of the <a href="#">GEOGRAPHY ENTITY</a> . For example: <ul style="list-style-type: none"> <li>▪ BTS in GSM network</li> <li>▪ Customer installation site in ADSL broadband</li> </ul>
NETWORK TOUCHPOINT CLASS	Lookup	Lookup for available classes of <a href="#">NETWORK TOUCHPOINT</a> . For example: <ul style="list-style-type: none"> <li>▪ Public</li> <li>▪ Private</li> </ul>
NETWORK TOUCHPOINT MONTH AGGR	Aggregate	Monthly summary of <a href="#">NETWORK TOUCHPOINTS</a> by <a href="#">CUSTOMER</a> , <a href="#">NETWORK</a> , Address, and so on.
NETWORK TOUCHPOINT DRVD	Derived	Monthly summary of <a href="#">NETWORK TOUCHPOINTS</a> by <a href="#">NETWORK</a> , County, and so on.
NETWORK TOUCHPOINT STATUS	Lookup	Lookup for Available Status codes and descriptions of <a href="#">NETWORK TOUCHPOINT</a> .
NETWORK TOUCHPOINT TYPE	Lookup	Lookup for the type of <a href="#">NETWORK TOUCHPOINT</a> . For example: <ul style="list-style-type: none"> <li>▪ Cell Site (Wireless)</li> <li>▪ International Switch (roaming partners)</li> <li>▪ Ethernet Socket at Customer site (last mile included - wireline/broadband)</li> <li>▪ Switch (wireline - exclusive last mile - wireline/broadband)</li> </ul>
NETWORK TYPE	Lookup	Lookup for the types of <a href="#">NETWORK</a> . Will include: <ul style="list-style-type: none"> <li>▪ PSTN</li> <li>▪ GSM</li> <li>▪ CDMA</li> </ul>
NOTIFICATION TYPE	Lookup	Lookup for types of notification a subscriber may receive when a call is received by or diverted to a UMS or VMS mailbox. For example: <ul style="list-style-type: none"> <li>▪ SMS</li> <li>▪ Internet mail</li> </ul> <p>The UMS Notification Type dimension helps to organize the notifications data by notification type, along with other dimensions.</p>
NP MOBILE MSISDN	Reference	The mobile MSISDN number of ported number.
NP REQUEST HEADER	Base	The Number Porting (NP) Request submitted by a customer (Porting In) or a recipient operator (Porting Out).
NP REQUEST LINE ITEM	Base	Request Line Item within a Number Porting (NP) request.
NP REQUEST LINE ITEM STATE HISTORY	Base	State history for Number Porting (NP) request line items.
NP REQUEST LINE ITEM STATE TYPE	Lookup	Lookup for type of Number Porting (NP) line item state. For example: <ul style="list-style-type: none"> <li>▪ Passed</li> <li>▪ Pending</li> </ul>
NP REQUEST STATE HISTORY	Base	State history for the Number Porting (NP) request.
NP REQUEST STATE TYPE	Lookup	Lookup for type of state for Number Porting (NP) request. For example: <ul style="list-style-type: none"> <li>▪ Pre-application</li> <li>▪ Application</li> <li>▪ Document check</li> </ul>
NP REQUEST TYPE	Lookup	Lookup for type of Number Porting (NP) Request. For example: <ul style="list-style-type: none"> <li>▪ Porting In</li> <li>▪ Porting Out</li> </ul>

**Table 2–26 (Cont.) K to N Entity Descriptions**

Entity Name	Type	Description
NP_STEP	Lookup	Step involved in the Number Porting (NP) request. For example: <ul style="list-style-type: none"> <li>Application</li> <li>Document check</li> <li>Notify NPAC</li> </ul>
NUMBER_AREA	Reference	Defines the codes associated to a given area; these codes are typically used for calls to a fixed line number. For example: <ul style="list-style-type: none"> <li>1 for Paris (in France)</li> <li>89 for Munich (in Germany)</li> </ul> A number area could also be associated to other operators, and not to a geographical area. For example, 9 in France.
NUMBER_COUNTRY	Reference	Country number. For example: <ul style="list-style-type: none"> <li>US-01</li> <li>China-86</li> </ul>
NUMBER_NETWORK_TYPE	Lookup	Lookup for available classifications for the network technology, used in relation to subscriptions. For example: <ul style="list-style-type: none"> <li>in MICA-GCM: CDMA</li> <li>in Flexcab - NTWK, NNSA, WRBL, and so on</li> </ul>
NUMBER_PORT_DAY_DRVD	Derived	Aggregation of daily Porting Requests (in/out).
NUMBER_PORT_MONTH_AGGR	Aggregate	Monthly summary of Porting Requests (in/out).

**Table 2–27 O to R Entity Descriptions**

Entity Name	Type	Description
ON_OFF_NET_TYPE	Lookup	Lookup of call classifications: <ul style="list-style-type: none"> <li>On net</li> <li>Off net</li> </ul>
OPERATING_SYSTEM	Reference	An Operating System is a concrete entity that represents either software and/or firmware that runs the <b>LOGICAL_ELEMENT</b> . This entity implements and/or manages the Elements, tasks, file systems, security, and data available on the <b>LOGICAL_ELEMENT</b> . Note that an Operating System is distinct from software applications that are run on the Element. All applications and software must communicate with the Operating System for all operations that they need.
OPERATOR_GROUP	Lookup	Classification group for operators. For example, the group can be classified as: <ul style="list-style-type: none"> <li>Global Direct Competing</li> <li>Local Competitor</li> <li>Allied by Stock Share</li> </ul>
OPERATOR_TYPE	Lookup	Lookup for operator type to classify operators. For example: <ul style="list-style-type: none"> <li>International</li> <li>Local</li> </ul> International operators normally have multiple subsidiaries whose relationship is modeled in the party relationship.
ORACLE_GEOMETRY	Reference	Provides geometry information.
ORDER_LINE_ITEM_STATE	Reference	Lookup for the status that a given order line item, in a command, can be assigned. For example: <ul style="list-style-type: none"> <li>Pending</li> <li>Waiting for Customer feedback</li> <li>Closed</li> <li>Started</li> <li>Error</li> </ul>

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
ORDER STATE	Lookup	Lookup for the type of Order State. For example: <ul style="list-style-type: none"> <li>■ Open / Processing</li> <li>■ Pending / Waiting for Customer Feedback</li> <li>■ Pending / Waiting for Internal Feedback</li> <li>■ Pending / Waiting for Third Party Feedback</li> <li>■ Error</li> <li>■ Closed</li> <li>■ Cancelled</li> </ul>
ORDER STATUS	Lookup	Lookup for the type of Order Status. For example: <ul style="list-style-type: none"> <li>■ Already Shipped</li> <li>■ Delivered / Processed</li> <li>■ Processing</li> <li>■ Partially Delivered</li> <li>■ Installed</li> </ul>
ORDER TYPE	Lookup	Lookup for type of <a href="#">CUSTOMER ORDER</a> . For example: <ul style="list-style-type: none"> <li>■ Order for Pickup</li> <li>■ Order for Delivery</li> <li>■ Order for Activation</li> </ul>
ORGANIZATION AREA	Reference	An <a href="#">ORGANIZATION HIERARCHY LEVEL</a> within an <a href="#">ORGANIZATION CHAIN</a> . The Organization Area entity is the parent of one or more <a href="#">ORGANIZATION REGIONS</a> .
ORGANIZATION BANNER	Reference	The name of Company, Organization, or subsidiary that is recognizable to the consumer or the name of the store as it appears on the catalog, web channel, or brick and mortar store.
ORGANIZATION BUSINESS ENTITY	Reference	Any logical entity that is a part of the enterprise for business analysis and transactions. Classification for a business entity can include company, operation unit, store, or warehouse.
ORGANIZATION BUSINESS UNIT	Reference	A business unit of the organization that delivers a limited range of specific communications services or merchandise through any sales channel (Web Site, store, partner stands, and so on). For example, for the SuperTelco example, two Business Units could be defined as: <ul style="list-style-type: none"> <li>■ SuperTelco Communications (Mobile)</li> <li>■ SuperData (Broadband)</li> </ul>
ORGANIZATION BUSINESS UNIT COST	Base	Sub-table of <a href="#">COST</a> . This entity associates a specific cost to an <a href="#">ORGANIZATION BUSINESS UNIT</a> (for those costs not covered by <a href="#">EMPLOYEE COST</a> ).
ORGANIZATION BUSINESS UNIT TYPE	Lookup	Lookup for type of <a href="#">ORGANIZATION BUSINESS UNIT</a> . For example: <ul style="list-style-type: none"> <li>■ Call Center</li> <li>■ Branch Office</li> <li>■ Warehouse</li> </ul>
ORGANIZATION CHAIN	Reference	An <a href="#">ORGANIZATION HIERARCHY LEVEL</a> within an <a href="#">ORGANIZATION COMPANY</a> . Organization Chain entity is the parent of one or more <a href="#">ORGANIZATION AREAS</a> .
ORGANIZATION COMPANY	Reference	An <a href="#">ORGANIZATION HIERARCHY LEVEL</a> within an <a href="#">ORGANIZATION CORPORATE</a> . Organization Company entity is the parent of one or more <a href="#">ORGANIZATION CHAINS</a> .
ORGANIZATION CORPORATE	Reference	Highest level of <a href="#">ORGANIZATION HIERARCHY</a> . Organization Corporate entity is the parent of one or more <a href="#">ORGANIZATION COMPANYS</a> .
ORGANIZATION DISTRICT	Reference	An <a href="#">ORGANIZATION HIERARCHY LEVEL</a> within an <a href="#">ORGANIZATION REGION</a> . Organization District entity is the parent of one or more <a href="#">ORGANIZATION BUSINESS UNITS</a> .
ORGANIZATION DIVISION	Reference	An <a href="#">ORGANIZATION HIERARCHY LEVEL</a> within <a href="#">ORGANIZATION CORPORATE</a> .
ORGANIZATION HIERARCHY	Reference	User defined. Master list of all of the hierarchies in an organization.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
ORGANIZATION HIERARCHY LEVEL	Reference	The association entity for the hierarchies and levels.
ORGANIZATION HIERARCHY LEVEL ASSIGNMENT	Reference	Assignment of Hierarchy Levels to <a href="#">ORGANIZATION HIERARCHY</a> .
ORGANIZATION HIERARCHY VERSION	Reference	Version of <a href="#">ORGANIZATION HIERARCHY</a> .
ORGANIZATION ITEM SELLING PRICE	Reference	Associate selling price to the item. Each organization might have different prices for the same item model.
ORGANIZATION LEVEL	Reference	List of all the business levels within an organization.
ORGANIZATION LEVEL ATTRIBUTE VALUE	Reference	Values for the user defined attributes associated with an <a href="#">ORGANIZATION HIERARCHY LEVEL</a> .
ORGANIZATION LEVEL ATTRIBUTES	Reference	Attributes assigned to an <a href="#">ORGANIZATION LEVEL</a> .
ORGANIZATION MARKET DATA	Reference	Publicly available and statistical information regarding the internal or external parties, such as DUNS number and number of employees.
ORGANIZATION NAME	Reference	Different types of organization names represent the associated business legal status of their organization.
ORGANIZATION REGION	Reference	An <a href="#">ORGANIZATION HIERARCHY LEVEL</a> within an <a href="#">ORGANIZATION AREA</a> . Organization Region entity is the parent of one or more <a href="#">ORGANIZATION DISTRICTS</a> .
ORGANIZATION SERVICE WEBSITE	Reference	Subtype of the <a href="#">ORGANIZATION BUSINESS UNIT</a> . This entity collects all information on Web sites managed by the operator. This normally includes only public information.
ORGANIZATION WAREHOUSE	Reference	Location in which goods or merchandise (routers, handsets, computers, and so on) are stored but not sold, before they are sent to the shops or utilized by CSP. For example: <ul style="list-style-type: none"> <li>▪ Chairs</li> <li>▪ Telephone poles</li> <li>▪ Network equipment</li> <li>▪ Auto transmissions</li> <li>▪ Handsets</li> </ul>
ORGANIZATIONAL DEMOGRAPHY VALUE	Reference	User defined attribute definitions and corresponding values regarding demographic statistics as related to an <a href="#">ORGANIZATION BUSINESS UNIT</a> .
OS LICENSE ASSIGNMENT	Reference	Defines the semantics of the Party Role Licenses OS association. The OS License Assignment attributes help specify the licensing details for this particular <a href="#">OPERATING SYSTEM</a> instance.
OTHER INDIVIDUAL	Reference	Individual associated with a <a href="#">PARTY</a> organization, other than those defined such as <a href="#">CUSTOMER</a> or <a href="#">EMPLOYEE</a> .
P LOGICAL DEVICE ROLE	Reference	Defines required logical features to implement the specific role of a P (Provider Core) device, as used in a <a href="#">PRODUCT</a> or <a href="#">SERVICE</a> .
PARTNER PAYMENT	Base	The payment made to the partners, such as vendors, dealers, and so on. The partners may also have accounts in the source system such as Oracle BRM, therefore, this payment may refer to that account.
PARTNER PAYMENT TYPE	Lookup	Lookup for types of partner payment transactions. For example: <ul style="list-style-type: none"> <li>▪ Dealer commission</li> <li>▪ Purchase order Payment</li> </ul>
PARTNER PROMOTION PROGRAM	Reference	Assigns costs of a given <a href="#">PROMOTION</a> to a Partner or <a href="#">PARTY</a> participating in the promotion.
PARTNER SETTLEMENT MONTH AGGR	Aggregate	The monthly summary of financial settlement activities that have happened to partners at higher level.
PARTNER SETTLEMENT DRVD	Derived	Financial settlement activities that have happened to each partner within the month.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PARTNER SETTLEMENT REASON	Lookup	Lookup for valid reason codes for a partner settlement.
PARTY	Reference	<p>A party is a real person, organization, branch, subsidiary, legal entity, holding company, or some other entity. Any real thing that you would want to put a name to is a party.</p> <p>The attributes of a party are universal. In other words, they are independent of your selling, or ultimately buying relationship with the party.</p> <p>A party is not necessarily a customer. A party can represent prospects and parts of an <a href="#">ORGANIZATION HIERARCHY</a>, including branches, head offices, corporate conglomerates, that may not necessarily have a billing relationship with the company.</p> <p>Any party that has an active account can be considered a customer.</p> <p>Historical information concerning the party is available in the Parties History.</p>
PARTY ACCOUNT ASSIGNMENT	Reference	<p>Assignment of a <a href="#">PARTY</a> to an <a href="#">ACCOUNT</a>. Depending on type of party, the relationship can be:</p> <ul style="list-style-type: none"> <li>■ Customer owns the <a href="#">ACCOUNT</a> (typically for individual customers: there is one customer and one account)</li> <li>■ Multiple Customers may share the same account: This type of assignment is typical when several <a href="#">ORGANIZATION BUSINESS UNITS</a> or individuals, association or employees, have, for example, a shared balance of free minutes to use on top of their own package (with their own <a href="#">ACCOUNT</a>).</li> </ul>
PARTY ACCOUNT ASSIGNMENT TYPE	Lookup	<p>Lookup for type of relationship between <a href="#">PARTY</a> and <a href="#">ACCOUNT</a>. Depending on type of party, the relationship can be:</p> <ul style="list-style-type: none"> <li>■ Customer owns the account</li> <li>■ Multiple customers may share the same account</li> </ul>
PARTY ADDRESS LOCATION ASSIGNMENT	Reference	Associates one or more Addresses with a <a href="#">PARTY</a> .
PARTY AM PMP ASSIGNMENT HISTORY	Base	The assignment history among <a href="#">ACCESS METHOD</a> , <a href="#">PRODUCT MARKET PLAN</a> , and <a href="#">PARTY</a> .
PARTY AM PMP ASSIGNMENT STATUS	Base	The status history of assignment among <a href="#">PARTY</a> , <a href="#">ACCESS METHOD</a> , and <a href="#">PRODUCT MARKET PLAN</a> .
PARTY ASSIGNMENT	Reference	<p>Association of a <a href="#">PARTY</a> with one or more other Parties.</p> <p>The relationships may include relationships between customers or between customers and the telecommunications operator. An example of the later type of relationship, are account management portfolios where an account manager will have a relationship with one or more customers.</p>
PARTY ASSIGNMENT REASON	Lookup	<p>Lookup for valid reasons parties may be associated with each other. For example:</p> <ul style="list-style-type: none"> <li>■ Cooptation (customer brings in a new customer)</li> <li>■ Financial Responsibility</li> <li>■ Hierarchical relationship in the organization</li> <li>■ Contractual agreement</li> </ul>
PARTY ASSIGNMENT TYPE	Lookup	<p>Lookup for the type of the party relationship. For example:</p> <ul style="list-style-type: none"> <li>■ Father and son</li> <li>■ Organizational hierarchy, subsidiary</li> <li>■ Customer referral</li> </ul>
PARTY BUSINESS INTERACTION ROLE	Reference	The business interaction role which can be assigned by a <a href="#">PARTY</a> .
PARTY CONTACT INFORMATION	Reference	Contact information for a party.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PARTY CONTACT INFORMATION TYPE	Lookup	Lookup for the type of contact information. For example: <ul style="list-style-type: none"> <li>▪ Email</li> <li>▪ Home telephone number</li> <li>▪ Office telephone number</li> <li>▪ Cell phone number</li> <li>▪ Pager number</li> </ul>
PARTY CONTACT LIST PARTICIPATION	Lookup	Relationship between <a href="#">PARTY</a> and <a href="#">CONTACT LIST</a> . For example, a party belongs to a contact list.
PARTY CONTACT LIST ROLE	Lookup	The Role of the <a href="#">PARTY</a> in a <a href="#">CONTACT LIST</a> .
PARTY CONTRACT ASSIGNMENT	Reference	Assignment of a <a href="#">PARTY</a> to a <a href="#">CONTRACT</a> .
PARTY CONTRACT ASSIGNMENT ROLE	Lookup	Lookup for valid Roles that Parties may be assigned in <a href="#">PARTY CONTRACT ASSIGNMENT</a> .
PARTY CONTRACT ASSIGNMENT TYPE	Lookup	Lookup for type of the <a href="#">PARTY CONTRACT ASSIGNMENT</a> . For example: <ul style="list-style-type: none"> <li>▪ Customer contract</li> <li>▪ Managing employee</li> </ul>
PARTY COST ASSIGNMENT	Base	Assignment of cost items to a <a href="#">PARTY</a> . One party may incur multiple costs. For example, for a customer acquisition the customer might be given any of the following items that lead to costs: <ul style="list-style-type: none"> <li>▪ Handset</li> <li>▪ Network Device</li> <li>▪ Gifts</li> </ul> Cost might be assigned to multiple parties. For example, for operational cost several organizations may share the same expense on a <a href="#">PROMOTION</a> or <a href="#">CAMPAIGN</a> .
PARTY DEMOGRAPHIC	Reference	A demographic profile for a <a href="#">PARTY</a> .
PARTY DEMOGRAPHY VALUE	Reference	Defines individual and organization demography value for a given party demographic profile.
PARTY EVENT TYPE	Lookup	Lookup for valid <a href="#">EVENT TYPES</a> that may be assigned to a party profile for the various event types that may be actioned against a party.
PARTY GEOGRAPHY ENTITY ASSIGNMENT	Reference	Assigns a <a href="#">PARTY</a> to one or more <a href="#">GEOGRAPHY ENTITY</a> s.
PARTY IDENTIFICATION	Reference	Identifying information unique to a <a href="#">PARTY</a> .
PARTY IDENTIFICATION TYPE	Lookup	Lookup for valid types of <a href="#">PARTY IDENTIFICATION</a> . For example: <ul style="list-style-type: none"> <li>▪ Driver's License</li> <li>▪ DUNS Number</li> </ul>
PARTY INTERACTION THREAD	Base	Grouping of related contact events with a <a href="#">PARTY</a> into a single thread.
PARTY INTERACTION THREAD SUBSCRIPTION ASSIGNMENT	Base	The relationship between a <a href="#">PARTY INTERACTION THREAD</a> and the involved <a href="#">SUBSCRIPTIONS</a> .
PARTY INTERACTION THREAD TYPE	Lookup	The type of <a href="#">PARTY INTERACTION THREAD</a> . For example: <ul style="list-style-type: none"> <li>▪ Debt Collection</li> <li>▪ Retention Program</li> </ul>
PARTY LANGUAGE CAPABILITY	Reference	Keeps the language capability score for each party.
PARTY LOCATION REASON	Lookup	Lookup for available reason code and description for why a <a href="#">PARTY</a> may be assigned to an address. For example: <ul style="list-style-type: none"> <li>▪ Billing address</li> <li>▪ Shipping address</li> </ul>

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PARTY LOCATION TYPE	Lookup	The type of relationship between the <a href="#">PARTY</a> and the address. For example: <ul style="list-style-type: none"> <li>■ Office location</li> <li>■ Primary Living location</li> <li>■ Product Installation Address</li> </ul>
PARTY LOYALTY PROGRAM PARTICIPATION	Reference	Identifies the <a href="#">LOYALTY PROGRAMS</a> that each customer is enrolled in.
PARTY MANAGEMENT ROLE	Lookup	Defines all roles which a party plays in a <a href="#">CAMPAIGN</a> , such as management or potential customer.
PARTY MARKET SEGMENT ASSIGNMENT	Reference	Assigns a <a href="#">PARTY</a> to the market segment it belongs to.
PARTY NAME	Reference	Lists any other known names from the life history of a given party.
PARTY ORDER ASSIGNMENT	Base	Assignment of <a href="#">PARTY</a> to a given Order. For example: <ul style="list-style-type: none"> <li>■ Sales Agent gets a sales commission because of a customer order.</li> <li>■ A customer refers another customer to the operator network. The customer may receive incentives.</li> </ul>
PARTY ORDER ASSIGNMENT TYPE	Lookup	Lookup for available assignment type codes and descriptions pertaining to <a href="#">PARTY ORDER ASSIGNMENT</a> . For example: <ul style="list-style-type: none"> <li>■ Customer of contract</li> <li>■ Sales agent for the order</li> <li>■ Vendor selling the order</li> </ul>
PARTY PROFILE CHARACTERISTIC	Reference	The characteristic a party profile may take. For example, age, education, and so on.
PARTY PROFILE CHARACTERISTIC VALUE	Reference	The actual value for each <a href="#">PARTY PROFILE CHARACTERISTIC</a> on the party profile.
PARTY PROMOTION RESPONSE	Base	Response of a <a href="#">PARTY</a> to a <a href="#">PROMOTION</a> . Records the customers response result to the initiative. For example, positive responses: <ul style="list-style-type: none"> <li>■ The customer accepted the offer.</li> <li>■ The customer increased or modified their usage.</li> <li>■ The customer changed a specified behavior (for example moved from payment by check to an electronic payment option).</li> </ul>
PARTY ROLE	Lookup	Lookup for Roles a <a href="#">PARTY</a> may be assigned in an <a href="#">EVENT</a> .
PARTY ROLE ASSIGNMENT	Reference	Assigns party roles for the party. <a href="#">PARTY</a> and <a href="#">PARTY ROLE</a> are an X-X relationship. This relationship may change due to a contract change, or for other reasons.
PARTY ROLE OS PROCESS ASSIGNMENT	Reference	Defines the semantics of the Party Role Uses Processes association. Since different <a href="#">PARTY ROLES</a> have different privileges for working on and running the <a href="#">OPERATING SYSTEM</a> , an association class is needed to accurately model these details.
PARTY ROLE STATUS	Reference	Status history of each role that a <a href="#">PARTY</a> has taken.
PARTY SEGMENTATION METHOD	Lookup	Method used to create the segment, such as K-means clustering in Data Mining.
PARTY SERVICE ASSIGNMENT	Reference	Defines the relationship between <a href="#">PARTY</a> and <a href="#">SERVICE</a> .
PARTY SERVICE ASSIGNMENT ROLE	Lookup	Lookup for valid roles and descriptions a <a href="#">PARTY</a> may be assigned for a <a href="#">SERVICE</a> . For example: <ul style="list-style-type: none"> <li>■ Service Creation role</li> <li>■ Service consumer by customer</li> </ul>
PARTY SERVICE ASSIGNMENT REASON	Lookup	Lookup for available reasons for a <a href="#">PARTY</a> and <a href="#">SERVICE</a> relationship.
PARTY SIM CARD ASSIGNMENT	Reference	The relationship between <a href="#">SIM CARD</a> and <a href="#">PARTY</a> .



**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PARTY SIM CARD ROLE	Lookup	The role which <a href="#">PARTY</a> add in regards to the <a href="#">SIM CARD</a> .
PARTY SKILL	Reference	Defines skills with a score and skill level to each <a href="#">PARTY</a> .
PARTY STATUS CATEGORY	Lookup	Higher level of Party Status. For example: <ul style="list-style-type: none"> <li>▪ Financial Status</li> <li>▪ Credit Status</li> <li>▪ Payment Status</li> <li>▪ Personal Status</li> <li>▪ Legal Status</li> </ul>
PARTY STATUS CHANGE REASON	Lookup	Lookup for valid reasons that may be assigned for a Party Status change. For example: <ul style="list-style-type: none"> <li>▪ Hire</li> <li>▪ Transfer</li> <li>▪ New customer</li> </ul>
PARTY STATUS HISTORY	Base	Defines current <a href="#">PARTY</a> status history regarding what Operator may be interested.  Historical information captured for all lifetime of the customer or dealer. This information may be calculated from internal data; for example, from a payment, or this information may be obtained from an external source such as a credit rating agency.
PARTY STATUS TYPE	Lookup	Lookup for status type of the <a href="#">PARTY</a> . For example: <ul style="list-style-type: none"> <li>▪ Active</li> <li>▪ Inactive</li> <li>▪ Defaulted</li> <li>▪ New customer</li> <li>▪ VIP, Loyalty Program, customer</li> <li>▪ Black listed</li> </ul> <p>Credit Class is used to rank Customer Credit. For example, the entity value can be:</p> <ul style="list-style-type: none"> <li>▪ Good</li> <li>▪ Fair</li> <li>▪ Bad</li> </ul> <p>Or the customer may be defined as:</p> <ul style="list-style-type: none"> <li>▪ Gold</li> <li>▪ Silver</li> <li>▪ Bronze</li> </ul> <p>The party's credit is based on the underlying accounts held by the party.</p>
PARTY SUBSCRIPTION ASSIGNMENT	Reference	Defines a <a href="#">PARTY</a> 's relationship to a <a href="#">SUBSCRIPTION</a> . For example: a customer owns a subscription.
PARTY SUBSCRIPTION ROLE	Lookup	Lookup for valid Roles that may be assigned to <a href="#">PARTY</a> in regards to the <a href="#">SUBSCRIPTION</a> .
PARTY TYPE	Lookup	Lookup for party type that classifies involved parties according to their inherent characteristics and structure. For example: <ul style="list-style-type: none"> <li>▪ Person</li> <li>▪ Organization</li> <li>▪ Organization Unit</li> </ul>
PASSPORT	Reference	The passport as a type of <a href="#">PARTY IDENTIFICATION</a> .

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PAY_CATEGORY	Lookup	Lookup for type of pay category on a pay slip. For example: <ul style="list-style-type: none"> <li>Salary</li> <li>Deductions</li> <li>Contributions</li> <li>Taxes</li> </ul>
PAY_TV	Reference	Subtype of <a href="#">PRODUCT</a> . Pay TV is subscription-based product to deliver TV channels to a customer.
PAY_TYPE	Lookup	Lookup for the type of payment made to the employee. For example: <ul style="list-style-type: none"> <li>Bonus</li> <li>Basic wages</li> </ul>
PAYMENT_AGING_CLASS	Lookup	The classification of accounts according to payment delay history. For example: <ul style="list-style-type: none"> <li>0-10 days</li> <li>11-20 days</li> </ul>
PAYMENT_AGING_DAY_DRVD	Derived	Customer Debt aging results for a <a href="#">DAY</a> . Customer Debt is assigned to a predefined <a href="#">AGE_BAND</a> .
PAYMENT_AGING_MONTH_AGGR	Aggregate	Monthly summary of customer debt aging.
PAYMENT_CHANNEL	Reference	Channel by which customer may pay for service. For example: <ul style="list-style-type: none"> <li>Bank (automatic payment)</li> <li>Store (Check, cash)</li> <li>Call Center (Credit Card)</li> <li>Web (Credit Card)</li> </ul>
PAYMENT_METHOD_TYPE	Lookup	Lookup for valid methods of payment. For example: <ul style="list-style-type: none"> <li>Cash</li> <li>Check</li> <li>Credit Card</li> <li>Debit Card</li> </ul>
PAYMENT_TRANSACTION_TYPE	Lookup	Lookup for type codes and descriptions for transaction types associated with the <a href="#">ACCOUNT_PAYMENT</a> . The payment may be, for example: <ul style="list-style-type: none"> <li>Periodically Invoice</li> <li>Installation Fee</li> <li>Pre-deposit to the account</li> <li>Late Pay Penalty Payment</li> <li>Regular Monthly</li> <li>Refund / Void</li> </ul>
PCU_OUTAGE_REASON	Lookup	Lookup for reasons for a Packet Control Unit (PCU) outage in GPRS technology. For example: <ul style="list-style-type: none"> <li>Link Down</li> <li>Bit Error Rate</li> </ul>
PE_LOGICAL_DEVICE_ROLE	Reference	Defines required logical features to implement the specific role of a PE (Provider Edge) device, as used in a <a href="#">PRODUCT</a> or <a href="#">SERVICE</a> .
PEAK_OFFPEAK_TIME	Lookup	The definition of the time slots is usage dependent, but it is not common for all the products/packages. The time hours (Peak, off-peak, and night) can be different for different packages. The definition also varies for the following: <ul style="list-style-type: none"> <li>Normal Day</li> <li>Holiday</li> <li>Friday</li> <li>Sunday</li> </ul> For the special days defined in the system.
PERFORMANCE	Reference	A measure of the manner in which a <a href="#">SERVICE</a> and/or Element is functioning.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PERFORMANCE APPLICABILITY	Reference	The time of day or days during which a <a href="#">PERFORMANCE SPECIFICATION</a> is measured or not measured.
PERFORMANCE CAT CHARACTERISTIC VALUE	Reference	A value of a Characteristic Specification provided for <a href="#">PERFORMANCE CATEGORY</a> that further defines what the <a href="#">PERFORMANCE CATEGORY</a> is.
PERFORMANCE CAT SPEC RELATIONSHIP	Reference	A specification for an association that can be established between two instances of <a href="#">PERFORMANCE CATEGORIES</a> . For example, a relationship can be established between a Codec instance and Bearer Type instance.
PERFORMANCE CAT SPECIFICATION	Reference	The invariant characteristics that define a group or set of performance qualities that are classified together because of common characteristics.
PERFORMANCE CATEGORY	Reference	A group or set of performance qualities that are classified together because of common characteristics.
PERFORMANCE CATEGORY RELATIONSHIP	Reference	An association between two instances of <a href="#">PERFORMANCE CATEGORIES</a> . For example, a relationship between a Codec instance and Bearer Type instance.
PERFORMANCE CHARACTERISTIC VALUE	Reference	A value of a Characteristic Specification provided for <a href="#">PERFORMANCE</a> that further defines what the <a href="#">PERFORMANCE</a> is.
PERFORMANCE CONSEQUENCE	Reference	An action taken if a <a href="#">PERFORMANCE OBJECTIVE</a> is not met.
PERFORMANCE INDICATOR	Reference	A numeric value or text determined for a <a href="#">PERFORMANCE INDICATOR SPECIFICATION</a> . For example, a value of .005 ms that represents average packet delay.
PERFORMANCE INDICATOR DERIVATION PARAMETER	Reference	A parameter used in the calculation of a <a href="#">PERFORMANCE INDICATOR</a> . A Characteristic Specification can be used as a parameter or another <a href="#">PERFORMANCE INDICATOR SPECIFICATION</a> can be used.
PERFORMANCE INDICATOR RELATIONSHIP	Reference	An association between two <a href="#">PERFORMANCE INDICATORS</a> , such as one indicator derived from another.
PERFORMANCE INDICATOR SPEC RELATIONSHIP	Reference	An association between two <a href="#">PERFORMANCE INDICATOR SPECIFICATIONS</a> , such as one indicator derived from another.
PERFORMANCE INDICATOR SPECIFICATION	Reference	A measure of a specific aspect of the performance of an entity, such as a lost packets or average jitter, defined for a <a href="#">PERFORMANCE SPECIFICATION</a> that may trigger the creation of a <a href="#">PERFORMANCE CONSEQUENCE</a> .
PERFORMANCE IP ADDRESS	Reference	A Performance-related extension to an <a href="#">IP ADDRESS</a> .
PERFORMANCE IP ADDRESS SPECIFICATION	Lookup	Type of <a href="#">IP ADDRESS</a> related performance measures.
PERFORMANCE MOBILE ADDRESS	Reference	A network address that identifies mobile Element Elements, such as cell sites and base station controllers.
PERFORMANCE NETWORK ADDRESS	Reference	A Performance-related extension to a <a href="#">NETWORK ADDRESS</a> . A <a href="#">NETWORK ADDRESS</a> defines different ways to identify where an Element is, such as an <a href="#">IP ADDRESS</a> , or an IPXAddress, or a Point Code.
PERFORMANCE NETWORK ADDRESS SPECIFICATION	Lookup	The invariant characteristics that define Performance-related extensions to Network Address Specification. Network Address Specifications define different types of addresses of different technologies, such as an <a href="#">IP ADDRESS</a> or an IPXAddress. Each related <a href="#">PERFORMANCE NETWORK ADDRESS</a> instance has the same invariant characteristics. However, the values associated with other characteristics of the instantiated <a href="#">PERFORMANCE NETWORK ADDRESS</a> entity are specific to each instance.
PERFORMANCE NOTIFICATION	Reference	A communication that occurs as part of measuring performance. A Notification is typically one-sided, that is, no Response is expected.
PERFORMANCE NOTIFICATION SPECIFICATION	Reference	The invariant characteristics that define a communication (notification) that occurs as part of performance measurement. A Notification is typically one-sided, that is, no Response is expected.
PERFORMANCE OBJECTIVE	Reference	A goal for a <a href="#">PERFORMANCE INDICATOR</a> defined in terms of metrics, thresholds, and tolerances.
PERFORMANCE OBJECTIVE APPLICABILITY	Reference	The time of day or days during which a <a href="#">PERFORMANCE OBJECTIVE</a> is evaluated or not evaluated.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PERFORMANCE OBJECTIVE APPLICABILITY CONSEQUENCE	Reference	The time of day or days during which a Performance Objective Consequence applies or not to the violation of a <a href="#">PERFORMANCE OBJECTIVE</a> .
PERFORMANCE POINT CODE	Reference	The performance gathered on a <a href="#">POINT CODE</a> (subtype of <a href="#">NETWORK ADDRESS</a> ).
PERFORMANCE SPEC INTERVAL CONVERSION	Reference	The conversion factor that defines how many instances of one <a href="#">PERFORMANCE SPECIFICATION INTERVALS</a> are contained in the related <a href="#">PERFORMANCE SPECIFICATION INTERVAL</a> .
PERFORMANCE SPECIFICATION	Reference	The invariant characteristics that define a measure that determines how a <a href="#">SERVICE</a> and/or Element is functioning. Each related <a href="#">PERFORMANCE</a> instance will have the same invariant characteristics. However, the values associated with other characteristics of the instantiated <a href="#">PERFORMANCE</a> entity are specific to each instance.
PERFORMANCE SPECIFICATION INTERVAL	Reference	The interval of time for represented by the <a href="#">PERFORMANCE SPECIFICATION</a> .
PERIOD TO DATE TRANSFORMATION	Reference	Cumulative time transformations at the period level.
PERIOD TRANSFORMATION	Reference	Time transformations at the period level.
PHYSICAL CAPACITY	Reference	This entity represents the minimum and maximum requirements, limits, or other variable features of a Managed Device or <a href="#">MANAGED HARDWARE</a> object.
PHYSICAL CAPACITY DETAIL	Reference	Represents the semantics of the Has <a href="#">PHYSICAL CAPACITY</a> association. The Physical Capacity Detail provides additional semantics describing the different types of <a href="#">PHYSICAL CAPACITYs</a> that this Managed Component contains, and provides methods to tell how many <a href="#">PHYSICAL CAPACITYs</a> are associated with this particular Managed Component instance.
PHYSICAL COMPONENT	Reference	This is the base entity for different types of Physical Components that can reside either in an <a href="#">EQUIPMENT</a> or an Equipment Holder object. They cannot be used as a standalone object. From a management point-of-view, this object either cannot or does not need to be split into its constituent parts. For example, an ASIC (or Chip) cannot, and a tape for data storage does not need to be split up into their constituent parts. Any piece of hardware that is not a <a href="#">PHYSICAL LINK</a> , <a href="#">PHYSICAL CONNECTOR</a> , <a href="#">EQUIPMENT</a> , or Equipment Holder, is a subclass of this class.
PHYSICAL CONNECTOR	Reference	This is a concrete entity that represents any type of hardware unit that connects to other hardware units and transmit signals and/or power between them.
PHYSICAL CONTAINER	Reference	This entity adds additional semantics to the <a href="#">MANAGED HARDWARE</a> entity. The associated attributes define whether a <a href="#">MANAGED HARDWARE</a> object can be removed and/or replaced, and whether this action requires power to be removed or not when the action is performed.
PHYSICAL DEVICE	Reference	This entity represents hardware devices that can be managed. Represents a convenient aggregation point for combining different aspects of a device (for example, the cables, connectors, cards, power supplies, and other objects that together comprise the device). Thus, it enables the device itself to have a physical manifestation (for example, the "Internet Gateway Router" can be identified as a <a href="#">PHYSICAL DEVICE</a> ). Examples of this entity include routers and switches, computers, and other end-devices that are managed.
PHYSICAL DEVICE ATOMIC	Reference	Entity for representing hardware devices that can be managed that contains no sub-ordinate devices. In other words, this physical device is a standalone physical device. Represents a convenient aggregation point for combining different aspects of a device (for example, its physical composition and the set of services that it offers). The Physical Device Atomic also enables the device itself to have a physical manifestation. Examples of this entity include routers and switches, computers, and other end-devices that are managed.
PHYSICAL DEVICE COMPOSITE	Reference	Entity for representing hardware devices that can be managed that contains one or more sub-ordinate devices. In other words, this physical device is not a standalone physical device; rather, it represents an aggregation of physical devices. Each physical device in this aggregation can be managed. Represents a convenient aggregation point for combining different aspects of a device (for example, its physical composition and the set of services that it offers). The Physical Device Composite also enables the device itself to have a physical manifestation. Examples of this entity include routers and switches, computers, and other end-devices that are managed.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PHYSICAL DEVICE ROLE SPEC	Reference	Entity for all Physical Device Role Specification subclasses. The Physical Device Role Spec enables relationships to be defined between itself and other entities in the core model. This helps prevent relationship explosion. The Physical Device Role Spec entity defines the invariant attributes, methods, relationships, and constraints of various types of roles associated with <a href="#">PHYSICAL DEVICES</a> in the model.
PHYSICAL DEVICE ROLE SPEC DETAIL	Reference	Captures the semantics of the Specifies Physical Device Roles aggregation.
PHYSICAL DEVICE SPEC	Reference	This entity describes specific attributes, behavior, relationships, constraints, and semantics for building <a href="#">PHYSICAL DEVICE</a> objects.
PHYSICAL ELEMENT	Reference	This entity describes different types of hardware that constitute a <a href="#">PRODUCT</a> . The Physical Element has two main purposes: <ol style="list-style-type: none"> <li>To collect common attributes and relationships for all hardware.</li> <li>To provide a convenient, single point where relationships with other managed objects can be defined.</li> </ol>
PHYSICAL ELEMENT CHARACTERISTIC	Reference	Entity for defining the characteristic features and behavior of a <a href="#">PHYSICAL ELEMENT SPEC</a> . Every <a href="#">PHYSICAL ELEMENT SPEC</a> has a variety of important attributes, methods, constraints, and relationships which distinguish that <a href="#">PHYSICAL ELEMENT SPEC</a> from other Physical Element Specifications. We call these Physical Element Spec Characteristics. Each of these characteristics is used at the business level to characterize a <a href="#">PHYSICAL ELEMENT SPEC</a> .
PHYSICAL ELEMENT ROLE	Reference	This is a physical role that a device has. The Physical Element Role enables the correlation of physical components that route traffic with the logical capability of routing traffic.
PHYSICAL ELEMENT ROLE ASSIGNMENT	Reference	Implements the semantics of the Roles Describe Physical Element aggregation.
PHYSICAL ELEMENT ROLE SPEC	Reference	Entity for all Physical Element Role Specification subclasses. The Physical Element Role Spec enables relationships to be defined between it and other classes in the model. This helps prevent relationship explosion. The Physical Element Role Spec defines the invariant attributes, methods, relationships, and constraints of various types of roles associated with Physical Elements, whether they are subclasses of <a href="#">PHYSICAL DEVICE</a> or Hardware, in the model.
PHYSICAL ELEMENT SPEC	Lookup	This entity defines the invariant characteristics and behavior, attributes, methods, constraints, and relationships, of a <a href="#">PHYSICAL ELEMENT</a> .
PHYSICAL ELEMENT SPEC ATOMIC	Lookup	Describes specific attributes, behavior, relationships, constraints, and semantics for building <a href="#">PHYSICAL ELEMENT</a> objects. The purpose of this entity is to track Physical Element Specifications separately from other types of Element Specifications. This entity inherits the Specifies Element aggregation, and therefore can be used with the corresponding <a href="#">PHYSICAL ELEMENT</a> entity. The difference between this entity and the <a href="#">PHYSICAL ELEMENT SPEC COMPOSITE</a> entity is that this entity represents standalone Physical Element Specifications. The <a href="#">PHYSICAL ELEMENT SPEC COMPOSITE</a> entity represents a specification that is in reality made up of a set (usually a hierarchy) of Physical Element Specifications.
PHYSICAL ELEMENT SPEC COMPOSITE	Lookup	This entity describes specific attributes, behavior, relationships, constraints, and semantics for building Physical Element objects. The purpose of this entity is to track Physical Element Specifications separately from other types of Element Specifications.  This entity inherits the modifiesElementSpec aggregation, and therefore can be used with the corresponding <a href="#">PHYSICAL ELEMENT SPEC</a> entity. The difference between this entity and the <a href="#">PHYSICAL ELEMENT SPEC ATOMIC</a> entity is that this entity represents a hierarchy of Physical Element Specifications. The <a href="#">PHYSICAL ELEMENT SPEC ATOMIC</a> entity represents a single standalone Physical Element Specification.
PHYSICAL EQUIPMENT	Reference	Represents physical components of a managed device, including replaceable components. An instance of this object class must be present in only a single geographic location. An Equipment object may be nested within another Equipment object, thereby creating a containment relationship. The Equipment type shall be identified by sub-classing this object class. Either the name of the sub-class or an attribute may be used for identifying the equipment type.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PHYSICAL LINK	Reference	This is a concrete entity that represents the connecting or cabling together of hardware entities. This entity enables both wireless and connector-based communication to be modeled.
PHYSICAL PORT	Reference	Represents an actual or potential end point of a topological (physical) link, and corresponds directly to a physical port on a topology map. Physical Ports are always contained by another physical object - they cannot exist by themselves. The two most common examples are Physical Ports on a <a href="#">CARD</a> and on a <a href="#">CHASSIS</a> .
PHYSICAL PORT RESOURCE PORT ASSIGNMENT	Reference	This entity is a concrete entity that defines the semantics of the <a href="#">PHYSICAL PORTS</a> In Element Port aggregation. For example, it will describe characteristics and behavior of the <a href="#">PHYSICAL PORTS</a> that comprise this particular Element Port in terms of dependencies and how a <a href="#">PHYSICAL PORT</a> interacts with other <a href="#">PHYSICAL PORTS</a> .
PHYSICAL RESOURCE ROLE SPEC DETAIL	Reference	Captures the semantics of the Specifies <a href="#">PHYSICAL ELEMENT ROLES</a> aggregation.
PIPE	Reference	Pipe is an abstracted Link between two network resources (which are also abstracted as <a href="#">TERMINATION POINTS</a> ).
PIT CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a <a href="#">PARTY INTERACTION THREAD</a> (PIT).
PIT CHARACTERISTIC TYPE	Lookup	Type of <a href="#">PARTY INTERACTION THREAD</a> (PIT) Characteristic.
PIT CHARACTERISTIC VALUE	Reference	A value of a <a href="#">PARTY INTERACTION THREAD</a> (PIT) Characteristic.
PLANNING PERIOD	Reference	Period level in the planning calendar.
PLANNING QUARTER	Reference	Quarter level in the planning calendar.
PLANNING SEASON	Reference	Season level in the planning calendar.
PLANNING WEEK	Reference	Week level in the planning calendar.
PLANNING YEAR	Reference	Year level in the planning calendar.
PMP AVAILABILITY	Reference	Reference for Available Product Market Plan in different area or organization business unit.
PMP LOYALTY PROGRAM AVAILABILITY	Reference	Define the <a href="#">PRODUCT MARKET PLAN</a> availability over Loyalty Program participants.
PMP MARKET SEGMENT AVAILABILITY	Reference	Defines the <a href="#">PRODUCT MARKET PLAN</a> availability over certain Market Segments.
PMP ORGANIZATION AVAILABILITY	Reference	Reference for available <a href="#">PRODUCT MARKET PLAN</a> subscriptions in an <a href="#">ORGANIZATION BUSINESS UNIT</a> (store, outlet, and so on).
PMP PRICE POLICY ACTION	Reference	The outcome of the successful evaluation of a <a href="#">POLICY STATEMENT</a> (that is, one that has met its condition(s)). The outcome is expressed in terms of the price of a Product Offering. A Prod Offer Price Action is a type of <a href="#">POLICY ACTION</a> .
PMP PRICE POLICY CONDITION	Reference	Part of a <a href="#">POLICY STATEMENT</a> representing a single constraint that defines the assessment of the rule. The constraint is specified in terms of one or more Product Offering, Product Specification Type, Product Offering Price, and/or Product Offering Price Component. Prod Offer Price Rule Condition is a type of <a href="#">POLICY CONDITION</a> .
PMP PRICE POLICY VALUE	Reference	An amount expressed in money or another medium of exchange that is thought to be a fair exchange for a Product Offering as the result of the evaluation of a <a href="#">POLICY STATEMENT</a> .
PMP PRICE POLICY VARIABLE	Reference	A type of <a href="#">POLICY VARIABLE</a> that represents a Product Offering, Product Offering Price, or Product Specification Type.
PMP PRODUCT INSTANCE ASSIGNMENT	Reference	The Relationship between <a href="#">PRODUCT MARKET PLAN</a> and <a href="#">PRODUCT INSTANCE</a> . Through this assignment, the product market plan can be designed based on Product Instance. For example, the movie Avatar can be promoted with Email service. In this example, the operator can run a promotion saying: Subscribing to the Email service in this month gives you the movie Avatar for free (from IPTV or by downloading).
PMP RATING PLAN	Reference	An altered rating plan, with allowance or premium charge, over the standard rating charge to the product inside a <a href="#">PRODUCT MARKET PLAN</a> .

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PMP RATING PLAN DETAIL	Reference	Details for an alternation, allowance or premium charge, over the standard rating charge to the product inside a product market plan.
POINT CODE	Reference	ISUP Signaling OPC and DPC attributes that map to Region, Subregion, Node Type, and Node Name.
POLICY	Reference	This entity is the root of the <a href="#">POLICY</a> model. As such, it defines common attributes, methods and relationships that all policy subclasses use and take part in.
POLICY ACTION	Reference	This entity represents how to form the action clause of a <a href="#">POLICY RULE</a> . This consists of a single occurrence of a <a href="#">POLICY STATEMENT</a> , which is of the form: {variable, operator, value} Policy actions have the semantics of "SET variable to value". There are two types of actions: - pass actions are invoked if the condition clause was TRUE - fail actions are invoked if the condition clause was FALSE.
POLICY ACTION ASSIGNMENT	Reference	This entity specifies the semantics needed for the contained Policy Actions aggregation.
POLICY ACTION ATOMIC	Reference	This is the base entity for all simple <a href="#">POLICY ACTIONS</a> . A simple <a href="#">POLICY ACTION</a> consists of a single Boolean clause, which performs a single action. This consists of a single occurrence of a <a href="#">POLICY STATEMENT</a> , which is of the form: {SET   CLEAR} <a href="#">POLICY VARIABLE</a> to <a href="#">POLICY VALUE</a> . This is distinctly different from the Policy Action Vendor, which does not use a <a href="#">POLICY STATEMENT</a> . Policy Action Atomic objects can also be used to form more complex action structures. A Policy Action Composite object contains a group of Policy Action Atomic objects; this grouping enables multiple Policy Action Atomic objects to be executed as a group. Alternatively, a Policy Action Atomic object can contain one or more Policy Action Atomic objects (and also Policy Action Composite groups if desired) to provide the semantics of a compound Policy Action. In either case, the aggregation is done using the contained Policy Actions aggregation.
POLICY ACTION COMPOSITE	Reference	Serves as a generic container in which to place Policy Action Atomic, Policy Action Vendor, or Policy Action Composite entities. The first two provide actions that this container groups, while the latter establishes a hierarchy in which to order the execution of <a href="#">POLICY ACTIONS</a> . Both simple and complex <a href="#">POLICY ACTIONS</a> can be placed in this container. Each Policy Action Atomic and Policy Action Vendor object is linked to this object using the containedPolicy Actions association.
POLICY ACTION RULE ASSIGNMENT	Reference	This entity specifies the semantics needed for the Policy Action In Policy Rule aggregation. This aggregation defines the set of <a href="#">POLICY ACTIONS</a> that are contained in this <a href="#">POLICY RULE</a> .
POLICY ACTION VENDOR	Reference	Provides a general extension mechanism for representing <a href="#">POLICY ACTIONS</a> that have not been modeled with the attributes specified in this model. This entity uses two of its properties (Constraint and Constraint Encoding) for defining the content and format of a vendor-specific condition. Its third property (actionResponse) to provide a standard result, so that this object can be placed with other <a href="#">POLICY ACTION</a> objects in a <a href="#">POLICY RULE</a> object. Standardized extensions are not expected to use this entity.
POLICY APPLICATION ASSIGNMENT	Reference	This is an association class that explicitly defines which Managed Entities in a Policy Domain this Policy information applies to.
POLICY CONDITION	Reference	This entity represents how to form the condition clause of a <a href="#">POLICY RULE</a> . This entity represents rule-specific or reusable policy conditions. Policy conditions are of the form: {variable, operator, value} where the operator is usually the MATCH operator, but could be another type (for example, compare) of operator. This gives the semantics of "IF the condition is TRUE (or FALSE)". The subclasses of <a href="#">POLICY CONDITION</a> , along with its recursive aggregation, enable simple and compound (for example, nested) <a href="#">POLICY CONDITIONS</a> to be supported by the same structure.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
POLICY CONDITION ASSIGNMENT	Reference	This entity specifies the semantics needed for the Policy Condition In Policy Condition aggregation. This aggregation defines the set of <a href="#">POLICY CONDITIONS</a> that are contained in this <a href="#">POLICY CONDITION</a> . Note that the <a href="#">POLICY CONDITION</a> Contained Policy Condition Details entity and the Policy Condition Rule Details entity have conceptually the same attributes. This is because they both provide semantics to form a condition expression. The difference lies in their placement relative to the <a href="#">POLICY RULE</a> entity. That is, the Contained Policy Condition Details entity combines individual expressions within a condition clause, whereas the Policy Condition Rule Details entity describes how the completed condition clause appears to the <a href="#">POLICY RULE</a> . These attributes are described in the Data Dictionary section of this Addendum.
POLICY CONDITION ATOMIC	Reference	This is the base entity for all simple policy conditions. A simple policy condition consists of a single Boolean clause, which tests a single condition. This consists of a single occurrence of a <a href="#">POLICY STATEMENT</a> , which is of the form: {variable, operator, value} This design relies on the <a href="#">POLICY STATEMENT</a> to supply the actual terms to form the condition clause. Thus, since everything is normalized to a condition clause, no subclasses of Policy Condition Atomic are needed. Instead, subclasses of the appropriate <a href="#">POLICY STATEMENT</a> classes are provided. A compound <a href="#">POLICY CONDITION</a> consists of one or more <a href="#">POLICY CONDITIONS</a> contained inside a higher-level <a href="#">POLICY CONDITION</a> . These can optionally be grouped by a <a href="#">POLICY CONDITION COMPOSITE</a> object if desired.
POLICY CONDITION COMPOSITE	Reference	The <a href="#">POLICY CONDITION COMPOSITE</a> entity is the base entity for all complex policy conditions. A complex policy condition consists of an aggregation of <a href="#">POLICY CONDITION ATOMIC</a> and <a href="#">POLICY CONDITION COMPOSITE</a> objects, which in turn form a complex Boolean statement. Note that such an object still evaluates to a single Boolean TRUE or FALSE value.  Conceptually, this is a standalone object that consists of one <a href="#">POLICY CONDITION</a> that provides an overall context for either a nested or a group of subordinate <a href="#">POLICY CONDITIONS</a> to be evaluated.
POLICY CONDITION RULE ASSIGNMENT	Reference	This entity specifies the semantics needed for the Policy Condition In Policy Rule aggregation. This aggregation defines the set of Policy Conditions that are contained in this <a href="#">POLICY RULE</a> . The Contained Policy Condition Details entity and the Policy Condition Rule Details entity have conceptually the same attributes. This is because they both provide semantics to form a condition expression. The difference lies in their placement relative to the <a href="#">POLICY RULE</a> entity. That is, the Contained Policy Condition Details entity combines individual expressions within a condition clause, whereas the Policy Condition Rule Details entity describes how the completed condition clause appears to the <a href="#">POLICY RULE</a> . These attributes are described in the Data Dictionary section of this Addendum.
POLICY EVENT	Base	Represents an aggregation of Policy Events, constrained according to the eventConstraint attribute of the Event Details aggregation entity. This set of Policy Events is then presented to one or more <a href="#">POLICY RULES</a> to trigger the evaluation of their condition clauses. This entity enables an external application, such as a Policy Server, to dynamically adjust the set of events that are being used to trigger the evaluation of a <a href="#">POLICY RULE</a> .
POLICY EVENT ATOMIC	Base	Represents the occurrence of a single atomic event, which triggers the evaluation of the condition clause of a <a href="#">POLICY RULE</a> .
POLICY EVENT COMPOSITE	Base	Represents the occurrence of a composite event. A composite event is an event that is made up of a set of Policy Event Atomic and/or Policy Event Composite entities. Like a Policy Event Atomic, a Policy Event Composite can also be used to trigger the evaluation of the condition clause of a <a href="#">POLICY RULE</a> .
POLICY GROUP	Reference	This entity is a generalized aggregation container. A Policy Group enables <a href="#">POLICY RULES</a> and <a href="#">POLICY GROUPS</a> to be aggregated in a single container. Note that loops, including the degenerate case of a <a href="#">POLICY GROUP</a> that contains itself, are not allowed when <a href="#">POLICY GROUPS</a> contain other <a href="#">POLICY GROUPS</a> .
POLICY GROUP EXECUTION DETAIL	Reference	This is an association entity that defines the semantics associated with a Policy Event Set being applied to a <a href="#">POLICY GROUP</a> . Specifically, it controls through its Execution Filter attribute which components in the <a href="#">POLICY GROUP</a> this Policy Event Set will be passed to, so it can be evaluated.



**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
POLICY OPERATOR	Reference	This is a concrete entity for modeling different types of operators in a <a href="#">POLICY STATEMENT</a> . By restricting the type of operator used in a <a href="#">POLICY STATEMENT</a> , one can effectively restrict the semantics of that <a href="#">POLICY STATEMENT</a> .
POLICY OPERATOR VARIABLE ASSIGNMENT	Reference	Defines the relationship between <a href="#">POLICY OPERATOR</a> and <a href="#">POLICY VARIABLE</a> .
POLICY ROLE	Reference	This entity defines the concept of various types of roles for different policies that are used.
POLICY RULE	Reference	Entity for realizing the "event-condition-passaction-failaction" semantics that form a the model policy rule. The semantics of this rule are that the rule is evaluated when an event occurs. If the condition clause is satisfied, then the pass-action clause will be executed (otherwise, the fail-action clause will be executed). <a href="#">POLICY RULES</a> may be nested within <a href="#">POLICY RULES</a> . This is often needed in networking (for example, bandwidth allocation).
POLICY SET	Reference	This entity defines two types of collections. <a href="#">POLICY RULE</a> collects Policy Events, <a href="#">POLICY CONDITIONS</a> , and <a href="#">POLICY ACTIONS</a> , while <a href="#">POLICY GROUP</a> collects <a href="#">POLICY RULES</a> and <a href="#">POLICY GROUPS</a> . Two important and powerful features of this arrangement are that a <a href="#">POLICY SET</a> defines a common decision strategy and a common set of <a href="#">POLICY ROLES</a> to be used by the <a href="#">POLICY GROUPS</a> and the <a href="#">POLICY RULES</a> that inherit from it.
POLICY SET ASSIGNMENT	Reference	Defines relationship between <a href="#">POLICY SETS</a> .
POLICY STATEMENT	Reference	This entity models the triplet {variable, operator, value} that is used by both the <a href="#">POLICY CONDITION</a> and <a href="#">POLICY ACTION</a> entities. The semantics are reflected in the types of operators that are allowed to be used in each case. For conditions, users want the semantics of "variable relates to value", where "relates to" is usually the match operator, but could also be other applicable operators (for example, a comparison operator). For actions, users want the semantics of "set variable to value". Here, the only operator allowed is the set operator.
POLICY VALUE	Reference	An abstract base entity for modeling different types of values that occur in a <a href="#">POLICY STATEMENT</a> . The <a href="#">POLICY VALUE</a> specifies an attribute that should either be set or cleared (if used in a <a href="#">POLICY ACTION</a> ) or matched or compared to a value of the <a href="#">POLICY VARIABLE</a> in a <a href="#">POLICY CONDITION</a> .
POLICY VARIABLE	Reference	This entity models different types of variables that form a <a href="#">POLICY STATEMENT</a> . The variable specifies an attribute or concept that should either be matched or compared to a value when the condition is evaluated.
POLICY VARIABLE VALUE ASSIGNMENT	Reference	This is an association class that contains the OCL expression that will be used to define the particular semantics of how this Value is constrained by this Variable. This includes constraints such as upper and lower bounds of the value that a <a href="#">POLICY VALUE</a> object can take.
POSTAL SERVICE TYPE	Lookup	Lookup for type of postal service type available to the carrier. For example: <ul style="list-style-type: none"> <li>■ First-Class Mail</li> <li>■ Registered Mail</li> <li>■ Regular Mail</li> <li>■ Postal Card</li> </ul>
POSTCODE	Reference	Postal Code, Zip Code, or similar geographical designation.
POSTPAID WIRELESS	Reference	Subtype of <a href="#">PRODUCT</a> for postpaid wireless.
PPA CATEGORY	Lookup	Lookup for categorizations of prepaid allowances. For example: <ul style="list-style-type: none"> <li>■ Local Call Allowance</li> <li>■ Long Distance Call Allowance</li> <li>■ Bonus Free Minutes</li> <li>■ Internal (Inside Operators network) Call Allowance</li> </ul>
PPA DEDUCTION TYPE	Lookup	Lookup for valid deduction types as related to prepaid allowances (PPA).
PREPAID ACCOUNT ACTIVATION DAY DRVD	Derived	The summary of daily prepaid <a href="#">ACCOUNT</a> activations, with all their initial values.
PREPAID ACCOUNT STATISTIC DRVD	Derived	Monthly aggregation of prepaid account revenue, including: air time, recharge value and so on, by <a href="#">ACCOUNT</a> , <a href="#">SALES CHANNEL</a> , <a href="#">AGE ON NET BAND</a> .

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PREPAID ACCOUNT STATISTIC SEGMENT AGGR	Aggregate	Monthly summary of prepaid account revenue, including: air time, recharge value, and so on, by <a href="#">CUSTOMER SEGMENT</a> , <a href="#">PRODUCT MARKET PLAN</a> .
PREPAID ALLOWANCE DAY DRVD	Derived	Daily aggregate of free minutes allowance (PPA) for <a href="#">ACCOUNT</a> and <a href="#">PRODUCT MARKET PLAN</a> .
PREPAID ALLOWANCE MONTH AGGR	Aggregate	Monthly summary of free minutes allowance (PPA) in a <a href="#">PRODUCT MARKET PLAN</a> .
PREPAID CALL SUMMARY DAY DRVD	Derived	Daily aggregate of prepaid calls by <a href="#">ACCOUNT</a> , <a href="#">PRODUCT MARKET PLAN</a> , and <a href="#">ACCESS METHOD</a> .
PREPAID CALL SUMMARY MONTH AGGR	Aggregate	Monthly summary of prepaid call activity by <a href="#">PRODUCT MARKET PLAN</a> , <a href="#">CUSTOMER TYPE</a> .
PREPAID MOBILE EVENT TYPE	Lookup	Lookup for the prepaid mobile event types that may be actioned against a prepaid mobile subscription. The specific event types are implementation specific. For example: <ul style="list-style-type: none"> <li>▪ Initial activation</li> <li>▪ Recharges</li> <li>▪ Adjustments</li> <li>▪ Deactivations</li> </ul>
PREPAID RECHARGE	Base	Type of <a href="#">ACCOUNT PAYMENT</a> in which a <a href="#">PREPAID VOUCHER INSTANCE</a> is recharged.
PREPAID VOUCHER	Reference	The voucher a customer can buy to refill their prepaid account, normally in the form of a paper or plastic card. For example: <ul style="list-style-type: none"> <li>▪ Prepaid Mobile Recharge Voucher</li> <li>▪ Prepaid Calling Card</li> </ul>
PREPAID VOUCHER BATCH	Reference	Each voucher instance generation batch may produce thousands vouchers.
PREPAID VOUCHER INSTANCE	Reference	Represents each prepaid card. The cards are a means of recharging prepaid mobiles. The card can be physically a Plastic Card or a paper slip with account number and pin code.
PREPAID VOUCHER RECHARGE DAY DRVD	Derived	The summary of daily prepaid voucher recharge.
PREPAID VOUCHER RECHARGE OPTION	Reference	The recharge options for a type of <a href="#">PREPAID VOUCHER</a> . A voucher can be configured with different perceived value to the customer and they may choose to redeem any one of them. For example a voucher may have the following recharge options: <ul style="list-style-type: none"> <li>▪ \$10 cash</li> <li>▪ \$5 and 400 SMS</li> <li>▪ 20Mb data</li> </ul>
PREPAID WIRELESS	Reference	Type of Service Product. Subtype of <a href="#">SERVICE</a> , for Prepaid Wireless service only.
PRICE DERIVATION RULE	Reference	The specification of a method to be used to transform the current sell unit retail amount to the price charged to account based on a discount group.
PRICE EVENT	Reference	Type of event which may trigger a billing process, for example, event of customer using a product over its quota.
PRODUCT	Reference	The product provided by the carrier. Product includes <a href="#">PRODUCT PACKAGE</a> information. The composition of a <a href="#">PRODUCT PACKAGE</a> is tracked in the product relationship.
PRODUCT ADDITIONAL TEXT	Reference	Additional descriptive text for a given product, that cannot fit in any other existing attributes, or that should be customized for users with different languages.
PRODUCT ASSIGNMENT	Reference	Defines a relationship between a <a href="#">PRODUCT</a> and a related product.
PRODUCT ASSIGNMENT REASON	Lookup	Lookup for valid reason codes and descriptions for <a href="#">PRODUCT ASSIGNMENT</a> .

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PRODUCT BRAND	Lookup	Brand of the <a href="#">PRODUCT</a> or <a href="#">PRODUCT MARKET PLAN</a> . The operators can provide the same product under different brands for different segments of customers. For example, some operators may have brand such as Business, High End, Economical, for the same gsm wireless product.
PRODUCT CAPABILITY	Reference	Various product capabilities, or features. For example: <ul style="list-style-type: none"> <li>■ Number of lines for a phone</li> <li>■ Storage size for Email</li> <li>■ Number of "Friends&amp;Family" numbers</li> </ul>
PRODUCT CAPABILITY TYPE	Lookup	Lookup for type of <a href="#">PRODUCT CAPABILITY</a> .
PRODUCT CAPABILITY VALUE	Reference	Detailed <a href="#">PRODUCT CAPABILITY</a> information. The information would be quantitative by <a href="#">PRODUCT CAPABILITY TYPE</a> .
PRODUCT CATALOG	Reference	A list of <a href="#">PRODUCT MARKET PLAN</a> for sale, with prices and illustrations, for example in book form or on the web. Product Catalogs can be used by Customers during a self-care ordering process and may be used across one or more Distribution Channels.
PRODUCT CATALOG CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a Product Catalog Specification.
PRODUCT CATALOG CHARACTERISTIC ASSIGNMENT	Reference	A use of the Product Catalog Spec Characteristic by an Entity Specification to which additional properties (attributes) apply or override the properties of similar properties contained in Product Catalog Spec Characteristic.
PRODUCT CATALOG CHARACTERISTIC RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between/among Characteristic Specifications.
PRODUCT CATALOG CHARACTERISTIC VALUE	Reference	A value associated with a Product Catalog Characteristic.
PRODUCT CATALOG CHARACTERISTIC VALUE ASSIGNMENT	Reference	A use of the Product Catalog Spec Characteristic Value by an Product Catalog Specification to which additional properties (attributes) apply or override the properties of similar properties contained in Product Catalog Spec Characteristic Value.
PRODUCT CATALOG CHARACTERISTIC VALUE RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between/among Characteristic Spec Values.
PRODUCT CATALOG GEOGRAPHY ASSIGNMENT	Reference	Defines which <a href="#">PRODUCT CATALOG</a> is available in which geographical area.
PRODUCT CATALOG MARKET PLAN ASSIGNMENT	Reference	Defines the relationship between a <a href="#">PRODUCT CATALOG</a> and the product market plans that appeared on the <a href="#">PRODUCT CATALOG</a> .
PRODUCT CATALOG PRESENTATION TYPE	Reference	The <a href="#">PRODUCT CATALOG</a> presentation type. For example: <ul style="list-style-type: none"> <li>■ Brochure</li> <li>■ Web pages</li> <li>■ Video</li> </ul>
PRODUCT CATALOG SALES CHANNEL ASSIGNMENT	Reference	Defines where the <a href="#">PRODUCT CATALOGS</a> are made available to the end user.
PRODUCT CATALOG TYPE	Lookup	Lookup for types that define the invariant characteristics of a <a href="#">PRODUCT CATALOG</a> .
PRODUCT CATEGORY	Lookup	Lookup for classification of the <a href="#">PRODUCT</a> according to certain common characteristics.
PRODUCT CHARACTERISTIC	Reference	A characteristic quality or distinctive feature of a Product Specification. The characteristic can be take on a discrete value, such as color, can take on a range of values, (for example, sensitivity of 100-240 mV), or can be derived from a formula (for example, usage time (hrs) = 30 - talk time *3). Certain characteristics, such as color, may be configured during the ordering or some other process.
PRODUCT CHARACTERISTIC ASSIGNMENT	Reference	A use of the Characteristic Specification by an Product Specification to which additional properties apply.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PRODUCT CHARACTERISTIC RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between/among Product Spec Characteristics.
PRODUCT CHARACTERISTIC TYPE	Lookup	Type of <a href="#">PRODUCT CHARACTERISTIC</a> .
PRODUCT CHARACTERISTIC VALUE	Reference	A value of a Product Spec Characteristic chosen for a <a href="#">PRODUCT</a> that further defines what the <a href="#">PRODUCT</a> is.
PRODUCT CHARACTERISTIC VALUE ASSIGNMENT	Reference	A use of the Product Catalog Spec Characteristic Value by an Product Catalog Specification to which additional properties (attributes) apply or override the properties of similar properties contained in Product Catalog Spec Characteristic Value.
PRODUCT CHARACTERISTIC VALUE RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between/among Product Spec Characteristics.
PRODUCT CHARGE TYPE	Lookup	Lookup for type codes and descriptions for <a href="#">PRODUCT PACKAGE</a> charge on a <a href="#">PRODUCT</a> . For example: <ul style="list-style-type: none"> <li>▪ One time charge</li> <li>▪ Usage duration charge</li> <li>▪ Usage per call charge</li> <li>▪ Usage amount charge (data transfer)</li> <li>▪ Monthly cycle forward fee</li> <li>▪ Monthly cycle arrear fee</li> <li>▪ Free unit charge</li> <li>▪ Free charge</li> <li>▪ Factorization (call charge* a factor)</li> </ul>
PRODUCT CHARGE TYPE RELATIONSHIP	Reference	Assignment of related <a href="#">PRODUCT CHARGE TYPES</a> .
PRODUCT CHARGE TYPE RLTN REASON	Lookup	Lookup for available reasons for <a href="#">PRODUCT CHARGE TYPES</a> to be related to each other.
PRODUCT CHARGING REASON	Lookup	Lookup for available reasons for Product Charge in the <a href="#">PRODUCT RATING PLAN</a> . For example: <ul style="list-style-type: none"> <li>▪ Charge for Roaming</li> <li>▪ Charge for Long-Distance</li> <li>▪ Charge or For Local Call</li> <li>▪ Regular Fee</li> </ul>
PRODUCT COST	Base	Sub-table of the <a href="#">COST TYPE</a> table, used to associate a specific cost to a given product.
PRODUCT COVERAGE AREA	Reference	Coverage of a product over geographical area.
PRODUCT COVERAGE AREA TYPE	Lookup	Lookup for type code and description for <a href="#">PRODUCT COVERAGE AREA</a> . For example: <ul style="list-style-type: none"> <li>▪ Available</li> <li>▪ Denied</li> <li>▪ Planned</li> </ul>
PRODUCT COVERAGE GEO DETAIL	Reference	Links detailed geographical locations to a certain <a href="#">PRODUCT COVERAGE AREA</a> .
PRODUCT FEATURE	Reference	Available features that may be associated with one or more <a href="#">PRODUCTS</a> . For example, for a handset there are features such as: <ul style="list-style-type: none"> <li>▪ MP3 indicator</li> <li>▪ MIDIndicator</li> <li>▪ 3G indicator</li> <li>▪ JAVA indicator</li> <li>▪ GSM 1800 indicator</li> </ul>

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PRODUCT FEATURE ASSIGNMENT	Reference	Assigns one or more <a href="#">PRODUCT FEATURES</a> to a <a href="#">PRODUCT</a> . Multiple products may have the same <a href="#">PRODUCT FEATURES</a> .
PRODUCT FUNCTIONALITY DEPENDENCY	Reference	Assignment of valid <a href="#">EQUIPMENT FUNCTIONALITY</a> and <a href="#">PRODUCT VERSIONS</a> to a <a href="#">PRODUCT</a> .
PRODUCT GEOGRAPHY ASSIGNMENT	Reference	Assigns a <a href="#">PRODUCT</a> to a <a href="#">GEOGRAPHY ENTITY</a> . This is particularly used for products offered only locally or in a limited region. For example: "Broadband Service" in specific cities and ZIP code areas (typically used for City carriers).
PRODUCT GROUP	Lookup	<p>Categorizations or Groups into which <a href="#">PRODUCTS</a> may be assigned, usually based on similar functionality.</p> <p>Note: this is different and should not be confused with the <a href="#">PRODUCT MARKET PLAN GROUP</a> entity.</p> <p>For example, the customer may group product in categories such as:</p> <ul style="list-style-type: none"> <li>▪ Postpaid Wireless</li> <li>▪ Prepaid Wireless</li> <li>▪ Fixed Line Subscription</li> <li>▪ Calling Card</li> <li>▪ Pay TV</li> <li>▪ Broadband</li> </ul>
PRODUCT GROUP ASSIGNMENT	Reference	Defines relationship of <a href="#">PRODUCT</a> and one or more <a href="#">PRODUCT GROUPS</a> .
PRODUCT GROUP TYPE	Lookup	Lookup for codes and descriptions of types of <a href="#">PRODUCT GROUPS</a> .
PRODUCT INSTANCE	Reference	<p>The real instance of a given <a href="#">PRODUCT</a> which a customer can purchase or rent (or eventually gets for free as part of a <a href="#">PRODUCT MARKET PLAN</a>). The product instance is linked to the Customer Order Line Item and relates a product to a customer. For example:</p> <ul style="list-style-type: none"> <li>▪ Song specified as "You are not alone": Corresponding to Product <a href="#">MUSIC DOWNLOAD</a></li> <li>▪ TV channel specified as "Discovery" - Corresponding to Product <a href="#">PAY TV</a></li> </ul>
PRODUCT INSTANCE STATUS HISTORY	Base	<p>A history of the Status for a <a href="#">PRODUCT INSTANCE</a>. For example:</p> <ul style="list-style-type: none"> <li>▪ New</li> <li>▪ Broken</li> <li>▪ Returned</li> <li>▪ Lost</li> <li>▪ Reserved</li> <li>▪ Obsolete</li> </ul>
PRODUCT INSTANCE STATUS TYPE	Lookup	<p>Lookup for type of specific Product instance status type. For example:</p> <ul style="list-style-type: none"> <li>▪ Purchased from Vendor</li> <li>▪ In Warehouse</li> <li>▪ Presented In Shop</li> <li>▪ In Customer</li> <li>▪ Broken</li> <li>▪ Reserved</li> <li>▪ Free Downloading (for content)</li> </ul>
PRODUCT LINE	Lookup	Lookup for the ways to classify products according business organization. For example: Wireless, Fixed Line, and so on.
PRODUCT MANAGEMENT HISTORY	Base	Defines relationship between <a href="#">EMPLOYEE</a> , <a href="#">PRODUCT MANAGEMENT ROLE</a> , and <a href="#">PRODUCT</a> .
PRODUCT MANAGEMENT REASON	Lookup	Lookup for available reasons for a <a href="#">PRODUCT MANAGEMENT HISTORY</a> relationship.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PRODUCT MANAGEMENT ROLE	Lookup	Lookup for valid role codes and descriptions an employee may be assigned in <a href="#">PRODUCT MANAGEMENT HISTORY</a> . For example: <ul style="list-style-type: none"> <li>Product Creation role</li> <li>Publication to the market (in/out) role</li> <li>Product Version Update role</li> <li>Product Testing role</li> </ul>
PRODUCT MARKET PLAN	Reference	Defines how a product is brought to the market, including: positioning, pricing, and bundling details. For example: <ul style="list-style-type: none"> <li>Tariff Liberty 60, with 60 Free National Minutes, 3 Friends &amp; Family Network Intern Numbers</li> <li>DSL 32Mbit/s + VoIP Phone + TV Entertainment + Pay TV Soccer Championship one year promotion</li> </ul>
PRODUCT MARKET PLAN ASSIGNMENT	Reference	Assigns Products to <a href="#">PRODUCT MARKET PLANS</a> .
PRODUCT MARKET PLAN ASSIGNMENT TYPE	Lookup	Lookup for type of product participation (inclusion) in the market plan. For example: <ul style="list-style-type: none"> <li>Use as gift</li> <li>Main product</li> <li>Revenue generation service</li> <li>Base on</li> </ul>
PRODUCT MARKET PLAN COST	Base	Sub-table of the <a href="#">COST TYPE</a> table. This entity associates a specific cost to a given <a href="#">PRODUCT MARKET PLAN</a> . The cost should not be related to the <a href="#">CAMPAIGN</a> or to the <a href="#">PROMOTION</a> , but just to the <a href="#">PRODUCT MARKET PLAN</a> .
PRODUCT MARKET PLAN GEOGRAPHY ASSIGNMENT	Reference	Relationship between <a href="#">PRODUCT MARKET PLAN</a> and Geography. Some <a href="#">PRODUCTS</a> may only be sold in a particular area.
PRODUCT MARKET PLAN GROUP	Reference	Hierarchy level to group the various <a href="#">PRODUCT MARKET PLANS</a> . For example: <ul style="list-style-type: none"> <li>Postpaid "Family"</li> <li>Broadband "Business Unlimited"</li> <li>Prepaid "Freedom"</li> </ul>
PRODUCT MARKET PLAN GROUP ASSIGNMENT	Reference	Defines relationship of <a href="#">PRODUCT MARKET PLANS</a> to one or more <a href="#">PRODUCT MARKET PLAN GROUPS</a> .
PRODUCT MARKET PLAN GROUP TYPE	Lookup	Lookup for the type code and description for a <a href="#">PRODUCT MARKET PLAN GROUP</a> .
PRODUCT MARKET PLAN RELATIONSHIP	Reference	Defines the relationship between two <a href="#">PRODUCT MARKET PLANS</a> . For example: <ul style="list-style-type: none"> <li>One product market plan replaced another one.</li> <li>One product market plan is an alternation of another one.</li> </ul>
PRODUCT MARKET PLAN RELATIONSHIP TYPE	Lookup	Lookup for the types of <a href="#">PRODUCT MARKET PLAN</a> relationships.
PRODUCT MARKET PLAN TYPE	Lookup	Type of the <a href="#">PRODUCT MARKET PLAN</a> . For example: <ul style="list-style-type: none"> <li>Prepaid Wireless</li> <li>Postpaid Wireless</li> <li>VAS Special Package</li> </ul>
PRODUCT NETWORK ASSIGNMENT	Reference	Assigns a <a href="#">PRODUCT</a> to one or more <a href="#">NETWORKS</a> .
PRODUCT PACKAGE	Reference	Groups of <a href="#">PRODUCTS</a> bundled to serve as basis of a <a href="#">PRODUCT MARKET PLAN</a> . The product package is not customer facing and a customer should subscribe to a product package through the <a href="#">PRODUCT MARKET PLAN</a> . For example: <ul style="list-style-type: none"> <li>Tariff Liberty 60, Wireless phone, 3 Friends &amp; Family Network Intern Numbers</li> <li>DSL 32Mbit/s + VoIP Phone + TV Entertainment + Pay TV Soccer Championship</li> </ul>

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PRODUCT PACKAGE ASSIGNMENT	Reference	Assigns <b>PRODUCT</b> (s) to a <b>PRODUCT PACKAGE</b> .
PRODUCT PACKAGE CHARGE TYPE	Lookup	Lookup for type codes and descriptions for <b>PRODUCT PACKAGE</b> charge on a <b>PRODUCT</b> . For example: <ul style="list-style-type: none"> <li>▪ One time charge</li> <li>▪ Usage Duration charge</li> <li>▪ Usage per Call charge</li> <li>▪ Usage amount charge (Data transfer)</li> <li>▪ Monthly Cycle Forward Fee</li> <li>▪ Monthly Cycle Arrear Fee</li> <li>▪ Free Unit Charge</li> <li>▪ Free Charge</li> </ul>
PRODUCT RATING PLAN	Reference	Grouping mechanism for prices and usage limits associated with a <b>PRODUCT</b> .
PRODUCT RATING PLAN DETAIL	Reference	Detail of <b>PRODUCT RATING PLAN</b> , defines prices and usage limits for each <b>PRODUCT CHARGE TYPE</b> .
PRODUCT RATING PLAN TYPE	Lookup	Lookup for the type of <b>PRODUCT RATING PLAN</b> .
PRODUCT STATUS HISTORY	Base	Status history of <b>PRODUCT</b> .
PRODUCT STATUS TYPE	Lookup	Lookup for the type of the product status.
PRODUCT TYPE	Lookup	Lookup for the type of the <b>PRODUCT</b> . For example: <ul style="list-style-type: none"> <li>▪ Item</li> <li>▪ Service</li> </ul>
PRODUCT USERNAME	Reference	The usernames assigned to customer for given products. For example: <ul style="list-style-type: none"> <li>▪ Instant Messenger</li> <li>▪ Web Meeting</li> <li>▪ Remoted (online) Storage</li> <li>▪ Web Self Service Account</li> </ul>
PRODUCT VERSION	Reference	Iteration of a <b>PRODUCT</b> created when a minor change is made to the <b>PRODUCT</b> setting that does not require creating a new <b>PRODUCT</b> .
PROJECT	Reference	The business activities, <b>TASKs</b> , may be categorized into a specific Project according to their common purpose. For example: <ul style="list-style-type: none"> <li>▪ 3G WCDMA network upgrade Phase II</li> <li>▪ LTE Trial Network</li> </ul>
PROJECT ELEMENT	Reference	The business activity which may happen to the operator. It is the super type of <b>PROJECT</b> and <b>TASKs</b> .
PROMOTION	Reference	The promotion reflects the tactics that an operator undertakes to generate increased incremental sales or usage volume for a specific product within a promotional event. Promotions are frequently communicated as part of a marketing campaign to ensure that awareness is generated with the target audience.
PROMOTION CLUSTER USAGE	Base	Assigns a particular <b>CUSTOMER SEGMENT</b> , cluster, to a given <b>PROMOTION</b> or list of promotions. The customer segments are generated by certain analytic applications, including Oracle Mining, and this assignment tracks the usage of customer segments in the <b>PROMOTION</b> .
PROMOTION CONTACT LIST UTILIZATION	Base	Defines the relationship between a <b>CONTACT LIST</b> and a <b>PROMOTION</b> : the contact list has been used for a marketing campaign to which a specific promotion was proposed.
PROMOTION COST	Base	Subtype of the <b>COST</b> , which is used to associate a specific cost uniquely associated to a given promotion. For example, a rent fee for the location where the operator performs the promotion.
PROMOTION MANAGEMENT HISTORY	Base	A history of campaign party role about management of a campaign <b>EPISODE</b> .

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PROMOTION MARKET PLAN ASSIGNMENT	Reference	Associates a market plan to a <a href="#">PROMOTION</a> . Typically, this applies when a given market plan is offered with an additional discount ( <a href="#">PROMOTION</a> ) during a certain period.
PROMOTION MESSAGE RENDERING	Reference	Details regarding each <a href="#">CAMPAIGN MESSAGE</a> broadcast through a <a href="#">MEDIA OBJECT</a> .
PROMOTION PRODUCT ASSIGNMENT	Reference	The relationship between a <a href="#">PRODUCT</a> and a <a href="#">PROMOTION</a> .
PROMOTION PRODUCT CATALOG ASSIGNMENT	Reference	Associates <a href="#">PRODUCT CATALOGS</a> to a <a href="#">PROMOTION</a> .
PROMOTION RELATIONSHIP	Reference	Defines the relationship between two <a href="#">PROMOTIONS</a> .
PROMOTION RESULT TYPE	Lookup	Lookup for the prospect reaction to a specific <a href="#">PROMOTION</a> during a sales campaign. For example: <ul style="list-style-type: none"> <li>▪ Accepted</li> <li>▪ Not interested</li> <li>▪ Interested but not accepted</li> <li>▪ Not Interested but other product sold</li> </ul>
PROMOTION SALES CHANNEL ASSIGNMENT	Reference	The allocation of <a href="#">PROMOTION</a> resources or actions onto each <a href="#">SALES CHANNEL</a> .
PROMOTION TERM TYPE	Lookup	Lookup for valid type codes and descriptions of Promotion Term associated with a <a href="#">PROMOTION TERM VALUE</a> . For example: <ul style="list-style-type: none"> <li>▪ Number of customers</li> <li>▪ Period</li> <li>▪ Planning</li> <li>▪ Selling amount</li> <li>▪ Planning contracts number</li> </ul>
PROMOTION TERM VALUE	Base	Assigns <a href="#">PROMOTION TERM TYPE</a> to a <a href="#">PROMOTION</a> with a value corresponding to the Term Type. For example: <ul style="list-style-type: none"> <li>▪ Maximum Number of customers</li> <li>▪ Period</li> <li>▪ Planning selling amount</li> <li>▪ Planning contracts number</li> </ul>
PROMOTION TYPE	Lookup	Lookup for the type of <a href="#">PROMOTION</a> (each for either a limited time or for the contract duration). For example: <ul style="list-style-type: none"> <li>▪ Monthly Fee Discount</li> <li>▪ Additional Free Service</li> <li>▪ Free Installation Cost</li> <li>▪ Give-away Equipment</li> <li>▪ Free Equipment Rental</li> <li>▪ Limited Extra Usage for Free</li> </ul>
PROPERTY	Reference	A parcel of land with defined legal boundaries. This is a concrete Geographic Location entity.
PROPERTY ADDRESS LOCATION ASSIGNMENT	Reference	Defines the relationship of which property is using which address location to identify the property.
PROPOSAL	Reference	The proposals made available to prospects in the promotion. It could be a upsell offer like selling a new product, or a retention program (Free Minutes for Longer contract period).
PROPOSAL RELATIONSHIP	Reference	The relationship between two <a href="#">PROPOSALS</a> .
PROSPECT	Reference	An individual, collection of individuals, company, or public institution that does not currently purchase merchandise or services, but who may in the future. A prospect may also be a <a href="#">CUSTOMER</a> of one <a href="#">PRODUCT</a> (already purchased) that does not currently purchase another <a href="#">PRODUCT</a> (may purchase).  A prospect has no recorded relationship with the provider.



**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PROSPECT INDIVIDUAL	Reference	Attributes of an individual <a href="#">PROSPECT</a> , one who is not an organization.
PROSPECT ORGANIZATION	Reference	Attributes of a prospect organization.
PROSPECT PRIORITY TYPE	Lookup	The different priorities which can be assigned to the prospect and prospect interests.
PROSPECT QUALITY SCORE TYPE	Reference	Lookup for type of quality scores which can be applied to <a href="#">PROSPECT</a> . For example: <ul style="list-style-type: none"> <li>▪ Income</li> <li>▪ Buying Probability</li> </ul>
PROSPECT QUALITY SCORE VALUE	Reference	The quality score value assigned to each prospect under different types of criteria.
PROSPECT REJECT REASON	Lookup	The reason to explain why an offer or <a href="#">PROPOSAL</a> is rejected by the prospect.
PROTOCOL	Reference	A formal set of rules and conventions that governs how two entities exchange information (usually over one or more types of network media). This entity represents Protocols that can be managed. Represents a convenient aggregation point for defining how Protocols are managed and used.
PTV FULL CHANNEL ACTIVATION	Base	Pay TV full channel activation event.
PTV QPI SERVICE EVENT	Base	The detail of QPI service.
PTV USAGE EVENT	Base	Customer usage of <a href="#">PAY TV</a> service.
PUBLICATION	Reference	Publication to which the <a href="#">MEDIA OBJECT</a> used in <a href="#">CAMPAIGN</a> belongs.
PUBLICATION TYPE	Lookup	Lookup for code and description describing the type of publication.
PURCHASE ORDER	Base	All the purchase orders that are raised on suppliers by the purchasing unit of a business organization (purchasing organization). The types of purchase orders can be many and would typically include one-time, regular, blanket, release, and so on.
PURCHASE ORDER LINE ITEM	Base	Specifies purchase order line Item information.
PURCHASE ORDER LINE ITEM STATE	Base	Specifies the state change history of each <a href="#">PURCHASE ORDER LINE ITEM</a> .
PURCHASE ORDER STATE	Base	Defines the records of a <a href="#">PURCHASE ORDER LINE ITEM</a> being in a particular state for a period of time.
PURCHASE ORDER STATE TYPE	Lookup	Lookup for the different types of state a purchase order or a line item may be at. For example: <ul style="list-style-type: none"> <li>▪ Paid</li> <li>▪ Shipped</li> <li>▪ Returned</li> </ul>
PV BIT STRING VALUE	Reference	Represents a single or a set of bit string values. A bit string is defined as a string whose individual characters have the value "0" or "1". No other values are allowed.
PV BOOLEAN VALUE	Reference	Represents a Boolean value (TRUE or FALSE).
PV INTEGER VALUE	Reference	Provides a list of integer or integer range values. Each integer can be of an arbitrary size.
PV IP ADDRESS VALUE	Reference	Provides an unordered list of IPv4 addresses, IPv6 addresses, ranges of IPv4 addresses, ranges of IPv6 addresses, and host names to be matched against in a policy condition. The format of each string is specified according to the ABNF definition of an IPv4 address. If a host name is matched against another valid IP address, the match is done by resolving the host name into a valid IPv4 or IPv6 address. Matching host names against each other, like matching IP addresses (of the same type) against each other, is done using a string comparison. Matching an IPv4 address against an IPv6 address fails.
PV STRING VALUE	Reference	Represents a single string value, or a set of string values. Each value can have wildcards.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
PVAR BIT STRING VARIABLE	Reference	Represent a single or set of bit string variable. Thus, only Bit String Value classes can be used in the value portion of the condition expression with this <a href="#">POLICY VARIABLE</a> .
PVAR STRING VARIABLE	Reference	Represents a single or set of string variable. Each can have wildcards. Thus, only String Value classes can be used in the value portion of the condition expression with this <a href="#">POLICY VARIABLE</a> .
QOS SERVICE	Reference	<p>Represents a generic specification for defining the different types of Sub-Services that are required to implement a specific type of QoS. This enables business rules to be mapped to the network, and define services that the network provides.</p> <p>A QoS Service can be thought of as an aggregation of sub-services needed to realize the functionality specified by, for example, a <a href="#">SERVICE BUNDLE</a>. This enables the network administrator to map business rules, as specified in a more abstract object or set of objects, to the network, and the network designer to engineer the network such that the network provides different functions for different types of applications.</p> <p>QoS Services are a type of <a href="#">RESOURCE FACING SERVICE</a> and are bundled together using <a href="#">SERVICE BUNDLES</a>. QoS Services can be turned into templates using <a href="#">SERVICE BUNDLE SPECS</a>.</p> <p>The QoS Service itself is a means to coordinate different technology-specific approaches to implementing QoS, such as DiffServ, ToS, and IEEE 802.x. As such, the QOS Service entity is an abstract entity.</p>
QOS SERVICE SPEC TYPE	Lookup	The <a href="#">QOS SERVICE</a> spec type.
QUARTER HOUR	Reference	Quarter Hour as defined in Time Hierarchy.
QUARTER TO DATE TRANSFORMATION	Reference	Cumulative time transformations at the quarter level.
QUARTER TRANSFORMATION	Reference	<p>Transformation with respect to a quarter. For example:</p> <ul style="list-style-type: none"> <li>■ This quarter last year</li> <li>■ This year last quarter</li> </ul>
RACK	Reference	<p>A Rack is a type of Secure Holder that represents an enclosure in which Equipment Holders, such as <a href="#">CHASSIS</a>, are placed. Typically a Rack is nothing more than the enclosure, and all the functioning componentry is packaged in the <a href="#">CHASSIS</a>. The logical identifier of a Rack is not typically associated with the Device (that is, the Network Element). Compare this to either a Bay or a Shelf, whose logical identifier IS associated with the Device. Thus, the Rack is explicitly not a part of the logical model of a network. The Rack typically serves as the "master enclosure" for <a href="#">CHASSIS</a>, Shelves and Bays. In addition, Racks can have multiple instances of multiple Devices mounted in them.</p>
RATABLE UNIT MEASUREMENT	Lookup	<p>Lookup to specify the valid candidate Ratable Unit Measurement (RUM)s for each event type. For example:</p> <ul style="list-style-type: none"> <li>■ Duration</li> <li>■ Size</li> <li>■ Count</li> </ul>
RATED NETWORK EVENT	Base	Contains rating information attached to raw or mediated network event.
RATING METHOD TYPE	Lookup	<p>Lookup for Rating Method Type code and description. For example:</p> <ul style="list-style-type: none"> <li>■ Flat Rate</li> <li>■ Tier Rating</li> <li>■ Threshold Rating</li> </ul>
RAW MMS EVENT	Base	The raw <a href="#">MMS EVENT</a> s acquired on network element.
RAW WIRELESS CALL EVENT	Base	The raw <a href="#">WIRELESS CALL EVENT</a> .

Table 2–27 (Cont.) O to R Entity Descriptions

Entity Name	Type	Description
RESOURCE FACING SERVICE SPEC ROLE	Reference	This class defines a <a href="#">SERVICE SPEC</a> , in terms of a set of ServiceSpecificationRoles, for a ElementFacingService. This is the base class for defining ServiceSpecificationRoles that are used to represent the invariant characteristics of a ElementFacingService. This enables the ElementFacingService to be managed abstractly using ServiceSpecificationRoles. It also helps define the <a href="#">SERVICE SPEC</a> in terms of the functions that it has or provides.
RECHARGE REVENUE SLAB	Lookup	Lookup for the bands of revenue earned from the sale of recharge coupons, for prepaid, which is called recharge revenue. The recharge revenue is to be analyzed for all currently active prepaid subscribers and for all churned subscribers until the time of termination.  For example, the revenue can be banded by creating slabs for recharge revenue of \$0-\$25, \$25-\$50, and so on.
RECURRING PMP RATING PLAN DETAIL	Reference	A type of <a href="#">PRODUCT MARKET PLAN</a> (PMP) rating plan with a recurring charge.
REDEMPTION DAY DRVD	Derived	The daily aggregate of loyalty point redemption by <a href="#">CREDIT CATEGORY</a> , <a href="#">LOYALTY PROGRAM CHANNEL</a> , <a href="#">AGE ON NET BAND</a> , and <a href="#">EMPLOYEE</a> .  Daily aggregation of <a href="#">LOYALTY PROGRAM</a> redemption statistics by <a href="#">LOYALTY PROGRAM CHANNEL</a> , <a href="#">SALES CHANNEL</a> , <a href="#">AGE ON NET BAND</a> , <a href="#">CREDIT CATEGORY</a> , and <a href="#">EMPLOYEE</a> .
REDEMPTION MO AGGR	Aggregate	Monthly summary of <a href="#">LOYALTY PROGRAM</a> redemption statistics by <a href="#">LOYALTY PROGRAM CHANNEL</a> .
REDEMPTION TYPE	Lookup	Lookup for redemption type that maintains all possible point redemption types and organizes redemption data by redemption type for analysis purposes.
RELIGION	Lookup	This lookup for religion. For example: <ul style="list-style-type: none"> <li>▪ Christianity</li> <li>▪ Jewish</li> <li>▪ Islamic</li> <li>▪ Hinduism</li> </ul>
RESOURCE FACING SERVICE	Reference	This is the base entity for defining Resource Facing Services. A Resource Facing Service is an abstraction that defines the characteristics and behavior of a particular <a href="#">SERVICE</a> that is not directly seen or purchased by the Customer. Resource Facing Services are "internal" Services that are required to support a <a href="#">CUSTOMER FACING SERVICE</a> . The Customer purchases <a href="#">CUSTOMER FACING SERVICES</a> , and is not aware of the Resource Facing Services which support the <a href="#">CUSTOMER FACING SERVICE</a> (s) that is being purchased directly by the Customer. For example, a VPN is an example of a <a href="#">CUSTOMER FACING SERVICE</a> . This particular type of VPN may require BGP to support it. Customers do not purchase BGP, and hopefully are not even aware that BGP is running. Therefore, BGP is an example of a Resource Facing Service.
RESOURCE FACING SERVICE ROLE	Reference	Defines a <a href="#">SERVICE</a> in terms of a set of <a href="#">SERVICE ROLES</a> for a <a href="#">RESOURCE FACING SERVICE</a> . This is the base entity for defining <a href="#">SERVICE ROLES</a> that represent the variable characteristics of a <a href="#">RESOURCE FACING SERVICE</a> in terms of roles that this <a href="#">SERVICE</a> plays. This entity enables the <a href="#">RESOURCE FACING SERVICE</a> to be managed abstractly using <a href="#">SERVICE ROLES</a> . The Resource Facing Service Role also helps define the <a href="#">SERVICE</a> in terms of the functions that it has or provides.
RESOURCE FACING SERVICE SPEC	Lookup	This is the base entity for defining Resource Facing Service Specs. A Resource Facing Service Spec is an abstraction that defines the invariant characteristics and behavior of a particular <a href="#">RESOURCE FACING SERVICE</a> . This is not seen by the Customer. However, it is required by one or more <a href="#">CUSTOMER FACING SERVICE SPECS</a> in order for them to function correctly. The invariant portion serves as a single common basis to build a set of variable <a href="#">RESOURCE FACING SERVICES</a> that all use this common Resource Facing Service Spec.
RESOURCE FACING SERVICE SPEC ATOMIC	Lookup	This entity defines a standalone <a href="#">RESOURCE FACING SERVICE</a> that meets the needs of a particular <a href="#">CUSTOMER FACING SERVICE</a> . Standalone <a href="#">RESOURCE FACING SERVICES</a> may be linked directly to a <a href="#">CUSTOMER FACING SERVICE</a> or aggregated by a Resource Facing Service Composite.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
RESOURCE FACING SERVICE SPEC COMPOSITE	Lookup	This entity defines an integrated set of <a href="#">RESOURCE FACING SERVICE</a> that collectively meets the needs of a <a href="#">CUSTOMER FACING SERVICE</a> . For example, the Customer may have requested "GoldService", which is a <a href="#">SERVICE PACKAGE</a> that defines a set of <a href="#">SERVICE BUNDLES</a> , each of which has its own QoS. A set of Resource Facing Service Products can then be defined, one for each different <a href="#">SERVICE BUNDLE</a> instance, that provides the required QoS for each <a href="#">SERVICE BUNDLE</a> instance.
RESOURCE FACING SERVICE SPECROLE	Reference	Defines a Service Specification, in terms of a set of Service Specification Roles, for a <a href="#">RESOURCE FACING SERVICE</a> . This is the base entity for defining Service Specification Roles that represent the invariant characteristics of a <a href="#">RESOURCE FACING SERVICE</a> . This entity enables the <a href="#">RESOURCE FACING SERVICE</a> to be managed abstractly using Service Specification Roles. The Resource Facing Servicesrole also helps define the Service Specification in terms of the functions that it has or provides.
RESOURCE FACING SERVICE SPEC VERSION	Reference	Keeps the historical versions of <a href="#">RESOURCE FACING SERVICE SPEC</a> .
RESOURCE ORDER	Base	A type of Request that represents a Service Order's services decomposed into the Elements on which the services will be provisioned.
RESOURCE ORDER ITEM	Base	The purpose for the <a href="#">RESOURCE ORDER</a> expressed in terms of a <a href="#">NETWORK ELEMENT TYPE</a> or a <a href="#">NETWORK ELEMENT</a> .
RESOURCE PERFORMANCE	Reference	A measure of the manner in which a Element is functioning.
RESOURCE PERFORMANCE SPEC	Lookup	The invariant characteristics of a measure of the manner in which a Element is functioning. Each related <a href="#">PERFORMANCE</a> instance will have the same invariant characteristics. However, the values associated with other characteristics of the instantiated <a href="#">PERFORMANCE</a> entity are specific to each instance.
RESOURCE SPEC PERF ROLE	Reference	A role that a Element Specification plays in defining a <a href="#">PERFORMANCE SPECIFICATION</a> .
RESOURCE PORT	Reference	The Resource Port covers both logical and physical port together and manage as a single entity.
RETAIL STORE	Reference	Subtype of internal organization. This usually lists the shops where the communications service provider presents the products and sells directly to customers. A retail store may contain several <a href="#">SELLING LOCATIONS</a> .
RF CARRIER	Reference	Reference list of all wireless or Radio Frequency (RF) carriers.
RF NETWORK CAPACITY DAY DRVD	Derived	Daily aggregate of Radio Frequency (RF) Network Capacity utilization statistics. Radio Frequency (RF) interfaces are present at two levels in the network: <ul style="list-style-type: none"> <li>■ RF Interface between CELL and the Mobile Station</li> <li>■ RF interface between MSC and the BSS</li> </ul>
RF NETWORK CAPACITY MONTH AGGR	Aggregate	Monthly summary of Radio Frequency (RF) Network Capacity utilization statistics.
RFS SPEC VERSION DETAIL	Reference	Defines the semantics of the modifiesRFSSpec aggregation. Specifically, it enables an application to define which set of versions of this Resource Facing Service Specification are appropriate for a given task.
RINGTONE	Reference	Sub-table of <a href="#">SUPPLEMENTARY SERVICE</a> , by which a customer can download music as a ringtone for the phone.
ROAMING TYPE	Lookup	Lookup for the various roaming types to classify the calls. For example: <ul style="list-style-type: none"> <li>■ (Standard) Outgoing Roaming</li> <li>■ (Standard) Incoming Roaming</li> <li>■ Inland Outgoing Roaming</li> <li>■ Inland Incoming Roaming</li> </ul>
ROLE	Reference	This is an abstract base entity that defines the concept of various types of roles.
ROLES HIERARCHY	Reference	Hierarchy among the job roles within an organization.
ROOT ENTITY	Reference	Provides an abstraction for most policy entities. The root entity properties enable you to name, describe, and identify all objects, manageable and unmanageable, in the environment.

**Table 2–27 (Cont.) O to R Entity Descriptions**

Entity Name	Type	Description
ROUTED PROTOCOL	Reference	This entity represents different types of routed protocols that can be managed. Routed protocols are those protocols that can be routed by a router. Specifically, the router must be able to interpret the logical internetwork as specified by that routed protocol. Represents a convenient aggregation point for defining how routed protocols are managed and used.
ROUTER	Reference	A type of physical device which performs routing function in IP-based network.
ROUTING DEVICE	Reference	In IN Network or Wireless, many different type of devices such as VLR, HLR, SCP servers are utilized in network to decide the call routing. This entity tracks the device information.
ROUTING PROTOCOL	Reference	This entity represents different types of routing protocols that can be managed. Routing protocols are used to determine how information is routed (for example, how it traverses an intermediate system). This entity represents a convenient aggregation point for defining how routing protocols are managed and used.
ROUTING ROLE	Reference	An abstracts entity showing the different routing capabilities necessary for a <a href="#">LOGICAL DEVICE</a> to have. This entity helps to simplify the modeling of network devices, which have many different sets of capabilities. For example, most routers can do routing, forwarding, and firewalling of traffic. By modeling these capabilities as three roles, router functionality is both abstracted as well as categorized, so that the differences between routing done by a router and routing done by an L3 switch can be differentiated.

**Table 2–28 S to V Entity Descriptions**

Entity Name	Type	Description
SALES CAMPAIGN SUMMARY DAY DRVD	Derived	Daily aggregate of campaign results by <a href="#">PROMOTION RESULT TYPE</a> and Sales Campaign Client Code.
SALES CAMPAIGN SUMMARY MONTH AGGR	Aggregate	Monthly summary of Sales Campaign results by <a href="#">PRODUCT MARKET PLAN</a> , <a href="#">CAMPAIGN CHANNEL</a> , <a href="#">PROMOTION RESULT TYPE</a> .
SALES CHANNEL	Reference	Channel used to communicate with parties for sales purposes. For example: <ul style="list-style-type: none"> <li>▪ Representatives</li> <li>▪ Partner-Dealers</li> <li>▪ Direct Dealers</li> </ul> Sales channels are represented by the channel level, which also becomes the lowest level for the channel dimension.
SALES CHANNEL COMMISSION PLAN ASSIGNMENT	Base	Defines a history of which <a href="#">SALES CHANNEL</a> is applicable to which <a href="#">SALES COMMISSION PLAN</a> .
SALES CHANNEL REPRESENTATIVE	Reference	The sales representative who sells the product to the customer. For example: <ul style="list-style-type: none"> <li>▪ Sales Representative in the operator owned shops.</li> <li>▪ Direct sales representatives in the call center.</li> <li>▪ Dealer for a partner.</li> </ul>
SALES COMMISSION DETAIL	Base	The sales commission earned by sales agent because of the contract.
SALES COMMISSION PAYROLL	Base	The sales commission issued to the sales agent.
SALES COMMISSION PLAN	Reference	The sales commission plan for particular <a href="#">PRODUCT PACKAGE</a> and sales agent level.
SALES COMMISSION PLAN DETAIL	Reference	Details about the <a href="#">SALES COMMISSION PLAN</a> per <a href="#">PRODUCT MARKET PLAN</a> and <a href="#">PROMOTIONS</a> , including sales quota and commission rate.
SALES DAY DRVD	Derived	Daily aggregate of sales by <a href="#">SALES CHANNEL</a> , <a href="#">PRODUCT MARKET PLAN</a> , business unit, sales representative, <a href="#">CUSTOMER</a> .
SALES MONTH AGGR	Aggregate	Monthly summary of sales by <a href="#">SALES CHANNEL</a> , <a href="#">PRODUCT MARKET PLAN</a> , business unit, sales representative.
SALES REPRESENTATIVE STATISTICS DRVD	Derived	Monthly summary of sales representative performance measured by sales, commission, and so on.
SCD2 MULTILANGUAGE	Lookup	Super entity to provide SCD2 and <a href="#">LANGUAGE</a> support for all its children.

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SCRIPT	Reference	A list of specific groupings of questions or statements presented to individuals during a survey.
SCRIPT QUESTION	Reference	Initiative questions documents the questions asked of the customer as part of the initiative.
SCRIPT QUESTION TYPE	Lookup	The domain of values used to group script items. For example: <ul style="list-style-type: none"> <li>■ 1 = Yes or No answers</li> <li>■ 2 = Provide a Value</li> <li>■ 3 = Give a Range</li> <li>■ 4 = Free form answer</li> </ul>
SEASON	Lookup	Seasons and their attributes. Seasons are arbitrary periods around which some providers organize their buying and selling patterns. Each day should fall within no more than one season.
SECOND	Reference	Second hierarchy level as defined in Time Hierarchy.
SECURE HOLDER	Reference	This entity is a type of Holder Composite that serves as the parent for the <a href="#">RACK</a> and <a href="#">CHASSIS</a> entities. This entity generalizes common properties that apply to <a href="#">RACKS</a> and <a href="#">CHASSIS</a> .
SECURITY REQUIRED TYPE	Lookup	Lookup for type and description of security requirements that may be associated with an <a href="#">ITEM</a> .
SEGMENT CRITERIA	Reference	Minimum and Maximum scores for each segment associated with an <a href="#">ACCOUNT SEGMENT</a> or <a href="#">CUSTOMER SEGMENT</a> .
SEGMENT TYPE	Lookup	Lookup for type codes and descriptions used to define <a href="#">ACCOUNT SEGMENTATION MODEL</a> or <a href="#">CUSTOMER SEGMENTATION MODEL</a> .
SELLING LOCATION	Reference	Physical location in a <a href="#">RETAIL STORE</a> specifically dedicated to selling or displaying merchandise.
SELLING LOCATION TYPE	Lookup	Lookup for type code and description used to define a <a href="#">SELLING LOCATION</a> : For example: <ul style="list-style-type: none"> <li>■ Store</li> <li>■ Floor</li> <li>■ Aisle</li> <li>■ Shelf</li> </ul>
SERVICE	Reference	Service is an internal technical presentation of available <a href="#">PRODUCTS</a> to the end user. Different customers may subscribe to different services under the same product name. For example, for a service of 4MB Broadband, the service may be implemented by ADSL service or by FTTH (Optical Fiber).
SERVICE BUNDLE	Reference	Conceptually, a Service Bundle is thought of as a collection of Element Facing Service Specifications. This entity enables the needs of different sets of Element Facing Service Specifications to be grouped together - hence, the name "bundle". Since these are Resource Facing Specifications, they define reusable templates for implementing the Element Facing Services that are required by a particular <a href="#">CUSTOMER FACING SERVICE</a> (as represented by a <a href="#">SERVICE PACKAGE</a> ). Service Bundles were designed to define a set of Class of Service specifications that were required by a <a href="#">CUSTOMER FACING SERVICE</a> to work together. A <a href="#">SERVICE PACKAGE</a> is the entity that models the requirements of the <a href="#">CUSTOMER FACING SERVICE</a> . Thus, <a href="#">SERVICE PACKAGES</a> can specify different packaging of <a href="#">CUSTOMER FACING SERVICE</a> that are sold to the Customer, and Service Bundles specify the set of Element Facing Services that each <a href="#">CUSTOMER FACING SERVICE</a> requires. Service Bundles are a natural way to implement the requirements of a <a href="#">SERVICE PACKAGE</a> , and are related to a <a href="#">SERVICE PACKAGE</a> through the Service Package Uses Service Bundles aggregation.

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SERVICE BUNDLE SPEC	Reference	A Service Bundle Spec is the base entity for defining the different classes of bundled Element Facing Service Specs that a Customer (or some other appropriate <b>PARTY ROLE</b> ) can subscribe to. The preferred way to represent a Customer subscription of this nature is by defining a Service Bundle Spec that defines the set of Element Facing Service Specs that are being used. Conceptually, a Service Bundle Spec is thought of as a collection to enable the needs of different sets of Element Facing Service Specs to be grouped together. The "bundle" conveys the concept of grouped Service Specs that are related. Since these are Resource Facing Specifications, they define reusable templates for implementing the Element Facing Services that are required by a particular <b>CUSTOMER FACING SERVICE</b> (as represented by a <b>SERVICE PACKAGE</b> ).
SERVICE BUNDLE SPEC ATOMIC	Reference	A Service Bundle Spec Atomic object models different <b>SERVICE BUNDLE SPECS</b> as a set of different instances of individual, independent Element Facing Service Specs. This is fundamentally different than the <b>SERVICE BUNDLE SPEC COMPOSITE</b> entity, which models one <b>SERVICE BUNDLE SPEC COMPOSITE</b> as the combination of other existing <b>SERVICE PACKAGE SPECS</b> (as well as providing its own extensions). For example, assume that the Gold Package service offering (which is a subclass of Service Package, not <b>SERVICE PACKAGE SPEC</b> ), requires two different CoS Service instances. This may be because the Gold Package service offering has two different groups of applications that require two different types of traffic conditioning mechanisms. This is represented by a Service Bundle Spec Atomic object. Now, assume that the Platinum Package service offering includes the Gold Package service offering and a new service offering requiring a new set of traffic conditioning mechanisms. This requires a second Service Bundle Spec Atomic object, as users want to reuse the first Service Bundle Spec Atomic object. These could be aggregated to form an instance of a <b>SERVICE BUNDLE SPEC COMPOSITE</b> entity.
SERVICE BUNDLE SPEC COMPOSITE	Reference	A Service Bundle Spec Composite defines an integrated set of <b>SERVICE BUNDLE SPECS</b> that collectively meets the needs of a Element Facing Service Spec Composite entity. This is fundamentally different than the Service Bundle Spec Atomic object, which models one Service Bundle Spec as the combination of other existing <b>SERVICE PACKAGE SPECS</b> (as well as providing its own extensions). For example, assume that the Gold Package service offering (which is a subclass of <b>SERVICE PACKAGE</b> , not <b>SERVICE PACKAGE SPEC</b> ), requires two different CoS Service instances. This may be because the Gold Package service offering has two different groups of applications that require two different types of traffic conditioning mechanisms. This is represented by a <b>SERVICE BUNDLE SPEC ATOMIC</b> entity. Now, assume that the Platinum Package service offering includes the Gold Package service offering and a new service offering requiring a new set of traffic conditioning mechanisms. This requires a second <b>SERVICE BUNDLE SPEC ATOMIC</b> entity, as you want to reuse the first <b>SERVICE BUNDLE SPEC ATOMIC</b> entity. These could be aggregated to form an instance of a Service Bundle Spec Composite object.
SERVICE BUSINESS ACTOR	Reference	This is an association entity. The entity represents the semantics, for example, owns, uses, and other relationships, of a Business Actor using a particular <b>SERVICE</b> .
SERVICE CATEGORY	Lookup	Lookup for category of <b>SERVICE</b> . For example: <ul style="list-style-type: none"> <li>■ Customer facing service</li> <li>■ Resource facing service</li> <li>■ Composite service</li> </ul>
SERVICE CHARACTERISTIC	Reference	This entity represents the key features of this Service Specification. For example, bandwidth is characteristic of many different types of services; if bandwidth is important (for example, from the point-of-view of a Customer purchasing this Service) then bandwidth would be a Service Characteristic for that particular <b>SERVICE</b> . Note that in this example, bandwidth would have to be defined as an invariant feature that multiple Services use. Otherwise, it should be defined as a Service Characteristic.
SERVICE CHARACTERISTIC ASSIGNMENT	Reference	A use of the Service Spec Characteristic by an Service Specification to which additional properties (attributes) apply or override the properties of similar properties contained in Service Spec Characteristic.
SERVICE CHARACTERISTIC RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between or among Service Spec Characteristics.

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SERVICE CHARACTERISTIC VALUE	Reference	A Service Spec Characteristic Value object defines a set of attributes, each of which can be assigned to a corresponding set of attributes in a Service Spec Characteristic object. The values of the attributes in the Service Spec Characteristic Value object describe the values of the attributes that a corresponding Service Spec Characteristic object can take on.
SERVICE CHARACTERISTIC VALUE ASSIGNMENT	Reference	A use of the Service Spec Characteristic Value by an Entity Specification to which additional properties (attributes) apply or override the properties of similar properties contained in Service Spec Characteristic Value.
SERVICE CHARACTERISTIC VALUE RELATIONSHIP	Reference	A aggregation, migration, substitution, dependency, or exclusivity relationship between/among Service Spec Characteristic Values.
SERVICE CLASS	Lookup	The class of the services. For QoS reason, the call can be divided into different classes (Basically might be home line or business line, or others). The Service Class can also be divided by other aspect, line utilizing Circuit Line or IP packets, and so on.
SERVICE CLASS TYPE	Lookup	Lookup for the type or base to define the <a href="#">SERVICE CLASS</a> .
SERVICE COVERAGE AREA	Reference	The geographic area covered by service provider with certain product combination.  Service areas are defined so that service providers can determine the demographic / psychographic / population data the geography served by the network.
SERVICE COVERAGE AREA TYPE	Lookup	Lookup for type code and description for <a href="#">SERVICE COVERAGE AREA</a> .
SERVICE COVERAGE GEO DETAIL	Reference	The detail about service coverage on lowest level. For example: <ul style="list-style-type: none"> <li>■ Areas covered by a specific BTS</li> <li>■ Building covered by Broadband Copper line or Fiber line.</li> </ul>
SERVICE DEPENDENCY	Reference	The Dependency among services. One service may depend on others to function, for example, GSM Roaming depends on HLR service to determine its subscription status, likewise, multiple ADSL services depends on the core IP network to transfer the information.
SERVICE DEVICE INTERFACE ASSIGNMENT	Reference	Captures the semantics involved in representing how a particular Element Facing Service is implemented on a specific <a href="#">DEVICE INTERFACE</a> .
SERVICE EQUIPMENT ASSIGNMENT	Reference	Assignments between <a href="#">NETWORK TOUCHPOINT</a> , <a href="#">EQUIPMENT</a> , and <a href="#">SERVICE</a> according to which <a href="#">SERVICE</a> was tied to which <a href="#">NETWORK TOUCHPOINT</a> through which <a href="#">EQUIPMENT INSTANCE</a> .
SERVICE LEVEL AGREEMENT	Reference	A special type of contract which keeps the agreement between a customer and the service provider specifying the service quality, including availability, bandwidth, and so on. The detailed terms of the service level agreement are specified in <a href="#">CONTRACT TERM VALUE</a> .
SERVICE LEVEL AGREEMENT ITEM	Reference	Detail line items for a <a href="#">SERVICE LEVEL AGREEMENT</a> .
SERVICE LEVEL AGREEMENT TYPE	Lookup	Lookup for type of all service levels. For example, the classification of service levels can be: Gold, Silver, Bronze.  Each product may have different Service Level Agreement settings.
SERVICE LEVEL AGREEMENT VIOLATION	Base	The customer case of each violation to the <a href="#">SERVICE LEVEL AGREEMENT</a> .
SERVICE LEVEL OBJECTIVE	Reference	Quality goal for a Service Level Specification defined in terms of parameters and metrics, thresholds, and tolerances associated with the parameters.
SERVICE LEVEL SPEC APPLICABILITY	Reference	The time of day or days during which a Service Level Specification, Service Level Objective, or Service Level Spec Consequence is relent or not.
SERVICE LEVEL SPEC CONSEQUENCE	Reference	An action that takes place when a <a href="#">SERVICE LEVEL OBJECTIVE</a> is not met.
SERVICE LEVEL SPEC PARAMETER	Reference	Specifies a variable whose value determines compliance with a Service Level Objective.
SERVICE LEVEL SPECIFICATION	Reference	A pre-defined or negotiated set of service level objectives, and consequences that occur, if the objectives are not met.



**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SERVICE LEVEL UNMET CONSEQUENCE TYPE	Lookup	Lookup for the type of consequences if the service level requirement is not met.
SERVICE LR DEPENDENCY	Reference	This is an association entity. The Service LR Dependency represents the semantics (for example, exists, uses, and other relationships) that exist when a LOGICAL ELEMENT helps to supply or to support a particular Element Facing Service.
SERVICE NETWORK ELEMENT ASSIGNMENT	Reference	Defines how a network element supports a service.
SERVICE ORDER	Base	A type of Request that represents the products in a Customer Order decomposed into the services through which the products are realized.
SERVICE ORDER LINE ITEM	Base	The purpose for the SERVICE ORDER expressed in terms of a SERVICE SPEC or a Service.
SERVICE PACKAGE	Reference	A Service Package is derived from an associated SERVICE PACKAGE SPEC. The SERVICE PACKAGE SPEC defines the invariant attributes, methods, relationships, and constraints for all Service Package instances that are derived from it. This entity enables each individual Service Package to add its own application-specific changeable characteristics and behavior. There is no specific aggregation used to relate a particular Service Package to the SERVICE PACKAGE SPEC that it is derived from. This is because the SERVICE PACKAGE SPEC and Service Package both inherit the Specifies Service aggregation, and at this (the business level) view, there are no new semantics that are required to represent this relationship. Finally, while the composite pattern could be applied to Service Package, there is no perceived need to do so. Multiple Service Packages will simply be aggregated by a Product Bundle, and appear as separate Product Components.
SERVICE PACKAGE BUNDLE ASSIGNMENT	Reference	Defines how service bundle implements SERVICE PACKAGE.
SERVICE PACKAGE BUNDLE DETAIL	Reference	Defines how a type of service bundle can support other types of SERVICE PACKAGES.
SERVICE PACKAGE SPEC	Lookup	A Service Package Spec defines the concept of bundling a set of different CUSTOMER FACING SERVICE SPECS to meet the functionality specified by one or more Product Specifications. This entity enables the specification of the invariant characteristics and behavior of these CUSTOMER FACING SERVICES, so that multiple PRODUCTS can be built from their associated Product Specification. Treating this set of CUSTOMER FACING SERVICE SPECS as a single object is important for building complex Services, such as a VPN. This entity enables a single Product Item, derived ultimately from a Product Specification, to be offered to the Customer, even though in reality the Product Item consists of a set of different CUSTOMER FACING SERVICES that must work to provide the functionality that the Customer needs.
SERVICE PACKAGE SPEC ATOMIC	Lookup	A Service Package Spec Atomic object models different SERVICE PACKAGE SPECS as a set of different instances of individual, independent CUSTOMER FACING SERVICE SPECS. This is fundamentally different than the Service Package Spec Composite object, which models one SERVICE PACKAGE SPEC as the combination of other existing SERVICE PACKAGE SPECS (as well as providing its own extensions). For example, Gold Package Spec is an individual packaging of services, and is therefore an instance of the Service Package Spec Atomic entity. If there was a service offering that combined the services defined by the Gold Package Spec with those defined by another Service Package Spec Atomic entity, such as the Platinum Package Spec, then that combination could be aggregated, forming an instance of the Service Package Spec Composite entity.
SERVICE PACKAGE SPEC COMPOSITE	Lookup	This models different packages as the combination of other existing SERVICE PACKAGES (as well as providing its own extensions). This is fundamentally different than Service Package Atomic, which models different SERVICE PACKAGES as a set of different instances.
SERVICE PERFORMANCE	Reference	A measure of the manner in which a SERVICE is functioning.
SERVICE PERFORMANCE SPEC	Lookup	The invariant characteristics of a measure of the manner in which a SERVICE is functioning. Each related PERFORMANCE instance will have the same invariant characteristics. However, the values associated with other characteristics of the instantiated PERFORMANCE entity are specific to each instance.

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SERVICE PR DEPENDENCY	Reference	This is an association entity. The Service PR Dependency represents the semantics (for example, exists, uses, and other relationships) that exist when a <a href="#">PHYSICAL ELEMENT</a> helps to supply or to support a particular <a href="#">RESOURCE FACING SERVICE</a> .
SERVICE REQUEST	Base	Subtype of <a href="#">PARTY INTERACTION THREAD</a> , specifically dedicated to a service request that may trigger a customer field service support order.
SERVICE ROLE	Reference	This entity defines a <a href="#">SERVICE</a> in terms of a set of roles. The roles are then used to characterize the functionality of the Service, regardless of whether it is a Element- or a customer-facing service. Service Roles represent the functionality of a Service, and as such are a mix of the invariant and changeable characteristics and behavior of a Service. Representing a <a href="#">SERVICE</a> in terms of Service Roles enables the functionality of the <a href="#">SERVICE</a> to be defined independently of Business Actor, <a href="#">PHYSICAL ELEMENT</a> , <a href="#">LOGICAL ELEMENT</a> , or other Services.
SERVICE SPECIFICATION ROLE	Reference	This entity defines a Service Specification in terms of a set of roles. The roles are then used to characterize the invariant functionality of the Service, regardless of whether it is a resource- or a customer-facing service. Service Specification Roles represent the invariant functionality of a Service. Representing a <a href="#">SERVICE</a> in terms of Service Specification Roles enables the functionality of the <a href="#">SERVICE</a> to be defined independently of Business Actor, network element, or other Services.
SERVICE SPEC	Reference	<p>This entity defines the ServiceSpecification hierarchy. All Services are characterized as either being directly visible and usable by a Customer or not. This gives rise to the two subclasses of Service: <a href="#">CUSTOMER FACING SERVICE</a> and <a href="#">ElementFacingService</a>. However, each instance of a Service is made up of changeable as well as invariant attributes, methods, relationships and constraints. A ServiceSpecification defines the invariant characteristics of a Service. It can be conceptually thought of as a template that different Service instances can be instantiated from. Each of these Service instances will have the same invariant characteristics. However, the other characteristics of the instantiated Service will be specific to each instance.</p> <p>This entity can be thought of as a template, which represents a generic specification for implementing a particular type of Service. A ServiceSpecification may consist of other ServiceSpecifications supplied together as a collection. Members of the collection may be offered individually or collectively. ServiceSpecifications may also exist within groupings, such as within a Product.</p>
SERVICE SPEC ATOMIC	Reference	This entity defines <a href="#">SERVICE SPECS</a> that do not have any subordinate <a href="#">SERVICE SPECS</a> . In other words, a ServiceSpecAtomic is a standalone <a href="#">SERVICE SPEC</a> , and does not require any supporting <a href="#">SERVICE SPECS</a> to define the invariant characteristics of Services that it serves as a template for.
SERVICE SPEC COMPOSITE	Reference	This entity defines <a href="#">SERVICE SPECS</a> that are formed by aggregating other <a href="#">SERVICE SPECS</a> . The types of <a href="#">SERVICE SPECS</a> that are aggregated may be ServiceSpecAtomic or ServiceSpecComposite instances. A ServiceSpecComposite collectively defines all of the invariant characteristics of Services that it serves as a template for.
SERVICE SPEC NETWORK ELEMENT TYPE RELATIONSHIP	Reference	Defines the relationship between Service Spec and Network Element. For example, to track which Network Element Type is required for a certain type of Service Spec to work.
SERVICE SPEC PRODUCT RELATIONSHIP	Reference	Defines the relationship between Service Spec and Product, for example, to track which Product requires which Service Spec.
SERVICE SPEC VERSION	Reference	This entity represents the ability to distinguish between different instances of <a href="#">SERVICE SPECS</a> . It represents a particular form or variety of a <a href="#">SERVICE SPEC</a> that is different from others or from the original. The form represents differences in attributes, methods, relationships, and/or constraints that characterize this particular <a href="#">SERVICE SPEC</a> , but which are not enough to warrant creating a new <a href="#">SERVICE SPEC</a> .
SERVICE STATUS	Lookup	Lookup for all status types of a <a href="#">SERVICE</a> . For example: <ul style="list-style-type: none"> <li>▪ Active</li> <li>▪ Inactive</li> </ul>
SERVICE STATUS CATEGORY	Lookup	A category that categorizes similar <a href="#">SERVICE STATUS</a> .

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SERVICE STATUS HISTORY	Base	A history of the Status of a <a href="#">SERVICE</a> . Such as active, inactive, defaulted, terminated.
SERVICE STATUS REASON	Lookup	Lookup for reasons why a <a href="#">SERVICE</a> has a certain status.
SERVICE TYPE	Lookup	Lookup for types of <a href="#">SERVICE</a> . For example, values should be from a subtype of: CUSTOMER FACING SERVICE RESOURCE FACING SERVICE COMPOSITE SERVICE
SERVICE TYPE ATOMIC	Lookup	This entity defines Service Specifications that do not have any subordinate Service Specifications. In other words, a Service Spec Atomic is a standalone Service Specification, and does not require any supporting Service Specifications to define the invariant characteristics of Services that it serves as a template for.
SERVICE TYPE COMPOSITE	Lookup	This entity defines Service Specifications that are formed by aggregating other Service Specifications. The types of Service Specifications that are aggregated may be Service Spec Atomic and/or Service Spec Composite instances. A Service Spec Composite collectively defines all of the invariant characteristics of Services that it serves as a template for.
SERVICE TYPE VERSION	Lookup	Represents the ability to distinguish between different instances of Service Specifications. The Service Type Version represents a particular form or variety of a Service Specification that is different from others or from the original. The form represents differences in attributes, methods, relationships, and/or constraints that characterize this particular Service Specification, but which are not enough to warrant creating a new Service Specification.
SERVICE USAGE TYPE	Lookup	A detailed description of a service usage event (for example, a purchase or a usage of a service).
SET TOP BOX	Reference	Set-top box for Television service.
SET TOP BOX MODEL	Reference	Set-top box model specification.
SHARED PACKAGE USAGE STATISTICS DAY DRVD	Derived	Daily aggregate of Lines Count by <a href="#">PRODUCT MARKET PLAN</a> . For example: <ul style="list-style-type: none"> <li>▪ Family 1+1</li> <li>▪ Corporate Package</li> </ul>
SHARED PACKAGE USAGE STATISTICS MO AGGR	Aggregate	Monthly summary of Lines Count by <a href="#">PRODUCT MARKET PLAN</a> . The usage and profitability is analyzed in this entity. For example: <ul style="list-style-type: none"> <li>▪ Family 1+1</li> <li>▪ Corporate Package</li> </ul>
SHELF	Reference	A Shelf is a type of Equipment Holder that is designed to hold various types of Equipment. The Shelf has a logical identifier that is often relative to the Bay that contains the Shelf (that is, the unique identifier for a Shelf is often a concatenation of the network element identifier, the Bay identifier, and the Shelf identifier). The logical identifier of a Shelf is typically associated with the Device (that is, the Network Element). Compare this to a <a href="#">RACK</a> , whose logical identifier is not associated with the Device. Thus, the Shelf is explicitly a part of the logical model of a network. Often, a Shelf contains not just pluggable components (for example, <a href="#">CARDS</a> , Power Supplies, and so on) but also cabling (for example, both fiber and wire), with optional connections to external fuse, alarm, and other types of panels.
SHOP EFFICIENCY DAY DRVD	Derived	Daily aggregate of shop efficiency details including customer and transaction counts, wait times, and so on, by <a href="#">ORGANIZATION BUSINESS UNIT</a> and <a href="#">GEOGRAPHY REGION</a> .
SHOP EFFICIENCY MONTH AGGR	Aggregate	Monthly summary of shop efficiency details including customer and transaction counts, wait times, and so on, by <a href="#">ORGANIZATION BUSINESS UNIT</a> and <a href="#">GEOGRAPHY REGION</a> .
SIC ASSIGNMENT	Reference	Assigns one industry to another industry in Standard Industrial Classification (SIC).
SIC ASSIGNMENT REASON	Lookup	Lookup for reason codes and descriptions that describe why two industries are assigned in the Standard Industrial Classification (SIC).

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SIC CLASSIFICATION	Lookup	A classification group for Standard Industrial Classification (SIC). For example: A. Division A: Agriculture, Forestry, And Fishing: <ul style="list-style-type: none"> <li>▪ Major Group 01: Agricultural Production Crops</li> <li>▪ Major Group 02: Agriculture Production Livestock and Animal Specialties</li> <li>▪ Major Group 07: Agricultural Services</li> <li>▪ Major Group 08: Forestry</li> <li>▪ Major Group 09: Fishing, Hunting, and Trapping</li> </ul>
SIC DIVISION	Reference	The base level of SIC classification. For more information see <a href="#">SIC CLASSIFICATION</a> .
SIC INDUSTRY GROUP	Lookup	The middle level of the industry classification hierarchy.
SIGNALING PROTOCOL	Reference	This entity represents different types of signaling protocols that can be managed. Signaling protocols are used to convey information along a specific path. Represents a convenient aggregation point for defining how signaling protocols are managed and used.
SIM CARD	Reference	A subscriber identity module (SIM) on a removable SIM card securely stores the service-subscriber key (IMSI) used to identify a subscriber on mobile telephony devices (such as a mobile phone).  Also used for UIM (User Identity Module) in the CDMA (Code Division Multiple Access) network.
SIM CARD ACCESS METHOD ASSIGNMENT	Reference	A history of relationship between <a href="#">ACCESS METHOD</a> and <a href="#">SIM CARD</a> . Many access methods can be assigned to one SIM Card at any given time.
SIM CARD ACCESS METHOD REASON	Lookup	Lookup for valid reason codes and descriptions to describe relationship between <a href="#">SIM CARD</a> and <a href="#">ACCESS METHOD</a> .
SIM CARD ACTIVATION REASON	Lookup	Lookup for valid reason codes and descriptions describing why a <a href="#">SIM CARD</a> has been activated.
SIM CARD ACTIVATION TYPE	Lookup	Usage states that a <a href="#">SIM CARD</a> may be in. For example: <ul style="list-style-type: none"> <li>▪ PP: Pre-Provisioned</li> <li>▪ BU: Barred from Usage</li> </ul>
SIM CARD HANDSET ASSIGNMENT	Reference	A history of relationship between a <a href="#">HANDSET INSTANCE</a> and a <a href="#">SIM CARD</a> . SIM Cards can be swapped between handsets.
SIM CARD SUBSCRIPTION ASSIGNMENT	Reference	A history of relationship between the <a href="#">SIM CARD</a> and a <a href="#">SUBSCRIPTION</a> .
SIM CARD SUBSCRIPTION REASON	Lookup	A reason why a <a href="#">SIM CARD</a> is associated with a <a href="#">SUBSCRIPTION</a> .
SIM CARD TYPE	Lookup	Lookup for the types of <a href="#">SIM CARD</a> . For example: <ul style="list-style-type: none"> <li>▪ 16k</li> <li>▪ 32k</li> <li>▪ 64k</li> <li>▪ 128k</li> </ul>
SITE	Reference	Site is any geographical location of interest to the telecom operator.
SITE INTERFACE ROLE	Reference	This role defines a Customer Site - that is, an interface to a set of Customers. The objective of this role is to enable the definition of Policies such that all Customers in this Site can receive the same Services. For example, routing announcements, traffic marking, and so on.
SITE TYPE	Lookup	Lookup of all possible types of sites of interest to the service provider.
SKILL TYPE	Lookup	Lookup of available skill types for an individual party.
SLOT	Reference	This is a concrete entity that has two main purposes. One is to model the ability of a hosting board to accept a daughter card to add or complete the base functionality of the hosting board. The second is to represent the different expansion slots supported by a <a href="#">CHASSIS</a> .

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SLOT RELATIONSHIP	Reference	This entity represents the semantics of the Adjacent Slots association. The <b>SLOT Relationship</b> includes two attributes that are used to provide general layout information describing the <b>SLOTS</b> in the Equipment Holder. The first, <b>Distance Between Slots</b> , defines the distance in inches between two adjacent <b>SLOTS</b> in the Physical Package. The second, <b>Shared Slots</b> , is a boolean attribute that describes the dependency between two <b>SLOTS</b> that are located near each other. Sometimes, the two <b>SLOTS</b> are so close that if one of these <b>SLOTS</b> is populated by an adapter <b>CARD</b> , the other <b>SLOT</b> must be left empty. If this attribute is set to <b>TRUE</b> , then the second <b>SLOT</b> must be left unoccupied.
SMS	Reference	Subtype of <b>VALUE ADDED SERVICE</b> . This entity defines the information relative to the Short Message Service (SMS). Do not confuse this entity with <b>SMS EVENT</b> .
SMS EVENT	Base	Subtype of <b>NETWORK EVENT</b> , which collects all information of product usage of Short Message Service (SMS).
SMS RATING PLAN	Reference	Subtype of <b>PRODUCT RATING PLAN</b> , reserved for Short Message Service (SMS), and also Multimedia Messaging Service (MMS), service.
SOC JOB	Reference	Entity holds the most detailed level of Standard Occupational Classification (SOC) job classification. For example: <ul style="list-style-type: none"> <li>■ 15-0000 Computer and Mathematical Occupations</li> <li>■ 15-1000 Computer Specialists</li> <li>■ 15-1010 Computer and Information Scientists, Research</li> <li>■ 15-1011 Computer and Information Scientists, Research</li> <li>■ 15-1020 Computer Programmers</li> <li>■ 15-1021 Computer Programmers</li> <li>■ 15-1030 Computer Software Engineers</li> <li>■ 15-1031 Computer Software Engineers, Applications</li> <li>■ 15-1032 Computer Software Engineers, Systems Software</li> <li>■ 15-1040 Computer Support Specialists</li> <li>■ 15-1041 Computer Support Specialists</li> </ul>
SOC JOB CATEGORY	Reference	Lookups for the categories in the Standard Occupational Classification (SOC) in which each occupation in the SOC is placed. The hierarchy in SOC is typically: NN-MMM0. These job categories correspond to the 449 "broad occupations" or categories. For example: <ul style="list-style-type: none"> <li>■ 13-2010 Accountants and Auditors</li> <li>■ 13-2020 Appraisers and Assessors of Real Estate</li> <li>■ 13-2030 Budget Analysts</li> <li>■ 13-2040 Credit Analysts</li> <li>■ 13-2050 Financial Analysts and Advisors</li> <li>■ 13-2060 Financial Examiners</li> </ul>
SOC JOB GROUP	Reference	Lookups for the groups in the Standard Occupational Classification (SOC) in which each occupation in the SOC is placed. The hierarchy of SOC is typically: NN-MM00. For example: <ul style="list-style-type: none"> <li>■ 13-1000 Business Operations Specialists</li> <li>■ 13-2000 Financial Specialists</li> </ul>
SOC JOB MAJOR GROUP	Reference	Lookups from the (23) major groups in the Standard Occupational Classification (SOC) in which each occupation in the SOC is placed. The hierarchy of SOC is typically: NN-0000. For example: <ul style="list-style-type: none"> <li>■ 11-0000 Management Occupations</li> <li>■ 13-0000 Business and Financial Operations Occupations</li> <li>■ 15-0000 Computer and Mathematical Occupations</li> <li>■ 17-0000 Architecture and Engineering Occupations</li> <li>■ 19-0000 Life, Physical, and Social Science Occupations</li> <li>■ 21-0000 Community and Social Services Occupations</li> <li>■ 23-0000 Legal Occupations</li> </ul>

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SOFTWARE	Reference	This entity represents software. Software represents the set of user visible functions and processes that are contained in a device. The Has Software Features association defines software that is associated with a <a href="#">LOGICAL DEVICE</a> , such as programs and operating systems. Since this software can be associated with devices and/or device components, this association is defined between the roots of the two classes. Software may be nested within other software, thereby creating a containment relationship (which is part of the system view). Currently, the subclasses of this class reflect user-facing features. For example, features that are manageable, configurable, and executable by users and applications. Internationalization and Language functionality are supported by creating a Software Uses Language association to the Language classes.
SOFTWARE ATOMIC	Reference	This entity represents atomic units of software that are individually manageable and do not form composite, or nested, software units. From a finite state machine view, each Software Atomic element is not just individually manageable, but is also installable, executable, and runnable. In addition, each Software Atomic element can be a FRU. This is the super-class for creating concrete subclasses that define particular functionality. For example, a device driver, or software that implements MPLS as part of a larger routing software package.
SOFTWARE COMMAND	Reference	Software Commands describe the sets of features that are programmable by a particular <a href="#">PARTY ROLE</a> . For example, a Developer, or Network Operator, and in rare cases, an End User. This should not be confused with Capabilities. Capabilities define what features and functions are available at a given moment for the Element. Thus, Software Commands represent the specific commands that are available in a device, whereas Capabilities represent higher-level generic functions available in a Element. For example, the ability to perform BGP routing is a Capability, whereas the actual commands used to implement BGP routing are Software Commands.
SOFTWARE COMPOSITE	Reference	This entity represents software units that are made up of other software units (that is, instances of this entity and the Software Atomic base entity). This provides the semantics of collecting a set of components, each of which is individually manageable, and being able to manage the set of objects as a whole. An example is an operating system - this is manageable as a unit, but consists of individually manageable components. This containment is modeled using the Contains Software Components composition. From a finite state machine view, each Software Composite element is manageable, installable, executable, and runnable. In addition, each Software Composite element can be a FRU. This is the super-class for creating concrete subclasses that define groups of functionality. For example, set of features that work to provide application-level functionality to the end-user.
SOFTWARE FEATURE SETS	Reference	Software Feature Sets describe the groups of Software Commands that distinguish a particular release of Software. The Software Commands contained in the Software Feature Sets are programmable by a particular <a href="#">PARTY ROLE</a> (for example, a Developer, or Network Operator, and in rare cases and End User). Often, Software Feature Sets are used by the manufacturer to define a custom or semi-custom build of software, or are provided as a set of options that are orderable by the Customer. This should not be confused with Capabilities. Capabilities define what features and functions are available at a given moment for the Element. Thus, Software Feature Sets represent groups of commands that are available in a device, whereas Capabilities represent higher-level generic functions available in a Element. For example, the ability to perform BGP routing is a Capability, whereas the actual commands used to implement BGP routing are Software Commands that reside in one or more Software Feature Sets. Hence, Software Feature Sets may or may not offer BGP as a programmable feature.
SOFTWARE OS RELATIONSHIP	Reference	This is an association class, and defines the semantics of the Software Interacts With OS association. This is a complex class, and consequently only a few simple attributes are shown in this viewpoint in order for the reader to get a flavor of the types of parameters defined in this entity.
SOURCE SYSTEM	Reference	System of record from which information was loaded.
SOURCE SYSTEM KEY MAPPING	Reference	Track Key of the <a href="#">PARTY</a> , customer or employee, in the originating source system. This key can track information back to the source management system.

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SOURCE SYSTEM TYPE	Lookup	Lookup for type code and description used to describe <a href="#">SOURCE SYSTEM</a> . For example: <ul style="list-style-type: none"> <li>▪ Competitor Customer Listing</li> <li>▪ Third-Party Purchased Mailing List</li> <li>▪ CRM List</li> <li>▪ Billing System List</li> </ul>
SPECIFICATION	Reference	This is an entity that defines the invariant characteristics, attributes, methods, and relationships, of a managed entity.
SPECIFICATION ROLE	Reference	This is the entity for all Role Specification subclasses.
SPECTRUM COVERAGE AREA	Reference	The geographic coverage area of a given wireless spectrum.
STATISTICAL ENTITY	Reference	To be defined
SUB NETWORK	Reference	An abstraction provided by the Element Management System (EMS) to the Network Management System (NMS) that describes the potential for subnetwork connections. The Sub Network also provides a transparent end-to-end connection or a <a href="#">TRAIL</a> , closed or half-open, through a Subnetwork according to the roles associated to its end points.
SUBSCRIBER ACTIVATION REASON	Lookup	Lookup for valid Subscriber activation code and reasons used to describe Subscriber Activation. For example: <ul style="list-style-type: none"> <li>▪ Reactivate because of paying</li> <li>▪ Deactivate by non-paid</li> </ul>
SUBSCRIPTION	Reference	The record of customer using a product or service which may be based on a contract. Customer's subscription to services is the basis of billing and network usage authorization.
SUBSCRIPTION ASSIGNMENT	Reference	Relational assignment of one <a href="#">SUBSCRIPTION</a> to another <a href="#">SUBSCRIPTION</a> . This is optional.
SUBSCRIPTION ASSIGNMENT TYPE	Lookup	Lookup for type codes and descriptions pertaining to <a href="#">SUBSCRIPTION ASSIGNMENT</a> .
SUBSCRIPTION EVENT TYPE	Lookup	Lookup for available type codes and descriptions for Subscription Events.
SUBSCRIPTION NETWORK ELEMENT ROLE ASSIGNMENT	Reference	Defines the relationship between <a href="#">SUBSCRIPTION</a> and the <a href="#">NETWORK ELEMENT ROLE</a> .
SUBSCRIPTION PMP ASSIGNMENT	Reference	The relationship between <a href="#">SUBSCRIPTION</a> and <a href="#">PRODUCT MARKET PLANS</a> . A <a href="#">SUBSCRIPTION</a> may be reassigned to different <a href="#">PRODUCT MARKET PLANS</a> during its lifetime.
SUBSCRIPTION PRICE	Reference	Charge information over a specific subscription.
SUBSCRIPTION PRICE ALTERATION	Reference	Price alteration applied to the given subscription.
SUBSCRIPTION PRICE CHARGE	Reference	The monetary charge applied to an individual subscription, as a subtype of <a href="#">SUBSCRIPTION PRICE</a> .
SUBSCRIPTION PRICE PARTY ROLE ASSIGNMENT	Reference	The relationship between the Party Role and <a href="#">SUBSCRIPTION PRICE</a> to track who managed the <a href="#">SUBSCRIPTION PRICE</a> .
SUBSCRIPTION SERVICE ASSIGNMENT	Reference	The relationship between <a href="#">SUBSCRIPTION</a> and <a href="#">SERVICE</a> . One subscription may be used to rate multiple services. For example, WCDMA 3G Data + Wifi, and vice versa. One service, for example a gsm mobile, may support multiple products (calling minutes, discounts, and so on).
SUBSCRIPTION SERVICE CLASS ASSIGNMENT	Reference	Defines the class of service for a <a href="#">SUBSCRIPTION</a> .
SUBSCRIPTION STATISTIC DRVD	Derived	Monthly aggregate of subscriber Churn information by <a href="#">ACCOUNT</a> , <a href="#">PRODUCT MARKET PLAN</a> , <a href="#">SALES CHANNEL</a> , <a href="#">AGE BAND</a> , <a href="#">AGE ON NET BAND</a> , <a href="#">CREDIT CATEGORY</a> , <a href="#">DEBT AGING BAND</a> , <a href="#">CUSTOMER REVENUE BAND</a> , <a href="#">ARPU BAND</a> , <a href="#">CUSTOMER</a> .
SUBSCRIPTION STATISTIC MONTH AGGR	Aggregate	Monthly summary of Subscriber Churn by <a href="#">PRODUCT</a> , <a href="#">PRODUCT MARKET PLAN</a> , <a href="#">CUSTOMER TYPE</a> , <a href="#">GEOGRAPHY ENTITY</a> , <a href="#">ORGANIZATION BUSINESS UNIT</a> .

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SUBSCRIPTION STATUS	Lookup	<p>Lookup for available code and description for the status of a <a href="#">SUBSCRIPTION</a>. For example:</p> <ul style="list-style-type: none"> <li>▪ Active</li> <li>▪ Inactive</li> <li>▪ In Debt</li> </ul>
SUBSCRIPTION STATUS CATEGORY	Lookup	<p>Lookup for category codes and descriptions used to group or categorize <a href="#">SUBSCRIPTION STATUS</a>.</p>
SUBSCRIPTION STATUS HISTORY	Base	<p>A history of the status of a <a href="#">SUBSCRIPTION</a>. For example:</p> <ul style="list-style-type: none"> <li>▪ Active</li> <li>▪ Inactive</li> <li>▪ Defaulted</li> <li>▪ Terminated</li> </ul> <p>The subscription can simultaneously contain multiple status. For example, the subscription could be Active and In_Debt, or amount below threshold.</p>
SUBSCRIPTION STATUS REASON	Lookup	<p>Lookup for available reason codes and descriptions for defining why a <a href="#">SUBSCRIPTION</a> may be assigned a status.</p>
SUBSCRIPTION STATUS TYPE	Lookup	<p>Lookup for available code and description for the status of a <a href="#">SUBSCRIPTION</a>. For example:</p> <ul style="list-style-type: none"> <li>▪ Active</li> <li>▪ Inactive</li> <li>▪ In Debt</li> </ul> <p>A subscription can simultaneously have two statuses. For example, a subscription could be Active and In Debt, or an amount below a threshold, at the same time.</p>
SUBSCRIPTION TERM TYPE	Lookup	<p>Lookup for available type codes and descriptions pertaining to <a href="#">SUBSCRIPTIONS</a> and <a href="#">PRODUCTS</a> to which Values may be assigned. For example:</p> <ul style="list-style-type: none"> <li>▪ Monetary Amount</li> <li>▪ Period</li> <li>▪ Premium</li> <li>▪ Initial Points</li> <li>▪ Cancellation Policy</li> </ul>
SUBSCRIPTION TERM VALUE	Base	<p>Value assignments for Subscription Terms as pertains to a <a href="#">SUBSCRIPTION</a> and <a href="#">PRODUCT</a>. For example:</p> <ul style="list-style-type: none"> <li>▪ Monetary amount</li> <li>▪ Period</li> <li>▪ Premium</li> <li>▪ Initial points</li> </ul> <p>The value can vary at different time periods. For example, the monthly fee might be 100 for first six months, and 80 for last six months. A penalty calculation can also be assigned based on the months left in a contract.</p>
SUBSCRIPTION TYPE	Lookup	<p>Lookup for available type codes and descriptions for <a href="#">SUBSCRIPTIONS</a>. For example:</p> <ul style="list-style-type: none"> <li>▪ Prepaid Wireless</li> <li>▪ Fixed Line</li> <li>▪ Broadband</li> </ul>
SUBSIDY AMOUNT MONTH AGGR	Aggregate	<p>Monthly summation of the amount budgeted for the items to be given on subsidy by <a href="#">PRODUCT MARKET PLAN</a>, and <a href="#">CUSTOMER TYPE</a>, excluding the NVP scheme items and give-away items.</p>
SUBSIDY AMOUNT DRVD	Derived	<p>Monthly aggregation of the amount budgeted for the items to be given on subsidy by <a href="#">PRODUCT MARKET PLAN</a> and <a href="#">CUSTOMER TYPE</a>, excluding the NVP scheme items and give-away items.</p>



**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
SUBSIDY TYPE	Lookup	Lookup for type code and description of a Subsidy.
SUPPLEMENTARY SERVICE	Reference	Subtype of <a href="#">PRODUCT</a> that may include supplementary services to complement and support existing services such as telephone and data services. For example: <ul style="list-style-type: none"> <li>▪ Call forwarding</li> <li>▪ Barring of Outgoing Calls</li> <li>▪ Barring of Incoming Calls</li> <li>▪ Advice of Charge (AoC)</li> <li>▪ Call Hold</li> <li>▪ Call Waiting</li> <li>▪ Multi-party service</li> <li>▪ Calling Line Identification presentation/restriction</li> <li>▪ Closed User Groups (CUGs)</li> <li>▪ Explicit Call Transfer (ECT)</li> </ul>
SUPPLEMENTARY SERVICE USAGE DRVD	Derived	Keep the aggregation information for usage of supplementary service. Analyze <a href="#">SUPPLEMENTARY SERVICE</a> for the Core Network Planning.
SUPPLEMENTARY SERVICE USAGE MONTH AGGR	Aggregate	Monthly summation of Charge and Billing details for <a href="#">SUPPLEMENTARY SERVICE</a> usage by Business Unit, <a href="#">PRODUCT MARKET PLAN</a> , and <a href="#">PRODUCT</a> .
SURVEY	Reference	A survey is a subtype to the <a href="#">PROMOTION</a> .
SWITCH	Reference	Network switches or exchanges. A switch may be a PSTN (wireline) digital or analog, or a GSM Mobile Station controller (wireless).
SWITCH CAPABILITY	Reference	Records the specific functional characteristics of each switch or exchange. The types of capabilities of interest are those that enable customer services; this entity enables the operator to identify if customers on a particular switch can utilize a certain service (for example, VPN).
SWITCH CAPABILITY TYPE	Lookup	Lookup for type codes and descriptions used to categorize <a href="#">SWITCH CAPABILITY</a> .
SWITCH COMMAND	Reference	Command which is sent to the switch, telling it to take an action. For example, activate a port with specified parameters.
SWITCH ROUTING DEVICE ASSIGNMENT	Reference	Assigns a routing device to a switch in any type of network.
SWITCH TYPE	Lookup	Classification of Switch Type and Manufacturer.
SWITCHING PROTOCOL	Reference	This entity represents different types of switching protocols that can be managed. Switching protocols are those protocols that enable routing to take into account layer 2 information, such as bandwidth and QoS. (Remember that traditional routing protocols are designed to evaluate each frame's layer 3 header only). Several methods are available for accomplishing the task of looking at layer 2 information and defining a next hop. Most now use the concept of a label, which is a means to define the next hop without evaluating all of the information of a traditional header.
SWITCHING ROLE	Reference	Abstracts the different routing capabilities necessary for a <a href="#">LOGICAL DEVICE</a> to have. This helps simplify the modeling of (especially) network devices, which have many different sets of capabilities. For example, most routers can do routing, forwarding, and firewalling of traffic. By modeling these capabilities as three roles, switch functionality is both abstracted and categorized, so that the differences between forwarding traffic done by a router and forwarding traffic done by a L3 switch can be differentiated.
SWOT TYPE	Lookup	A Strength, Weakness, Opportunity, Threat (SWOT) that an enterprise has when compared to a <a href="#">COMPETITOR</a> . SWOT analysis is a formal framework of identifying and framing organizational growth opportunities.
TAP IN WIRELESS ROAMING EVENT	Base	Network events invoked by our customer on partners network. Those events should be attached to the account for billing purposes.
TAP OUT WIRELESS ROAMING EVENT	Base	Network events by partner customer on the operator network.
TARGET ACCESS METHOD	Reference	The <a href="#">ACCESS METHODS</a> associated with a <a href="#">PROMOTION</a> .

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
TARGET ACCOUNT	Reference	<a href="#">ACCOUNT</a> s targeted by a <a href="#">PROMOTION</a> .
TARGET CONTRACT	Reference	<a href="#">CONTRACT</a> s targeted by a <a href="#">PROMOTION</a> .
TARGET GEOGRAPHY AREA	Reference	<a href="#">GEOGRAPHY ENTITY</a> s targeted by a <a href="#">PROMOTION</a> .
TARGET MARKET SEGMENT	Reference	The <a href="#">MARKET SEGMENT</a> s included in a specific <a href="#">CAMPAIGN</a> .
TARGET TYPE	Lookup	Lookup for valid Type codes and descriptions as pertain to a <a href="#">PROMOTION</a> . For example: <ul style="list-style-type: none"> <li>▪ <a href="#">CUSTOMER</a></li> <li>▪ <a href="#">ACCOUNT</a>s</li> <li>▪ <a href="#">ACCESS METHOD</a></li> <li>▪ Geography area</li> </ul>
TASK	Reference	The specific tasks inside a <a href="#">PROJECT</a> .
TAX AUTHORITY	Reference	A government authority that levies sales taxes and on whose behalf the store collects these sales taxes. For Example: <ul style="list-style-type: none"> <li>▪ National</li> <li>▪ State</li> <li>▪ Province</li> <li>▪ City</li> <li>▪ County</li> <li>▪ Other</li> </ul>
TAX CATEGORY	Lookup	The tax categories which may be applied to invoices items.
TAX EXEMPT	Lookup	Lookup for valid tax exempt codes and descriptions as pertains to an <a href="#">ITEM</a> .
TCH TYPE	Lookup	Lookup for the types of Traffic Channel. For example: <ul style="list-style-type: none"> <li>▪ Voice Channel</li> <li>▪ Data Channel</li> </ul>
TECHNOLOGY	Lookup	Technology names and descriptions that can define a <a href="#">NETWORK ELEMENT</a> . For example: <ul style="list-style-type: none"> <li>▪ CDMA</li> <li>▪ GSM</li> <li>▪ ADSL</li> <li>▪ Ethernet</li> </ul>
TECHNOLOGY TYPE	Lookup	Lookup for available type codes and descriptions that can classify or categorize a <a href="#">TECHNOLOGY</a> . For example: <ul style="list-style-type: none"> <li>▪ Wireless</li> <li>▪ Copper line</li> <li>▪ Optical Fiber</li> </ul>
TELEPHONE NUMBER	Reference	The phone number as a subtype of access method.
TELEPHONE NUMBER POOL	Reference	The telephone number pool allocated to the TELCO operator.
TEMPLATE SERVICE LEVEL SPEC	Reference	The template for <a href="#">SERVICE LEVEL AGREEMENT</a> spec.
TERMINATION POINT	Reference	This entity is for terminates transport entities, such as trails and connections. This object class is a basic object class from which subclasses, such as Trail Termination Point and <a href="#">CONNECTION TERMINATION POINT</a> , are derived.
TIME BAND	Lookup	Band of call duration. For example: <ul style="list-style-type: none"> <li>▪ 0-5 minutes</li> <li>▪ 5-30 minutes</li> <li>▪ 30-120 minutes</li> <li>▪ &gt;120 minutes</li> </ul>

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
TIME SLOT	Reference	Reference entity defining the time slot within a <a href="#">DAY</a> in relation to <a href="#">HOURS</a> , <a href="#">HALF HOURS</a> and <a href="#">QUARTER HOURS</a> . This is used in all time derived and aggregation tables.
TIME STANDARD BY DAY	Reference	Relates the calendar day to a season and to a standard day. Specifies the relationship between a given day and all days of a given season up to that day.
TIME STANDARD BY WEEK	Reference	Relates the calendar week to a season and to a standard week. Specifies the relationship between a given week and all days of a given season up to that week.
TIME ZONE	Lookup	Lookup for the Geographic time zone as related to the Greenwich Mean Time (GMT +0.00).
TRAIL	Reference	Trail is a class of managed objects in layer networks which is responsible for the integrity of transfer of characteristic information from one or more other layer networks. A Trail is composed of two Trail Termination Points and one or more Connections and associated <a href="#">CONNECTION TERMINATION POINTS</a> .
TRAIL TERMINATION POINT	Reference	This entity groups different types of Trail Termination Points. This entity enables a single composition (CTPsInTrail) to be run to this entity, which is then inherited by its subclasses. This is deemed better than building three relationships between the (currently) three types of Trail Termination Points and the CTP class. Note that each has the same containment relationship.
TV CHANNEL	Reference	Type of <a href="#">PRODUCT INSTANCE</a> associating a Television Channel with a <a href="#">PTV USAGE EVENT</a> .
UMS ACCESS TYPE	Lookup	Lookup for valid type codes and descriptions for Unified Messaging Services (UMS). The UMS access type indicates the way customers are accessing their mailboxes. This is especially applicable to UMS users who can access their mailbox either using the standard method, with a specified number or by using Internet mail.
UMS EVENT	Base	Subtype of <a href="#">NETWORK EVENT</a> . In the UMS notification type dimension, Unified Messaging Service (UMS) is an advanced version of Voice Message Service (VMS). As it is possible to notify the subscriber using UMS by either SMS or by internet mail, similarly a subscriber can access a mailbox in different ways, including by calling a standard access number or through the internet.  The information related to UMS access is to be analyzed by the type of access. UMS access type dimension will be used to fulfill this requirement.
UMS EVENT TYPE	Lookup	Lookup for the type of UMS events. For example: <ul style="list-style-type: none"> <li>■ E-mail</li> <li>■ SMS</li> <li>■ Fax</li> <li>■ Voicemail</li> <li>■ Video Messaging</li> </ul>
UNIT OF MEASURE	Lookup	Lookup for possible measurement units valid for the data within the system. For example: <ul style="list-style-type: none"> <li>■ Inch</li> <li>■ Kilowatt-hour</li> <li>■ Days</li> <li>■ Cubic centimeters</li> </ul>
URBAN PROPERTY ADDRESS	Reference	The property address in the format of an urban area.
USER	Reference	Associative entity for <a href="#">EMPLOYEE</a> , <a href="#">JOB ROLE</a> , Business Unit; associates a unique ID for every job role that an employee performs at a particular business unit. An employee appears only one time in the <a href="#">EMPLOYEE</a> entity, but in <a href="#">USER</a> entity, the employee appears on time for each job role at each business unit.
VALUE ADDED SERVICE	Reference	Type of product consisting of supplementary or value added services such as Call Forward, Call barring, CLI, CLIR, UMS, or VMS.

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
VALUE_CUSTOM	Reference	This entity provides two basic attributes to define custom value objects that can be used in an application-specific fashion. These two attributes are called valueModelAttribute and valueModelClass. The valueModelAttribute is a string attribute that defines the name of the attribute within the entity specified in the valueModelClass attribute that is to be evaluated or set as a <b>POLICY VALUE</b> . The valueModelClass is a string attribute that defines the entity name whose attribute is to be evaluated or set as a <b>POLICY VALUE</b> . This combination enables new custom subclasses of Value Custom to be defined that specify the entity and attribute that they are modeling. These new subclasses can be found by users of the current the model schema by searching for these two properties. That also enables the model users to immediately understand the purpose of new extensions.
VALUE_MEASURE	Lookup	Lookup for unit of measure for the value. For example a customer or a profile can be valued in terms of monetary value or time (a customer for next three years).
VALUE_STANDARD	Reference	This is the abstract base entity for defining a set of standardized <b>POLICY VALUES</b> . This set of <b>POLICY VALUES</b> will be added to over time, and represents a set of common values that are useful in a variety of PBNM applications. The subclasses of Value Standard are a set of classes that define the semantics of commonly occurring variables that occur in PBNM applications.
VALUE_TYPE	Lookup	Lookup for available type codes and descriptions pertaining to defining the derived value of a <b>CUSTOMER</b> or <b>PROSPECT</b> .
VARIABLE_CUSTOM	Reference	There are two subclasses of <b>POLICY VARIABLE</b> , called Variable Custom and Variable Standard. The Variable Custom entity defines a set of standardized policy variables for use in an application-specific manner. The term "custom" means that such variables are explicitly designed to work with attributes that are not in any of the model Variable Standard subclasses. Thus, the particular semantics, including any applicable constraints, are not known to the model. This entity provides two basic attributes to define custom variables to use in an application-specific fashion.
VARIABLE_STANDARD	Reference	This entity defines a standard set of <b>POLICY VARIABLE</b> objects that are common to most PBNM applications.
VAS_SUBSCRIPTION	Reference	Type of Subscription that includes <b>VALUE ADDED SERVICE</b> .
VAS_SUBSCRIPTION_QUICK_SUMMARY_MO_AGGR	Aggregate	Monthly Summary of <b>VALUE ADDED SERVICE</b> Details by <b>CUSTOMER TYPE</b> .
VAS_SUBSCRIPTION_QUICK_SUMMARY_DRVD	Derived	Monthly Aggregation of <b>VALUE ADDED SERVICE</b> Details by <b>CUSTOMER</b> and <b>ACCESS METHOD</b> .
VAS_USAGE_DAY_DRVD	Derived	Daily usage statistics for all value added services that are content based (and some others). This includes: M2M, P2P, and SMS, MMS, ringtone, music, video, email, Universal (Voice/Email) message, and others.
VAS_USAGE_MONTH_AGGR	Aggregate	Monthly aggregation of VAS usage statistics, from <b>VAS_USAGE_DAY_DRVD</b> .
VEHICLE	Reference	The vehicles owned and used by the operators to fulfill its business requirement.
VENDOR	Reference	Supplier or source of equipment or supplies.
VENDOR_APPOINTMENT	Base	Single or recurring appointment times allocated for <b>VENDOR</b> representative to visit the Provider or Retail Site.
VENDOR_CLASS	Lookup	Lookup for the classification of Vendors. For example: <ul style="list-style-type: none"> <li>■ Primary</li> <li>■ Associate</li> <li>■ Direct Supply</li> </ul>
VENDOR_CONTRACT	Reference	Time bound agreement with <b>VENDOR</b> .
VENDOR_FACTOR_COMPANY_ASSIGNMENT	Reference	Defines the relationship between <b>VENDOR</b> and <b>FACTOR COMPANY</b> .
VENDOR_RATING	Reference	Score assigned to <b>VENDOR</b> based on performance criteria.
VENDOR_RATING_TYPE	Lookup	Lookup for type codes and descriptions of <b>VENDOR RATING</b> performance criteria.

**Table 2–28 (Cont.) S to V Entity Descriptions**

Entity Name	Type	Description
VENDOR SITE	Reference	A Site or Location associated with a <b>VENDOR</b> from which <b>VENDOR</b> may do business with Provider. A Vendor site may be an Office, Warehouse, Dispatch Center, and so on.
VENDOR SITE COURIER ASSIGNMENT	Reference	Association of <b>VENDOR SITE</b> with <b>COURIER</b> code (from the goods transportation perspective).
VENDOR SITE TYPE	Lookup	Lookup for valid type codes and descriptions pertaining to <b>VENDOR SITE</b> . For example: <ul style="list-style-type: none"> <li>▪ Call center</li> <li>▪ Branch Office</li> <li>▪ Warehouse</li> </ul>
VIRTUAL TEAM	Reference	Type of Business Unit formed for a specific purpose. For example: <ul style="list-style-type: none"> <li>▪ Sales Team A, B, C</li> <li>▪ Customer Support Team A, B, C</li> <li>▪ Project team</li> <li>▪ Strategic Account management team including sales and support</li> </ul>
VOICE MESSAGE SERVICE	Reference	Subtype of <b>SERVICE</b> .
VOICE CALL DAY DRVD	Derived	Daily aggregate of Voice Call statistics by <b>TIME SLOT</b> , Business Unit, County, <b>PRODUCT</b> , <b>CUSTOMER TYPE</b> , Call Source, Call Destination, <b>CALL DIRECTION</b> , Call Success/Failure, Roaming Service.
VOIP CALL EVENT	Base	The subtype of Network event, specialized for Voice Over IP (VOIP) Calls.
VOICE CALL MONTH AGGR	Aggregate	Monthly Summary of Voice Call statistics by Business Unit, County, <b>PRODUCT</b> , <b>CUSTOMER TYPE</b> , <b>CALL CATEGORY</b> , <b>CALL DIRECTION</b> , Call Success/Failure.
VOLUME BAND	Lookup	Characterizes network events by volume. The volume characteristic may be in units of bytes, minutes, packets, downloads. The entity is used as part of the rating of calls and other network events.
VPN LOGICAL DEVICE ROLE	Reference	A <b>VPNRole</b> is the superclass for various types of VPN role classes. For example, MPLS VPNs will use the <b>CPELogicalDeviceRole</b> , <b>PELogicalDeviceRole</b> , and <b>PLogicalDeviceRole</b> subclasses of this entity to abstract functionality required for the CPE, PE, and P roles of an MPLS VPN. Other types of VPNs use other subclasses of the <b>VPNRole</b> class. The advantage of this class is that it enables different types of VPN roles to be specified by an <b>MPLSVPNServiceSpecification</b> .
VPN SERVICE	Reference	The VPN service currently used by the customers.

**Table 2–29 W to Z Entity Descriptions**

Entity Name	Type	Description
WAN PROTOCOL	Reference	WAN Protocols operate at the lowest three levels of the OSI model, that is, physical, data link, and network. Use WAN Protocols define communications over different types of wide-area media.
WEATHER CONDITION	Reference	Reference of the various “weather” conditions, in a very general sense, affecting a given day. There is a difference between internal “weather” (a flood in a store, an employee strike, and so on) and external “weather” (storm, flood, snow, and so on). This information is useful in relation to a network failure.
WEB INTERACTION NAVIGATION HISTORY	Base	The history of customer navigation path in web visit.
WEB PAGE	Reference	A web page on a service operator Web site. The Web page may present a product or handle a customer service request.
WEB PAGE CONTENT	Reference	Content of a <b>WEB PAGE</b> , links <b>WEB PAGE</b> to its relevant entity, including product, script, and so on.
WEB PAGE RENDERING TYPE	Lookup	Lookup for type of <b>WEB PAGE</b> rendering. For example: <ul style="list-style-type: none"> <li>▪ Dynamic (ASP, PHP, JSP, and so on)</li> <li>▪ Static (html)</li> </ul>

**Table 2–29 (Cont.) W to Z Entity Descriptions**

Entity Name	Type	Description
WEB PAGE TYPE	Lookup	Web page type groups the web pages according to their content and purpose. For example: <ul style="list-style-type: none"> <li>▪ Service page</li> <li>▪ Advertisement</li> <li>▪ Tariff plan</li> </ul>
WEEK TODATE TRANSFORMATION	Reference	Cumulative time transformations at the week level.
WEEK TRANSFORMATION	Reference	Time transformations at the week level.
WEEKDAY	Reference	Calendar weekdays.
WIRELESS CALL EVENT	Base	Defines occurrence of wireless call.
WIRELESS CONTENT DOWNLOADING EVENT	Base	Type of network event, to track wireless content downloading such as music, video clips, and so on.
WIRELESS NETWORK ELEMENT	Derived	Derived from <a href="#">NETWORK ELEMENT</a> Hierarchy for analytical purposes.
WIRELESS RATING PLAN	Reference	Subtype of <a href="#">PRODUCT RATING PLAN</a> , reserved for wireless voice and data services.
WIRELESS ROAMING EVENT	Base	The wireless call event which roams across operators, including TAP IN and TAP OUT events. This entity is designed according to GSMA (Global System for Mobile communications) official document TD.57.
WIRELESS ROAMING EVENT BATCH	Base	The batch which includes roaming events as details. This batch normally appears in one TAP file.
WIRELESS SERVICE	Reference	The wireless services that the customer is using. For example: <ul style="list-style-type: none"> <li>▪ GSM</li> <li>▪ WCDMA</li> </ul>
WIRELESS SPECTRUM	Reference	The wireless spectrum used in service provider network.
YEAR TRANSFORMATION	Reference	Transformations at the year level.

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## Logical Data Model Dimensions

This chapter describes the logical dimensions, and hierarchies, of the data model, as shown in [Table 3-1](#).

**Table 3-1** *Logical Data Model Dimensions*

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**Dimension**

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Access Method  
Account  
Account Payment Method Status Type  
Account Refund Reason  
Address Location  
Age Band  
Age On Net Band  
ARPU Band  
Bank Direct Debit Channel  
Ber Fer Type  
Billing Cycle  
Billing Status Type  
Business Time  
Calendar Time  
Call Category  
Call Center Agent  
Call Center Case Title  
Call Center  
Call Direction  
Call Other Type  
Call Routing Type  
Call Service Type  
Call Source Destination  
Call Success Fail Type  
Call Type  
Campaign Channel  
Cell Outage Reason  
Change Proposed By Type  
Collection Agency

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**Table 3–1 (Cont.) Logical Data Model Dimensions**

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**Dimension**

---

Commission Type  
Content Type  
Contract Change Initiator Type  
Contract Assignment Reason  
Contract  
Credit Category  
Customer Revenue Band  
Customer Segment  
Dealer  
Debt Aging Band  
Direct Debit Status Reason  
Divert Retrieve Type  
Employee  
Event Result  
Event Type  
External Operator  
Fraud Profile Class  
Geography  
Give Away Type  
GPRS Services  
Handset Model  
IN Platform  
Initiative Type  
Interaction Channel  
Internet Service Provider  
Invoice Adjustment Reason  
Invoice Adjustment Type  
Item  
Legal Process Status Type  
Loyalty Program Channel  
Market Area  
Network  
Network Element  
Network Touchpoint Class  
Network Touchpoint Status  
Network Touchpoint Type  
Notification Type  
NP Request Type  
On Off Net  
Organization  
Partner Settlement Reason  
Party



**Table 3–1 (Cont.) Logical Data Model Dimensions**

<b>Dimension</b>
Payment Channel
Payment Method Type
Payment Transaction Type
PCU Outage Reason
Peak Offpeak Time
PPA Category
Product
Product Market Plan
Promotion
Promotion Result Type
Recharge Revenue Slab
Redemption Type
RF Carrier
Roaming Type
Sales Channel
Sales Channel Representative
Service Coverage Area
Subscription
Subsidy Type
Switch
Technology Type
Time Slot
UMS Access Type
Value Added Services (VAS)

## Logical Data Model Dimensions

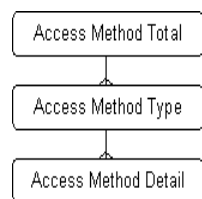
This sections lists the logical data model dimensions.

### Access Method

Description: [ACCESS METHOD](#)

#### Access Method Hierarchy

Standard Access Method Hierarchy



#### Access Method Levels

[Table 3–2](#) shows Access Method Total: All access method is the most aggregate level of the dimension.

**Table 3–2 Access Method Total**

Sr. Number	Attribute	Description
1.	ACCESS METHOD TOTAL	Code for All Access Method.

Table 3–3 shows Access Method Type: This entity keeps all types of the Access Telephone Numbers, such as Wire line, Wireless.

**Table 3–3 Access Method Type**

Sr. Number	Attribute	Description	Sample Value
1	ACCESS METHOD TYPE CODE	A code, used to uniquely identify the access method type.	FLTN
2	ACCESS METHOD TYPE DESC	A textual description of the Access Method Type.	Fixed Line Telephone Numbers
3	ACCESS METHOD TYPE NAME	The name assigned to the Access Method Type.	Fixed Line Telephone Numbers
4	LANGUAGE CODE	Unique identifier for Language	

Table 3–4 shows Access Method Detail: Detail level of the dimension. Stores the Access Method Information.

**Table 3–4 Access Method Detail**

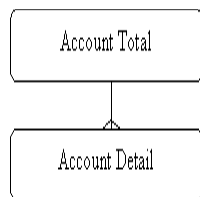
Sr. Number	Attribute	Description	Sample Value
1	ACCESS METHOD CODE	A sequence of numbers (like phone number) electronically registered to telecommunications equipment that gives the Customer access to services or products. Other access method like DSL account, Service ID might be character type.	867558305000
2	ACCESS METHOD DESC	Access method full description.	WRLS867558305000
3	ACCESS METHOD NAME	ACCESS METHOD NAME. ACCESS METHOD NAME	WRLS867558305000
4	ACCESS METHOD POOL CODE	Unique identifier for Access Method Pool	
5	ACCESS METHOD SEGMENT CODE	Unique identifier for Access Method Segment	
1	ACCESS METHOD TYPE CODE	A code, used to uniquely identify a access method type.	FLTN
2	ACCOUNT CODE	This is usually natural key of the account. Optional column, At certain time period, the access method may not be bound to an account.	10000101
3	CUSTOMER SELECT INDICATOR	Indicates whether the phone number (access method identifier) is selected by a customer.	
4	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	12/31/2005 12:00:00 AM
5	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	12/31/2005 12:00:00 AM
6	NETWORK CODE	Identifier of the network.	
7	SILENT NUMBER INDICATOR	An indicator that indicates whether a party has a silent number. A silent number could not be found on the White Pages. access method full description	
8	STATUS CODE	Current STATUS CODE, standard SCD2 column.	
9	SWITCH CODE	Unique identifier for Switch	

## Account

Description: [ACCOUNT](#)

## Account Hierarchies

Standard Account Hierarchy:



## Account Levels

Table 3–5 shows Account Total: All accounts are most aggregate level of the dimension.

**Table 3–5 Account Total**

Sr. Number	Attribute	Description
1.	ACCOUNT TOTAL	Code for All account.

Table 3–6 shows Account Detail: All account types are most aggregate level of the dimension.

**Table 3–6 Account Detail**

Sr. Number	Attribute	Description	Sample Value
1	ACCOUNT CODE	This is usually natural key of the account.	10000102
2	ACCOUNT NAME	The name for the account.	
3	ACCOUNT SEGMENT CODE	Unique identifier for Account Segment	
4	ACCOUNT TYPE CODE	Unique identifier for Account Type	PRPD
5	ACCOUNTING CYCLE CODE	Unique identifier for Accounting Cycle	
6	ADVERTISING STATUS	Indicated if it need some advertising material for a particular invoice arrangement, and if customer explicitly requested NOT to send.	
7	BILLING CYCLE CODE	Unique identifier for Billing Cycle	MO
8	BILLING PERIOD CODE	Unique identifier for Billing period	
9	CREATE DATE	The date when the account was created.	4/4/2006 12:00:00 AM
10	CREATE STAFF	the employee number of who created the account.	
11	CREDIT CATEGORY CODE	Current Credit Category Code.	
12	CREDIT RATING DATE	CREDIT RATING DATE is when the credit category code is rated for the account.	
13	CURRENCY CODE	Unique identifier for Currency	USD
14	CUSTOMER CODE	Unique identifier for Customer	
15	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	12/31/2005 12:00:00 AM
16	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	12/31/2005 12:00:00 AM
17	GROUP PLAN INDICATOR	Indicates whether an account belongs to a group plan/solution.	
18	LAST ACTIVATE DATE	The last date when account was activated.	
19	LAST REOPEN DATE	Last time when account was reopen.	
20	LAST SUSPEND DATE	Last date when the account was suspended for certain reasons.	

**Table 3–6 (Cont.) Account Detail**

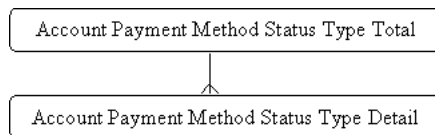
Sr. Number	Attribute	Description	Sample Value
21	MULTIPLE CUSTOMER INDICATOR	Indicates whether one bill has multiple customer.	
22	ORGANIZATION BUSINESS UNIT CODE	Unique identifier for Organization Business Unit	
23	PAYMENT DAYS	The number of days after customer billing before certain actions (like debt collection) would be taken.	
24	STATUS CODE	STATUS CODE, standard SCD2 column.	
25	TERMINATION DATE	TERMINATION DATE.	3/3/2008 12:00:00 AM

## Account Payment Method Status Type

Description: [ACCOUNT PAYMENT METHOD STATUS TYPE](#)

### Account Payment Method Status Type Hierarchy

Standard Account Payment Method Status Type Hierarchy:



### Account Payment Method Status Type Levels

[Table 3–7](#) shows Account Payment Method Status Type Total: All Account Payment Method Status Types are most aggregate level of the dimension.

**Table 3–7 Account Payment Method Status Type Total**

Sr. Number	Attribute	Description
1.	ACCOUNT PAYMENT METHOD STATUS TYPE TOTAL	Code for All Account Payment Method Status Type.

[Table 3–8](#) shows Account Payment Method Status Type Detail: All Account Payment Method Status Types are most aggregate level of the dimension.

**Table 3–8 Account Payment Method Status Type Detail**

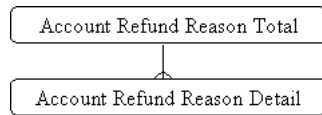
Sr. Number	Attribute	Description	Sample Value
1	ACCOUNT PAYMENT METHOD STATUS TYPE CODE	Code for Direct Debit Status	CHECK
2	ACCOUNT PAYMENT METHOD STATUS TYPE DESC	Direct Debit Status Description	CHECK
3	ACCOUNT PAYMENT METHOD STATUS TYPE NAME	Direct Debit Status Short Description	Transaction By Check
4	LANGUAGE CODE	Unique identifier for Language	

## Account Refund Reason

Description: [ACCOUNT REFUND REASON](#)

### Account Refund Reason Hierarchies

Standard Account Refund Reason Hierarchy:



### Account Refund Reason Levels

Table 3–9 shows Account Refund Reason Total: All Account Refund Reasons are the most aggregate level of the dimension.

**Table 3–9 Account Refund Reason Total**

Sr. Number	Attribute	Description
1.	ACCOUNT REFUND REASON TOTAL	Code for All Account Refund Reason.

Table 3–10 shows Account Refund Reason Detail: All Account Refund Reason Types are most aggregate level of the dimension.

**Table 3–10 Account Refund Reason Detail**

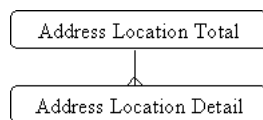
Sr. Number	Attribute	Description	Sample Value
1	ACCOUNT REFUND REASON CODE	A code, used to uniquely identify ACCOUNT REFUND REASON.	INVCADJ
2	ACCOUNT REFUND REASON DESC	A textual description of ACCOUNT REFUND REASON.	Invoice Adjustment
3	ACCOUNT REFUND REASON NAME	The name assigned to ACCOUNT REFUND REASON.	Invoice Adjustment
4	LANGUAGE CODE	Unique identifier for Language	

### Address Location

Description: [ADDRESS LOCATION](#)

### Address Location Hierarchies

Standard Address Location Hierarchy:



### Address Location Levels

Table 3–11 shows Address Location Total: All Address Location is most aggregate level of the dimension.

**Table 3–11 Address Location Total**

Sr. Number	Attribute	Description
1.	ADDRESS LOCATION TOTAL	Code for All Address Locations.

Table 3–12 shows Address Location Detail: All Address Locations are most aggregate level of the dimension.

**Table 3–12 Address Location Detail**

Sr. Number	Attribute	Description	Sample Value
1	ADDRESS DESCRIPTION	Address description. Textual description of the address.	
2	ADDRESS LATITUDE MEASURE	This is the Latitude value of the specified location	
3	ADDRESS LINE 1	Address. Line one of detailed postal address	123 Park Avenue
4	ADDRESS LINE 2	Address. Line two of detailed postal address	ABC Tower
5	ADDRESS LINE 3	Address. Line three of detailed postal address	Suite 1111
6	ADDRESS LINES PHONETIC	Phonetic or Kana representation of the Kanji address lines (used in Japan)	
7	ADDRESS LOCATION CODE	unique identifier for the address.	
8	ADDRESS LONGITUDE MEASURE	This is the longitude location of the specified address.	
9	ADDRESS STYLE	Any specific style of the address. It might include the detail like All Capital words, case, font and so on.	
10	ADDRESS TYPE CODE	Unique identifier for the address type.	Shipping
11	REGION NAME	Name of the Reason	
12	SUBREGION DESC	description of sub region	
13	TAX AUTHORITY CODE	Unique identified for the tax authority	
14	WORLD DESC	Description of world	
15	WORLD NAME	Name of the world	
16	ADDRESS LATITUDE MEASURE	This is the Latitude value of the specified location	
17	POSTAL PLUS CODE	Four digit extension to the United States Postal ZIP code.	
18	STREET CODE	Uniquely identifier of state	
19	CITY DESC	Description of the city	
20	FLAT ROOM CODE	Uniquely identifier of the flat room	
21	GEOGRAPHY STATE CODE	State of the geography	
22	POST OFFICE BOX	PO box if available.	
23	STATE DESC	Description of the state	
24	STATE NAME	Name of the state	
26	BUILDING DESC	Description for Building	
27	COUNTY DESC	Description for County	
28	GEOGRAPHY COUNTRY CODE	Code for Geography Country	
29	POSTCODE CODE	Code for Post Code	
30	ADDRESS DESCRIPTION	Address description. Textual description of the address.	
31	ADDRESS TYPE CODE	Unique identifier for the address type.	
32	BUILDING NAME	Name for Building	
33	COUNTY NAME	Name for County	
34	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	
35	FLAT ROOM DESC	Description for Flat Room	
36	GEOGRAPHY COUNTY CODE	Code for Geography County	

**Table 3–12 (Cont.) Address Location Detail**

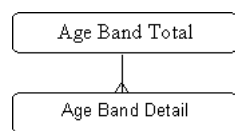
Sr. Number	Attribute	Description	Sample Value
37	GEOGRAPHY ENTITY CODE	unique geography identifier. A unique identifier for the geography entities, could be a system generated unique key for Geography entity.	
38	REGION DESC	Description for Region	
39	WORLD CODE	Description for World	
42	LONGITUDE	The angular distance between a point on any meridian and the prime meridian at Greenwich	
43	PRIMARY ADDRESS TELEPHONE	Telephonic address	
44	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.	
47	COUNTRY NAME	Name for Country	
48	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	
49	EMPLOYEE CODE	Code for Employee	
50	FLOOR DESC	Description for Floor	
51	SUBREGION NAME	Name for Subregion	
52	ADDRESS LOCATION CODE	unique identifier for the address.	
53	CITY NAME	Name for City	
54	COUNTRY DESC	Description for Country	
55	FLAT ROOM NAME	Name for Flat Room	
56	GEOGRAPHY CITY CODE	Code for Geography City	
57	GEOGRAPHY SUBREGION CODE	Code for Geography Subregion	
58	STREET DESC	Description for Street	
59	STREET NAME	Name for Street	
60	TIME ZONE CODE	Unique Identifier for time zone.	
	GEOGRAPHY LOCATION CODE		
	ELEVATION		
	ELEVATION UOM CODE		
	GEOGRAPHY REGION CODE		
	PRIMARY EMAIL ADDRESS		

## Age Band

Description: [AGE BAND](#)

### Age Band Hierarchies

Standard Age Band Hierarchy



### Age Band Levels

[Table 3–13](#) shows Age Band Total: All Age Bands are most aggregate level of the dimension.

**Table 3–13 Age Band Total**

Sr. Number	Attribute	Description
1.	AGE BAND TOTAL	Code for All Age Bands.

Table 3–14 shows Age Band Detail: All Age Bands are most aggregate level of the dimension.

**Table 3–14 Age Band Detail**

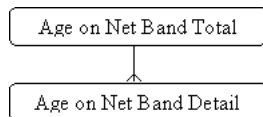
Sr. Number	Attribute	Description	Sample Value
1	AGE BAND CODE	Code for Age band.	AGBND1
2	AGE BAND DESC	Long Description for age band value.	Age Band 21-30
3	AGE BAND FROM	Lower limit of age value of the slab.	21
4	AGE BAND NAME	Description for age band value.	Age Band 21-30
5	AGE BAND TO	Upper limit of age value of the slab.	30
6	LANGUAGE CODE	Unique identifier for Language	

## Age On Net Band

Description: [AGE ON NET BAND](#)

### Age on Net Band Hierarchies

Standard Age On Net Band Hierarchy:



### Age on Net Band Levels

Table 3–15 shows Age on Net Band Total: All age on net bands are most aggregate level of the dimension.

**Table 3–15 Age on Net Band Total**

Sr. Number	Attribute	Description
1.	AGE ON NET BAND TOTAL	Code for All Age On Net Band.

Table 3–16 shows Age On Net Band Detail: All Age on net bands are most aggregate level of the dimension.

**Table 3–16 Age On Net Band Detail**

Sr. Number	Attribute	Description	Sample Value
1	AGE ON NET BAND CODE	Code for age on Net band.	AGBND1
2	AGE ON NET BAND DESC	Long Description for age on net band value.	Age on net Band 0-20
3	AGE ON NET BAND FROM	Lower limit of age on net band value of the slab.	21
4	AGE ON NET BAND NAME	Description for age on net band value.	Age on net Band 21-30
5	AGE ON NET BAND TO	Upper limit of age on net band value of the slab.	30
6	LANGUAGE CODE	Unique identifier for Language.	

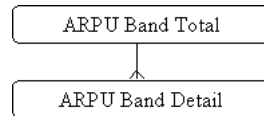


## ARPU Band

Description: [ARPU BAND](#)

### ARPU Band Hierarchies

Standard ARPU Band Hierarchy:



### ARPU Band Levels

[Table 3–17](#) shows ARPU Band Total: All ARPU Bands are most aggregate level of the dimension.

**Table 3–17 ARPU Band Total**

Sr. Number	Attribute	Description
1.	ARPU BAND TOTAL	Code for All ARPU Band.

[Table 3–18](#) shows ARPU Band Detail: All ARPU Bands are most aggregate level of the dimension.

**Table 3–18 ARPU Band Detail**

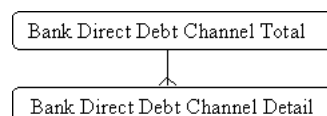
Sr. Number	Attribute	Description	Sample Value
1	ARPU BAND CODE	Unique identifier for revenue band. For example: 0_1000, 1000_3000.	ARPU1000
2	ARPU BAND DESC	Description revenue band.	ARPU Ranging From 0-1000
3	ARPU BAND END VALUE	The end point of a band (the end point is included in the band).	\$1,000.00
4	ARPU BAND END VALUE LOCAL	The end point of a band.	
5	ARPU BAND END VALUE REPORTING	The end point of a band.	
6	ARPU BAND NAME	Name of revenue band.	
7	ARPU BAND START VALUE	The start point of a band (the start value is included in the band).	\$0.00
8	ARPU BAND START VALUE LOCAL	The start point of a band.	
9	ARPU BAND START VALUE REPORTING	The start point of a band.	
10	LANGUAGE CODE	Unique identifier for Language	

## Bank Direct Debit Channel

Description: [BANK DIRECT DEBIT CHANNEL](#)

### Bank Direct Debit Channel Hierarchies

Standard Bank Direct Debt Channel Hierarchy:



### Bank Direct Debit Channel Levels

Table 3–19 shows Bank Direct Debt Channel Total: All Bank Direct Debt Channel is most aggregate level of the dimension.

**Table 3–19 Bank Direct Debt Channel Total**

Sr. Number	Attribute	Description
1.	BANK DIRECT DEBT CHANNEL TOTAL	Code for All Bank Direct Debt Channel.

Table 3–20 shows Bank Direct Debit Channel Detail: All Bank Direct Debt Channel is most aggregate level of the dimension.

**Table 3–20 Bank Direct Debit Channel Detail**

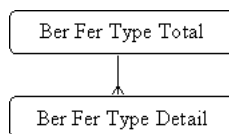
Sr. Number	Attribute	Description	Sample Value
1	BANK BRANCH CODE	Bank Branch id/code.	
2	BANK DIRECT DEBIT CHANNEL CODE	Unique identifier for Bank Direct Debit Channel	SHF
3	PAYMENT CHANNEL CODE		
4	CHANNEL CODE		
5	CHANNEL TYPE CODE		
6	PARTY CODE		
7	PARTY TYPE CODE		
8	CHANNEL NAME		
9	CHANNEL DESC		
10	CAPACITY QUANTITY		
11	EFFECTIVE FROM DATE		
12	EFFECTIVE TO DATE		
13	STATUS CODE		

### Ber Fer Type

Description: [BER FER TYPE](#)

#### Ber Fer Type Hierarchies

Standard Ber Fer Type Hierarchy:



#### Ber Fer Type Levels

Table 3–21 shows Ber Fer Type Total: All Ber Fer Types are most aggregate level of the dimension.

**Table 3–21 Ber Fer Type Total**

Sr. Number	Attribute	Description
1.	BER FER TYPE TOTAL	Code for All Ber Fer Type.

Table 3–22 shows Ber Fer Type Detail: All Ber Fer Type are most aggregate level of the dimension.

**Table 3–22 Ber Fer Type Detail**

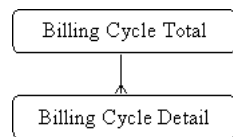
Sr. Number	Attribute	Description	Sample Value
1	BER FER TYPE CODE	Unique identifier for Ber Fer Type	BER
2	BER FER TYPE DESC	Description for Ber Fer Type	Bit Error Ratio
3	BER FER TYPE NAME	Name of Ber Fer Type	Bit Error Ratio
4	LANGUAGE CODE	Unique identifier for Language	

## Billing Cycle

Description: [BILLING CYCLE](#)

### Billing Cycle Hierarchies

Standard Billing Cycle Hierarchy:



### Billing Cycle Levels

The next figure shows Billing Cycle Total: All Billing Cycle is most aggregate level of the dimension.

**Table 3–23 Billing Cycle Total**

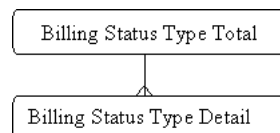
Sr. Number	Attribute	Description	Sample Value
1	BILLING CYCLE CODE	Code.	BIWK
2	BILLING CYCLE DESC	Full description.	Billed every 2 weeks
3	BILLING CYCLE NAME	Name of the Billing Cycle.	Bi-Week
4	BILLING CYCLE PERIOD UOM	The time period unit used to define the Cycle.	
5	BILLING CYCLE UNIT AMOUNT	Amount of period unit in the billing cycle.	
6	BILLING CYCLE UNIT AMOUNT LOCAL	Amount of period unit in the billing cycle.	
7	BILLING CYCLE UNIT AMOUNT REPORTING	Amount of period unit in the billing cycle.	
8	LANGUAGE CODE	Unique identifier for Language	

## Billing Status Type

Description: [BILLING STATUS TYPE](#)

### Billing Status Type Hierarchies

Standard Billing Status Type Hierarchy:



### Billing Status Type Levels

Table 3–24 shows Billing Status Type Total: All Billing Status Type are most aggregate level of the dimension.

**Table 3–24 Billing Status Type Total**

Sr. Number	Attribute	Description
1.	BILLING STATUS TYPE TOTAL	Code for All Billing Status Type.

Table 3–25 shows Billing Status Type Detail: All Billing Status Type is most aggregate level of the dimension.

**Table 3–25 Billing Status Type Detail**

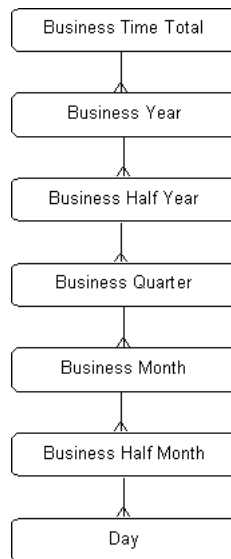
Sr. Number	Attribute	Description	Sample Value
1	BILLING STATUS CATEGORY CODE	BILLING STATUS CATEGORY CODE.	FAILED
2	BILLING STATUS TYPE CODE	BILLING STATUS TYPE code.	FAILDAT
3	BILLING STATUS TYPE DESC	BILLING STATUS TYPE description.	Status type of billing result: Incorrect_data_failed
4	BILLING STATUS TYPE NAME	BILLING STATUS TYPE NAME	Incorrect data failed
5	LANGUAGE CODE	Unique identifier for Language	

## Business Time

Description: Calendar as defined and applied to a business unit. Corresponds business calendar entities (BUSINESS YEAR, BUSINESS HALF YEAR, BUSINESS QUARTER, BUSINESS MONTH, BUSINESS HALF MONTH, DAY).

### Business Time Hierarchies

Standard Business Time Hierarchy:



### Business Time Level

Table 3–26 shows Business Time Total: This is the most aggregate level of the Time dimension.

**Table 3–26 Business Time Total**

Sr. Number	Attribute	Description
1.	ALL BUSINESS TIME CODE	Identification for the top level value

Table 3–27 shows Business Year: It captures information relating to a year in a Business Calendar.

**Table 3–27 Business Year**

Sr. Number	Attribute	Description	Sample Value
1	BUSINESS CALENDAR NAME	Textual name of the business Calendar	BUSINESS
2	BUSINESS YEAR CODE	Unique warehouse key of the Year, in the Calendar.	20050101
3	BUSINESS YEAR DESC	Calendar year description.	BY 2005
4	BUSINESS YEAR END DATE	Calendar year end date.	12/31/2005 12:00:00 AM
5	BUSINESS YEAR NUMBER	Calendar year number	
6	BUSINESS YEAR START DATE	Calendar year start date	12/31/2005 12:00:00 AM
7	BUSINESS YEAR TIMESPAN	The length, in terms of days, of this year in the Calendar. For example: 365 days	365
8	TOTAL CODE		

Table 3–28 shows Business Half Year: It captures information relating to half year in a Business Calendar.

**Table 3–28 Business Half Year**

Sr. Number	Attribute	Description	Sample Value
1	BUSINESS HALF YEAR CODE	Unique warehouse key of the half year, in the Calendar.	20050101
2	BUSINESS HALF YEAR DESC	Calendar half year description.	BY 2005 HY1
3	BUSINESS HALF YEAR END DATE	Calendar half year end date.	12/31/2005 12:00:00 AM
4	BUSINESS HALF YEAR NUMBER	A numeric representation of half year number in the Calendar. It contains values 1 or 2.	1
5	BUSINESS HALF YEAR START DATE	Calendar half year start date.	12/31/2005 0:00
6	BUSINESS HALF YEAR TIMESPAN	The length, in terms of days, of this half year in the Calendar. For example: 178 days	181
7	BUSINESS YEAR CODE	Unique key of the year, in which this half year occurred in the Calendar.	20050101
8	BUSINESS YEAR START DAY CODE	Code for calendar year start day	

Table 3–29 shows Business Quarter: It captures information relating to half year in a Business Calendar.

**Table 3–29 Business Quarter**

Sr. Number	Attribute	Description	Sample Value
1	BUSINESS HALF YEAR CODE	Unique key of the half year	20050101
2	BUSINESS HALF YEAR START DAY CODE	Calendar year start date	
3	BUSINESS QUARTER CODE	Unique key of business quarter	20050101
4	BUSINESS QUARTER DESC	Description for business quarter	BY 2005 Q1
5	BUSINESS QUARTER END DATE	Calendar year end date	12/31/2005 0:00
6	BUSINESS QUARTER NUMBER	Number for business quarter	1
7	BUSINESS QUARTER START DATE	Calendar year start date	12/31/2005 0:00
8	BUSINESS QUARTER TIMESPAN	The length, in terms of days, of this quarter	90
9	BUSINESS YEAR CODE	Unique key of the year, in which this half year occurred in the Calendar.	
10	BUSINESS YEAR START DAY CODE	Code for year start date	

Table 3–30 shows Business Month: It captures information relating to a month in a Business Calendar.

**Table 3–30 Business Month**

Sr. Number	Attribute	Description	Sample Value
1	BUSINESS HALF YEAR CODE	Unique warehouse key for half year	20050101
2	BUSINESS HALF YEAR START DAY CODE	Unique warehouse key for year start day	20050101
3	BUSINESS MONTH CODE	Unique warehouse key of the month, in the Calendar.	20050101
4	BUSINESS MONTH DESC	Calendar month description.	BY 2005 M1
5	BUSINESS MONTH END DATE	Calendar month end date	12/31/2005 0:00
6	BUSINESS MONTH NUMBER	A numeric representation of the month number in the Calendar. It ranges from 1 to 12	1
7	BUSINESS MONTH START DATE	Calendar month start date	12/31/2005 0:00
8	BUSINESS MONTH TIMESPAN	The length, in terms of days, of this month in the Calendar. For example: 30 days	28
9	BUSINESS QUARTER CODE	Unique key of the quarter, in which this month occurred in the Calendar.	20050101
10	BUSINESS QUARTER START DAY CODE	Unique warehouse key for quarter start day	
11	BUSINESS YEAR CODE	Unique warehouse key for year	20050101
12	BUSINESS YEAR START DAY CODE	Unique warehouse key year start day	

Table 3–31 shows Business Half Month: It captures information relating to a Fortnight in a Business Calendar.

**Table 3–31 Business Half Month**

Sr. Number	Attribute	Description	Sample Value
1	BUSINESS HALF MONTH CODE	Unique warehouse key of the Fortnight, in the Calendar.	20050101
2	BUSINESS HALF MONTH DESC	Calendar half month description.	BY 2005 M1 HM1
3	BUSINESS HALF MONTH END DATE	Calendar half month end date.	12/31/2005 12:00:00 AM
4	BUSINESS HALF MONTH NUMBER	A numeric representation of the fortnight number in the Calendar. It ranges from 1 to 24	1
5	BUSINESS HALF MONTH START DATE	Calendar half month start date	12/31/2005 12:00:00 AM
6	BUSINESS HALF MONTH TIMESPAN	The length, in terms of days, of this fortnight in the Calendar. For example: 15 days	15
7	BUSINESS HALF YEAR CODE	Unique warehouse key for half year	20050101
8	BUSINESS HALF YEAR START DAY CODE	Unique warehouse key for half year start day	20050101
9	BUSINESS MONTH CODE	Unique key of the month, in which this fortnight occurred in the Calendar.	20050101
10	BUSINESS MONTH START DAY CODE	Unique warehouse key for month start day	
11	BUSINESS QUARTER CODE	Unique warehouse key for quarter	20050101
12	BUSINESS QUARTER START DAY CODE	Unique warehouse key for quarter start day	
13	BUSINESS YEAR CODE	Unique warehouse key for year	20050101
14	BUSINESS YEAR START DAY CODE	Unique warehouse key for year start day	

Table 3–32 shows Day: It captures information relating to a Day.

**Table 3–32 Day**

Sr. Number	Attribute	Description	Sample Value
1	BUSINESS CURRENT IND	Business Current indicator 'Y' or 'N'	
2	BUSINESS DATE	Business date.	
3	BUSINESS DATE DESC	Business Date description.	
4	BUSINESS DAY CODE	Code for Calendar Day	20050101
5	BUSINESS DAY OF YEAR	Business day of year	
6	BUSINESS DAY TIME SPAN	The length, in terms of days, of this fortnight in the Calendar.	
7	BUSINESS END DATE	Business end date.	12/31/2005 12:00:00 AM
8	BUSINESS HALF MONTH CODE	Unique warehouse key for half month	20050101
9	BUSINESS HALF MONTH DESCRIPTION	Calendar half month description.	
10	BUSINESS HALF MONTH END DATE	Calendar half month end date.	12/31/2005 12:00:00 AM
11	BUSINESS HALF MONTH NUMBER	A numeric representation of the fortnight number in the Calendar. It ranges from 1 to 24.	1
12	BUSINESS HALF MONTH START DATE	Calendar half month start date.	12/31/2005 12:00:00 AM

**Table 3–32 (Cont.) Day**

Sr. Number	Attribute	Description	Sample Value
13	BUSINESS HALF MONTH START DAY CODE	Unique ware house key for half month start day.	20050101
14	BUSINESS HALF MONTH TIMESPAN	The length, in terms of days, of this fortnight in the Calendar. For example: 15 days	15
15	BUSINESS HALF YEAR CODE	Unique warehouse key for half year	20050101
16	BUSINESS HALF YEAR DESC	Business half year description.	
17	BUSINESS HALF YEAR END DATE	Business half year end date.	12/31/2005 12:00:00 AM
18	BUSINESS HALF YEAR NUMBER	Business half year number	
19	BUSINESS HALF YEAR START DATE	Business half year start date	12/31/2005 12:00:00 AM
20	BUSINESS HALF YEAR START DAY CODE	Unique warehouse key for half year start day	20050101
21	BUSINESS HALF YEAR TIMESPAN	The length, in terms of days, of this half year in the Calendar. For example: 178 days	181
22	BUSINESS MONTH CODE	Unique key of the month, in which this fortnight occurred in the Calendar	20050101
23	BUSINESS MONTH DESC	Calendar month description	BY 2005 M1
24	BUSINESS MONTH END DATE	Calendar month end date.	12/31/2005 12:00:00 AM
25	BUSINESS MONTH NUMBER	A numeric representation of the month number in the Calendar. It ranges from 1 to 12.	1
26	BUSINESS MONTH START DATE	Calendar month start date.	12/31/2005 12:00:00 AM
27	BUSINESS MONTH START DAY CODE	Unique warehouse key for month start day	20050101
28	BUSINESS MONTH TIME SPAN	The length, in terms of days, of this month in the Calendar. For example: 30 days	28
29	BUSINESS QUARTER CODE	Unique warehouse key for quarter	20050101
30	BUSINESS QUARTER DESC	Calendar quarter description.	BY 2005 Q1
31	BUSINESS QUARTER END DATE	Business quarter end date.	12/31/2005 12:00:00 AM
32	BUSINESS QUARTER NUMBER	Number for business quarter	
33	BUSINESS QUARTER START DATE	Business quarter start date	12/31/2005 12:00:00 AM
34	BUSINESS QUARTER START DAY CODE	Unique warehouse key for quarter start day	20050101
35	BUSINESS QUARTER TIME SPAN	The length, in terms of days, of this year in the Calendar.	
36	BUSINESS START DATE	Business start date.	12/31/2005 12:00:00 AM
37	BUSINESS WEEK CODE	Unique identifier for business week	20050101
38	BUSINESS WEEK DAY	Business week day.	
39	BUSINESS WEEK DAY CODE	Unique identifier for business week day.	20050101
40	BUSINESS WEEK DAY DESC	Business week day description	
41	BUSINESS WEEK DESC	Business week description.	
42	BUSINESS WEEK END DATE	Business week end date.	12/31/2005 12:00:00 AM
43	BUSINESS WEEK NUMBER	Number for business week	
44	BUSINESS WEEK START DATE	Business week start date.	12/31/2005 12:00:00 AM
45	BUSINESS WEEK START DAY CODE	Unique identifier for business week start day	20050101



**Table 3–32 (Cont.) Day**

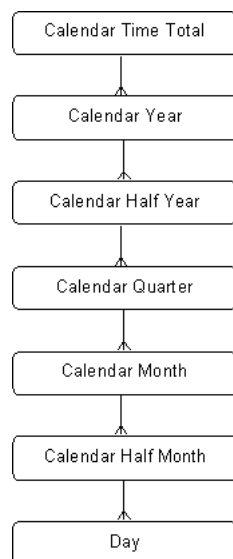
Sr. Number	Attribute	Description	Sample Value
46	BUSINESS WEEK TIME SPAN	The length, in terms of days, of this year in the Calendar.	
47	BUSINESS WEEKEND IND	Weekend indicator 'Y' or 'N'	
48	BUSINESS WORKING DAY IND	Working day indicator 'Y' or 'N'	
49	BUSINESS YEAR CODE	Unique warehouse key for year	20050101
50	BUSINESS YEAR DESC	Calendar year description	
51	BUSINESS YEAR END DATE	Calendar year end date.	12/31/2005 12:00:00 AM
52	BUSINESS YEAR NUMBER	Calendar year number.	
53	BUSINESS YEAR START DATE	Calendar year start date.	12/31/2005 12:00:00 AM
54	BUSINESS YEAR START DAY CODE	Unique warehouse key for year start day	20050101
55	BUSINESS YEAR TIMESPAN	The length, in terms of days, of this year in the Calendar. For example: 365 days	365

## Calendar Time

Description: Information related to the calendar, including: [CALENDAR YEAR](#), [CALENDAR HALF YEAR](#), [CALENDAR QUARTER](#), [CALENDAR MONTH](#), [CALENDAR HALF MONTH](#), [DAY](#).

### Calendar Time Hierarchy

Standard Calendar Time Hierarchy:



### Calendar Time Level

[Table 3–33](#) shows Calendar Time Total: This is the most aggregate level of the Time dimension.

**Table 3–33 Calendar Time Total**

Sr. Number	Attribute	Description
1.	ALL CALENDAR TIME CODE	Identification for the top level value

Table 3–34 shows Calendar Year: It captures information relating to a year in a Business Calendar.

**Table 3–34 Calendar Year**

Sr. Number	Attribute	Description	Sample Value
1	CALENDAR NAME	Textual name of the business Calendar	
2	CALENDAR YEAR CODE	Unique warehouse key of the Year, in the Calendar.	
3	CALENDAR YEAR DESC	Calendar year description.	
4	CALENDAR YEAR END DATE	Calendar year end date.	12/31/2005 12:00:00 AM
5	CALENDAR YEAR NUMBER	Calendar year number.	
6	CALENDAR YEAR START DATE	Calendar year start date.	12/31/2005 0:00
7	CALENDAR YEAR TIMESPAN	The length, in terms of days, of this year in the Calendar. For example: 365 days	

Table 3–35 shows Calendar Half Year: It captures information relating to half year in a Business Calendar.

**Table 3–35 Calendar Half Year**

Sr. Number	Attribute	Description	Sample Value
1	CALENDAR HALF YEAR CODE	Unique warehouse key of the half year, in the Calendar.	
2	CALENDAR HALF YEAR DESC	Calendar half year description.	
3	CALENDAR HALF YEAR END DATE	Calendar half year end date.	12/31/2005 12:00:00 AM
4	CALENDAR HALF YEAR NUMBER	A numeric representation of half year number in the Calendar. It contains values 1 or 2.	
5	CALENDAR HALF YEAR START DATE	Calendar half year start date.	12/31/2005 0:00
6	CALENDAR HALF YEAR TIMESPAN	The length, in terms of days, of this half year in the Calendar. For example: 178 days	
7	CALENDAR YEAR CODE	Unique key of the year, in which this half year occurred in the Calendar.	
8	CALENDAR YEAR START DAY CODE	Code for calendar year start day	

Table 3–36 shows Calendar Quarter: It captures information relating to half year in a Business Calendar.

**Table 3–36 Calendar Quarter**

Sr. Number	Attribute	Description	Sample Value
1	CALENDAR HALF YEAR CODE	Unique key of the half year	20050101
2	CALENDAR HALF YEAR START DAY CODE	Calendar year start date	20050101
3	CALENDAR QUARTER CODE	Unique key of Calendar quarter	20050101
4	CALENDAR QUARTER DESC	Description for Calendar quarter	CY 2005 Q1
5	CALENDAR QUARTER END DATE	Calendar year end date	12/31/2005 0:00
6	CALENDAR QUARTER NUMBER	Number for Calendar quarter	
7	CALENDAR QUARTER START DATE	Calendar year start date	12/31/2005 0:00

**Table 3–36 (Cont.) Calendar Quarter**

Sr. Number	Attribute	Description	Sample Value
8	CALENDAR QUARTER TIMESPAN	The length, in terms of days, of this quarter	
9	CALENDAR YEAR CODE	Unique key of the year, in which this half year occurred in the Calendar.	20050101
10	CALENDAR YEAR START DAY CODE	Code for year start date	20050101

[Table 3–37](#) shows Calendar Month: It captures information relating to a month in a Calendar.

**Table 3–37 Calendar Month**

Sr. Number	Attribute	Description	Sample Value
1	CALENDAR HALF YEAR CODE	Unique warehouse key for half year	20050101
2	CALENDAR HALF YEAR START DAY CODE	Unique warehouse key for year start day	
3	CALENDAR MONTH CODE	Unique warehouse key of the month, in the Calendar.	20050101
4	CALENDAR MONTH DESC	Calendar month description.	
5	CALENDAR MONTH END DATE	Calendar month end date.	12/31/2005 12:00:00 AM
6	CALENDAR MONTH NUMBER	A numeric representation of the month number in the Calendar. It ranges from 1 to 12.	
7	CALENDAR MONTH START DATE	Calendar month start date.	12/31/2005 0:00
8	CALENDAR MONTH TIMESPAN	The length, in terms of days, of this month in the Calendar. For example: 30 days	
9	CALENDAR QUARTER CODE	Unique key of the quarter, in which this month occurred in the Calendar.	20050101
10	CALENDAR QUARTER START DAY CODE	Unique warehouse key for quarter start day	
11	CALENDAR YEAR CODE	Unique warehouse key for year	20050101
12	CALENDAR YEAR START DAY CODE	Unique warehouse key year start day	

[Table 3–38](#) shows Calendar Half Month: It captures information relating to a Fortnight in a Business Calendar.

**Table 3–38 Calendar Half Month**

Sr. Number	Attribute	Description	Sample Value
1	CALENDAR HALF MONTH CODE	Unique warehouse key of the Fortnight, in the Calendar.	20050101
2	CALENDAR HALF MONTH DESC	Calendar half month description.	
3	CALENDAR HALF MONTH END DATE	Calendar half month end date.	12/31/2005 12:00:00 AM
4	CALENDAR HALF MONTH NUMBER	A numeric representation of the fortnight number in the Calendar. It ranges from 1 to 24.	
5	CALENDAR HALF MONTH START DATE	Calendar half month start date	
6	CALENDAR HALF MONTH TIMESPAN	The length, in terms of days, of this fortnight in the Calendar. For example: 15 days	
7	CALENDAR HALF YEAR CODE	Unique warehouse key for half year.	

**Table 3–38 (Cont.) Calendar Half Month**

Sr. Number	Attribute	Description	Sample Value
8	CALENDAR HALF YEAR START DAY CODE	Unique warehouse key for half year start day	
9	CALENDAR MONTH CODE	Unique key of the month, in which this fortnight occurred in the Calendar.	20050101
10	CALENDAR MONTH START DAY CODE	Unique warehouse key for month start day	
11	CALENDAR QUARTER CODE	Unique warehouse key for quarter	20050101
12	CALENDAR QUARTER START DAY CODE	Unique warehouse key for quarter start day	
13	CALENDAR YEAR CODE	Unique warehouse key for year	20050101
14	CALENDAR YEAR START DAY CODE	Unique warehouse key for year start day	

Table 3–39 shows Day: It captures information relating to a day.

**Table 3–39 Day**

Sr. Number	Attribute	Description	Sample Value
1	CALENDAR CURRENT IND	Calendar current indicator 'Y' or 'N'	
2	CALENDAR DATE	Calendar date.	
3	CALENDAR DATE DESC	Calendar date description.	
4	CALENDAR DAY OF YEAR	Calendar day of year.	
5	CALENDAR DAY TIMESPAN	The length, in terms of days.	
6	CALENDAR END DATE	Calendar end date	12/31/2005 0:00
7	CALENDAR HALF MONTH CODE	Calendar Half Month Code	20050101
8	CALENDAR HALF MONTH DESC	Calendar half month description.	
9	CALENDAR HALF MONTH END DATE	Calendar half month end date	12/31/2005 0:00
10	CALENDAR HALF MONTH NUMBER	A numeric representation of the month number in the Calendar. It ranges from 1 to 12.	
11	CALENDAR HALF MONTH START DATE	Calendar half month start date.	12/31/2005 0:00
12	CALENDAR HALF MONTH START DAY CODE	The unique identifier for a calendar half month start day.	
13	CALENDAR HALF MONTH TIMESPAN	The length, in terms of days, of this fortnight in the Calendar. For example: 15 days	
14	CALENDAR HALF YEAR CODE	The unique identifier for a calendar half year.	20050101
15	CALENDAR HALF YEAR DESC	Calendar half year description.	
16	CALENDAR HALF YEAR END DATE	Calendar half year description,	12/31/2005 0:00
17	CALENDAR HALF YEAR NUMBER	A numeric representation of half year number in the Calendar. It contains values 1 or 2.	
18	CALENDAR HALF YEAR START DATE	Calendar half year start date.	12/31/2005 0:00
19	CALENDAR HALF YEAR START DAY CODE	The unique identifier for a calendar half year start day.	20050101
20	CALENDAR HALF YEAR TIME SPAN	The length, in terms of days, of this half year in the Calendar. For example: 178 days	
21	CALENDAR HOLIDAY IND	It indicates holiday indicator 'Y' or 'N'	

**Table 3–39 (Cont.) Day**

<b>Sr. Number</b>	<b>Attribute</b>	<b>Description</b>	<b>Sample Value</b>
22	CALENDAR MONTH CODE	The unique identifier for a calendar month.	20050101
23	CALENDAR MONTH DESC	Calendar month description.	
24	CALENDAR MONTH END DATE	Calendar month end date.	12/31/2005 0:00
25	CALENDAR MONTH NUMBER	A numeric representation of the month number in the Calendar. It ranges from 1 to 12.	
26	CALENDAR MONTH START DATE	Calendar month start date.	12/31/2005 0:00
27	CALENDAR MONTH START DAY CODE	The unique identifier for a calendar month start day	20050101
28	CALENDAR MONTH TIME SPAN	The length, in terms of days, of this month in the Calendar. For example: 30 days	
29	CALENDAR QUARTER CODE	The unique identifier for calendar quarter.	20050101
30	CALENDAR QUARTER DESC	Calendar quarter description.	
31	CALENDAR QUARTER END DATE	Calendar quarter end date.	12/31/2005 0:00
32	CALENDAR QUARTER NUMBER	Number for Calendar quarter	
33	CALENDAR QUARTER START DATE	Calendar quarter start date.	12/31/2005 0:00
34	CALENDAR QUARTER START DAY CODE	The unique identifier for a calendar quarter start day.	20050101
35	CALENDAR QUARTER TIMESPAN	The length, in terms of days, of this quarter	
36	CALENDAR START DATE	Calendar Start Date	12/31/2005 0:00
37	CALENDAR WEEK CODE	The unique identifier for calendar week.	20050101
38	CALENDAR WEEK DAY	Calendar week day	
39	CALENDAR WEEK DAY CODE	The unique identifier for a calendar week day.	20050101
40	CALENDAR WEEK DAY DESCRIPTION	Calendar week day description.	
41	CALENDAR WEEK DESC	Calendar week description.	
42	CALENDAR WEEK END DATE	Calendar week end date.	12/31/2005 0:00
43	CALENDAR WEEK NUMBER	A numeric representation of the week number in the Calendar.	
44	CALENDAR WEEK START DATE	Calendar week start date	12/31/2005 0:00
45	CALENDAR WEEK TIMESPAN	The length, in terms of days, of this week	
46	CALENDAR WEEKEND IND	It indicates calendar weekend indicator 'Y' or 'N'	
47	CALENDAR WORKING DAY IND	It indicates the calendar working day indicator 'Y' or 'N'	
48	CALENDAR YEAR CODE	The unique identifier for a calendar year.	20050101
49	CALENDAR YEAR DESC	Calendar week description.	
50	CALENDAR YEAR END DATE	Calendar year end date.	12/31/2005 0:00
51	CALENDAR YEAR NUMBER	A numeric representation of the year number in the Calendar.	
52	CALENDAR YEAR START DATE	Calendar year start date.	12/31/2005 0:00
53	CALENDAR YEAR START DAY CODE	The unique identifier for a calendar year starts date.	

**Table 3–39 (Cont.) Day**

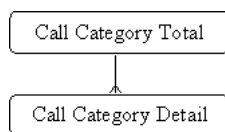
Sr. Number	Attribute	Description	Sample Value
54	CALENDAR YEAR TIME SPAN	The length, in terms of days, of this year in the Calendar. For example: 365 days	
55	CALENDAR WEEK START DAY CODE	The unique identifier for a calendar week starts date.	20050101
56	DAY CODE	The unique identifier for a calendar date	

## Call Category

Description: [CALL\\_CATEGORY](#)

### Call Category Hierarchies

Standard Call Category Hierarchy:



### Call Category Levels

[Table 3–40](#) shows Call Category Total: All Call Category are most aggregate level of the dimension.

**Table 3–40 Call Category Total**

Sr. Number	Attribute	Description
1.	CALL_CATEGORY_TOTAL	Code for All Call Categories.

[Table 3–41](#) shows Call Category Detail: All Call Category is most aggregate level of the dimension.

**Table 3–41 Call Category Detail**

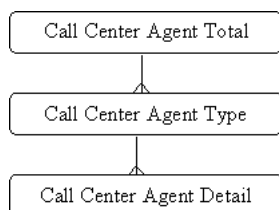
Sr. Number	Attribute	Description	Sample Value
1	CALL_CATEGORY_CODE	Code for Call Category.	DATA
2	CALL_CATEGORY_DESC	Description of the Call Category.	Data Call
3	CALL_CATEGORY_NAME	Short description of the Call Category.	Data Call

## Call Center Agent

Description: [CALL\\_CENTER\\_AGENT](#)

### Call Center Agent Hierarchy

Standard Call Center Agent Hierarchy:



## Call Center Agent Levels

Table 3–42 shows Call Center Agent Total: All call center agent are most aggregate level of the dimension.

**Table 3–42 Call Center Agent Total**

Sr. Number	Attribute	Description
1.	CALL CENTER AGENT TOTAL	Code for All Call Center Agent Subscribers.

Table 3–43 shows Call Center Agent Type: The type of Call Center Agent. Examples includes: Employee, IVR.

**Table 3–43 Call Center Agent Type**

Sr. Number	Attribute	Description	Sample Value
1	CALL CENTER AGENT TYPE DESC	Description of the Agent type.	AUTO
2	CALL CENTER AGENT TYPE NAME	Name of Agent type.	
3	LANGUAGE CODE	Uniquely identifier of language	
4	CALL CENTER AGENT TYPE CODE		

The next table shows Call Center Agent Detail: Detail level of the dimension. Stores the Call Center Agent Information.

**Table 3–44 Call Center Agent Detail**

Sr. Number	Attribute	Description	Sample Value
1	CALL CENTER AGENT CODE	All the possible agents with whom the customer can make a contact like IVR, Human Agent, Corporate agent, CRC, and so on.	CODE-1
2	CALL CENTER AGENT DESC	Description of the Agent.	
3	CALL CENTER AGENT NAME	Name of Agent.	HUMAN
4	CALL CENTER AGENT TYPE CODE	Foreign key, to indicate which type this agent is, for example: Auto, Human.	
5	CALL CENTER CODE	Uniquely identifier of call center	
6			
7	BILLING ADDRESS EFFECTIVE DATE	Date on which the billing address referenced in the billing_address_id column became active. This facilitates queries such as find customers who changed address in the last 3 months.""	
8	BUSINESS DIVISION EXECUTIVE NAME	BUSINESS DIVISION EXECUTIVE LAST NAME is the last name of the business division executive to whom the employee reports to. Like LOB Owner.	
9	BUSINESS PHONE NUMBER	Phone number used for business purpose	
10	CELL PHONE NO	Redundancy to 'party contact information'	
11	CHILDREN COUNT	Number of children	
12	CONTACT ADDRESS EFFECTIVE DATE	Date on which the contact address referenced in the billing_address_id column became active. This facilitates queries such as find customers who changed address in the last 3 months.""	
13	COST CENTER NUMBER	The cost center to which the bank employee expenses are charged.	
14	DATE OF BIRTH	Date of Birth of the individual.	
15	DATE OF DEATH	Date of natural person death.	

**Table 3–44 (Cont.) Call Center Agent Detail**

Sr. Number	Attribute	Description	Sample Value
16	DEATH CERTIFICATE CODE	The certification document number for customer's death.	
17	DEPENDENTS COUNT	Number of dependents	
18	DRIVER LICENSE NUMBER	Driver License Number in most countries.	
19	DWELLING SIZE	Size of dwelling	
20	DWELLING TENURE	Tenure of dwelling	
21	ECONOMICALLY ACTIVE IND	customer is economically active (is not a minor or pensioner and so on.)	
22	EDUCATION CODE	The customer highest level of education.	
23	EMAIL	Redundancy to 'party contact information'	
24	EMPLOYEE CODE	A code for any person or business that is of interest to the Communications Service Provider.	
25	EMPLOYEE DESIGNATION CODE	Unique warehouse key, representing the designation	
26	EMPLOYEE DISCOUNT GROUP CODE	Unique identifier for Employee Discount Group	
27	EMPLOYEE KEY	Key value for each employee	
28	EMPLOYEE NUMBER	Internal number for the employee.	
29	EMPLOYEE TYPE CODE	Unique identifier for Employee Type	PT
30	EMPLOYEE TYPE DESC	Description of the Employee Type	Part Time
31	EMPLOYEE TYPE NAME	Unique identifier for the Employee Type	Part Time
32	EMPLOYER TAX NUMBER	The tax code of Employer.	
33	EMPLOYMENT BEGIN DATE	Start date for the employment.	12/31/2005 12:00:00 AM
34	EMPLOYMENT END DATE	If the employee quit from the Bank, we still hold the information of his past employment	
35	EMPLOYMENT EXEMPT IND	An employee exempt from the overtime policies of the University due to the nature of the work, as compared to (Non-Exempt).  Education requirements of the position and salary range. These employees are paid an annual salary and are not customarily eligible for overtime pay.	
36	EMPLOYMENT STATUS	EMPLOYEE STATUS is the abbreviated identifier for the employment status. Employee	
37	END OF JOB CONTRACT	End date of the customer's job contract (for contracts concluded for definite terms).	
38	ETHNIC BACKGROUND	Customer Attribute of an employee	
39	ETHNICITY	Classifies the individual for minority reporting purposes.	
40	FAMILY NAME IN MAIDEN	Given name in maiden	
41	FIRST NAME	First name of a party individual	
42	FORM OF EMPLOYMENT	The customer's form of employment (private entrepreneur, employee, civil servant and so on.)	
43	GENDER CODE	For PARTYS that are people, this is their GENDER. For PARTYS that are organizations, this indicates whether the organization is foreign or domestically owned.	
44	GIVEN NAME IN MAIDEN	Given name in maiden	
45	HOME TELEPHONE NO	Redundance to 'party contact information'	
46	HOUSEHOLD KEY	The code of household which the party belongs to.	



**Table 3–44 (Cont.) Call Center Agent Detail**

<b>Sr. Number</b>	<b>Attribute</b>	<b>Description</b>	<b>Sample Value</b>
47	INCOME	Income of a party individual	
48	INCOME LCL	Income of a party individual	
49	INCOME RPT	Income of a party individual	
50	JOB CONTRACT TYPE	Type of the customer's job contract	
51	JOB KEY	Code for job of subscriber.	
52	JOB POSITION	job Position.	
53	LANGUAGE CODE	Unique identifier for Language	
54	LAST NAME	Last name of a party individual	
55	LAST PERFORMANCE RATING	This describes the annual rating assigned to the employee.	
56	LAST PERFORMANCE RATING DATE	When the last rating is done.	
57	LEGAL TITLE TO HOUSING	The customer's legal title to home (rents, owns and so on.)	
58	LIVING AT CURRENT ADDRESS SINCE	Date since the customer has lived at the present address.	
59	MANAGER CODE	manager's employee code.	
60	MARITAL STATUS	CSALADI ALLAPOT. Marital status	
61	MARTIAL STATUS CODE		
62	MIDDLE NAME	Middle name of a party individual	
63	MOTHER FIRST NAME	Mother's first name	
64	MOTHER LAST NAME	Mother's last name	
65	NAME OF WORKPLACE	Name of workplace	
66	NAME PREFIX	Name prefix For example: Mr, Mrs, Ms, Dr,	
67	NAME SUFFIX	Name suffix. For example: PhD, MD, JD, MA	
68	NATIONALITY CODE	Code for Nationality of subscriber	
69	NUMBER OF EARNERS IN HOUSEHOLD	Number of wage earners in the household.	
70	NUMBER OF PERSONS LIVING IN HOUSEHOLD	Number of persons sharing the customer's household.	
72	OFFICE TELEPHONE NO	Redundancy to 'party contact information'	
73	ORGANIZATION BUSINESS UNIT KEY		
74	PERSONAL ID NUMBER	In China, this one will be same as party.national_ identifier.	
75	PLACE OF BIRTH	Where the person was born.	
76	PREVIOUS EMPLOYER TAX NUMBER	Tax number of previous employer.	
77	PREVIOUS EMPLOYMENT END DATE	End date of previous job.	
78	PREVIOUS EMPLOYMENT START DATE	Start date of previous job.	12/31/2005 12:00:00 AM
79	SOC JOB KEY		
80	SOCIAL SECURITY NUMBER	In US, this code will be same as party.national_ identifier. Null if some country does not have.	
81	SOURCE OF INCOME	Source of income (can typify, may be several)	
82	START OF EMPLOYMENT	Start of employment	
83	TAX NUMBER	Tax number	

**Table 3–44 (Cont.) Call Center Agent Detail**

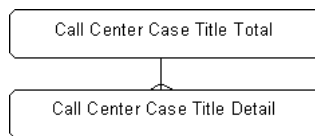
Sr. Number	Attribute	Description	Sample Value
84	ACTIVE IND	Activate Indicator	
85	ADDRESS	Address	
86	BARING REASON CODE	Unique identifier for Baring Reason	
87	BUSINESS LEGAL STATUS CODE	A unique identifier for a legal classification of a non-residential Customer.	
88	CITY	City of the party. Redundance to party location history.	
89	COUNTRY	Country of the party. Redundance to party location history.	
90	CUSTOMER IND	Indicator for Customer	
91	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	
92	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	
93	EMPLOYEE NAME	Name of the employee	
94	PARTY DESC	Description for the Party	
95	PARTY KEY	Key value for Party	
96	PARTY NAME	Name of the Party	
97	PARTY TYPE CODE	Unique identifier for Party Type	
98	POST CODE	Unique identifier for Post	
99	SOURCE SYSTEM KEY	Key value for Source System	
100	STATE	State Name	
101	STATUS CODE	Current Status	

## Call Center Case Title

Description: [CALL CENTER CASE TITLE](#)

### Call Center Case Title Hierarchies

Standard Call Center Case Title Hierarchy:



### Call Center Case Levels

[Table 3–45](#) shows Call Center Case Title Total: All call center case title are most aggregate level of the dimension.

**Table 3–45 Call Center Case Title Total**

Sr. Number	Attribute	Description
1.	CALL CENTER CASE TITLE TOTAL	Total of all call center case titles.

[Table 3–46](#) shows Call Center Case Title Detail: Detail level of the dimension. Stores the Call Center Case Title Information.

**Table 3–46 Call Center Case Title Detail**

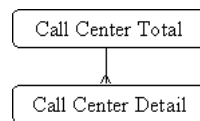
Sr. Number	Attribute	Description	Sample Value
1	CALL CENTER CASE SUB TYPE CODE	Code or Id for Call Center Case Sub Type.	
2	CALL CENTER CASE TITLE CODE	Code or Id for Call Center Case Title.	CBPWD
3	CALL CENTER CASE TITLE DESC	Description of the Call Center Case Title.	
4	CALL CENTER CASE TITLE NAME	Name of Call Center Case Title.	
5	LANGUAGE CODE	Uniquely identifier of language	

## Call Center

Description: [CALL CENTER](#)

### Call Center Hierarchies

Standard Call Center Hierarchy:



### Call Center Levels

[Table 3–47](#) shows Call Center Total: All call centers is most aggregate level of the dimension.

**Table 3–47 Call Center Total**

Sr. Number	Attribute	Description
1.	CALL CENTER TOTAL	Code for All Call Centers.

[Table 3–48](#) shows Call Center: Detail level of the dimension. Stores the Call Center Information.

**Table 3–48 Call Center Detail**

Sr. Number	Attribute	Description
1	CALL CENTER CODE	CODE-1
2	NUMBER OF EMPLOYEES	NUMBER OF EMPLOYEES.
3	NUMBER OF LINES	How many telephone lines (trunk) are offered.
4	PRIMARY LANGUAGE	The language/Dialects the call center can support.
5	ACCOUNT CLERK CODE	This field is client specific. The definition and use of this field is customizable for each client.
6	ADDRESS LINE 1	Address. Line one of detailed postal address
7	ADDRESS LINE 2	Address. Line two of detailed postal address
8	ADDRESS LINE 3	Address. Line three of detailed postal address
9	ADDRESS LOCATION CODE	Unique identifier for the address. unique identifier for the address location
10	ADDRESS TYPE CODE	Unique identifier of the address type.
11	ADDRESS USAGE	Describes how the address is used
12	ANNUAL REVENUE	Revenue of the company.
13	ANNUAL REVENUE LOCAL	Revenue of the company.
14	ANNUAL REVENUE REPORTING	Revenue of the company.

**Table 3–48 (Cont.) Call Center Detail**

Sr. Number	Attribute	Description
15	ANNUAL SALES	Sales for Annual
16	ANNUAL SALES LOCAL	Local Sales for Annual
17	ANNUAL SALES REPORTING	Reporting Sales for Annual
18	BANKRUPTCY END DATE	The end date of bankruptcy. If current date is behind start and end date is null, then the company is undergoing the bankruptcy process.
19	BANKRUPTCY START DATE	start date of bankruptcy.
20	BUSINESS ENTITY CODE	Unique Identifier for Business Entity
21	BUSINESS UNIT CONCEPT	Possible values include, Convenience, General Merchandise, Category dominant anchors with few small tenants, Fashion, Higher-end (Upscale), Fashion oriented, Manufacturer's Outlet, Leisure, Tourist oriented and Discount.
22	BUSINESS UNIT TYPE CODE	Unique identifier of the business unit type
23	CHAIRMAN CODE	Connect to Another Person Party who is responsible for this Organization.
24	CHANNEL TYPE CODE	Unique identifier of the channel type
25	COMPANY REGISTRY NUMBER	Will be same as Party. National_Identifier. Natural Key for Organization.
26	CONSTRUCTION STATUS	Identifies the status of the site such as 'Under Construction', 'New', and so on.
27	CONTACT CODE	ID of the contact person for the organization.
28	CONTACT NAME	Contact Employee for organization.
29	CONTACT NUMBER	This is the number for the method specified to contact this site. There can be multiple contact numbers of each type for each site.
30	CONTACT TYPE CODE	This is the general method to use to contact a site, that is, Phone, Fax, Telex, and so on.
31	COURT CODE	Code of the law of court.
32	DOMESTIC INDICATOR	For PARTYS that are organizations, this indicates whether the organization is foreign or domestically owned.
33	DUNS NUMBER	DUNS NUMBER is an identifier for organization.
34	EMPLOYEE COUNT	Total number of employee in the company or organization.
35	EQUITY AMOUNT	The equity value of the company/org.
36	EQUITY AMOUNT LOCAL	The equity value of the company/org.
37	EQUITY AMOUNT REPORTING	The equity value of the company/org.
38	EXTERNAL NAME	Name/Number assigned to site for electronic communication. For example: EDI transactions.
39	FINAL SETTLEMENT END DATE	End date of final settlement.
40	FINAL SETTLEMENT START DATE	Start date of final settlement
41	JUDICIAL DISTRAINT CODE	Case identifier of the judicial distraint
42	JUDICIAL DISTRAINT DATE	Date of the judicial distraint
43	LIQUIDATION END DATE	The date when the company/org was liquidated. If is null and start_date is not null, the company is undergoing the liquidation.
44	LIQUIDATION START DATE	Start date of liquidation
45	LOCATION TYPE CODE	Unique identifier for location type
46	LONG DESCRIPTION	The 10 character abbreviation of the store name
47	MANAGER CODE	ID of the manager for the organization.
48	MANAGER EMPLOYEE NUMBER	Unique key denoting the employee number of the employee's manager.

**Table 3–48 (Cont.) Call Center Detail**

Sr. Number	Attribute	Description
49	MANAGER NAME	Name of manager for the whole company.
50	ORGANIZATION BANNER CODE	
51	ORGANIZATION BUSINESS UNIT CODE	Unique identifier for Business Unit. To identify whether the site is a store, distribution center or warehouse.
52	ORGANIZATION BUSINESS UNIT TYPE CODE	Unique identifier for Organization business unit type
53	ORGANIZATION CODE	The unique identifier of the organization
54	ORGANIZATION DISTRICT CODE	District code of ORGANIZATION DISTRICT
55	ORGANIZATION DIVISION CODE	Division code of a ORGANIZATION
56	ORGANIZATION NAME	Name of the organization
57	ORGANIZATIONAL DEMOGRAPHY VALUE CODE	Unique identifier for organization demographic value
58	PAYMENT ACCOUNT CLOSE DATE	Closing date of the account for payments.
59	PAYMENT ACCOUNT NUMBER	Account number for payments.
60	PAYMENT ACCOUNT OPEN DATE	Opening date of the account for payments.
61	POSTAL PLUS CODE	Four digit extension to the United States Postal ZIP code.
62	POSTCODE	Postal codes of interest to the Retail Organization
63	PRIMARY ADDRESS TELEPHONE	Default Address Telephone Number
64	PRIMARY BUSINESS UNIT CALENDAR CODE	Primary Business Unit Calendar Code
65	PRIMARY CURRENCY ISO CODE	The unique ISO standard identifier of the CURRENCY
66	PRIMARY EMAIL ADDRESS	Default Email Address
67	PRIMARY MARKET AREA CODE	Market area code under which the business unit falls
68	PRIMARY TRADE AREA CODE	Primary Trade area code, under which the business unit falls
69	SEAL IMAGE	The image of the Organization's Seal, or the Artificial Person's Signature.
70	SECONDARY DESCRIPTION	The secondary description or name of the store or warehouse.
72	SHOPPING CENTER TYPE	Shopping center is group of retail and other commercial establishments that is planned, developed, owned, and managed as a single property.=- Strip Center (Neighborhood, Community)- Mall (Power, Super Regional, Regional, Fashion/Specialty, Lifestyle, Outlet, Theme/Festival)
73	SHORT DESCRIPTION	The 3 character abbreviation of the store name.
74	STOCK EXCHANGE NAME	Abbreviation of listed companies as used on the stock exchange.
75	TAX EXEMPT STATUS	Indicates if the org. is tax exempt.
76	TERMINATION DATE	Termination date of the company in case of company was founded with termination date.
77	TIME ZONE	It denotes which TimeZone the Site is in.
78	TOTAL LINEAR DISTANCE	The total linear selling space of the location.
79	VALIDATION END DATE	Effective date of the deletion of the company's record from the company register.
70	SECONDARY DESCRIPTION	The secondary description or name of the store or warehouse.

**Table 3–48 (Cont.) Call Center Detail**

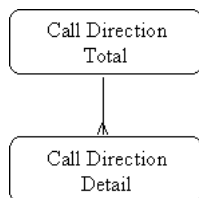
Sr. Number	Attribute	Description
80	VALIDATION START DATE	Date of the registration of the company' record deletion from the company register.
81	VAT INCLUDE INDICATOR	Indicates whether the Value Added Tax will be included in the retail prices for the store. Valid values are 'Y' or 'N'
82	VAT REGION	The number of the Value Added Tax region in which this store or warehouse is contained.
83	PARTY CODE	
84	PARTY TYPE CODE	
85	BUSINESS LEGAL STATUS CODE	
86	SOURCE SYSTEM CODE	
87	BARING REASON CODE	
88	STATUS CODE	
89	CITY	
90	STATE	
91	COUNTRY	
92	PARTY NAME	
93	PARTY DESC	
94	ADDRESS	
95	ACTIVE INDICATOR	
96	CUSTOMER INDICATOR	
97	EFFECTIVE FROM DATE	
98	EFFECTIVE TO DATE	

## Call Direction

Description: [CALL DIRECTION](#)

### Call Direction Hierarchies

Standard Call Direction Hierarchy:



### Call Direction Levels

[Table 3–49](#) shows Call Direction Total: All Call Directions are most aggregate level of the dimension.

**Table 3–49 Call Direction Total**

Sr. Number	Attribute	Description
1.	ALL CALL DIRECTION CODE	Code for Call Directions.

Table 3–50 shows Call Direction Detail: Detail level of the dimension. Stores the Call Direction Information.

**Table 3–50 Call Direction Detail**

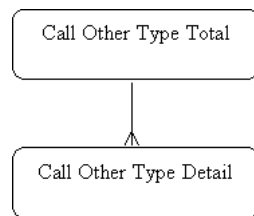
Sr. Number	Attribute	Description	Sample Value
1	CALL DIRECTION CODE	Code for call direction.	IN
2	CALL DIRECTION DESC	Description of call direction.	To indicate incoming call
3	CALL DIRECTION NAME	Name of the call direction.	IN
4	LANGUAGE CODE	Unique identifier for Language	

## Call Other Type

Description: [CALL OTHER TYPE](#)

### Call Other Type Hierarchies

Standard Call Other Type Hierarchy:



### Call Other Type Levels

Table 3–51 shows Call Other Type Total: All Call Other Types are most aggregate level of the dimension.

**Table 3–51 Call Other Type Total**

Sr. Number	Attribute	Description
1.	ALL CALL OTHER TYPE CODE	Code for Call Other Types.

Table 3–52 shows Call Other Type Detail: Detail level of the dimension. Stores the Call other Type Information.

**Table 3–52 Call Other Type Detail**

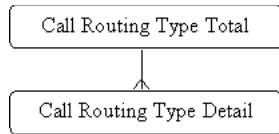
Sr. Number	Attribute	Description	Sample Value
1	CALL OTHER TYPE CODE	A code used to uniquely identify a category of Special Services that a Call may utilize. Examples include: 1 - Directory Assistance 2 - 800 3 - 900 4 - 911 5 - Customer Service 6 - Voice Mail.	CUSTSRVC
2	CALL OTHER TYPE DESC	A textual description of a Call Special Service Type.	Customer Service
3	CALL OTHER TYPE NAME	The name assigned to a Call Special Service Type. Examples include: Directory Assistance 800 900 911 Customer Service Voice Mail.	Customer Service
4	LANGUAGE CODE	Unique identifier for Language	

## Call Routing Type

Description: [CALL ROUTING TYPE](#)

### Call Routing Type Hierarchies

Standard Call Routing Type Hierarchy:



### Call Routing Type Levels

Table 3–53 shows Call Routing Type Total: All Call Routing Type are most aggregate level of the dimension.

**Table 3–53 Call Routing Type Total**

Sr. Number	Attribute	Description
1.	ALL CALL ROUTING CODE	Code for All Call Routing Subscribers.

Table shows Call Routing Type Detail: Detail level of the dimension. Stores the Call Routing Type Information.

**Table 3–54 Call Routing Type Detail**

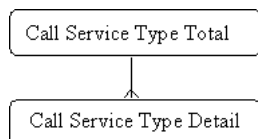
Sr. Number	Attribute	Description	Sample Value
1	CALL ROUTING TYPE CODE	The code for the type can use number or character.	ATA
2	CALL ROUTING TYPE DESC	Full Description.	Call was routed from Air To Air
3	CALL ROUTING TYPE NAME	The short name for the type.	Air To Air
4	LANGUAGE CODE	Uniquely identifier of language	

## Call Service Type

Description: [CALL SERVICE TYPE](#)

### Call Service Type Hierarchies

Standard Service Type Hierarchy:



### Call Service Type Levels

Table 3–55 shows Call Service Type Total: All Call Service Type are most aggregate level of the dimension.

**Table 3–55 Call Service Type Total**

Sr. Number	Attribute	Description
1.	CALL SERVICE TYPE TOTAL CODE	Code for All Call Service Type.

Table 3–56 shows Call Service Type Detail: Detail level of the dimension. Stores the Call Service Type Information.



**Table 3–56 Call Service Type Detail**

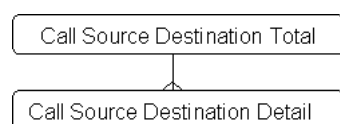
Sr. Number	Attribute	Description	Sample Value
1	CALL SERVICE TYPE CODE	The code.	1
2	CALL SERVICE TYPE DESC	The full description.	Fire
3	CALL SERVICE TYPE NAME	The title.	Fire
4	LANGUAGE CODE	Uniquely identifier of language	

## Call Source Destination

Description: [CALL SOURCE DESTINATION](#)

### Call Source Destination Hierarchies

Standard Call Source Destination Hierarchy:



### Call Source Destination Levels

[Table 3–57](#) shows Call Source Destination Total: All Call Source Destination are most aggregate level of the dimension.

**Table 3–57 Call Source Destination Total**

Sr. Number	Attribute	Description
1.	CALL SOURCE DESTINATION TOTAL	Code for All Call Source Destination

[Table 3–58](#) shows Call Source Destination Detail: Detail level of the dimension. Stores the Call Source Destination Information.

**Table 3–58 Call Source Destination Detail**

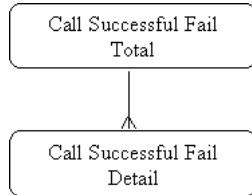
Sr. Number	Attribute	Description	Sample Value
1	CALL SOURCE DESTINATION CODE	Code for call destination.	8675583965191
2	CALL SOURCE DESTINATION DESC	Description of call destination.	8675583965191
3	CALL SOURCE DESTINATION NAME	Name of the destination.	8675583965191
4	DESTINATION TYPE CODE	Unique identifier of destination type.	
5	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
6	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.	
7	NETWORK TYPE CODE	Unique identifier of destination network type.	
8	NUMBER AREA CODE	Area code. For example: 713-Houston	
9	NUMBER NETWORK TYPE CODE	Unique identifier of destination network type.	
10	STATUS CODE	Current status of the assignment.	

## Call Success Fail Type

Description: [CALL SUCCESS FAILURE TYPE](#)

### Call Successful Fail Hierarchies

Standard Call Success Fail Hierarchy:



### Call Success Fail Type Levels

[Table 3–59](#) shows Call Successful Fail Total: All Call Successful/failed is most aggregate level of the dimension.

**Table 3–59** *Call Successful Fail Total*

Sr. Number	Attribute	Description
1.	ALL SUCCESSFUL/FAILED CODE	Code for All Call Successful/failed.

[Table 3–60](#) shows Call Successful Fail Detail: Detail level of the dimension. Stores the Successful/failed Detail Information.

**Table 3–60** *Call Successful Fail Detail*

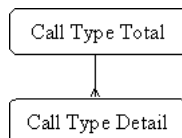
Sr. Number	Attribute	Description	Sample Value
1	CALL SUCCESS FAILURE TYPE CODE	Call Success failure id.	FAIL
2	CALL SUCCESS FAILURE TYPE DESC	Call Success failure description.	Fail
3	CALL SUCCESS FAILURE TYPE NAME	Call Success failure short description.	Fail
4	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Call Type

Description: [CALL TYPE](#)

### Call Type Hierarchies

Standard Call Type Hierarchy:



### Call Type Levels

[Table 3–61](#) shows Call Type Total: All Call Type are most aggregate level of the dimension.

**Table 3–61 Call Type Total**

Sr. Number	Attribute	Description
1.	ALL CALL TYPE CODE	Code for All Call Type Subscribers.

[Table 3–62](#) shows Call Type Detail: Detail level of the dimension. Stores the Call Type Information.

**Table 3–62 Call Type Detail**

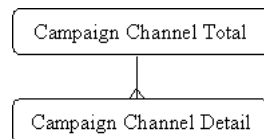
Sr. Number	Attribute	Description	Sample Value
1	CALL CATEGORY CODE	The code for the call category.	VOI
2	CALL TYPE CODE	The code for the call type.	INTL
3	CALL TYPE DESC	The Full Description.	International
4	CALL TYPE NAME	The title.	International
5	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Campaign Channel

Description: [CAMPAIGN CHANNEL](#)

### Campaign Channel Hierarchies

Standard Campaign Channel Hierarchy:



### Campaign Channel Levels

[Table 3–63](#) shows Campaign Channel Total: All Campaign Channels are most aggregate level of the dimension.

**Table 3–63 Campaign Channel Total**

Sr. Number	Attribute	Description
1.	ALL CAMPAIGN CHANNEL CODE	Code for All Campaign Channel.

[Table 3–64](#) shows Campaign Channel Detail: Detail level of the dimension. Stores the Campaign Channel Information.

**Table 3–64 Campaign Channel Detail**

Sr. Number	Attribute	Description	Sample Value
1	CAMPAIGN CHANNEL CODE	A unique identifier for a campaign channel.	MAGAZINE
2	CAMPAIGN CHANNEL DESC	The name assigned to a campaign channel.	
3	CAMPAIGN CHANNEL NAME	A textual description of an campaign channel.	
4	CAMPAIGN CHANNEL TYPE CODE	A code used to uniquely identify a campaign channel type.	MGZN
5	CAPACITY QUANTITY	The number of transaction that a Channel can handle, at a point of time.	

**Table 3–64 (Cont.) Campaign Channel Detail**

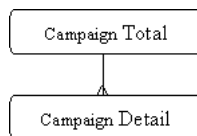
Sr. Number	Attribute	Description	Sample Value
6	CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
7	CHANNEL DESC	Descriptions of the channels	
8	CHANNEL NAME	The name assigned to a channel.	
9	CHANNEL TYPE CODE	A code used to uniquely identify a major grouping of Channels. Examples: M - MailT - Telephone TV - Television.	LYLTCHNL
10	EFFECTIVE FROM DATE	The first date of the period when this Channel was valid.	12/31/2005 12:00:00 AM
11	EFFECTIVE TO DATE	The end date of the period when this Channel was valid.	12/31/2005 12:00:00 AM
12	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	
13	PARTY TYPE CODE	Type of party	RPRSTTV
14	STATUS CODE	Current status.	

## Campaign

Description: [CAMPAIGN](#)

### Campaign Hierarchies

Standard Campaign Hierarchy:



### Campaign Levels

[Table 3–65](#) shows Campaign Total: All Campaign is most aggregate level of the dimension.

**Table 3–65 Campaign Total**

Sr. Number	Attribute	Description
1.	ALL CAMPAIGN CODE	Code for All Campaign.

[Table 3–66](#) shows Campaign Detail: Detail level of the dimension. Stores the Campaign Information.

**Table 3–66 Campaign Detail**

Sr. Number	Attribute	Description	Sample Value
1	CAMPAIGN CODE	The campaign which this cost occurs in	CMPGN-1
2	CAMPAIGN DESC	A textual description of the Campaign.	
3	CAMPAIGN NAME	Name of the campaign	

**Table 3–66 (Cont.) Campaign Detail**

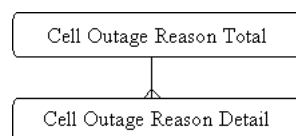
Sr. Number	Attribute	Description	Sample Value
4	CAMPAIGN PURPOSE	Campaign purpose. The purpose of the campaign being conducted, in most of scenarios this field would be empty since this would be addressed in the Theme and Promotion Theme. But when this campaign is being executed as a continuation of a previous campaign due to demand, this field would contain the reason for the continuation.	ACQUIRE
5	CAMPAIGN PURPOSE TYPE CODE	Unique Identifier for a Campaign purpose type.	RTENTION
6	CAMPAIGN STATUS CODE	A code used to uniquely identify strategy of a Campaign.	
7	CAMPAIGN TYPE CODE	Unique Identifier for a Campaign type.	MMPRMTN
8	COST AMOUNT	The monetary cost of a Campaign.	
9	COST AMOUNT LOCAL	The monetary cost of a Campaign.	
10	COST AMOUNT REPORTING	The monetary cost of a Campaign.	
11	COST CODE	Identify the cost to the Carrier.	CMPGN_CSCD_1
12	EFFECTIVE FROM DATE	The start date of a Campaign.	12/31/2005 12:00:00 AM
13	EFFECTIVE TO DATE	The end date of a Campaign.	12/31/2005 12:00:00 AM
14	FUND SOURCE CODE	Campaign fund source type. Possible values would include, Vendor Sponsored, Charity and so on.	
15	GLOBAL IND	Flag to indicate if the campaign is run globally.	
16	PARTNER IND	Indicates if the campaign has partners.	
17	PARTNER NUMBER	Identification number for partner.	
18	PLANNED COST	Planned or budgeted total cost for the campaign.	
19	PLANNED COST LOCAL	Planned or budgeted total cost for the campaign.	
20	PLANNED COST REPORTING	Planned or budgeted total cost for the campaign.	
21	PLANNED RESPONSE	Expected or planned response for the campaign.	
22	PRIORITY	Campaign priority.	

## Cell Outage Reason

Description: [CELL OUTAGE REASON](#)

### Cell Outage Reason Hierarchies

Standard Cell Outage Reason Hierarchy:



### Cell Outage Levels

[Table 3–67](#) shows Cell Outage Reason Total: All Cell Outage Reason is most aggregate level of the dimension.

**Table 3–67 Cell Outage Reason Total**

Sr. Number	Attribute	Description
1.	ALL CELL OUTAGE REASON CODE	Code for All Cell Outage Reason.

Table 3–68 shows Cell Outage Reason Detail: Detail level of the dimension. Stores the Cell Outage Reason Information.

**Table 3–68 Cell Outage Reason Detail**

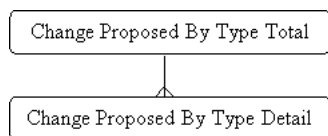
Sr. Number	Attribute	Description	Sample Value
1	CELL OUTAGE REASON CODE	Cause for cell outage.	FAIL
2	CELL OUTAGE REASON DESC	Description of CELL OUTAGE REASON	Fail
3	CELL OUTAGE REASON NAME	Name of the CELL OUTAGE REASON	Fail
4	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Change Proposed By Type

Description: [CHANGE PROPOSED BY TYPE](#)

### Change Proposed By Type Hierarchies

Standard Change Proposed By Type Hierarchy:



### Change Proposed By Type Levels

Table 3–69 shows Change Proposed By Type Total: All Change Proposed By Type is most aggregate level of the dimension.

**Table 3–69 Change Proposed By Type Total**

Sr. Number	Attribute	Description
1.	ALL CHANGE PROPOSED BY TYPE CODE	Code for Change Proposed By Type.

Table 3–70 shows Change Proposed By Type Detail: Detail level of the dimension. Stores the Change Proposed By Type Information.

**Table 3–70 Change Proposed By Type Detail**

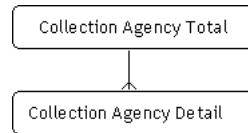
Sr. Number	Attribute	Description	Sample Value
1	CHANGE PROPOSED BY TYPE CODE	Some customer chooses another plan voluntary while other are downgrade/upgraded by the operator.	CMPLN
2	CHANGE PROPOSED BY TYPE DESC	Description of the CHANGE PROPOSED BY TYPE	Complain
3	CHANGE PROPOSED BY TYPE NAME	Name of the CHANGE PROPOSED BY TYPE	Complain
4	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Collection Agency

Description: [COLLECTION AGENCY](#)

### Collection Agency Hierarchies

Standard Collection Agency Hierarchy:



### Collection Agency Levels

[Table 3-71](#) shows Collection Agency Total: This is the most aggregate level of the Debt Aging Band dimension.

**Table 3-71** *Collection Agency Total*

Sr. Number	Attribute	Description
1.	ALL COLLECTION AGENCY TOTAL CODE	Identification for the top level value

[Table 3-72](#) shows Collection Agency Detail: Description level of the dimension. It stores the Collection Agency details.

**Table 3-72** *Collection Agency Detail*

Sr. Number	Attribute	Description	Sample Value
1	ANNUAL REVENUE	Revenue of the company.	
2	ANNUAL REVENUE LOCAL	Revenue of the company.	
3	ANNUAL REVENUE REPORTING	Revenue of the company.	
4	ANNUAL SALES	Sales for annual	
5	ANNUAL SALES LOCAL	Local sales for annual	
6	ANNUAL SALES REPORTING	Reporting sales for annual	
7	BANKRUPTCY END DATE	The end date of bankruptcy. If current date is behind start and end date is null, then the company is undergoing the bankruptcy process.	12/31/2005 12:00:00 AM
8	BANKRUPTCY START DATE	Start date of bankruptcy.	12/31/2005 12:00:00 AM
9	CAMPAIGN PARTNER CODE	CAMPAIGN PARTNER CODE is the code to track campaign partner.	
10	CAMPAIGN PARTNER INDICATOR	to indicator this is a campaign partner. The campaign partner can be an external organization or even another Telco operator. The service provider can partner with another service provider if their business is complementary, like 1 wireless operator and 1 local fixed line company. Most of content provider can also partner with the telco for promotion.	
11	CHAIRMAN CODE	Connect to Another Person Party who is responsible for this Organization.	
12	COLLECTION AGENCY CODE	A code for any person or business that is of interest to the Communications Service Provider.	1,2,3

**Table 3–72 (Cont.) Collection Agency Detail**

Sr. Number	Attribute	Description	Sample Value
13	COMPANY REGISTRY NUMBER	Will be same as Party. National_Identifier. Natural Key for Organization.	
14	CONTACT CODE	ID of the contact person for the organization.	
15	CONTACT NAME	Contact Employee for organization.	
16	COURT CODE	Code of the law of court.	
17	DOMESTIC INDICATOR	For PARTYs that are organizations, this indicates whether the organization is foreign or domestically owned.	
18	DUNS NUMBER	DUNS NUMBER is an identifier for organization.	
19	EMPLOYEE COUNT	Total number of employee in the company or organization.	
20	EQUITY AMOUNT	The equity value of the company/org.	
21	EQUITY AMOUNT LOCAL	The equity value of the company/org.	
22	EQUITY AMOUNT REPORTING	The equity value of the company/org.	
23	EXTERNAL ORGANIZATION TYPE CODE	Uniquely identifier of EXTERNAL ORGANIZATION TYPE	
24	FINAL SETTLEMENT END DATE	End date of final settlement.	
25	FINAL SETTLEMENT START DATE	Start date of final settlement	12/31/2005 0:00
26	JUDICIAL DISTRAINT CODE	Case identifier of the judicial distraint	
27	JUDICIAL DISTRAINT DATE	Date of the judicial distraint.	12/31/2005 0:00
28	LIQUIDATION END DATE	The date when the company/org was liquidated. If is null and start_date is not null, the company is undergoing the liquidation.	12/31/2005 0:00
29	LIQUIDATION START DATE	Start date of liquidation.	12/31/2005 0:00
30	MANAGER CODE	ID of the manager for the organization.	
31	MANAGER NAME	Name of manager for the whole company.	
32	OTHER INDIVIDUAL CODE	Uniquely identifier of OTHER INDIVIDUAL	
33	PARTY ORGANIZATION TYPE CODE	Type code of organization party.	
34	PAYMENT ACCOUNT CLOSE DATE	Closing date of the account for payments.	
35	PAYMENT ACCOUNT NUMBER	Account number for payments.	
36	PAYMENT ACCOUNT OPEN DATE	Opening date of the account for payments.	
37	SEAL IMAGE	The image of the Organization's Seal, or the Artificial Person's Signature.	
38	STOCK EXCHANGE NAME	Abbreviation of listed companies as used on the stock exchange.	
39	TAX EXEMPT STATUS	Indicates if the org. is tax exempt.	
40	TERMINATION DATE	Termination date of the company in case of company was founded with termination date.	
41	VALIDATION END DATE	Effective date of the deletion of the company's record from the company register.	
42	VALIDATION START DATE	Date of the registration of the company' record deletion from the company register	12/31/2005 0:00
43	ACTIVE INDICATOR	Indicates if the party is currently active - which means the party has a current relationship with the carrier.	



**Table 3–72 (Cont.) Collection Agency Detail**

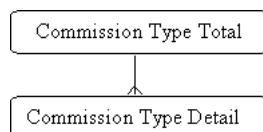
Sr. Number	Attribute	Description	Sample Value
44	ADDRESS	Address of the party. Redundance to party location history.	
45	BARING REASON CODE	Reasons for barring. For example, 1-Credit Limit, 2-Barring period.	
46	BUSINESS LEGAL STATUS CODE	A unique identifier for a legal classification of a non-residential Customer.	
47	CITY	City of the party. Redundance to party location history.	
48	COUNTRY	Country of the party. Redundance to party location history.	
49	CUSTOMER INDICATOR	Indicates if the party is a customer. Note: the party may have multiple relationships simultaneously - this flag identifies those parties which has a current account with the Telco.	
50	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column	12/31/2005 0:00
51	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	12/31/2005 0:00
52	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider	
53	PARTY DESC	Description of the party. applicable to both individual and organization. Normally it refer to the full name.	
54	PARTY NAME	Name of the party. applicable to both individual and organization. Normally it refer to the full name.	Collector1
55	PARTY TYPE CODE	type code. type code	
56	POST CODE	Postcode of the party. Redundance to party location history.	
57	SOURCE SYSTEM CODE	SOURCE SYSTEM ID, from which source ERP system this recorded was extracted.	
58	STATE	State of the party. Redundance to party location history.	
59	STATUS CODE	Current status of party.	

## Commission Type

Description: [COMMISSION TYPE](#)

### Commission Type Hierarchies

Standard Commission Type Hierarchy:



### Commission Type Levels

Table 3-73 shows Commission Type Total: All Commission Type are most aggregate level of the dimension.

**Table 3-73 Commission Type Total**

Sr. Number	Attribute	Description
1.	ALL COMMISSION TYPE CODE	Code for All Commission Type.

Table 3-74 shows Commission Type Details: Detail level of the dimension. Stores the Commission Type Information.

**Table 3-74 Commission Type Detail**

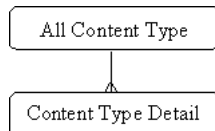
Sr. Number	Attribute	Description	Sample Value
1	COMMISSION TYPE CODE	COMMISSION TYPE CODE.	FLAT
2	COMMISSION TYPE DESC	COMMISSION TYPE DESC.	Flat Rate
3	COMMISSION TYPE NAME	Redemption Type Short Name.	Flat Rate
4	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Content Type

Description: [CONTENT TYPE](#)

### Content Type Hierarchies

Standard Content Type Hierarchy:



### Content Type Levels

Table 3-75 shows All Content Type: All Content Types are most aggregate level of the dimension.

**Table 3-75 All Content Type**

Sr. Number	Attribute	Description
1.	ALL CONTENT TYPE CODE	Code for All Content Type.

Table 3-76 shows Content Type Details: Detail level of the dimension. Stores the Content Types Information.

**Table 3-76 Content Type Detail**

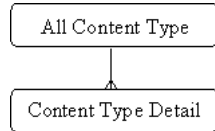
Sr. Number	Attribute	Description	Sample Value
1	CONTENT TYPE CODE	Type of the content: For example: constellation, jokes, and so on.	CONST
2	CONTENT TYPE DESC	Descriptions of content type	Constellation
3	CONTENT TYPE NAME	Name of the content type.	Constellation
4	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Contract Change Initiator Type

Description: [CONTRACT CHANGE INITIATOR TYPE](#)

### Contract Change Initiator Type Hierarchies

Standard Contract Change Initiator Type Hierarchy:



### Contract Change Initiator Type Levels

[Table 3-77](#) shows Contract Change Initiator Type Total: All Contract Change Initiator type is most aggregate level of the dimension.

**Table 3-77 Contract Change InitiatorType Total**

Sr. Number	Attribute	Description
1.	ALL CONTENT TYPE CODE	Code for All Content Type.

[Table 3-78](#) shows Contract Change Initiator Type Detail: Detail level of the dimension. Stores the Content Type Information.

**Table 3-78 Contract Change Initiator Type Detail**

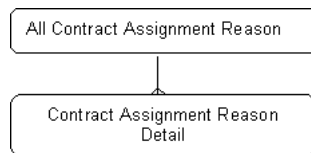
Sr. Number	Attribute	Description	Sample Value
1	CONTRACT CHANGE INITIATOR TYPE CODE	CONTRACT CHANGE INITIATOR TYPE CODE.	CUST
2	CONTRACT CHANGE INITIATOR TYPE DESC	CONTRACT CHANGE INITIATOR TYPE DESC.	Cust
3	CONTRACT CHANGE INITIATOR TYPE NAME	CONTRACT CHANGE INITIATOR TYPE name.	Cust
4	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Contract Assignment Reason

Description: [CONTRACT ASSIGNMENT REASON](#)

### Contract Assignment Reason Hierarchies

Standard Contract Assignment Reason Hierarchies:



### Contract Assignment Reason Level

[Table 3-79](#) shows Contract Assignment Reason Total: It's not actually hierarchy. It is the top level to aggregate.

**Table 3–79 Contract Assignment Reason Total**

Sr. Number	Attribute	Description
1	CONTRACT ASSIGNMENT REASON ID	Code of reason

Table 3–80 shows Contract Assignment Reason Detail: Detail level of the Contract Assignment Reason.

**Table 3–80 Contract Assignment Reason Detail**

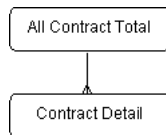
Sr. Number	Attribute	Description	Sample Value
1	CONTRACT ASSIGNMENT REASON CODE	Code of reason	CMPLN
2	CONTRACT ASSIGNMENT REASON DESC	Description of reason	Complain
3	CONTRACT ASSIGNMENT REASON NAME	Name of reason	Complain
4	LANGUAGE CODE	Language ID--Unique identifier for a row in the Language dimension.	

## Contract

Description: [CONTRACT](#)

### Contract Hierarchies

Standard Contract Hierarchies:



### Contract Levels

Table 3–81 shows Contract Total: This is not really a hierarchical dimension but to provide the summary or aggregate value on month based on the entire Contract.

**Table 3–81 Contract Total**

Sr. Number	Attribute	Description
1	CONTRACT ID	Id of the contract

Table 3–82 shows Contract Detail: This level represents the detail level information of Contract End Month.

**Table 3–82 Contract Detail**

Sr. Number	Attribute	Description	Sample Value
1	ACCOUNT CODE	This is usually natural key of the account.	
2	ACTUAL COST	Actual cost of the Contract	\$2,000.00
3	ACTUAL COST LOCAL	Actual cost of the Contract	\$2,000.00
4	ACTUAL COST REPORTING	Actual cost of the Contract	\$2,000.00
5	AMORTIZED ACTUAL COST	Amortized cost of the Contract	\$2,000.00
6	AMORTIZED ACTUAL COST LOCAL	Amortized cost of the Contract	\$2,000.00
7	AMORTIZED ACTUAL COST REPORTING	Amortized cost of the Contract	\$2,000.00

**Table 3–82 (Cont.) Contract Detail**

Sr. Number	Attribute	Description	Sample Value
8	AMORTIZED STANDARD COST	Amortized Standard Cost of the Contract	\$2,000.00
9	AMORTIZED STANDARD COST LOCAL	Amortized Standard Cost of the Contract	\$2,000.00
10	AMORTIZED STANDARD COST REPORTING	Amortized Standard Cost of the Contract	\$2,000.00
11	AUTOMATIC RENEW INDICATOR	Whether the contract should be automatically renewed when the contract ends.	
12	CANCELLATION DATE	The date when customer applied for cancellation.	
13	CANCELLATION REASON	Reason of cancel	
14	CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
15	CONTRACT CODE	CONTRACT CODE.	zone-1000001
16	CONTRACT DATE	The date when the contract was created.	10/11/2008 0:00
17	CONTRACT END DATE	The expected contract end date.	10/11/2008 0:00
18	CONTRACT NAME	The name assigned to a contract.	zone-1000001
19	CONTRACT START DATE	When the contract was set to start. Customer may define a future time as start date of a new contract (future plan) while using current contract	12/31/2005 0:00
20	CONTRACT TYPE CODE	CONTRACT TYPE CODE	LECNRT
21	CUSTOMER CODE	A code for any person or business that is of interest to the Communications Service Provider.	
22	CUSTOMER ORDER NUMBER	A unique system assigned identifier for the Customer Order.	11000001
23	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	
24	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	
25	INTERACTION CHANNEL CODE	Uniquely identifier of Interaction Channel	
26	INVC PAYMENT TERM TYPE CODE	Code.	
27	LEGAL EFFECTIVE DATE	The date on which a contract take effect.	
28	ORGANIZATION BUSINESS UNIT CODE	Unique identifier for Business Unit. To identify whether the site is a store, distribution center or warehouse.	
29	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	
30	PREMIUM ACTUAL COST	The standard cost of contract normally stay in Product Market plan, Here is actual cost for individual contract. This can only be calculated after the contract generated, therefore not from market plan. Note: Customer can use Gift redemption event "to track the cost instead of updating this column. But this is useful if they want to."	\$2,000.00
31	PREMIUM ACTUAL COST LOCAL	The standard costs of contract normally stay in Product Market plan, Here is actual cost for individual contract. This can only be calculated after the contract generated, therefore not from market plan. Note: Customer can use Gift redemption event "to track the cost instead of updating this column. But this is useful if they want to."	\$2,000.00

**Table 3–82 (Cont.) Contract Detail**

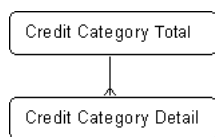
Sr. Number	Attribute	Description	Sample Value
32	PREMIUM ACTUAL COST REPORTING	The standard cost of contract normally stay in Product Market plan, Here is actual cost for individual contract. This can only be calculated after the contract generated, therefore not from market plan. Note: Customer can use Gift redemption event "to track the cost instead of updating this column. But this is useful if they want to."	\$2,000.00
33	PRODUCT MARKET PLAN CODE	MARKET PLAN CODE.	
34	PROMOTION CODE	A unique identifier for a campaign cell.	
35	SALES CHANNEL CODE	Link to sales channel to determine sales representatives caring the customer	
36	SALES CHANNEL REPRESENTATIVE CODE	SALES CHANNEL REPRESENTATIVE CODE is used to track and detect sales performance on account payment status.	
37	STANDARD COST	Standard cost of the Contract	\$2,000.00
38	STANDARD COST LOCAL	Standard cost of the Contract	\$2,000.00
39	STANDARD COST REPORTING	Standard cost of the Contract	\$2,000.00
40	START BILLING DATE	The date when first bill was generated.	
41	STATUS CODE	Current Status	
42	SUPPORTING DOCUMENT CODE	Large Binary Object (LOB) column to store support document with type of text or image. It can also be a path string to external storage.	

## Credit Category

Description: [CREDIT CATEGORY](#)

### Credit Category Hierarchies

Standard Credit Category Hierarchies:



### Credit Category Levels

[Table 3–83](#) shows Credit Category Total: Top most level used in the Credit Category dimension for aggregating data for all Credit categories. Attribute at this level is just the id for the level value.

**Table 3–83 Credit Category Total**

Sr. Number	Attribute	Description
1	CREDIT CATEGORY TOTAL ID	Id of the contract Credit Category Total

[Table 3–84](#) shows Credit Category Detail: The detail or lowest level of the dimension, which actually contains the category values. The attributes for this level are id, descriptions for the level values.

**Table 3–84 Credit Category Detail**

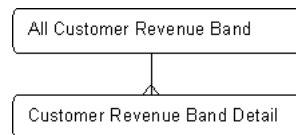
Sr. Number	Attribute	Description	Sample Value
1	CREDIT CATEGORY CODE	Code for Credit Category.	BAD
2	CREDIT CATEGORY DESC	Description for credit category.	Bad Customer
3	CREDIT CATEGORY NAME	Name for Credit Category.	Bad Customer
4	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	12/31/2005 12:00:00 AM
5	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	12/31/2005 12:00:00 AM
6	STATUS CODE	Current STATUS CODE, standard SCD2 column.	

## Customer Revenue Band

Description: [CUSTOMER REVENUE BAND](#)

### Customer Revenue Band Hierarchies

Standard Customer Revenue Band Hierarchies:



### Customer Revenue Band Levels

[Table 3–85](#) shows Customer Revenue Band Total: This is not really a hierarchical dimension but to provide the summary or aggregate value Customer Revenue.

**Table 3–85 Customer Revenue Band Total**

Sr. Number	Attribute	Description
1	CUSTOMER REVENUE BAND TOTAL ID	Id of Customer Revenue Band Total

[Table 3–86](#) shows Customer Revenue Band Detail: This level represents the detail level information of Customer Revenue Band.

**Table 3–86 Customer Revenue Band Detail**

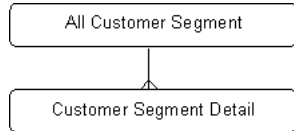
Sr. Number	Attribute	Description	Sample Value
1	CUSTOMER REVENUE BAND CODE	Unique identifier for revenue band. For example: 0_1000, 1000_3000.	BAND100
2	CUSTOMER REVENUE BAND DESC	Description revenue band.	Customer Revenue Band 100
3	CUSTOMER REVENUE BAND END VALUE	The end point of a band.	\$100.00
4	CUSTOMER REVENUE BAND NAME	Name of revenue band.	Customer Revenue Band 100
5	CUSTOMER REVENUE BAND START VALUE	The start point of a band.	\$0.00
6	CUSTOMER REVENUE TYPE CODE	For recharging, rent fee, one time equipment purchase,-.	RCG
7	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Customer Segment

Description: [CUSTOMER SEGMENT](#)

### Customer Segment Hierarchies

Standard Customer Segment Hierarchies:



### Customer Segment Levels

[Table 3–87](#) shows Customer Segment Total: This is not really a hierarchical dimension but to provide the summary or aggregate value Customer Segment.

**Table 3–87 Customer Segment Total**

Sr. Number	Attribute	Description
1	CUSTOMER SEGMENT TOTAL ID	Id of Customer Segment Total

[Table 3–88](#) shows Customer Segment Detail: This level represents the detail level information of Customer Segment.

**Table 3–88 Customer Segment Detail**

Sr. Number	Attribute	Description	Sample Value
1	CUSTOMER SEGMENT CODE	A code used to uniquely identify a grouping of Parties or Accounts for marketing and management issues.	1
2	CUSTOMER SEGMENT DESC	A textual description for a Segment.	SGMNT1
3	CUSTOMER SEGMENT NAME	The name assigned to a Segment.	SGMNT1
4	CUSTOMER SEGMENTATION MODEL CODE	Unique identifier for Customer Segmentation Model	
5	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	
6	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	
7	IS LEAF INDICATOR	Is leaf is to indicate if the cluster is leaf of the cluster tree.	
8	SEGMENT CRITERIA CODE	SEGMENT CRITERIA CODE.	
9	SEGMENT DISPERSION	The dispersion of the training data in this segment.	
10	STATUS CODE	Current STATUS CODE, standard SCD2 column.	
11	SUPPORTING RECORD COUNT	How many customers are included in segment during training, therefore support the cluster.	
12	TREE LEVEL	TREE LEVEL in the cluster tree.	6

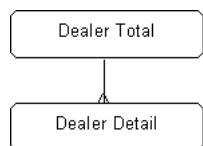
## Dealer

Description: [DEALER](#)

### Dealer Hierarchies

Standard Dealer Hierarchies:





### Dealer Levels

Table 3–89 shows Dealer Total: This is not really a hierarchical dimension but to provide the summary or aggregate value of Dealer.

**Table 3–89 Dealer Total**

Sr. Number	Attribute	Description
1	DEALER TOTAL ID	Id of dealer

Table 3–90 shows Dealer Detail: This level represents the detail level information of Customer Revenue Band.

**Table 3–90 Dealer Detail**

Sr. Number	Attribute	Description	Sample Value
1	ADDRESS LOCATION CODE	Unique identifier for Address Location	
2	ANNUAL REVENUE	Revenue of the company.	
3	ANNUAL REVENUE LOCAL	Revenue of the company.	
4	ANNUAL REVENUE REPORTING	Revenue of the company.	
5	ANNUAL SALES	Annual sales of Dealer	
6	ANNUAL SALES LOCAL	Annual sales of Dealer local	
7	ANNUAL SALES REPORTING	Annual sales of Dealer reporting	
8	AREA CODE	Code for the Area.	
9	BANKRUPTCY END DATE	The end date of bankruptcy. If current date is behind start and end date is null, then the company is undergoing the bankruptcy process.	
10	BANKRUPTCY START DATE	start date of bankruptcy.	12/31/2005 12:00:00 AM
11	CAMPAIGN PARTNER CODE	CAMPAIGN PARTNER CODE is the code to track campaign partner.	
12	CAMPAIGN PARTNER INDICATOR	To indicator this is a campaign partner. The campaign partner can be an external organization or even another telco operator. The service provider can partner with another service provider if their business are complementary, like 1 wireless operator and 1 local fixed line company. Most of content provider can also partner with the telco for promotion.	
13	CHAIRMAN CODE	Connect to Another Person Party who is responsible for this Organization.	
14	COMPANY REGISTRY NUMBER	Will be same as Party. National_Identifier. Natural Key for Organization.	
15	CONTACT CODE	ID of the contact person for the organization.	
16	CONTACT NAME	Contact Employee for organization.	
17	CONTRACT DATE	The date when the contract was created.	
18	CONTRACT VALID TILL	Validation details	
19	COURT CODE	Code of the law of court.	

**Table 3–90 (Cont.) Dealer Detail**

Sr. Number	Attribute	Description	Sample Value
20	DEALER CODE	Uniquely identifier of dealer	
21	DEALER NAME	Name of the dealer	
22	DISCOUNT ELIGIBLE INDICATOR	Flag represents eligible for discount or not	
23	DISCOUNT GROUP CODE	DISCOUNT GROUP CODE.	
24	DOMESTIC INDICATOR	For PARTYs that are organizations, this indicates whether the organization is foreign or domestically owned.	
25	DUNS NUMBER	DUNS NUMBER is an identifier for organization.	
26	EMAIL ADDRESS	Electronic Address of dealer	
27	EMPLOYEE COUNT	Total number of employee in the company or organization.	
28	EQUITY AMOUNT	The equity value of the company/org.	
29	EQUITY AMOUNT LOCAL	The equity value of the company/org.	
30	EQUITY AMOUNT REPORTING	The equity value of the company/org.	
31	FINAL SETTLEMENT END DATE	End date of final settlement.	
32	FINAL SETTLEMENT START DATE	Start date of final settlement.	12/31/2005 0:00
33	JUDICIAL DISTRAINT CODE	Case identifier of the judicial distraint	
34	JUDICIAL DISTRAINT DATE	Date of the judicial distraint	
35	LIQUIDATION END DATE	The date when the company/org was liquidated. If is null and start_date is not null, the company is undergoing the liquidation.	
36	LIQUIDATION START DATE	Start date of liquidation.	12/31/2005 0:00
37	MANAGER CODE	ID of the manager for the organization	
38	MANAGER NAME	Name of manager for the whole company	
39	OTHER INDIVIDUAL CODE	Unique identifier for Individual	
40	PAYMENT ACCOUNT CLOSE DATE	Closing date of the account for payments.	
41	PAYMENT ACCOUNT NUMBER	Account number for payments.	
42	PAYMENT ACCOUNT OPEN DATE	Opening date of the account for payments.	
43	SALES CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
44	SEAL IMAGE	The image of the Organization's Seal, or the Artificial Person's Signature.	
45	STOCK EXCHANGE NAME	Abbreviation of listed companies as used on the stock exchange.	
46	TAX EXEMPT STATUS	Indicates if the org. is tax exempt.	
47	TERMINATION DATE	Termination date of the company in case of company was founded with termination date.	
48	VALIDATION END DATE	Effective date of the deletion of the company's record from the company register.	
49	VALIDATION START DATE	Date of the registration of the company' record deletion from the company register	12/31/2005 0:00
50	ACTIVE INDICATOR	Indicates if the party is currently active - which means the party has a current relationship with the carrier.	

**Table 3–90 (Cont.) Dealer Detail**

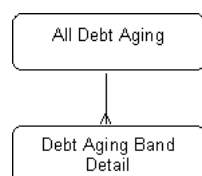
Sr. Number	Attribute	Description	Sample Value
51	ADDRESS	Address of the party. Redundance to party location history.	
52	BARING REASON CODE	Reasons for barring, eg,1-Credit Limit, 2-Barring period. Reasons for barring. For example 1-Credit Limit, 2-Barring period	
53	BUSINESS LEGAL STATUS CODE	A unique identifier for a legal classification of a non-residential Customer.	
54	CITY	City of the party. Redundance to party location history.	
55	COUNTRY	Country of the party. Redundance to party location history.	
56	CUSTOMER INDICATOR	Indicates if the party is a customer. Note: the party may have multiple relationships simultaneously - this flag identifies those parties which has a current account with the Telco.	
57	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column	
58	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	
59	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	
60	PARTY DESC	Description of the party. applicable to both individual and organization. Normally it refer to the full name.	
61	PARTY NAME	Name of the party. Applicable to both individual and organization. Normally it refers to the full name.	
62	PARTY TYPE CODE	type code.	
63	POST CODE	Postcode of the party. Redundance to party location history.	
64	SOURCE SYSTEM CODE	SOURCE SYSTEM ID, from which source ERP system this recorded was extracted.	
65	STATE	State of the party. Redundance to party location history.	
66	STATUS CODE	Current status of party.	

## Debt Aging Band

Description: [DEBT AGING BAND](#)

### Debt Aging Band Hierarchies

Standard Debt Aging Band Hierarchy:



### Debt Aging Band Levels

Table 3–91 shows Debt Aging Band Total: Most aggregate level for the Debt Aging Band dimension to see the aggregated value of all the Debt Aging Band.

**Table 3–91 Debt Aging Band Total**

Sr. Number	Attribute	Description
1.	DEBT AGING BAND ID	Code for Debt Aging Band

Table 3–92 shows Debt Aging Band Detail: There are customers who have not paid or partially paid one or more bills. This is called as aging for the bill payment. Based on the age of unpaid or partial paid bill those amounts are put into different buckets for each customer.

**Table 3–92 Debt Aging Band Detail**

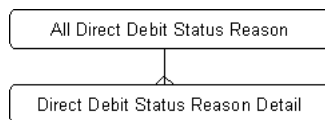
Sr. Number	Attribute	Description	Sample Value
1	DEBT AGING BAND CODE	Code for Aging Slab.	DAB1
2	DEBT AGING BAND DESC	Description for aging Slab.	Debt Aging Band Between 0 And 4
3	DEBT AGING BAND FROM		
4	DEBT AGING BAND NAME	Name for aging Slab.	Band(0-4)
5	DEBT AGING BAND TO	0	
6	LANGUAGE CODE	Unique identifier for Language	4

### Direct Debit Status Reason

Description: [DIRECT DEBIT STATUS REASON](#)

#### Direct Debit Status Reason Hierarchies

Standard Direct Debt Status Reason Hierarchy:



#### Direct Debit Status Reason Levels

Table 3–93 shows Direct Debit Status Reason Total: Most aggregate level for the Direct Debit Status Reason dimension to see the aggregated value of all the Direct Debit Status Reason.

**Table 3–93 Direct Debit Status Reason Total**

Sr. Number	Attribute	Description
1	DIRECT DEBT STATUS REASON ID	Code for Direct Debit Status Reason

Table 3–94 shows Direct Debit Status Reason Detail: All Address Locations are most aggregate level of the dimension.

**Table 3–94 Direct Debit Status Reason Detail**

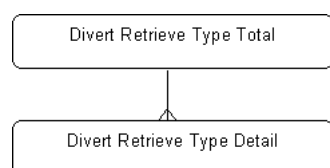
Sr. Number	Attribute	Description	Sample Value
1	DIRECT DEBT STATUS REASON CODE	Unique code for Direct Debt Status Reason	ACTV
2	DIRECT DEBT STATUS REASON DESC	Description of Direct Debt Status Reason	Active
3	DIRECT DEBT STATUS REASON NAME	Name for Direct Debt Status Reason	Active
4	LANGUAGE CODE	Unique identifier for Language	

## Divert Retrieve Type

Description: [DIVERT RETRIEVE TYPE](#)

### Divert Retrieve type Hierarchies

Standard Divert Retrieve Type Hierarchy:



### Divert Retrieve Type Levels

[Table 3–95](#) shows Divert Retrieve Type Total: Most aggregate level for the Divert Retrieve Type Total dimension to see the aggregated value of all the Divert Retrieve Type Total.

**Table 3–95 Divert Retrieve Type Total**

Sr. Number	Attribute	Description
1.	DIVERT RETRIEVE TYPE TOTAL ID	Code for Divert Retrieve Type Total

[Table 3–96](#) shows Divert Retrieve Type Detail: Call divert retrieve type indicates if the call is a diverted call or a retrieved call and then it can further drill down to define call as diverted to/retrieved from fax, ums or vms.

Subscriber's calls are diverted to the voice mail or UMS mail box according to subscriber instructions or settings. For example, calls can be diverted when subscriber is busy on other call, subscriber has switched off this handset or subscriber is not reachable for the moment.

Subscriber can later retrieve all his calls that are stored on the mailbox by accessing his mailbox through specified numbers or using Internet in case of UMS.

All this traffic generated by diverted calls as well as retrieved calls is to be analyzed based on the type of call such as diverted or retrieved, type of access to retrieve a call and so on.

Call Divert retrieve dimension helps in achieving this by organizing calls as diverted - retrieved calls.

**Table 3–96 Divert Retrieve Type Detail**

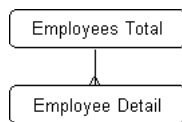
Sr. Number	Attribute	Description	Sample Value
1	DIVERT RETRIEVE SUB TYPE CODE	Call divert/retrieve subtype ID.	
2	DIVERT RETRIEVE SUB TYPE DESC	Call divert/retrieve subtype description.	
3	DIVERT RETRIEVE SUB TYPE NAME	Call divert/retrieve subtype short description.	
4	DIVERT RETRIEVE TYPE CODE	Code for Divert Retrieve Type.	DVRT
5	DIVERT RETRIEVE TYPE DESC	Divert retrieve Type description.	Call Are Diverted To The Mailbox
6	DIVERT RETRIEVE TYPE NAME	Name of Divert retrieve Type.	Diverted Calls
7	LANGUAGE CODE	Unique identifier for Language	

## Employee

Description: [EMPLOYEE](#)

### Employee Hierarchies

Standard Employee Hierarchy:



### Employee Levels

[Table 3–97](#) shows Employee Total: Most aggregate level for the Employee Total dimension to see the aggregated value of all the Employee Total

**Table 3–97 Employee Total**

Sr. Number	Attribute	Description
1.	EMPLOYEE TOTAL ID	Code for employee total identifier.

[Table 3–98](#) shows Employee Details: Employee of Carrier. Sub entity of Party individual.

**Table 3–98 Employee Detail**

Sr. Number	Attribute	Description	Sample Value
1	BILLING ADDRESS EFFECTIVE DATE	Date on which the billing address referenced in the billing_address_id column became active. This facilitates queries such as find customers who changed address in the last 3 months."''	
2	BUSINESS DIVISION EXECUTIVE NAME	BUSINESS DIVISION EXECUTIVE LAST NAME is the last name of the business division executive to whom the employee reports to. Like LOB Owner.	
3	BUSINESS PHONE NUMBER	Phone number used for business purpose	
4	CELL PHONE NO	Redundancy to 'party contact information'	
5	CHILDREN COUNT	Number of children	
6	CONTACT ADDRESS EFFECTIVE DATE	Date on which the contact address referenced in the billing_address_id column became active. This facilitates queries such as find customers who changed address in the last 3 months."''	

**Table 3–98 (Cont.) Employee Detail**

Sr. Number	Attribute	Description	Sample Value
7	COST CENTER NUMBER	The cost center to which the bank employee expenses are charged.	
8	DATE OF BIRTH	Date of Birth of the individual.	
9	DATE OF DEATH	Date of natural person death.	
10	DEATH CERTIFICATE CODE	The certification document number for customer's death.	
11	DEPENDENTS COUNT	Number of dependents	
12	DRIVER LICENSE NUMBER	Driver License Number in most countries.	
13	DWELLING SIZE	Size of dwelling	
14	DWELLING TENURE	Tenure of dwelling	
15	ECONOMICALLY ACTIVE IND	customer is economically active (is not a minor or pensioner and so on.)	
16	EDUCATION CODE	The customer highest level of education.	
17	EMAIL	Redundancy to 'party contact information'	
18	EMPLOYEE CODE	A code for any person or business that is of interest to the Communications Service Provider.	
19	EMPLOYEE DESIGNATION CODE	Unique warehouse key, representing the designation	
20	EMPLOYEE DISCOUNT GROUP CODE	Unique identifier for Employee Discount Group	
21	EMPLOYEE KEY	Key value for each employee	
22	EMPLOYEE NUMBER	Internal number for the employee.	
23	EMPLOYEE TYPE CODE	Unique identifier for Employee Type	PT
24	EMPLOYEE TYPE DESC	Description of the Employee Type	Part Time
25	EMPLOYEE TYPE NAME	Unique identifier for the Employee Type	Part Time
26	EMPLOYER TAX NUMBER	The tax code of Employer.	
27	EMPLOYMENT BEGIN DATE	Start date for the employment.	12/31/2005 12:00:00 AM
28	EMPLOYMENT END DATE	If the employee quit from the Bank, we still hold the information of his past employment	
29	EMPLOYMENT EXEMPT IND	An employee exempt from the overtime policies of the University due to the nature of the work, as compared to (Non-Exempt).  Education requirements of the position and salary range. These employees are paid an annual salary and are not customarily eligible for overtime pay.	
30	EMPLOYMENT STATUS	EMPLOYEE STATUS is the abbreviated identifier for the employment status. Employee	
31	END OF JOB CONTRACT	End date of the customer's job contract (for contracts concluded for definite terms).	
32	ETHNIC BACKGROUND	Customer Attribute of an employee	
33	ETHNICITY	Classifies the individual for minority reporting purposes.	
34	FAMILY NAME IN MAIDEN	Given name in maiden	
35	FIRST NAME	First name of a party individual	
36	FORM OF EMPLOYMENT	The customer's form of employment (private entrepreneur, employee, civil servant and so on.)	
37	GENDER CODE	For PARTYs that are people, this is their GENDER.  For PARTYs that are organizations, this indicates whether the organization is foreign or domestically owned.	

**Table 3–98 (Cont.) Employee Detail**

Sr. Number	Attribute	Description	Sample Value
38	GIVEN NAME IN MAIDEN	Given name in maiden	
39	HOME TELEPHONE NO	Redundance to 'party contact information'	
40	HOUSEHOLD KEY	The code of household which the party belongs to.	
41	INCOME	Income of a party individual	
42	INCOME LCL	Income of a party individual	
43	INCOME RPT	Income of a party individual	
44	JOB CONTRACT TYPE	Type of the customer's job contract	
45	JOB KEY	Code for job of subscriber.	
46	JOB POSITION	job Position.	
47	LANGUAGE CODE	Unique identifier for Language	
48	LAST NAME	Last name of a party individual	
49	LAST PERFORMANCE RATING	This describes the annual rating assigned to the employee.	
50	LAST PERFORMANCE RATING DATE	When the last rating is done.	
51	LEGAL TITLE TO HOUSING	The customer's legal title to home (rents, owns and so on.)	
52	LIVING AT CURRENT ADDRESS SINCE	Date since the customer has lived at the present address.	
53	MANAGER CODE	manager's employee code.	
54	MARITAL STATUS	CSALADI ALLAPOT. Marital status	
55	MARTIAL STATUS CODE		
56	MIDDLE NAME	Middle name of a party individual	
57	MOTHER FIRST NAME	Mother's first name	
58	MOTHER LAST NAME	Mother's last name	
59	NAME OF WORKPLACE	Name of workplace	
60	NAME PREFIX	Name prefix For example: Mr, Mrs, Ms, Dr,	
61	NAME SUFFIX	Name suffix. For example: PhD, MD, JD, MA	
62	NATIONALITY CODE	Code for Nationality of subscriber	
63	NUMBER OF EARNERS IN HOUSEHOLD	Number of wage earners in the household.	
64	NUMBER OF PERSONS LIVING IN HOUSEHOLD	Number of persons sharing the customer's household.	
65	OFFICE TELEPHONE NO	Redundancy to 'party contact information'	
66	ORGANIZATION BUSINESS UNIT KEY		
67	PERSONAL ID NUMBER	In China, this one will be same as party.national_identifier.	
68	PLACE OF BIRTH	Where the person was born.	
69	PREVIOUS EMPLOYER TAX NUMBER	Tax number of previous employer.	
70	PREVIOUS EMPLOYMENT END DATE	End date of previous job.	
71	PREVIOUS EMPLOYMENT START DATE	Start date of previous job.	12/31/2005 12:00:00 AM
72	SOC JOB KEY		
73	SOCIAL SECURITY NUMBER	In US, this code will be same as party.national_identifier. Null if some country does not have.	



**Table 3–98 (Cont.) Employee Detail**

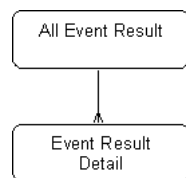
Sr. Number	Attribute	Description	Sample Value
74	SOURCE OF INCOME	Source of income (can typify, may be several)	
75	START OF EMPLOYMENT	Start of employment	
76	TAX NUMBER	Tax number	
77	ACTIVE IND	Activate Indicator	
78	ADDRESS	Address	
79	BARING REASON CODE	Unique identifier for Baring Reason	
80	BUSINESS LEGAL STATUS CODE	A unique identifier for a legal classification of a non-residential Customer.	
81	CITY	City of the party. Redundance to party location history.	
82	COUNTRY	Country of the party. Redundance to party location history.	
83	CUSTOMER IND	Indicator for Customer	
84	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	
85	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	
86	EMPLOYEE NAME	Name of the employee	
87	PARTY DESC	Description for the Party	
88	PARTY KEY	Key value for Party	
89	PARTY NAME	Name of the Party	
90	PARTY TYPE CODE	Unique identifier for Party Type	
91	POST CODE	Unique identifier for Post	
92	SOURCE SYSTEM KEY	Key value for Source System	
93	STATE	State Name	
94	STATUS CODE	Current Status	

## Event Result

Description: [EVENT RESULT](#)

### Event Result Hierarchies

Standard Event Result Hierarchy:



### Event Result Levels

[Table 3–99](#) shows Event Result Total: Most aggregate level for the Event Result dimension to see the aggregated value of all the Event Result.

**Table 3–99 Event Result Total**

Sr. Number	Attribute	Description
1.	ALL EVENT RESULT ID	Code for Event Result

Table 3–100 shows Event Result Detail: Keep the result of an event. For example,

- S: Successful
- F: failed

**Table 3–100 Event Result Detail**

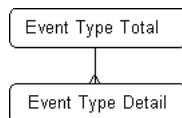
Sr. Number	Attribute	Description	Sample Value
2	EVENT RESULT CODE	The unique identifier of an event result.	FAIL
3	EVENT RESULT DESC	The description of an event result.	Failed
4	EVENT RESULT NAME	The name of an event result.	Failed
5	LANGUAGE CODE	Unique identifier for Language	

## Event Type

Description: [EVENT TYPE](#)

### Event Type Hierarchies

Standard Event Type Hierarchies:



### Event Type Levels

Table 3–101 shows Event Type Total: Most aggregate level for the Event Type to see the aggregated sales of all the Event Type of all types.

**Table 3–101 Event Type Total**

Sr. Number	Attribute	Description
1.	ALL EVENT TYPE TOTAL ID	Code for All Event Type

Table 3–102 shows Event Type Detail: This entity keeps all types of events under each category.

**Table 3–102 Event Type Detail**

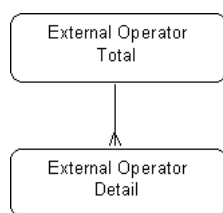
Sr. Number	Attribute	Description	Sample Value
1	EVENT CATEGORY CODE	An unique identifier for event class. Examples: A-advertising.	ACCSMTHD
2	EVENT TYPE CODE	A Code used to uniquely identify the type of Event. Examples: M - Marketing, F - Finance.	ACTV
3	EVENT TYPE DESC	A textual description for an Event Type.	Activate
4	EVENT TYPE NAME	The name of type. Examples: Marketing, Finance.	Activate
5	LANGUAGE CODE	Unique identifier for Language	

## External Operator

Description: [EXTERNAL OPERATOR](#)

### External Operator Hierarchies

Standard External Operator Hierarchy:



### External Operator Levels

Table 3–103 shows All External Operator: Most aggregate level for the External Operator to see the aggregated sales of all the External Operator of all types.

**Table 3–103 All External Operator**

Sr. Number	Attribute	Description
1.	ALL EXTERNAL OPERATOR ID	Code for All External Operator

Table 3–104 shows External Operator: Other operators. Those information are required when client roam to their territory or are from those operators.

**Table 3–104 External Operator**

Sr. Number	Attribute	Description	Sample Value
1	ANNUAL REVENUE LCL	Revenue of the company.	
2	ANNUAL REVENUE RPT	Revenue of the company.	
3	ANNUAL SALES	Sales for annual	
4	ANNUAL SALES LCL	Local Sales for annual	
5	ANNUAL SALES RPT	Reporting Sales for annual	
6	BANKRUPTCY END DATE	The end date of bankruptcy. If current date is behind start and end date is null, then the company is undergoing the bankruptcy process.	
7	BANKRUPTCY START DATE	Start date of bankruptcy.	12/31/2005 12:00:00 AM
8.	CAMPAIGN PARTNER CODE	CAMPAIGN PARTNER CODE is the code to track campaign partner.	
9	CAMPAIGN PARTNER IND	to indicator this is a campaign partner. The campaign pattern can be an external organization or even another telco operator. The service provider can partner with another service provider if their businesses are complementary, like 1 wireless operator and 1 local fixed line company. Most of content provider can also partner with the telco for promotion.	
10	CHAIRMAN CODE	Connect to Another Person Party who is responsible for this Organization.	
11	COMPANY REGISTRY NUMBER	Will be same as Party. National_Identifier. Natural Key for Organization.	
12	CONTACT CODE	ID of the contact person for the organization.	
13	CONTACT NAME	Contact Employee for organization.	
14	COUNTRY CODE	Unique identifier for country. For example: USA, UK, CN, JP.	
15	COUNTRY DESC	Short Name/description for Governors/Country.	
16	COUNTRY NAME	The name of the country associated with this currency.	
17	COURT CODE	Code of the law of court.	
18	DUNS NUMBER	DUNS NUMBER is an identifier for organization.	

**Table 3–104 (Cont.) External Operator**

Sr. Number	Attribute	Description	Sample Value
19	DOMESTIC IND	For PARTYs that are organizations, this indicates whether the organization is foreign or domestically owned.	
20	EMPLOYEE COUNT	Total number of employee in the company or organization.	
21	EQUITY AMOUNT	The equity value of the company/org.	
22	EQUITY AMOUNT LCL	The equity value of the company/org.	
23	EQUITY AMOUNT RPT	The equity value of the company/org.	
24	EXTERNAL OPERATOR CODE	Unique identifier for operator. For example: Airtel, CMCC, NTT.	
26	EXTERNAL ORGANIZATION TYPE CODE		
27	FINAL SETTLEMENT END DATE	End date of final settlement	12/31/2005 0:00
28	FINAL SETTLEMENT START DATE	Start date of final settlement	12/31/2005 0:00
29	JUDICIAL DISTRAINT CODE	Case identifier of the judicial distraint.	
30	JUDICIAL DISTRAINT DATE	Date of the judicial distraint.	
31	LIQUIDATION END DATE	The date when the company/org was liquidated. If is null and start date is not null, the company is undergoing the liquidation.	12/31/2005 0:00
32	LIQUIDATION START DATE	Start date of liquidation	12/31/2005 0:00
33	MANAGER CODE	ID of the manager for the organization	
34	MANAGER NAME	Name of manager for the whole company	
35	OPERATOR DESC	Further information with operating country and other details	
36	OPERATOR GROUP CODE	Unique identifier for operator type. For example: international, land!-.	
37	OPERATOR NAME	The full name of the operator. For example: China Mobile for CMCC.	
38	OPERATOR TYPE CODE	Unique identifier for operator type. For example: international, land!-.	LSCL
39	OTHER INDIVIDUAL CODE	Code for individual.	
40	PARTY ORGANIZATION TYPE CODE	Unique identifier for Party Organization	
41	PAYMENT ACCOUNT CLOSE DATE	Closing date of the account for payments.	
42	PAYMENT ACCOUNT NUMBER	Account number for payments.	
43	PAYMENT ACCOUNT OPEN DATE	Opening date of the account for payments.	
44	SEAL IMAGE	The image of the Organization's Seal, or the Artificial Person's Signature.	
45	STOCK EXCHANGE NAME	Abbreviation of listed companies as used on the stock exchange.	
46	TAX EXEMPT STATUS	Indicates if the org. is tax exempt	
47	TERMINATION DATE	Termination date of the company in case of company was founded with termination date	
48	VALID END DATE	Effective date of the deletion of the company's record from the company register	12/31/2005 0:00

**Table 3–104 (Cont.) External Operator**

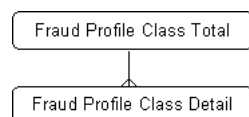
Sr. Number	Attribute	Description	Sample Value
49	VALID START DATE	Date of the registration of the company' record deletion from the company register	12/31/2005 0:00
50	ACTIVE IND	Active Indicator	
51	ADDRESS	Address	
52	BARING REASON CODE	Unique identifier for Baring Reason	
53	BUSINESS LEGAL STATUS CODE	Unique identifier for Business Legal Status	
54	CITY	City	
55	COUNTRY	Country	
56	CUSTOMER IND	Customer Indicator	
57	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	
58	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	
59	PARTY DESC	Description of the party. Applicable to both individual and organization. Normally it refers to the full name.	
60	PARTY CODE	Code value for a party.	
61	PARTY NAME	Name of the Party	
62	PARTY TYPE CODE	Unique identifier for Party	
63	POST CODE	Postcode of the party. Redundance to party location history.	
64	SOURCE SYSTEM CODE	Code value for source system.	
65	STATE	State	
66	STATUS CODE	Current Status	
	ANNUAL REVENUE		

## Fraud Profile Class

Description: [FRAUD PROFILE CLASS](#)

### Fraud Profile Class Hierarchies

Standard Fraud Profile Class Hierarchy:



### Fraud Profile Class Levels

[Table 3–105](#) shows Fraud Profile Class Total: Most aggregate level for the Fraud Profile Class dimension to see the aggregated value of all the Fraud Profile Class.

**Table 3–105 Fraud Profile Class Total**

Sr. Number	Attribute	Description
1.	ALL FRAUD PROFILE CLASS ID	Code for All Fraud Profile Class

Table 3–106 shows Fraud Profile Class Detail: The fraud profile class is generalized after certain analysis process over the past network event. New network event therefore can be tagged through the same model to detect if there are suspicious activities.

**Table 3–106 Fraud Profile Class Detail**

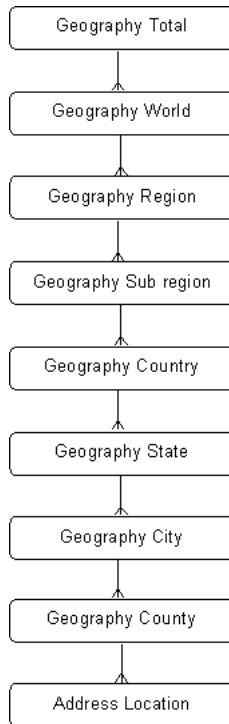
Sr. Number	Attribute	Description
1.	FRAUD PROFILE CLASS CODE	Code of The Fraud Profile Class
2.	FRAUD PROFILE CLASS NAME	Name of The Fraud Profile Class
3.	FRAUD PROFILE CLASS DESCRIPTION LANGUAGE CODE	Description of The Fraud Profile Class

## Geography

Description: GEOGRAPHY ENTITY

### Geography Hierarchies

Standard Geography Hierarchy:



### Geography Levels

Table 3–107 shows Geography World: World level in GEOGRAPHY hierarchy.

**Table 3–107 Geography World**

Sr. Number	Attribute	Description	Sample Value
1	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	

**Table 3–107 (Cont.) Geography World**

Sr. Number	Attribute	Description	Sample Value
2	GEOGRAPHY WORLD CODE	Identifier of world.	
3	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
4	GEOGRAPHY WORLD NAME	Name of the geography world.	

Table 3–108 shows Geography Region: Region level in GEOGRAPHY hierarchy.

**Table 3–108 Geography Region**

Sr. Number	Attribute	Description	Sample Value
1	GEOGRAPHY REGION CODE	uniquely identifier of geography region	
2	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	12/31/2005 12:00:00 AM
3	GEOGRAPHY WORLD CODE	Identifier of world.	
4	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
5	GEOGRAPHY REGION NAME	Name of the geography region	

Table 3–109 shows Geography Sub Region: Sub Region level in GEOGRAPHY hierarchy.

**Table 3–109 Geography Sub Region**

Sr. Number	Attribute	Description	Sample Value
1	GEOGRAPHY REGION CODE	uniquely identifier of geography region	
2	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	12/31/2005 12:00:00 AM
3	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
4	GEOGRAPHY SUB REGION NAME	name of the sub region	
5	GEOGRAPHY SUB REGION CODE	Uniquely identifier of geography sub region	

Table 3–110 shows Geography Country: Country level in GEOGRAPHY hierarchy.

**Table 3–110 Geography Country**

Sr. Number	Attribute	Description	Sample Value
1	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	12/31/2005 12:00:00 AM
2	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
3	GEOGRAPHY COUNTRY CODE	Uniquely identifier of the country.	
4	GEOGRAPHY SUB REGION CODE	Uniquely identifier of geography sub region	
5	GEOGRAPHY COUNTRY NAME	Name of the country	

Table 3–111 shows Geography State: State level in GEOGRAPHY hierarchy.

**Table 3–111 Geography State**

Sr. Number	Attribute	Description	Sample Value
1	GEOGRAPHY STATE NAME	Name of state	
2	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	12/31/2005 12:00:00 AM
3	GEOGRAPHY STATE CODE	Uniquely identifier of geography state	
4	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
5	GEOGRAPHY COUNTRY CODE	Uniquely identifier of the country.	

Table 3–112 shows Geography City: CITY level in GEOGRAPHY hierarchy.

**Table 3–112 Geography City**

Sr. Number	Attribute	Description	Sample Value
1	GEOGRAPHY CITY NAME	Name of the city	
2	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	12/31/2005 12:00:00 AM
3	GEOGRAPHY STATE CODE	Uniquely identifier of state	
4	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
5	GEOGRAPHY CITY CODE	Uniquely identifier of city	
6	GEOGRAPHY CITY DESC	CITY DESC.	

Table 3–113 shows Geography County: County level in GEOGRAPHY hierarchy.

**Table 3–113 Geography County**

Sr. Number	Attribute	Description	Sample Value
1	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	
2	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
3	GEOGRAPHY COUNTY CODE	Uniquely identifier of county	
4	GEOGRAPHY COUNTY NAME	Name of the county	
5	GEOGRAPHY CITY CODE	Uniquely identifier of city	

Table 3–114 shows Address Location: Keep all address. It has levels as country, state, city, address and so on.

**Table 3–114 Address Location**

Sr. Number	Attribute	Description
1	ADDRESS STYLE	Any specific style of the address. It might include the detail like All Capital words, case, font and so on.
2	BUILDING CODE	Uniquely identifier of building
3	ELEVATION	Elevation of the Geographic Location
4	ELEVATION UOM CODE	Uniquely identifier of ELEVATION UOM
5	FLOOR CODE	Uniquely identifier of floor
6	FLOOR NAME	Name of the floor
7	GEOGRAPHY LOCATION CODE	Applicable unique geography ID.



**Table 3–114 (Cont.) Address Location**

<b>Sr. Number</b>	<b>Attribute</b>	<b>Description</b>
8	GEOGRAPHY REGION CODE	Uniquely identifier of GEOGRAPHY REGION
9	LATITUDE	LATITUDE description
10	PRIMARY EMAIL ADDRESS	Email address
11	REGION NAME	Name of the Reason
12	SUBREGION DESC	description of sub region
13	TAX AUTHORITY CODE	Unique identified for the tax authority
14	WORLD DESC	Description of world
15	WORLD NAME	Name of the world
16	ADDRESS LATITUDE MEASURE	This is the Latitude value of the specified location
17	POSTAL PLUS CODE	Four digit extension to the United States Postal ZIP code.
18	STREET CODE	Uniquely identifier of state
19	CITY DESC	Description of the city
20	FLAT ROOM CODE	Uniquely identifier of the flat room
21	GEOGRAPHY STATE CODE	State of the geography
22	POST OFFICE BOX	PO box if available.
23	STATE DESC	Description of the state
24	STATE NAME	Name of the state
25	ADDRESS LONGITUDE MEASURE	This is the longitude location of the specified address.
26	BUILDING DESC	Description for Building
27	COUNTY DESC	Description for County
28	GEOGRAPHY COUNTRY CODE	Code for Geography Country
29	POSTCODE CODE	Code for Post Code
30	ADDRESS DESCRIPTION	Address description. Textual description of the address.
31	ADDRESS TYPE CODE	Unique identifier for the address type.
32	BUILDING NAME	Name for Building
33	COUNTY NAME	Name for County
34	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.
35	FLAT ROOM DESC	Description for Flat Room
36	GEOGRAPHY COUNTY CODE	Code for Geography County
37	GEOGRAPHY ENTITY CODE	unique geography identifier. A unique identifier for the geography entities, could be a system generated unique key for geography entity
38	REGION DESC	Description for Region
39	WORLD CODE	Description for World
40	ADDRESS LINE 2	Address. Line 2 of the detailed postal address
41	ADDRESS LINE 3	Address. Line 3 of the detailed postal address
42	LONGITUDE	The angular distance between a point on any meridian and the prime meridian at Greenwich
43	PRIMARY ADDRESS TELEPHONE	Telephonic address
44	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.
45	ADDRESS LINE 1	Address. Line one of detail postal address
46	ADDRESS LINES PHONETIC	Phonetic or Kana representation of the Kanji address lines (used in Japan).
47	COUNTRY NAME	Name for Country

**Table 3–114 (Cont.) Address Location**

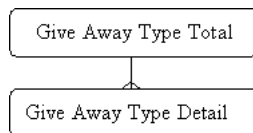
Sr. Number	Attribute	Description
48	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.
49	EMPLOYEE CODE	Code for Employee
50	FLOOR DESC	Description for Floor
51	SUBREGION NAME	Name for Subregion
52	ADDRESS LOCATION CODE	unique identifier for the address.
53	CITY NAME	Name for City
54	COUNTRY DESC	Description for Country
55	FLAT ROOM NAME	Name for Flat Room
56	GEOGRAPHY CITY CODE	Code for Geography City
57	GEOGRAPHY SUBREGION CODE	Code for Geography Subregion
58	STREET DESC	Description for Street
59	STREET NAME	Name for Street
60	TIME ZONE CODE	Unique Identifier for time zone.

## Give Away Type

Description: [GIVE AWAY TYPE](#)

### Give Away Type Hierarchies

Standard Give Away Hierarchy:



### Give Away Type Levels

[Table 3–115](#) shows All Give Away Type: All Give Away are most aggregate level of the dimension.

**Table 3–115 All Give Away Type**

Sr. Number	Attribute	Description
1.	ALL GIVE AWAY TYPE CODE	Code for All Give Away Type.

[Table 3–116](#) shows Give Away Type Detail: Detail level of the dimension. Stores the Give Away Type Detail Information.

**Table 3–116 Give Away Type Detail**

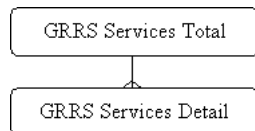
Sr. Number	Attribute	Description
1.	GIVE AWAY TYPE CODE	Code for Give Away type
2.	GIVE AWAY TYPE DESC	Description of the Give Away Type
3.	GIVE AWAY TYPE NAME	Name of the Give Away type
4.	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.

## GPRS Services

Description: [GPRS SERVICE](#)

### GRPS Service Hierarchies

Standard GRPS Service Hierarchy:



### GPRS Service Levels

[Table 3–117](#) shows GRRS Services Total: All GPRS Service are most aggregate level of the dimension.

**Table 3–117 GRRS Services Total**

Sr. Number	Attribute	Description
1.	ALL GPRS SERVICE CODE	Code for All GPRS Service.

[Table 3–118](#) shows GRRS Services: Detail level of the dimension. Stores the GPRS Service Detail Information.

**Table 3–118 GRRS Services Detail**

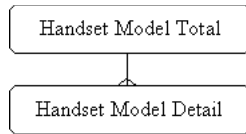
Sr. Number	Attribute	Description
1.	EFFECTIVE FROM DATE	Active from. Standard SCD field,
2.	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.
3.	EQUIPMENT FUNCTIONALITY CODE	The code of function
4.	GPRS SERVICE CODE	GPRS service code
5.	GPRS SERVICE DESC	GPRS service description
6.	GPRS SERVICE NAME	GPRS service name
7.	IN PLATFORM CODE	IN PLATFORM CODE.
8.	NETWORK CODE	Identifier of the network.
9.	PRODUCT CODE	The unique identifier of product.
10.	PRODUCT DESC	Full Description.
11.	PRODUCT GROUP CODE	The unique identifier of product group
12.	PRODUCT NAME	Product name.
13.	PRODUCT PACKAGE CHARGE TYPE CODE	The unique identifier of product package charge type.
14.	PRODUCT PACKAGE TYPE CODE	Code for product package type
15.	PRODUCT TYPE CODE	Retrofitted from column PRODUCT_KEY of table FACT_MARKET_SHARE
16.	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.
	PRODUCT RATING PLAN TYPE CODE	

## Handset Model

Description: [HANDSET MODEL](#)

## Handset Model Hierarchies

Standard Handset Model Hierarchy:



## Handset Model Levels

Table 3–119 shows Handset Model Total: All Handset Model are most aggregate level of the dimension.

**Table 3–119 Handset Model Total**

Sr. Number	Attribute	Description
1.	HANDBET MODEL TOTAL CODE	Code for All Handset Model.

Table 3–120 shows Handset Model Detail: Detail level of the dimension. Stores the Handset Model Detail Information.

**Table 3–120 Handset Model Detail**

Sr. Number	Attribute	Description
1.	AVAILABLE FOR SALE DATE	The date when this ITEM becomes available for sale. For example, certain books have specific publication dates, music entertainment release dates.
2.	BRAND CODE	Unique Identifier for a item brand
3.	BRAND NAME	One Item can have one brand name. One brand name can extend to multiple items. A unique name to denote a class of Items as a product of a single supplier or manufacturer. The brand can include private label Items.
4.	COMMISSION IND	A flag to indicate whether this ITEM has a commission related to it or not
5.	CUSTOMER USAGE INDICATOR	Indicates whether equipment should be used by customer, otherwise for service provider.
6.	DISCOUNT IND	A flag to indicate whether this ITEM can be discounted.
7.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date
8.	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.
9.	EQUIPMENT CODE	EQUIPMENT CODE.
10.	EQUIPMENT DESC	EQUIPMENT DESC.
11.	EQUIPMENT FUNCTIONALITY CODE	The code of function
12.	EQUIPMENT NAME	EQUIPMENT NAME.
13.	HANDBET BRAND CODE	Code for Handset Brand.
14.	HANDBET BRAND DESC	Description of the Handset Brand.
15.	HANDBET BRAND NAME	Name of the Handset Brand.
16.	HANDBET MODEL CODE	The date when this ITEM becomes available for sale. For example, certain books have specific publication dates, music entertainment release dates.
17.	HANDBET MODEL DESC	Description of Handset Model.
18.	HANDBET MODEL NAME	Name of the Handset Model.
19.	IN PLATFORM CODE	IN PLATFORM CODE.
20.	INVENTORY IND	Indicates whether an item is an inventory item or a non-inventory item (such as gift certificates, labor)

**Table 3–120 (Cont.) Handset Model Detail**

Sr. Number	Attribute	Description
21.	ITEM CLUSTER CODE	Surrogate key used to identify an Item cluster. This column is used for Behavior Profiling.
22.	ITEM CODE	Unique identifier for item type.
23.	ITEM TYPE CODE	Unique identifier for item type.
24.	MERCHANDISE IND	Indicates whether the item's sales are financially tracked in the stock ledger.
25.	NETWORK CODE	Identifier of the network.
26.	PERISHABLE IND	Indicates whether the item is perishable.
27.	PRICE AUDIT IND	An indicator to denote whether the ITEM was validated (scanned) during verification of the ITEM table.
28.	PRIMARY ALTERNATE ITEM NAME	Default Alternate Item Name
29.	PRIMARY ALTERNATE ITEM NUMBER	Default Alternate Item Number
30.	PRODUCT CODE	Description of Handset Model.
31.	PRODUCT GROUP CODE	Code for Product Group.
32.	PRODUCT NAME	Product name.
33.	PRODUCT PACKAGE CHARGE TYPE CODE	Code. For example: CMBND
34.	PRODUCT PACKAGE TYPE CODE	Identifier for the offer. For example: Individual.
35.	PRODUCT RATING PLAN TYPE CODE	Identifier for the offer.
36.	PRODUCT TYPE CODE	Code. For example CALL
37.	RECIPE IND	The recipe identifier that is associated to the selling item.
38.	SECURITY REQUIRED TYPE CODE	A code that defines the security environment and procedures required for receiving, displaying and selling the item. This is for high-priced merchandise like jewelry, certain prescription drugs, ordinance, fireworks, and so on.
39.	SELLABLE IND	Indicates whether the item can be sold. If 'N', then the only analysis available is on customer order lines of type partial within Customer Order Management
40.	SHRINK IND	An indicator to denote if the ITEM could loose weight from the time of order until the time of receipt
41.	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.
42.	STOP SALE IND	Indicates that sale of the item should be stopped immediately at the location.
43.	STORE REORDERABLE IND	Indicates whether the store may re-order the item.
44.	SUBSTITUTE IDENTIFIED IND	An ITEM for which there is a substitute available for sale within the RETAIL STORE
45.	SWELL IND	An indicator to indicate if the ITEM may gain weight or swell from time of order to time of receipt.
46.	TAX EXEMPT CODE	A code to denote the tax exemption status from sales and use tax. The codes refer to the UCC code
47.	UNIT PRICE FACTOR	The number of units of measure per selling unit. Used as the divisor when calculating the ITEMs unit retail price. For example: \$1.67 per pound or \$2.59 for 32 fl. oz.
48.	UOM CODE	The code used to specify the units in which a value is being expressed, or manner in which a measurement has been taken. This code relates to the UCC data element 355.

**Table 3–120 (Cont.) Handset Model Detail**

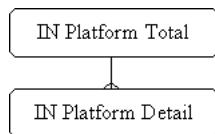
Sr. Number	Attribute	Description
49.	VENDOR CODE	The vendor who provide this product. Here product should be an product item. For example: handset, STB
50.	VENDOR SITE CODE	Unique identifier or the Vendor Site
	PRODUCT DESC	
	MODEL TYPE CODE	

## IN Platform

Description: [IN PLATFORM](#)

### IN Platform Hierarchies

Standard IN Platform Hierarchy:



### IN Platform Level

[Table 3–121](#) shows IN Platform Total: All IN Platform are most aggregate level of the dimension.

**Table 3–121 IN Platform Total**

Sr. Number	Attribute	Description
1.	ALL IN PLATFORM CODE	Code for All IN Platform.

[Table 3–122](#) shows IN Platform Detail: Detail level of the dimension. Stores the IN Platform Detail Information.

**Table 3–122 IN Platform Detail**

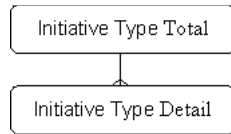
Sr. Number	Attribute	Description	Sample Value
1.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
2.	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.	12/31/2005 12:00:00 AM
3.	IN PLATFORM CODE	Id for IN Platform.	5101
4.	IN PLATFORM DESC	IN Platform description.	
5.	IN PLATFORM NAME	IN Platform name.	
6.	NETWORK CODE	The network which is used by this platform	1
8.	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.	

## Initiative Type

Description: [INITIATIVE TYPE](#)

### Initiative Type Hierarchies

Standard Initiative Type Hierarchy:



### Initiative Type Levels

Table 3–123 shows Initiative Type Total: All Initiative Type are most aggregate level of the dimension.

**Table 3–123 Initiative Type Total**

Sr. Number	Attribute	Description
1.	ALL INITIATIVE TYPE CODE	Code for All Initiative Type.

Table 3–124 shows Initiative Type Detail: Detail level of the dimension. Stores the Initiative Type Detail Information.

**Table 3–124 Initiative Type Detail**

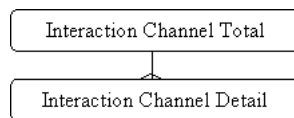
Sr. Number	Attribute	Description
1.	INITIATIVE TYPE CODE	The initiative type identifier.
2.	INITIATIVE TYPE NAME	The initiative type name.
3.	INITIATIVE TYPE DESC	The initiative type description
4.	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.

### Interaction Channel

Description: [INTERACTION CHANNEL](#)

### Interaction Channel Hierarchies

Standard Interaction Channel Hierarchy:



### Interaction Channel Levels

Table 3–125 shows Interaction Channel Total: All Initiative Type are most aggregate level of the dimension.

**Table 3–125 Interaction Channel Total**

Sr. Number	Attribute	Description
1.	ALL INTERACTION CHANNEL CODE	Code for All Interaction Channel.

Table 3–126 shows Interaction Channel Detail: Detail level of the dimension. It Stores the Interaction Channel Detail Information.

**Table 3–126 Interaction Channel Detail**

Sr. Number	Attribute	Description	Sample Value
1.	CAPACITY QUANTITY	The number of transaction that a Channel can handle, at a point of time.	
2.	CHANNEL CODE	A unique identifier for channel	
3.	CHANNEL DESC	Description for Channel	
4.	CHANNEL NAME	The name assigned to a channel.	SHOP
5.	CHANNEL TYPE CODE	A code used to uniquely identify a major grouping of Channels. Examples: M - MailT - Telephone TV - Television.	SLCHNL
6.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
7.	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.	12/31/2005 12:00:00 AM
8.	INTERACTION CHANNEL CODE	A code for Interaction channel	
9.	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	
10.	PARTY TYPE CODE	PARTY TYPE CODE.	ORG
11.	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on. An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.	

## Internet Service Provider

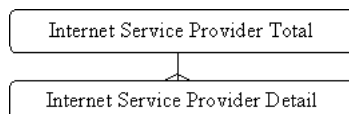
Description: An Internet service provider (ISP), also sometimes referred to as an Internet Access Provider (IAP), is a company that offers its customers access to the Internet. The ISP connects to its customers using a data transmission technology appropriate for delivering Internet Protocol datagrams, such as dial-up, DSL, cable modem, wireless, or dedicated high-speed interconnects.

This entity relates an [ISP](#) to the Communications Service Provider through a "business" relationship. This entity assigns the definition of the relationship, in entity [ISP BUSINESS](#), with the corresponding [ISP](#).

ISP Usage Events records traffic details of each session the user conducts with the Internet Service Provider ISP. The entity documents the connect and disconnect date/time as well as the number of local and international bytes downloaded as well uploaded. There will typically be multiple rows for each long running session. The entity will be implementation dependent, but normally there will be a record generate each hour - all records for the one session will have the same connect and disconnect date times, but the event start/ed date times will identify the period that the usage (bytes) covers.

### Internet Service Provider Hierarchies

Standard Internet Service Provider Hierarchy:





## Internet Service Provider Levels

Table 3–127 shows Internet Service Provider Total: All Internet Service Provider are most aggregate level of the dimension.

**Table 3–127 Internet Service Provider Total**

Sr. Number	Attribute	Description
1.	ALL INTERNET SERVICE PROVIDER CODE	Code for Internet Service Provider.

Table 3–128 shows Internet Service Provider Detail: Detail level of the dimension. It Stores the Internet Service Provider Detail information.

**Table 3–128 Internet Service Provider Detail**

Sr. Number	Attribute	Description	Sample Value
1.	ANNUAL REVENUE	Revenue of the company.	
2.	ANNUAL REVENUE LOCAL	Revenue of the company in local currency.	
3.	ANNUAL REVENUE REPORTING	Revenue of the company in reporting currency.	
4.	ANNUAL SALES	Sales of the company	
5.	ANNUAL SALES LOCAL	Sales of the company in local currency	
6.	ANNUAL SALES REPORTING	Sales of the company in reporting currency	
7.	BANKRUPTCY END DATE	The end date of bankruptcy. If current date is behind start and end date is null, then the company is undergoing the bankruptcy process.	12/31/2005 12:00:00 AM
8.	BANKRUPTCY START DATE	start date of bankruptcy.	12/31/2005 12:00:00 AM
9.	CHAIRMAN CODE	Connect to Another Person Party who is responsible for this Organization.	
10.	COMPANY REGISTRY NUMBER	Will be same as Party. National_Identifier. Natural Key for Organization.	
11.	CONTACT CODE	ID of the contact person for the organization.	
12.	CONTACT NAME	Contact Employee for organization.	
13.	COURT CODE	Code of the law of court.	
14.	DOMESTIC INDICATOR	For PARTYS that are organizations, this indicates whether the organization is foreign or domestically owned.	
15.	DUNS NUMBER	DUNS NUMBER is an identifier for organization.	
16.	EMPLOYEE COUNT	Total number of employee in the company or organization.	
17.	EQUITY AMOUNT	The equity value of the company/org.	
18.	EQUITY AMOUNT LOCAL	The equity value of the company/org.	
19.	EQUITY AMOUNT REPORTING	The equity value of the company/org.	
20.	EXTERNAL ORGANIZATION TYPE CODE	code for external organization type	
21.	FINAL SETTLEMENT END DATE	End date of final settlement.	12/31/2005 12:00:00 AM
22.	FINAL SETTLEMENT START DATE	Start date of final settlement.	12/31/2005 12:00:00 AM

**Table 3–128 (Cont.) Internet Service Provider Detail**

Sr. Number	Attribute	Description	Sample Value
23.	ISP BUSINESS LICENSE CODE	The ISP business license code issued by regulation authorities.	TYP1
24.	ISP CODE	Unique key for internet service provider	1
25.	ISP TYPE CODE	unique key for internet service provider type.	TYP1
26.	JUDICIAL DISTRAINT CODE	Case identifier of the judicial distraint.	
27.	JUDICIAL DISTRAINT DATE	Date of the judicial distraint	12/31/2005 12:00:00 AM
28.	LIQUIDATION END DATE	The date when the company/org was liquidated. If is null and start date is not null, the company is undergoing the liquidation	12/31/2005 12:00:00 AM
29.	LIQUIDATION START DATE	Start date of liquidation	12/31/2005 12:00:00 AM
30.	MANAGER CODE	ID of the manager for the organization	
31.	MANAGER NAME	Name of manager for the whole company.	
32.	OTHER INDIVIDUAL CODE	code for other individual	
33.	PARTY ORGANIZATION TYPE CODE	unique key for organization type party	Individual
34.	PAYMENT ACCOUNT CLOSE DATE	Closing date of the account for payments.	12/31/2005 12:00:00 AM
35.	PAYMENT ACCOUNT NUMBER	Account number for payments.	
36.	PAYMENT ACCOUNT OPEN DATE	Opening date of the account for payments.	12/31/2005 12:00:00 AM
37.	SEAL IMAGE	The image of the Organization's Seal, or the Artificial Person's Signature.	
38.	STOCK EXCHANGE NAME	Abbreviation of listed companies as used on the stock exchange.	
39.	TAX EXEMPT STATUS	Indicates if the org. is tax exempt.	
40.	TERMINATION DATE	Termination date of the company in case of company was founded with termination date.	12/31/2005 12:00:00 AM
41.	VALIDATION END DATE	Effective date of the deletion of the company's record from the company register.	12/31/2005 12:00:00 AM
42.	VALIDATION START DATE	Date of the registration of the company' record deletion from the company register.	12/31/2005 12:00:00 AM
	ADDRESS		
	PARTY CODE		
	PARTY TYPE CODE		
	BUSINESS LEGAL STATUS CODE		
	SOURCE SYSTEM CODE		
	BARING REASON CODE		
	POST CODE		
	STATUS CODE		
	CITY		
	STATE		
	COUNTRY		

**Table 3–128 (Cont.) Internet Service Provider Detail**

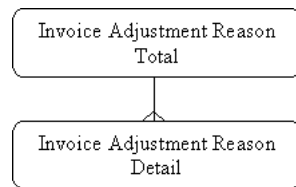
Sr. Number	Attribute	Description	Sample Value
	PARTY NAME		
	PARTY DESC		
	ACTIVE INDICATOR		
	CUSTOMER INDICATOR		
	EFFECTIVE FROM DATE		
	EFFECTIVE TO DATE		

## Invoice Adjustment Reason

Description: [INVOICE ADJUSTMENT REASON](#)

### Invoice Adjustment Reason Hierarchies

Standard Invoice Adjustment Reason Hierarchy:



### Invoice Adjustment Reason Levels

[Table 3–129](#) shows Invoice Adjustment Reason Total: All Invoice Adjustment Reason are most aggregate level of the dimension.

**Table 3–129 Invoice Adjustment Reason Total**

Sr. Number	Attribute	Description
1.	ALL INVOICE ADJUSTMENT REASON CODE	Code for All Invoice Adjustment Reason.

[Table 3–130](#) shows Invoice Adjustment Reason Detail: Detail level of the dimension. It Stores the Invoice Adjustment Reason Detail Information.

**Table 3–130 Invoice Adjustment Reason Detail**

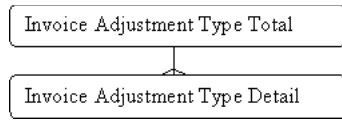
Sr. Number	Attribute	Description	Sample Value
2.	INVOICE ADJUSTMENT RSN CODE	A unique identifier for reason	C MPLN
3.	INVOICE ADJUSTMENT RSN DESC	Description for reason	Customer complain
4.	INVOICE ADJUSTMENT RSN NAME	The name for invoice adjustment.	Customer complain
5.	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Invoice Adjustment Type

Description: [INVOICE ADJUSTMENT TYPE](#)

### Invoice Adjustment Type Hierarchies

Standard Invoice Adjustment Type Hierarchy:



### Invoice Adjustment Type Levels

Table 3–131 shows Invoice Adjustment Type Total: All Invoice Adjustment Type are most aggregate level of the dimension.

**Table 3–131 Invoice Adjustment Type Total**

Sr. Number	Attribute	Description
1.	ALL INVOICE ADJUSTMENT TYPE CODE	Code for All Invoice Adjustment Type.

Table 3–132 shows Invoice Adjustment Type Detail: Detail level of the dimension. It Stores the Invoice Adjustment Type Detail Information.

**Table 3–132 Invoice Adjustment Type Detail**

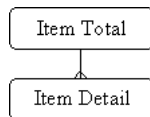
Sr. Number	Attribute	Description	Sample Value
1.	INVOICE ADJUSTMENT TYPE CODE	A code used to uniquely identify a adjustment type.	CMPGN
2.	INVOICE ADJUSTMENT TYPE DESC	A textual description of the adjustment Type.	Invoice Adjustment because of Specific Campaign in certain time period
3.	INVOICE ADJUSTMENT TYPE NAME	The name assigned to a adjustment Type.	Campaign
4.	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	

## Item

Description: [ITEM](#)

### Item Hierarchies

Standard Item Hierarchy:



### Item Levels

Table 3–133 shows Item Total: All Items are most aggregate level of the dimension.

**Table 3–133 Item Total**

Sr. Number	Attribute	Description
1.	ALL ITEM CODE	Code for All Items.

Table 3–134 shows Item Detail: Detail level of the dimension. It Stores the Item Detail Information.

**Table 3–134 Item Detail**

Sr. Number	Attribute	Description	Sample Value
1.	AVAILABLE FOR SALE DATE	The date when this ITEM becomes available for sale. For example, certain books have specific publication dates, music entertainment release dates.	12/31/2005 12:00:00 AM
2.	BRAND CODE	Unique Identifier for a item brand	
3.	BRAND NAME	One Item can have one brand name. One brand name can extend to multiple items.  A unique name to denote a class of ITEMS as a product of a single supplier or manufacturer. The brand can include private label ITEMS.	
4.	COMMISSION IND	A flag to indicate whether this ITEM has a commission related to it or not	
5.	DISCOUNT IND	A flag to indicate whether this ITEM can be discounted.	
6.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
7.	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.	12/31/2005 12:00:00 AM
8.	EQUIPMENT FUNCTIONALITY CODE	The code of function	
9.	IN PLATFORM CODE	IN PLATFORM CODE.	
10.	ITEM CODE	Unique identifier for item type.	ITEM-1
11.	ITEM TYPE CODE	Unique identifier for item type.	CELL
12.	MERCHANDISE IND	Indicates whether the item's sales are financially tracked in the stock ledger.	
13.	MODEL TYPE CODE	Unique Identifier for Model Type	
14.	NETWORK CODE	Identifier of the network.	
15.	PERISHABLE IND	Indicates whether the item is perishable.	
16.	PRIMARY ALTERNATE ITEM NAME	Default Alternate Item Name	
17.	PRIMARY ALTERNATE ITEM NUMBER	Default Alternate Item Number	
18.	PRODUCT CODE	PRODUCT CODE.	
19.	PRODUCT DESC	Full Description.	Broadband
20.	PRODUCT GROUP CODE		
21.	PRODUCT NAME	Product name.	BRDBND
22.	PRODUCT PACKAGE CHARGE TYPE CODE	Code.	
23.	PRODUCT PACKAGE TYPE CODE	Identifier for the offer.	
24.	PRODUCT RATING PLAN TYPE CODE	Identifier for the offer.	
25.	PRODUCT TYPE CODE	Retrofitted from column PRODUCT_KEY of table FACT_MARKET_SHARE	NETWORK
26.	RECIPE IND	The recipe identifier that is associated to the selling item.	
27.	SECURITY REQUIRED TYPE CODE	A code that defines the security environment and procedures required for receiving, displaying and selling the item. This is for high-priced merchandise like jewelry, certain prescription drugs, ordinance, fireworks, and so on.	

**Table 3–134 (Cont.) Item Detail**

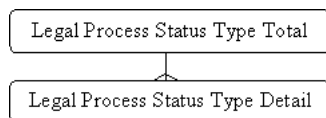
Sr. Number	Attribute	Description	Sample Value
28.	SHRINK IND	An indicator to denote if the ITEM could loose weight from the time of order until the time of receipt	
29.	STOP SALE IND	Indicates that sale of the item should be stopped immediately at the location.	
30.	STORE REORDERABLE IND	Indicates whether the store may re-order the item.	
31.	SUBSTITUTE IDENTIFIED IND	An ITEM for which there is a substitute available for sale within the RETAIL STORE	
32.	SWELL IND	An indicator to indicate if the ITEM may gain weight or swell from time of order to time of receipt.	
33.	TAX EXEMPT CODE	A code to denote the tax exemption status from sales and use tax. The codes refer to the UCC code	
34.	UNIT PRICE FACTOR	The number of units of measure per selling unit. Used as the divisor when calculating the ITEMS unit retail price. For example: \$1.67 per pound or \$2.59 for 32 fl. oz.	
35.	UOM CODE	The code used to specify the units in which a value is being expressed, or manner in which a measurement has been taken. This code relates to the UCC data element 355.	
36.	VENDOR CODE	The vendor who provide this product. Here product should be an product item. For example: handset, STB	
37.	VENDOR SITE CODE ITEM CLUSTER CODE INVENTORY IND SELLABLE IND PRICE AUDIT IND	Unique identifier or the Vendor Site	

## Legal Process Status Type

Description: [LEGAL PROCESS STATUS TYPE](#)

### Legal Process Status Type Hierarchies

Standard Legal Process Status Type Hierarchy:



### Legal Process Status type Levels

[Table 3–135](#) shows Legal Process Status Type Total: All Legal Process Status Type are most aggregate level of the dimension.

**Table 3–135 Legal Process Status Type Total**

Sr. Number	Attribute	Description
1.	ALL LEGAL PROCESS STATUS TYPE CODE	Code for All Legal Process Status Type.

Table 3–136 shows Legal Process Status Type Detail: Detail level of the dimension. It Stores the Legal Process Status Type Detail Information.

**Table 3–136 Legal Process Status Type Detail**

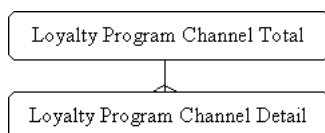
Sr. Number	Attribute	Description
1.	LEGAL PROCESS STATUS TYPE CODE	Legal Process Started Indicator.
2.	LEGAL PROCESS STATUS TYPE DESC	Description for Legal Process Status Type.
3.	LEGAL PROCESS STATUS TYPE NAME	Name for Legal Process Status Type.
4.	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.

## Loyalty Program Channel

Description: [LOYALTY PROGRAM CHANNEL](#)

### Loyalty Program Channel Hierarchies

Standard Loyalty Program Channel Hierarchy:



### Loyalty Program Channel Levels

Table 3–137 shows Loyalty Program Channel Total: All Loyalty Program Channel are most aggregate level of the dimension.

**Table 3–137 Loyalty Program Channel Total**

Sr. Number	Attribute	Description
1.	ALL LOYALTY PROGRAM CHANNEL CODE	Code for All Loyalty Program Channel.

Table 3–138 shows Loyalty Program Channel Detail: Detail level of the dimension. It Stores the Loyalty Program Channel Detail Information.

**Table 3–138 Loyalty Program Channel Detail**

Sr. Number	Attribute	Description	Sample Value
1.	CAPACITY QUANTITY	The number of transaction that a Channel can handle, at a point of time.	
2.	CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	-1,1
3.	CHANNEL DESC	Description for that channel can be handle.	
4.	CHANNEL NAME	The name assigned to a channel.	
5.	CHANNEL TYPE CODE	Unique identifier of the channel type	LYLTCHNL
6.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM

**Table 3–138 (Cont.) Loyalty Program Channel Detail**

Sr. Number	Attribute	Description	Sample Value
7.	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.	12/31/2005 12:00:00 AM
8.	LOYALTY PROGRAM CHANNEL CODE	Code for Loyalty Program Channel	-1,1
9.	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	
10.	PARTY TYPE CODE	PARTY TYPE CODE.	CUSTOMER
11.	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on. An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.	

## Market Area

Description: [MARKET AREA](#)

### Market Area Hierarchies

Standard Market Area Hierarchy:



### Market Area Levels

[Table 3–139](#) shows Market Area Total: All Market Area are most aggregate level of dimension.

**Table 3–139 Market Area Total**

Sr. Number	Attribute	Description
1.	ALL MARKET AREA CODE	Code for All Market Area's

[Table 3–140](#) shows Market Area Detail: Detail level of the dimension. It Stores the Market Area Information.

**Table 3–140 Market Area Details**

Sr. Number	Attribute	Description
1	MARKET AREA CODE	Market Area identifier
2	SERVICE COVERAGE AREA CODE	COVERAGE AREA CODE. Unique identifier for the coverage area
3	ORGANIZATION BUSINESS UNIT CODE	Market Area identifier
4	SECONDARY ZIP CODE	Applicable only in case the zip code spans across multiple zip codes
5	MARKET AREA LEVEL CODE	Identifier for the community or logical segment under the market area.
6	MARKET AREA UOM CODE	This is the unit of measure used to measure the size of the trading area, that is, miles, minutes, and so on.
7	PRIMARY ZIP CODE	Primary Zip code for the market area.



**Table 3–140 (Cont.) Market Area Details**

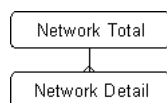
Sr. Number	Attribute	Description
8	MARKET AREA NAME	Name of the market area.
9	MARKET AREA DESC	Description of the market area.
10	AREA TYPE	Type of Trading Area- Urban- Suburban
11	COUNTY	County / District
12.	CITY	City in which the market area belongs
13.	STATE	State or province
14.	COUNTRY	Country of the market area
15.	PULL FACTOR	Ratios that estimate the proportion of local sales that occurs in a town
16.	TRADE AREA CAPTURE	An estimate of the number of people who shop in the local area during a certain period
17.	TOTAL POPULATION	Estimated total population of the market area
18.	STATE POPULATION	Estimated state population of the market area.
19.	STATE SALES	Estimated total retail sales in the state
20.	STATUS CODE	Unique Identifier of the status.
	DEFINITION TYPE	
	AREA SHAPE	
	STATE SALES LOCAL	
	STATE SALES REPORTING	
	EFFECTIVE FROM DATE	
	EFFECTIVE TO DATE	

## Network

Description: [NETWORK](#)

### Network Hierarchies

Standard Network Hierarchy:



### Network Levels

[Table 3–141](#) shows Network Total: All Networks are most aggregate level of dimension.

**Table 3–141 Network Total**

Sr. Number	Attribute	Description
1.	ALL NETWORK CODE	Code for All Network's.

[Table 3–142](#) shows Network Detail: Detail level of the dimension. It stores the Network information.

**Table 3–142 Network Detail**

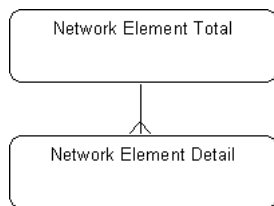
Sr. Number	Attribute	Description	Sample Value
1.	NETWORK CODE	Identifier of the network	CDMA
2.	NETWORK TYPE CODE	A code that uniquely identifies the type of technology (for example GSM, CDMA) being used by a network.	CDMA
3.	EXTERNAL OPERATOR CODE	Unique identifier for operator. For example: Airtel, CMCC, NTT.	
4.	SERVICE PROVIDER CODE	Code of the service provider of the network.	
5.	NETWORK NAME	Name of the network	CDMA
6.	NETWORK DESC	A textual description that describes the type of technology (for example GSM, CDMA) being used by a network.	CDMA

## Network Element

Description: [NETWORK ELEMENT](#)

### Network Element Hierarchies

Standard Network Element Hierarchy:



### Network Element Levels

[Table 3–143](#) shows Network Element Total: All Networks Element are most aggregate level of dimension.

**Table 3–143 Network Element Total**

Sr. Number	Attribute	Description
1.	NETWORK ELEMENT TOTAL CODE	Code for All Network Elements.

[Table 3–144](#) shows Network Element Detail: This level explains the detail level of Network element dimension.

**Table 3–144 Network Element Detail**

Sr. Number	Attribute	Description	Sample Value
1.	NETWORK ELEMENT CODE	cells can split into sectors or individual areas to make them more efficient and to let them to carry more calls	CDMA
2.	NETWORK CODE	Identifier of the network.	CDMA
3.	NETWORK ELEMENT NAME	Name of the Network Element.	CDMA
4.	NETWORK ELEMENT DESC	Description of the Network Element.	CDMA
5.	EFFECTIVE FROM DATE	Date from when Network Element is Effective	12/31/2005 12:00:00 AM

**Table 3–144 (Cont.) Network Element Detail**

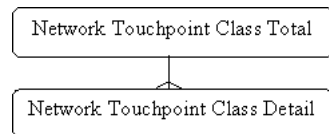
Sr. Number	Attribute	Description	Sample Value
6.	EFFECTIVE TO DATE	Date to when Network Element is Effective	12/31/2005 12:00:00 AM
7.	STATUS CODE TECHNOLOGY CODE	Unique identifier of the status.	

## Network Touchpoint Class

Description: [NETWORK TOUCHPOINT CLASS](#)

### Network Touchpoint Class Hierarchies

Standard Network Touchpoint Class Hierarchy:



### Network Touchpoint Class Levels

[Table 3–145](#) shows Network Touchpoint Class Total: All Networks Touch point class are most aggregate level of dimension.

**Table 3–145 Network Touchpoint Class Total**

Sr. Number	Attribute	Description
1.	NETWORK TOUCHPOINT CLASS TOTAL CODE	Code for All Network Touchpoint class.

[Table 3–146](#) shows Network Touchpoint Class Detail: Detail level of the dimension. It stores the Network Touchpoint class information.

**Table 3–146 Network Touchpoint Class Detail**

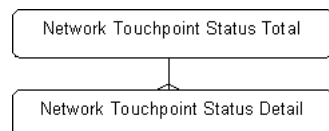
Sr. Number	Attribute	Description	Sample Value
1.	NETWORK TOUCHPOINT CLASS CODE	Unique identifier of the network touchpoint class.	INDVL
2.	NETWORK TOUCHPOINT CLASS NAME	Name of network touchpoint class.	Individual
3.	NETWORK TOUCHPOINT CLASS DESC	Description of network touchpoint class.	Network touchpoint is owned by Individual customer
4.	LANGUAGE CODE	Code for network touchpoint class languages.	

## Network Touchpoint Status

Description: [NETWORK TOUCHPOINT STATUS](#)

### Network Touchpoint Status Hierarchies

Standard Network Touchpoint Status Hierarchy:



### Network Touchpoint Status Level

Table 3–147 shows Network Touchpoint Status Total: All Networks Touchpoint Status are most aggregate level of dimension.

**Table 3–147 Network Touchpoint Status Total**

Sr. Number	Attribute	Description
1.	NETWORK TOUCHPOINT STATUS TOTAL CODE	Code for All Network Touchpoint Status.

Table 3–148 shows Network Touchpoint Status Detail: Detail level of the dimension. It stores the Network Touchpoint Status information.

**Table 3–148 Network Touchpoint Status Detail**

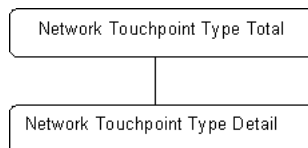
Sr. Number	Attribute	Description
1.	LANGUAGE CODE	Code for network touchpoint status languages
2.	NETWORK TOUCHPOINT STATUS CODE	Unique identifier of the network touchpoint status.
3.	NETWORK TOUCHPOINT STATUS NAME	Name of network touchpoint status.
4.	NETWORK TOUCHPOINT STATUS DESC	Description of network touchpoint status.

### Network Touchpoint Type

Description: NETWORK TOUCHPOINT TYPE

#### Network Touchpoint Type Hierarchies

Standard Network Touchpoint Type Hierarchy:



#### Network Touchpoint Type Levels

Table 3–149 shows Network Touchpoint Type Total: All Networks Touchpoint Type are most aggregate level of dimension.

**Table 3–149 Network Touchpoint Type Total**

Sr. Number	Attribute	Description
1.	NETWORK TOUCHPOINT TYPE TOTAL CODE	Code for All Network Touchpoint Type.

Table 3–150 shows Network Touchpoint Type Detail: Detail level of the dimension. It stores the Network Touchpoint Type information.

**Table 3–150 Network Touchpoint Type Detail**

Sr. Number	Attribute	Description	Sample Value
1.	LANGUAGE CODE	Code for network touchpoint type languages	

**Table 3–150 (Cont.) Network Touchpoint Type Detail**

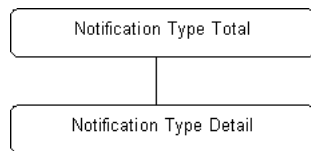
Sr. Number	Attribute	Description	Sample Value
2.	NETWORK TOUCHPOINT TYPE CODE	Unique identifier of the network touchpoint type.	BRDBND
3.	NETWORK TOUCHPOINT TYPE NAME	Name of the network touchpoint type.	Broadband
4.	NETWORK TOUCHPOINT TYPE DESC	Description of network touchpoint type.	Broadband

## Notification Type

Description: [NOTIFICATION TYPE](#)

### Notification Type Hierarchies

Standard Notification Type Hierarchy:



### Notification Type Levels

[Table 3–151](#) shows Notification Type Total: All Notification Type are most aggregate level of dimension.

**Table 3–151 Notification Type Total**

Sr. Number	Attribute	Description
1.	NOTIFICATION TYPE TOTAL CODE	Code for All Notification Type total.

[Table 3–152](#) shows Notification Type Detail: Detail level of the dimension. It stores the Notification Type information.

**Table 3–152 Notification Type Detail**

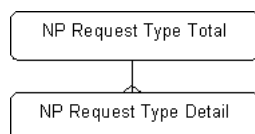
Sr. Number	Attribute	Description	Sample Value
1.	LANGUAGE CODE	Code for Notification type languages	
2.	NOTIFICATION TYPE CODE	Code for UMS Notification Type.	FAX
3.	NOTIFICATION TYPE DESC	Description of the UMS Notification Type.	Fax
4.	NOTIFICATION TYPE NAME	Name of the UMS Notification Type.	Fax

## NP Request Type

Description: [NP REQUEST TYPE](#)

### NP Request Type Hierarchies

Standard NP Request Type Hierarchy:



### NP Request Type Levels

Table 3–153 shows NP Request Type Total: All NP Request Type Total are most aggregate level of dimension.

**Table 3–153 NP Request Type Total**

Sr. Number	Attribute	Description
1.	NP REQUEST TYPE TOTAL CODE	Code for All NP Request Types Total.

Table 3–154 shows NP Request Type Detail: Detail level of the dimension. It stores the NP Request Type information.

**Table 3–154 NP Request Type Detail**

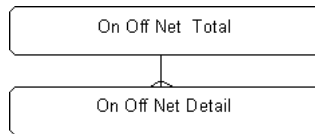
Sr. Number	Attribute	Description	Sample Value
1.	LANGUAGE CODE	Code for NP Request Type language	
2.	NP REQUEST TYPE CODE	A code, used to uniquely identify the NP REQUEST TYPE.	IN
3.	NP REQUEST TYPE NAME	The name assigned to the NP REQUEST TYPE.	Porting In
4.	NP REQUEST TYPE DESC	A textual description of the NP REQUEST TYPE.	Porting In

### On Off Net

Description: ON OFF NET TYPE

#### On Off Net Hierarchies

Standard On Off Net Hierarchy:



#### On Off Net Levels

Table 3–155 shows On Off Net Total: On Off Net Total are most aggregate level of dimension.

**Table 3–155 On Off Net Total**

Sr. Number	Attribute	Description
1.	ON OFF NET TOTAL CODE	Code for All On Off Net Total.

Table 3–156 shows On Off Net Detail: Detail level of the dimension. It stores the On Off Net information.

**Table 3–156 On Off Net Detail**

Sr. Number	Attribute	Description	Sample Value
1.	LANGUAGE CODE	Code for On Off Net language	
2.	ON OFF NET TYPE CODE	A code, used to uniquely identify the On Off Net TYPE.	OFF
3.	ON OFF NET TYPE NAME	The name assigned to the On Off Net TYPE.	Off Net
4.	ON OFF NET TYPE DESC	A textual description of the On Off Net TYPE.	Off Net

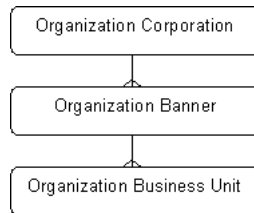
## Organization

Description: **ORGANIZATION HIERARCHY** is the hierarchy of business units within the organization, with **ORGANIZATION BUSINESS UNIT** as lowest level and **ORGANIZATION CORPORATE** as highest level.

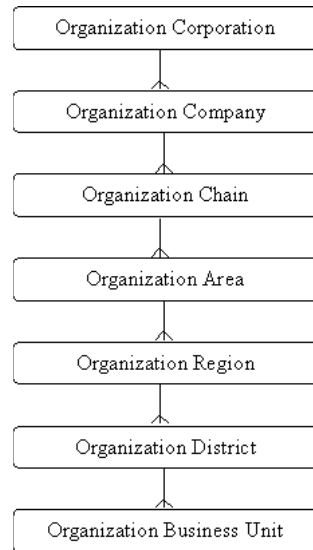
### Organization Hierarchies

Standard Organization Hierarchy:

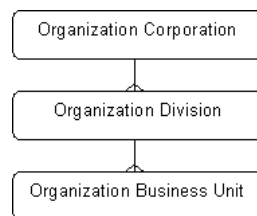
Banner Hierarchy



Company Hierarchy:



Division Hierarchy:



### Organization Corporate Levels

[Table 3-157](#) shows All Organization Total: All Organization Total are most aggregate level of dimension.

**Table 3–157 All Organization Total**

Sr. Number	Attribute	Description
1.	ORGANIZATION TOTAL Id's	Code for All Organization Total.

[Table 3–158](#) shows Organization Corporate: Description level of the dimension. It stores the Organization Corporate information.

**Table 3–158 Organization Corporate**

Sr. Number	Attribute	Description	Sample Value
1.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
2.	EFFECTIVE TO DATE	End effective date for the assignment.	12/31/2005 12:00:00 AM
3.	ORGANIZATION CORPORATE CODE	Code for Organization Corporate	
4.	ORGANIZATION CORPORATE DESC	Description for Organization Corporate	
5.	ORGANIZATION CORPORATE ESTABLISHED		
6.	ORGANIZATION CORPORATE NAME	Name for Organization Corporate	
7.	STATUS CODE	Current STATUS CODE of the assignment.	

### Organization Banner Levels

[Table 3–159](#) shows Organization Banner Levels: The name of a company's subsidiary that is recognizable to the consumer or the name of the store as it appears on the catalog, web channel or brick and mortar store.

**Table 3–159 Organization Banner Levels**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION BANNER ID's	Code for All Organization Banner.

[Table 3–160](#) shows Organization Banner: Description level of the dimension. It stores the Organization Banner information.

**Table 3–160 Organization Banner**

Sr. Number	Attribute	Description	Sample Value
1.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
2.	EFFECTIVE TO DATE	End effective date for the assignment.	12/31/2005 12:00:00 AM
3.	ORGANIZATION BANNER CODE	Code for Organization Banner	
4.	ORGANIZATION BANNER DESC	Description for Organization Banner.	
5.	ORGANIZATION BANNER NAME	Name for Organization Banner	
6.	ORGANIZATION CORPORATE CODE	Code for Organization Corporate	
7.	STATUS CODE	Current STATUS CODE of the assignment.	



## Organization Company Levels

[Table 3–161](#) shows All Organization Company: All Organization Company are most aggregate level of Dimension.

**Table 3–161 All Organization Company**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION COMPANY ID's	Code for All Organization Company.

[Table 3–162](#) shows Organization Company: Description level of the dimension. It stores the Organization Company information.

**Table 3–162 Organization Company**

Sr. Number	Attribute	Description	Sample Value
1	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 0:00
2	ORGANIZATION COMPANY DESC	Description for Organization Company	
3	ORGANIZATION COMPANY CODE	Code for Organization Company	
4	EFFECTIVE TO DATE	End effective date for the assignment.	12/31/2005 12:00:00 AM
5	ORGANIZATION COMPANY NAME	Name for Organization Company	
6	ORGANIZATION CORPORATE CODE		
7	STATUS CODE	Current STATUS CODE of the assignment.	

## Organization Division Levels

[Table 3–163](#) shows Organization Division Total: All Organization Division are most aggregate level of dimension.

**Table 3–163 Organization Division Total**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION DIVISION ID's	Code for All Organization Division.

[Table 3–164](#) shows Organization Division: Description level of the dimension. It stores the Organization Division information.

**Table 3–164 Organization Division**

Sr. Number	Attribute	Description	Sample Value
1.	ORGANIZATION DIVISION CODE	Code for Organization Division	Ace Comms
3.	ORGANIZATION CORPORATE CODE	Code for Organization Code	
4.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
5.	ORGANIZATION DIVISION DESC	Description for Organization Division	Ace Comms

**Table 3–164 (Cont.) Organization Division**

Sr. Number	Attribute	Description	Sample Value
6.	ORGANIZATION DIVISION NAME	Name for Organization Division	Ace Comms
7.	STATUS CODE	Current STATUS CODE of the assignment.	
	EFFECTIVE TO DATE		

### Organization Chain: Organization Chain Levels

Table 3–165 shows Organization Chain Total: Chain is the second highest level within the organization hierarchy below company. A chain consists of one or more areas.

**Table 3–165 Organization Chain Total**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION CHAIN ID's	Code for All Organization Chain.

Table 3–166 shows Organization Chain Detail: Description level of the dimension. It stores the Organization Chain information

**Table 3–166 Organization Chain Detail**

Sr. Number	Attribute	Description
1.	ORGANIZATION CHAIN CODE	Code for Organization chain
2.	ORGANIZATION CHAIN DESC	Description for Organization Chain
3.	ORGANIZATION CHAIN NAME	Name for Organization Chain
4.	EFFECTIVE FROM DATE	Description for Organization Chain
5.	EFFECTIVE TO DATE	End effective date for the assignment.
6.	ORGANIZATION COMPANY CODE	Code for Organization Company
7.	STATUS CODE	Current STATUS CODE of the assignment.

### Organization Area

Table 3–167 shows Organization Area Total: Organization hierarchy level within an organization chain and is the parent of one or more organization regions.

**Table 3–167 Organization Area Total**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION AREA ID's	Code for All Organization Area.

Table 3–168 shows Organization Area Detail: Description level of the dimension. It stores the Organization Area information.

**Table 3–168 Organization Area Detail**

Sr. Number	Attribute	Description	Sample Value
1.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
2.	EFFECTIVE TO DATE	End effective date for the assignment.	12/31/2005 12:00:00 AM
3.	ORGANIZATION AREA CODE	Code for Organization area	
4.	ORGANIZATION AREA DESC	Description for Organization Area	
5.	ORGANIZATION AREA NAME	Name for Organization Area	
6.	ORGANIZATION CHAIN CODE	Code for Organization Chain	
7.	STATUS CODE	Current STATUS CODE of the assignment.	

### Organization Region Levels

[Table 3–169](#) shows All Organization Regions: Region is the fourth highest attribute within the organization hierarchy, below area. A region consists of one or more districts

**Table 3–169 All Organization Regions**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION REGION ID's	Code for All Organization Region.

[Table 3–170](#) shows Organization Region: Description level of the dimension. It stores the Organization Region information.

**Table 3–170 Organization Region**

Sr. Number	Attribute	Description	Sample Value
1.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
2.	EFFECTIVE TO DATE	End effective date for the assignment.	12/31/2005 12:00:00 AM
3.	ORGANIZATION AREA CODE	Code for Organization area.	
4.	ORGANIZATION REGION CODE	Code for Organization region	
5.	ORGANIZATION REGION DESC	Description for Organization region	
6.	ORGANIZATION REGION NAME	Name for Organization Region	
7.	STATUS CODE	Current STATUS CODE of the assignment.	

### Organization District Levels

[Table 3–171](#) shows All Organization District: District is the fifth highest attribute within the organization hierarchy, below region. A district consists of one or more business units.

**Table 3–171 All Organization District**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION DISTRICT ID's	Code for All Organization District.

Table 3–172 shows Organization District: Description level of the dimension. It stores the Organization District information.

**Table 3–172 Organization District**

Sr. Number	Attribute	Description	Sample Value
1.	ORGANIZATION DISTRICT CODE	Code for Organization District	12/31/2005 12:00:00 AM
2.	EFFECTIVE TO DATE	End effective date for the assignment.	12/31/2005 12:00:00 AM
3.	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	
4.	ORGANIZATION DISTRICT DESC	Description for Organization District	
5.	ORGANIZATION DISTRICT NAME	Name for Organization District	
6.	ORGANIZATION REGION CODE	Code for Organization Region.	
7.	STATUS CODE	Current STATUS CODE of the assignment.	

### Organization Business Unit

Organization business unit contains 2 kinds of information -store and branch company. In the higher level is branch company. Some customer cannot belong to a particular store, in that case, they are associated with a branch company. So branch company are put in organization business unit level. A business unit of the organization that sells, stores, or distributes merchandises and services through either a physical location (store), catalog, web page or other channel, distribution center, or warehouse.

Table 3–173 shows All Organization Business Unit: It is the lowest level of Organization.

**Table 3–173 All Organization Business Unit**

Sr. Number	Attribute	Description
1.	ALL ORGANIZATION BUSINESS UNIT ID's	Code for All Organization Business Unit.

Table 3–174 shows Organization Business Unit: Description level of the dimension. It stores the Organization Business Unit information.

**Table 3–174 Organization Business Unit**

Sr. Number	Attribute	Description
1	ADDRESS LINE 1	Address. Line one of detailed postal address
2	ADDRESS LINE 2	Address. Line 2 of the detailed postal address
3	ADDRESS LINE 3	Address. Line 3 of the detailed postal address
4	ADDRESS LOCATION CODE	unique identifier for the address Location
5	ADDRESS TYPE CODE	Unique identifier of the address type.
6	ADDRESS USAGE	Describes how the address is used
7	ANNUAL REVENUE	Revenue of the company.
8	ANNUAL REVENUE LOCAL	Revenue of the company.
9	ANNUAL REVENUE REPORTING	Revenue of the company.
10	ANNUAL SALES	Sales of the company
11	ANNUAL SALES LOCAL	Sales of the company

**Table 3–174 (Cont.) Organization Business Unit**

Sr. Number	Attribute	Description
12	ANNUAL SALES REPORTING	Sales of the company
13	BANKRUPTCY END DATE	The end date of bankruptcy. If current date is behind start and end date is null, then the company is undergoing the bankruptcy process.
14	BANKRUPTCY START DATE	start date of bankruptcy.
15	BUSINESS ENTITY CODE	Business Entity Identifier. Unique Identifier for Business Entity. For example: SPRINT
16	BUSINESS UNIT CONCEPT	"Possible values include, Convenience, General Merchandise, Category dominant anchors with few small tenants, Fashion, Higher-end (Upscale), Fashion oriented, Manufacturer's Outlet, Leisure, Tourist oriented and Discount."
18	BUSINESS UNIT TYPE CODE	Unique identifier of the business unit type
19	CHAIRMAN CODE	Connect to Another Person Party who is responsible for this Organization.
20	CHANNEL TYPE CODE	Unique identifier of the channel type
21	COMPANY REGISTRY NUMBER	Will be same as Party. National_Identifier. Natural Key for Organization.
45	ACCOUNT CLERK CODE	This field is client specific. The definition and use of this field is customizable for each client
46	MANAGER EMPLOYEE NUMBER	Unique key denoting the employee number of the employee's manager.
47	MANAGER NAME	Name of manager for the whole company.
48	ORGANIZATION BANNER CODE	Unique identifier for Organization Banner
49	ORGANIZATION BUSINESS UNIT CODE	Unique identifier for Business Unit. To identify whether the site is a store, distribution center or warehouse. For example: SPRINT1
50	ORGANIZATION BUSINESS UNIT TYPE CODE	Unique identifier for Organization Business Unit Type
51	ORGANIZATION CODE	The unique identifier of the organization. For example: ORGUNIT1
52	ORGANIZATION DISTRICT CODE	Unique identifier for Organization district
53	ORGANIZATION DIVISION CODE	Unique identifier for division. For example: China Mobile Beijing
54	ORGANIZATION NAME	Name of the organization
55	ORGANIZATIONAL DEMOGRAPHY VALUE CODE	Unique identifier for demography
56	PAYMENT ACCOUNT CLOSE DATE	Closing date of the account for payments. For example: 12/31/2005 12:00:00 AM
57	PAYMENT ACCOUNT NUMBER	Account number for payments.
58	PAYMENT ACCOUNT OPEN DATE	Opening date of the account for payments. For example: 12/31/2005 12:00:00 AM
59	POSTAL PLUS CODE	Four digit extension to the United States Postal ZIP code.
60	POSTCODE	Postal codes of interest to the Retail Organization
61	PRIMARY ADDRESS TELEPHONE	Default Address Telephone Number
62	PRIMARY BUSINESS UNIT CALENDAR CODE	Primary Business Unit Calendar Code
63	PRIMARY CURRENCY ISO CODE	The unique ISO standard identifier of the CURRENCY
64	PRIMARY EMAIL ADDRESS	Default Email Address
65	PRIMARY TRADE AREA CODE	Primary Trade area code, under which the business unit falls
66	SEAL IMAGE	The image of the Organization's Seal, or the Artificial Person's Signature.

**Table 3-174 (Cont.) Organization Business Unit**

Sr. Number	Attribute	Description
67	SECONDARY DESCRIPTION	"The secondary description or name of the store or warehouse."
68	SHOPPING CENTER TYPE	Shopping center is group of retail and other commercial establishments that is planned, developed, owned, and managed as a single property. Strip Center (Neighborhood, Community)- Mall (Power, Super Regional, Regional, Fashion/Specialty, Lifestyle, Outlet, Theme/Festival)".
70	SHORT DESCRIPTION	The 3 character abbreviation of the store name.
71	STOCK EXCHANGE NAME	Abbreviation of listed companies as used on the stock exchange.
72	TAX EXEMPT STATUS	Indicates if the org. is tax exempt.
73	TERMINATION DATE	Termination date of the company in case of company was founded with termination date. For example: 12/31/2005 12:00:00 AM
74	TIME ZONE	It denotes which TimeZone the Site is in.
75	TOTAL LINEAR DISTANCE	The total linear selling space of the location.
76	VALIDATION END DATE	Effective date of the deletion of the company's record from the company register. For example: 12/31/2005 12:00:00 AM
77	VALIDATION START DATE	Date of the registration of the company' record deletion from the company register. For example: 12/31/2005 12:00:00 AM
78	VAT INCLUDE INDICATOR	Indicates whether the Value Added Tax will be included in the retail prices for the store. Valid values are 'Y' or 'N'."
80	VAT REGION	"The number of the Value Added Tax region in which this store or warehouse is contained."
	PARTY CODE	
	PARTY TYPE CODE	
	BUSINESS LEGAL STATUS CODE	
	SOURCE SYSTEM CODE	
	BARING REASON CODE	
	STATUS CODE	
	CITY	
	STATE	
	COUNTRY	
	PARTY NAME	
	PARTY DESC	
	LOCATION TYPE CODE	
	CONTACT TYPE CODE	
	ADDRESS	
	PRIMARY MARKET AREA CODE	
	ACTIVE INDICATOR	
	CUSTOMER INDICATOR	
	JUDICIAL DISTRRAINT CODE	
	CONTACT CODE	
	COURT CODE	
	MANAGER CODE	
	DUNS NUMBER	

**Table 3–174 (Cont.) Organization Business Unit**

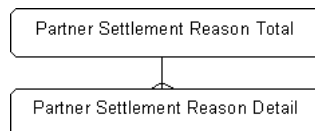
Sr. Number	Attribute	Description
	CONTACT NUMBER	
	LONG DESCRIPTION	
	CONSTRUCTION STATUS	
	CONTACT NAME	
	EXTERNAL NAME	
	EMPLOYEE COUNT	
	EQUITY AMOUNT	
	EQUITY AMOUNT LOCAL	
	EQUITY AMOUNT REPORTING	
	LIQUIDATION START DATE	
	LIQUIDATION END DATE	
	DOMESTIC INDICATOR	
	FINAL SETTLEMENT START DATE	
	FINAL SETTLEMENT END DATE	
	JUDICIAL DISTRRAINT DATE	
	EFFECTIVE FROM DATE	
	EFFECTIVE TO DATE	

## Partner Settlement Reason

Description: [PARTNER SETTLEMENT REASON](#)

### Partner Settlement Reason Hierarchies

Standard Partner Settlement Reason Hierarchy:



### Partner Settlement Reason Levels

[Table 3–175](#) shows Partner Settlement Reason Total: All Partner Settlement Reason are most aggregate level of dimension.

**Table 3–175 Partner Settlement Reason Total**

Sr. Number	Attribute	Description
1.	ALL PARTNER SETTLEMENT REASON CODE	Code for All Partner Settlement Reason.

[Table 3–176](#) shows Partner Settlement Reason Detail: Detail level of the dimension. It stores the Partner Settlement Reason information.

**Table 3–176 Partner Settlement Reason Detail**

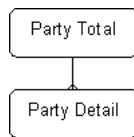
Sr. Number	Attribute	Description
1.	LANGUAGE CODE	Unique identifier for Language
2.	PARTNER SETTLEMENT REASON CODE	Unique identifier for Partner Settlement
3.	PARTNER SETTLEMENT REASON NAME	Name of the Partner Settlement
4.	PARTNER SETTLEMENT REASON DESC	Description for the Partner Settlement

## Party

Description: [PARTY](#)

### Party Hierarchies

Standard Party Hierarchy:



### Party Levels

[Table 3–177](#) shows Party Total: All Party is most aggregate level of dimension.

**Table 3–177 Party Total**

Sr. Number	Attribute	Description
1.	ALL PARTY CODE	Code for All Party.

[Table 3–178](#) shows Party Detail: Detail level of the dimension. It stores the Party information.

**Table 3–178 Party Detail**

Sr. Number	Attribute	Description	Sample Value
1.	ACTIVE INDICATOR	Indicates if the party is currently active - which means the party has a current relationship with the carrier.	Y
2.	ADDRESS	Address of the party. Redundance to party location history.	
3.	BARING REASON CODE	Reasons for barring. For example, 1-Credit Limit, 2-Barring period.	
4.	BUSINESS LEGAL STATUS CODE	A unique identifier for a legal classification of a non-residential Customer.	
5.	CITY	City of the party. Redundance to party location history.	
6.	COUNTRY	Country of the party. Redundance to party location history.	
7.	CUSTOMER INDICATOR	Indicates if the party is a customer. Note: the party may have multiple relationships simultaneously - this flag identifies those parties which has a current account with the Telco.	
8.	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column	12/31/2005 12:00:00 AM
9.	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column	12/31/2005 12:00:00 AM
10.	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	PRTY-50001



**Table 3–178 (Cont.) Party Detail**

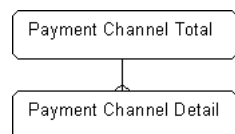
Sr. Number	Attribute	Description	Sample Value
11.	PARTY DESC	Description of the party. Applicable to both individual and organization. Normally it refer to the full name.	Sprint
12.	PARTY NAME	Name of the party. Applicable to both individual and organization. Normally it refer to the full name.	Sprint
13.	PARTY TYPE CODE	Party Type Code	ORGUNIT
14.	POST CODE	Postcode of the party. Redundance to party location history.	
15.	SOURCE SYSTEM CODE	SOURCE SYSTEM ID, from which source ERP system this recorded was extracted.	
16.	STATE	State of the party. Redundance to party location history.	
17.	STATUS CODE	Current status of party.	

## Payment Channel

Description: [PAYMENT CHANNEL](#).

### Payment Channel Hierarchies

Standard Payment Channel Hierarchy:



### Payment Channel Levels

[Table 3–179](#) shows Payment Channel Total: All Payment Channel are most aggregate level of dimension.

**Table 3–179 Payment Channel Total**

Sr. Number	Attribute	Description
1.	PAYMENT CHANNEL TOTAL ID's	Code for All Payment Channel.

[Table 3–180](#) shows Payment Channel Detail: Detail level of the dimension. It stores the Payment Channel Detail information.

**Table 3–180 Payment Channel Detail**

Sr. Number	Attribute	Description	Sample Value
1.	CAPACITY QUANTITY	The number of transaction that a Channel can handle, at a point of time.	\$1.00
2.	CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
3.	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	

**Table 3–180 (Cont.) Payment Channel Detail**

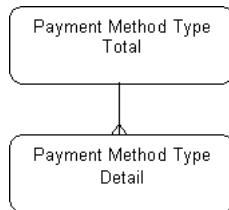
Sr. Number	Attribute	Description	Sample Value
4.	PAYMENT CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
5.	CHANNEL NAME	The name assigned to a channel.	PAY
6.	CHANNEL TYPE CODE	Unique identifier of the channel type	PAY
	PARTY TYPE CODE		
	CHANNEL DESC		
	EFFECTIVE FROM DATE		
	EFFECTIVE TO DATE		
	STATUS CODE		

## Payment Method Type

Description: [PAYMENT METHOD TYPE](#)

### Payment Method Type Hierarchies

Standard Payment Method Type Hierarchy:



### Payment Method Type Levels

[Table 3–181](#) shows Payment Method Type Total: All Payment Method Types are most aggregate level of dimension.

**Table 3–181 Payment Method Type Total**

Sr. Number	Attribute	Description
1.	PAYMENT METHOD TYPE TOTAL ID'S	Code for All Payment Method Types.

[Table 3–182](#) shows Payment Method Type Detail: Detail level of the dimension. It stores the Payment Method Type Detail information.

**Table 3–182 Payment Method Type Detail**

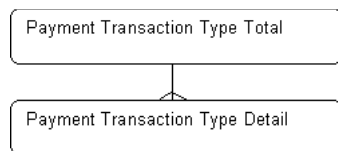
Sr. Number	Attribute	Description	Sample Value
1.	LANGUAGE CODE	Language ID--Unique identifier for a row in the Language dimension.	
2.	PAYMENT METHOD TYPE CODE	Code for All Payment Methods Types	BNK
3.	PAYMENT METHOD TYPE DESC	Payment Method Type Description.	Bank
4.	PAYMENT METHOD TYPE NAME	Payment Method Type Name.	Bank

## Payment Transaction Type

Description: [PAYMENT TRANSACTION TYPE](#)

### Payment Transaction Type Hierarchies

Standard Payment Transaction Type Hierarchy:



### Payment Transaction Type Levels

Table 3–183 shows Payment Transaction Type Total: All Payment Transaction Type are most aggregate level of dimension.

**Table 3–183** *Payment Transaction Type Total*

Sr. Number	Attribute	Description
1.	PAYMENT TRANSACTION TYPE TOTAL CODE	Code for All Payment Transaction Type.

Table 3–184 shows Payment Transaction Type Detail: Detail level of the dimension. It stores the Payment Transaction Type Detail information.

**Table 3–184** *Payment Transaction Type Detail*

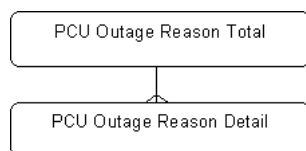
Sr. Number	Attribute	Description	Sample Value
1.	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.	
2.	PAYMENT TRANSACTION TYPE CODE	Code for payment transaction type.	CRDT
3.	PAYMENT TRANSACTION TYPE DESC	Description for payment transaction type.	Credit
4.	PAYMENT TRANSACTION TYPE NAME	Name of payment transaction type.	credit

### PCU Outage Reason

Description: [PCU OUTAGE REASON](#)

### PCU Outage Reason Hierarchies

Standard PCU Outage Reason Hierarchy:



### PCU Outage Reason Levels

Table 3–185 shows PCU Outage Reason Total: All PCU Outage Reason are most aggregate level of dimension.

**Table 3–185** *PCU Outage Reason Total*

Sr. Number	Attribute	Description
1.	PCU OUTAGE REASON TOTAL CODE	Code for All PCU Outage Reason.

Table 3–186 shows PCU Outage Reason Detail: Detail level of the dimension. It stores the PCU Outage Reason Detail information.

**Table 3–186 PCU Outage Reason Detail**

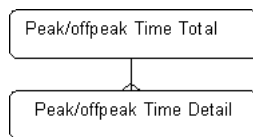
Sr. Number	Attribute	Description
1.	LANGUAGE CODE	Language ID---Unique identifier for a row in the Language dimension.
2.	PCU OUTAGE REASON CODE	Code for PCU outage reason.
3.	PCU OUTAGE REASON DESC	Description for PCU outage reason.
4.	PCU OUTAGE REASON NAME	Name of PCU outage reason.

## Peak Offpeak Time

Description: [PEAK OFFPEAK TIME](#)

### Peak Offpeak Time Hierarchies

Standard Peak Offpeak Time Hierarchy:



### Peak Offpeak Time Levels

[Table 3–187](#) shows Peak Offpeak Time Total: All Peak Offpeak Time is most aggregate level of dimension.

**Table 3–187 Peak Offpeak Time Total**

Sr. Number	Attribute	Description
1.	PEAK OFFPEAK TIME TOTAL Id's	Code for All Peak Offpeak Time.

[Table 3–188](#) shows Peak Offpeak Time Detail: Detail level of the dimension. It stores the Peak Offpeak Time Detail information.

**Table 3–188 Peak Offpeak Time Detail**

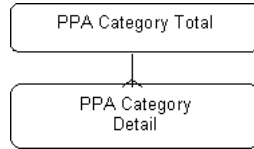
Sr. Number	Attribute	Description	Sample Value
1.	HOLIDAY INDICATOR	Indicates if the time band applies on designated public holidays.	N
2.	PEAK OFFPEAK END	This is to express start and end date for all days, therefore it use varchar2 rather than date data type.	4/1/2008 5:00:00 PM
3.	PEAK OFFPEAK START	This is to express start and end date for all days, therefore it use varchar2 rather than date data type.	4/1/2008 5:00:00 PM
4.	PEAK OFFPEAK TIME CODE	Indicates if this time is busy hour.	PK
5.	PEAK OFFPEAK TIME DESC	Peak Off peak Time Description	
6.	PEAK OFFPEAK TIMENAME	Peak Off peak Time name	Peak Time
7.	WEEKDAY INDICATOR	Indicates if the time band applies on week days (Monday through Friday).	Y
8.	WEEKEND INDICATOR	Indicates if the time band applies on weekends (Saturday and Sunday).	Y
	LANGUAGE CODE		

## PPA Category

Description: [PPA CATEGORY](#)

### PPA Category Hierarchies

Standard PPA Category Hierarchy:



### PPA Category Levels

[Table 3–189](#) shows PPA Category Total: Most Aggregate level of the dimension.

**Table 3–189 PPA Category Total**

Sr. Number	Attribute	Description
1.	PPA CATEGORY TOTAL ID	Code for All PPA Categories

[Table 3–190](#) shows PPA Category Detail: level of the dimension, stores PPA Category information.

**Table 3–190 PPA Category Detail**

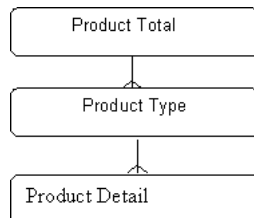
Sr. Number	Attribute	Description	Sample Value
1.	PPA CATEGORY CD	PPA Category code	FLANSWER
2.	LANGUAGE CODE	Language Code	
3.	PPA CATEGORY NAME	PPA Category Short Description	Free Local Answer
4.	PPA CATEGORY DESCRIPTION	PPA Category Description	free local answer

## Product

Description: [PRODUCT](#)

### Product Hierarchies

Standard Product Hierarchy:



### Product Levels

[Table 3–191](#) shows Product Total: This is the most aggregate level of the product dimension and hence represents the summation for all products including prepaid and post paid products/packages in the company.

**Table 3–191 Product Total**

Sr. Number	Attribute	Description
1.	All PRODUCTS ID	Identification for the top level value

Table 3–192 shows Product Type: The level classifies products into two main categories, that is, Prepaid and Postpaid products.

**Table 3–192 Product Type**

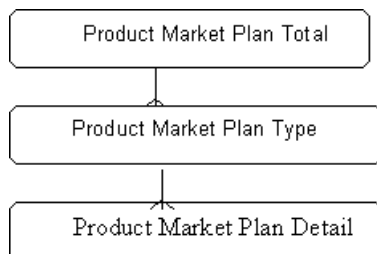
Sr. Number	Attribute	Description	Sample Value
1.	PRODUCT TYPE CD	Product Type Code	BB
2.	PRODUCT TYPE DESCRIPTION	Product Type Description	Broad Band
	PRODUCT TYPE NAME		
	PRODUCT TYPE DESC		
	EFFECTIVE FROM DATE		
	EFFECTIVE TO DATE		
	STATUS CODE		

## Product Market Plan

Description: [PRODUCT MARKET PLAN](#)

### Product Market Plan Hierarchies

Standard Product Hierarchy:



### Product Market Plan Levels

Table 3–193 shows Product Market Plan Total: This is the most aggregate level of the product market plan dimension.

**Table 3–193 Product Market Plan Total**

Sr. Number	Attribute	Description
1.	All PRODUCTS ID	Identification for the top level value

Table 3–194 shows Product Market Plan Type:

**Table 3–194 Product Market Plan Type**

Sr. Number	Attribute	Description	Sample Value
1.	PRODUCT TYPE CD	Product Type Code	BB
2.	PRODUCT TYPE DESCRIPTION	Product Type Description	Broad Band
	PRODUCT TYPE NAME		
	PRODUCT TYPE DESC		
	EFFECTIVE FROM DATE		
	EFFECTIVE TO DATE		
	STATUS CODE		

Table 3–195 shows Product Market Plan Detail: This is the lowest or most granular level of the product market plan dimension.

**Table 3–195 Product Market Plan Detail**

Sr. Number	Attribute	Description	Sample Value
1	PRODUCT MARKET PLAN KEY	Unique Identifier for market plan	
2	PRODUCT MARKET PLAN CODE	MARKET PLAN CODE.	PLAN-1
3	PRODUCT MARKET PLAN NAME	MARKET PLAN NAME.	
4	PRODUCT MARKET PLAN TYPE CODE	PREPAID	
5	COMMIT SERVICE TIME	How much service time are committed by customer to use.	\$23.00
6	DISCOUNT AMOUNT	Total DISCOUNT AMOUNT offered.	
7	DISCOUNT AMOUNT LOCAL	Total DISCOUNT AMOUNT offered.	
8	DISCOUNT AMOUNT REPORTING	Total DISCOUNT AMOUNT offered.	
9	EARLY DEPARTURE PENALTY	The penalty if the subscription was terminated before the committed service time.	\$200.00
10	EARLY DEPARTURE PENALTY LOCAL	The penalty if the subscription was terminated before the committed service time.	\$200.00
11	EARLY DEPARTURE PENALTY REPORTING	The penalty if the subscription was terminated before the committed service time.	\$200.00
12	EFFECTIVE FROM DATE	The date on which an Offering becomes associated with a Product.	12/31/2005 12:00:00 AM
13	EFFECTIVE TO DATE	The date on which an Offering ceases to be associated with a Product.	12/31/2005 12:00:00 AM
14	EXPECTED TOTAL COST	EXPECTED TOTAL COST.	
15	EXPECTED TOTAL COST LOCAL	TOTAL COST.	
16	EXPECTED TOTAL COST REPORTING	TOTAL COST.	
17	EXPECTED TOTAL REVENUE	EXPECTED TOTAL REVENUE.	
18	EXPECTED TOTAL REVENUE LOCAL	EXPECTED TOTAL REVENUE.	
19	EXPECTED TOTAL REVENUE REPORTING	EXPECTED TOTAL REVENUE.	
20	FREE TIME	How much free time provided in the package over the specific product.	\$10.00
21	FREE TIME UOM	UOM of free time, like month (for broadband, VAS, and so on) or Minutes (for Call).	Day

**Table 3–195 (Cont.) Product Market Plan Detail**

<b>Sr. Number</b>	<b>Attribute</b>	<b>Description</b>	<b>Sample Value</b>
22	GROSS ARPU	Expected GROSS ARPU.	\$100.00
23	GROSS ARPU LOCAL	Expected GROSS ARPU.	\$100.00
24	GROSS ARPU REPORTING	Expected GROSS ARPU.	\$100.00
25	INITIAL DEPOSIT AMOUNT	After customer joins the market plan, how much deposit is given	
26	INITIAL DEPOSIT AMOUNT LOCAL	After customer joins the market plan, how much deposit is given.	
27	INITIAL DEPOSIT AMOUNT REPORTING	After customer joins the market plan, how much deposit is given.	
28	JOINT PROGRAM INDICATOR	JOINT_PROGRAM_FLAG.	
29	LOYALTY PROGRAM INDICATOR	LOYALTY PROGRAM FLAG.	
30	MARKET PLAN FULL DESC	MARKET PLAN FULL DESC.	FREE COMBO FOR 14 YEARS
31	NET ARPU	Expected net arpu.	
32	NET ARPU LOCAL	Expected net arpu.	
33	NET ARPU REPORTING	Expected net arpu.	
34	NEW CUSTOMER ONLY INDICATOR	NEW CUSTOMER ONLY INDICATOR.	N
35	PORTING CHARGE	PORTING CHARGE if available. Charge for porting in, out.	
36	PORTING CHARGE LOCAL	PORTING CHARGE if available. Charge for porting in, out.	
37	PORTING CHARGE REPORTING	PORTING CHARGE if available. Charge for porting in, out.	
38	PREMIUM PAY AMOUNT	PREMIUM PAY AMOUNT. Customer have to pay a certain amount to get premium	
39	PREMIUM PAY AMOUNT LOCAL	PREMIUM PAY AMOUNT. Customer have to pay a certain amount to get premium	
40	PREMIUM PAY AMOUNT REPORTING	PREMIUM PAY AMOUNT. Customer have to pay a certain amount to get premium	
41	PREMIUM PAY METHOD	PREMIUM PAY METHOD.	
42	PREPAID SERVICE TIME	\$24.00	
43	PREPAY AMOUNT	How much prepayment must be made.	\$200.00
44	PREPAY AMOUNT LOCAL	How much prepayment must be made.	\$200.00
45	PREPAY AMOUNT REPORTING	How much prepayment must be made.	\$200.00
46	PREPAY TIME	INITIAL PAY Service TIME.	
47	PRIMARY PRODUCT CODE	The short name for the product.	
48	PRODUCT RATING PLAN CODE	The code to identify a Pricing plan.	
49	REMARK	Remark from creating or amending employee.	
50	SERVICE TIME UNIT CHARGE	Charge of every service time unit - normally month, defined by the service time UOM.	\$9,000.00
51	SERVICE TIME UNIT CHARGE LOCAL	Charge of every service time unit - normally month, defined by the service time UOM	\$9,000.00
52	SERVICE TIME UNIT CHARGE REPORTING	Charge of every service time unit - normally month, defined by the service time UOM	\$9,000.00



**Table 3–195 (Cont.) Product Market Plan Detail**

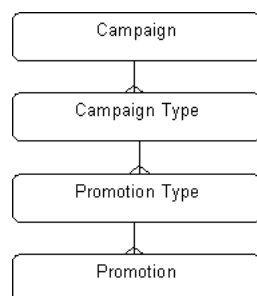
Sr. Number	Attribute	Description	Sample Value
53	SERVICE TIME UOM	UOM of prepaid service, commit service, trial service time.	Month
54	STATUS CODE		
55	TOTAL COST UPGRADE	TOTAL COST UPGRADE	
56	TOTAL COST UPGRADE LOCAL	TOTAL COST UPGRADE.	
57	TOTAL COST UPGRADE REPORTING	TOTAL COST UPGRADE.	
58	TOTAL SERVICE TIME	TOTAL SERVICE TIME.	1
59	TRIAL SERVICE TIME	For how long the customer can terminate the subscription without penalty.	
60	VAS INDICATOR	Whether VAS line was included with the package.	

## Promotion

Description: [PROMOTION](#)

### Promotion Hierarchies

Standard Promotion Hierarchy:



### Promotion Levels

[Table 3–196](#) shows Campaign: A campaign is a concentrated effort to enhance the image of the enterprise, to retain, acquire, or consolidate customers.

**Table 3–196 Campaign**

Sr. Number	Attribute	Description	Sample Value
1	CAMPAIGN CODE	Unique Identifier for Campaign	CMPGN-1
2	CAMPAIGN DESC	A textual description of the Campaign.	
3	CAMPAIGN NAME	Short Name of the Campaign	
4	CAMPAIGN PURPOSE	Campaign purpose. The purpose of the campaign being conducted, in most of scenarios this field would be empty since this would be addressed in the Theme and Promotion Theme. But when this campaign is being executed as a continuation of a previous campaign due to demand, this field would contain the reason for that continuation.	ACQUIRE
5	CAMPAIGN PURPOSE TYPE CODE	Unique Identifier for a Campaign purpose type	
6	CAMPAIGN STATUS CODE	A code used to uniquely identify strategy of a Campaign.	CSTAT
7	CAMPAIGN TYPE CODE	Unique Identifier for a Campaign type.	MMPRMTN
8	COST AMOUNT	The monetary cost of a Campaign.	

**Table 3–196 (Cont.) Campaign**

Sr. Number	Attribute	Description	Sample Value
9	COST AMOUNT LOCAL	The monetary cost of a Campaign.	
10	COST AMOUNT REPORTING	The monetary cost of a Campaign.	
11	COST CODE	Identify the cost to the Carrier.	
12	EFFECTIVE FROM DATE	The start date of a Campaign.	12/31/2005 12:00:00 AM
13	EFFECTIVE TO DATE	The end date of a Campaign.	12/31/2005 12:00:00 AM
14	FUND SOURCE CODE	Campaign fund source type. Possible values would include, Vendor Sponsored, Charity and so on.	
15	GLOBAL IND	Flag to indicate if the campaign is run globally. Flag to indicate if the campaign is run globally.	
16	PARTNER IND	Indicates if the campaign has partners. Indicates if the campaign has partners	
17	PARTNER NUMBER	Identification number for partner.	
18	PLANNED COST	Planned or budgeted total cost for the campaign.	
19	PLANNED COST LOCAL	Planned or budgeted total cost for the campaign.	
20	PLANNED COST REPORTING	Planned or budgeted total cost for the campaign.	
21	PLANNED RESPONSE	Expected or planned response for the campaign.	
22	PRIORITY	Campaign priority. Campaign priority	

Table 3–197 shows Campaign Type:

**Table 3–197 Campaign Type**

Sr. Number	Attribute	Description	Sample Value
	CAMPAIGN TYPE CODE	A code used to uniquely identify a CAMPAIGN TYPE.	TGPRMTN
	CAMPAIGN TYPE DESC	A textual description of a CAMPAIGN TYPE.	A Targeted Promotion
	CAMPAIGN TYPE NAME	The name assigned to a CAMPAIGN TYPE.	Targeted Promotion
	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

Table 3–198 shows Promotion Type: The type of a promotion, like direct marketing by Phone call, direct marketing by mail, Media Broadcast by TV, and so on.

**Table 3–198 Promotion Type**

Sr. Number	Attribute	Description	Sample Value
1	PROMOTION TYPE CODE	A code used to uniquely identify a PROMOTION TYPE.	MAIL
2	PROMOTION TYPE DESC	A textual description of a PROMOTION TYPE.	Promotion by Mail
3	PROMOTION TYPE NAME	The name assigned to a PROMOTION TYPE.	Mail
4	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

Table 3–199 shows Promotion Type: This entity keeps types of Campaigns. Examples include: a targeted promotion (to specific individuals, account or group of accounts, a

mass market promotion (to a massive audience usually through radio, television, and newspaper.

**Table 3–199 Promotion**

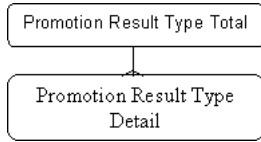
Sr. Number	Attribute	Description	Sample Value
1	PROMOTION CODE	A unique identifier for a campaign cell.	PRMTN-1
2	PROMOTION DESC	A textual description for a campaign Cell.	PRMTN-1
3	PROMOTION NAME	Name of Promotion	PRMTN-1
4	ACTUAL RESPONSE COUNT	Actual RESPONSE COUNT.	
5	ACTUAL SALES AMOUNT	ACTUAL SALES AMOUNT.	
6	ACTUAL SALES AMOUNT LOCAL	ACTUAL SALES AMOUNT.	
7	ACTUAL SALES AMOUNT REPORTING	ACTUAL SALES AMOUNT.	
8	ACTUAL SALES COUNT	ACTUAL SALES COUNT.	
9	ACTUAL TOTAL COST	ACTUAL TOTAL COST.	
10	ACTUAL TOTAL COST LOCAL	ACTUAL TOTAL COST.	
11	ACTUAL TOTAL COST REPORTING	ACTUAL TOTAL COST.	
12	CAMPAIGN CHANNEL CODE	A unique identifier for a campaign channel.	
13	CAMPAIGN CODE	The campaign which this cost occurs in	CMPGN-1
14	GLOBAL IND	Flag to indicate if the campaign is run globally.	
15	PARTICIPANT TARGET NUMBER	The number of target customers within a PROMOTION.	113
16	PARTNER NUMBER	Unique number assigned to the Partner	
17	PERSON RESPONSIBLE	Name of the employee who is responsible for the promotion	
18	PLANNED RESPONSE COUNT	Number of positive responses expected on the full promotion time.	
19	PLANNED SALES AMOUNT	Planned sales amount.	
20	PLANNED SALES AMOUNT LOCAL	Planned sales amount local.	
21	PLANNED SALES AMOUNT REPORTING	Planned sales amount reporting.	
22	PLANNED SALES COUNT	Planned sales count	
23	PLANNED TOTAL COST	Planned or budgeted total cost for the promotion.	\$200.00
24	PLANNED TOTAL COST LOCAL	Planned or budgeted total cost for the promotion.	\$200.00
25	PLANNED TOTAL COST REPORTING	Planned or budgeted total cost reporting for the promotion.	\$200.00
26	PROMOTION END DATE	Promotion end date.	12/31/2005 12:00:00 AM
27	PROMOTION PURPOSE	Captures the purpose of the promotion.	
28	PROMOTION START DATE	PROMOTION START DATE.	12/31/2005 12:00:00 AM
29	PROMOTION TYPE CODE	A code used to uniquely identify a PROMOTION TYPE.	MAIL
30	TARGET TYPE CODE	A code used to uniquely identify a Categorization for each Target occurrence. Examples include: C = Customer A = Account AM = Access Method M = Market.	ACCS
31	THEME	Promotion theme	
32	VERSION NUMBER	Version Number of the campaign. A campaign can have many versions before it goes active	

## Promotion Result Type

Description: [PROMOTION RESULT TYPE](#)

### Promotion Result Hierarchies

Standard Promotion Result Type Hierarchy:



### Promotion Result Type Levels

[Table 3–200](#) shows Promotion Result Type Total: Top level for the dimension with one single value indicating value for all promotion result type.

**Table 3–200** *Promotion Result Type Total*

Sr. Number	Attribute	Description
1.	PROMOTION RESULT TYPE TOTAL ID	Code for All Promotion Result Type

[Table 3–201](#) shows Promotion Result Type Detail: Contain actual sales campaign result type values. Data for the sales campaign results will have these values. Like Offer accepted, Attribution prevented

**Table 3–201** *Promotion Result Type Detail*

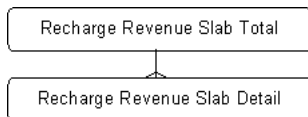
Sr. Number	Attribute	Description	Sample Value
1	PROMOTION RESULT CTGRY CODE	Code for Sales Campaign result category.	
2	PROMOTION RESULT CTGRY DESC	Code for Sales Campaign result category.	
3	PROMOTION RESULT CTGRY NAME	Description of the Sales Campaign result category.	
4	PROMOTION RESULT TYPE CODE	Name of the Sales Campaign result.	ATRPRVNT
5	PROMOTION RESULT TYPE DESC	Code for Sales Campaign Result.	Attribution Prevented
6	PROMOTION RESULT TYPE NAME	Description of the Sales Campaign result	Attribution Prevented
7	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

## Recharge Revenue Slab

Description: [RECHARGE REVENUE SLAB](#)

### Recharge Revenue Slab Hierarchies

Standard recharge revenue slab Hierarchy:



### Recharge Revenue Slab Levels

[Table 3–202](#) shows Recharge Revenue Slab Total: Top level for the dimension with one single value indicating value for all slabs.

**Table 3–202 Recharge Revenue Slab Total**

Sr. Number	Attribute	Description
1.	RECHARGE REVENUE SLAB TOTAL ID	Code for All recharge revenue slabs

Table 3–203 shows Recharge Revenue Slab Detail: Most detail level holds values for individual recharge slabs.

**Table 3–203 Recharge Revenue Slab Detail**

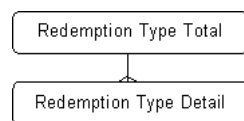
Sr. Number	Attribute	Description	Sample Value
1	RECHARGE REVENUE SLAB CODE	Recharge revenue slab ID or code.	RVN100
2	RECHARGE REVENUE SLAB DESC	Recharge revenue slab description.	Recharge revenue earned for \$50-100
3	RECHARGE REVENUE SLAB NAME	Recharge revenue slab short description.	\$50-100
4	SLAB RANGE END VALUE	End value of the slab.	
5	SLAB RANGE END VALUE LOCAL	End value of the slab.	
6	SLAB RANGE END VALUE REPORTING	End value of the slab.	
7	SLAB RANGE START VALUE	Starting value of the slab.	
8	SLAB RANGE START VALUE LOCAL	Starting value of the slab.	
9	SLAB RANGE START VALUE REPORTING	Starting value of the slab	
10	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

## Redemption Type

Description: [REDEMPTION TYPE](#)

### Redemption Type Hierarchies

Standard Redemption Type Hierarchy:



### Redemption Type Levels

Table 3–204 shows Redemption Type Total: Top level used to aggregate data for all the redemption types.

**Table 3–204 Redemption Type Total**

Sr. Number	Attribute	Description
1.	REDEMPTION TYPE TOTAL ID	Code for All redemption Types

Table 3–205 shows Redemption Type: Granular level of the dimension at which data is available, lists all the redemption types and its descriptions.

**Table 3–205 Redemption Type**

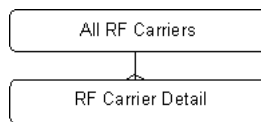
Sr. Number	Attribute	Description	Sample Value
1	REDEMPTION TYPE CODE	Code for Redemption Types.	ACCTDPST
2	REDEMPTION TYPE DESC	Redemption Type Description.	Account Deposit
3	REDEMPTION TYPE NAME	Redemption Type Short Name.	Account Deposit
4	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

## RF Carrier

Description: [RF CARRIER](#)

### RF Carrier Hierarchies

Standard RF Carrier Hierarchy:



### RF Carrier Levels

[Table 3–206](#) shows RF Carrier Total: Values for all carriers. Data may or may not be seen at this level.

**Table 3–206 RF Carrier Total**

Sr. Number	Attribute	Description
1.	CARRIER TOTAL ID	Code for All Carriers

[Table 3–207](#) shows RF Carrier Detail: The detail level of the dimension at which the data will be captured and stored.

**Table 3–207 RF Carrier Detail**

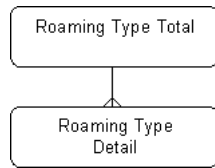
Sr. Number	Attribute	Description	Sample Value
1	RF CARRIER CODE	Carrier code or ID.	
2	RF CARRIER DESC	Carrier description.	
3	RF CARRIER NAME	Carrier Name.	
4	STATUS CODE	Current Status Identifier	
5	BASE TRANSCEIVER STATION CODE	Identifier for Transceiver Station	
6	EFFECTIVE FROM DATE	In Effect From	12/31/2005 12:00:00 AM
7	EFFECTIVE TO DATE	In Effect till date	12/31/2005 12:00:00 AM

## Roaming Type

Description: [ROAMING TYPE](#)

### Roaming Type Hierarchies

Standard Roaming Type Hierarchy:



### Roaming Type Levels

Table 3–208 shows Roaming Type Total: The Subscriber type defines if the calls made/received are by the Roaming subscriber or by a non-roaming subscriber. Roaming type is further classified as Inbound and outbound roaming subscriber

**Table 3–208** *Roaming Type Total*

Sr. Number	Attribute	Description
1.	ROAMING TYPE TOTAL CODE	Code for All Roaming Types

Table 3–209 shows Roaming Type: If the calls made/received are by the Roaming subscriber or by a non-roaming subscriber.

**Table 3–209** *Roaming Type Detail*

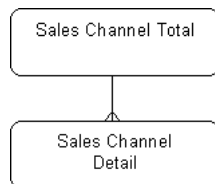
Sr. Number	Attribute	Description	Sample Value
1	ROAMING TYPE CODE	ROAMING TYPE CODE.	NONROAM
2	ROAMING TYPE DESC	ROAMING TYPE DESC.	Non-Roaming
3	ROAMING TYPE NAME	Short description of the ROAMING TYPE.	Non-Roaming
4	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

### Sales Channel

Description: [SALES CHANNEL](#)

#### Sales Channel Hierarchy

Standard Sales Channel Hierarchy:



### Sales Channel Levels

Table 3–210 shows Sales Channel Total: The most aggregate level in the channel dimension. It combines the results of all channels and shows the total values for facts if selected in the report.

**Table 3–210** *Sales Channel Total*

Sr. Number	Attribute	Description
1.	SALES CHANNEL TOTAL ID	Code for All Sales channels value

Table 3–211 shows Sales Channel Detail: Sales channel is not multi tiered. Mainly there are three channels of sales such as Sales Representatives, Outlets and dealers. Which

are represented by the channel level, which also becomes the lowest level for the channel dimension.

**Table 3–211 Sales Channel Detail**

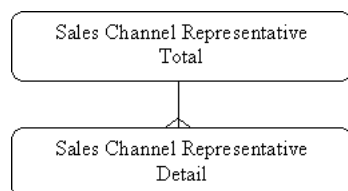
Sr. Number	Attribute	Description	Sample Value
2	SALES CHANNEL CODE	Code for Sales Channel	
3	CHANNEL DESC	A text description for the channel	
4	CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
5	CHANNEL NAME	Short name for the channel	A01
6	CHANNEL TYPE CODE	Unique identifier for channel	SLCHNL
7	CAPACITY QUANTITY	The number of transaction that a Channel can handle, at a point of time.	
8	DEALER CODE	The number of transaction that a Channel can handle, at a point of time.	
9	EFFECTIVE FROM DATE	The first date of the period when this Channel was valid.	12/31/2005 12:00:00 AM
10	EFFECTIVE TO DATE	The end date of the period when this Channel was valid.	12/31/2005 12:00:00 AM
11	PARTY CODE	A code for any person or business that is of interest to the Communications Service Provider.	
12	PARTY TYPE CODE	Code for party types	RPRSTTV
13	STATUS CODE	Current status	A

## Sales Channel Representative

Description: [SALES CHANNEL REPRESENTATIVE](#)

### Sales Channel Hierarchies

Standard Sales Channel Representative Hierarchy:



### Sales Channel Representative Levels

[Table 3–212](#) shows Sales Channel Representative Total: The most aggregate level in the channel dimension.

**Table 3–212 Sales Channel Representative Total**

Sr. Number	Attribute	Description
1.	SALES CHANNEL REPRESENTATIVE TOTAL ID	Code for All Sales Channel Representative

[Table 3–213](#) shows Sales Channel Representative: This is the most granular level of the channel dimension. Values in this level represent the codes for sales representatives in the shops, Direct sales representatives and Sub-dealers in case of dealers.



**Table 3–213 Sales Channel Representative**

Sr. Number	Attribute	Description	Sample Value
1	SALES CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
2	SALES CHANNEL REPRESENTATIVE CODE	SALES CHANNEL REPRESENTATIVE CODE is used to track and detect sales performance on account payment status.	SLREP-1
1	BILLING ADDRESS EFFECTIVE DATE	Date on which the billing address referenced in the billing_address_id column became active. This facilitates queries such as find customers who changed address in the last 3 months.""	
2	BUSINESS DIVISION EXECUTIVE NAME	BUSINESS DIVISION EXECUTIVE LAST NAME is the last name of the business division executive to whom the employee reports to. Like LOB Owner.	
3	BUSINESS PHONE NUMBER	Phone number used for business purpose	
4	CELL PHONE NO	Redundancy to 'party contact information'	
5	CHILDREN COUNT	Number of children	
6	CONTACT ADDRESS EFFECTIVE DATE	Date on which the contact address referenced in the billing_address_id column became active. This facilitates queries such as find customers who changed address in the last 3 months.""	
7	COST CENTER NUMBER	The cost center to which the bank employee expenses are charged.	
8	DATE OF BIRTH	Date of Birth of the individual.	
9	DATE OF DEATH	Date of natural person death.	
10	DEATH CERTIFICATE CODE	The certification document number for customer's death.	
11	DEPENDENTS COUNT	Number of dependents	
12	DRIVER LICENSE NUMBER	Driver License Number in most countries.	
13	DWELLING SIZE	Size of dwelling	
14	DWELLING TENURE	Tenure of dwelling	
15	ECONOMICALLY ACTIVE IND	customer is economically active (is not a minor or pensioner and so on.)	
16	EDUCATION CODE	The customer highest level of education.	
17	EMAIL	Redundancy to 'party contact information'	
18	EMPLOYEE CODE	A code for any person or business that is of interest to the Communications Service Provider.	
19	EMPLOYEE DESIGNATION CODE	Unique warehouse key, representing the designation	
20	EMPLOYEE DISCOUNT GROUP CODE	Unique identifier for Employee Discount Group	
21	EMPLOYEE KEY	Key value for each employee	
22	EMPLOYEE NUMBER	Internal number for the employee.	
23	EMPLOYEE TYPE CODE	Unique identifier for Employee Type	PT
24	EMPLOYEE TYPE DESC	Description of the Employee Type	Part Time
25	EMPLOYEE TYPE NAME	Unique identifier for the Employee Type	Part Time
26	EMPLOYER TAX NUMBER	The tax code of Employer.	
27	EMPLOYMENT BEGIN DATE	Start date for the employment.	12/31/2005 12:00:00 AM

**Table 3–213 (Cont.) Sales Channel Representative**

Sr. Number	Attribute	Description	Sample Value
28	EMPLOYMENT END DATE	If the employee quit from the Bank, we still hold the information of his past employment	
29	EMPLOYMENT EXEMPT IND	An employee exempt from the overtime policies of the University due to the nature of the work, as compared to (Non-Exempt). Education requirements of the position and salary range. These employees are paid an annual salary and are not customarily eligible for overtime pay.	
30	EMPLOYMENT STATUS	EMPLOYEE STATUS is the abbreviated identifier for the employment status. Employee	
31	END OF JOB CONTRACT	End date of the customer's job contract (for contracts concluded for definite terms).	
32	ETHNIC BACKGROUND	Customer Attribute of an employee	
33	ETHNICITY	Classifies the individual for minority reporting purposes.	
34	FAMILY NAME IN MAIDEN	Given name in maiden	
35	FIRST NAME	First name of a party individual	
36	FORM OF EMPLOYMENT	The customer's form of employment (private entrepreneur, employee, civil servant and so on.)	
37	GENDER CODE	For PARTYs that are people, this is their GENDER. For PARTYs that are organizations, this indicates whether the organization is foreign or domestically owned.	
38	GIVEN NAME IN MAIDEN	Given name in maiden	
39	HOME TELEPHONE NO	Redundance to 'party contact information'	
40	HOUSEHOLD KEY	The code of household which the party belongs to.	
41	INCOME	Income of a party individual	
42	INCOME LCL	Income of a party individual	
43	INCOME RPT	Income of a party individual	
44	JOB CONTRACT TYPE	Type of the customer's job contract	
45	JOB KEY	Code for job of subscriber.	
46	JOB POSITION	job Position.	
47	LANGUAGE CODE	Unique identifier for Language	
48	LAST NAME	Last name of a party individual	
49	LAST PERFORMANCE RATING	This describes the annual rating assigned to the employee.	
50	LAST PERFORMANCE RATING DATE	When the last rating is done.	
51	LEGAL TITLE TO HOUSING	The customer's legal title to home (rents, owns and so on.)	
52	LIVING AT CURRENT ADDRESS SINCE	Date since the customer has lived at the present address.	
53	MANAGER CODE	manager's employee code.	
54	MARITAL STATUS	CSALADI ALLAPOT. Marital status	
55	MARTIAL STATUS CODE		
56	MIDDLE NAME	Middle name of a party individual	
57	MOTHER FIRST NAME	Mother's first name	
58	MOTHER LAST NAME	Mother's last name	

**Table 3–213 (Cont.) Sales Channel Representative**

Sr. Number	Attribute	Description	Sample Value
59	NAME OF WORKPLACE	Name of workplace	
60	NAME PREFIX	Name prefix For example: Mr, Mrs, Ms, Dr,	
61	NAME SUFFIX	Name suffix. For example: PhD, MD, JD, MA	
62	NATIONALITY CODE	Code for Nationality of subscriber	
63	NUMBER OF EARNERS IN HOUSEHOLD	Number of wage earners in the household.	
64	NUMBER OF PERSONS LIVING IN HOUSEHOLD	Number of persons sharing the customer's household.	
65	OFFICE TELEPHONE NO	Redundancy to 'party contact information'	
66	ORGANIZATION BUSINESS UNIT KEY		
67	PERSONAL ID NUMBER	In China, this one will be same as party.national_ identifier.	
68	PLACE OF BIRTH	Where the person was born.	
69	PREVIOUS EMPLOYER TAX NUMBER	Tax number of previous employer.	
70	PREVIOUS EMPLOYMENT END DATE	End date of previous job.	
71	PREVIOUS EMPLOYMENT START DATE	Start date of previous job.	12/31/2005 12:00:00 AM
72	SOC JOB KEY		
73	SOCIAL SECURITY NUMBER	In US, this code will be same as party.national_ identifier. Null if some country does not have.	
74	SOURCE OF INCOME	Source of income (can typify, may be several)	
75	START OF EMPLOYMENT	Start of employment	
76	TAX NUMBER	Tax number	
77	ACTIVE IND	Activate Indicator	
78	ADDRESS	Address	
79	BARING REASON CODE	Unique identifier for Baring Reason	
80	BUSINESS LEGAL STATUS CODE	A unique identifier for a legal classification of a non-residential Customer.	
81	CITY	City of the party. Redundance to party location history.	
82	COUNTRY	Country of the party. Redundance to party location history.	
83	CUSTOMER IND	Indicator for Customer	
84	EFFECTIVE FROM DATE	EFFECTIVE FROM DATE, standard SCD2 column.	
85	EFFECTIVE TO DATE	EFFECTIVE TO DATE, standard SCD2 column.	
86	EMPLOYEE NAME	Name of the employee	
87	PARTY DESC	Description for the Party	
88	PARTY KEY	Key value for Party	
89	PARTY NAME	Name of the Party	
90	PARTY TYPE CODE	Unique identifier for Party Type	
91	POST CODE	Unique identifier for Post	

**Table 3–213 (Cont.) Sales Channel Representative**

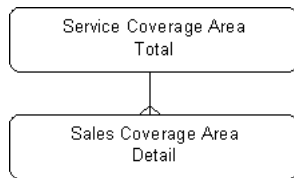
Sr. Number	Attribute	Description	Sample Value
92	SOURCE SYSTEM KEY	Key value for Source System	
93	STATE	State Name	
94	STATUS CODE	Current Status	

## Service Coverage Area

Description: [SERVICE COVERAGE AREA](#)

### Service Coverage Hierarchies

Standard Service Coverage Hierarchy:



### Service Coverage Area Levels

[Table 3–214](#) shows Service Coverage Area Total: Service areas are defined so that service providers can determine the demographic / psychographic / population data the geography served by the network.

**Table 3–214 Service Coverage Area Total**

Sr. Number	Attribute	Description
1.	SALES CHANNEL REPRESENTATIVE TOTAL ID	Code for All Sales Coverage Area values

[Table 3–215](#) shows Service Coverage Area: This is the detail level of Service Coverage Area.

**Table 3–215 Service Coverage Area**

Sr. Number	Attribute	Description
1	AREA SHAPE	Shape of the trade area
2	AREA TYPE	- Urban - Suburban - Exurban - Rural
3	AVERAGE DRIVE TIME	Average drive time from the coverage area to the given store or site.
4	AVERAGE FAMILY SIZE	Average Family Size = Total population divided by number of families
5	AVERAGE HOUSEHOLD SIZE	Average household size in the coverage area.
6	AVERAGE NUMBER VEHICLES PER HOUSEHOLD	Average Number of Vehicles by household = total number of vehicles divided by total number of household.
7	CITY	City. City of the trade area
8	COMMUNITY SEGMENTS	The segmentation system was created to group neighborhoods based on socioeconomic and demographic composition such as age, income, home value, occupation, household type, education, and so on. They help improve the ability to predict behavior of social groups that are geographically clustered.
9	COMMUTER POPULATION	Total commuter population of the coverage area.
10	COUNTRY	Country. Country of the trade area

**Table 3–215 (Cont.) Service Coverage Area**

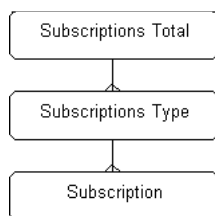
Sr. Number	Attribute	Description
11	COUNTY	County / District. County / District of the trade area
12	DEFINITION SOURCE	The source of the definition
13	DEFINITION TYPE	Definition type of the market area, some standard classifications can include: Study traffic flow, Use a retail gravity model, Use a zip code method and so on. Some standard classifications can include: Study traffic flow, Use a retail gravity model, Use a zip code method and so on.
14	ISO CURRENCY CODE	Currency used for the demographic information
15	LATITUDE	The latitude measure for the trade area
16	LONGITUDE	The longitude measure for the trade area
17	NUMBER OF HOUSEHOLDS	Approximate total number of households in the coverage area.
18	ORGANIZATION BUSINESS UNIT CODE	Unique identifier for Business Unit. To identify whether the site is a store, distribution center or warehouse.
19	PEAK SEASON POPULATION	The peak trading season of a given area can be determined by the seasonality or yearly economic cycle and so on. This is mostly applicable for renowned tourist spots.
20	PER CAPITA INCOME	Per Capita Income = income of that area divided by total population
21	PER CAPITA INCOME LOCAL	Per Capita Income = income of that area divided by total population
22	PER CAPITA INCOME REPORTING	Per Capita Income = income of that area divided by total population
23	PRIMARY ZIP CODE	Primary zip code of the market area. The primary zip code or the pin code of the Trade area
24	PRODUCT CODE	The short name for the product.
25	PULL FACTOR	Ratios that estimate the proportion of local sales that occurs in a town. Ratio that estimate the proportion of local sales that occurs in a town.
26	SECONDARY ZIP CODE	Secondary zip code in case the zip code spans across multiple zip codes. Applicable only in case the zip code spans across multiple zip codes
27	SERVICE COVERAGE AREA CODE	COVERAGE AREA CODE. Unique identifier for the coverage area
28	SERVICE COVERAGE AREA TYPE CODE	
29	STATE	State or province. State or province of the trade area
30	STATE POPULATION	Approximate population of the state.
31	STATE SALES	Estimated total retail sales in the state.
32	TOTAL POPULATION	Estimated total population of the market area
33	TOURIST POPULATION	Expected tourist population of the Trade coverage area.
34	TRADE AREA CAPTURE	An estimate of the number of people who shop in the local area during a certain period.
35	TRADE AREA CODE	Market Area identifier.
36	TRADE AREA DESC	Trade area description. Textual description of the trade area
37	TRADE AREA NAME	Market area name. The name of the trade area

## Subscription

Description: [SUBSCRIPTION](#)

## Subscription Hierarchies

Standard Subscription Hierarchy:



## Subscription Levels

[Table 3–216](#) shows Subscription Total: Most aggregate level for the Subscription Dimension.

**Table 3–216** *Subscription Total*

Sr. Number	Attribute	Description
1.	SUBSCRIPTION TOTAL CODE	Code for All Subsidy Types

[Table 3–217](#) shows Subscription Type: Type of the subscriptions. Examples include: Prepaid wireless, Fixed\_line, Broadband, and so on.

**Table 3–217** *Subscription Type*

Sr. Number	Attribute	Description	Sample Value
1	LANGUAGE CODE	Uniquely Identifier for Language	
2	SUBSCRIPTION TYPE CATEGORY CODE	Category or classification of the subscription type. Can be used for grouping subscription types for analysis or reporting.	BROADBAND
3	SUBSCRIPTION TYPE CODE	Identifier of the subscription type.	BRDBND
4	SUBSCRIPTION TYPE DESC	Name or description of the subscription type.	Broadband
5	SUBSCRIPTION TYPE NAME	Name or description of the subscription type.	Broadband

[Table 3–218](#) shows Subscription: Different ways to offer subsidies are to give handsets, free minutes or connections subsidies to the customers.

**Table 3–218** *Subscription*

Sr. Number	Attribute	Description	Sample Value
1	SUBSCRIPTION CODE	Unique identifier for a subscription.	SBRP-1000601
2	SUBSCRIPTION END DATE	SUBSCRIPTION END DATE is the day when subscription was decommissioned.	12/31/2005 12:00:00 AM
3	SUBSCRIPTION START DATE	SUBSCRIPTION START DATE is the day when subscription was setup.	12/31/2005 12:00:00 AM
4	SUBSCRIPTION TYPE CODE	Identifier of the subscription type.	BRDBND
5	ACCESS METHOD CODE	A sequence of numbers (like phone number) electronically registered to telecommunications equipment that gives the Customer access to services or products. Other access method like DSL account, Service ID might be character type.	

**Table 3–218 (Cont.) Subscription**

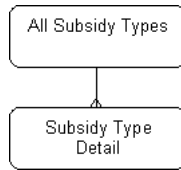
Sr. Number	Attribute	Description	Sample Value
6	ACCOUNT CODE	A code for any person or business that is of interest to the Communications Service Provider. This is usually natural key of the account	
7	ACQUISITION COST	ACQUISITION COST for the subscription. This can be derived from underlying contract or product it subscribes to.	
8	ACQUISITION COST LOCAL	ACQUISITION COST for the subscription. This can be derived from underlying contract or product it subscribes to.	
9	ACQUISITION COST REPORTING	ACQUISITION COST for the subscription. This can be derived from underlying contract or product it subscribes to.	
10	CAMPAIGN CHANNEL CODE	A unique identifier for a campaign channel.	
11	CHANNEL CODE	The unique identifier for each Channel. A Channel identifies each possible link where interaction between the Communications Service Provider and the Customer occurs.	
12	CIRCUIT COMPONENT CODE	Identifies the circuit component.	
13	CONTRACT CODE	The contract number based on which the relationship was founded.	
14	CUSTOMER CODE	A code for any person or business that is of interest to the Communications Service Provider.	
15	EFFECTIVE FROM DATE	Active from. Standard SCD field, Effective Start Date	12/31/2005 12:00:00 AM
16	EFFECTIVE TO DATE	Date the party left the program. Will be null if the party is currently a member of the program.	12/31/2005 12:00:00 AM
17	ESSENTIAL SERVICE INDICATOR	The code indicates the server was associated with critical customer; examples are hospital, police, Fire.	
18	NETWORK TOUCHPOINT CODE	Identifier of the site.	
19	NETWORK TYPE CODE	A code that uniquely identifies the type of technology (for example GSM, CDMA) being used by a network.	PSTN
20	ORGANIZATION BUSINESS UNIT CODE	Foreign key to the Organization Job Role At Site table, to identify the store schedule.	
21	PRODUCT CODE	Product code. Product dimension cannot be used in rolling-up. Since customer will be counted several times.	
22	SALES CHANNEL REPRESENTATIVE CODE	SALES CHANNEL REPRESENTATIVE CODE is used to track and detect sales performance on account payment status.	
23	STATUS CODE	An indicator of the address current status. For instance, this address may be valid, invalid, temporary, and so on.	

## Subsidy Type

Description: [SUBSIDY TYPE](#)

### Subsidy Type Hierarchies

Standard Subsidy Type Hierarchy:



### Subsidy Type Levels

[Table 3–219](#) shows Subsidy Type Total: Most aggregate level for the Subsidy Type dimension to see the aggregated value of all the subsidy types.

**Table 3–219 Subsidy Type Total**

Sr. Number	Attribute	Description
1.	SUBSIDY TYPE TOTAL CODE	Code for All Subsidy Types

[Table 3–220](#) shows Subsidy Type Detail: This level stores the actual values for subsidy types and enables analysis of related facts by subsidy types. This is the most granular level of the dimension data will be captured and stored at this level.

**Table 3–220 Subsidy Type Detail**

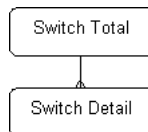
Sr. Number	Attribute	Description	Sample Value
1	SUBSIDY TYPE CODE	Code for Subsidy type	ACCTDPST
2	SUBSIDY TYPE DESC	Description of the Subsidy Type	Account Deposit
3	SUBSIDY TYPE NAME	Name of the Subsidy type	Account Deposit
4	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

## Switch

Description: [SWITCH](#)

### Switch Hierarchies

Standard Switch Hierarchy:



### Switch Levels

[Table 3–221](#) shows Switch Total: Network switches or exchanges. It may a position switch (digital or analog), or GSM MSC.



**Table 3–221 Switch Total**

Sr. Number	Attribute	Description
1.	SWITCH TOTAL CODE	Code for Switches

Table 3–222 shows Switch Detail: Network switches or exchanges. It may a position switch (digital or analog), or GSM MSC.

**Table 3–222 Switch Detail**

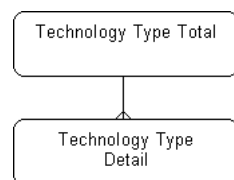
Sr. Number	Attribute	Description	Sample Value
1	SWITCH CODE	A unique identifier for a telecommunications device used to route telephone calls and communication transmissions.	ANALOG
2	SWITCH TYPE CODE	A code used to categorize a switch.	
4	TECHNOLOGY CODE	A code that uniquely identifies a technology.	
7	EFFECTIVE FROM DATE	Effective from date when valid	12/31/2005 12:00:00 AM
8	EFFECTIVE TO DATE	Effective to date when valid	12/31/2005 12:00:00 AM
9	EQUIPMENT CENTER CODE	The equipment center, where this equipment locates in.	
10	EXTERNAL OUTBOUND INDICATOR	Indicate if the switch belongs to external operator, then the circuit.	
11	NETWORK ELEMENT DESC	A text description for the Network	
12	NETWORK ELEMENT CODE	Identifier of the network.	
13	NETWORK ELEMENT NAME	Short name of the network.	
14	NETWORK CODE	Code for the network.	
	STATUS CODE		

## Technology Type

Description: [TECHNOLOGY TYPE](#)

### Technology Type Hierarchies

Standard Technology Type Hierarchy:



### Technology Type Levels

Table 3–223 shows Technology Type Total: Categories for a Technology. For example, wireless, copper line, Optical Fiber.

**Table 3–223 Technology Type Total**

Sr. Number	Attribute	Description
1.	ALL TECHNOLOGY CODE	Code for all technologies.

Table 3–224 shows Technology Types: Detail level of each technology type. Categories for Technology, for example, wireless, copper line, Optical Fiber

**Table 3–224 Technology Types**

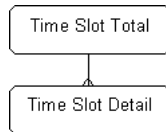
Sr. Number	Attribute	Description	Sample Value
1	TECHNOLOGY TYPE CODE	A code that uniquely identifies technology type.	CL
2	TECHNOLOGY TYPE DESC	A textual description that describes a technology type.	Copper Line
3	TECHNOLOGY TYPE NAME	A name assigned to a technology type.	Copper Line
4	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

## Time Slot

Description: [TIME SLOT](#)

### Time Slot Hierarchies

Standard Time Slot Hierarchy:



### Time Slot Levels

Table 3–225 shows Time Slot Total: Level to be used for summary analysis for all time slots. Most aggregate level of the dimension.

**Table 3–225 Time Slot Total**

Sr. Number	Attribute	Description
1.	TIME SLOT TOTAL ID	Key/code for grouping all the time hour slots of the day.

Table 3–226 shows Time Slot Detail: Most detail level of the dimension at which data will be captured in the facts. Values will be used for detail analysis.

**Table 3–226 Time Slot Detail**

Sr. Number	Attribute	Description	Sample Value
1	HALF HOUR CODE	Retrofitted from column HALF_HOUR_CODE of table TIME_SLOT_DIM	
2	HALF HOUR NAME	Retrofitted from column HALF_HOUR_NAME of table TIME_SLOT_DIM	01:00 - 01:29 AM
3	HALF HOUR NUMBER	Retrofitted from column HLF_HOUR_NUMBER of table TIME_SLOT_DIM	
4	HALF HOUR TIME OF DAY	Retrofitted from column HLF_HOUR_TIME_OF_DAY of table TIME_SLOT_DIM	5/15/2008 1:00:00 AM
5	HOURLY CODE	Retrofitted from column HOUR_CODE of table TIME_SLOT_DIM	
6	HOURLY NAME	Retrofitted from column HOUR_NAME of table TIME_SLOT_DIM	01:00 - 01:29 AM
7	HOURLY NUMBER	Retrofitted from column HOUR_NUMBER of table TIME_SLOT_DIM	1

**Table 3–226 (Cont.) Time Slot Detail**

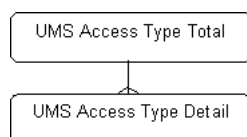
Sr. Number	Attribute	Description	Sample Value
8	HOUR TIME OF DAY	Retrofitted from column HOUR_TIME_OF_DAY of table TIME_SLOT_DIM	5/5/2008 1:00:00 AM
9	QTR HOUR CODE	Retrofitted from column QTR_HOUR_CODE of table TIME_SLOT_DIM	
10	QTR HOUR NAME	Retrofitted from column QTR_HOUR_NAME of table TIME_SLOT_DIM	
11	QTR HOUR NUMBER	Retrofitted from column QTR_HOUR_NUMBER of table TIME_SLOT_DIM	
12	QTR HOUR TIME OF DAY	Retrofitted from column QTR_HOUR_TIME_OF_DAY of table TIME_SLOT_DIM	
13	TIME SLOT CODE	TIME SLOT CODE.	5,6
14	TIME SLOT NAME	TIME SLOT NAME.	01:00 - 01:14 AM
15	WHOLE DAY CODE	Retrofitted from column WHOLE_DAY_CODE of table TIME_SLOT_DIM	
16	WHOLE DAY NAME	Retrofitted from column WHOLE_DAY_NAME of table TIME_SLOT_DIM	

## UMS Access Type

Description: [UMS ACCESS TYPE](#)

### UMS Access Type Hierarchies

Standard UMS Access Type Hierarchy:



### UMS Access Type Levels

[Table 3–227](#) shows UMS Access Type Total: Most aggregate level shows sum of values for all types of UMS access.

**Table 3–227 UMS Access Type Total**

Sr. Number	Attribute	Description
1.	UMS ACCESS TYPE TOTAL ID	Code for All UMS Access Types

[Table 3–228](#) shows UMS Access Type Detail: The granular level at which data will be captured. The values at this level indicate the actual UMS access types that are used to notify the UMS subscribers.

**Table 3–228 UMS Access Type Detail**

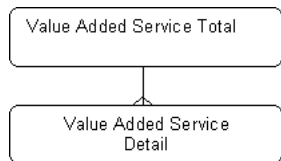
Sr. Number	Attribute	Description	Sample Value
1	UMS ACCESS TYPE CODE	Code for UMS Access Type.	FAX
2	UMS ACCESS TYPE DESC	Description of the UMS Access Type.	Fax
3	UMS ACCESS TYPE NAME	Short description of the UMS Access Type.	Fax
4	LANGUAGE CODE	Unique identifier for a row in the Language dimension.	

## Value Added Services (VAS)

Description: [VALUE ADDED SERVICE](#)

### Value Added Services Hierarchies

Standard Value Added Service Hierarchy:



### Value Added Services Levels

[Table 3–229](#) shows Value Added Service (VAS) Total: All VAS is the most aggregate level of the dimension and is used to see the results for all the services, that is, irrespective of type and individual service.

**Table 3–229 Value Added Service Total**

Sr. Number	Attribute	Description
1.	VALUE ADDED SERVICE TOTAL CODE	Code for All Value Added Service

[Table 3–230](#) shows Value Added Service (VAS): is the lowest level or the most detail level, at which data related to VAS facts will be captured and stored. The values in this level indicate the actual value added services offered by Service provider

**Table 3–230 Value Added Service**

Sr. Number	Attribute	Description	Sample Value
1	VALUE ADDED SERVICE TYPE NAME	Short description of the VAS type.	
2	VALUE ADDED SERVICE TYPE DESC	Description of the VAS Type.	
3	VALUE ADDED SERVICE TYPE CODE	Code for VAS type.	
4	VALUE ADDED SERVICE NAME	Short description of the VAS.	Product 1
5	VALUE ADDED SERVICE DESC	Description of VAS.	ZeroBallImpact
6	VALUE ADDED SERVICE CODE	Code or Id for VAS.	1
7	PRODUCT TYPE CODE	Retrofitted from column PRODUCT_KEY of table FACT_MARKET_SHARE	
8	PRODUCT RATING PLAN TYPE CODE	Identifier for the offer.	
9	PRODUCT PACKAGE TYPE CODE	Identifier for the offer.	
10	PRODUCT PACKAGE CHARGE TYPE CODE	Code.	
11	PRODUCT NAME	Product name.	
12	PRODUCT GROUP CODE	Unique identifier for Product Group.	
13	PRODUCT CODE	Uniquely identifier of product.	\$13.00
14	NETWORK CODE	The network which is used by this platform	
15	IN PLATFORM CODE	Code for IN Platform	
16	EQUIPMENT FUNCTIONALITY CODE	The code of function	

**Table 3-230 (Cont.) Value Added Service**

<b>Sr. Number</b>	<b>Attribute</b>	<b>Description</b>	<b>Sample Value</b>
18	EFFECTIVE TO DATE	The end date of the period when this Channel was valid.	12/31/2005 12:00:00 AM
19	EFFECTIVE FROM DATE PROD_DESC	Standard SCD field, effective from date	12/31/2005 12:00:00 AM



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# Oracle Communications Data Model Physical Data Model

This chapter provides information about the physical data model of Oracle Communications Data Model.

This chapter includes the following sections:

- [Introduction to Oracle Communications Data Model Physical Data Model](#)
- [Reference Tables](#)
- [Lookup Tables](#)
- [Base Tables](#)
- [Derived Tables](#)
- [Aggregate Tables](#)
- [Temporary and Other Tables](#)
- [Database Sequences](#)
- [Compressed Tables](#)
- [Oracle Communications Data Model OLAP Cube MV, Cube View](#)

## Introduction to Oracle Communications Data Model Physical Data Model

The Physical Data Model of the Oracle Communications Data Model is the physical manifestation of the logical data model into database tables and relationships (or foreign key constraints). Partitions, indexes, and Materialized Views have been added to aid performance.

The Physical data model includes the following:

- [Reference Tables](#)
- [Lookup Tables](#)
- [Base Tables](#)
- [Derived Tables](#)
- [Aggregate Tables](#)
- [Database Sequences](#)

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**Important:** Do not make changes to the schemas as such changes are not supported.

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Oracle Communications Data Model provides the following types of tables:

- Reference tables contain information that is usually used as dimensions. They usually do not change often (or at all). Typically, Reference tables are PARTY, CUSTOMER, ADDRESS LOCATION, ACCOUNT, SUBSCRIPTION, and so on
- Lookup tables in the foundation layer are added to save the definition of short codes used in other tables.
- Base tables store information about any type of transactions (Calls Data Records or CDRs, Invoices, Payments, Business Interactions, and so on). They are usually transformed into facts.
- Derived Tables in the analytic layer are usually transition tables to STARs. They are also leveraged for the Mining models.
- Aggregate Tables, or materialized views, are the STAR schema themselves at a higher level of aggregation. They may be related to the OLAP cubes.

For more information on Oracle Communications Data Model table types, see "[Oracle Communications Data Model Concepts](#)" on page 1-3.

[Table 4–1](#) shows the table name prefix conventions. When you examine the predefined physical model, keep in mind the naming conventions shown in [Table 4–1](#) that use DW (Data Warehouse) prefixes to identify the types of tables and views.

**Table 4–1 Table Name Prefix Conventions**

Prefix	Description
DWA_	Aggregate table
DWB_	Base transaction table
DWD_	Derived table (Mining included)
DWL_	Lookup table
DWR_	Reference data table

## Reference Tables

[Table 4–2](#) briefly describes the Reference tables in Oracle Communications Data Model.

**Table 4–2 Reference Tables**

Table Name	More Information
DWR_ACCS_MTHD	<a href="#">ACCESS METHOD</a>
DWR_ACCS_MTHD_ACCT_ASGN	<a href="#">ACCESS METHOD ACCOUNT ASSIGNMENT</a>
DWR_ACCS_MTHD_ASGN	<a href="#">ACCESS METHOD ASSIGNMENT</a>
DWR_ACCS_MTHD_ELMNT	<a href="#">ACCESS METHOD ELEMENT</a>
DWR_ACCS_MTHD_EQPMNT_ASGN	<a href="#">ACCESS METHOD EQUIPMENT ASSIGNMENT</a>
DWR_ACCS_MTHD_GEO_ASGN	<a href="#">ACCESS METHOD GEOGRAPHY ASSIGNMENT</a>
DWR_ACCS_MTHD_POOL	<a href="#">ACCESS METHOD POOL</a>



**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_ACCS_MTHD_PRTY_ASGN	ACCESS METHOD PARTY ASSIGNMENT
DWR_ACCS_MTHD_SBRP_ASGN	ACCESS METHOD SUBSCRIPTION ASSIGNMENT
DWR_ACCS_MTHD_SGMNT	ACCESS METHOD SEGMENT
DWR_ACCS_MTHD_SRVC_ASGN	ACCESS METHOD SERVICE ASSIGNMENT
DWR_ACCSRS	ACCESSORIES
DWR_ACCT	ACCOUNT
DWR_ACCT_ASGN	ACCOUNT ASSIGNMENT
DWR_ACCT_BAL_GRP	ACCOUNT BALANCE GROUP
DWR_ACCT_BLLG_CYCL_HIST	ACCOUNT BILLING CYCLE HISTORY
DWR_ACCT_BLLG_FRQNCY_HIST	ACCOUNT BILLING FREQUENCY HISTORY
DWR_ACCT_BLLG_PRD_HIST	ACCOUNT BILLING PERIOD HISTORY
DWR_ACCT_BSNS_INTRACN_RL	ACCOUNT BUSINESS INTERACTION ROLE
DWR_ACCT_CNRT_RLTN	ACCOUNT CONTRACT RELATIONSHIP
DWR_ACCT_PREF_INVC_DLVRY	ACCOUNT PREFERRED INVOICE DELIVERY
DWR_ACCT_PREF_PYMT_MTHD	ACCOUNT PREFERRED PAYMENT METHOD
DWR_ACCT_PRFL	ACCOUNT PROFILE
DWR_ACCT_PRTY_PMP_RLTN	ACCOUNT PARTY PMP RELATIONSHIP
DWR_ACCT_SBRP_ASGN	ACCOUNT SUBSCRIPTION ASSIGNMENT
DWR_ACCT_SGMNT	ACCOUNT SEGMENT
DWR_ACCT_SGMNT_ASGN_HIST	ACCOUNT SEGMENT ASSIGNMENT HISTORY
DWR_ACCT_SGMNT_MDL	ACCOUNT SEGMENTATION MODEL
DWR_ADDR_LCTN_NAME	ADDRESS LOCATION NAME
DWR_ADDR_LOC	ADDRESS LOCATION
DWR_ADDR_RLTD	ADDRESS RELATED
DWR_ADTNL_TXT	ADDITIONAL TEXT
DWR_ADVR_PRD	ADVERTISING PERIOD
DWR_ADVR_QTR	ADVERTISING QUARTER
DWR_ADVR_WK	ADVERTISING WEEK
DWR_ADVR_YR	ADVERTISING YEAR
DWR_AGGRTN_INTRFC	AGGREGATION INTERFACE
DWR_ALWNCE_SBRP_PRICE_ALTRTN	ALLOWANCE SBRP PRICE ALTERNATION
DWR_AMRCN_PRPTY_ADDR	AMERICAN PROPERTY ADDRESS
DWR_AM_SGMNT_PROD_CPBLTY_RL	ACCESS METHOD SEGMENT PROD CAPABILITY RL
DWR_ANZSIC_CLSFCTN	ANZSIC CLASSIFICATION
DWR_ASSET	ASSET
DWR_ASSET_PRTY ASSOCTN	ASSET PARTY ASSOCIATION
DWR_ASSET_SITE_ASGN	ASSET SITE ASSIGNMENT

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_ATM_INTRFC	ATM INTERFACE
DWR_ATONOMS_SYS	AUTONOMOUS SYSTEM
DWR_AUXILIARY_CMPNT	AUXILIARY COMPONENT
DWR_BASE_DAY	BASE DAY
DWR_BASE_STN_CNTRLR	BASE STATION CONTROLLER
DWR_BASE_TRNSCVR_STN	BASE TRANSCEIVER STATION
DWR_BNK	BANK
DWR_BNK_DRCT_DEBT_CHNL	BANK DIRECT DEBIT CHANNEL
DWR_BRDBND_RTNG_PLN	BROADBAND RATING PLAN
DWR_BRDBND_SRVC	BROADBAND SERVICE
DWR_BRDGNG_PROTCL	BRIDGING PROTOCOL
DWR_BROWSER_VRSN	BROWSER VERSION
DWR_BRND	BRAND
DWR_BSNS_ASSET	BUSINESS ASSET
DWR_BSNS_HLF_MO	BUSINESS HALF MONTH
DWR_BSNS_HLF_YR	BUSINESS HALF YEAR
DWR_BSNS_INTRACN_ASGN	BUSINESS INTERACTION ASSIGNMENT
DWR_BSNS_INTRACN_CHTRSTC	BUSINESS INTERACTION CHARACTERISTIC
DWR_BSNS_INTRACN_CHTRSTC_VAL	BUSINESS INTERACTION CHARACTERISTIC VALUE
DWR_BSNS_INTRACN_LOC_ASGN	BUSINESS INTERACTION LOCATION ASSIGNMENT
DWR_BSNS_INTRACN_VRSN	BUSINESS INTERACTION VERSION
DWR_BSNS_MO	BUSINESS MONTH
DWR_BSNS_QTR	BUSINESS QUARTER
DWR_BSNS_UNIT_JB_RL	BUSINESS UNIT JOB ROLE
DWR_BSNS_UNIT_SHFT	BUSINESS UNIT SHIFT
DWR_BSNS_WK	BUSINESS WEEK
DWR_BSNS_YR	BUSINESS YEAR
DWR_CALL_CNTR	CALL CENTER
DWR_CALL_CNTR_AGNT	CALL CENTER AGENT
DWR_CALL_CNTR_SRVC_CAPBLTY	CALL CENTER SERVICE CAPABILITY
DWR_CALL_FRWD	CALL FORWARD
DWR_CALL_SRC_DSTN	CALL SOURCE DESTINATION
DWR_CALLR_ID	CALLER ID
DWR_CARD	CARD
DWR_CARD_RLTN	CARD RELATIONSHIP
DWR_CBL	CABLE
DWR_CBL_MDM	CABLE MODEM

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_CELL	CELL
DWR_CELL_SCTR	CELL SECTOR
DWR_CELL_SITE	CELL SITE
DWR_CFS_SPEC_VRSN_DTL	CFS SPEC VERSION DETAIL
DWR_CHASSIS	CHASSIS
DWR_CHASSIS_POSN	CHASSIS POSITION
DWR_CHNL	CHANNEL
DWR_CLNDR_HLF_MO	CALENDAR HALF MONTH
DWR_CLNDR_HLF_YR	CALENDAR HALF YEAR
DWR_CLNDR_MO	CALENDAR MONTH
DWR_CLNDR_QTR	CALENDAR QUARTER
DWR_CLNDR_WK	CALENDAR WEEK
DWR_CLNDR_YR	CALENDAR YEAR
DWR_CMPGN	CAMPAIGN
DWR_CMPGN_CHNL_ASGN	CAMPAIGN CHANNEL ASSIGNMENT
DWR_CMPGN_CHNL	CAMPAIGN CHANNEL
DWR_CMPGN_CHTRSTC	CAMPAIGN CHARACTERISTIC
DWR_CMPGN_CHTRSTC_VAL	CAMPAIGN CHARACTERISTIC VALUE
DWR_CMPGN_DOC	CAMPAIGN DOCUMENT
DWR_CMPGN_MGMT_HIST	CAMPAIGN MANAGEMENT HISTORY
DWR_CMPGN_MSG	CAMPAIGN MESSAGE
DWR_CMPGN_MSG_DPCT	CAMPAIGN MESSAGE DEPICTION
DWR_CMPGN_RLTN	CAMPAIGN RELATIONSHIP
DWR_CMPGN_TERM_VAL	CAMPAIGN TERM VALUE
DWR_CMPND_ELMNT	COMPOUND ELEMENT
DWR_CMPND_ELMNT_CMPND_DTL	COMPOUND ELEMENT COMPOUND DETAIL
DWR_CMPND_ELMNT_COLLCTN	COMPOUND ELEMENT COLLECTION
DWR_CMPND_ELMNT_DTL	COMPOUND ELEMENT DETAIL
DWR_CMPND_ELMNT_LGICL_DTL	COMPOUND ELEMENT LOGICAL DETAIL
DWR_CMPND_ELMNT_PHY_DTL	COMPOUND ELEMENT PHYSICAL DETAIL
DWR_CMPND_ELMNT_RL	COMPOUND ELEMENT ROLE
DWR_CMPND_ELMNT_RL_ASGN	COMPOUND ELEMENT ROLE ASSIGNMENT
DWR_CMPND_ELMNT_RL_SPEC	COMPOUND ELEMENT ROLE SPEC
DWR_CMPND_ELMNT_TP_DTL	COMPOUND ELEMENT TP DETAIL
DWR_CMPND_ELMNT_UNIT	COMPOUND ELEMENT UNIT
DWR_CMPNT_SBRP_PRICE	COMPONENT SUBSCRIPTION PRICE
DWR_CMPST_COMP_PROD_CRL_CHTRTC	COMPOSITE COMP PROD CRL CHARACTERISTIC

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_CMPST_PROD_RTNG_PLN	COMPOSITE PRODUCT RATING PLAN
DWR_CMPST_PROD_RTNG_PLN_ASGN	COMPOSITE PRODUCT RATING PLAN ASSIGNMENT
DWR_CMPST_SBRP_PRICE	COMPOSITE SUBSCRIPTION PRICE
DWR_CMPST_SRVC	COMPOSITE SERVICE
DWR_CMPST_SRVC_INCLSN	COMPOSITE SERVICE INCLUSION
DWR_CMPST_SRVC_TYP_INCLSN	COMPOSITE SERVICE TYPE INCLUSION
DWR_CMPTR	COMPETITOR
DWR_CMPTR_INTLGNCE	COMPETITOR INTELLIGENCE
DWR_CMPTR_INTLGNCE_PRTY_RL	COMPETITOR INTELLIGENCE PARTY ROLE
DWR_CMPTR_MKT_SGMNT_ASGN	COMPETITOR MARKET SEGMENT ASSIGNMENT
DWR_CMPTR_MKT_SGMNT_SWOT	COMPETITOR MARKET SEGMENT SWOT
DWR_CMPTR_PROD_CRLTN	COMPETITOR PRODUCT CORRELATION
DWR_CMPTR_SWOT	COMPETITOR SWOT
DWR_CMPTR_TIER_ASGN	COMPETITOR TIER ASSIGNMENT
DWR_CMPTVE_TIER	COMPETITIVE TIER
DWR_CNCT_LST	CONTACT LIST
DWR_CNCTN	CONNECTION
DWR_CNCTN_TMNT_PNT	CONNECTION TERMINATION POINT
DWR_CNRT	CONTRACT
DWR_CNRT_ASGN	CONTRACT ASSIGNMENT
DWR_CNRT_DOC	CONTRACT DOCUMENT
DWR_CNRT_ITEM	CONTRACT ITEM
DWR_CNRT_PROD_ASGN	CONTRACT PRODUCT ASSIGNMENT
DWR_CNSEQ_PRFMNC_NTFCTN	CONSEQUENCE PERFORMANCE NOTIFICATION
DWR_CNSEQ_PRFMNC_NTFCTN_SPEC	CONSEQUENCE PERFORMANCE NOTIFICATION SPEC
DWR_CNTNT	CONTENT
DWR_CNTNT_PRICE	CONTENT PRICE
DWR_CNTNT_PRVDR	CONTENT PROVIDER
DWR_COLLCTN	COLLECTION
DWR_COLLCTN_AGENCY	COLLECTION AGENCY
DWR_COMP_INTL_CHTRSTC	COMP INTEL CHARACTERISTIC
DWR_COMP_INTL_CHTRSTC_VAL	COMP INTEL CHARACTERISTIC VALUE
DWR_COMP_INTL_MKT_SGMNT	COMP INTEL MARKET SEGMENT
DWR_COMP_PROD_CRRL_CHTRSTC	COMP PROD CRRL CHARACTERISTIC
DWR_COMP_PROD_CRRL_CHTRSTC_ASGN	COMP PROD CRRL CHARACTERISTIC ASSIGNMENT
DWR_COMP_PROD_CRRL_CHTRSTC_RLTN	COMP PROD CRRL CHARACTERISTIC RELATIONSHIP
DWR_COMP_PROD_CRRL_CHTRSTC_VAL	COMP PROD CRRL CHARACTERISTIC VALUE

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_COMPLEX_ADDR	COMPLEX ADDRESS
DWR_COMUNICTN_SRVC	COMMUNICATION SERVICE
DWR_CORE_INTRFC	CORE INTERFACE
DWR_COST_CNTR	COST CENTER
DWR_COURIER	COURIER
DWR_CPCTY	CAPACITY
DWR_CPE_LGICL_DVC_RL	CPE LOGICAL DEVICE ROLE
DWR_CRCUT_CMPNT	CIRCUIT COMPONENT
DWR_CRDT_CTGRY	CREDIT CATEGORY
DWR_CRDT_SCR_PRVDR	CREDIT SCORE PROVIDER
DWR_CRNCY_GEO_ENT_ASGN	CURRENCY GEOGRAPHY ENTITY ASSIGNMENT
DWR_CUST	CUSTOMER
DWR_CUST_CLASS_ASGN	CUSTOMER CLASS ASSIGNMENT
DWR_CUST_COMMUNITY	CUSTOMER COMMUNITY
DWR_CUST_DOC	CUSTOMER DOCUMENT
DWR_CUST_FCNG_SRVC	CUSTOMER FACING SERVICE
DWR_CUST_FCNG_SRVC_RL	CUSTOMER FACING SERVICE ROLE
DWR_CUST_FCNG_SRVC_SPEC_RL	CUSTOMER FACING SERVICE SPEC ROLE
DWR_CUST_FCNG_SRVC_SPEC_VRSN	CUSTOMER FACING SERVICE SPEC VERSION
DWR_CUST_GRP_ASGN	CUSTOMER GROUP ASSIGNMENT
DWR_CUST_INDVL	CUSTOMER INDIVIDUAL
DWR_CUST_OCCSN	CUSTOMER OCCASION
DWR_CUST_ORDR_DOC	CUSTOMER ORDER DOCUMENT
DWR_CUST_ORG	CUSTOMER ORGANIZATION
DWR_CUST_RSTRCT_INFO	CUSTOMER RESTRICTED INFO
DWR_CUST_RVN_BND_ASGN	CUSTOMER REVENUE BAND
DWR_CUST_SCR	CUSTOMER SCORE
DWR_CUST_SGMNT	CUSTOMER SEGMENT
DWR_CUST_SGMNT_MDL	CUSTOMER SEGMENTATION MODEL
DWR_CUST_SIC_ASGN	CUSTOMER SIC ASSIGNMENT
DWR_CUST_SRC	CUSTOMER SOURCE
DWR_DAY	DAY
DWR_DAY_ACT_CONDITION	DAY ACTUAL CONDITION
DWR_DAY_TODATE_TRANS	DAY TODATE TRANSFORMATION
DWR_DAY_TRANS	DAY TRANSFORMATION
DWR_DEAL	DEAL
DWR_DEAL_LN_ITEM	DEAL LINE ITEM

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_DEMOG_ATTRIB	DEMOGRAPHY ATTRIBUTE
DWR_DEMOG_CHTRSTC	DEMOGRAPHIC CHARACTERISTIC
DWR_DEMOG_CHTRSTC_VAL	DEMOGRAPHIC CHARACTERISTIC VALUE
DWR_DEMOG_GRP	DEMOGRAPHY ATTRIBUTE
DWR_DISC_GRP	DISCOUNT GROUP
DWR_DISC_SBRP_PRICE_ALTRTN	DISCOUNT SBRP PRICE ALTERATION
DWR_DLR	DEALER
DWR_DLR_DISC_GRP_ASGN	DEALER DISCOUNT GROUP ASSIGNMENT
DWR_DOC_TYP_GRP_ASGN	DOCUMENT TYPE GROUP ASSIGNMENT
DWR_DRVD_VAL	DERIVED VALUE
DWR_DSL_MDM	DSL MODEM
DWR_DVC_INTRFC	DEVICE INTERFACE
DWR_DVC_INTRFC_DTL	DEVICE INTERFACE DETAIL
DWR_DVC_INTRFC_PHY_PRT_ASGN	DEVICE INTERFACE PHYSICAL PORT ASSIGNMENT
DWR_DVC_INTRFC_RL	DEVICE INTERFACE ROLE
DWR_DVC_INTRFC_TP_ASGN	DEVICE INTERFACE TP ASSIGNMENT
DWR_EDGE_INTRFC	EDGE INTERFACE
DWR_ELMNT_CHTRSTC	ELEMENT CHARACTERISTIC
DWR_ELMNT_CHTRSTC_ASGN	ELEMENT CHARACTERISTIC ASSIGNMENT
DWR_ELMNT_CHTRSTC_RLTN	ELEMENT CHARACTERISTIC RELATIONSHIP
DWR_ELMNT_CHTRSTC_VAL	ELEMENT CHARACTERISTIC VALUE
DWR_ELMNT_CHTRSTC_VAL_ASGN	ELEMENT CHARACTERISTIC VALUE ASSIGNMENT
DWR_ELMNT_CHTRSTC_VAL_RLTN	ELEMENT CHARACTERISTIC VALUE RELATIONSHIP
DWR_EML_SRVC	EMAIL SERVICE
DWR_EMP	EMPLOYEE
DWR_EMP_DISC_GRP_ASGN	EMPLOYEE DISCOUNT GROUP ASSIGNMENT
DWR_EMP_JB_RL_ASGN	EMPLOYEE JOB ROLE ASSIGNMENT
DWR_EMP_LANG_CAPBLTY	EMPLOYEE LANGUAGE CAPABILITY
DWR_EMP_RSTRCT_INFO	EMPLOYEE RESTRICTED INFO
DWR_EMP_SCHL	EMPLOYEE SCHEDULE
DWR_ENT	ENTITY
DWR_ENT_RL	ENTITY ROLE
DWR_ENT_SPECFTN	ENTITY SPECIFICATION
DWR_EQPMNT	EQUIPMENT
DWR_EQPMNT_CNTR	EQUIPMENT CENTER
DWR_EQPMNT_FNCTNLTY	EQUIPMENT FUNCTIONALITY
DWR_EQPMNT_FNCTNLTY_ASGN	EQUIPMENT FUNCTIONALITY ASSIGNMENT

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_EQPMNT_HLDR	EQUIPMENT HOLDER
DWR_EQPMNT_INSTNC	EQUIPMENT INSTANCE
DWR_EQPMNT_INSTNC_RNTNG_CNRT	EQUIPMENT INSTANCE RENTING CONTRACT
DWR_EQPMNT_SBRP	EQUIPMENT SUBSCRIPTION
DWR_EVT_LOC	EVENT LOCATION
DWR_EVT_PRTY_RL	EVENT PARTY ROLE
DWR_EVT_RSLTN	EVENT RESOLUTION
DWR_EXCLD_PRT_DTL	EXCLUDE PORT DETAIL
DWR_EXTRNL_CRDT_PRFL	EXTERNAL CREDIT PROFILE
DWR_EXTRNL_CRDT_PRFL_ASGN	EXTERNAL CREDIT PROFILE ASSIGNMENT
DWR_EXTRNL_INFO_SRC	EXTERNAL INFORMATION SOURCE
DWR_EXTRNL_OPRTR	EXTERNAL OPERATOR
DWR_FCTR_CMPNY	FACTOR COMPANY
DWR_FDA	FDA
DWR_FIXED_LN_PRT	FIXED LINE PORT
DWR_FIXED_LN_RTNG_PLN	FIXED LINE RATING PLAN
DWR_FIXED_LN_SRVC	FIXED LINE SERVICE
DWR_FRWL_RL	FIREWALL ROLE
DWR_FSAM	FSAM
DWR_FSCL_HLF_MO	FISCAL HALF MONTH
DWR_FSCL_HLF_YR	FISCAL HALF YEAR
DWR_FSCL_MO	FISCAL MONTH
DWR_FSCL_QTR	FISCAL QUARTER
DWR_FSCL_WK	FISCAL WEEK
DWR_FSCL_YR	FISCAL YEAR
DWR_FXBLE_CHTRSTC	FLEXIBLE CHARACTERISTIC
DWR_FXBLE_CHTRSTC_ASGN	FLEXIBLE CHARACTERISTIC ASSIGNMENT
DWR_FXBLE_CHTRSTC_ASGN_TYP	FLEXIBLE CHARACTERISTIC ASSIGNMENT TYPE
DWR_FXBLE_CHTRSTC_RLTN	FLEXIBLE CHARACTERISTIC RELATIONSHIP
DWR_FXBLE_CHTRSTC_TYP	FLEXIBLE CHARACTERISTIC TYPE
DWR_FXBLE_CHTRSTC_VAL	FLEXIBLE CHARACTERISTIC VALUE
DWR_FXBLE_CHTRSTC_VAL_ASGN	FLEXIBLE CHARACTERISTIC VALUE ASSIGNMENT
DWR_FXBLE_CHTRSTC_VAL_RLTN	FLEXIBLE CHARACTERISTIC VALUE RELATIONSHIP
DWR_GEO_BLDG	GEOGRAPHY BUILDING
DWR_GEO_CITY	GEOGRAPHY CITY
DWR_GEO_CNTRY	GEOGRAPHY COUNTRY
DWR_GEO_CNTY	GEOGRAPHY COUNTY

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_GEO_COMPLEX	GEOGRAPHY COMPLEX
DWR_GEO_DEMOG_ATRIB	GEOGRAPHY DEMOGRAPHY ATTRIBUTE
DWR_GEO_DEMOG_GRP	GEOGRAPHY DEMOGRAPHIC GROUP
DWR_GEO_DEMOG_VAL	GEOGRAPHY DEMOGRAPHY VALUE
DWR_GEO_ENT	GEOGRAPHY ENTITY
DWR_GEO_ENT_ASGN	GEOGRAPHY ENTITY ASSIGNMENT
DWR_GEO_ENT_HIER_LVL_ASGN	GEOGRAPHY ENTITY HIER LEVEL ASSIGNMENT
DWR_GEO_HRCHY	GEOGRAPHY HIERARCHY
DWR_GEO_HRCHY_LVL	GEOGRAPHY HIERARCHY LEVEL
DWR_GEO_HRCHY_LVL_ASGN	GEOGRAPHY HIERARCHY LEVEL ASSIGNMENT
DWR_GEO_LVL	GEOGRAPHY LEVEL
DWR_GEO_LVL_ATRIB	GEOGRAPHY LEVEL ATTRIBUTE
DWR_GEO_LVL_ATRIB_VAL	GEOGRAPHY LEVEL ATTRIBUTE VALUE
DWR_GEO_RGN	GEOGRAPHY REGION
DWR_GEO_SBRGN	GEOGRAPHY SUB REGION
DWR_GEO_STATE	GEOGRAPHY STATE
DWR_GEO_STRT	GEOGRAPHY STREET
DWR_GEO_WORLD	GEOGRAPHY WORLD
DWR_GL_ACCT	GL ACCOUNT
DWR_GL_ACCT_ASGN	GL ACCOUNT ASSIGNMENT
DWR_GL_ACCT_SGMNT	GL ACCOUNT SEGMENT
DWR_GL_COST_CNTR_SGMNT	GL COST CENTER SEGMENT
DWR_GL_LDGR	GL LEDGER
DWR_GL_LDGR_ACCT_ASGN	GL LEDGER ACCOUNT ASSIGNMENT
DWR_GL_ORG_BSNS_UNIT_SGMNT	GL ORG BSNS UNIT SEGMENT
DWR_GL_PRD	GL PERIOD
DWR_GL_PROD_SGMNT	GL PRODUCT SEGMENT
DWR_GL_PROJ_SGMNT	GL PROJECT SEGMENT
DWR_GL_REF	GL REFERENCE
DWR_GL_SBLDGR	GL SUBLEDGER
DWR_GL_SGMNT	GL SEGMENT
DWR_GPRS_SRVC	GPRS SERVICE
DWR_HH	HOUSEHOLD
DWR_HLDR_ATMC	HOLDER ATOMIC
DWR_HLDR_CMPST	HOLDER COMPOSITE
DWR_HLF_HR	HALF HOUR
DWR_HLF_MO_TODATE_TRANS	HALF MONTH TODATE TRANSFORMATION



**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_HLF_MO_TRANS	HALF MONTH TRANSFORMATION
DWR_HLF_YR_TODATE_TRANS	HALF YEAR TODATE TRANSFORMATION
DWR_HLF_YR_TRANS	HALF YEAR TRANSFORMATION
DWR_HM_SBCRBR_SERVER	HOME SUBSCRIBER SERVER
DWR_HNDST_INSTNC	HANDSET INSTANCE
DWR_HNDST_MDL	HANDSET MODEL
DWR_HR	HOURL
DWR_HRDWR	HARDWARE
DWR_IDD	IDD
DWR_IN_PLTFRM	IN PLATFORM
DWR_IN_RUTNG_DVC	IN ROUTING DEVICE
DWR_INDVL_DEMOG_PRFL	INDIVIDUAL DEMOGRAPHY PROFILE
DWR_INDVL_DEMOG_VAL	INDIVIDUAL DEMOGRAPHY VALUE
DWR_INDVL_NAME	INDIVIDUAL NAME
DWR_INTRACN_CHNL	INTERACTION CHANNEL
DWR_INTRACN_NAVGTN_ASGN	INTERACTION NAVIGATION ASSIGNMENT
DWR_INTRACN_NAVGTN_ITEM	INTERACTION NAVIGATION ITEM
DWR_INTRACN_NAVGTN_TYP_VRSN	INTERACTION NAVIGATION TYPE VERSION
DWR_INVC_ADJ_QTA	INVOICE ADJUSTMENT QUOTA
DWR_IP_ADDR	IP ADDRESS
DWR_IP_ADDR_POOL	IP ADDRESS POOL
DWR_IP_SUBNET	IP SUBNET
DWR_IPV4_ADDR	IPV4 ADDRESS
DWR_ISP	ISP
DWR_ISP_BSNS	ISP BUSINESS
DWR_ISP_BSNS_ASGN	ISP BUSINESS ASSIGNMENT
DWR_ISP_USER	ISP USER
DWR_ITEM	ITEM
DWR_JB	JOB
DWR_JB_RL	JOB ROLE
DWR_KEY_PRFMNC_IND_SLS_PARM	KEY PERFORMANCE INDICATOR SLS PARM
DWR_KEY_QLTY_IND_SLS_PARM	KEY QUALITY INDICATOR SLS PARM
DWR_LAN	LAN
DWR_LAN_PROTCL	LAN PROTOCOL
DWR_LAND_PARCEL_ADDR	LAND PARCEL ADDRESS
DWR_LANG_DIALECT	LANGUAGE DIALECT
DWR_LAYER_NTWK	LAYER NETWORK

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_LCL_ADDR_LOC	LOCAL ADDRESS LOCATION
DWR_LGICL_CPCTY	LOGICAL CAPACITY
DWR_LGICL_DVC	LOGICAL DEVICE
DWR_LGICL_DVC_ATMC	LOGICAL DEVICE ATOMIC
DWR_LGICL_DVC_CMPST	LOGICAL DEVICE COMPOSITE
DWR_LGICL_DVC_OS_ASGN	LOGICAL DEVICE OS ASSIGNMENT
DWR_LGICL_DVC_RL	LOGICAL DEVICE ROLE
DWR_LGICL_DVC_RL_SPEC	LOGICAL DEVICE ROLE SPEC
DWR_LGICL_ELMNT	LOGICAL ELEMENT
DWR_LGICL_ELMNT_PHY_SPPRT	LOGICAL ELEMENT PHYSICAL SUPPORT
DWR_LGICL_ELMNT_RL	LOGICAL ELEMENT ROLE
DWR_LGICL_ELMNT_RL_ASGN	LOGICAL ELEMENT ROLE ASSIGNMENT
DWR_LGICL_ELMNT_RL_SPEC	LOGICAL ELEMENT ROLE SPEC
DWR_LGICL_ELMNT_SPEC_PHY_SPPRT	LOGICAL ELEMENT SPEC PHYSICAL SUPPORT
DWR_LGICL_ELMNT_TYP_VRSN	LOGICAL ELEMENT TYPE VERSION
DWR_LGICL_INTRFC	LOGICAL INTERFACE
DWR_LYLTY_PROG	LOYALTY PROGRAM
DWR_LYLTY_PROG_CHNL	LOYALTY PROGRAM CHANNEL
DWR_MAILBOX	MAILBOX
DWR_MANAGED_ENT	MANAGED ENTITY
DWR_MANAGED_HRDWR	MANAGED HARDWARE
DWR_MANAGED_TRNSMISN_ENT	MANAGED TRANSMISSION ENTITY
DWR_MBL_SWTCHNG_CNTR	MOBILE SWITCHING CENTER
DWR_MEDIA_INTRFC	MEDIA INTERFACE
DWR_MEDIA_OBJ	MEDIA OBJECT
DWR_MEDIA_OBJ_ASGN	MEDIA OBJECT ASSIGNMENT
DWR_MGMT_DOMAIN	MANAGEMENT DOMAIN
DWR_MGMT_PROTCL	MANAGEMENT PROTOCOL
DWR_MKT_AREA	MARKET AREA
DWR_MKT_AREA_LVL	MARKET AREA LEVEL
DWR_MKT_PLN_DOC_REQRMNT	MARKET PLAN DOCUMENT REQUIREMENT
DWR_MKT_PLN_SUB_BY_DOC	MARKET PLAN SUBSTITUTE BY DOC
DWR_MKT_PLN_TERM_VAL	MARKET PLAN TERM VALUE
DWR_MKT_SGMNT	MARKET SEGMENT
DWR_MKT_SGMNT_CHTRSTC	MARKET SEGMENT CHARACTERISTIC
DWR_MKT_SGMNT_CHTRSTC_VAL	MARKET SEGMENT CHARACTERISTIC VALUE
DWR_MKT_STTSTCS	MARKET STATISTICS

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_MMS_SRVC	MMS
DWR_MNT	MINUTE
DWR_MO_TODATE_TRANS	MONTH TODATE TRANSFORMATION
DWR_MO_TRANS	MONTH TRANSFORMATION
DWR_MUS_DNLD	MUSIC DOWNLOAD
DWR_NAICS_CLSFCTN	NAICS CLASSIFICATION
DWR_NAICS_INDSTRY	NAICS INDUSTRY
DWR_NAICS_INDSTRY_GRP	NAICS INDUSTRY GROUP
DWR_NAICS_INDSTRY_SCTR	NAICS INDUSTRY SECTOR
DWR_NAICS_INDSTRY_SUBSCTR	NAICS INDUSTRY SUBSECTOR
DWR_NBR_AREA	NUMBER AREA
DWR_NBR_CNTRY	NUMBER COUNTRY
DWR_NEGOTIATED_SRVC_LVL_SPEC	NEGOTIATED SERVICE LEVEL SPEC
DWR_NP_MBL_MSISDN	NP MOBILE MSISDN
DWR_NTWK	NETWORK
DWR_NTWK_ADDR	NETWORK ADDRESS
DWR_NTWK_ADDR_INTRFC_BNDNG	NETWORK ADDRESS INTERFACE BINDING
DWR_NTWK_ASGN	NETWORK ASSIGNMENT
DWR_NTWK_ATMC	NETWORK ATOMIC
DWR_NTWK_CMPST	NETWORK COMPOSITE
DWR_NTWK_CPCTY	NETWORK CAPACITY
DWR_NTWK_DOMAIN	NETWORK DOMAIN
DWR_NTWK_DOMAIN_ASGN	NETWORK DOMAIN ASSIGNMENT
DWR_NTWK_ELMNT	NETWORK ELEMENT
DWR_NTWK_ELMNT_BSNS_INTRACN_RL	NETWORK ELEMENT BUSINESS INTERACTION ROLE
DWR_NTWK_ELMNT_PRTY ASSOCTN	NETWORK ELEMENT PARTY ASSOCIATION
DWR_NTWK_ELMNT_PRTY_MGMT	NETWORK ELEMENT PARTY MANAGEMENT
DWR_NTWK_ELMNT_RL	NETWORK ELEMENT ROLE
DWR_NTWK_ELMNT_RL_ASGN	NETWORK ELEMENT ROLE ASSIGNMENT
DWR_NTWK_ELMNT_RL_PRTY_ASGN	NETWORK ELEMENT ROLE PARTY ASSIGNMENT
DWR_NTWK_ELMNT_RL_SPEC	NETWORK ELEMENT ROLE SPEC
DWR_NTWK_ELMNT_RLTN	NETWORK ELEMENT RELATIONSHIP
DWR_NTWK_ELMNT_TYP	NETWORK ELEMENT TYPE
DWR_NTWK_ELMNT_TYP_VRSN	NETWORK ELEMENT TYPE VERSION
DWR_NTWK_ELMNT_TYP_VRSN_USG	NETWORK ELEMENT TYPE VERSION USAGE
DWR_NTWK_EVT_CHTRSTC	NETWORK EVENT CHARACTERISTIC
DWR_NTWK_EVT_CHTRSTC_ASGN	NETWORK EVENT CHARACTERISTIC ASSIGNMENT

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_NTWK_EVT_CHTRSTC_RLTN	NETWORK EVENT CHARACTERISTIC RELATIONSHIP
DWR_NTWK_EVT_CHTRSTC_VAL	NETWORK EVENT CHARACTERISTIC VALUE
DWR_NTWK_EVT_CHTRSTC_VAL_ASGN	NETWORK EVENT CHARACTERISTIC VALUE ASSIGNMENT
DWR_NTWK_EVT_CHTRSTC_VAL_RLTN	NETWORK EVENT CHARACTERISTIC VALUE RELATIONSHIP
DWR_NTWK_EVT_TYP_VRSN	NETWORK EVENT TYPE VERSION
DWR_NTWK_ROUTE	NETWORK ROUTE
DWR_NTWK_ROUTE_PNT	NETWORK ROUTE POINT
DWR_NTWK_ROUTE_PNT_ASGN	NETWORK ROUTE POINT ASSIGNMENT
DWR_NTWK_SITE	NETWORK SITE
DWR_NTWK_SRVC_COVRG_ASGN	NETWORK SERVICE COVERAGE ASSIGNMENT
DWR_NTWK_TCHPNT	NETWORK TOUCHPOINT
DWR_OPERTNG_SYS	OPERATING SYSTEM
DWR_ORACLE_GEOMETRY	ORACLE GEOMETRY
DWR_ORDR_LN_ITEM_STATE	ORDER LINE ITEM STATE
DWR_ORG_AREA	ORGANIZATION AREA
DWR_ORG_BNR	ORGANIZATION BANNER
DWR_ORG_BSNS_ENT	ORGANIZATION BUSINESS ENTITY
DWR_ORG_BSNS_UNIT	ORGANIZATION BUSINESS UNIT
DWR_ORG_CHAIN	ORGANIZATION CHAIN
DWR_ORG_CMPNY	ORGANIZATION COMPANY
DWR_ORG_CRPRT	ORGANIZATION CORPORATE
DWR_ORG_DIV	ORGANIZATION DIVISION
DWR_ORG_DSTRCT	ORGANIZATION DISTRICT
DWR_ORG_HRCHY	ORGANIZATION HIERARCHY
DWR_ORG_HRCHY_LVL	ORGANIZATION HIERARCHY LEVEL
DWR_ORG_HRCHY_LVL_ASGN	ORGANIZATION HIERARCHY LEVEL ASSIGNMENT
DWR_ORG_HRCHY_VRSN	ORGANIZATION HIERARCHY VERSION
DWR_ORG_ITEM_SLNG_PRICE	ORGANIZATION ITEM SELLING PRICE
DWR_ORG_LVL	ORGANIZATION LEVEL
DWR_ORG_LVL_ATRIB_VAL	ORGANIZATION LEVEL ATTRIBUTE VALUE
DWR_ORG_LVL_ATTR	ORGANIZATION LEVEL ATTRIBUTES
DWR_ORG_MKT_DATA	ORGANIZATION MARKET DATA
DWR_ORG_NAME	ORGANIZATION NAME
DWR_ORG_RGN	ORGANIZATION REGION
DWR_ORG_SRVC_WBSITE	ORGANIZATION SERVICE WEBSITE
DWR_ORG_WRHS	ORGANIZATION WAREHOUSE
DWR_ORGNTL_DEMOG_VAL	ORGANIZATIONAL DEMOGRAPHY VALUE

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_OS_LICNS_ASGN	OS LICENSE ASSIGNMENT
DWR_OTHR_INDVL	OTHER INDIVIDUAL
DWR_PASPRT	PASSPORT
DWR_PBLCTN	PUBLICATION
DWR_PE_LGICL_DVC_RL	PE LOGICAL DEVICE ROLE
DWR_PHONE_NBR	TELEPHONE NUMBER
DWR_PHONE_NBR_POOL	TELEPHONE NUMBER POOL
DWR_PHY_CMPNT	PHYSICAL COMPONENT
DWR_PHY_CNCTR	PHYSICAL CONNECTOR
DWR_PHY_CONTNR	PHYSICAL CONTAINER
DWR_PHY_CPCTY	PHYSICAL CAPACITY
DWR_PHY_CPCTY_DTL	PHYSICAL CAPACITY DETAIL
DWR_PHY_DVC	PHYSICAL DEVICE
DWR_PHY_DVC_ATMC	PHYSICAL DEVICE ATOMIC
DWR_PHY_DVC_CMPST	PHYSICAL DEVICE COMPOSITE
DWR_PHY_DVC_RL_SPEC	PHYSICAL DEVICE ROLE SPEC
DWR_PHY_DVC_RL_SPEC_DTL	PHYSICAL DEVICE ROLE SPEC DETAIL
DWR_PHY_DVC_SPEC	PHYSICAL DEVICE SPEC
DWR_PHY_ELMNT	PHYSICAL ELEMENT
DWR_PHY_ELMNT_CHTRSTC	PHYSICAL ELEMENT CHARACTERISTIC
DWR_PHY_ELMNT_RL	PHYSICAL ELEMENT ROLE
DWR_PHY_ELMNT_RL_ASGN	PHYSICAL ELEMENT ROLE ASSIGNMENT
DWR_PHY_ELMNT_RL_SPEC	PHYSICAL ELEMENT ROLE SPEC
DWR_PHY_EQPMNT	PHYSICAL EQUIPMENT
DWR_PHY_LNK	PHYSICAL LINK
DWR_PHY_PRT	PHYSICAL PORT
DWR_PHY_PRT_RESRE_PRT_ASGN	PHYSICAL PORT RESOURCE PORT ASSIGNMENT
DWR_PHY_RESRE_RL_SPEC_DTL	PHYSICAL RESOURCE ROLE SPEC DETAIL
DWR_PIPE	PIPE
DWR_PIT_CHTRSTC	PIT CHARACTERISTIC
DWR_PIT_CHTRSTC_VAL	PIT CHARACTERISTIC VALUE
DWR_PLCY	POLICY
DWR_PLCY_ACTN	POLICY ACTION
DWR_PLCY_ACTN_ASGN	POLICY ACTION ASSIGNMENT
DWR_PLCY_ACTN_ATMC	POLICY ACTION ATOMIC
DWR_PLCY_ACTN_CMPST	POLICY ACTION COMPOSITE
DWR_PLCY_ACTN_RULE_ASGN	POLICY ACTION RULE ASSIGNMENT

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_PLCY_ACTN_VNDR	POLICY ACTION VENDOR
DWR_PLCY_APPLN_ASGN	POLICY APPLICATION ASSIGNMENT
DWR_PLCY_CNDTN	POLICY CONDITION
DWR_PLCY_CNDTN_ASGN	POLICY CONDITION ASSIGNMENT
DWR_PLCY_CNDTN_ATMC	POLICY CONDITION ATOMIC
DWR_PLCY_CNDTN_CMPST	POLICY CONDITION COMPOSITE
DWR_PLCY_CNDTN_RULE_ASGN	POLICY CONDITION RULE ASSIGNMENT
DWR_PLCY_GRP	POLICY GROUP
DWR_PLCY_GRP_EXEC_DTL	POLICY GROUP EXECUTION DETAIL
DWR_PLCY_OPRTR	POLICY OPERATOR
DWR_PLCY_OPRTR_VARBLE_ASGN	POLICY OPERATOR VARIABLE ASSIGNMENT
DWR_PLCY_RL	POLICY ROLE
DWR_PLCY_RULE	POLICY RULE
DWR_PLCY_SET	POLICY SET
DWR_PLCY_SET_ASGN	POLICY SET ASSIGNMENT
DWR_PLCY_STMT	POLICY STATEMENT
DWR_PLCY_VAL	POLICY VALUE
DWR_PLCY_VARBLE	POLICY VARIABLE
DWR_PLCY_VARBLE_VAL_ASGN	POLICY VARIABLE VALUE ASSIGNMENT
DWR_PLNG_PRD	PLANNING PERIOD
DWR_PLNG_QTR	PLANNING QUARTER
DWR_PLNG_SEASON	PLANNING SEASON
DWR_PLNG_WK	PLANNING WEEK
DWR_PLNG_YR	PLANNING YEAR
DWR_PMP_AVLBLTY	PMP AVAILABILITY
DWR_PMP_LYLTY_PROG_AVLBLTY	PMP LOYALTY PROGRAM AVAILABILITY
DWR_PMP_MKT_SGMNT_AVLBLTY	PMP MARKET SEGMENT AVAILABILITY
DWR_PMP_ORG_AVLBLTY	PMP ORGANIZATION AVAILABILITY
DWR_PMP_PRICE_PLCY_ACTN	PMP PRICE POLICY ACTION
DWR_PMP_PRICE_PLCY_CNDTN	PMP PRICE POLICY CONDITION
DWR_PMP_PRICE_PLCY_VAL	PMP PRICE POLICY VALUE
DWR_PMP_PRICE_PLCY_VARBLE	PMP PRICE POLICY VARIABLE
DWR_PMP_PROD_INSTNC_ASGN	PMP PRODUCT INSTANCE ASSIGNMENT
DWR_PMP_RTNG_PLN	PMP RATING PLAN
DWR_PMP_RTNG_PLN_DTL	PMP RATING PLAN DETAIL
DWR_PNT_CD	POINT CODE
DWR_POSTCD	POSTCODE

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_PRICE_DRVTN_RULE	PRICE DERIVATION RULE
DWR_PRD_TODATE_TRANS	PERIOD TO DATE TRANSFORMATION
DWR_PRD_TRANS	PERIOD TRANSFORMATION
DWR_PRFMNC_APLBLETY	PERFORMANCE APPLICABILITY
DWR_PRFMNC_CAT_CHTRSTC_VAL	PERFORMANCE CAT CHARACTERISTIC VALUE
DWR_PRFMNC_CAT_SPECFTN	PERFORMANCE CAT SPECIFICATION
DWR_PRFMNC_CAT_SPEC_RLTN	PERFORMANCE CAT SPEC RELATIONSHIP
DWR_PRFMNC_CHTRSTC_VAL	PERFORMANCE CHARACTERISTIC VALUE
DWR_PRFMNC_CTGRY	PERFORMANCE CATEGORY
DWR_PRFMNC_CTGRY_RLTN	PERFORMANCE CATEGORY RELATIONSHIP
DWR_PRFMNC_IND_RLTN	PERFORMANCE INDICATOR RELATIONSHIP
DWR_PRFMNC_IND_SPECFTN	PERFORMANCE INDICATOR SPECIFICATION
DWR_PRFMNC_IND_SPEC_RLTN	PERFORMANCE INDICATOR SPEC RELATIONSHIP
DWR_PRFMNC_NTFCTN_SPECFTN	PERFORMANCE NOTIFICATION SPECIFICATION
DWR_PRFMNC_OBJCTV	PERFORMANCE OBJECTIVE
DWR_PRFMNC_OBJCTV_APLBLETY	PERFORMANCE OBJECTIVE APPLICABILITY
DWR_PRFMNC_OBJ_APLBLETY_CNSEQ	PERFORMANCE OBJECTIVE APPLICABILITY CONSEQUENCE
DWR_PRFMNC_SPECFTN	PERFORMANCE SPECIFICATION
DWR_PRFMNC_SPECFTN_INTRVL	PERFORMANCE SPECIFICATION INTERVAL
DWR_PRFMNC_SPEC_INTRVL_CNVRSN	PERFORMANCE SPEC INTERVAL CONVERSION
DWR_PRMTN	PROMOTION
DWR_PRMTN_MKT_PLN_ASGN	PROMOTION MARKET PLAN ASSIGNMENT
DWR_PRMTN_MSG_RNDRNG	PROMOTION MESSAGE RENDERING
DWR_PRMTN_PROD_ASGN	PROMOTION PRODUCT ASSIGNMENT
DWR_PRMTN_PROD_CTLG_ASGN	PROMOTION PRODUCT CATALOG ASSIGNMENT
DWR_PRMTN_RLTN	PROMOTION RELATIONSHIP
DWR_PRMTN_SL_CHNL_ASGN	PROMOTION SALES CHANNEL ASSIGNMENT
DWR_PROD	PRODUCT
DWR_PROD_ADTNL_TXT	PRODUCT ADDITIONAL TEXT
DWR_PROD_ASGN	PRODUCT ASSIGNMENT
DWR_PROD_CAPBLTY	PRODUCT CAPABILITY
DWR_PROD_CAPBLTY_VAL	PRODUCT CAPABILITY VALUE
DWR_PROD_CHRG_TYP_RLTN	PRODUCT CHARGE TYPE RELATIONSHIP
DWR_PROD_CHTRSTC	PRODUCT CHARACTERISTIC
DWR_PROD_CHTRSTC_ASGN	PRODUCT CHARACTERISTIC ASSIGNMENT
DWR_PROD_CHTRSTC_RLTN	PRODUCT CHARACTERISTIC RELATIONSHIP
DWR_PROD_CHTRSTC_VAL	PRODUCT CHARACTERISTIC VALUE

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_PROD_CHTRSTC_VAL_ASGN	PRODUCT CHARACTERISTIC VALUE ASSIGNMENT
DWR_PROD_CHTRSTC_VAL_RLTN	PRODUCT CHARACTERISTIC VALUE RELATIONSHIP
DWR_PROD_COVRG_AREA	PRODUCT COVERAGE AREA
DWR_PROD_COVRG_GEO_DTL	PRODUCT COVERAGE GEO DETAIL
DWR_PROD_CTLG	PRODUCT CATALOG
DWR_PROD_CTLG_CHTRSTC	PRODUCT CATALOG CHARACTERISTIC
DWR_PROD_CTLG_CHTRSTC_ASGN	PRODUCT CATALOG CHARACTERISTIC ASSIGNMENT
DWR_PROD_CTLG_CHTRSTC_RLTN	PRODUCT CATALOG CHARACTERISTIC RELATIONSHIP
DWR_PROD_CTLG_CHTRSTC_VAL	PRODUCT CATALOG CHARACTERISTIC VALUE
DWR_PROD_CTLG_CHTRSTC_VAL_ASGN	PRODUCT CATALOG CHARACTERISTIC VALUE ASSIGNMENT
DWR_PROD_CTLG_CHTRSTC_VAL_RLTN	PRODUCT CATALOG CHARACTERISTIC VALUE RELATIONSHIP
DWR_PROD_CTLG_GEO_ASGN	PRODUCT CATALOG GEOGRAPHY ASSIGNMENT
DWR_PROD_CTLG_MKT_PLN_ASGN	PRODUCT CATALOG MARKET PLAN ASSIGNMENT
DWR_PROD_CTLG_SL_CHNL_ASGN	PRODUCT CATALOG SALES CHANNEL ASSIGNMENT
DWR_PROD_FNCTNLTY_DPNDNTCY	PRODUCT FUNCTIONALITY DEPENDENCY
DWR_PROD_FTR	PRODUCT FEATURE
DWR_PROD_FTR_ASGN	PRODUCT FEATURE ASSIGNMENT
DWR_PROD_GEO_ASGN	PRODUCT GEOGRAPHY ASSIGNMENT
DWR_PROD_GRP_ASGN	PRODUCT GROUP ASSIGNMENT
DWR_PROD_INSTNC	PRODUCT INSTANCE
DWR_PROD_MKT_PLN	PRODUCT MARKET PLAN
DWR_PROD_MKT_PLN_ASGN	PRODUCT MARKET PLAN ASSIGNMENT
DWR_PROD_MKT_PLN_GEO_ASGN	PRODUCT MARKET PLAN GEOGRAPHY ASSIGNMENT
DWR_PROD_MKT_PLN_GRP	PRODUCT MARKET PLAN GROUP
DWR_PROD_MKT_PLN_GRP_ASGN	PRODUCT MARKET PLAN GROUP ASSIGNMENT
DWR_PROD_MKT_PLN_RLTN	PRODUCT MARKET PLAN RELATIONSHIP
DWR_PROD_NTWK_ASGN	PRODUCT NETWORK ASSIGNMENT
DWR_PROD_PKG	PRODUCT PACKAGE
DWR_PROD_PKG_ASGN	PRODUCT PACKAGE ASSIGNMENT
DWR_PROD_RTNG_PLN	PRODUCT RATING PLAN
DWR_PROD_RTNG_PLN_DTL	PRODUCT RATING PLAN DETAIL
DWR_PROD_USRNM	PRODUCT USERNAME
DWR_PROD_VRSN	PRODUCT VERSION
DWR_PROJ	PROJECT
DWR_PROJ_ELMNT	PROJECT ELEMENT
DWR_PROPOSAL	PROPOSAL
DWR_PROPOSAL_RLTN	PROPOSAL RELATIONSHIP



**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_PROTCL	PROTOCOL
DWR_PRPD_VCHR_BTCH	PREPAID VOUCHER BATCH
DWR_PRPD_VCHR_INSTNC	PREPAID VOUCHER INSTANCE
DWR_PRPD_VCHR_RCHRG_OPTN	PREPAID VOUCHER RECHARGE OPTION
DWR_PRPD_VCHR	PREPAID VOUCHER
DWR_PRPD_WRLS	PREPAID WIRELESS
DWR_PRPTY	PROPERTY
DWR_PRPTY_ADDR_LOC_ASGN	PROPERTY ADDRESS LOCATION ASSIGNMENT
DWR_PRSPCT	PROSPECT
DWR_PRSPCT_INDVL	PROSPECT INDIVIDUAL
DWR_PRSPCT_ORG	PROSPECT ORGANIZATION
DWR_PRSPCT_QLTY_SCR_VAL	PROSPECT QUALITY SCORE VALUE
DWR_PRTNR_PRMTN_PROG	PARTNER PROMOTION PROGRAM
DWR_PRTY	PARTY
DWR_PRTY_ACCT_ASGN	PARTY ACCOUNT ASSIGNMENT
DWR_PRTY_ADDR_LOC_ASGN	PARTY ADDRESS LOCATION ASSIGNMENT
DWR_PRTY_ASGN	PARTY ASSIGNMENT
DWR_PRTY_BSNS_INTRACN_RL	PARTY BUSINESS INTERACTION ROLE
DWR_PRTY_CNCT_INFO	PARTY CONTACT INFORMATION
DWR_PRTY_CNRT_ASGN	PARTY CONTRACT ASSIGNMENT
DWR_PRTY_DEMOG	PARTY DEMOGRAPHIC
DWR_PRTY_DEMOG_VAL	PARTY DEMOGRAPHY VALUE
DWR_PRTY_GEO_ENT_ASGN	PARTY GEOGRAPHY ENTITY ASSIGNMENT
DWR_PRTY_ID	PARTY IDENTIFICATION
DWR_PRTY_LANG_CAPBLTY	PARTY LANGUAGE CAPABILITY
DWR_PRTY_LYLTY_PROG_PRTCPTN	PARTY LOYALTY PROGRAM PARTICIPATION
DWR_PRTY_MKT_SGMNT_ASGN	PARTY MARKET SEGMENT ASSIGNMENT
DWR_PRTY_NAME	PARTY NAME
DWR_PRTY_PRFL_CHTRSTC	PARTY PROFILE CHARACTERISTIC
DWR_PRTY_PRFL_CHTRSTC_VAL	PARTY PROFILE CHARACTERISTIC VALUE
DWR_PRTY_RL_ASGN	PARTY ROLE ASSIGNMENT
DWR_PRTY_RL_OS_PRCS_ASGN	PARTY ROLE OS PROCESS ASSIGNMENT
DWR_PRTY_RL_STAT	PARTY ROLE STATUS
DWR_PRTY_SBRP_ASGN	PARTY SUBSCRIPTION ASSIGNMENT
DWR_PRTY_SIM_CARD_ASGN	PARTY SIM CARD ASSIGNMENT
DWR_PRTY_SKILL	PARTY SKILL
DWR_PRTY_SRVC_ASGN	PARTY SERVICE ASSIGNMENT

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_PSTPD_WRLS	POSTPAID WIRELESS
DWR_PVAR_BIT_STRING_VARBLE	PVAR BIT STRING VARIABLE
DWR_PVAR_STRING_VARBLE	PVAR STRING VARIABLE
DWR_PV_BIT_STRING_VAL	PV BIT STRING VALUE
DWR_PV_BOLEN_VAL	PV BOOLEAN VALUE
DWR_PV_INTEGER_VAL	PV INTEGER VALUE
DWR_PV_IP_ADDR_VAL	PV IP ADDRESS VALUE
DWR_PV_STRING_VAL	PV STRING VALUE
DWR_PYMT_CHNL	PAYMENT CHANNEL
DWR_PYTV_SRVC	PAY TV
DWR_P_LGICL_DVC_RL	P LOGICAL DEVICE ROLE
DWR_QOS_SRVC	QOS SERVICE
DWR_QTR_HR	QUARTER HOUR
DWR_QTR_TODATE_TRANS	QUARTER TO DATE TRANSFORMATION
DWR_QTR_TRANS	QUARTER TRANSFORMATION
DWR_RACK	RACK
DWR_RCRNG_PMP_RTNG_PLN_DTL	RECURRING PMP RATING PLAN DETAIL
DWR_RESRE_FCNG_SRVC	RESOURCE FACING SERVICE
DWR_RESRE_FCNG_SRVC_RL	RESOURCE FACING SERVICE ROLE
DWR_RESRE_FCNG_SRVC_SPEC_RL	RESOURCE FACING SERVICE SPECROLE
DWR_RESRE_FCNG_SRVC_SPEC_VRSN	RESOURCE FACING SERVICE SPEC VERSION
DWR_RESRE_PRFMNC_SPEC	RESOURCE PERFORMANCE SPEC
DWR_RESRE_PRT	RESOURCE PORT
DWR_RESRE_SPEC_PERF_RL	RESOURCE SPEC PERF ROLE
DWR_RFS_SPEC_VRSN_DTL	RFS SPEC VERSION DETAIL
DWR_RF_CARRIER	RF CARRIER
DWR_RLS_HRCHY	ROLES HIERARCHY
DWR_RL	ROLE
DWR_RNGTN	RINGTONE
DWR_ROOT_ENT	ROOT ENTITY
DWR_ROUTED_PROTCL	ROUTED PROTOCOL
DWR_ROUTER	ROUTER
DWR_RTL_STORE	RETAIL STORE
DWR_RUTNG_DVC	ROUTING DEVICE
DWR_RUTNG_PROTCL	ROUTING PROTOCOL
DWR_RUTNG_RL	ROUTING ROLE
DWR_SB_NTWK	SUB NETWORK

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_SBRP	SUBSCRIPTION
DWR_SBRP_ASGN	SUBSCRIPTION ASSIGNMENT
DWR_SBRP_CLASS_OF_SRVC	SUBSCRIPTION SERVICE CLASS ASSIGNMENT
DWR_SBRP_NTWK_ELMNT_RL_ASGN	SUBSCRIPTION NETWORK ELEMENT ROLE ASSIGNMENT
DWR_SBRP_PMP_ASGN	SUBSCRIPTION PMP ASSIGNMENT
DWR_SBRP_PRICE	SUBSCRIPTION PRICE
DWR_SBRP_PRICE_ALTRTN	SUBSCRIPTION PRICE ALTERATION
DWR_SBRP_PRICE_CHRG	SUBSCRIPTION PRICE CHARGE
DWR_SBRP_PRICE_PRTY_RL_ASGN	SUBSCRIPTION PRICE PARTY ROLE ASSIGNMENT
DWR_SBRP_SRVC_ASGN	SUBSCRIPTION SERVICE ASSIGNMENT
DWR_SBRP_SRVC_CLASS_ASGN	SUBSCRIPTION SERVICE CLASS ASSIGNMENT
DWR_SCND	SECOND
DWR_SCRIPT	SCRIPT
DWR_SCRIPT_QUES	SCRIPT QUESTION
DWR_SECURE_HLDR	SECURE HOLDER
DWR_SET_TOP_BOX	SET TOP BOX
DWR_SET_TOP_BOX_MDL	SET TOP BOX MODEL
DWR_SGMNT_CRTRA	SEGMENT CRITERIA
DWR_SGNLNG_PROTCL	SIGNALING PROTOCOL
DWR_SHELF	SHELF
DWR_SIC_ASGN	SIC ASSIGNMENT
DWR_SIC_DIV	SIC DIVISION
DWR_SIM_CARD	SIM CARD
DWR_SIM_CARD_ACCS_MTHD_ASGN	SIM CARD ACCESS METHOD ASSIGNMENT
DWR_SIM_CARD_HNDST_ASGN	SIM CARD HANDSET ASSIGNMENT
DWR_SIM_CARD_SBRP_ASGN	SIM CARD SUBSCRIPTION ASSIGNMENT
DWR_SITE	SITE
DWR_SITE_INTRFC_RL	SITE INTERFACE ROLE
DWR_SL_CHNL	SALES CHANNEL
DWR_SL_CHNL_RPRSTV	SALES CHANNEL REPRESENTATIVE
DWR_SL_CMISN_PLN	SALES COMMISSION PLAN
DWR_SL_CMISN_PLN_DTL	SALES COMMISSION PLAN DETAIL
DWR_SLNG_LOC	SELLING LOCATION
DWR_SLT	SLOT
DWR_SLT_RLTN	SLOT RELATIONSHIP
DWR_SMS_SRVC	SMS
DWR_SMS_RTNG_PLN	SMS RATING PLAN

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_SOC_JB	SOC JOB
DWR_SOC_JB_CTGRY	SOC JOB CATEGORY
DWR_SOC_JB_GRP	SOC JOB GROUP
DWR_SOC_JB_MJR_GRP	SOC JOB MAJOR GROUP
DWR_SOFTWARE	SOFTWARE
DWR_SOFTWARE_ATMC	SOFTWARE ATOMIC
DWR_SOFTWARE_CMND	SOFTWARE COMMAND
DWR_SOFTWARE_CMPST	SOFTWARE COMPOSITE
DWR_SOFTWARE_FTR_SETS	SOFTWARE FEATURE SETS
DWR_SOFTWARE_OS_RLTN	SOFTWARE OS RELATIONSHIP
DWR_SPECFTN	SPECIFICATION
DWR_SPECFTN_RL	SPECIFICATION ROLE
DWR_SPLMNTR_SRVC	SUPPLEMENTARY SERVICE
DWR_SPTRUM_COVRG_AREA	SPECTRUM COVERAGE AREA
DWR_SRC_SYS	SOURCE SYSTEM
DWR_SRC_SYS_KEY_MAPPING	SOURCE SYSTEM KEY MAPPING
DWR_SRVC	SERVICE
DWR_SRVC_BNDL	SERVICE BUNDLE
DWR_SRVC_BNDL_SPEC	SERVICE BUNDLE SPEC
DWR_SRVC_BNDL_SPEC_ATMC	SERVICE BUNDLE SPEC ATOMIC
DWR_SRVC_BNDL_SPEC_CMPST	SERVICE BUNDLE SPEC COMPOSITE
DWR_SRVC_CHTRSTC	SERVICE CHARACTERISTIC
DWR_SRVC_CHTRSTC_ASGN	SERVICE CHARACTERISTIC ASSIGNMENT
DWR_SRVC_CHTRSTC_RLTN	SERVICE CHARACTERISTIC RELATIONSHIP
DWR_SRVC_CHTRSTC_VAL	SERVICE CHARACTERISTIC VALUE
DWR_SRVC_CHTRSTC_VAL_ASGN	SERVICE CHARACTERISTIC VALUE ASSIGNMENT
DWR_SRVC_CHTRSTC_VAL_RLTN	SERVICE CHARACTERISTIC VALUE RELATIONSHIP
DWR_SRVC_COVRG_AREA	SERVICE COVERAGE AREA
DWR_SRVC_COVRG_GEO_DTL	SERVICE COVERAGE GEO DETAIL
DWR_SRVC_DPNDCY	SERVICE DEPENDENCY
DWR_SRVC_DVC_INTRFC_ASGN	SERVICE DEVICE INTERFACE ASSIGNMENT
DWR_SRVC_EQPMNT_ASGN	SERVICE EQUIPMENT ASSIGNMENT
DWR_SRVC_LR_DPNDCY	SERVICE LR DEPENDENCY
DWR_SRVC_LVL_AGRMNT	SERVICE LEVEL AGREEMENT
DWR_SRVC_LVL_AGRMNT_ITEM	SERVICE LEVEL AGREEMENT ITEM
DWR_SRVC_LVL_OBJCTV	SERVICE LEVEL OBJECTIVE
DWR_SRVC_LVL_SPECFTN	SERVICE LEVEL SPECIFICATION

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_SRVC_LVL_SPEC_APLBLETY	SERVICE LEVEL SPEC APPLICABILITY
DWR_SRVC_LVL_SPEC_CNSEQ	SERVICE LEVEL SPEC CONSEQUENCE
DWR_SRVC_LVL_SPEC_PRMTR	SERVICE LEVEL SPEC PARAMETER
DWR_SRVC_NTWK_ELMNT_ASGN	SERVICE NETWORK ELEMENT ASSIGNMENT
DWR_SRVC_PKG	SERVICE PACKAGE
DWR_SRVC_PKG_BNDL_DTL	SERVICE PACKAGE BUNDLE DETAIL
DWR_SRVC_PRFMNC_SPEC	SERVICE PERFORMANCE SPEC
DWR_SRVC_PR_DPNDCY	SERVICE PR DEPENDENCY
DWR_SRVC_RL	SERVICE ROLE
DWR_SRVC_SPEC	SERVICE SPEC
DWR_SRVC_SPEC_ATMC	SERVICE SPEC ATOMIC
DWR_SRVC_SPEC_CMPST	SERVICE SPEC COMPOSITE
DWR_SRVC_SPEC_PROD_RLTN	SERVICE SPEC PRODUCT RELATIONSHIP
DWR_SRVC_SPEC_VRSN	SERVICE SPEC VERSION
DWR_SRVC_SPECFTN_RL	SERVICE SPECIFICATION ROLE
DWR_STTSTCL_ENT	STATISTICAL ENTITY
DWR_SURVEY	SURVEY
DWR_SVCSPEC_NTWK_ELETYP_RLTN	SERVICE SPEC NETWORK ELEMENT TYPE RELATIONSHIP
DWR_SWITCH	SWITCH
DWR_SWITCH_CAPBLTY	SWITCH CAPABILITY
DWR_SWITCH_CMMND	SWITCH COMMAND
DWR_SWITCH_RUTNG_DVC_ASGN	SWITCH ROUTING DEVICE ASSIGNMENT
DWR_SWITCHNG_PROTCL	SWITCHING PROTOCOL
DWR_SWITCHNG_RL	SWITCHING ROLE
DWR_TASK	TASK
DWR_TAX_AUTH	TAX AUTHORITY
DWR_TEMPLATE_SRVC_LVL_SPEC	TEMPLATE SERVICE LEVEL SPEC
DWR_TIME_SLT	TIME SLOT
DWR_TIME_STNDRD_BY_DAY	TIME STANDARD BY DAY
DWR_TIME_STNDRD_BY_WK	TIME STANDARD BY WEEK
DWR_TMNT_PNT	TERMINATION POINT
DWR_TRAIL	TRAIL
DWR_TRAIL_TMNT_PNT	TRAIL TERMINATION POINT
DWR_TRGT_ACCS_MTHD	TARGET ACCESS METHOD
DWR_TRGT_ACCT	TARGET ACCOUNT
DWR_TRGT_CNRT	TARGET CONTRACT
DWR_TRGT_GEO_AREA	TARGET GEOGRAPHY AREA

**Table 4–2 (Cont.) Reference Tables**

<b>Table Name</b>	<b>More Information</b>
DWR_TRGT_MKT_SGMNT	TARGET MARKET SEGMENT
DWR_TV_CHNL	TV CHANNEL
DWR_URBN_PRPTY_ADDR	URBAN PROPERTY ADDRESS
DWR_USER	USER
DWR_VAL_ADD_SRVC	VALUE ADDED SERVICE
DWR_VAL_CSTM	VALUE CUSTOM
DWR_VAL_STNDRD	VALUE STANDARD
DWR_VARBLE_CSTM	VARIABLE CUSTOM
DWR_VARBLE_STNDRD	VARIABLE STANDARD
DWR_VAS_SBRP	VAS SUBSCRIPTION
DWR_VHCL	VEHICLE
DWR_VNDR	VENDOR
DWR_VNDR_CNRT	VENDOR CONTRACT
DWR_VNDR_FCTR_CMPNY_ASGN	VENDOR FACTOR COMPANY ASSIGNMENT
DWR_VNDR_RTNG	VENDOR RATING
DWR_VNDR_SITE	VENDOR SITE
DWR_VNDR_SITE_COURIER_ASGN	VENDOR SITE COURIER ASSIGNMENT
DWR_VOI_MSG_SRVC	VOICE MESSAGE SERVICE
DWR_VPN_LGICL_DVC_RL	VPN LOGICAL DEVICE ROLE
DWR_VPN_SRVC	VPN SERVICE
DWR_VRTL_TEAM	VIRTUAL TEAM
DWR_WAN_PROTCL	WAN PROTOCOL
DWR_WEATHR_CNDTN	WEATHER CONDITION
DWR_WEB_PG	WEB PAGE
DWR_WEB_PG_CNTNT	WEB PAGE CONTENT
DWR_WK_TODATE_TRANS	WEEK TODATE TRANSFORMATION
DWR_WK_TRANS	WEEK TRANSFORMATION
DWR_WKDAY	WEEKDAY
DWR_WRLS_NTWK_ELMNT	WIRELESS NETWORK ELEMENT
DWR_WRLS_RTNG_PLN	WIRELESS RATING PLAN
DWR_WRLS_SRVC	WIRELESS SERVICE
DWR_WRLS_SPTRUM	WIRELESS SPECTRUM
DWR_YR_TRANS	YEAR TRANSFORMATION

## Lookup Tables

Table 4–3 briefly describes the Lookup tables in Oracle Communications Data Model.

**Table 4–3** *Lookup Tables*

Table Name	More Information
DWL_ACCS_MTHD_ASGN_TYP	ACCESS METHOD ASSIGNMENT TYPE
DWL_ACCS_MTHD_ELMNT_TYP	ACCESS METHOD ELEMENT TYPE
DWL_ACCS_MTHD_PRTY_ASGN_TYP	ACCESS METHOD PARTY ASSIGNMENT TYPE
DWL_ACCS_MTHD_STAT_RSN	ACCESS METHOD STATUS REASON
DWL_ACCS_MTHD_STAT_TYP	ACCESS METHOD STATUS TYPE
DWL_ACCS_MTHD_TYP	ACCESS METHOD TYPE
DWL_ACCT_ADJ_RSN	ACCOUNT ADJUSTMENT REASON
DWL_ACCT_ASGN_RSN	ACCOUNT ASSIGNMENT REASON
DWL_ACCT_ASGN_TYP	ACCOUNT ASSIGNMENT TYPE
DWL_ACCT_BAL_ADJ_TYP	ACCOUNT BALANCE ADJUSTMENT TYPE
DWL_ACCT_BAL_TYP	ACCOUNT BALANCE TYPE
DWL_ACCT_CYCL	ACCOUNTING CYCLE
DWL_ACCT_EVT_TYP	ACCOUNT EVENT TYPE
DWL_ACCT_ITEM_CTGRY	ACCOUNTING ITEM CATEGORY
DWL_ACCT_PYMT_MTHD_STAT_RSN	ACCOUNT PAYMENT METHOD STATUS REASON
DWL_ACCT_PYMT_MTHD_STAT_TYP	ACCOUNT PAYMENT METHOD STATUS TYPE
DWL_ACCT_RFND_RSN	ACCOUNT REFUND REASON
DWL_ACCT_RL_TYP	ACCOUNT ROLE TYPE
DWL_ACCT_SBRP_ASGN_RSN	ACCOUNT SUBSCRIPTION ASSIGNMENT REASON
DWL_ACCT_STAT_RSN	ACCOUNT STATUS REASON
DWL_ACCT_STAT_TYP	ACCOUNT STATUS TYPE
DWL_ACCT_TYP	ACCOUNT TYPE
DWL_ADDR_RLTD_RSN	ADDRESS RELATED REASON
DWL_ADDR_RLTD_TYP	ADDRESS RELATED TYPE
DWL_ADDR_STAT_RSN	ADDRESS STATUS REASON
DWL_ADDR_TYP	ADDRESS TYPE
DWL_AGE_BND	AGE BAND
DWL_AGE_ON_NET_BND	AGE ON NET BAND
DWL_APNMNT_TYP	APPOINTMENT TYPE
DWL_ARPU_BND	ARPU BAND
DWL_ASSET_TYP	ASSET TYPE
DWL_AWRD_LVL	AWARD LEVEL
DWL_BARNG_RSN	BARING REASON
DWL_BER_FER_TYP	BER FER TYPE

**Table 4–3 (Cont.) Lookup Tables**

<b>Table Name</b>	<b>More Information</b>
DWL_BLLG_CYCL	BILLING CYCLE
DWL_BLLG_FRQNCY	BILLING FREQUENCY
DWL_BLLG_OCCRNCE_TYP	BILLING OCCURRENCE TYPE
DWL_BLLG_PRD	BILLING PERIOD
DWL_BLLG_STAT_CTGRY	BILLING STATUS CATEGORY
DWL_BLLG_STAT_RSN	BILLING STATUS REASON
DWL_BLLG_STAT_TYP	BILLING STATUS TYPE
DWL_BROWSER_TYP	BROWSER TYPE
DWL_BSNS_INTRACN_ASGN_TYP	BUSINESS INTERACTION ASSIGNMENT TYPE
DWL_BSNS_INTRACN_CHTRSTC_TYP	BUSINESS INTERACTION CHARACTERISTIC TYPE
DWL_BSNS_INTRACN_STAT_RSN	BUSINESS INTERACTION STATUS REASON
DWL_BSNS_INTRACN_STAT_TYP	BUSINESS INTERACTION STATUS TYPE
DWL_BSNS_INTRACN_TYP	BUSINESS INTERACTION TYPE
DWL_BSNS_LEGAL_STAT	BUSINESS LEGAL STATUS
DWL_CALL_CNTR_AGNT_TYP	CALL CENTER AGENT TYPE
DWL_CALL_CNTR_CASE_SUB_TYP	CALL CENTER CASE SUB TYPE
DWL_CALL_CNTR_CASE_TTL	CALL CENTER CASE TITLE
DWL_CALL_CNTR_CASE_TYP	CALL CENTER CASE TYPE
DWL_CALL_CTGRY	CALL CATEGORY
DWL_CALL_DRCTN	CALL DIRECTION
DWL_CALL_OTHR_TYP	CALL OTHER TYPE
DWL_CALL_RCYLD_RSN	CALL RECYCLED REASON
DWL_CALL_RUTNG_TYP	CALL ROUTING TYPE
DWL_CALL_SRCHRG	CALL SURCHARGE
DWL_CALL_SRVC_TYP	CALL SERVICE TYPE
DWL_CALL_SUCC_FAIL_TYP	CALL SUCCESS FAILURE TYPE
DWL_CALL_TMNT_RSN	CALL TERMINATION REASON
DWL_CALL_TYP	CALL TYPE
DWL_CELL_OUTAGE_RSN	CELL OUTAGE REASON
DWL_CELL_SITE_TYP	CELL SITE TYPE
DWL_CELL_TYP	CELL TYPE
DWL_CHNG_PPSD_BY_TYP	CHANGE PROPOSED BY TYPE
DWL_CHNL_TYP	CHANNEL TYPE
DWL_CHRN_RSN	CHURN REASON
DWL_CMISN_TYP	COMMISSION TYPE
DWL_CMPGN_CHNL_TYP	CAMPAIGN CHANNEL TYPE
DWL_CMPGN_PRPS_TYP	CAMPAIGN PURPOSE TYPE



Table 4-3 (Cont.) Lookup Tables

Table Name	More Information
DWL_CMPGN_STAT	CAMPAIGN STATUS
DWL_CMPGN_TYP	CAMPAIGN TYPE
DWL_CMPND_ELMNT_SPEC	COMPOUND ELEMENT SPEC
DWL_CMPND_ELMNT_SPEC_ATMC	COMPOUND ELEMENT SPEC ATOMIC
DWL_CMPND_ELMNT_SPEC_CMPST	COMPOUND ELEMENT SPEC COMPOSITE
DWL_CNCT_LST_CHNG_RSN	CONTACT LIST CHANGE REASON
DWL_CNCT_LST_RECRNC_TYP	CONTACT LIST RECURRENCE TYPE
DWL_CNCT_RLS	CONTACT ROLES
DWL_CNRT_ASGN_RSN	CONTRACT ASSIGNMENT REASON
DWL_CNRT_ASGN_TYP	CONTRACT ASSIGNMENT TYPE
DWL_CNRT_CHNG_INITTR_TYP	CONTRACT CHANGE INITIATOR TYPE
DWL_CNRT_CHNG_TYP	CONTRACT CHANGE TYPE
DWL_CNRT_STAT_RSN	CONTRACT STATUS REASON
DWL_CNRT_STAT_TYP	CONTRACT STATUS TYPE
DWL_CNRT_TERM_TYP	CONTRACT TERM TYPE
DWL_CNRT_TYP	CONTRACT TYPE
DWL_CNTNT_PRCNG_TYP	CONTENT PRICING TYPE
DWL_CNTNT_TYP	CONTENT TYPE
DWL_COST_RSN	COST REASON
DWL_COST_SUBTYP	COST SUBTYPE
DWL_COST_TYP	COST TYPE
DWL_CRCUT_CTGRY	CIRCUIT CATEGORY
DWL_CRCUT_RNTL_EVT_TYP	CIRCUIT RENTAL EVENT TYPE
DWL_CRCUT_TYP	CIRCUIT TYPE
DWL_CRNCY	CURRENCY
DWL_CUST_CLASS	CUSTOMER CLASS
DWL_CUST_FCNG_SRVC_SPEC	CUSTOMER FACING SERVICE SPEC
DWL_CUST_FCNG_SRVC_SPEC_ATMC	CUSTOMER FACING SERVICE SPEC ATOMIC
DWL_CUST_FCNG_SRVC_SPEC_CMPST	CUSTOMER FACING SERVICE SPEC COMPOSITE
DWL_CUST_GRP	CUSTOMER GROUP
DWL_CUST_OCCSN_TYP	CUSTOMER OCCASION TYPE
DWL_CUST_ORDR_PRIORITY_TYP	CUSTOMER ORDER PRIORITY TYPE
DWL_CUST_ORDR_STATE_CHNG_RSN	CUSTOMER ORDER STATE CHANGE REASON
DWL_CUST_RVN_BND	CUSTOMER REVENUE BAND
DWL_CUST_RVN_TYP	CUSTOMER REVENUE TYPE
DWL_CUST_TYP	CUSTOMER TYPE
DWL_DEBT_AGNG_BND	DEBT AGING BAND

**Table 4–3 (Cont.) Lookup Tables**

<b>Table Name</b>	<b>More Information</b>
DWL_DOC_CNDTN_TYP	DOCUMENT CONDITION TYPE
DWL_DOC_TYP	DOCUMENT TYPE
DWL_DOC_TYP_GRP	DOCUMENT TYPE GROUP
DWL_DRCT_DEBT_STAT_RSN	DIRECT DEBIT STATUS REASON
DWL_DSTN_TYP	DESTINATION TYPE
DWL_DSTNC_BND	DISTANCE BAND
DWL_DVRT_RTRV_RSN	DIVERT RETRIEVE REASON
DWL_DVRT_RTRV_TYP	DIVERT RETRIEVE TYPE
DWL_EDU	EDUCATION
DWL_EMP_DESIG	EMPLOYEE DESIGNATION
DWL_EMP_JB_RL_TYP	EMPLOYEE JOB ROLE TYPE
DWL_EMP_TYP	EMPLOYEE TYPE
DWL_EQPMNT_INSTNC_STAT_TYP	EQUIPMENT INSTANCE STATUS TYPE
DWL_EQPMNT_TYP	EQUIPMENT TYPE
DWL_EVT_ASGN_RSN	EVENT ASSIGNMENT REASON
DWL_EVT_ASGN_TYP	EVENT ASSIGNMENT TYPE
DWL_EVT_CLASS	EVENT CLASS
DWL_EVT_CTGRY	EVENT CATEGORY
DWL_EVT_RESPN_RSN	EVENT RESPONSE REASON
DWL_EVT_RSLT	EVENT RESULT
DWL_EVT_RSN	EVENT REASON
DWL_EVT_RSN_CTGRY	EVENT REASON CATEGORY
DWL_EVT_STAT_RSN	EVENT STATUS REASON
DWL_EVT_STAT_TYP	EVENT STATUS TYPE
DWL_EVT_TYP	EVENT TYPE
DWL_EXP_RPT_STATE_TYP	EXPENSE REPORT STATE TYPE
DWL_EXP_TYP	EXPENSE TYPE
DWL_EXTRNL_ORG_TYP	EXTERNAL ORGANIZATION TYPE
DWL_FLD_ACTVTY_RSLT_TYP	FIELD ACTIVITY RESULT TYPE
DWL_FLD_ACTVTY_TYP	FIELD ACTIVITY TYPE
DWL_FLT_RSLTN_TYP	FAULT RESOLUTION TYPE
DWL_FLT_TYP	FAULT TYPE
DWL_FRAUD_PRFL_CLASS	FRAUD PROFILE CLASS
DWL_GIVE_AWAY_TYP	GIVE AWAY TYPE
DWL_GL_ACCT_TYP	GL ACCOUNT TYPE
DWL_GL_JE_CTGRY	GL JOURNAL ENTRY CATEGORY
DWL_GL_SGMNT_TYP	GL SEGMENT TYPE

Table 4–3 (Cont.) Lookup Tables

Table Name	More Information
DWL_GNDR	GENDER
DWL_INTRACN_DRCTN	INTERACTION DIRECTION
DWL_INTRACN_NAVGTN_ITEM_TYP	INTERACTION NAVIGATION ITEM TYPE
DWL_INTRACN_NAVGTN_LVL	INTERACTION NAVIGATION LEVEL
DWL_INTRACN_NAVGTN_TYP	INTERACTION NAVIGATION TYPE
DWL_INTRACN_PRIORITY_TYP	INTERACTION PRIORITY TYPE
DWL_INTRACN_RSLT_TYP	INTERACTION RESULT TYPE
DWL_INTRACN_RSN	INTERACTION REASON
DWL_INTRACN_STAT	INTERACTION STATUS
DWL_INTRACN_TRNSFR_RSN	INTERACTION TRANSFER REASON
DWL_INTRACN_TYP	INTERACTION TYPE
DWL_INTTV_RSLT_TYP	INITIATIVE RESULT TYPE
DWL_INTTV_TYP	INITIATIVE TYPE
DWL_INVC_ADJ_RSN	INVOICE ADJUSTMENT REASON
DWL_INVC_ADJ_TYP	INVOICE ADJUSTMENT TYPE
DWL_INVC_DISC_RSN	INVOICE DISCOUNT REASON
DWL_INVC_DISC_TYP	INVOICE DISCOUNT TYPE
DWL_INVC_DLVRV_FRMT	INVOICE DELIVERY FORMAT
DWL_INVC_DLVRV_TYP	INVOICE DELIVERY TYPE
DWL_INVC_ITEM_DTL_TYP	INVOICE ITEM DETAIL TYPE
DWL_INVC_ITEM_TYP	INVOICE ITEM TYPE
DWL_INVC_PYMT_TERM_TYP	INVOICE PAYMENT TERM TYPE
DWL_INVC_STAT_TYP	INVOICE STATUS TYPE
DWL_INVC_TYP	INVOICE TYPE
DWL_ISP_BSNS_TYP	ISP BUSINESS TYPE
DWL_ISP_TYP	ISP TYPE
DWL_ITEM_TYP	ITEM TYPE
DWL_IVR_MENU_ITEM	IVR MENU ITEM
DWL_LANG	LANGUAGE
DWL_LEGAL_PRCS_STAT_TYP	LEGAL PROCESS STATUS TYPE
DWL_LGICL_ELMNT_SPEC	LOGICAL ELEMENT SPEC
DWL_LGICL_ELMNT_SPEC_ATMC	LOGICAL ELEMENT SPEC ATOMIC
DWL_LGICL_ELMNT_SPEC_CMPST	LOGICAL ELEMENT SPEC COMPOSITE
DWL_LOOKUP	LOOKUP
DWL_LTR_TYP	LETTER TYPE
DWL_LYLTYP_PROG_EVT_CTGRY	LOYALTY PROGRAM EVENT CATEGORY
DWL_LYLTYP_PROG_EVT_TYP	LOYALTY PROGRAM EVENT TYPE

**Table 4–3 (Cont.) Lookup Tables**

<b>Table Name</b>	<b>More Information</b>
DWL_LYLTYPROGPTYRL	LOYALTY PROGRAM PARTY ROLE
DWL_LYLTYPROGTMNTRSN	LOYALTY PROGRAM TERMINATION REASON
DWL_MDL_TYP	MODEL TYPE
DWL_MDTN_STAT_CTGRY	MEDIATION STATUS CATEGORY
DWL_MDTN_STAT_RSN	MEDIATION STATUS REASON
DWL_MDTN_STAT_TYP	MEDIATION STATUS TYPE
DWL_MEDIA_OBJ_TYP	MEDIA OBJECT TYPE
DWL_MNNG_LTV_BAND	CUSTOMER LTV BAND
DWL_MNG_ACTN_TYP	MANAGE ACTION TYPE
DWL_MRTL_STAT	MARITAL STATUS
DWL_NBR_NTWK_TYP	NUMBER NETWORK TYPE
DWL_NP_RQST_LN_ITEM_STATE_TYP	NP REQUEST LINE ITEM STATE TYPE
DWL_NP_RQST_STATE_TYP	NP REQUEST STATE TYPE
DWL_NP_RQST_TYP	NP REQUEST TYPE
DWL_NP_STEP	NP STEP
DWL_NTFCTN_TYP	NOTIFICATION TYPE
DWL_NTNLTY	NATIONALITY
DWL_NTWK_ADDR_TYP	NETWORK ADDRESS TYPE
DWL_NTWK_ASGN_TYP	NETWORK ASSIGNMENT TYPE
DWL_NTWK_ELMNT_CTGRY	NETWORK ELEMENT CATEGORY
DWL_NTWK_ELMNT_RLTN_TYP	NETWORK ELEMENT RELATIONSHIP TYPE
DWL_NTWK_ELMNT_STATE_RSN	NETWORK ELEMENT STATE REASON
DWL_NTWK_ELMNT_STATE_TYP	NETWORK ELEMENT STATE TYPE
DWL_NTWK_ELMNT_USG_EVT_TYP	NETWORK ELEMENT USAGE EVENT TYPE
DWL_NTWK_EVT_CHTRSTC_TYP	NETWORK EVENT CHARACTERISTIC TYPE
DWL_NTWK_EVT_STAT	NETWORK EVENT STATUS
DWL_NTWK_EVT_TYP	NETWORK EVENT TYPE
DWL_NTWK_FLT_PRIORITY_TYP	NETWORK FAULT PRIORITY TYPE
DWL_NTWK_TCHPNT_CLASS	NETWORK TOUCHPOINT CLASS
DWL_NTWK_TCHPNT_STAT	NETWORK TOUCHPOINT STATUS
DWL_NTWK_TCHPNT_TYP	NETWORK TOUCHPOINT TYPE
DWL_NTWK_TYP	NETWORK TYPE
DWL_ONOFF_NET	ON OFF NET TYPE
DWL_OPRTR_GRP	OPERATOR GROUP
DWL_OPRTR_TYP	OPERATOR TYPE
DWL_ORDR_STATE	ORDER STATE
DWL_ORDR_STAT	ORDER STATUS

**Table 4–3 (Cont.) Lookup Tables**

<b>Table Name</b>	<b>More Information</b>
DWL_ORDR_TYP	ORDER TYPE
DWL_ORG_BSNS_UNIT_TYP	ORGANIZATION BUSINESS UNIT TYPE
DWL_PAY_CTGRY	PAY CATEGORY
DWL_PAY_TYP	PAY TYPE
DWL_PBLCTN_TYP	PUBLICATION TYPE
DWL_PCHSE_ORDR_STATE_TYP	PURCHASE ORDER STATE TYPE
DWL_PCU_OUTAGE_RSN	PCU OUTAGE REASON
DWL_PHY_ELMNT_SPEC	PHYSICAL ELEMENT SPEC
DWL_PHY_ELMNT_SPEC_ATMC	PHYSICAL ELEMENT SPEC ATOMIC
DWL_PHY_ELMNT_SPEC_CMPST	PHYSICAL ELEMENT SPEC COMPOSITE
DWL_PIT_CHTRSTC_TYP	PIT CHARACTERISTIC TYPE
DWL_PK_OFFPK_TIME	PEAK OFFPEAK TIME
DWL_POSTL_SRVC_TYP	POSTAL SERVICE TYPE
DWL_PPA_CTGRY	PPA CATEGORY
DWL_PPA_DEDUCTN_TYP	PPA DEDUCTION TYPE
DWL_PRMTN_RSLT_TYP	PROMOTION RESULT TYPE
DWL_PRMTN_TERM_TYP	PROMOTION TERM TYPE
DWL_PRMTN_TYP	PROMOTION TYPE
DWL_PROD_ASGN_RSN	PRODUCT ASSIGNMENT REASON
DWL_PROD_BRND	PRODUCT BRAND
DWL_PROD_CAPBLTY_TYP	PRODUCT CAPABILITY TYPE
DWL_PROD_CHRG_TYP	PRODUCT CHARGE TYPE
DWL_PROD_CHRG_TYP_RLTN_RSN	PRODUCT CHARGE TYPE RLTN REASON
DWL_PROD_CHRGNG_RSN	PRODUCT CHARGING REASON
DWL_PROD_CHTRSTC_TYP	PRODUCT CHARACTERISTIC TYPE
DWL_PROD_COVRG_AREA_TYP	PRODUCT COVERAGE AREA TYPE
DWL_PROD_CTGRY	PRODUCT CATEGORY
DWL_PROD_CTLG_PRSNT_TYP	PRODUCT CATALOG PRESENTATION TYPE
DWL_PROD_CTLG_TYP	PRODUCT CATALOG TYPE
DWL_PROD_GRP	PRODUCT GROUP
DWL_PROD_GRP_TYP	PRODUCT GROUP TYPE
DWL_PROD_INSTNC_STAT_TYP	PRODUCT INSTANCE STATUS TYPE
DWL_PROD_LN	PRODUCT LINE
DWL_PROD_MGMT_RL	PRODUCT MANAGEMENT ROLE
DWL_PROD_MGMT_RSN	PRODUCT MANAGEMENT REASON
DWL_PROD_MKT_PLN_ASGN_TYP	PRODUCT MARKET PLAN ASSIGNMENT TYPE
DWL_PROD_MKT_PLN_GRP_TYP	PRODUCT MARKET PLAN GROUP TYPE

**Table 4–3 (Cont.) Lookup Tables**

<b>Table Name</b>	<b>More Information</b>
DWL_PROD_MKT_PLN_RLTN_TYP	PRODUCT MARKET PLAN RELATIONSHIP TYPE
DWL_PROD_MKT_PLN_TYP	PRODUCT MARKET PLAN TYPE
DWL_PROD_PKG_CHRG_TYP	PRODUCT PACKAGE CHARGE TYPE
DWL_PROD_RTNG_PLN_TYP	PRODUCT RATING PLAN TYPE
DWL_PROD_STAT_TYP	PRODUCT STATUS TYPE
DWL_PROD_TYP	PRODUCT TYPE
DWL_PRPD_MBL_EVT_TYP	PREPAID MOBILE EVENT TYPE
DWL_PRSPECT_PRIORITY_TYP	PROSPECT PRIORITY TYPE
DWL_PRSPECT_QLTY_SCR_TYP	PROSPECT QUALITY SCORE TYPE
DWL_PRSPECT_REJECT_RSN	PROSPECT REJECT REASON
DWL_PRTNR_PYMT_TYP	PARTNER PAYMENT TYPE
DWL_PRTNR_STLMNT_RSN	PARTNER SETTLEMENT REASON
DWL_PRTY_ACCT_ASGN_TYP	PARTY ACCOUNT ASSIGNMENT TYPE
DWL_PRTY_ASGN_RSN	PARTY ASSIGNMENT REASON
DWL_PRTY_ASGN_TYP	PARTY ASSIGNMENT TYPE
DWL_PRTY_CNCT_INFO_TYP	PARTY CONTACT INFORMATION TYPE
DWL_PRTY_CNCT_LST_PRTCPN	PARTY CONTACT LIST PARTICIPATION
DWL_PRTY_CNCT_LST_RL	PARTY CONTACT LIST ROLE
DWL_PRTY_CNRT_ASGN_RL	PARTY CONTRACT ASSIGNMENT ROLE
DWL_PRTY_CNRT_ASGN_TYP	PARTY CONTRACT ASSIGNMENT TYPE
DWL_PRTY_EVT_TYP	PARTY EVENT TYPE
DWL_PRTY_IDNT_TYP	PARTY IDENTIFICATION TYPE
DWL_PRTY_INTRACN_THRD_TYP	PARTY INTERACTION THREAD TYPE
DWL_PRTY_LOC_RSN	PARTY LOCATION REASON
DWL_PRTY_LOC_TYP	PARTY LOCATION TYPE
DWL_PRTY_MGMT_RL	PARTY MANAGEMENT ROLE
DWL_PRTY_ORDR_ASGN_TYP	PARTY ORDER ASSIGNMENT TYPE
DWL_PRTY_RL	PARTY ROLE
DWL_PRTY_SBRP_RL	PARTY SUBSCRIPTION ROLE
DWL_PRTY_SGMNT_MTHD	PARTY SEGMENTATION METHOD
DWL_PRTY_SIM_CARD_RL	PARTY SIM CARD ROLE
DWL_PRTY_SRVC_ASGN_RL	PARTY SERVICE ASSIGNMENT ROLE
DWL_PRTY_SRVC_ASGN_RSN	PARTY SERVICE ASSIGNMENT REASON
DWL_PRTY_STAT_CHNG_RSN	PARTY STATUS CHANGE REASON
DWL_PRTY_STAT_CTGRY	PARTY STATUS CATEGORY
DWL_PRTY_STAT_TYP	PARTY STATUS TYPE
DWL_PRTY_TYP	PARTY TYPE

**Table 4–3 (Cont.) Lookup Tables**

<b>Table Name</b>	<b>More Information</b>
DWL_PYMT_AGNG_CLASS	PAYMENT AGING CLASS
DWL_PYMT_MTHD_TYP	PAYMENT METHOD TYPE
DWL_PYMT_TRX_TYP	PAYMENT TRANSACTION TYPE
DWL_RATABLE_UNIT_MEASUREMENT	RATABLE UNIT MEASUREMENT
DWL_RDMPNTN_TYP	REDEMPTION TYPE
DWL_RECHRG_RVN_SLB	RECHARGE REVENUE SLAB
DWL_RELGN	RELIGION
DWL_RESRE_FCNG_SRVC_SPEC	RESOURCE FACING SERVICE SPEC
DWL_RESRE_FCNG_SRVC_SPEC_ATMC	RESOURCE FACING SERVICE SPEC ATOMIC
DWL_RESRE_FCNG_SRVC_SPEC_CMPST	RESOURCE FACING SERVICE SPEC COMPOSITE
DWL_RMNG_TYP	ROAMING TYPE
DWL_RTNG_MTHD_TYP	RATING METHOD TYPE
DWL_SBRP_ASGN_TYP	SUBSCRIPTION ASSIGNMENT TYPE
DWL_SBRP_EVT_TYP	SUBSCRIPTION EVENT TYPE
DWL_SBRP_STAT	SUBSCRIPTION STATUS
DWL_SBRP_STAT_CTGRY	SUBSCRIPTION STATUS CATEGORY
DWL_SBRP_STAT_RSN	SUBSCRIPTION STATUS REASON
DWL_SBRP_STAT_TYP	SUBSCRIPTION STATUS TYPE
DWL_SBRP_TERM_TYP	SUBSCRIPTION TERM TYPE
DWL_SBRP_TYP	SUBSCRIPTION TYPE
DWL_SBSCRPT_ACTVTN_RSN	SUBSCRIBER ACTIVATION REASON
DWL_SCRPT_QUES_TYP	SCRIPT QUESTION TYPE
DWL_SCRTY_REQD_TYP	SECURITY REQUIRED TYPE
DWL_SEASON	SEASON
DWL_SGMNT_TYP	SEGMENT TYPE
DWL_SIC_ASGN_RSN	SIC ASSIGNMENT REASON
DWL_SIC_CLSFCTN	SIC CLASSIFICATION
DWL_SIC_INDSTRY_GRP	SIC INDUSTRY GROUP
DWL_SIM_CARD_ACCS_MTHD_RSN	SIM CARD ACCESS METHOD REASON
DWL_SIM_CARD_ACTVTN_RSN	SIM CARD ACTIVATION REASON
DWL_SIM_CARD_ACTVTN_TYP	SIM CARD ACTIVATION TYPE
DWL_SIM_CARD_SBRP_RSN	SIM CARD SUBSCRIPTION REASON
DWL_SIM_CARD_TYP	SIM CARD TYPE
DWL_SITE_TYP	SITE TYPE
DWL_SKILL_TYP	SKILL TYPE
DWL_SLNG_LOC_TYP	SELLING LOCATION TYPE
DWL_SRC_SYS_TYP	SOURCE SYSTEM TYPE

**Table 4–3 (Cont.) Lookup Tables**

<b>Table Name</b>	<b>More Information</b>
DWL_SRVC_CLASS	SERVICE CLASS
DWL_SRVC_CLASS_TYP	SERVICE CLASS TYPE
DWL_SRVC_COVRG_AREA_TYP	SERVICE COVERAGE AREA TYPE
DWL_SRVC_CTGRY	SERVICE CATEGORY
DWL_SRVC_LVL_AGRMNT_TYP	SERVICE LEVEL AGREEMENT TYPE
DWL_SRVC_LVL_UNMET_CNSEQ_TYP	SERVICE LEVEL UNMET CONSEQUENCE TYPE
DWL_SRVC_PKG_SPEC	SERVICE PACKAGE SPEC
DWL_SRVC_PKG_SPEC_ATMC	SERVICE PACKAGE SPEC ATOMIC
DWL_SRVC_PKG_SPEC_CMPST	SERVICE PACKAGE SPEC COMPOSITE
DWL_SRVC_STAT	SERVICE STATUS
DWL_SRVC_STAT_CTGRY	SERVICE STATUS CATEGORY
DWL_SRVC_STAT_RSN	SERVICE STATUS REASON
DWL_SRVC_TYP	SERVICE TYPE
DWL_SRVC_USG_TYP	SERVICE USAGE TYPE
DWL_SUBSDY_TYP	SUBSIDY TYPE
DWL_SWOT_TYP	SWOT TYPE
DWL_SWITCH_CAPBLTY_TYP	SWITCH CAPABILITY TYPE
DWL_SWITCH_TYP	SWITCH TYPE
DWL_TAX_CTGRY	TAX CATEGORY
DWL_TAX_EXMPT	TAX EXEMPT
DWL_TCH_TYP	TCH TYPE
DWL_TECH	TECHNOLOGY
DWL_TECH_TYP	TECHNOLOGY TYPE
DWL_TIME_BND	TIME BAND
DWL_TIME_ZN	TIME ZONE
DWL_TRGT_TYP	TARGET TYPE
DWL_UMS_ACCS_TYP	UMS ACCESS TYPE
DWL_UMS_EVT_TYP	UMS EVENT TYPE
DWL_UOM	UNIT OF MEASURE
DWL_VAL_TYP	VALUE TYPE
DWL_VNDR_CLASS	VENDOR CLASS
DWL_VNDR_RTNG_TYP	VENDOR RATING TYPE
DWL_VNDR_SITE_TYP	VENDOR SITE TYPE
DWL_VOL_BND	VOLUME BAND
DWL_WEB_PG_RNDRNG_TYP	WEB PAGE RENDERING TYPE
DWL_WEB_PG_TYP	WEB PAGE TYPE



## Base Tables

Table 4–4 briefly describes the Base tables in Oracle Communications Data Model.

**Table 4–4 Base Tables**

Table Name	More Information
DWB_ACCS_MTHD_PORT_HIST	ACCESS METHOD PORTING HISTORY
DWB_ACCS_MTHD_STAT_HIST	ACCESS METHOD STATUS HISTORY
DWB_ACCT_ACCTNG_CYCL_HIST	ACCOUNT ACCOUNTING CYCLE HISTORY
DWB_ACCT_BAL_ADJ	ACCOUNT BALANCE ADJUSTMENT
DWB_ACCT_BAL_BUCKET	ACCOUNT BALANCE BUCKET
DWB_ACCT_BAL_HIST	ACCOUNT BALANCE HISTORY
DWB_ACCT_BAL_IMPC	ACCOUNT BALANCE IMPACT
DWB_ACCT_BAL_TRNSFR	ACCOUNT BALANCE TRANSFER
DWB_ACCT_BLLG_OCCRNCE	ACCOUNT BILLING OCCURRENCE
DWB_ACCT_COST	ACCOUNT COST
DWB_ACCT_CRDT_LMT	ACCOUNT CREDIT LIMIT
DWB_ACCT_DEBT_WRT_OFF	ACCOUNT DEBT WRITE OFF
DWB_ACCT_MNGMNT_HIST	ACCOUNT MANAGEMENT HISTORY
DWB_ACCT_PMP_PRTCPTN_HIST	ACCOUNT PMP PARTICIPATION HISTORY
DWB_ACCT_PYMT	ACCOUNT PAYMENT
DWB_ACCT_PYMT_BAL_IMPC	ACCOUNT PAYMENT BALANCE IMPACT
DWB_ACCT_PYMT_MTHD_STAT	ACCOUNT PAYMENT METHOD STATUS
DWB_ACCT_RCHRQ	ACCOUNT RECHARGE
DWB_ACCT_RFND	ACCOUNT REFUND
DWB_ACCT_STAT_HIST	ACCOUNT STATUS HISTORY
DWB_ADDR_STAT	ADDRESS STATUS
DWB_APNMNT	APPOINTMENT
DWB_APNMNT_CLNDR	APPOINTMENT CALENDAR
DWB_ASSET_APPRSL_HIST	ASSET APPRAISAL HISTORY
DWB_ASSET_CNDTN_HIST	ASSET CONDITION HISTORY
DWB_ASSET_DEPRCN_HIST	ASSET DEPRECIATION HISTORY
DWB_BLK_LST_HIST	BLACK LIST HISTORY
DWB_BNDLD_NTWK_EVT	BUNDLED NETWORK EVENT
DWB_BRDBND_USG_EVT	BROADBAND USAGE EVENT
DWB_BSNS_INTRACN	BUSINESS INTERACTION
DWB_BSNS_INTRACN_ITEM	BUSINESS INTERACTION ITEM
DWB_BSNS_INTRACN_ITEM_PRICE	BUSINESS INTERACTION ITEM PRICE
DWB_BSNS_INTRACN_PYMT_ASGN	BUSINESS INTERACTION PAYMENT ASSIGNMENT
DWB_BSNS_INTRACN_RL	BUSINESS INTERACTION ROLE

**Table 4–4 (Cont.) Base Tables**

<b>Table Name</b>	<b>More Information</b>
DWB_BSNS_INTRACN_STAT_HIST	BUSINESS INTERACTION STATUS HISTORY
DWB_BSNS_UNIT_COST	ORGANIZATION BUSINESS UNIT COST
DWB_CELL_SITE_COST	CELL SITE COST
DWB_CHNL_COST	CHANNEL COST
DWB_CMPGN_COST	CAMPAIGN COST
DWB_CMPGN_MSG_CRTVE	CAMPAIGN MESSAGE CREATIVE
DWB_CNCT_LST_COST	CONTACT LIST COST
DWB_CNRT_APRVL	CONTRACT APPROVAL
DWB_CNRT_STAT	CONTRACT STATUS
DWB_CNRT_TERM_VAL	CONTRACT TERM VALUE
DWB_CNTNT_DLVRV_EVT	CONTENT DELIVERY EVENT
DWB_COST	COST
DWB_COST_CNTR_BDGT	COST CENTER BUDGET
DWB_COURIER_COST	COURIER COST
DWB_CRCUT_RNTL	CIRCUIT RENTAL
DWB_CRCUT_TRFC	CIRCUIT TRAFFIC
DWB_CRNCY_EXCHNG_RATE	CURRENCY EXCHANGE RATE
DWB_CUST_COST	CUSTOMER COST
DWB_CUST_FLD_INSLTN	CUSTOMER FIELD INSTALLATION
DWB_CUST_FLD_SPPRT	CUSTOMER FIELD SUPPORT
DWB_CUST_FLD_SRVC_ACTVTY	CUSTOMER FIELD SERVICE ACTIVITY
DWB_CUST_FLD_SRVC_DTL	CUSTOMER FIELD SERVICE DETAIL
DWB_CUST_ORDR	CUSTOMER ORDER
DWB_CUST_ORDR_LN_ITEM	CUSTOMER ORDER LINE ITEM
DWB_CUST_ORDR_LN_ITEM_ST_ASGN	CUSTOMER ORDER LINE ITEM STATE ASSIGN
DWB_CUST_ORDR_PYMT	CUSTOMER ORDER PAYMENT
DWB_CUST_ORDR_STATE_ASGN	CUSTOMER ORDER STATE ASSIGNMENT
DWB_DATA_SRVC_EVT	DATA SERVICE EVENT
DWB_DEBT_COLLCTN	DEBT COLLECTION
DWB_DEBT_COLLCTN_ASGN	DEBT COLLECTION ASSIGNMENT
DWB_DEBT_COLLCTN_ASGN_BTCH	DEBT COLLECTION ASSIGNMENT BATCH
DWB_EMP_ACT_LBR_HRLY	EMPLOYEE ACTUAL LABOR HOURLY
DWB_EMP_ACT_LBR_SALARIED	EMPLOYEE ACTUAL LABOR SALARIED
DWB_EMP_COST	EMPLOYEE COST
DWB_EMP_EXP_RPT	EMPLOYEE EXPENSE REPORT
DWB_EMP_EXP_RPT_ITEM	EMPLOYEE EXPENSE REPORT ITEM
DWB_EMP_EXP_RPT_STATE	EMPLOYEE EXPENSE REPORT STATE

**Table 4–4 (Cont.) Base Tables**

<b>Table Name</b>	<b>More Information</b>
DWB_EMP_TRNG_REC	EMPLOYEE TRAINING RECORD
DWB_EQPMNT_CNTR_COST	EQUIPMENT CENTER COST
DWB_EQPMNT_INSTNC_STAT_HIST	EQUIPMENT INSTANCE STATUS HISTORY
DWB_ERRD_MDTD_CALL_EVT	ERRORED MEDIATED CALL EVENT
DWB_ERRD_RAW_WRLS_CALL_EVT	ERRORED RATED WIRELESS CALL EVENT
DWB_ERRD_RTD_WRLS_CALL_EVT	ERRORED RAW WIRELESS CALL EVENT
DWB_EVT	EVENT
DWB_EVT_ACCS_MTHD_ACTVTY	EVENT ACCESS METHOD ACTIVITY
DWB_EVT_ACCT	EVENT ACCOUNT
DWB_EVT_ASGN	EVENT ASSIGNMENT
DWB_EVT_CHAT	EVENT CHAT
DWB_EVT_CHAT_DTL	EVENT CHAT DETAIL
DWB_EVT_CNRT	EVENT CONTRACT
DWB_EVT_COST	EVENT COST
DWB_EVT_CRCUT_RNTL	EVENT CIRCUIT RENTAL
DWB_EVT_EMIT_DTL	EVENT EMIT DETAIL
DWB_EVT_EMP_PYRL	EVENT EMPLOYEE PAYROLL
DWB_EVT_EQPMNT_INSTNC	EVENT EQUIPMENT INSTANCE
DWB_EVT_FINCL	EVENT FINANCIAL
DWB_EVT_GEO	EVENT GEOGRAPHY
DWB_EVT_GFT_RDMPTN	EVENT GIFT REDEMPTION
DWB_EVT_INVC_DLVR	EVENT INVOICE DELIVERY
DWB_EVT_LYLTY_PROG	EVENT LOYALTY PROGRAM
DWB_EVT_LYLTY_PROG_ACMLTN	EVENT LOYALTY PROGRAM ACCUMULATION
DWB_EVT_LYLTY_PROG_RDMPTN	EVENT LOYALTY PROGRAM REDEMPTION
DWB_EVT_PROD_PKG	EVENT PRODUCT PACKAGE
DWB_EVT_PRPD_MBL	EVENT PREPAID MOBILE
DWB_EVT_PRTY_ASGN	EVENT PARTY ASSIGNMENT
DWB_EVT_PRTY_INTRACN	EVENT PARTY INTERACTION
DWB_EVT_PRTY_INTRACN_CALL	EVENT PARTY INTERACTION CALL
DWB_EVT_PRTY_INTRACN_EML	EVENT PARTY INTERACTION EMAIL
DWB_EVT_PRTY_INTRACN_ITEM	EVENT PARTY INTERACTION ITEM
DWB_EVT_PRTY_INTRACN_LTR	EVENT PARTY INTERACTION LETTER
DWB_EVT_PRTY_INTRACN_PRTCPN	EVENT PARTY INTERACTION PARTICIPATION
DWB_EVT_PRTY_INTRACN_VST	EVENT PARTY INTERACTION VISIT
DWB_EVT_PRTY_PRFL	EVENT PARTY PROFILE
DWB_EVT_SBRP	EVENT SUBSCRIPTION

**Table 4–4 (Cont.) Base Tables**

<b>Table Name</b>	<b>More Information</b>
DWB_EVT_SBRP_CHNG	EVENT SUBSCRIPTION CHANGE
DWB_EVT_SIM_CARD	EVENT SIM CARD
DWB_EVT_STAT	EVENT STATUS
DWB_EVT_TRGR_DTL	EVENT TRIGGER DETAIL
DWB_EVT_WEB_RGSTRN	EVENT WEB REGISTRATION
DWB_EVT_WEB_VST	EVENT WEB VISIT
DWB_EXP_RPT_PRTY_ASGN	EXPENSE REPORT PARTY ASSIGNMENT
DWB_FIXED_LN_CALL_EVT	FIXED LINE CALL EVENT
DWB_GL_BAL	GL BALANCE
DWB_GL_JE	GL JOURNAL ENTRY
DWB_GL_JE_BTCH	GL JOURNAL ENTRY BATCH
DWB_GL_JE_LN	GL JOURNAL ENTRY LINE
DWB_GL_JE_LN_SBLDGR_ASGN	GL JE LINE SUBLEDGER ASSIGNMENT
DWB_GL_SBLDGR_JE	GL SUBLEDGER JOURNAL ENTRY
DWB_GL_SBLDGR_JE_LN	GL SUBLEDGER JOURNAL ENTRY LINE
DWB_GPRS_USG_EVT	GPRS USAGE EVENT
DWB_IDD_CALL_EVT	IDD CALL EVENT
DWB_INSTMNT_CNRT	INSTALLMENT CONTRACT
DWB_INTRACN_ANSWR_CHOICE	INTERACTION ANSWER CHOICE
DWB_INTRACN_NAVGTN_HIST	INTERACTION NAVIGATION HISTORY
DWB_INTRACN_QUES_RESPN	INTERACTION QUESTION RESPONSE
DWB_INTRACN_TRNSFR_HIST	INTERACTION TRANSFER HISTORY
DWB_INTRNT_ACCS_EVT	INTERNET ACCESS EVENT
DWB_INVC	INVOICE
DWB_INVC_ADJ	INVOICE ADJUSTMENT
DWB_INVC_DISC	INVOICE DISCOUNT
DWB_INVC_ITEM	INVOICE ITEM
DWB_INVC_ITEM_DTL	INVOICE ITEM DETAIL
DWB_INVC_ITEM_RLTN	INVOICE ITEM RELATIONSHIP
DWB_INVC_PYMT_ASGN	INVOICE PAYMENT ASSIGNMENT
DWB_INVC_PYMT_TERM	INVOICE PAYMENT TERM
DWB_INVC_STAT_HIST	INVOICE STATUS HISTORY
DWB_INVC_TAX_ITEM	INVOICE TAX ITEM
DWB_INV_ITEM_STATE	INVENTORY ITEM STATE
DWB_ISP_USG_EVT	ISP USAGE EVENT
DWB_IVR_INTRACN_NAVGTN_HIST	IVR INTERACTION NAVIGATION HISTORY

**Table 4–4 (Cont.) Base Tables**

<b>Table Name</b>	<b>More Information</b>
DWB_JE_LN_CUST_ORDR_ITEM_ASGN	JOURNAL ENTRY LINE CUSTOMER ORDER ITEM ASSIGNMENT
DWB_JE_LN_INVC_ITEM_ASGN	JOURNAL ENTRY LINE INVOICE ITEM ASSIGNMENT
DWB_LYLTY_PROG_PTS_BAL	LOYALTY PROGRAM POINTS BALANCE
DWB_MDTD_CALL_EVT	MEDIATED CALL EVENT
DWB_MEDIA_OBJ_COST	MEDIA OBJECT COST
DWB_MKT_PLN_MGMT	MARKET PLAN MANAGEMENT
DWB_MMS_EVT	MMS EVENT
DWB_MNT_ALLWNC	MINUTE ALLOWANCE
DWB_NP_RQST_HDR	NP REQUEST HEADER
DWB_NP_RQST_LN_ITEM	NP REQUEST LINE ITEM
DWB_NP_RQST_LN_ITEM_STATE_HIST	NP REQUEST LINE ITEM STATE HISTORY
DWB_NP_RQST_STATE_HIST	NP REQUEST STATE HISTORY
DWB_NTWK_ELMNT_COST	NETWORK ELEMENT COST
DWB_NTWK_ELMNT_FLT_ASGN	NETWORK ELEMENT FAULT ASSIGNMENT
DWB_NTWK_ELMNT_STATE_HIST	NETWORK ELEMENT STATE HISTORY
DWB_NTWK_EVT	NETWORK EVENT
DWB_NTWK_EVT_ACCT_BAL_BKT_IMPC	NETWORK EVENT ACCOUNT BALANCE BUCKET IMPACT
DWB_NTWK_EVT_ACCT_BAL_IMPC	NETWORK EVENT ACCOUNT BALANCE IMPACT
DWB_NTWK_EVT_ASGN	NETWORK EVENT ASSIGNMENT
DWB_NTWK_FLT	NETWORK FAULT
DWB_NTWK_FLT_SBRP_ASGN	NETWORK FAULT SUBSCRIPTION ASSIGNMENT
DWB_NTWK_FLT_SRVC_ASGN	NETWORK FAULT SERVICE ASSIGNMENT
DWB_NTWK_FLT_STAT_HIST	NETWORK FAULT STATUS HISTORY
DWB_ORG_BSNS_UNIT_COST	ORGANIZATION BUSINESS UNIT COST
DWB_PCHSE_ORDR	PURCHASE ORDER
DWB_PCHSE_ORDR_LN_ITEM	PURCHASE ORDER LINE ITEM
DWB_PCHSE_ORDR_LN_ITEM_STATE	PURCHASE ORDER LINE ITEM STATE
DWB_PCHSE_ORDR_STATE	PURCHASE ORDER STATE
DWB_PLCY_EVT	POLICY EVENT
DWB_PLCY_EVT_ATOMC	POLICY EVENT ATOMIC
DWB_PLCY_EVT_CMPST	POLICY EVENT COMPOSITE
DWB_PRFMNC	PERFORMANCE
DWB_PRFMNC_CNSEQ	PERFORMANCE CONSEQUENCE
DWB_PRFMNC_IND	PERFORMANCE INDICATOR
DWB_PRFMNC_IP_ADDR	PERFORMANCE IP ADDRESS
DWB_PRFMNC_MBL_ADDR	PERFORMANCE MOBILE ADDRESS

**Table 4–4 (Cont.) Base Tables**

<b>Table Name</b>	<b>More Information</b>
DWB_PRFMNC_NTFCTN	PERFORMANCE NOTIFICATION
DWB_PRFMNC_NTWK_ADDR	PERFORMANCE NETWORK ADDRESS
DWB_PRFMNC_PNT_CD	PERFORMANCE POINT CODE
DWB_PRICE_EVT	PRICE EVENT
DWB_PRMTN_CLSTR_USG	PROMOTION CLUSTER USAGE
DWB_PRMTN_CNCT_LST_UTLZTN	PROMOTION CONTACT LIST UTILIZATION
DWB_PRMTN_COST	PROMOTION COST
DWB_PRMTN_MGMT_HIST	PROMOTION MANAGEMENT HISTORY
DWB_PRMTN_TERM_VAL	PROMOTION TERM VALUE
DWB_PROD_COST	PRODUCT COST
DWB_PROD_INSTNC_STAT_HIST	PRODUCT INSTANCE STATUS HISTORY
DWB_PROD_MGMT_HIST	PRODUCT MANAGEMENT HISTORY
DWB_PROD_MKT_PLN_COST	PRODUCT MARKET PLAN COST
DWB_PROD_STAT_HIST	PRODUCT STATUS HISTORY
DWB_PRPD_RCHRG	PREPAID RECHARGE
DWB_PRTNR_PYMT	PARTNER PAYMENT
DWB_PRTY_AM_PMP_ASGN_HIST	PARTY AM PMP ASSIGNMENT HISTORY
DWB_PRTY_AM_PMP_ASGN_STAT	PARTY AM PMP ASSIGNMENT STATUS
DWB_PRTY_COST_ASGN	PARTY COST ASSIGNMENT
DWB_PRTY_INTRACN_THRD	PARTY INTERACTION THREAD
DWB_PRTY_INTRACN_THRD_SBRP_ASN	PARTY INTERACTION THREAD SUBSCRIPTION ASSIGNMENT
DWB_PRTY_ORDR_ASGN	PARTY ORDER ASSIGNMENT
DWB_PRTY_PRMTN_RESPN	PARTY PROMOTION RESPONSE
DWB_PRTY_STAT_HIST	PARTY STATUS HISTORY
DWB_PTV_FULL_CHNL_ACTVTN	PTV FULL CHANNEL ACTIVATION
DWB_PTV_QPI_SRVC_EVT	PTV QPI SERVICE EVENT
DWB_PTV_USG_EVT	PTV USAGE EVENT
DWB_RAW_MMS_EVT	RAW MMS EVENT
DWB_RAW_WRLS_CALL_EVT	RAW WIRELESS CALL EVENT
DWB_RESRE_ORDR	RESOURCE ORDER
DWB_RESRE_ORDR_ITEM	RESOURCE ORDER ITEM
DWB_RESRE_PRFMNC	RESOURCE PERFORMANCE
DWB_RTD_NTWK_EVT	RATED NETWORK EVENT
DWB_SBRP_STAT_HIST	SUBSCRIPTION STATUS HISTORY
DWB_SBRP_TERM_VAL	SUBSCRIPTION TERM VALUE
DWB_SL_CHNL_CMISN_PLN_ASGN	SALES CHANNEL COMMISSION PLAN ASSIGNMENT
DWB_SL_CMISN_DTL	SALES COMMISSION DETAIL

**Table 4–4 (Cont.) Base Tables**

<b>Table Name</b>	<b>More Information</b>
DWB_SL_CMISN_PYRL	SALES COMMISSION PAYROLL
DWB_SMS_EVT	SMS EVENT
DWB_SRVC_LVL_AGRMNT_VILTN	SERVICE LEVEL AGREEMENT VIOLATION
DWB_SRVC_ORDR	SERVICE ORDER
DWB_SRVC_ORDR_LN_ITEM	SERVICE ORDER LINE ITEM
DWB_SRVC_PRFMNC	SERVICE PERFORMANCE
DWB_SRVC_RQST	SERVICE REQUEST
DWB_SRVC_STAT_HIST	SERVICE STATUS HISTORY
DWB_TAP_IN_WRLS_RMNG_EVT	TAP IN WIRELESS ROAMING EVENT
DWB_TAP_OUT_WRLS_RMNG_EVT	TAP OUT WIRELESS ROAMING EVENT
DWB_UMS_EVT	UMS EVENT
DWB_VNDR_APNMNT	VENDOR APPOINTMENT
DWB_VOIP_CALL_EVT	VOIP CALL EVENT
DWB_WEB_INTRACN_NAVGTN_HIST	WEB INTERACTION NAVIGATION HISTORY
DWB_WRLS_CALL_EVT	WIRELESS CALL EVENT
DWB_WRLS_CNTNT_DNLDG_EVT	WIRELESS CONTENT DOWNLOADING EVENT
DWB_WRLS_RMNG_EVT	WIRELESS ROAMING EVENT
DWB_WRLS_RMNG_EVT_BTCH	WIRELESS ROAMING EVENT BATCH

## Derived Tables

Table 4–5 briefly describes the Derived tables in Oracle Communications Data Model.

**Table 4–5 Derived Tables**

<b>Table Name</b>	<b>More Information</b>
DWD_ACCT_BAL_MO	ACCOUNT BALANCE MONTH DRVD
DWD_ACCT_DEBT_DAY	ACCOUNT DEBT DAY DRVD
DWD_ACCT_PYMT_DAY	ACCOUNT PAYMENT DAY DRVD
DWD_ACCT_PYMT_MTHD_STAT_HIST	ACCOUNT PAYMENT METHOD STATUS HIST DRVD
DWD_ACCT_RFND_DAY	ACCOUNT REFUND DAY DRVD
DWD_ACCT_STAT	ACCOUNT STATUS DRVD
DWD_ACCT_STTSTC	ACCOUNT STATISTIC DRVD
DWD_ARPU_BASE	ARPU BASE DRVD
DWD_BER_FER_ERR_RATIO_DAY	BER FER ERROR RATIO DAY DRVD
DWD_CALL_CNTR_CALL_DAY	CALL CENTER CALL DAY DRVD
DWD_CALL_CNTR_CASE_DAY	CALL CENTER CASE DAY DRVD
DWD_CANBLZTN_DTL_DAY	CANNIBALIZATION DETAIL DAY DRVD
DWD_CELL_STTSTC_DAY	CELL STATISTIC DAY DRVD
DWD_CHRN_PRDCT_SRC	CHURN PREDICT SOURCE DERIVED

**Table 4–5 (Cont.) Derived Tables**

<b>Table Name</b>	<b>More Information</b>
DWD_CMISN_DAY	COMMISSION DAY DRVD
DWD_CNCT_DSCNCT_DAY	CONNECT DISCONNECT DAY DRVD
DWD_CNRT	CONTRACT DRVD
DWD_CNRT_CHNG	CONTRACT CHANGED DRVD
DWD_COST_CUST	COST CUSTOMER DRVD
DWD_COST_ORG	COST ORGANIZATIONAL DRVD
DWD_CRDT_CTGRY	CREDIT CATEGORY DRVD
DWD_CUST_ACQSTN_SUMM_DAY	CUSTOMER ACQUISITION SUMMARY DAY DRVD
DWD_CUST_CALL_SCL_NTWK	CUSTOMER CALL SOCIAL NETWORK
DWD_CUST_COMMUNITY_ASGN	CUSTOMER COMMUNITY ASSIGNMENT
DWD_CUST_DEBT_COLLCTN	CUSTOMER DEBT COLLECTION DRVD
DWD_CUST_MNNG	CUSTOMER MINING
DWD_CUST_EQPMNT_INSTLTN_DAY	CUSTOMER EQUIPMENT INSTALLATION DAY DRVD
DWD_DATA_USG_DAY	DATA USAGE DAY DRVD
DWD_EXTRNL_DEBT_COLLCTN_DAY	EXTERNAL DEBT COLLECTION DAY DRVD
DWD_GIVE_AWAY_ITEM_DAY	GIVE AWAY ITEM DAY DRVD
DWD_GPRS_PCU_DAY	GPRS PCU DAY DRVD
DWD_GPRS_SRVCS_DAY	GPRS SERVICES DAY DRVD
DWD_HNDST_STCK_DAY	HANDSET STOCK DAY DRVD
DWD_HNDST_SUBSDY_DAY	HANDSET SUBSIDY DAY DRVD
DWD_IN_PLTFRM_DAY	IN PLATFORM DAY DRVD
DWD_INTRNL_DEBT_COLLCTN_DAY	INTERNAL DEBT COLLECTION DAY DRVD
DWD_INVC	INVOICE DRVD
DWD_INVC_ADJ	INVOICE ADJUSTMENT DRVD
DWD_LN_ACTVTN_TMNT_DAY	LINE ACTIVATION TERMINATION DAY DRVD
DWD_LYLTY_PROG_DAY	LOYALTY PROGRAM DAY DRVD
DWD_MKT_OPRTR_PRTNG	MARKET OPERATOR PORTING DERIVED
DWD_MKT_SHARE	MARKET SHARE DRVD
DWD_MSC_TRFC_DAY	MSC TRAFFIC DAY DRVD
DWD_NBR_PRT_DAY	NUMBER PORT DAY DRVD
DWD_NTWK_AVLBLTY_DAY	NETWORK AVAILABILITY DAY DRVD
DWD_NTWK_TCHPNT	NETWORK TOUCHPOINT DRVD
DWD_PRPD_ACCT_ACTVTN_DAY	PREPAID ACCOUNT ACTIVATION DAY DRVD
DWD_PRPD_ACCT_STTSTC	PREPAID ACCOUNT STATISTIC DRVD
DWD_PRPD_ALWNCE_DAY	PREPAID ALLOWANCE DAY DRVD
DWD_PRPD_CALL_SUMM_DAY	PREPAID CALL SUMMARY DAY DRVD
DWD_PRPD_VCHR_RCHRГ_DAY	PREPAID VOUCHER RECHARGE DAY DRVD



**Table 4–5 (Cont.) Derived Tables**

Table Name	More Information
DWD_PRTNR_STLMNT	PARTNER SETTLEMENT DRVD
DWD_PYMT_AGNG_DAY	PAYMENT AGING DAY DRVD
DWD_RDMPTN_DAY	REDEMPTION DAY DRVD
DWD_RF_NTWK_CPCTY_DAY	RF NETWORK CAPACITY DAY DRVD
DWD_SBRP_STTSTC	SUBSCRIPTION STATISTIC DRVD
DWD_SHOP_EFFNCY_DAY	SHOP EFFICIENCY DAY DRVD
DWD_SHARED_PKG_USG_STTSTC_DAY	SHARED PACKAGE USAGE STATISTICS DAY DRVD
DWD_SL_CMPGN_SUMM_DAY	SALES CAMPAIGN SUMMARY DAY DRVD
DWD_SL_DAY	SALES DAY DRVD
DWD_SL_RPRSTV_STTSTC	SALES REPRESENTATIVE STATISTICS DRVD
DWD_SPLMNR_SRVC_USG	SUPPLEMENTARY SERVICE USAGE DRVD
DWD_SUBSDY_AMT	SUBSIDY AMOUNT DRVD
DWD_VAS_SBRP_QCK_SUMM	VAS SUBSCRIPTION QUICK SUMMARY DRVD
DWD_VAS_USG_DAY	VAS USAGE DAY DRVD
DWD_VOI_CALL_DAY	VOICE CALL DAY DRVD

## Aggregate Tables

Table 4–6 briefly describes the Aggregate tables in Oracle Communications Data Model.

**Table 4–6 Aggregate Tables**

Table Name	More Information
DWA_ACCT_DEBT_MO	ACCOUNT DEBT MONTH AGGR
DWA_ACCT_PYMT_MO	ACCOUNT PAYMENT MONTH AGGR
DWA_ACCT_PYMT_MTHD_STAT_HIST	ACCOUNT PAYMENT METHOD STATUS HIST AGGR
DWA_ACCT_RFND_MO	ACCOUNT REFUND MONTH AGGR
DWA_ACCT_STAT_TYP	ACCOUNT STATUS TYPE AGGR
DWA_ACCT_STTSTC_TYP	ACCOUNT STATISTIC TYPE AGGR
DWA_ARPU_BASE_CUST_TYP	ARPU BASE CUSTOMER TYPE AGGR
DWA_BER_FER_ERR_RATIO_MO	BER FER ERROR RATIO MONTH AGGR
DWA_CALL_CNTR_CALL_MO	CALL CENTER CALL MONTH AGGR
DWA_CALL_CNTR_CASE_MO	CALL CENTER CASE MONTH AGGR
DWA_CANBLZTN_DTL_MO	CANNIBALIZATION DETAIL MONTH AGGR
DWA_CELL_STTSTC_MO	CELL STATISTIC MONTH AGGR
DWA_CMISN_MO	COMMISSION MONTH AGGR
DWA_CNCT_DSCNCT_MO	CONNECT DISCONNECT MONTH AGGR
DWA_CNRT_MO	CONTRACT MONTH AGGR
DWA_COST_CUST_MO	COST CUSTOMER MONTH AGGR

**Table 4–6 (Cont.) Aggregate Tables**

<b>Table Name</b>	<b>More Information</b>
DWA_COST_ORG_MO	COST ORGANIZATIONAL DRVD
DWA_CRDT_CTGRY_MO	CREDIT CATEGORY MONTH AGGR
DWA_CUST_ACQSTN_SUMM_MO	CUSTOMER ACQUISITION SUMMARY MONTH AGGR
DWA_CUST_DEBT_COLLCTN_MO	CUSTOMER DEBT COLLECTION MONTH AGGR
DWA_CUST_EQPMNT_INSTLTN_MO	CUSTOMER EQUIPMENT INSTALLATION MO AGGR
DWA_DATA_USG_MO	DATA USAGE MONTH AGGR
DWA_EXTRNL_DEBT_COLLCTN_MO	EXTERNAL DEBT COLLECTION MONTH AGGR
DWA_GIVE_AWAY_ITEM_MO	GIVE AWAY ITEM MONTH AGGR
DWA_GPRS_PCU_MO	GPRS PCU MONTH AGGR
DWA_GPRS_SRVCS_MO	GPRS SERVICES MONTH AGGR
DWA_HNDST_STCK_MO	HANDSET STOCK MO AGGR
DWA_HNDST_SUBSDY_MO	HANDSET SUBSIDY MONTH AGGR
DWA_IN_PLTFRM_MO	IN PLATFORM MONTH AGGR
DWA_INTRNL_DEBT_COLLCTN_MO	INTERNAL DEBT COLLECTION MONTH AGGR
DWA_INVC_ADJ_MO	INVOICE ADJUSTMENT MONTH AGGR
DWA_INVC_CUST_TYP	INVOICE CUSTOMER TYPE AGGR
DWA_LN_ACTVTN_TMNT_MO	LINE ACTIVATION TERMINATION MONTH AGGR
DWA_LYLTY_PROG_MO	LOYALTY PROGRAM MO AGGR
DWA_MKT_SHARE	MARKET SHARE AGGR
DWA_MSC_TRFC_MO	MSC TRAFFIC MONTH AGGR
DWA_NBR_PRT_MO	NUMBER PORT MONTH AGGR
DWA_NTWK_AVLBLTY_MO	NETWORK AVAILABILITY MONTH AGGR
DWA_NTWK_TCHPNT_MO	NETWORK TOUCHPOINT MONTH AGGR
DWA_PRPD_ACCT_STTSTC_SGMNT	PREPAID ACCOUNT STATISTIC SEGMENT AGGR
DWA_PRPD_ALWNCE_MO	PREPAID ALLOWANCE MONTH AGGR
DWA_PRPD_CALL_SUMM_MO	PREPAID CALL SUMMARY MONTH AGGR
DWA_PRTNR_STLMNT_MO	PARTNER SETTLEMENT MONTH AGGR
DWA_PYMT_AGNG_MO	PAYMENT AGING MONTH AGGR
DWA_RDMPNTN_MO	REDEMPTION MO AGGR
DWA_RF_NTWK_CPCTY_MO	RF NETWORK CAPACITY MONTH AGGR
DWA_SBRP_STTSTC_MO	SUBSCRIPTION STATISTIC MONTH AGGR
DWA_SHARED_PKG_USG_STTSTC_MO	SHARED PACKAGE USAGE STATISTICS MO AGGR
DWA_SHOP_EFFNCY_MO	SHOP EFFICIENCY MONTH AGGR
DWA_SL_CMPGN_SUMM_MO	SALES CAMPAIGN SUMMARY MONTH AGGR
DWA_SL_MO	SALES MONTH AGGR
DWA_SPLMNTR_SRVC_USG_MO	SUPPLEMENTARY SERVICE USAGE MONTH AGGR
DWA_SUBSDY_AMT_MO	SUBSIDY AMOUNT MONTH AGGR

**Table 4–6 (Cont.) Aggregate Tables**

Table Name	More Information
DWA_VAS_SBRP_QCK_SUMM_MO	VAS SUBSCRIPTION QUICK SUMMARY MO AGGR
DWA_VAS_USG_MO	VAS USAGE MONTH AGGR
DWA_VOI_CALL_MO	VOICE CALL MONTH AGGR

## Temporary and Other Tables

Table 4–7, Table 4–8, and Table 4–9 briefly describes the temporary and control tables in Oracle Communications Data Model.

**Table 4–7 Temporary Oracle Communications Data Model Tables**

Table Name	Description
DWA_CUST_GROSS_ORDRS_QTR	This entity gives order measures, number of orders and total order amount, in same quarters of consecutive years.
DWA_CUST_NET_ORDRS_QTR	This entity gives order measures, number of orders and total order amount, in consecutive quarters.
DWA_CUST_ORDR_MO	This entity summarizes orders placed by customers at month level aggregation. Using this entity, order measures, number of orders and total order amount, across order status, order type, product, product type dimensions can be computed.

**Table 4–8 Control Tables**

Table Name	Description
DWC_ETL_PARAMETER	Store ETL parameters such as etl start date and etl end date. For more information, see "Intra-ETL Load Parameters Control Table" on page A-1.
DWC_INTRA_ETL_ACTIVITY	Reports errors at the individual program level. For more information, see "Intra-ETL Monitoring Process Control Tables" on page A-3.
DWC_INTRA_ETL_PROCESS	Reports errors at the whole batch load level. For more information, see "Intra-ETL Monitoring Process Control Tables" on page A-3.

**Table 4–9 Miscellaneous Oracle Communications Data Model Tables**

Table Name	Description
DWV_CNRT_ACCT_SBRP_PROD	The MV which prejoins dwr_cnrt,dwr_sbrp, dwr_acct, dwr_prod, and dwr_cust. This MV is on sbrp_key level . This join occurs frequently in the Intra ETL, so it is prejoined and stores the result MV, then the Intra ETL only needs to access the MV instead of joining the five tables.
STG_DWD_VOI_CALL_DAY	Table stores staging results in populating data for DWD_VOI_CALL_DAY.

## Database Sequences

Table 4–10 lists the Sequence Names in Oracle Communications Data Model.

**Table 4–10 Database Sequences**

Generates the Physical Key for Table Name	Sequence Name
DWR_ACCS_MTHD	AM_SEQ
DWR_ACCS_MTHD_ELMNT	AME1_SEQ
DWR_ACCS_MTHD_POOL	AMP_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_ACCS_MTHD_SGMNT	AMS_SEQ
DWR_ACCSRS	ACCE_SEQ
DWR_ACCT	ACCT_SEQ
DWR_ACCT_BLLG_CYCL_HIST	ABCH_SEQ
DWR_ACCT_BLLG_FRQNCY_HIST	ABFH_SEQ
DWR_ACCT_BLLG_PRD_HIST	ABPH_SEQ
DWR_ACCT_BSNS_INTRACN_RL	ABIR_SEQ
DWR_ACCT_PREF_PYMT_MTHD	APP_SEQ
DWR_ACCT_PRFL	APH1_SEQ
DWR_ACCT_SGMNT	ACCT_SEG_SEQ
DWR_ACCT_SGMNT_MDL	CSM_2_SEQ
DWR_ADDR_LOC	AL1_SEQ
DWR_ADDR_RLTD	AR_1_SEQ
DWR_ADTNL_TXT	AT2_SEQ
DWR_ADVR_PRD	AP_SEQ
DWR_ADVR_QTR	AQ_SEQ
DWR_ADVR_WK	AW_SEQ
DWR_ADVR_YR	AY_SEQ
DWR_AGGRTN_INTRFC	AGIN_SEQ
DWR_AMRCN_PRPTY_ADDR	APA_SEQ
DWR_ANZSIC_CLSFCTN	ANZSIC_SEQ
DWR_ATM_INTRFC	ATIN_SEQ
DWR_ATONOMS_SYS	AOSY_SEQ
DWR_AUXILIARY_CMPNT	AXCM_SEQ
DWR_BASE_TRNSCVR_STN	BTS_SEQ
DWR_BNK	BAN1_SEQ
DWR_BNK_DRCT_DEBT_CHNL	BDDC_SEQ
DWR_BRDGNG_PROTCL	BP1_SEQ
DWR_BRND	BRA_SEQ
DWR_BSNS_HLF_MO	BHM_SEQ
DWR_BSNS_HLF_YR	BHY_SEQ
DWR_BSNS_INTRACN_LOC_ASGN	BILA_SEQ
DWR_BSNS_INTRACN_RL	BIR_SEQ
DWR_BSNS_MO	BM_SEQ
DWR_BSNS_QTR	BQ_SEQ
DWR_BSNS_UNIT_SHFT	BUS_SEQ
DWR_BSNS_WK	BW_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_BSNS_YR	BY1_SEQ
DWR_CALL_CNTR	CC3_SEQ
DWR_CALL_CNTR_AGNT	CCA_SEQ
DWR_CALL_CNTR_SRVC_CAPBLTY	CCSC_SEQ
DWR_CALL_SRC_DSTN	CD3_SEQ
DWR_CARD	CARD_SEQ
DWR_CBL	CBL_SEQ
DWR_CELL	CEL_SEQ
DWR_CELL_SCTR	CS1_SEQ
DWR_CELL_SITE	CS2_SEQ
DWR_CHASSIS	CHS_SEQ
DWR_CHNL	CHNL_SEQ
DWR_CLNDR_HLF_MO	CHM_SEQ
DWR_CLNDR_HLF_YR	CHY_SEQ
DWR_CLNDR_MO	CM_SEQ
DWR_CLNDR_QTR	CQ_SEQ
DWR_CLNDR_WK	CW_SEQ
DWR_CLNDR_YR	CY_SEQ
DWR_CMPGN	CAM_SEQ
DWR_CMPGN_CHNL	RCC_SEQ
DWR_CMPGN_CHTRSTC	CMCH_SEQ
DWR_CMPGN_CHTRSTC_VAL	CCV_SEQ
DWR_CMPGN_DOC	RCMD_SEQ
DWR_CMPGN_MSG	RCM_SEQ
DWR_CMPGN_MSG_DPCT	CMD_SEQ
DWR_CMPND_ELMNT	CE_SEQ
DWR_CMPND_ELMNT_CMPND_DTL	CECD_SEQ
DWR_CMPND_ELMNT_COLLCTN	CECL_SEQ
DWR_CMPND_ELMNT_DTL	CED_SEQ
DWR_CMPND_ELMNT_LGICL_DTL	CELD_SEQ
DWR_CMPND_ELMNT_PHY_DTL	CEPD_SEQ
DWR_CMPND_ELMNT_RL	CER1_SEQ
DWR_CMPND_ELMNT_RL_ASGN	CERA_SEQ
DWR_CMPND_ELMNT_RL_SPEC	CERS_SEQ
DWR_CMPND_ELMNT_TP_DTL	CETD_SEQ
DWR_CMPND_ELMNT_UNIT	CEU_SEQ
DWR_CMPNT_SBRP_PRICE	CTSP_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_CMPST_COMP_PROD_CRL_CHTRTC	CPCC_SEQ
DWR_CMPST_PROD_RTNG_PLN	CPRP_SEQ
DWR_CMPST_SBRP_PRICE	CSPR_SEQ
DWR_CMPST_SRVC	CMST_SEQ
DWR_CMPTR	CPTR_SEQ
DWR_CMPTR_INTLGNCE_PRTY_RL	CPTR9_SEQ
DWR_CNCT_LST	CL_SEQ
DWR_CNCTN	CTN_SEQ
DWR_CNCTN_TMNT_PNT	CTP_SEQ
DWR_CNRT	CON_SEQ
DWR_CNRT_DOC	CD_SEQ
DWR_CNRT_ITEM	CNIT_SEQ
DWR_CNSEQ_PRFMNC_NTFCTN	CQPN_SEQ
DWR_CNTNT	CNTNT_SEQ
DWR_CNTNT_PRICE	CP1_SEQ
DWR_CNTNT_PRVDR	CP_SEQ
DWR_COLLCTN	CLTN_SEQ
DWR_COLLCTN_AGENCY	CAP_SEQ
DWR_COMP_INTL_CHTRSTC	CICH_SEQ
DWR_COMP_INTL_CHTRSTC_VAL	CIHV_SEQ
DWR_COMP_PROD_CRRL_CHTRSTC	CPCH_SEQ
DWR_COMP_PROD_CRRL_CHTRSTC_VAL	CCHV_SEQ
DWR_COMUNICTN_SRVC	CMSR_SEQ
DWR_CORE_INTRFC	CRI1_SEQ
DWR_COST_CNTR	CC1_SEQ
DWR_COURIER	CAR1_SEQ
DWR_CPCTY	CPY_SEQ
DWR_CPE_LGICL_DVC_RL	CLDR_SEQ
DWR_CRCUT_CMPNT	CC_SEQ
DWR_CRDT_CTGRY	DLCC_SEQ
DWR_CRDT_SCR_PRVDR	CSP_SEQ
DWR_CRNCY_GEO_ENT_ASGN	CGER_SEQ
DWR_CUST	CI_SEQ
DWR_CUST_CLASS_ASGN	CCAI_SEQ
DWR_CUST_DOC	CDOC_SEQ
DWR_CUST_FCNG_SRVC	CFS1_SEQ
DWR_CUST_FCNG_SRVC_RL	CFSR_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_CUST_FCNG_SRVC_SPEC_RL	CFSSR_SEQ
DWR_CUST_FCNG_SRVC_SPEC_VRSN	CFV_SEQ
DWR_CUST_INDVL	CUSTI_SEQ
DWR_CUST_OCCSN	CO2_SEQ
DWR_CUST_ORDR_DOC	COD_SEQ
DWR_CUST_RSTRCT_INFO	CRI_1_SEQ
DWR_CUST_SCR	DLCS_SEQ
DWR_CUST_SGMNT	SEG_SEQ
DWR_CUST_SGMNT_MDL	CSM_SEQ
DWR_CUST_SIC_ASGN	CSIC_SEQ
DWR_CUST_SRC	CS5_SEQ
DWR_DAY	DAY_SEQ
DWR_DAY_ACT_CONDITION	DAC_SEQ
DWR_DAY_TODATE_TRANS	DTT_SEQ
DWR_DAY_TRANS	DTRAN_SEQ
DWR_DEAL	DEA2_SEQ
DWR_DEMOG_ATRIB	DA_SEQ
DWR_DEMOG_CHTRSTC	DGCH_SEQ
DWR_DEMOG_CHTRSTC_VAL	DCHV_SEQ
DWR_DEMOG_GRP	DG_SEQ
DWR_DISC_GRP	XEDG_SEQ
DWR_DISC_SBRP_PRICE_ALTRTN	DSPA_SEQ
DWR_DLR	DEA1_SEQ
DWR_DLR_DISC_GRP_ASGN	DDGA_SEQ
DWR_DRVD_VAL	DV_SEQ
DWR_DVC_INTRFC	DVI_SEQ
DWR_DVC_INTRFC_RL	DIR_SEQ
DWR_EDGE_INTRFC	EGI_SEQ
DWR_ELMNT_CHTRSTC	ECH_SEQ
DWR_ELMNT_CHTRSTC_ASGN	ECHA_SEQ
DWR_ELMNT_CHTRSTC_RLTN	ECHR_SEQ
DWR_ELMNT_CHTRSTC_VAL	ECHV_SEQ
DWR_ELMNT_CHTRSTC_VAL_ASGN	EHVA_SEQ
DWR_ELMNT_CHTRSTC_VAL_RLTN	EHVR_SEQ
DWR_EMP	EMP_SEQ
DWR_EMP_LANG_CAPBLTY	ELC_SEQ
DWR_EMP_RSTRCT_INFO	CRI_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_ENT	ENT_SEQ
DWR_ENT_RL	ETR1_SEQ
DWR_ENT_SPECFTN	ETS_SEQ
DWR_EQPMNT	EQU_SEQ
DWR_EQPMNT_CNTR	EC2_SEQ
DWR_EQPMNT_FNCTNLTY	EF_SEQ
DWR_EQPMNT_HLDR	EQH_SEQ
DWR_EQPMNT_INSTNC	EI_SEQ
DWR_EQPMNT_INSTNC_RENTING_CNRT	EISH_SEQ
DWR_EQPMNT_SBRP	EQS_SEQ
DWR_EVT_PRTY_RL	EPR_SEQ
DWR_EVT_RSLTN	ER2_SEQ
DWR_EXCLD_PRT_DTL	EXPD_SEQ
DWR_EXTRNL_INFO_SRC	EIS_SEQ
DWR_EXTRNL_OPRTR	PEO_SEQ
DWR_FCTR_CMPNY	FC_SEQ
DWR_FRWL_RL	FWL_SEQ
DWR_FSCL_HLF_MO	FHM_SEQ
DWR_FSCL_HLF_YR	FHY_SEQ
DWR_FSCL_MO	FM_SEQ
DWR_FSCL_QTR	FQ_SEQ
DWR_FSCL_WK	FW_SEQ
DWR_FSCL_YR	FY_SEQ
DWR_FXBLE_CHTRSTC	FCH_SEQ
DWR_FXBLE_CHTRSTC_ASGN	FCA_SEQ
DWR_FXBLE_CHTRSTC_ASGN_TYP	FCAT_SEQ
DWR_FXBLE_CHTRSTC_RLTN	FCR_SEQ
DWR_FXBLE_CHTRSTC_TYP	FCT_SEQ
DWR_FXBLE_CHTRSTC_VAL	FCV_SEQ
DWR_FXBLE_CHTRSTC_VAL_ASGN	FCVA_SEQ
DWR_FXBLE_CHTRSTC_VAL_RLTN	FCVR_SEQ
DWR_GEO_BLDG	GEOB_SEQ
DWR_GEO_CITY	GC1_SEQ
DWR_GEO_CNTRY	GC_SEQ
DWR_GEO_CNTY	GEOC_SEQ
DWR_GEO_DEMOG_ATRIB	GDA_SEQ
DWR_GEO_DEMOG_GRP	GDG_SEQ



**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_GEO_DEMOG_VAL	GDV_SEQ
DWR_GEO_ENT	GE_1_SEQ
DWR_GEO_HRCHY	GH_SEQ
DWR_GEO_HRCHY_LVL	GHL_SEQ
DWR_GEO_LVL	GL_SEQ
DWR_GEO_LVL_ATTRIB	GLATTR_SEQ
DWR_GEO_LVL_ATTRIB_VAL	GLA_SEQ
DWR_GEO_NIEHBRHD	GEOCM_SEQ
DWR_GEO_RGN	GR_1_SEQ
DWR_GEO_SBRGN	GSR_SEQ
DWR_GEO_STATE	GS_1_SEQ
DWR_GEO_STRT	GEOS_SEQ
DWR_GEO_WORLD	GW_SEQ
DWR_GL_REF	GR_SEQ
DWR_GPRS_SRVC	GS_SEQ
DWR_HH	HOU1_SEQ
DWR_HLDR_ATMC	HA_SEQ
DWR_HLDR_CMPST	HC_SEQ
DWR_HLF_HR	HH_SEQ
DWR_HLF_MO_TODATE_TRANS	HMTT_SEQ
DWR_HLF_MO_TRANS	HMT_SEQ
DWR_HLF_YR_TRANS	HYT_SEQ
DWR_HNDST_INSTNC	HAN_SEQ
DWR_HNDST_MDL	HM_SEQ
DWR_HR	HOU_SEQ
DWR_HRDWR	HW_SEQ
DWR_IN_PLTFRM	DRIP_SEQ
DWR_IN_RUTNG_DVC	IR1_SEQ
DWR_INDVL_DEMOG_VAL	IDV_1_SEQ
DWR_INDVL_NAME	IVNM_SEQ
DWR_INTRACN_CHNL	IC_SEQ
DWR_IP_ADDR	IPA_SEQ
DWR_IP_SUBNET	ISN_SEQ
DWR_IPV4_ADDR	IPA4_SEQ
DWR_ISP	ISP_SEQ
DWR_ISP_BSNS	IBT_SEQ
DWR_ISP_USER	IU_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_ITEM	ITE_SEQ
DWR_JB	DLJ_SEQ
DWR_JB_RL	JR_SEQ
DWR_KEY_PRFMNC_IND_SLS_PARM	KPIP_SEQ
DWR_KEY_QLTY_IND_SLS_PARM	KQSP_SEQ
DWR_LAN	LAN1_SEQ
DWR_LAN_PROTCL	LP1_SEQ
DWR_LANG_DIALECT	LDI_SEQ
DWR_LAYER_NTWK	LN_SEQ
DWR_LGICL_CPCTY	LGCP_SEQ
DWR_LGICL_DVC	LD_SEQ
DWR_LGICL_DVC_ATMC	LDA_SEQ
DWR_LGICL_DVC_CMPST	LDC_SEQ
DWR_LGICL_DVC_RL	LDR_SEQ
DWR_LGICL_DVC_RL_SPEC	LDRS_SEQ
DWR_LGICL_ELMNT	LE_SEQ
DWR_LGICL_ELMNT_RL	LER_SEQ
DWR_LGICL_ELMNT_RL_ASGN	LERA_SEQ
DWR_LGICL_ELMNT_RL_SPEC	LRS_SEQ
DWR_LGICL_ELMNT_TYP_VRSN	LETV_SEQ
DWR_LGICL_INTRFC	LGIN_SEQ
DWR_LYLTY_PROG	LP_SEQ
DWR_LYLTY_PROG_CHNL	LPC_SEQ
DWR_MAILBOX	MAI_SEQ
DWR_MANAGED_ENT	ME1_SEQ
DWR_MANAGED_HRDWR	MHW_SEQ
DWR_MANAGED_TRNSMISN_ENT	MTE_SEQ
DWR_MBL_SWTCHNG_CNTR	MSC_SEQ
DWR_MEDIA_INTRFC	MI_SEQ
DWR_MEDIA_OBJ	MO_SEQ
DWR_MGMT_DOMAIN	MDM_SEQ
DWR_MGMT_PROTCL	MPT_SEQ
DWR_MKT_AREA	OMA_SEQ
DWR_MKT_AREA_LVL	OMAL_SEQ
DWR_MKT_PLN_TERM_VAL	MPTV_SEQ
DWR_MKT_SGMNT	RMSCHZ_SEQ
DWR_MKT_SGMNT_CHTRSTC	MSCH_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_MKT_SGMNT_CHTRSTC_VAL	MSCV_SEQ
DWR_MNT	MIN_SEQ
DWR_MO_TODATE_TRANS	MTT_SEQ
DWR_MO_TRANS	MT1_SEQ
DWR_NAICS_CLSFCTN	NAIC_SEQ
DWR_NAICS_INDSTRY	NI_SEQ
DWR_NAICS_INDSTRY_GRP	NIG_SEQ
DWR_NAICS_INDSTRY_SCTR	IS3_SEQ
DWR_NAICS_INDSTRY_SUBSCTR	NIS_SEQ
DWR_NBR_AREA	DAX_SEQ
DWR_NBR_CNTRY	DCC1_SEQ
DWR_NP_MBL_MSISDN	NMM_SEQ
DWR_NTWK	NET1_SEQ
DWR_NTWK_ADDR	NWA_SEQ
DWR_NTWK_ATMC	NWAT_SEQ
DWR_NTWK_CMPST	NWC_SEQ
DWR_NTWK_DOMAIN	NTWK_DOMAIN_SEQ
DWR_NTWK_ELMNT	DWNE_SEQ
DWR_NTWK_ELMNT_BSNS_INTRACN_RL	NEBIR_SEQ
DWR_NTWK_ELMNT_RL	NER_SEQ
DWR_NTWK_ELMNT_RL_ASGN	NTRA_SEQ
DWR_NTWK_ELMNT_RL_SPEC	NERS_SEQ
DWR_NTWK_ELMNT_TYP	NET4_SEQ
DWR_NTWK_ELMNT_TYP_VRSN	ELTV_SEQ
DWR_NTWK_EVT_CHTRSTC	NEC_SEQ
DWR_NTWK_EVT_CHTRSTC_ASGN	NCHA_SEQ
DWR_NTWK_EVT_CHTRSTC_VAL	NECV_SEQ
DWR_NTWK_EVT_CHTRSTC_VAL_ASGN	NEVA_SEQ
DWR_NTWK_EVT_CHTRSTC_VAL_RLTN	NEVR_SEQ
DWR_NTWK_EVT_TYP_VRSN	NETV_SEQ
DWR_NTWK_ROUTE_PNT	NRP_SEQ
DWR_NTWK_SITE	NWS_SEQ
DWR_NTWK_TCHPNT	NTP_SEQ
DWR_OPERTNG_SYS	OPSY_SEQ
DWR_ORDR_LN_ITEM_STATE	OLIS_SEQ
DWR_ORG_AREA	ARE_SEQ
DWR_ORG_BNR	BAN_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_ORG_BSNS_ENT	OBE_SEQ
DWR_ORG_BSNS_UNIT	DOBU_SEQ
DWR_ORG_CHAIN	CHA_1_SEQ
DWR_ORG_CMPNY	COM_SEQ
DWR_ORG_CRPRT	COR_SEQ
DWR_ORG_DIV	DIV_SEQ
DWR_ORG_DSTRCT	DOD_SEQ
DWR_ORG_HRCHY	OH_SEQ
DWR_ORG_HRCHY_LVL	OHL_SEQ
DWR_ORG_HRCHY_LVL_ASGN	OHLA_SEQ
DWR_ORG_HRCHY_VRSN	OHV_SEQ
DWR_ORG_LVL	OL_SEQ
DWR_ORG_LVL_ATRIB_VAL	OBEA_SEQ
DWR_ORG_LVL_ATTR	OLA_SEQ
DWR_ORG_NAME	ORGN_SEQ
DWR_ORG_RGN	REG_SEQ
DWR_ORG_WRHS	OW_SEQ
DWR_OTHR_INDVL	OI_SEQ
DWR_P_LGICL_DVC_RL	PLD_SEQ
DWR_PASPRT	RPP_SEQ
DWR_PBLCTN	PUB_SEQ
DWR_PE_LGICL_DVC_RL	PLDR_SEQ
DWR_PHONE_NBR	TPN_SEQ
DWR_PHY_CMPNT	PHCM_SEQ
DWR_PHY_CNCTR	PHCO_SEQ
DWR_PHY_CONTNR	PHC_SEQ
DWR_PHY_DVC	PHD_SEQ
DWR_PHY_DVC_ATMC	PDA_SEQ
DWR_PHY_DVC_CMPST	PDC_SEQ
DWR_PHY_DVC_RL_SPEC	PDRS_SEQ
DWR_PHY_DVC_SPEC	PDS_SEQ
DWR_PHY_ELMNT	PHE_SEQ
DWR_PHY_ELMNT_CHTRSTC	PECH_SEQ
DWR_PHY_ELMNT_RL	PEL_SEQ
DWR_PHY_ELMNT_RL_ASGN	PERA_SEQ
DWR_PHY_ELMNT_RL_SPEC	PERS_SEQ
DWR_PHY_EQPMNT	PEQ_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_PHY_LNK	PHL_SEQ
DWR_PHY_PRT	PHP_SEQ
DWR_PIPE	PIE_SEQ
DWR_PLCY	PY_SEQ
DWR_PLCY_ACTN	PYA_SEQ
DWR_PLCY_ACTN_ATMC	PYAA_SEQ
DWR_PLCY_ACTN_CMPST	PYAC_SEQ
DWR_PLCY_ACTN_VNDR	PYAV_SEQ
DWR_PLCY_CNDTN	PYC_SEQ
DWR_PLCY_CNDTN_ASGN	PYCD_SEQ
DWR_PLCY_CNDTN_ATMC	PYCA_SEQ
DWR_PLCY_CNDTN_CMPST	PYCC_SEQ
DWR_PLCY_GRP	PYG_SEQ
DWR_PLCY_OPRTR	POPR_SEQ
DWR_PLCY_RL	PYRL_SEQ
DWR_PLCY_RULE	PYR_SEQ
DWR_PLCY_SET	PYS_SEQ
DWR_PLCY_STMT	PYST_SEQ
DWR_PLCY_VAL	PYV_SEQ
DWR_PLCY_VARBLE	PYB_SEQ
DWR_PLNG_PRD	PP4_SEQ
DWR_PLNG_QTR	PQ1_SEQ
DWR_PLNG_SEASON	PS1_SEQ
DWR_PLNG_WK	PW_1_SEQ
DWR_PLNG_YR	ADV_SEQ
DWR_PMP_AVLBLTY	PMPA_SEQ
DWR_PMP_LYLTYPROG_AVLBLTY	PMPLPA_SEQ
DWR_PMP_MKT_SGMNT_AVLBLTY	PMPMSA_SEQ
DWR_PMP_PRICE_PLCY_ACTN	PPLA_SEQ
DWR_PMP_PRICE_PLCY_CNDTN	PPLC_SEQ
DWR_PMP_PRICE_PLCY_VAL	PPLV_SEQ
DWR_PMP_PRICE_PLCY_VARBLE	PLVA_SEQ
DWR_PMP_PROD_INSTNC_ASGN	PMPPIA_SEQ
DWR_PMP_RTNG_PLN	PRPL_SEQ
DWR_PMP_RTNG_PLN_DTL	PRDL_SEQ
DWR_PNT_CD	PCD_SEQ
DWR_POSTCD	POS_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_PRFMNC	PRF_SEQ
DWR_PRFMNC_IP_ADDR	PIAD_SEQ
DWR_PRFMNC_MBL_ADDR	PMAR_SEQ
DWR_PRFMNC_NTFCTN	PNF_SEQ
DWR_PRFMNC_NTWK_ADDR	PNA_SEQ
DWR_PRFMNC_PNT_CD	PPCD_SEQ
DWR_PRICE_DRVTN_RULE	PDR_SEQ
DWR_PRMTN	P_SEQ
DWR_PRMTN_PROD_CTLG_ASGN	PPCA_SEQ
DWR_PROD	PRO_SEQ
DWR_PROD_ADTNL_TXT	PAT_SEQ
DWR_PROD_CAPBLTY	PC_SEQ
DWR_PROD_CHTRSTC	PCH1_SEQ
DWR_PROD_CHTRSTC_ASGN	PCHA_SEQ
DWR_PROD_CHTRSTC_VAL	PCHV_SEQ
DWR_PROD_CHTRSTC_VAL_ASGN	PHVA_SEQ
DWR_PROD_COVRG_AREA	PCA_SEQ
DWR_PROD_COVRG_GEO_DTL	PCGD_SEQ
DWR_PROD_CTLG_CHTRSTC	PCC_SEQ
DWR_PROD_CTLG_CHTRSTC_ASGN	PCCA_SEQ
DWR_PROD_CTLG_CHTRSTC_RLTN	PCHR_SEQ
DWR_PROD_CTLG_CHTRSTC_VAL	PCCHV_SEQ
DWR_PROD_CTLG_CHTRSTC_VAL_ASGN	PCHVA_SEQ
DWR_PROD_CTLG_CHTRSTC_VAL_RLTN	PHVR_SEQ
DWR_PROD_FTR	EF1_SEQ
DWR_PROD_GRP_ASGN	PGR_SEQ
DWR_PROD_INSTNC	PI3_SEQ
DWR_PROD_MKT_PLN	PMP_SEQ
DWR_PROD_MKT_PLN_GRP	PMPG_SEQ
DWR_PROD_MKT_PLN_RLTN	PMPR_SEQ
DWR_PROD_PKG	PPACK_SEQ
DWR_PROD_RTNG_PLN	CPP_SEQ
DWR_PROD_RTNG_PLN_DTL	CRPD_SEQ
DWR_PROD_USRNM	PDUSR_SEQ
DWR_PROD_VRSN	PV_SEQ
DWR_PROTCL	POTL_SEQ
DWR_PRPD_VCHR	ACCE1_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_PRPTY	PRPTY_SEQ
DWR_PRSPCT	PRO1_SEQ
DWR_PRTNR_PRMTN_PROG	PPP_SEQ
DWR_PRTY	PAR_SEQ
DWR_PRTY_BSNS_INTRACN_RL	PBIR_SEQ
DWR_PRTY_CNCT_INFO	PCI_SEQ
DWR_PRTY_DEMOG_VAL	PDV_SEQ
DWR_PRTY_ID	PI_SEQ
DWR_PRTY_LANG_CAPBLTY	PLC_SEQ
DWR_PRTY_LYLTY_PROG_PRTCPTN	PLPP_SEQ
DWR_PRTY_NAME	PRTY_NAME_SEQ
DWR_PRTY_PRFL_CHTRSTC	PPC_SEQ
DWR_PRTY_PRFL_CHTRSTC_VAL	PPCV_SEQ
DWR_PRTY_RL_ASGN	PRR_SEQ
DWR_PRTY_RL_STAT	PRSH_SEQ
DWR_PRTY_SIM_CARD_ASGN	PSCH_SEQ
DWR_PRTY_SKILL	PRS_SEQ
DWR_PRTY_SRVC_ASGN	PSA2_SEQ
DWR_PV_BIT_STRING_VAL	PBSV_SEQ
DWR_PV_BOLEN_VAL	PBV_SEQ
DWR_PV_INTEGER_VAL	PIV_SEQ
DWR_PV_IP_ADDR_VAL	PIAV_SEQ
DWR_PV_STRING_VAL	PSV_SEQ
DWR_PVAR_BIT_STRING_VARBLE	PBIV_SEQ
DWR_PVAR_STRING_VARBLE	PSGV_SEQ
DWR_PYMT_CHNL	PC2_SEQ
DWR_QOS_SRVC	QS_SEQ
DWR_QTR_HR	QUA_SEQ
DWR_QTR_TODATE_TRANS	QTDT_SEQ
DWR_QTR_TRANS	QT_SEQ
DWR_RACK	RACK_SEQ
DWR_RCRNG_PMP_RTNG_PLN_DTL	RRD_SEQ
DWR_RESRE_FCNG_SRVC	RFS_SEQ
DWR_RESRE_FCNG_SRVC_RL	RFSR_SEQ
DWR_RESRE_FCNG_SRVC_SPEC_RL	RFSSR_SEQ
DWR_RESRE_FCNG_SRVC_SPEC_VRSN	RFSV_SEQ
DWR_RESRE_PRFMNC	RPF_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_RESRE_PRT	RST_SEQ
DWR_RF_CARRIER	CAR_SEQ
DWR_RL	RL_SEQ
DWR_ROOT_ENT	RET_SEQ
DWR_ROUTED_PROTCL	RP_SEQ
DWR_ROUTER	R_SEQ
DWR_RTL_STORE	RS_SEQ
DWR_RUTNG_PROTCL	RPO_SEQ
DWR_RUTNG_RL	RR_SEQ
DWR_SB_NTWK	SNW_SEQ
DWR_SBRP	SUB_SEQ
DWR_SBRP_CLASS_OF_SRVC	SCOS_SEQ
DWR_SBRP_PRICE	SBPR_SEQ
DWR_SBRP_PRICE_ALTRTN	SBPA_SEQ
DWR_SBRP_PRICE_CHRG	SPCH_SEQ
DWR_SCND	SEC_SEQ
DWR_SCRIPT	SCR_SEQ
DWR_SCRIPT_QUES	IQ_SEQ
DWR_SECURE_HLDR	SH_SEQ
DWR_SGMNT_CRTRA	SC_1_SEQ
DWR_SGNLNG_PROTCL	SGPO_SEQ
DWR_SHELF	SLF_SEQ
DWR_SIC_DIV	SICD_SEQ
DWR_SIM_CARD_ACCS_MTHD_ASGN	SCAMH_SEQ
DWR_SIM_CARD_HNDST_ASGN	SCHH_SEQ
DWR_SIM_CARD_SBRP_ASGN	SCSH_SEQ
DWR_SITE	ST_SEQ
DWR_SITE_INTRFC_RL	SINR_SEQ
DWR_SL_CHNL	CHR_SEQ
DWR_SL_CHNL_RPRSTV	RSCR_SEQ
DWR_SL_CMISN_PLN	SCP_SEQ
DWR_SL_CMISN_PLN_DTL	SCPD_SEQ
DWR_SLNG_LOC	SL_SEQ
DWR_SLT	SLT1_SEQ
DWR_SOC_JB	SJ_SEQ
DWR_SOC_JB_CTGRY	SJC_SEQ
DWR_SOC_JB_GRP	SJG_SEQ



**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_SOC_JB_MJR_GRP	SJMG_SEQ
DWR_SOFTWARE	SWR_SEQ
DWR_SOFTWARE_ATMC	SWRA_SEQ
DWR_SOFTWARE_CMND	SWC_SEQ
DWR_SOFTWARE_CMPST	SWRC_SEQ
DWR_SOFTWARE_FTR_SETS	SFS_SEQ
DWR_SPECFTN	SFN_SEQ
DWR_SPECFTN_RL	SFR_SEQ
DWR_SPTRUM_COVRG_AREA	SPCA_SEQ
DWR_SRC_SYS	SS_SEQ
DWR_SRVC	SRVC_SEQ
DWR_SRVC_BNDL	SRBN_SEQ
DWR_SRVC_BNDL_SPEC	SBS_SEQ
DWR_SRVC_BNDL_SPEC_ATMC	SBSA_SEQ
DWR_SRVC_BNDL_SPEC_CMPST	SBSC_SEQ
DWR_SRVC_CHTRSTC	SC_SEQ
DWR_SRVC_CHTRSTC_ASGN	SCHA_SEQ
DWR_SRVC_CHTRSTC_RLTN	SCHR_SEQ
DWR_SRVC_CHTRSTC_VAL	SCHV_SEQ
DWR_SRVC_CHTRSTC_VAL_ASGN	SCVA_SEQ
DWR_SRVC_CHTRSTC_VAL_RLTN	SCVR_SEQ
DWR_SRVC_COVRG_AREA	OTA_SEQ
DWR_SRVC_COVRG_GEO_DTL	SCGD_SEQ
DWR_SRVC_LR_DPNDY	SRDY_SEQ
DWR_SRVC_LVL_AGRMNT	SLA_SEQ
DWR_SRVC_LVL_AGRMNT_ITEM	SLAI_SEQ
DWR_SRVC_LVL_SPEC_PRMTR	SRSP_SEQ
DWR_SRVC_NTWK_ELMNT_ASGN	SNEA_SEQ
DWR_SRVC_PR_DPNDY	SPDN_SEQ
DWR_SRVC_PKG	SPK_SEQ
DWR_SRVC_PRFMNC	SPF_SEQ
DWR_SRVC_RL	SRL_SEQ
DWR_SRVC_SPEC	STYP_SEQ
DWR_SRVC_SPEC_ATMC	STA_SEQ
DWR_SRVC_SPEC_CMPST	CSTY_SEQ
DWR_SRVC_SPEC_VRSN	STV_SEQ
DWR_SRVC_SPECFTN_RL	SSRL_SEQ

**Table 4–10 (Cont.) Database Sequences**

<b>Generates the Physical Key for Table Name</b>	<b>Sequence Name</b>
DWR_STTSTCL_ENT	STE_SEQ
DWR_SURVEY	SUR_SEQ
DWR_SWTCH	SWH_SEQ
DWR_SWTCH_CAPBLTY	SC3_SEQ
DWR_SWTCH_CMMND	SCMD_SEQ
DWR_SWTCH_RUTNG_DVC_ASGN	SRDR_SEQ
DWR_SWTCHNG_PROTCL	SPO_SEQ
DWR_SWTCHNG_RL	SWHR_SEQ
DWR_TIME_SLT	DRTS_SEQ
DWR_TIME_STNDRD_BY_WK	TSBW_SEQ
DWR_TMNT_PNT	TMP_SEQ
DWR_TRAIL	TL_SEQ
DWR_TRAIL_TMNT_PNT	TTP_SEQ
DWR_URBN_PRPTY_ADDR	UPA_SEQ
DWR_USER	USE_SEQ
DWR_VAL_ADD_SRVC	VAS1_SEQ
DWR_VAL_CSTM	VALC_SEQ
DWR_VAL_STNDRD	VALS_SEQ
DWR_VARBLE_CSTM	VRBC_SEQ
DWR_VARBLE_STNDRD	VRBS_SEQ
DWR_VNDR	VEN_SEQ
DWR_VNDR_CNRT	VC_SEQ
DWR_VNDR_FCTR_CMPNY_ASGN	VFCA_SEQ
DWR_VNDR_RTNG	VR_SEQ
DWR_VNDR_SITE	VS2_SEQ
DWR_VPN_LGICL_DVC_RL	VDRL_SEQ
DWR_WAN_PROTCL	WP_SEQ
DWR_WEB_PG	WBPG_SEQ
DWR_WK_TODATE_TRANS	WTT_SEQ
DWR_WK_TRANS	WT_SEQ
DWR_WKDAY	TWD1_SEQ
DWR_WRLS_NTWK_ELMNT	NETELEM_SEQ
DWR_WRLS_SPTRUM	WS_SEQ
DWR_YR_TRANS	YT_SEQ

## Compressed Tables

[Table 4–11](#) lists the Compressed Tables in Oracle Communications Data Model. Oracle Communications Data Model uses Database Compression on these tables to save space and load times.

**Table 4–11 Compressed Tables**

Table Name
DWB_ACCS_MTHD_PORT_HIST
DWB_ACCS_MTHD_STAT_HIST
DWB_ACCT_ACCTNG_CYCL_HIST
DWB_ACCT_BAL_ADJ
DWB_ACCT_BAL_HIST
DWB_ACCT_BLLG_OCCRNCE
DWB_ACCT_COST
DWB_ACCT_CRDT_LMT
DWB_ACCT_DEBT_WRT_OFF
DWB_ACCT_MNGMNT_HIST
DWB_ACCT_PMP_PRTCPTN_HIST
DWB_ACCT_PYMT
DWB_ACCT_PYMT_MTHD_STAT
DWB_ACCT_RCHRG
DWB_ACCT_RFND
DWB_ACCT_STAT_HIST
DWB_ADDR_STAT
DWB_APNMNT_CLNDR
DWB_BLK_LST_HIST
DWB_BNDLD_NTWK_EVT
DWB_BRDBND_USG_EVT
DWB_BSNS_INTRACN
DWB_BSNS_INTRACN_ITEM
DWB_BSNS_INTRACN_ITEM_PRICE
DWB_BSNS_UNIT_COST
DWB_CELL_SITE_COST
DWB_CHNL_COST
DWB_CMPGN_COST
DWB_CMPGN_MSG_CRTVE
DWB_CNCT_LST_COST
DWB_CNRT_APRVL
DWB_CNRT_STAT
DWB_CNRT_TERM_VAL

**Table 4–11 (Cont.) Compressed Tables****Table Name**

DWB\_CNTNT\_DLVRY\_EVT  
DWB\_COST  
DWB\_COST\_CNTR\_BDGT  
DWB\_COURIER\_COST  
DWB\_CRCUT\_RNTL  
DWB\_CRCUT\_TRFC  
DWB\_CRNCY\_EXCHNG\_RATE  
DWB\_CUST\_COST  
DWB\_CUST\_FLD\_INSTLTN  
DWB\_CUST\_FLD\_SPPRT  
DWB\_CUST\_FLD\_SRVC\_ACTVTY  
DWB\_CUST\_FLD\_SRVC\_DTL  
DWB\_CUST\_ORDR  
DWB\_CUST\_ORDR\_LN\_ITEM  
DWB\_CUST\_ORDR\_LN\_ITEM\_ST\_ASGN  
DWB\_CUST\_ORDR\_PYMT  
DWB\_CUST\_ORDR\_STATE\_ASGN  
DWB\_DATA\_SRVC\_EVT  
DWB\_DEBT\_COLLCTN  
DWB\_DEBT\_COLLCTN\_ASGN  
DWB\_DEBT\_COLLCTN\_ASGN\_BTCH  
DWB\_EMP\_ACT\_LBR\_HRLY  
DWB\_EMP\_ACT\_LBR\_SALARIED  
DWB\_EMP\_COST  
DWB\_EMP\_TRNG\_REC  
DWB\_EQPMNT\_CNTR\_COST  
DWB\_EQPMNT\_INSTNC\_STAT\_HIST  
DWB\_ERRD\_MTD\_CALL\_EVT  
DWB\_ERRD\_RAW\_WRLS\_CALL\_EVT  
DWB\_ERRD\_RTD\_WRLS\_CALL\_EVT  
DWB\_EVT  
DWB\_EVT\_ACCS\_MTHD\_ACTVTY  
DWB\_EVT\_ACCT  
DWB\_EVT\_ASGN  
DWB\_EVT\_COST  
DWB\_EVT\_CRCUT\_RNTL  
DWB\_EVT\_EMIT\_DTL

**Table 4–11 (Cont.) Compressed Tables****Table Name**

DWB\_EVT\_EMP\_PYRL  
 DWB\_EVT\_EQPMNT\_INSTNC  
 DWB\_EVT\_FINCL  
 DWB\_EVT\_GEO  
 DWB\_EVT\_GFT\_RDMPTN  
 DWB\_EVT\_INVC\_DLVR  
 DWB\_EVT\_LYLT  
 DWB\_EVT\_LYLT\_PROG  
 DWB\_EVT\_LYLT\_PROG\_ACMLTN  
 DWB\_EVT\_LYLT\_PROG\_RDMPTN  
 DWB\_EVT\_PROD\_PKG  
 DWB\_EVT\_PRPD\_MBL  
 DWB\_EVT\_PRTY\_ASGN  
 DWB\_EVT\_PRTY\_INTRACN  
 DWB\_EVT\_PRTY\_INTRACN\_CALL  
 DWB\_EVT\_PRTY\_INTRACN\_EML  
 DWB\_EVT\_PRTY\_INTRACN\_LTR  
 DWB\_EVT\_PRTY\_INTRACN\_VST  
 DWB\_EVT\_PRTY\_PRFL  
 DWB\_EVT\_SBRP  
 DWB\_EVT\_SBRP\_CHNG  
 DWB\_EVT\_SIM\_CARD  
 DWB\_EVT\_STAT  
 DWB\_EVT\_TRGR\_DTL  
 DWB\_EVT\_WEB\_RGSTRN  
 DWB\_EVT\_WEB\_VST  
 DWB\_FIXED\_LN\_CALL\_EVT  
 DWB\_IDD\_CALL\_EVT  
 DWB\_INTRACN\_ANSWR\_CHOICE  
 DWB\_INTRACN\_QUES\_RESPN  
 DWB\_INTRNT\_ACCS\_EVT  
 DWB\_INVC  
 DWB\_INVC\_ADJ  
 DWB\_INVC\_DISC  
 DWB\_INVC\_ITEM  
 DWB\_INVC\_ITEM\_DTL  
 DWB\_INVC\_ITEM\_RLTN  
 DWB\_INVC\_PYMT\_ASGN

**Table 4–11 (Cont.) Compressed Tables****Table Name**

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DWB\_ISP\_USG\_EVT  
DWB\_LYLTY\_PROG\_PTS\_BAL  
DWB\_MDTD\_CALL\_EVT  
DWB\_MEDIA\_OBJ\_COST  
DWB\_MKT\_PLN\_MGMT  
DWB\_MMS\_EVT  
DWB\_MNT\_ALLWNC  
DWB\_NP\_RQST\_HDR  
DWB\_NP\_RQST\_LN\_ITEM  
DWB\_NP\_RQST\_LN\_ITEM\_STATE\_HIST  
DWB\_NP\_RQST\_STATE\_HIST  
DWB\_NTWK\_ELMNT\_COST  
DWB\_NTWK\_EVT  
DWB\_NTWK\_EVT\_ASGN  
DWB\_NTWK\_FLT  
DWB\_PLCY\_EVT  
DWB\_PLCY\_EVT\_ATMC  
DWB\_PLCY\_EVT\_CMPST  
DWB\_PRICE\_EVT  
DWB\_PRMTN\_CLSTR\_USG  
DWB\_PRMTN\_CNCT\_LST\_UTLZTN  
DWB\_PRMTN\_COST  
DWB\_PRMTN\_MGMT\_HIST  
DWB\_PRMTN\_TERM\_VAL  
DWB\_PROD\_COST  
DWB\_PROD\_MGMT\_HIST  
DWB\_PROD\_MKT\_PLN\_COST  
DWB\_PROD\_STAT\_HIST  
DWB\_PRPD\_RCHRG  
DWB\_PRTY\_AM\_PMP\_ASGN\_HIST  
DWB\_PRTY\_AM\_PMP\_ASGN\_STAT  
DWB\_PRTY\_COST\_ASGN  
DWB\_PRTY\_INTRACN\_THRD  
DWB\_PRTY\_ORDR\_ASGN  
DWB\_PRTY\_PRMTN\_RESPN  
DWB\_PRTY\_STAT\_HIST  
DWB\_PTV\_FULL\_CHNL\_ACTVTN

**Table 4–11 (Cont.) Compressed Tables****Table Name**


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DWB\_PTV\_QPI\_SRVC\_EVT  
 DWB\_PTV\_USG\_EVT  
 DWB\_RAW\_MMS\_EVT  
 DWB\_RAW\_WRLS\_CALL\_EVT  
 DWB\_RESRE\_ORDR  
 DWB\_RESRE\_ORDR\_ITEM  
 DWB\_RTD\_NTWK\_EVT  
 DWB\_SBRP\_STAT\_HIST  
 DWB\_SBRP\_TERM\_VAL  
 DWB\_SL\_CMISN\_DTL  
 DWB\_SL\_CMISN\_PYRL  
 DWB\_SMS\_EVT  
 DWB\_SRVC\_ORDR  
 DWB\_SRVC\_ORDR\_LN\_ITEM  
 DWB\_SRVC\_RQST  
 DWB\_TAP\_IN\_WRLS\_RMNG\_EVT  
 DWB\_TAP\_OUT\_WRLS\_RMNG\_EVT  
 DWB\_UMS\_EVT  
 DWB\_VNDR\_APNMNT  
 DWB\_VOIP\_CALL\_EVT  
 DWB\_WRLS\_CALL\_EVT  
 DWB\_WRLS\_CNTNT\_DNLDG\_EVT  
 DWB\_WRLS\_RMNG\_EVT  
 DWB\_WRLS\_RMNG\_EVT\_BTCH  
 DWD\_ACCT\_DEBT\_DAY  
 DWD\_ACCT\_PYMT\_DAY  
 DWD\_ACCT\_PYMT\_MTHD\_STAT\_HIST  
 DWD\_ACCT\_RFND\_DAY  
 DWD\_ACCT\_STAT  
 DWD\_ACCT\_STTSTC  
 DWD\_ARPU\_BASE  
 DWD\_BER\_FER\_ERR\_RATIO\_DAY  
 DWD\_CALL\_CNTR\_CALL\_DAY  
 DWD\_CALL\_CNTR\_CASE\_DAY  
 DWD\_CANBLZTN\_DTL\_DAY  
 DWD\_CELL\_STTSTC\_DAY  
 DWD\_CHRN\_PRDCT\_SRC

**Table 4–11 (Cont.) Compressed Tables****Table Name**

DWD\_CMISN\_DAY  
DWD\_CNCT\_DSCNCT\_DAY  
DWD\_CNRT  
DWD\_CNRT\_CHNG  
DWD\_COST\_CUST  
DWD\_COST\_ORG  
DWD\_CRDT\_CTGRY  
DWD\_CUST\_ACQSTN\_SUMM\_DAY  
DWD\_CUST\_DEBT\_COLLCTN  
DWD\_CUST\_EQPMNT\_INSTLTN\_DAY  
DWD\_DATA\_USG\_DAY  
DWD\_EXTRNL\_DEBT\_COLLCTN\_DAY  
DWD\_GIVE\_AWAY\_ITEM\_DAY  
DWD\_GPRS\_PCU\_DAY  
DWD\_GPRS\_SRVCS\_DAY  
DWD\_HNDST\_STCK\_DAY  
DWD\_HNDST\_SUBSDY\_DAY  
DWD\_INTRNL\_DEBT\_COLLCTN\_DAY  
DWD\_INVC  
DWD\_INVC\_ADJ  
DWD\_IN\_PLTFRM\_DAY  
DWD\_LN\_ACTVTN\_TMNT\_DAY  
DWD\_LYLTY\_PROG\_DAY  
DWD\_MKT\_OPRTR\_PRTNG  
DWD\_MKT\_SHARE  
DWD\_MSC\_TRFC\_DAY  
DWD\_NBR\_PRT\_DAY  
DWD\_NTWK\_AVLBLTY\_DAY  
DWD\_NTWK\_TCHPNT  
DWD\_PRPD\_ACCT\_STTSTC  
DWD\_PRPD\_ALWNCE\_DAY  
DWD\_PRPD\_CALL\_SUMM\_DAY  
DWD\_PRTNR\_STLMNT  
DWD\_PYMT\_AGNG\_DAY  
DWD\_RDMPTN\_DAY  
DWD\_RF\_NTWK\_CPCTY\_DAY  
DWD\_SBCRBR\_CHRN\_STTSTC



**Table 4–11 (Cont.) Compressed Tables**

Table Name
DWD_SHARED_PKG_USG_STTSTC_DAY
DWD_SHOP_EFFNCY_DAY
DWD_SL_CMPGN_SUMM_DAY
DWD_SL_DAY
DWD_SL_RPRSTV_STTSTC
DWD_SPLMNTR_SRVC_USG
DWD_SUBSDY_AMT
DWD_VAS_SBRP_QCK_SUMM
DWD_VAS_USG_DAY
DWD_VOI_CALL_DAY

## Oracle Communications Data Model OLAP Cube MV, Cube View

This section includes information on the following:

- Oracle OLAP Cube Views: Oracle OLAP cube views provide organizations with the ability to both improve the performance and analytic content of SQL-based business intelligence applications. OLAP cube views are relational views of OLAP cubes, dimensions, and hierarchies that reveal the full content of cubes and dimensions.
- Cube MV (Materialized Cube Views): Cube-organized materialized views, introduced in Oracle Database 11g, play the same role as table-based materialized views. That is, a summary management solution that is transparent to the querying application. Like table-based materialized views, the application queries the detail tables and the database automatically rewrites the query to access summary data in the materialized view. In the case of cube-organized materialized views, the data is managed in the cube rather than a table.

Table 4–12 shows the cube materialized views in `ocdm_sys` schema.

**Table 4–12 OLAP Cube Materialized Views in `ocdm_sys` Schema**

Cube Materialized View Name	OLAP Object Name	OLAP Object Type	More Information
CB\$ACM	ACM	Cube	<a href="#">Customer Acquisition Cube</a>
CB\$ADM	ADM	Cube	<a href="#">Account Debt Cube</a>
CB\$APM	APM	Cube	<a href="#">Account Payment Cube</a>
CB\$ARM	ARM	Cube	<a href="#">Account Refund Cube</a>
CB\$ARRSN_HARRSN	ARRSN_HARRSN	Dimension_Hierarchy	<a href="#">Account Refund Reason: ARRSN</a>
CB\$CAGNCY_HCAGNCY	CAGNCY_HCAGNCY	Dimension_Hierarchy	<a href="#">Collection Agency: CAGNCY</a>
CB\$CCM	CCM	Cube	<a href="#">Cost Product Market Plan Cube</a>
CB\$CHRN	CHRN	Cube	<a href="#">Subscriber Churn Statistic Cube</a>
CB\$CM	CM	Cube	<a href="#">Contract Cube</a>
CB\$CMSN	CMSN	Cube	<a href="#">Commission Cube</a>

**Table 4–12 (Cont.) OLAP Cube Materialized Views in ocdm\_sys Schema**

<b>Cube Materialized View Name</b>	<b>OLAP Object Name</b>	<b>OLAP Object Type</b>	<b>More Information</b>
CB\$CMTYP_HCMTYP	CMTYP_HCMTYP	Dimension_Hierarchy	Commission Type: CMTYP
CB\$COM	COM	Cube	Cost Organizational Cube
CB\$CRNRSN_HCRNRSN	CRNRSN_HCRNRSN	Dimension_Hierarchy	Churn Reason: CRNRSN
CB\$CSGMNT_HCSGMNT	CSGMNT_HCSGMNT	Dimension_Hierarchy	Customer Segment: CSGMNT
CB\$CSM	CSM	Cube	Cell Statistic Cube
CB\$CUSTYP_HCUSTYP	CUSTYP_HCUSTYP	Dimension_Hierarchy	Customer Type: CUSTYP
CB\$CUST_HCUST	CUST_HCUST	Dimension_Hierarchy	Customer: CUST
CB\$DAB_HDAB	DAB_HDAB	Dimension_Hierarchy	Debt Aging Band: DAB
CB\$EDCM	EDCM	Cube	External Debt Collection Cube
CB\$GEO_HGEO	GEO_HGEO	Dimension_Hierarchy	Geography: GEO
CB\$HSKM	HSKM	Cube	Handset Stock Cube
CB\$HSMDL_HHSMDL	HSMDL_HHSMDL	Dimension_Hierarchy	Handset Model: HSMDL
CB\$IAM	IAM	Cube	Invoice Adjustment Cube
CB\$IARSN_HIARSN	IARSN_HIARSN	Dimension_Hierarchy	Invoice Adjustment Reason: IARSN
CB\$IATYP_HIATYP	IATYP_HIATYP	Dimension_Hierarchy	Invoice Adjustment Type: IATYP
CB\$ICT	ICT	Cube	Invoice Customer Type Cube
CB\$MNCT_HMNCT	MNCT_HMNCT	Dimension_Hierarchy	Mining Churn Type: MNCT
CB\$MNLSB_HMNLBSB	MNLSB_HMNLBSB	Dimension_Hierarchy	Mining Life Time Survival Band: MNLSB
CB\$MNLVB_HMNLVB	MNLVB_HMNLVB	Dimension_Hierarchy	Mining Life Time Value Band: MNLVB
CB\$MNSC_HMNSC	MNSC_HMNSC	Dimension_Hierarchy	Mining Sentiment Category: MNSC
CB\$NELMNT_HNELMNT	NELMNT_HNELMNT	Dimension_Hierarchy	Network Element: NELMNT
CB\$ORG_HBANNER	ORG_HBANNER	Dimension_Hierarchy	Organization: ORG
CB\$ORG_HCHAIN	ORG_HCHAIN	Dimension_Hierarchy	Organization: ORG
CB\$ORG_HCORPORATE	ORG_HCORPORATE	Dimension_Hierarchy	Organization: ORG
CB\$PCHNL_HPCHNL	PCHNL_HPCHNL	Dimension_Hierarchy	Payment Channel: PCHNL
CB\$PMP_HPMP	PMP_HPMP	Dimension_Hierarchy	Product Market Plan: PMP
CB\$PMTYP_HPMTYP	PMTYP_HPMTYP	Dimension_Hierarchy	Payment Method Type: PMTYP
CB\$POPT_HPOPT	POPT_HPOPT	Dimension_Hierarchy	Peak Offpeak Time: POPT
CB\$PRMTN_HCMPGN	PRMTN_HCMPGN	Dimension_Hierarchy	Promotion: PRMTN
CB\$PRMTN_HPRMTN	PRMTN_HPRMTN	Dimension_Hierarchy	Promotion: PRMTN
CB\$PROD_HPROD	PROD_HPROD	Dimension_Hierarchy	Product: PROD
CB\$PTTYP_HPTTYP	PTTYP_HPTTYP	Dimension_Hierarchy	Payment Transaction Type: PTTYP
CB\$RVN	RVN	Cube	Revenue Cube

**Table 4–12 (Cont.) OLAP Cube Materialized Views in ocdm\_sys Schema**

<b>Cube Materialized View Name</b>	<b>OLAP Object Name</b>	<b>OLAP Object Type</b>	<b>More Information</b>
CB\$SLCHNL_HSLCHNL	SLCHNL_HSLCHNL	Dimension_Hierarchy	<a href="#">Sales Channel: SLCHNL</a>
CB\$TIME_HTBSNS	TIME_HTBSNS	Dimension_Hierarchy	<a href="#">Time: TIME</a>
CB\$TSLT_HTSLT	TSLT_HTSLT	Dimension_Hierarchy	<a href="#">Time Slot: TSLT</a>

[Table 4–13](#) shows the OLAP cube views in ocdm\_sys schema.

**Table 4–13 OLAP Cube Views in ocdm\_sys schema**

<b>Cube View Name</b>	<b>OLAP Object Name</b>	<b>OLAP Object Type</b>	<b>More Information</b>
ACM_FCST_STTSTC_VIEW	ACM_FCST_STTSTC	Cube	<a href="#">Customer Acquisition Forecast Statistic Cube</a>
ACM_FCST_VIEW	ACM_FCST	Cube	<a href="#">Customer Acquisition Forecast Cube</a>
ACM_VIEW	ACM	Cube	<a href="#">Customer Acquisition Forecast Cube</a>
ADM_VIEW	ADM	Cube	<a href="#">Customer Acquisition Cube</a>
APM_VIEW	APM	Cube	<a href="#">Account Payment Cube</a>
ARM_VIEW	ARM	Cube	<a href="#">Account Refund Cube</a>
ARRSN_HARRSN_VIEW	ARRSN_HARRSN	Hierarchy	<a href="#">Account Refund Reason: ARRSN</a>
ARRSN_VIEW	ARRSN	Dimension	<a href="#">Account Refund Reason: ARRSN</a>
CAGNCY_HCAGNCY_VIEW	CAGNCY_HCAGNCY	Hierarchy	<a href="#">Collection Agency: CAGNCY</a>
CAGNCY_VIEW	CAGNCY	Dimension	<a href="#">Collection Agency: CAGNCY</a>
CCM_VIEW	CCM	Cube	<a href="#">Cost Product Market Plan Cube</a>
CHRN_VIEW	CHRN	Cube	<a href="#">Subscriber Churn Statistic Cube</a>
CMSN_VIEW	CMSN	Cube	<a href="#">Commission Cube</a>
CMTYP_HCMTYP_VIEW	CMTYP_HCMTYP	Hierarchy	<a href="#">Commission Type: CMTYP</a>
CMTYP_VIEW	CMTYP	Dimension	<a href="#">Commission Type: CMTYP</a>
CM_VIEW	CM	Cube	<a href="#">Contract Cube</a>
COM_VIEW	COM	Cube	<a href="#">Cost Organizational Cube</a>
CRNRSN_HCRNRSN_VIEW	CRNRSN_HCRNRSN	Hierarchy	<a href="#">Churn Reason: CRNRSN</a>
CRNRSN_VIEW	CRNRSN	Dimension	<a href="#">Churn Reason: CRNRSN</a>
CSGMNT_HCSGMNT_VIEW	CSGMNT_HCSGMNT	Hierarchy	<a href="#">Customer Segment: CSGMNT</a>
CSGMNT_VIEW	CSGMNT	Dimension	<a href="#">Customer Segment: CSGMNT</a>
CSM_FCST_VIEW	CSM_FCST	Cube	<a href="#">Cell Statistic Forecast Cube</a>
CSM_VIEW	CSM	Cube	<a href="#">Cell Statistic Cube</a>
CUSTYP_HCUSTYP_VIEW	CUSTYP_HCUSTYP	Hierarchy	<a href="#">Customer Type: CUSTYP</a>
CUSTYP_VIEW	CUSTYP	Dimension	<a href="#">Customer Type: CUSTYP</a>
CUST_HCUST_VIEW	CUST_HCUST	Hierarchy	<a href="#">Customer: CUST</a>
CUST_VIEW	CUST	Dimension	<a href="#">Customer: CUST</a>
DAB_HDAB_VIEW	DAB_HDAB	Hierarchy	<a href="#">Debt Aging Band: DAB</a>
DAB_VIEW	DAB	Dimension	<a href="#">Debt Aging Band: DAB</a>

**Table 4–13 (Cont.) OLAP Cube Views in ocdm\_sys schema**

<b>Cube View Name</b>	<b>OLAP Object Name</b>	<b>OLAP Object Type</b>	<b>More Information</b>
EDCM_VIEW	EDCM	Cube	External Debt Collection Cube
GEO_HGEO_VIEW	GEO_HGEO	Hierarchy	Geography: GEO
GEO_VIEW	GEO	Dimension	Geography: GEO
HSKM_FCST_VIEW	HSKM_FCST	Cube	Handset Stock Forecast Cube
HSKM_VIEW	HSKM	Cube	Handset Stock Cube
HSMDL_HHSMDL_VIEW	HSMDL_HHSMDL	Hierarchy	Handset Model: HSMDL
HSMDL_VIEW	HSMDL	Dimension	Handset Model: HSMDL
IAM_VIEW	IAM	Cube	Invoice Adjustment Cube
IARSN_HIARSN_VIEW	IARSN_HIARSN	Hierarchy	Invoice Adjustment Reason: IARSN
IARSN_VIEW	IARSN	Dimension	Invoice Adjustment Reason: IARSN
IATYP_HIATYP_VIEW	IATYP_HIATYP	Hierarchy	Invoice Adjustment Type: IATYP
IATYP_VIEW	IATYP	Dimension	Invoice Adjustment Type: IATYP
ICT_VIEW	ICT	Cube	Invoice Customer Type Cube
MNCT_HMNCT_VIEW	MNCT_HMNCT	Hierarchy	Mining Churn Type: MNCT
MNCT_VIEW	MNCT	Dimension	Mining Churn Type: MNCT
MNLSB_HMNLSB_VIEW	MNLSB_HMNLSB	Hierarchy	Mining Life Time Survival Band: MNLSB
MNLSB_VIEW	MNLSB	Dimension	Mining Life Time Survival Band: MNLSB
MNLVB_HMNLVB_VIEW	MNLVB_HMNLVB	Hierarchy	Mining Life Time Value Band: MNLVB
MNLVB_VIEW	MNLVB	Dimension	Mining Life Time Value Band: MNLVB
MNSC_HMNSC_VIEW	MNSC_HMNSC	Hierarchy	Mining Sentiment Category: MNSC
MNSC_VIEW	MNSC	Dimension	Mining Sentiment Category: MNSC
NELMNT_HNELMNT_VIEW	NELMNT_HNELMNT	Hierarchy	Network Element: NELMNT
NELMNT_VIEW	NELMNT	Dimension	Network Element: NELMNT
ORG_HBANNER_VIEW	ORG_HBANNER	Hierarchy	Organization: ORG
ORG_HCHAIN_VIEW	ORG_HCHAIN	Hierarchy	Organization: ORG
ORG_HCORPORATE_VIEW	ORG_HCORPORATE	Hierarchy	Organization: ORG
ORG_VIEW	ORG	Dimension	Organization: ORG
PCHNL_HPCHNL_VIEW	PCHNL_HPCHNL	Hierarchy	Payment Channel: PCHNL
PCHNL_VIEW	PCHNL	Dimension	Payment Channel: PCHNL
PMP_HPMP_VIEW	PMP_HPMP	Hierarchy	Product Market Plan: PMP
PMP_VIEW	PMP	Dimension	Product Market Plan: PMP
PMTYP_HPMTYP_VIEW	PMTYP_HPMTYP	Hierarchy	Payment Method Type: PMTYP
PMTYP_VIEW	PMTYP	Dimension	Payment Method Type: PMTYP
POPT_HPOPT_VIEW	POPT_HPOPT	Hierarchy	Peak Offpeak Time: POPT
POPT_VIEW	POPT	Dimension	Peak Offpeak Time: POPT

**Table 4–13 (Cont.) OLAP Cube Views in ocdm\_sys schema**

<b>Cube View Name</b>	<b>OLAP Object Name</b>	<b>OLAP Object Type</b>	<b>More Information</b>
PRMTN_HCMPGN_VIEW	PRMTN_HCMPGN	Hierarchy	Promotion: PRMTN
PRMTN_HPRMTN_VIEW	PRMTN_HPRMTN	Hierarchy	Promotion: PRMTN
PRMTN_VIEW	PRMTN	Dimension	Promotion: PRMTN
PROD_HPROD_VIEW	PROD_HPROD	Hierarchy	Product: PROD
PROD_VIEW	PROD	Dimension	Product: PROD
PTTYP_HPTTYP_VIEW	PTTYP_HPTTYP	Hierarchy	Payment Transaction Type: PTTYP
PTTYP_VIEW	PTTYP	Dimension	Payment Transaction Type: PTTYP
RVN_FCST_VIEW	RVN_FCST	Cube	Revenue Forecast Cube
RVN_VIEW	RVN	Cube	Revenue Cube
SLCHNL_HSLCHNL_VIEW	SLCHNL_HSLCHNL	Hierarchy	Sales Channel: SLCHNL
SLCHNL_VIEW	SLCHNL	Dimension	Sales Channel: SLCHNL
TIME_HTBSNS_VIEW	TIME_HTBSNS	Hierarchy	Time: TIME
TIME_VIEW	TIME	Dimension	Time: TIME
TSLT_HTSLT_VIEW	TSLT_HTSLT	Hierarchy	Time Slot: TSLT
TSLT_VIEW	TSLT	Dimension	Time Slot: TSLT



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# Oracle Communications Data Model Logical to Physical Mapping

This chapter provides a table listing the Oracle Communications Data Model entities in the logical data model, and the physical database tables or views to which the logical entities have been implemented or "physicalized".

This chapter includes the following section:

- [Overview of Mapping and Inheritance in Oracle Communications Data Model](#)
- [Logical to Physical Mappings for Oracle Communications Data Model](#)

## Overview of Mapping and Inheritance in Oracle Communications Data Model

The physical manifestation of the logical data model into database tables and relationships is not necessarily a pure 1:1 mapping from logical entities to physical tables. Physically, Oracle Communications Data Model is setup for best performance, and minimal data disk storage, leveraging the database options and consulting best practices wherever possible. The foundation layer follows the Third normal Form rule ("the key, only the key and nothing but the key") while the analytics layer is setup for optimal reporting performance. Partitions, Indexes, primary and foreign keys, constraints, and Materialized Views are used to map the logical model in the best possible way by default.

The complete Oracle Communications Data Model model is installed into two database schemas of the same database instance:

- `OCDM_SYS`: Schema includes most of Oracle Communications Data Model tables from the foundation and analytics layers, including the OLAP cubes.
- `OCDM_MINING`: Schema includes the mining models related objects like source tables, model building database packages, target tables and the specific views. This allows a third party mining tools to connect and interact with Oracle Communications Data Model when required, in a similar way that the Oracle Mining option would (with the difference that it would not necessarily be in-database mining).

### Inheritance with Subtypes and SuperEntities

Some logical entities are sub-types of super-entities. Physically, there are different ways to realize this. For example, `WIRELESS CALL EVENT` and `FIXED LINE CALL EVENT` are both sub-types of `NETWORK EVENT`. To avoid data duplication, one could use either `NETWORK EVENT` as a view of both tables or the sub-types could be a filtered view of the main table `NETWORK EVENT`. In this concrete case, `NETWORK`

EVENT is not a view. It stays a purely abstract entity because there is usually no search on very different type of events at this level. So decision on how to materialize the logical entity is based on consulting experience.

## Logical to Physical Mappings for Oracle Communications Data Model

Table 5–1 and Table 5–2 list the Oracle Communications Data Model entities in the logical data model, and the physical database tables or views to which the logical entities have been implemented or "physicalized".

**Table 5–1 Entity Mapping Table: Logical to Physical Mapping A to N**

Entity	Table or View
ACCESS METHOD	DWR_ACCS_MTHD
ACCESS METHOD ACCOUNT ASSIGNMENT	DWR_ACCS_MTHD_ACCT_ASGN
ACCESS METHOD ASSIGNMENT	DWR_ACCS_MTHD_ASGN
ACCESS METHOD ASSIGNMENT TYPE	DWL_ACCS_MTHD_ASGN_TYP
ACCESS METHOD ELEMENT	DWR_ACCS_MTHD_ELMNT
ACCESS METHOD ELEMENT TYPE	DWL_ACCS_MTHD_ELMNT_TYP
ACCESS METHOD EQUIPMENT ASSIGNMENT	DWR_ACCS_MTHD_EQPMNT_ASGN
ACCESS METHOD GEOGRAPHY ASSIGNMENT	DWR_ACCS_MTHD_GEO_ASGN
ACCESS METHOD PARTY ASSIGNMENT	DWR_ACCS_MTHD_PRTY_ASGN
ACCESS METHOD PARTY ASSIGNMENT TYPE	DWL_ACCS_MTHD_PRTY_ASGN_TYP
ACCESS METHOD POOL	DWR_ACCS_MTHD_POOL
ACCESS METHOD PORTING HISTORY	DWB_ACCS_MTHD_PORT_HIST
ACCESS METHOD SEGMENT	DWR_ACCS_MTHD_SGMNT
ACCESS METHOD SEGMENT PROD CAPABILITY RL	DWR_AM_SGMNT_PROD_CPBLTY_RL
ACCESS METHOD SERVICE ASSIGNMENT	DWR_ACCS_MTHD_SRVC_ASGN
ACCESS METHOD STATUS HISTORY	DWB_ACCS_MTHD_STAT_HIST
ACCESS METHOD STATUS REASON	DWL_ACCS_MTHD_STAT_RSN
ACCESS METHOD STATUS TYPE	DWL_ACCS_MTHD_STAT_TYP
ACCESS METHOD SUBSCRIPTION ASSIGNMENT	DWR_ACCS_MTHD_SBRP_ASGN
ACCESS METHOD TYPE	DWL_ACCS_MTHD_TYP
ACCESSORIES	DWR_ACCSRS
ACCOUNT	DWR_ACCT
ACCOUNT ACCOUNTING CYCLE HISTORY	DWB_ACCT_ACCTNG_CYCL_HIST
ACCOUNT ADJUSTMENT REASON	DWL_ACCT_ADJ_RSN
ACCOUNT ASSIGNMENT	DWR_ACCT_ASGN
ACCOUNT ASSIGNMENT REASON	DWL_ACCT_ASGN_RSN
ACCOUNT ASSIGNMENT TYPE	DWL_ACCT_ASGN_TYP
ACCOUNT BALANCE ADJUSTMENT	DWB_ACCT_BAL_ADJ
ACCOUNT BALANCE ADJUSTMENT TYPE	DWL_ACCT_BAL_ADJ_TYP
TBS	DWB_ACCT_BAL_BUCKET



**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
ACCOUNT BALANCE GROUP	DWR_ACCT_BAL_GRP
ACCOUNT BALANCE HISTORY	DWB_ACCT_BAL_HIST
ACCOUNT BALANCE TYPE	DWL_ACCT_BAL_TYP
ACCOUNT BILLING CYCLE HISTORY	DWR_ACCT_BLLG_CYCL_HIST
ACCOUNT BILLING FREQUENCY HISTORY	DWR_ACCT_BLLG_FRQNCY_HIST
ACCOUNT BILLING OCCURRENCE	DWB_ACCT_BLLG_OCCRNCE
ACCOUNT BILLING PERIOD HISTORY	DWR_ACCT_BLLG_PRD_HIST
ACCOUNT BUSINESS INTERACTION ROLE	DWR_ACCT_BSNS_INTRACN_RL
ACCOUNT CONTRACT RELATIONSHIP	DWR_ACCT_CNRT_RLTN
ACCOUNT COST	DWB_ACCT_COST
ACCOUNT CREDIT LIMIT	DWB_ACCT_CRDT_LMT
ACCOUNT DEBT DAY DRVD	DWD_ACCT_DEBT_DAY
ACCOUNT DEBT MONTH AGGR	DWA_ACCT_DEBT_MO
ACCOUNT DEBT WRITE OFF	DWB_ACCT_DEBT_WRT_OFF
ACCOUNT EVENT TYPE	DWL_ACCT_EVT_TYP
ACCOUNT MANAGEMENT HISTORY	DWB_ACCT_MNGMNT_HIST
ACCOUNT PARTY PMP RELATIONSHIP	DWR_ACCT_PRTY_PMP_RLTN
ACCOUNT PAYMENT	DWB_ACCT_PYMT
ACCOUNT PAYMENT DAY DRVD	DWD_ACCT_PYMT_DAY
ACCOUNT PAYMENT METHOD STATUS	DWB_ACCT_PYMT_MTHD_STAT
ACCOUNT PAYMENT METHOD STATUS HIST AGGR	DWA_ACCT_PYMT_MTHD_STAT_HIST
ACCOUNT PAYMENT METHOD STATUS HIST DRVD	DWD_ACCT_PYMT_MTHD_STAT_HIST
ACCOUNT PAYMENT METHOD STATUS REASON	DWL_ACCT_PYMT_MTHD_STAT_RSN
ACCOUNT PAYMENT METHOD STATUS TYPE	DWL_ACCT_PYMT_MTHD_STAT_TYP
ACCOUNT PAYMENT MONTH AGGR	DWA_ACCT_PYMT_MO
ACCOUNT PMP PARTICIPATION HISTORY	DWB_ACCT_PMP_PRTCPTN_HIST
ACCOUNT PREFERRED INVOICE DELIVERY	DWR_ACCT_PREF_INVC_DLVRY
ACCOUNT PREFERRED PAYMENT METHOD	DWR_ACCT_PREF_PYMT_MTHD
ACCOUNT PROFILE	DWR_ACCT_PRFL
ACCOUNT RECHARGE	DWB_ACCT_RCHRG
ACCOUNT REFUND	DWB_ACCT_RFND
ACCOUNT REFUND DAY DRVD	DWD_ACCT_RFND_DAY
ACCOUNT REFUND MONTH AGGR	DWA_ACCT_RFND_MO
ACCOUNT REFUND REASON	DWL_ACCT_RFND_RSN
ACCOUNT SEGMENT	DWR_ACCT_SGMNT
ACCOUNT SEGMENT ASSIGNMENT HISTORY	DWR_ACCT_SGMNT_ASGN_HIST
ACCOUNT SEGMENTATION MODEL	DWR_ACCT_SGMNT_MDL

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
ACCOUNT STATISTIC DRVD	DWD_ACCT_STTSTC
ACCOUNT STATISTIC TYPE AGGR	DWA_ACCT_STTSTC_TYP
ACCOUNT STATUS DRVD	DWD_ACCT_STAT
ACCOUNT STATUS HISTORY	DWB_ACCT_STAT_HIST
ACCOUNT STATUS REASON	DWL_ACCT_STAT_RSN
ACCOUNT STATUS TYPE	DWL_ACCT_STAT_TYP
ACCOUNT STATUS TYPE AGGR	DWA_ACCT_STAT_TYP
ACCOUNT SUBSCRIPTION ASSIGNMENT	DWR_ACCT_SBRP_ASGN
ACCOUNT SUBSCRIPTION ASSIGNMENT REASON	DWL_ACCT_SBRP_ASGN_RSN
ACCOUNT TYPE	DWL_ACCT_TYP
ACCOUNTING CYCLE	DWL_ACCT_CYCL
ACCOUNTING ITEM CATEGORY	DWL_ACCT_ITEM_CTGRY
ADDITIONAL TEXT	DWR_ADTNL_TXT
ADDRESS LOCATION	DWR_ADDR_LOC
ADDRESS LOCATION NAME	DWR_ADDR_LCTN_NAME
ADDRESS RELATED	DWR_ADDR_RLTD
ADDRESS RELATED REASON	DWL_ADDR_RLTD_RSN
ADDRESS RELATED TYPE	DWL_ADDR_RLTD_TYP
ADDRESS STATUS	DWB_ADDR_STAT
ADDRESS STATUS REASON	DWL_ADDR_STAT_RSN
ADDRESS TYPE	DWL_ADDR_TYP
ADVERTISING PERIOD	DWR_ADVR_PRD
ADVERTISING QUARTER	DWR_ADVR_QTR
ADVERTISING WEEK	DWR_ADVR_WK
ADVERTISING YEAR	DWR_ADVR_YR
AGE BAND	DWL_AGE_BND
AGE ON NET BAND	DWL_AGE_ON_NET_BND
AGGREGATION INTERFACE	DWR_AGGRTN_INTRFC
ALLOWANCE SBRP PRICE ALTERNATION	DWR_ALWNCE_SBRP_PRICE_ALTRTN
AMERICAN PROPERTY ADDRESS	DWR_AMRCN_PRPTY_ADDR
ANZSIC CLASSIFICATION	DWR_ANZSIC_CLSFCTN
APPOINTMENT CALENDAR	DWB_APNMNT_CLNDR
APPOINTMENT TYPE	DWL_APNMNT_TYP
ARPU BAND	DWL_ARPU_BND
ARPU BASE CUSTOMER TYPE AGGR	DWA_ARPU_BASE_CUST_TYP
ARPU BASE DRVD	DWD_ARPU_BASE
ASSET	DWR_ASSET

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
ASSET PARTY ASSOCIATION	DWR_ASSET_PRTY ASSOCTN
ATM INTERFACE	DWR_ATM_INTRFC
AUTONOMOUS SYSTEM	DWR_ATONOMS_SYS
AUXILIARY COMPONENT	DWR_AUXILIARY_CMPNT
AWARD LEVEL	DWL_AWRD_LVL
BANK	DWR_BNK
BANK DIRECT DEBIT CHANNEL	DWR_BNK_DRCT_DEBT_CHNL
BARING REASON	DWL_BARNG_RSN
BASE DAY	DWR_BASE_DAY
BASE STATION CONTROLLER	DWR_BASE_STN_CNTRLR
BASE TRANSCEIVER STATION	DWR_BASE_TRNSCVR_STN
BER FER ERROR RATIO DAY DRVD	DWD_BER_FER_ERR_RATIO_DAY
BER FER ERROR RATIO MONTH AGGR	DWA_BER_FER_ERR_RATIO_MO
BER FER TYPE	DWL_BER_FER_TYP
BILLING CYCLE	DWL_BLLG_CYCL
BILLING FREQUENCY	DWL_BLLG_FRQNCY
BILLING OCCURRENCE TYPE	DWL_BLLG_OCCRNCE_TYP
BILLING PERIOD	DWL_BLLG_PRD
BILLING STATUS CATEGORY	DWL_BLLG_STAT_CTGRY
BILLING STATUS TYPE	DWL_BLLG_STAT_TYP
BLACK LIST HISTORY	DWB_BLK_LST_HIST
BRAND	DWR_BRND
BRIDGING PROTOCOL	DWR_BRDNGG_PROTCL
BROADBAND RATING PLAN	DWR_BRDBND_RTNG_PLN
BROADBAND USAGE EVENT	DWB_BRDBND_USG_EVT
BUNDLED NETWORK EVENT	DWB_BNDLD_NTWK_EVT
BUSINESS HALF MONTH	DWR_BSNS_HLF_MO
BUSINESS HALF YEAR	DWR_BSNS_HLF_YR
BUSINESS INTERACTION	DWB_BSNS_INTRACN
BUSINESS INTERACTION ASSIGNMENT	DWR_BSNS_INTRACN_ASGN
BUSINESS INTERACTION ASSIGNMENT TYPE	DWL_BSNS_INTRACN_ASGN_TYP
BUSINESS INTERACTION ITEM	DWB_BSNS_INTRACN_ITEM
BUSINESS INTERACTION ITEM PRICE	DWB_BSNS_INTRACN_ITEM_PRICE
BUSINESS INTERACTION LOCATION ASSIGNMENT	DWR_BSNS_INTRACN_LOC_ASGN
BUSINESS INTERACTION TYPE	DWL_BSNS_INTRACN_TYP
BUSINESS INTERACTION VERSION	DWR_BSNS_INTRACN_VRSN
BUSINESS LEGAL STATUS	DWL_BSNS_LEGAL_STAT

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
BUSINESS MONTH	DWR_BSNS_MO
BUSINESS QUARTER	DWR_BSNS_QTR
BUSINESS UNIT COST	DWB_BSNS_UNIT_COST
BUSINESS UNIT JOB ROLE	DWR_BSNS_UNIT_JB_RL
BUSINESS UNIT SHIFT	DWR_BSNS_UNIT_SHFT
BUSINESS WEEK	DWR_BSNS_WK
BUSINESS YEAR	DWR_BSNS_YR
CABLE	DWR_CBL
CABLE MODEM	DWR_CBL_MDM
CALENDAR HALF MONTH	DWR_CLNDR_HLF_MO
CALENDAR HALF YEAR	DWR_CLNDR_HLF_YR
CALENDAR MONTH	DWR_CLNDR_MO
CALENDAR QUARTER	DWR_CLNDR_QTR
CALENDAR WEEK	DWR_CLNDR_WK
CALENDAR YEAR	DWR_CLNDR_YR
CALL CATEGORY	DWL_CALL_CTGRY
CALL CENTER	DWR_CALL_CNTR
CALL CENTER AGENT	DWR_CALL_CNTR_AGNT
CALL CENTER AGENT TYPE	DWL_CALL_CNTR_AGNT_TYP
CALL CENTER CALL DAY DRVD	DWD_CALL_CNTR_CALL_DAY
CALL CENTER CALL MONTH AGGR	DWA_CALL_CNTR_CALL_MO
CALL CENTER CASE DAY DRVD	DWD_CALL_CNTR_CASE_DAY
CALL CENTER CASE MONTH AGGR	DWA_CALL_CNTR_CASE_MO
CALL CENTER CASE SUB TYPE	DWL_CALL_CNTR_CASE_SUB_TYP
CALL CENTER CASE TITLE	DWL_CALL_CNTR_CASE_TTL
CALL CENTER CASE TYPE	DWL_CALL_CNTR_CASE_TYP
CALL CENTER SERVICE CAPABILITY	DWR_CALL_CNTR_SRVC_CAPBLTY
CALL DIRECTION	DWL_CALL_DRCTN
CALL FORWARD	DWR_CALL_FRWD
CALL OTHER TYPE	DWL_CALL_OTHR_TYP
CALL RECYCLED REASON	DWL_CALL_RCYLD_RSN
CALL ROUTING TYPE	DWL_CALL_RUTNG_TYP
CALL SERVICE TYPE	DWL_CALL_SRVC_TYP
CALL SOURCE DESTINATION	DWR_CALL_SRC_DSTN
CALL SUCCESS FAILURE TYPE	DWL_CALL_SUCC_FAIL_TYP
CALL SURCHARGE	DWL_CALL_SRCHRG
CALL TERMINATION REASON	DWL_CALL_TMNT_RSN

**Table 5-1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
CALL TYPE	DWL_CALL_TYP
CALLER ID	DWR_CALLR_ID
CAMPAIGN	DWR_CMPGN
CAMPAIGN CHANNEL	DWR_CMPGN_CHNL
CAMPAIGN CHANNEL ASSIGNMENT	DWR_CMPGN_CHNL_ASGN
CAMPAIGN CHANNEL TYPE	DWL_CMPGN_CHNL_TYP
CAMPAIGN CHARACTERISTIC	DWR_CMPGN_CHTRSTC
CAMPAIGN CHARACTERISTIC VALUE	DWR_CMPGN_CHTRSTC_VAL
CAMPAIGN COST	DWB_CMPGN_COST
CAMPAIGN DOCUMENT	DWR_CMPGN_DOC
CAMPAIGN MANAGEMENT HISTORY	DWR_CMPGN_MGMT_HIST
CAMPAIGN MESSAGE	DWR_CMPGN_MSG
CAMPAIGN MESSAGE CREATIVE	DWB_CMPGN_MSG_CRTVE
CAMPAIGN MESSAGE DEPICTION	DWR_CMPGN_MSG_DPCT
CAMPAIGN PURPOSE TYPE	DWL_CMPGN_PRPS_TYP
CAMPAIGN RELATIONSHIP	DWR_CMPGN_RLTN
CAMPAIGN STATUS	DWL_CMPGN_STAT
CAMPAIGN TERM VALUE	DWR_CMPGN_TERM_VAL
CAMPAIGN TYPE	DWL_CMPGN_TYP
CANNIBALIZATION DETAIL DAY DRVD	DWD_CANBLZTN_DTL_DAY
CANNIBALIZATION DETAIL MONTH AGGR	DWA_CANBLZTN_DTL_MO
CAPACITY	DWR_CPCTY
CARD	DWR_CARD
CARD RELATIONSHIP	DWR_CARD_RLTN
CELL	DWR_CELL
CELL OUTAGE REASON	DWL_CELL_OUTAGE_RSN
CELL SECTOR	DWR_CELL_SCTR
CELL SITE	DWR_CELL_SITE
CELL SITE COST	DWB_CELL_SITE_COST
CELL SITE TYPE	DWL_CELL_SITE_TYP
CELL STATISTIC DAY DRVD	DWD_CELL_STTSTC_DAY
CELL STATISTIC MONTH AGGR	DWA_CELL_STTSTC_MO
CELL TYPE	DWL_CELL_TYP
CFS SPEC VERSION DETAIL	DWR_CFS_SPEC_VRSN_DTL
CHANGE PROPOSED BY TYPE	DWL_CHNG_PPSD_BY_TYP
CHANNEL	DWR_CHNL
CHANNEL COST	DWB_CHNL_COST

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
CHANNEL TYPE	DWL_CHNL_TYP
CHASSIS	DWR_CHASSIS
CHASSIS POSITION	DWR_CHASSIS_POSN
CHURN PREDICT SOURCE DERIVED	DWD_CHRN_PRDCT_SRC
CHURN REASON	DWL_CHRN_RSN
CIRCUIT CATEGORY	DWL_CRCUT_CTGRY
CIRCUIT COMPONENT	DWR_CRCUT_CMPNT
CIRCUIT RENTAL	DWB_CRCUT_RNTL
CIRCUIT RENTAL EVENT TYPE	DWL_CRCUT_RNTL_EVT_TYP
CIRCUIT TRAFFIC	DWB_CRCUT_TRFC
CIRCUIT TYPE	DWL_CRCUT_TYP
COLLECTION	DWR_COLLCTN
COLLECTION AGENCY	DWR_COLLCTN_AGENCY
COMMISSION DAY DRVD	DWD_CMISN_DAY
COMMISSION MONTH AGGR	DWA_CMISN_MO
COMMISSION TYPE	DWL_CMISN_TYP
COMMUNICATION SERVICE	DWR_COMUNICTN_SRVC
COMP INTEL CHARACTERISTIC	DWR_COMP_INTL_CHTRSTC
COMP INTEL CHARACTERISTIC VALUE	DWR_COMP_INTL_CHTRSTC_VAL
COMP INTEL MARKET SEGMENT	DWR_COMP_INTL_MKT_SGMNT
COMP PROD CRRL CHARACTERISTIC	DWR_COMP_PROD_CRRL_CHTRSTC
COMP PROD CRRL CHARACTERISTIC ASSIGNMENT	DWR_COMP_PROD_CRRL_CHTRTC_ASGN
COMP PROD CRRL CHARACTERISTIC RELATIONSHIP	DWR_COMP_PROD_CRRL_CHRSTC_RLTN
COMP PROD CRRL CHARACTERISTIC VALUE	DWR_COMP_PROD_CRRL_CHTRSTC_VAL
COMPETITIVE TIER	DWR_CMPTVE_TIER
COMPETITOR	DWR_CMPTR
COMPETITOR INTELLIGENCE	DWR_CMPTR_INTLGNCE
COMPETITOR INTELLIGENCE PARTY ROLE	DWR_CMPTR_INTLGNCE_PRTY_RL
COMPETITOR MARKET SEGMENT ASSIGNMENT	DWR_CMPTR_MKT_SGMNT_ASGN
COMPETITOR MARKET SEGMENT SWOT	DWR_CMPTR_MKT_SGMNT_SWOT
COMPETITOR PRODUCT CORRELATION	DWR_CMPTR_PROD_CRLTN
COMPETITOR SWOT	DWR_CMPTR_SWOT
COMPETITOR TIER ASSIGNMENT	DWR_CMPTR_TIER_ASGN
COMPONENT SUBSCRIPTION PRICE	DWR_CMPNT_SBRP_PRICE
COMPOSITE COMP PROD CRRL CHARACTERISTIC	DWR_CMPST_COMP_PROD_CRL_CHTRTC
COMPOSITE PRODUCT RATING PLAN	DWR_CMPST_PROD_RTNG_PLN

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
COMPOSITE PRODUCT RATING PLAN ASSIGNMENT	DWR_CMPST_PROD_RTNG_PLN_ASGN
COMPOSITE SERVICE	DWR_CMPST_SRVC
COMPOSITE SERVICE INCLUSION	DWR_CMPST_SRVC_INCLSN
COMPOSITE SERVICE TYPE INCLUSION	DWR_CMPST_SRVC_TYP_INCLSN
COMPOSITE SUBSCRIPTION PRICE	DWR_CMPST_SBRP_PRICE
COMPOUND ELEMENT	DWR_CMPND_ELMNT
COMPOUND ELEMENT COLLECTION	DWR_CMPND_ELMNT_COLLCTN
COMPOUND ELEMENT COMPOUND DETAIL	DWR_CMPND_ELMNT_CMPND_DTL
COMPOUND ELEMENT DETAIL	DWR_CMPND_ELMNT_DTL
COMPOUND ELEMENT LOGICAL DETAIL	DWR_CMPND_ELMNT_LGICL_DTL
COMPOUND ELEMENT PHYSICAL DETAIL	DWR_CMPND_ELMNT_PHY_DTL
COMPOUND ELEMENT ROLE	DWR_CMPND_ELMNT_RL
COMPOUND ELEMENT ROLE ASSIGNMENT	DWR_CMPND_ELMNT_RL_ASGN
COMPOUND ELEMENT ROLE SPEC	DWR_CMPND_ELMNT_RL_SPEC
COMPOUND ELEMENT SPEC	DWL_CMPND_ELMNT_SPEC
COMPOUND ELEMENT SPEC ATOMIC	DWL_CMPND_ELMNT_SPEC_ATMC
COMPOUND ELEMENT SPEC COMPOSITE	DWL_CMPND_ELMNT_SPEC_CMPST
COMPOUND ELEMENT TP DETAIL	DWR_CMPND_ELMNT_TP_DTL
COMPOUND ELEMENT UNIT	DWR_CMPND_ELMNT_UNIT
CONNECT DISCONNECT DAY DRVD	DWD_CNCT_DSCNCT_DAY
CONNECT DISCONNECT MONTH AGGR	DWA_CNCT_DSCNCT_MO
CONNECTION	DWR_CNCTN
CONNECTION TERMINATION POINT	DWR_CNCTN_TMNT_PNT
CONSEQUENCE PERFORMANCE NOTIFICATION	DWR_CNSEQ_PRFMNC_NTFCN
CONSEQUENCE PERFORMANCE NOTIFICATION SPEC	DWR_CNSEQ_PRFMNC_NTFCN_SPEC
CONTACT LIST	DWR_CNCT_LST
CONTACT LIST CHANGE REASON	DWL_CNCT_LST_CHNG_RSN
CONTACT LIST COST	DWB_CNCT_LST_COST
CONTACT LIST RECURRENCE TYPE	DWL_CNCT_LST_RECRNC_TYP
CONTACT ROLES	DWL_CNCT_RLS
CONTENT	DWR_CNTNT
CONTENT DELIVERY EVENT	DWB_CNTNT_DLVRY_EVT
CONTENT PRICE	DWR_CNTNT_PRICE
CONTENT PRICING TYPE	DWL_CNTNT_PRCNG_TYP
CONTENT PROVIDER	DWR_CNTNT_PRVDR
CONTENT TYPE	DWL_CNTNT_TYP

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
CONTRACT	DWR_CNRT
CONTRACT APPROVAL	DWB_CNRT_APRVL
CONTRACT ASSIGNMENT	DWR_CNRT_ASGN
CONTRACT ASSIGNMENT REASON	DWL_CNRT_ASGN_RSN
CONTRACT ASSIGNMENT TYPE	DWL_CNRT_ASGN_TYP
CONTRACT CHANGE INITIATOR TYPE	DWL_CNRT_CHNG_INTTR_TYP
CONTRACT CHANGE TYPE	DWL_CNRT_CHNG_TYP
CONTRACT CHANGED DRVD	DWD_CNRT_CHNG
CONTRACT DOCUMENT	DWR_CNRT_DOC
CONTRACT DRVD	DWD_CNRT
CONTRACT ITEM	DWR_CNRT_ITEM
CONTRACT MONTH AGGR	DWA_CNRT_MO
CONTRACT PRODUCT ASSIGNMENT	DWR_CNRT_PROD_ASGN
CONTRACT STATUS	DWB_CNRT_STAT
CONTRACT STATUS REASON	DWL_CNRT_STAT_RSN
CONTRACT STATUS TYPE	DWL_CNRT_STAT_TYP
CONTRACT TERM TYPE	DWL_CNRT_TERM_TYP
CONTRACT TERM VALUE	DWB_CNRT_TERM_VAL
CONTRACT TYPE	DWL_CNRT_TYP
CORE INTERFACE	DWR_CORE_INTRFC
COST	DWB_COST
COST CENTER	DWR_COST_CNTR
COST CENTER BUDGET	DWB_COST_CNTR_BDGT
COST CUSTOMER DRVD	DWD_COST_CUST
COST CUSTOMER MONTH AGGR	DWA_COST_CUST_MO
COST ORGANIZATIONAL DRVD	DWD_COST_ORG
COST ORGANIZATIONAL MONTH AGGR	DWA_COST_ORG_MO
COST REASON	DWL_COST_RSN
COST SUBTYPE	DWL_COST_SUBTYP
COST TYPE	DWL_COST_TYP
COURIER	DWR_COURIER
COURIER COST	DWB_COURIER_COST
CPE LOGICAL DEVICE ROLE	DWR_CPE_LGICL_DVC_RL
CREDIT CATEGORY	DWR_CRDT_CTGRY
CREDIT CATEGORY DRVD	DWD_CRDT_CTGRY
CREDIT CATEGORY MONTH AGGR	DWA_CRDT_CTGRY_MO
CREDIT SCORE PROVIDER	DWR_CRDT_SCR_PRVDR



**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
CURRENCY	DWL_CRNCY
CURRENCY EXCHANGE RATE	DWB_CRNCY_EXCHNG_RATE
CURRENCY GEOGRAPHY ENTITY ASSIGNMENT	DWR_CRNCY_GEO_ENT_ASGN
CUSTOMER	DWR_CUST
CUSTOMER ACQUISITION SUMMARY DAY DRVD	DWD_CUST_ACQSTN_SUMM_DAY
CUSTOMER ACQUISITION SUMMARY MONTH AGGR	DWA_CUST_ACQSTN_SUMM_MO
CUSTOMER CLASS	DWL_CUST_CLASS
CUSTOMER CLASS ASSIGNMENT	DWR_CUST_CLASS_ASGN
CUSTOMER COST	DWB_CUST_COST
CUSTOMER DEBT COLLECTION DRVD	DWD_CUST_DEBT_COLLCTN
CUSTOMER DEBT COLLECTION MONTH AGGR	DWA_CUST_DEBT_COLLCTN_MO
CUSTOMER DOCUMENT	DWR_CUST_DOC
CUSTOMER EQUIPMENT INSTALLATION DAY DRVD	DWD_CUST_EQPMNT_INSTLTN_DAY
CUSTOMER EQUIPMENT INSTALLATION MO AGGR	DWA_CUST_EQPMNT_INSTLTN_MO
CUSTOMER FACING SERVICE	DWR_CUST_FCNG_SRVC
CUSTOMER FACING SERVICE ROLE	DWR_CUST_FCNG_SRVC_RL
CUSTOMER FACING SERVICE SPEC	DWL_CUST_FCNG_SRVC_SPEC
CUSTOMER FACING SERVICE SPEC ATOMIC	DWL_CUST_FCNG_SRVC_SPEC_ATMC
CUSTOMER FACING SERVICE SPEC COMPOSITE	DWL_CUST_FCNG_SRVC_SPEC_CMPST
CUSTOMER FACING SERVICE SPEC ROLE	DWR_CUST_FCNG_SRVC_SPEC_RL
CUSTOMER FACING SERVICE SPEC VERSION	DWR_CUST_FCNG_SRVC_SPEC_VRSN
CUSTOMER FIELD INSTALLATION	DWB_CUST_FLD_INSTLTN
CUSTOMER FIELD SERVICE ACTIVITY	DWB_CUST_FLD_SRVC_ACTVTY
CUSTOMER FIELD SERVICE DETAIL	DWB_CUST_FLD_SRVC_DTL
CUSTOMER FIELD SUPPORT	DWB_CUST_FLD_SPPRT
CUSTOMER GROUP	DWL_CUST_GRP
CUSTOMER GROUP ASSIGNMENT	DWR_CUST_GRP_ASGN
CUSTOMER INDIVIDUAL	DWR_CUST_INDVL
CUSTOMER OCCASION	DWR_CUST_OCCSN
CUSTOMER OCCASION TYPE	DWL_CUST_OCCSN_TYP
CUSTOMER ORDER	DWB_CUST_ORDR
CUSTOMER ORDER DOCUMENT	DWR_CUST_ORDR_DOC
CUSTOMER ORDER LINE ITEM	DWB_CUST_ORDR_LN_ITEM
CUSTOMER ORDER LINE ITEM STATE ASSIGN	DWB_CUST_ORDR_LN_ITEM_ST_ASGN
CUSTOMER ORDER PAYMENT	DWB_CUST_ORDR_PYMT
CUSTOMER ORDER PRIORITY TYPE	DWL_CUST_ORDR_PRIORITY_TYP

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
CUSTOMER ORDER STATE CHANGE REASON	DWL_CUST_ORDR_STATE_CHNG_RSN
CUSTOMER ORDER STATE ASSIGNMENT	DWB_CUST_ORDR_STATE_ASGN
CUSTOMER ORGANIZATION	DWR_CUST_ORG
CUSTOMER RESTRICTED INFO	DWR_CUST_RSTRCT_INFO
CUSTOMER REVENUE BAND	DWL_CUST_RVN_BND
CUSTOMER REVENUE BAND ASSIGNMENT	DWR_CUST_RVN_BND_ASGN
CUSTOMER REVENUE TYPE	DWL_CUST_RVN_TYP
CUSTOMER SCORE	DWR_CUST_SCR
CUSTOMER SEGMENT	DWR_CUST_SGMNT
CUSTOMER SEGMENTATION MODEL	DWR_CUST_SGMNT_MDL
CUSTOMER SIC ASSIGNMENT	DWR_CUST_SIC_ASGN
CUSTOMER SOURCE	DWR_CUST_SRC
CUSTOMER TYPE	DWL_CUST_TYP
DATA SERVICE EVENT	DWB_DATA_SRVC_EVT
DATA USAGE DAY DRVD	DWD_DATA_USG_DAY
DATA USAGE MONTH AGGR	DWA_DATA_USG_MO
DAY	DWR_DAY
DAY ACTUAL CONDITION	DWR_DAY_ACT_CONDITION
DAY TODATE TRANSFORMATION	DWR_DAY_TODATE_TRANS
DAY TRANSFORMATION	DWR_DAY_TRANS
DEAL	DWR_DEAL
DEALER	DWR_DLR
DEALER DISCOUNT GROUP ASSIGNMENT	DWR_DLR_DISC_GRP_ASGN
DEBT AGING BAND	DWL_DEBT_AGNG_BND
DEBT COLLECTION	DWB_DEBT_COLLCTN
DEBT COLLECTION ASSIGNMENT	DWB_DEBT_COLLCTN_ASGN
DEBT COLLECTION ASSIGNMENT BATCH	DWB_DEBT_COLLCTN_ASGN_BTCH
DEMOGRAPHIC CHARACTERISTIC	DWR_DEMOG_CHTRSTC
DEMOGRAPHIC CHARACTERISTIC VALUE	DWR_DEMOG_CHTRSTC_VAL
DEMOGRAPHY ATTRIBUTE	DWR_DEMOG_ATTRIB
DEMOGRAPHY GROUP	DWR_DEMOG_GRP
DERIVED VALUE	DWR_DRVD_VAL
DESTINATION TYPE	DWL_DSTN_TYP
DEVICE INTERFACE	DWR_DVC_INTRFC
DEVICE INTERFACE DETAIL	DWR_DVC_INTRFC_DTL
DEVICE INTERFACE PHYSICAL PORT ASSIGNMENT	DWR_DVC_INTRFC_PHY_PRT_ASGN
DEVICE INTERFACE ROLE	DWR_DVC_INTRFC_RL

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
DEVICE INTERFACE TP ASSIGNMENT	DWR_DVC_INTRFC_TP_ASGN
DIRECT DEBIT STATUS REASON	DWL_DRCT_DEBT_STAT_RSN
DISCOUNT GROUP	DWR_DISC_GRP
DISCOUNT SBRP PRICE ALTERATION	DWR_DISC_SBRP_PRICE_ALTRTN
DISTANCE BAND	DWL_DSTNC_BND
DIVERT RETRIEVE REASON	DWL_DVRT_RTRV_RSN
DIVERT RETRIEVE TYPE	DWL_DVRT_RTRV_TYP
DOCUMENT CONDITION TYPE	DWL_DOC_CNDTN_TYP
DOCUMENT TYPE	DWL_DOC_TYP
DOCUMENT TYPE GROUP	DWL_DOC_TYP_GRP
DOCUMENT TYPE GROUP ASSIGNMENT	DWR_DOC_TYP_GRP_ASGN
DSL MODEM	DWR_DSL_MDM
EDGE INTERFACE	DWR_EDGE_INTRFC
EDUCATION	DWL_EDU
ELEMENT CHARACTERISTIC	DWR_ELMNT_CHTRSTC
ELEMENT CHARACTERISTIC ASSIGNMENT	DWR_ELMNT_CHTRSTC_ASGN
ELEMENT CHARACTERISTIC RELATIONSHIP	DWR_ELMNT_CHTRSTC_RLTN
ELEMENT CHARACTERISTIC VALUE	DWR_ELMNT_CHTRSTC_VAL
ELEMENT CHARACTERISTIC VALUE ASSIGNMENT	DWR_ELMNT_CHTRSTC_VAL_ASGN
ELEMENT CHARACTERISTIC VALUE RELATIONSHIP	DWR_ELMNT_CHTRSTC_VAL_RLTN
EMPLOYEE	DWR_EMP
EMPLOYEE ACTUAL LABOR HOURLY	DWB_EMP_ACT_LBR_HRLY
EMPLOYEE ACTUAL LABOR SALARIED	DWB_EMP_ACT_LBR_SALARIED
EMPLOYEE COST	DWB_EMP_COST
EMPLOYEE DESIGNATION	DWL_EMP_DESIG
EMPLOYEE DISCOUNT GROUP ASSIGNMENT	DWR_EMP_DISC_GRP_ASGN
EMPLOYEE EXPENSE REPORT	DWB_EMP_EXP_RPT
EMPLOYEE EXPENSE REPORT ITEM	DWB_EMP_EXP_RPT_ITEM
EMPLOYEE JOB ROLE ASSIGNMENT	DWR_EMP_JB_RL_ASGN
EMPLOYEE JOB ROLE TYPE	DWL_EMP_JB_RL_TYP
EMPLOYEE LANGUAGE CAPABILITY	DWR_EMP_LANG_CAPBLTY
EMPLOYEE RESTRICTED INFO	DWR_EMP_RSTRCT_INFO
EMPLOYEE SCHEDULE	DWR_EMP_SCHL
EMPLOYEE TRAINING RECORD	DWB_EMP_TRNG_REC
EMPLOYEE TYPE	DWL_EMP_TYP
ENTITY	DWR_ENT

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

Entity	Table or View
ENTITY ROLE	DWR_ENT_RL
ENTITY SPECIFICATION	DWR_ENT_SPECFTN
EQUIPMENT	DWR_EQPMNT
EQUIPMENT CENTER	DWR_EQPMNT_CNTR
EQUIPMENT CENTER COST	DWB_EQPMNT_CNTR_COST
EQUIPMENT FUNCTIONALITY	DWR_EQPMNT_FNCTNLTY
EQUIPMENT FUNCTIONALITY ASSIGNMENT	DWR_EQPMNT_FNCTNLTY_ASGN
EQUIPMENT HOLDER	DWR_EQPMNT_HLDR
EQUIPMENT INSTANCE	DWR_EQPMNT_INSTNC
EQUIPMENT INSTANCE RENTING CONTRACT	TBS
EQUIPMENT INSTANCE STATUS HISTORY	DWB_EQPMNT_INSTNC_STAT_HIST
EQUIPMENT INSTANCE STATUS TYPE	DWL_EQPMNT_INSTNC_STAT_TYP
EQUIPMENT SUBSCRIPTION	DWR_EQPMNT_SBRP
EQUIPMENT TYPE	DWL_EQPMNT_TYP
ERRORED MEDIATED CALL EVENT	DWB_ERRD_MDTD_CALL_EVT
ERRORED RATED WIRELESS CALL EVENT	DWB_ERRD_RTD_WRLS_CALL_EVT
ERRORED RAW WIRELESS CALL EVENT	DWB_ERRD_RAW_WRLS_CALL_EVT
EVENT	DWB_EVT
EVENT ACCESS METHOD ACTIVITY	DWB_EVT_ACCS_MTHD_ACTVTVY
EVENT ACCOUNT	DWB_EVT_ACCT
EVENT ASSIGNMENT	DWB_EVT_ASGN
EVENT ASSIGNMENT REASON	DWL_EVT_ASGN_RSN
EVENT ASSIGNMENT TYPE	DWL_EVT_ASGN_TYP
EVENT CATEGORY	DWL_EVT_CTGRY
EVENT CIRCUIT RENTAL	DWB_EVT_CRCUT_RNTL
EVENT CLASS	DWL_EVT_CLASS
EVENT COST	DWB_EVT_COST
EVENT EMIT DETAIL	DWB_EVT_EMIT_DTL
EVENT EMPLOYEE PAYROLL	DWB_EVT_EMP_PYRL
EVENT EQUIPMENT INSTANCE	DWB_EVT_EQPMNT_INSTNC
EVENT FINANCIAL	DWB_EVT_FINCL
EVENT GEOGRAPHY	DWB_EVT_GEO
EVENT GIFT REDEMPTION	DWB_EVT_GFT_RDMPN
EVENT INVOICE DELIVERY	DWB_EVT_INVC_DLVRV
EVENT LOCATION	DWR_EVT_LOC
EVENT LOYALTY PROGRAM	DWB_EVT_LYLYTY_PROG
EVENT LOYALTY PROGRAM ACCUMULATION	DWB_EVT_LYLYTY_PROG_ACMLTN

**Table 5-1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

Entity	Table or View
EVENT LOYALTY PROGRAM REDEMPTION	DWB_EVT_LYLYTY_PROG_RDMPNTN
EVENT PARTY ASSIGNMENT	DWB_EVT_PRTY_ASGN
EVENT PARTY INTERACTION	DWB_EVT_PRTY_INTRACN
EVENT PARTY INTERACTION CALL	DWB_EVT_PRTY_INTRACN_CALL
EVENT PARTY INTERACTION EMAIL	DWB_EVT_PRTY_INTRACN_EML
EVENT PARTY INTERACTION LETTER	DWB_EVT_PRTY_INTRACN_LTTR
EVENT PARTY INTERACTION VISIT	DWB_EVT_PRTY_INTRACN_VST
EVENT PARTY PROFILE	DWB_EVT_PRTY_PRFL
EVENT PARTY ROLE	DWR_EVT_PRTY_RL
EVENT PREPAID MOBILE	DWB_EVT_PRPD_MBL
EVENT PRODUCT PACKAGE	DWB_EVT_PROD_PKG
EVENT REASON	DWL_EVT_RSN
EVENT REASON CATEGORY	DWL_EVT_RSN_CTGRY
EVENT RESOLUTION	DWR_EVT_RSLTN
EVENT RESPONSE REASON	DWL_EVT_RESPN_RSN
EVENT RESULT	DWL_EVT_RSLT
EVENT SIM CARD	DWB_EVT_SIM_CARD
EVENT STATUS	DWB_EVT_STAT
EVENT STATUS REASON	DWL_EVT_STAT_RSN
EVENT STATUS TYPE	DWL_EVT_STAT_TYP
EVENT SUBSCRIPTION	DWB_EVT_SBRP
EVENT SUBSCRIPTION CHANGE	DWB_EVT_SBRP_CHNG
EVENT TRIGGER DETAIL	DWB_EVT_TRGR_DTL
EVENT TYPE	DWL_EVT_TYP
EVENT WEB REGISTRATION	DWB_EVT_WEB_RGSTRN
EVENT WEB VISIT	DWB_EVT_WEB_VST
EXCLUDE PORT DETAIL	DWR_EXCLD_PRT_DTL
EXTERNAL CREDIT PROFILE	DWR_EXTRNL_CRDT_PRFL
EXTERNAL CREDIT PROFILE ASSIGNMENT	DWR_EXTRNL_CRDT_PRFL_ASGN
EXTERNAL DEBT COLLECTION DAY DRVD	DWD_EXTRNL_DEBT_COLLCTN_DAY
EXTERNAL DEBT COLLECTION MONTH AGGR	DWA_EXTRNL_DEBT_COLLCTN_MO
EXTERNAL INFORMATION SOURCE	DWR_EXTRNL_INFO_SRC
EXTERNAL OPERATOR	DWR_EXTRNL_OPRTR
EXTERNAL ORGANIZATION TYPE	DWL_EXTRNL_ORG_TYP
FACTOR COMPANY	DWR_FCTR_CMPNY
FAULT RESOLUTION TYPE	DWL_FLT_RSLTN_TYP
FAULT TYPE	DWL_FLT_TYP

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
FIELD ACTIVITY RESULT TYPE	DWL_FLD_ACTVITY_RSLT_TYP
FIELD ACTIVITY TYPE	DWL_FLD_ACTVITY_TYP
FIREWALL ROLE	DWR_FRWL_RL
FISCAL HALF MONTH	DWR_FSCL_HLF_MO
FISCAL HALF YEAR	DWR_FSCL_HLF_YR
FISCAL MONTH	DWR_FSCL_MO
FISCAL QUARTER	DWR_FSCL_QTR
FISCAL WEEK	DWR_FSCL_WK
FISCAL YEAR	DWR_FSCL_YR
FIXED LINE CALL EVENT	DWB_FIXED_LN_CALL_EVT
FIXED LINE PORT	DWR_FIXED_LN_PRT
FIXED LINE RATING PLAN	DWR_FIXED_LN_RTNG_PLN
FLEXIBLE CHARACTERISTIC	DWR_FXBLE_CHTRSTC
FLEXIBLE CHARACTERISTIC ASSIGNMENT	DWR_FXBLE_CHTRSTC_ASGN
FLEXIBLE CHARACTERISTIC ASSIGNMENT TYPE	DWR_FXBLE_CHTRSTC_ASGN_TYP
FLEXIBLE CHARACTERISTIC RELATIONSHIP	DWR_FXBLE_CHTRSTC_RLTN
FLEXIBLE CHARACTERISTIC TYPE	DWR_FXBLE_CHTRSTC_TYP
FLEXIBLE CHARACTERISTIC VALUE	DWR_FXBLE_CHTRSTC_VAL
FLEXIBLE CHARACTERISTIC VALUE ASSIGNMENT	DWR_FXBLE_CHTRSTC_VAL_ASGN
FLEXIBLE CHARACTERISTIC VALUE RELATIONSHIP	DWR_FXBLE_CHTRSTC_VAL_RLTN
FRAUD PROFILE CLASS	DWL_FRAUD_PRFL_CLASS
GENDER	DWL_GNDR
GEOGRAPHY BUILDING	DWR_GEO_BLDG
GEOGRAPHY CITY	DWR_GEO_CITY
GEOGRAPHY COUNTRY	DWR_GEO_CNTRY
GEOGRAPHY COUNTY	DWR_GEO_CNTY
GEOGRAPHY DEMOGRAPHIC GROUP	DWR_GEO_DEMOG_GRP
GEOGRAPHY DEMOGRAPHY ATTRIBUTE	DWR_GEO_DEMOG_ATRIB
GEOGRAPHY DEMOGRAPHY VALUE	DWR_GEO_DEMOG_VAL
GEOGRAPHY ENTITY	DWR_GEO_ENT
GEOGRAPHY ENTITY ASSIGNMENT	DWR_GEO_ENT_ASGN
GEOGRAPHY ENTITY HIER LEVEL ASSIGNMENT	DWR_GEO_ENT_HIER_LVL_ASGN
GEOGRAPHY HIERARCHY	DWR_GEO_HRCHY
GEOGRAPHY HIERARCHY LEVEL	DWR_GEO_HRCHY_LVL
GEOGRAPHY HIERARCHY LEVEL ASSIGNMENT	DWR_GEO_HRCHY_LVL_ASGN
GEOGRAPHY LEVEL	DWR_GEO_LVL

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
GEOGRAPHY LEVEL ATTRIBUTE	DWR_GEO_LVL_ATTRIB
GEOGRAPHY LEVEL ATTRIBUTE VALUE	DWR_GEO_LVL_ATTRIB_VAL
GEOGRAPHY REGION	DWR_GEO_RGN
GEOGRAPHY STATE	DWR_GEO_STATE
GEOGRAPHY STREET	DWR_GEO_STRT
GEOGRAPHY SUB REGION	DWR_GEO_SBRGN
GEOGRAPHY WORLD	DWR_GEO_WORLD
GIVE AWAY ITEM DAY DRVD	DWD_GIVE_AWAY_ITEM_DAY
GIVE AWAY ITEM MONTH AGGR	DWA_GIVE_AWAY_ITEM_MO
GIVE AWAY TYPE	DWL_GIVE_AWAY_TYP
GL REFERENCE	DWR_GL_REF
GPRS PCU DAY DRVD	DWD_GPRS_PCU_DAY
GPRS PCU MONTH AGGR	DWA_GPRS_PCU_MO
GPRS SERVICE	DWR_GPRS_SRVC
GPRS SERVICES DAY DRVD	DWD_GPRS_SRVCS_DAY
GPRS SERVICES MONTH AGGR	DWA_GPRS_SRVCS_MO
HALF HOUR	DWR_HLF_HR
HALF MONTH TODATE TRANSFORMATION	DWR_HLF_MO_TODATE_TRANS
HALF MONTH TRANSFORMATION	DWR_HLF_MO_TRANS
HALF YEAR TODATE TRANSFORMATION	DWR_HLF_YR_TODATE_TRANS
HALF YEAR TRANSFORMATION	DWR_HLF_YR_TRANS
HANDSET INSTANCE	DWR_HNDST_INSTNC
HANDSET MODEL	DWR_HNDST_MDL
HANDSET STOCK DAY DRVD	DWD_HNDST_STCK_DAY
HANDSET STOCK MO AGGR	DWA_HNDST_STCK_MO
HANDSET SUBSIDY DAY DRVD	DWD_HNDST_SUBSDY_DAY
HANDSET SUBSIDY MONTH AGGR	DWA_HNDST_SUBSDY_MO
HARDWARE	DWR_HRDWR
HOLDER ATOMIC	DWR_HLDR_ATMC
HOLDER COMPOSITE	DWR_HLDR_CMPST
HOUR	DWR_HR
HOUSEHOLD	DWR_HH
IDD	DWR_IDD
IDD CALL EVENT	DWB_IDD_CALL_EVT
IN PLATFORM DAY DRVD	DWD_IN_PLTFRM_DAY
IN PLATFORM MONTH AGGR	DWA_IN_PLTFRM_MO
INDIVIDUAL DEMOGRAPHY PROFILE	DWR_INDVL_DEMOG_PRFL

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
INDIVIDUAL DEMOGRAPHY VALUE	DWR_INDVL_DEMOG_VAL
INDIVIDUAL NAME	DWR_INDVL_NAME
INITIATIVE RESULT TYPE	DWL_INTTV_RSLT_TYP
INITIATIVE TYPE	DWL_INTTV_TYP
INTERACTION ANSWER CHOICE	DWB_INTRACN_ANSWR_CHOICE
INTERACTION CHANNEL	DWR_INTRACN_CHNL
INTERACTION DIRECTION	DWL_INTRACN_DRCTN
INTERACTION QUESTION RESPONSE	DWB_INTRACN_QUES_RESPN
INTERACTION REASON	DWL_INTRACN_RSN
INTERACTION RESULT TYPE	DWL_INTRACN_RSLT_TYP
INTERACTION STATUS	DWL_INTRACN_STAT
INTERACTION TYPE	DWL_INTRACN_TYP
INTERNAL DEBT COLLECTION DAY DRVD	DWD_INTRNL_DEBT_COLLCTN_DAY
INTERNAL DEBT COLLECTION MONTH AGGR	DWA_INTRNL_DEBT_COLLCTN_MO
INTERNET ACCESS EVENT	DWB_INTRNT_ACCS_EVT
INVOICE	DWB_INVC
INVOICE ADJUSTMENT	DWB_INVC_ADJ
INVOICE ADJUSTMENT DRVD	DWD_INVC_ADJ
INVOICE ADJUSTMENT MONTH AGGR	DWA_INVC_ADJ_MO
INVOICE ADJUSTMENT QUOTA	DWR_INVC_ADJ_QTA
INVOICE ADJUSTMENT REASON	DWL_INVC_ADJ_RSN
INVOICE ADJUSTMENT TYPE	DWL_INVC_ADJ_TYP
INVOICE CUSTOMER TYPE AGGR	DWA_INVC_CUST_TYP
INVOICE DELIVERY FORMAT	DWL_INVC_DLVRY_FRMT
INVOICE DELIVERY TYPE	DWL_INVC_DLVRY_TYP
INVOICE DISCOUNT	DWB_INVC_DISC
INVOICE DISCOUNT REASON	DWL_INVC_DISC_RSN
INVOICE DISCOUNT TYPE	DWL_INVC_DISC_TYP
INVOICE DRVD	DWD_INVC
INVOICE ITEM	DWB_INVC_ITEM
INVOICE ITEM DETAIL	DWB_INVC_ITEM_DTL
INVOICE ITEM DETAIL TYPE	DWL_INVC_ITEM_DTL_TYP
INVOICE ITEM RELATIONSHIP	DWB_INVC_ITEM_RLTN
INVOICE ITEM TYPE	DWL_INVC_ITEM_TYP
INVOICE PAYMENT ASSIGNMENT	DWB_INVC_PYMT_ASGN
INVOICE PAYMENT TERM TYPE	DWL_INVC_PYMT_TERM_TYP
INVOICE TAX ITEM	DWB_INVC_TAX_ITEM



**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
INVOICE TYPE	DWL_INVC_TYP
IP ADDRESS	DWR_IP_ADDR
IP ADDRESS POOL	DWR_IP_ADDR_POOL
IP SUBNET	DWR_IP_SUBNET
IPV4 ADDRESS	DWR_IPV4_ADDR
ISP	DWR_ISP
ISP BUSINESS	DWR_ISP_BSNS
ISP BUSINESS ASSIGNMENT	DWR_ISP_BSNS_ASGN
ISP BUSINESS TYPE	DWL_ISP_BSNS_TYP
ISP TYPE	DWL_ISP_TYP
ISP USAGE EVENT	DWB_ISP_USG_EVT
ISP USER	DWR_ISP_USER
ITEM	DWR_ITEM
ITEM TYPE	DWL_ITEM_TYP
JOB	DWR_JB
JOB ROLE	DWR_JB_RL
KEY PERFORMANCE INDICATOR SLS PARM	DWR_KEY_PRFMNC_IND_SLS_PARM
KEY QUALITY INDICATOR SLS PARM	DWR_KEY_QLTY_IND_SLS_PARM
LAN	DWR_LAN
LAN PROTOCOL	DWR_LAN_PROTCL
LANGUAGE	DWL_LANG
LANGUAGE DIALECT	DWR_LANG_DIALECT
LAYER NETWORK	DWR_LAYER_NTWK
LEGAL PROCESS STATUS TYPE	DWL_LEGAL_PRCES_STAT_TYP
LETTER TYPE	DWL_LTTR_TYP
LINE ACTIVATION TERMINATION DAY DRVD	DWD_LN_ACTVTN_TMNT_DAY
LINE ACTIVATION TERMINATION MONTH AGGR	DWA_LN_ACTVTN_TMNT_MO
LOCAL ADDRESS LOCATION	DWR_LCL_ADDR_LOC
LOGICAL CAPACITY	DWR_LGICL_CPCTY
LOGICAL DEVICE	DWR_LGICL_DVC
LOGICAL DEVICE ATOMIC	DWR_LGICL_DVC_ATMC
LOGICAL DEVICE COMPOSITE	DWR_LGICL_DVC_CMPST
LOGICAL DEVICE OS ASSIGNMENT	DWR_LGICL_DVC_OS_ASGN
LOGICAL DEVICE ROLE	DWR_LGICL_DVC_RL
LOGICAL DEVICE ROLE SPEC	DWR_LGICL_DVC_RL_SPEC
LOGICAL ELEMENT	DWR_LGICL_ELMNT
LOGICAL ELEMENT PHYSICAL SUPPORT	DWR_LGICL_ELMNT_PHY_SPPRT

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
LOGICAL ELEMENT ROLE	DWR_LGICL_ELMNT_RL
LOGICAL ELEMENT ROLE ASSIGNMENT	DWR_LGICL_ELMNT_RL_ASGN
LOGICAL ELEMENT ROLE SPEC	DWR_LGICL_ELMNT_RL_SPEC
LOGICAL ELEMENT SPEC	DWL_LGICL_ELMNT_SPEC
LOGICAL ELEMENT SPEC ATOMIC	DWL_LGICL_ELMNT_SPEC_ATMC
LOGICAL ELEMENT SPEC COMPOSITE	DWL_LGICL_ELMNT_SPEC_CMPST
LOGICAL ELEMENT SPEC PHYSICAL SUPPORT	DWR_LGICL_ELMNT_SPEC_PHY_SPPRT
LOGICAL ELEMENT TYPE VERSION	DWR_LGICL_ELMNT_TYP_VRSN
LOGICAL INTERFACE	DWR_LGICL_INTRFC
LOOKUP	DWL_LOOKUP
LOYALTY PROGRAM	DWR_LYLTY_PROG
LOYALTY PROGRAM CHANNEL	DWR_LYLTY_PROG_CHNL
LOYALTY PROGRAM DAY DRVD	DWD_LYLTY_PROG_DAY
LOYALTY PROGRAM EVENT CATEGORY	DWL_LYLTY_PROG_EVT_CTGRY
LOYALTY PROGRAM EVENT TYPE	DWL_LYLTY_PROG_EVT_TYP
LOYALTY PROGRAM MO AGGR	DWA_LYLTY_PROG_MO
LOYALTY PROGRAM PARTY ROLE	DWL_LYLTY_PROG_PRTY_RL
LOYALTY PROGRAM POINTS BALANCE	DWB_LYLTY_PROG_PTS_BAL
LOYALTY PROGRAM TERMINATION REASON	DWL_LYLTY_PROG_TMNT_RSN
MAILBOX	DWR_MAILBOX
MANAGE ACTION TYPE	DWL_MNG_ACTN_TYP
MANAGED ENTITY	DWR_MANAGED_ENT
MANAGED HARDWARE	DWR_MANAGED_HRDWR
MANAGED TRANSMISSION ENTITY	DWR_MANAGED_TRNSMISN_ENT
MANAGEMENT DOMAIN	DWR_MGMT_DOMAIN
MANAGEMENT PROTOCOL	DWR_MGMT_PROTCL
MARITAL STATUS	DWL_MRTL_STAT
MARKET AREA	DWR_MKT_AREA
MARKET AREA LEVEL	DWR_MKT_AREA_LVL
MARKET OPERATOR PORTING DERIVED	DWD_MKT_OPRTR_PRTNG
MARKET PLAN DOCUMENT REQUIREMENT	DWR_MKT_PLN_DOC_REQRMNT
MARKET PLAN MANAGEMENT	DWB_MKT_PLN_MGMT
MARKET PLAN SUBSTITUTE BY DOC	DWR_MKT_PLN_SUB_BY_DOC
MARKET PLAN TERM VALUE	DWR_MKT_PLN_TERM_VAL
MARKET SEGMENT	DWR_MKT_SGMNT
MARKET SEGMENT CHARACTERISTIC	DWR_MKT_SGMNT_CHTRSTC
MARKET SEGMENT CHARACTERISTIC VALUE	DWR_MKT_SGMNT_CHTRSTC_VAL

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
MARKET SEGMENT INCLUSION	No physical table is associated with this entity.
MARKET SHARE MONTH AGGR	DWA_MKT_SHARE
MARKET SHARE MONTH DRVD	DWD_MKT_SHARE
MARKET STATISTICS	DWR_MKT_STTSTCS
MARKET STATISITC INCLUSION	No physical table is associated with this entity.
MEDIA INTERFACE	DWR_MEDIA_INTRFC
MEDIA OBJECT	DWR_MEDIA_OBJ
MEDIA OBJECT ASSIGNMENT	DWR_MEDIA_OBJ_ASGN
MEDIA OBJECT COST	DWB_MEDIA_OBJ_COST
MEDIA OBJECT TYPE	DWL_MEDIA_OBJ_TYP
MEDIATED CALL EVENT	DWB_MDTD_CALL_EVT
MEDIATION STATUS CATEGORY	DWL_MDTN_STAT_CTGRY
MEDIATION STATUS REASON	DWL_MDTN_STAT_RSN
MEDIATION STATUS TYPE	DWL_MDTN_STAT_TYP
MINUTE	DWR_MNT
MINUTE ALLOWANCE	DWB_MNT_ALLWNC
MMS EVENT	DWB_MMS_EVT
MOBILE SWITCHING CENTER	DWR_MBL_SWTCHNG_CNTR
MODEL TYPE	DWL_MDL_TYP
MONTH TODATE TRANSFORMATION	DWR_MO_TODATE_TRANS
MONTH TRANSFORMATION	DWR_MO_TRANS
MSC TRAFFIC DAY DRVD	DWD_MSC_TRFC_DAY
MSC TRAFFIC MONTH AGGR	DWA_MSC_TRFC_MO
MUSIC DOWNLOAD	DWR_MUS_DNLD
NAICS CLASSIFICATION	DWR_NAICS_CLSFCTN
NAICS INDUSTRY	DWR_NAICS_INDSTRY
NAICS INDUSTRY GROUP	DWR_NAICS_INDSTRY_GRP
NAICS INDUSTRY SECTOR	DWR_NAICS_INDSTRY_SCTR
NAICS INDUSTRY SUBSECTOR	DWR_NAICS_INDSTRY_SUBSCTR
NATIONALITY	DWL_NTNLTY
NEGOTIATED SERVICE LEVEL SPEC	DWR_NEGOTIATED_SRVC_LVL_SPEC
NETWORK	DWR_NTWK
NETWORK ADDRESS	DWR_NTWK_ADDR
NETWORK ADDRESS INTERFACE BINDING	DWR_NTWK_ADDR_INTRFC_BNDNG
NETWORK ADDRESS TYPE	DWL_NTWK_ADDR_TYP
NETWORK ASSIGNMENT	DWR_NTWK_ASGN
NETWORK ASSIGNMENT TYPE	DWL_NTWK_ASGN_TYP

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
NETWORK ATOMIC	DWR_NTWK_ATMC
NETWORK AVAILABILITY DAY DRVD	DWD_NTWK_AVLBLTY_DAY
NETWORK AVAILABILITY MONTH AGGR	DWA_NTWK_AVLBLTY_MO
NETWORK COMPOSITE	DWR_NTWK_CMPST
NETWORK DOMAIN	DWR_NTWK_DOMAIN
NETWORK ELEMENT	DWR_NTWK_ELMNT
NETWORK ELEMENT BUSINESS INTERACTION ROLE	DWR_NTWK_ELMNT_BSNS_INTRACN_RL
NETWORK ELEMENT CATEGORY	DWL_NTWK_ELMNT_CTGRY
NETWORK ELEMENT COST	DWB_NTWK_ELMNT_COST
NETWORK ELEMENT FAULT ASSIGNMENT	DWB_NTWK_ELMNT_FLT_ASGN
NETWORK ELEMENT PARTY ASSOCIATION	DWR_NTWK_ELMNT_PRTY ASSOCTN
NETWORK ELEMENT PARTY MANAGEMENT	DWR_NTWK_ELMNT_PRTY_MGMT
NETWORK ELEMENT RELATIONSHIP	DWR_NTWK_ELMNT_RLTN
NETWORK ELEMENT RELATIONSHIP TYPE	DWL_NTWK_ELMNT_RLTN_TYP
NETWORK ELEMENT ROLE	DWR_NTWK_ELMNT_RL
NETWORK ELEMENT ROLE ASSIGNMENT	DWR_NTWK_ELMNT_RL_ASGN
NETWORK ELEMENT ROLE PARTY ASSIGNMENT	DWR_NTWK_ELMNT_RL_PRTY_ASGN
NETWORK ELEMENT ROLE SPEC	DWR_NTWK_ELMNT_RL_SPEC
NETWORK ELEMENT STATE HISTORY	DWB_NTWK_ELMNT_STATE_HIST
NETWORK ELEMENT TYPE	DWR_NTWK_ELMNT_TYP
NETWORK ELEMENT TYPE VERSION	DWR_NTWK_ELMNT_TYP_VRSN
NETWORK ELEMENT TYPE VERSION USAGE	DWR_NTWK_ELMNT_TYP_VRSN_USG
NETWORK ELEMENT USAGE EVENT TYPE	DWL_NTWK_ELMNT_USG_EVT_TYP
NETWORK EVENT	DWB_NTWK_EVT
NETWORK EVENT ASSIGNMENT	DWB_NTWK_EVT_ASGN
NETWORK EVENT CHARACTERISTIC	DWR_NTWK_EVT_CHTRSTC
NETWORK EVENT CHARACTERISTIC ASSIGNMENT	DWR_NTWK_EVT_CHTRSTC_ASGN
NETWORK EVENT CHARACTERISTIC RELATIONSHIP	DWR_NTWK_EVT_CHTRSTC_RLTN
NETWORK EVENT CHARACTERISTIC TYPE	DWL_NTWK_EVT_CHTRSTC_TYP
NETWORK EVENT CHARACTERISTIC VALUE	DWR_NTWK_EVT_CHTRSTC_VAL
NETWORK EVENT CHARACTERISTIC VALUE ASSIGNMENT	DWR_NTWK_EVT_CHTRSTC_VAL_ASGN
NETWORK EVENT CHARACTERISTIC VALUE RELATIONSHIP	DWR_NTWK_EVT_CHTRSTC_VAL_RLTN
NETWORK EVENT STATUS	DWL_NTWK_EVT_STAT
NETWORK EVENT TYPE	DWL_NTWK_EVT_TYP

**Table 5–1 (Cont.) Entity Mapping Table: Logical to Physical Mapping A to N**

<b>Entity</b>	<b>Table or View</b>
NETWORK EVENT TYPE VERSION	DWR_NTWK_EVT_TYP_VRSN
NETWORK FAULT	DWB_NTWK_FLT
NETWORK FAULT SUBSCRIPTION ASSIGNMENT	DWB_NTWK_FLT_SBRP_ASGN
NETWORK ROUTE	DWR_NTWK_ROUTE
NETWORK ROUTE POINT	DWR_NTWK_ROUTE_PNT
NETWORK ROUTE POINT ASSIGNMENT	DWR_NTWK_ROUTE_PNT_ASGN
NETWORK SERVICE COVERAGE ASSIGNMENT	DWR_NTWK_SRVC_COVRG_ASGN
NETWORK SITE	DWR_NTWK_SITE
NETWORK TOUCHPOINT	DWR_NTWK_TCHPNT
NETWORK TOUCHPOINT CLASS	DWL_NTWK_TCHPNT_CLASS
NETWORK TOUCHPOINT DRVD	DWD_NTWK_TCHPNT
NETWORK TOUCHPOINT MONTH AGGR	DWA_NTWK_TCHPNT_MO
NETWORK TOUCHPOINT STATUS	DWL_NTWK_TCHPNT_STAT
NETWORK TOUCHPOINT TYPE	DWL_NTWK_TCHPNT_TYP
NETWORK TYPE	DWL_NTWK_TYP
NOTIFICATION TYPE	DWL_NTFCTN_TYP
NP MOBILE MSISDN	DWR_NP_MBL_MSISDN
NP REQUEST HEADER	DWB_NP_RQST_HDR
NP REQUEST LINE ITEM	DWB_NP_RQST_LN_ITEM
NP REQUEST LINE ITEM STATE HISTORY	DWB_NP_RQST_LN_ITEM_STATE_HIST
NP REQUEST LINE ITEM STATE TYPE	DWL_NP_RQST_LN_ITEM_STATE_TYP
NP REQUEST STATE HISTORY	DWB_NP_RQST_STATE_HIST
NP REQUEST STATE TYPE	DWL_NP_RQST_STATE_TYP
NP REQUEST TYPE	DWL_NP_RQST_TYP
NP STEP	DWL_NP_STEP
NUMBER AREA	DWR_NBR_AREA
NUMBER COUNTRY	DWR_NBR_CNTRY
NUMBER NETWORK TYPE	DWL_NBR_NTWK_TYP
NUMBER PORT DAY DRVD	DWD_NBR_PRT_DAY
NUMBER PORT MONTH AGGR	DWA_NBR_PRT_MO

**Table 5–2 Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
ON OFF NET TYPE	DWL_ONOFF_NET
OPERATING SYSTEM	DWR_OPERTNG_SYS
OPERATOR GROUP	DWL_OPRTR_GRP
OPERATOR TYPE	DWL_OPRTR_TYP

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
ORDER LINE ITEM STATE	DWR_ORDR_LN_ITEM_STATE
ORDER STATE	DWL_ORDR_STATE
ORDER STATUS	DWL_ORDR_STAT
ORDER TYPE	DWL_ORDR_TYP
ORGANIZATION AREA	DWR_ORG_AREA
ORGANIZATION BANNER	DWR_ORG_BNR
ORGANIZATION BUSINESS ENTITY	DWR_ORG_BSNS_ENT
ORGANIZATION BUSINESS UNIT	DWR_ORG_BSNS_UNIT
ORGANIZATION BUSINESS UNIT COST	DWB_ORG_BSNS_UNIT_COST
ORGANIZATION BUSINESS UNIT TYPE	DWL_ORG_BSNS_UNIT_TYP
ORGANIZATION CHAIN	DWR_ORG_CHAIN
ORGANIZATION COMPANY	DWR_ORG_CMPNY
ORGANIZATION CORPORATE	DWR_ORG_CRPRT
ORGANIZATION DISTRICT	DWR_ORG_DSTRCT
ORGANIZATION DIVISION	DWR_ORG_DIV
ORGANIZATION HIERARCHY	DWR_ORG_HRCHY
ORGANIZATION HIERARCHY LEVEL	DWR_ORG_HRCHY_LVL
ORGANIZATION HIERARCHY LEVEL ASSIGNMENT	DWR_ORG_HRCHY_LVL_ASGN
ORGANIZATION HIERARCHY VERSION	DWR_ORG_HRCHY_VRSN
ORGANIZATION ITEM SELLING PRICE	DWR_ORG_ITEM_SLNG_PRICE
ORGANIZATION LEVEL	DWR_ORG_LVL
ORGANIZATION LEVEL ATTRIBUTE VALUE	DWR_ORG_LVL_ATTRIB_VAL
ORGANIZATION LEVEL ATTRIBUTES	DWR_ORG_LVL_ATTR
ORGANIZATION MARKET DATA	DWR_ORG_MKT_DATA
ORGANIZATION NAME	DWR_ORG_NAME
ORGANIZATION REGION	DWR_ORG_RGN
ORGANIZATION SERVICE WEBSITE	DWR_ORG_SRVC_WBSITE
ORGANIZATION WAREHOUSE	DWR_ORG_WRHS
ORGANIZATIONAL DEMOGRAPHY VALUE	DWR_ORGNTL_DEMOG_VAL
OS LICENSE ASSIGNMENT	DWR_OS_LICNS_ASGN
OTHER INDIVIDUAL	DWR_OTHR_INDVL
PARTNER PAYMENT	DWB_PRTNR_PYMT
PARTNER PROMOTION PROGRAM	DWR_PRTNR_PRMTN_PROG
PARTNER SETTLEMENT DRVD	DWD_PRTNR_STLMNT
PARTNER SETTLEMENT MONTH AGGR	DWA_PRTNR_STLMNT_MO
PARTNER SETTLEMENT REASON	DWL_PRTNR_STLMNT_RSN

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
PARTY	DWR_PRTY
PARTY ACCOUNT ASSIGNMENT	DWR_PRTY_ACCT_ASGN
PARTY ACCOUNT ASSIGNMENT TYPE	DWL_PRTY_ACCT_ASGN_TYP
PARTY ADDRESS LOCATION ASSIGNMENT	DWR_PRTY_ADDR_LOC_ASGN
PARTY AM PMP ASSIGNMENT HISTORY	DWB_PRTY_AM_PMP_ASGN_HIST
PARTY AM PMP ASSIGNMENT STATUS	DWB_PRTY_AM_PMP_ASGN_STAT
PARTY ASSIGNMENT	DWR_PRTY_ASGN
PARTY ASSIGNMENT REASON	DWL_PRTY_ASGN_RSN
PARTY ASSIGNMENT TYPE	DWL_PRTY_ASGN_TYP
PARTY BUSINESS INTERACTION ROLE	DWR_PRTY_BSNS_INTRACN_RL
PARTY CONTACT INFORMATION	DWR_PRTY_CNCT_INFO
PARTY CONTACT INFORMATION TYPE	DWL_PRTY_CNCT_INFO_TYP
PARTY CONTACT LIST PARTICIPATION	DWL_PRTY_CNCT_LST_PRTCPTN
PARTY CONTACT LIST ROLE	DWL_PRTY_CNCT_LST_RL
PARTY CONTRACT ASSIGNMENT	DWR_PRTY_CNRT_ASGN
PARTY CONTRACT ASSIGNMENT ROLE	DWL_PRTY_CNRT_ASGN_RL
PARTY CONTRACT ASSIGNMENT TYPE	DWL_PRTY_CNRT_ASGN_TYP
PARTY COST ASSIGNMENT	DWB_PRTY_COST_ASGN
PARTY DEMOGRAPHIC	DWR_PRTY_DEMOG
PARTY DEMOGRAPHY VALUE	DWR_PRTY_DEMOG_VAL
PARTY EVENT TYPE	DWL_PRTY_EVT_TYP
PARTY GEOGRAPHY ENTITY ASSIGNMENT	DWR_PRTY_GEO_ENT_ASGN
PARTY IDENTIFICATION	DWR_PRTY_ID
PARTY IDENTIFICATION TYPE	DWL_PRTY_IDNT_TYP
PARTY INTERACTION THREAD	DWB_PRTY_INTRACN_THRD
PARTY INTERACTION THREAD TYPE	DWL_PRTY_INTRACN_THRD_TYP
PARTY LANGUAGE CAPABILITY	DWR_PRTY_LANG_CAPBLTY
PARTY LOCATION REASON	DWL_PRTY_LOC_RSN
PARTY LOCATION TYPE	DWL_PRTY_LOC_TYP
PARTY LOYALTY PROGRAM PARTICIPATION	DWR_PRTY_LYLTY_PROG_PRTCPTN
PARTY MANAGEMENT ROLE	DWL_PRTY_MGMT_RL
PARTY MARKET SEGMENT ASSIGNMENT	DWR_PRTY_MKT_SGMNT_ASGN
PARTY NAME	DWR_PRTY_NAME
PARTY ORDER ASSIGNMENT	DWB_PRTY_ORDR_ASGN
PARTY ORDER ASSIGNMENT TYPE	DWL_PRTY_ORDR_ASGN_TYP
PARTY PROFILE CHARACTERISTIC	DWR_PRTY_PRFL_CHTRSTC
PARTY PROFILE CHARACTERISTIC VALUE	DWR_PRTY_PRFL_CHTRSTC_VAL

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
PARTY PROMOTION RESPONSE	DWB_PRTY_PRMTN_RESPN
PARTY ROLE	DWL_PRTY_RL
PARTY ROLE ASSIGNMENT	DWR_PRTY_RL_ASGN
PARTY ROLE OS PROCESS ASSIGNMENT	DWR_PRTY_RL_OS_PRCs_ASGN
PARTY ROLE STATUS	DWR_PRTY_RL_STAT
PARTY SEGMENTATION METHOD	DWL_PRTY_SGMNT_MTHD
PARTY SERVICE ASSIGNMENT	DWR_PRTY_SRVC_ASGN
PARTY SERVICE ASSIGNMENT ROLE	DWL_PRTY_SRVC_ASGN_RL
PARTY SERVICE ASSIGNMENT REASON	DWL_PRTY_SRVC_ASGN_RSN
PARTY SIM CARD ASSIGNMENT	DWR_PRTY_SIM_CARD_ASGN
PARTY SIM CARD ROLE	DWL_PRTY_SIM_CARD_RL
PARTY SKILL	DWR_PRTY_SKILL
PARTY STATUS CATEGORY	DWL_PRTY_STAT_CTGRY
PARTY STATUS CHANGE REASON	DWL_PRTY_STAT_CHNG_RSN
PARTY STATUS HISTORY	DWB_PRTY_STAT_HIST
PARTY STATUS TYPE	DWL_PRTY_STAT_TYP
PARTY SUBSCRIPTION ASSIGNMENT	DWR_PRTY_SBRP_ASGN
PARTY SUBSCRIPTION ROLE	DWL_PRTY_SBRP_RL
PARTY TYPE	DWL_PRTY_TYP
PASSPORT	DWR_PASPRT
PAY CATEGORY	DWL_PAY_CTGRY
PAY TYPE	DWL_PAY_TYP
PAYMENT AGING CLASS	DWL_PYMT_AGNG_CLASS
PAYMENT AGING DAY DRVD	DWD_PYMT_AGNG_DAY
PAYMENT AGING MONTH AGGR	DWA_PYMT_AGNG_MO
PAYMENT CHANNEL	DWR_PYMT_CHNL
PAYMENT METHOD TYPE	DWL_PYMT_MTHD_TYP
PAYMENT TRANSACTION TYPE	DWL_PYMT_TRX_TYP
PCU OUTAGE REASON	DWL_PCU_OUTAGE_RSN
PE LOGICAL DEVICE ROLE	DWR_PE_LGICL_DVC_RL
PEAK OFFPEAK TIME	DWL_PK_OFPK_TIME
PERFORMANCE APPLICABILITY	DWR_PRFMNC_APLBLETY
PERFORMANCE CAT CHARACTERISTIC VALUE	DWR_PRFMNC_CAT_CHTRSTC_VAL
PERFORMANCE CAT SPEC RELATIONSHIP	DWR_PRFMNC_CAT_SPEC_RLTN
PERFORMANCE CAT SPECIFICATION	DWR_PRFMNC_CAT_SPECFTN
PERFORMANCE CATEGORY	DWR_PRFMNC_CTGRY
PERFORMANCE CATEGORY RELATIONSHIP	DWR_PRFMNC_CTGRY_RLTN



**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

Entity	Table or View
PERFORMANCE CHARACTERISTIC VALUE	DWR_PRFMNC_CHTRSTC_VAL
PERFORMANCE INDICATOR DERIVATION PARAMETER	No table generated for this entity.
PERFORMANCE INDICATOR RELATIONSHIP	DWR_PRFMNC_IND_RLTN
PERFORMANCE INDICATOR SPEC RELATIONSHIP	DWR_PRFMNC_IND_SPEC_RLTN
PERFORMANCE INDICATOR SPECIFICATION	DWR_PRFMNC_IND_SPECFTN
PERFORMANCE IP ADDRESS SPECIFICATION	No table generated for this entity.
PERFORMANCE NETWORK ADDRESS SPECIFICATION	No table generated for this entity.
PERFORMANCE NOTIFICATION SPECIFICATION	DWR_PRFMNC_NTFCTN_SPECFTN
PERFORMANCE OBJECTIVE	DWR_PRFMNC_OBJCTV
PERFORMANCE OBJECTIVE APPLICABILITY	DWR_PRFMNC_OBJCTV_APLBLETY
PERFORMANCE OBJECTIVE APPLICABILITY CONSEQUENCE	DWR_PRFMNC_OBJ_APLBLETY_CNSEQ
PERFORMANCE SPEC INTERVAL CONVERSION	DWR_PRFMNC_SPEC_INTRVL_CNVRSN
PERFORMANCE SPECIFICATION	DWR_PRFMNC_SPECFTN
PERFORMANCE SPECIFICATION INTERVAL	DWR_PRFMNC_SPECFTN_INTRVL
PERIOD TO DATE TRANSFORMATION	DWR_PRD_TODATE_TRANS
PERIOD TRANSFORMATION	DWR_PRD_TRANS
PHYSICAL CAPACITY	DWR_PHY_CPCTY
PHYSICAL CAPACITY DETAIL	DWR_PHY_CPCTY_DTL
PHYSICAL COMPONENT	DWR_PHY_CMPNT
PHYSICAL CONNECTOR	DWR_PHY_CNCTR
PHYSICAL CONTAINER	DWR_PHY_CONTNR
PHYSICAL DEVICE	DWR_PHY_DVC
PHYSICAL DEVICE ATOMIC	DWR_PHY_DVC_ATMC
PHYSICAL DEVICE COMPOSITE	DWR_PHY_DVC_CMPST
PHYSICAL DEVICE ROLE SPEC	DWR_PHY_DVC_RL_SPEC
PHYSICAL DEVICE ROLE SPEC DETAIL	DWR_PHY_DVC_RL_SPEC_DTL
PHYSICAL DEVICE SPEC	DWR_PHY_DVC_SPEC
PHYSICAL ELEMENT	DWR_PHY_ELMNT
PHYSICAL ELEMENT CHARACTERISTIC	DWR_PHY_ELMNT_CHTRSTC
PHYSICAL ELEMENT ROLE	DWR_PHY_ELMNT_RL
PHYSICAL ELEMENT ROLE ASSIGNMENT	DWR_PHY_ELMNT_RL_ASGN
PHYSICAL ELEMENT ROLE SPEC	DWR_PHY_ELMNT_RL_SPEC
PHYSICAL ELEMENT SPEC	DWR_PHY_ELMNT_SPEC
PHYSICAL ELEMENT SPEC ATOMIC	DWR_PHY_ELMNT_SPEC_ATMC
PHYSICAL ELEMENT SPEC COMPOSITE	DWR_PHY_ELMNT_SPEC_CMPST

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
PHYSICAL EQUIPMENT	DWR_PHY_EQPMNT
PHYSICAL LINK	DWR_PHY_LNK
PHYSICAL PORT	DWR_PHY_PRT
PHYSICAL PORT RESOURCE PORT ASSIGNMENT	DWR_PHY_PRT_RESRE_PRT_ASGN
PHYSICAL RESOURCE ROLE SPEC DETAIL	DWR_PHY_RESRE_RL_SPEC_DTL
PIPE	DWR_PIPE
PLANNING PERIOD	DWR_PLNG_PRD
PLANNING QUARTER	DWR_PLNG_QTR
PLANNING SEASON	DWR_PLNG_SEASON
PLANNING WEEK	DWR_PLNG_WK
PLANNING YEAR	DWR_PLNG_YR
PMP AVAILABILITY	DWR_PMP_AVLBLTY
PMP LOYALTY PROGRAM AVAILABILITY	DWR_PMP_LYLTY_PROG_AVLBLTY
PMP MARKET SEGMENT AVAILABILITY	DWR_PMP_MKT_SGMNT_AVLBLTY
PMP ORGANIZATION AVAILABILITY	DWR_PMP_ORG_AVLBLTY
PMP PRICE POLICY ACTION	DWR_PMP_PRICE_PLCY_ACTN
PMP PRICE POLICY CONDITION	DWR_PMP_PRICE_PLCY_CNDTN
PMP PRICE POLICY VALUE	DWR_PMP_PRICE_PLCY_VAL
PMP PRICE POLICY VARIABLE	DWR_PMP_PRICE_PLCY_VARBLE
PMP PRICE POLICY VARIABLE	DWR_PMP_PROD_INSTNC_ASGN
PMP RATING PLAN	DWR_PMP_RTNG_PLN
PMP RATING PLAN DETAIL	DWR_PMP_RTNG_PLN_DTL
POINT CODE	DWR_PNT_CD
POLICY	DWR_PLCY
POLICY ACTION	DWR_PLCY_ACTN
POLICY ACTION ASSIGNMENT	DWR_PLCY_ACTN_ASGN
POLICY ACTION ATOMIC	DWR_PLCY_ACTN_ATMC
POLICY ACTION COMPOSITE	DWR_PLCY_ACTN_CMPST
POLICY ACTION RULE ASSIGNMENT	DWR_PLCY_ACTN_RULE_ASGN
POLICY ACTION VENDOR	DWR_PLCY_ACTN_VNDR
POLICY APPLICATION ASSIGNMENT	DWR_PLCY_APPLN_ASGN
POLICY CONDITION	DWR_PLCY_CNDTN
POLICY CONDITION ASSIGNMENT	DWR_PLCY_CNDTN_ASGN
POLICY CONDITION ATOMIC	DWR_PLCY_CNDTN_ATMC
POLICY CONDITION COMPOSITE	DWR_PLCY_CNDTN_CMPST
POLICY CONDITION RULE ASSIGNMENT	DWR_PLCY_CNDTN_RULE_ASGN
POLICY EVENT	DWB_PLCY_EVT

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
POLICY EVENT ATOMIC	DWB_PLCY_EVT_ATMC
POLICY EVENT COMPOSITE	DWB_PLCY_EVT_CMPST
POLICY GROUP	DWR_PLCY_GRP
POLICY GROUP EXECUTION DETAIL	DWR_PLCY_GRP_EXEC_DTL
POLICY OPERATOR	DWR_PLCY_OPRTR
POLICY OPERATOR VARIABLE ASSIGNMENT	DWR_PLCY_OPRTR_VARBLE_ASGN
POLICY ROLE	DWR_PLCY_RL
POLICY RULE	DWR_PLCY_RULE
POLICY SET	DWR_PLCY_SET
POLICY SET ASSIGNMENT	DWR_PLCY_SET_ASGN
POLICY STATEMENT	DWR_PLCY_STMT
POLICY VALUE	DWR_PLCY_VAL
POLICY VARIABLE	DWR_PLCY_VARBLE
POLICY VARIABLE VALUE ASSIGNMENT	DWR_PLCY_VARBLE_VAL_ASGN
POSTAL SERVICE TYPE	DWL_POSTL_SRVC_TYP
POSTCODE	DWR_POSTCD
POSTPAID WIRELESS	DWR_PSTPD_WRLS
PPA CATEGORY	DWL_PPA_CTGRY
PPA DEDUCTION TYPE	DWL_PPA_DEDCTN_TYP
PREPAID ACCOUNT STATISTIC DRVD	DWD_PRPD_ACCT_STTSTC
PREPAID ACCOUNT STATISTIC SEGMENT AGGR	DWA_PRPD_ACCT_STTSTC_SGMNT
PREPAID ALLOWANCE DAY DRVD	DWD_PRPD_ALWNCE_DAY
PREPAID ALLOWANCE MONTH AGGR	DWA_PRPD_ALWNCE_MO
PREPAID CALL SUMMARY DAY DRVD	DWD_PRPD_CALL_SUMM_DAY
PREPAID CALL SUMMARY MONTH AGGR	DWA_PRPD_CALL_SUMM_MO
PREPAID MOBILE EVENT TYPE	DWL_PRPD_MBL_EVT_TYP
PREPAID RECHARGE	DWB_PRPD_RCHRG
PREPAID VOUCHER	DWR_PRPD_VCHR
PREPAID VOUCHER INSTANCE	DWR_PRPD_VCHR_INSTNC
PREPAID WIRELESS	DWR_PRPD_WRLS
PRICE DERIVATION RULE	DWR_PRICE_DRVTN_RULE
PRICE EVENT	DWB_PRICE_EVT
PRODUCT	DWR_PROD
PRODUCT ADDITIONAL TEXT	DWR_PROD_ADTNL_TXT
PRODUCT ASSIGNMENT	DWR_PROD_ASGN
PRODUCT ASSIGNMENT REASON	DWL_PROD_ASGN_RSN
PRODUCT CAPABILITY	DWR_PROD_CAPBLTY

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
PRODUCT CAPABILITY TYPE	DWL_PROD_CAPBLTY_TYP
PRODUCT CAPABILITY VALUE	DWR_PROD_CAPBLTY_VAL
PRODUCT CATALOG	DWR_PROD_CTLG
PRODUCT CATALOG CHARACTERISTIC	DWR_PROD_CTLG_CHTRSTC
PRODUCT CATALOG CHARACTERISTIC ASSIGNMENT	DWR_PROD_CTLG_CHTRSTC_ASGN
PRODUCT CATALOG CHARACTERISTIC RELATIONSHIP	DWR_PROD_CTLG_CHTRSTC_RLTN
PRODUCT CATALOG CHARACTERISTIC VALUE	DWR_PROD_CTLG_CHTRSTC_VAL
PRODUCT CATALOG CHARACTERISTIC VALUE ASSIGNMENT	DWR_PROD_CTLG_CHTRSTC_VAL_ASGN
PRODUCT CATALOG CHARACTERISTIC VALUE RELATIONSHIP	DWR_PROD_CTLG_CHTRSTC_VAL_RLTN
PRODUCT CATALOG GEOGRAPHY ASSIGNMENT	DWR_PROD_CTLG_GEO_ASGN
PRODUCT CATALOG MARKET PLAN ASSIGNMENT	DWR_PROD_CTLG_MKT_PLN_ASGN
PRODUCT CATALOG PRESENTATION TYPE	DWL_PROD_CTLG_PRSNT_TYP
PRODUCT CATALOG SALES CHANNEL ASSIGNMENT	DWR_PROD_CTLG_SL_CHNL_ASGN
PRODUCT CATALOG TYPE	DWL_PROD_CTLG_TYP
PRODUCT CATEGORY	DWL_PROD_CTGRY
PRODUCT CHARACTERISTIC	DWR_PROD_CHTRSTC
PRODUCT CHARACTERISTIC ASSIGNMENT	DWR_PROD_CHTRSTC_ASGN
PRODUCT CHARACTERISTIC RELATIONSHIP	DWR_PROD_CHTRSTC_RLTN
PRODUCT CHARACTERISTIC TYPE	DWL_PROD_CHTRSTC_TYP
PRODUCT CHARACTERISTIC VALUE	DWR_PROD_CHTRSTC_VAL
PRODUCT CHARACTERISTIC VALUE ASSIGNMENT	DWR_PROD_CHTRSTC_VAL_ASGN
PRODUCT CHARACTERISTIC VALUE RELATIONSHIP	DWR_PROD_CHTRSTC_VAL_RLTN
PRODUCT CHARGE TYPE	DWL_PROD_CHRG_TYP
PRODUCT CHARGE TYPE RELATIONSHIP	DWR_PROD_CHRG_TYP_RLTN
PRODUCT CHARGE TYPE RLTN REASON	DWL_PROD_CHRG_TYP_RLTN_RSN
PRODUCT CHARGING REASON	DWL_PROD_CHRGNG_RSN
PRODUCT COST	DWB_PROD_COST
PRODUCT COVERAGE AREA	DWR_PROD_COVRG_AREA
PRODUCT COVERAGE GEO DETAIL	DWR_PROD_COVRG_GEO_DTL
PRODUCT FEATURE	DWR_PROD_FTR
PRODUCT FEATURE ASSIGNMENT	DWR_PROD_FTR_ASGN
PRODUCT FUNCTIONALITY DEPENDENCY	DWR_PROD_FNCTNLTY_DPNDNTCY
PRODUCT GEOGRAPHY ASSIGNMENT	DWR_PROD_GEO_ASGN

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
PRODUCT GROUP	DWL_PROD_GRP
PRODUCT GROUP ASSIGNMENT	DWR_PROD_GRP_ASGN
PRODUCT GROUP TYPE	DWL_PROD_GRP_TYP
PRODUCT INSTANCE	DWR_PROD_INSTNC
PRODUCT LINE	DWL_PROD_LN
PRODUCT MANAGEMENT HISTORY	DWB_PROD_MGMT_HIST
PRODUCT MANAGEMENT REASON	DWL_PROD_MGMT_RSN
PRODUCT MANAGEMENT ROLE	DWL_PROD_MGMT_RL
PRODUCT MARKET PLAN	DWR_PROD_MKT_PLN
PRODUCT MARKET PLAN ASSIGNMENT	DWR_PROD_MKT_PLN_ASGN
PRODUCT MARKET PLAN ASSIGNMENT TYPE	DWL_PROD_MKT_PLN_ASGN_TYP
PRODUCT MARKET PLAN COST	DWB_PROD_MKT_PLN_COST
PRODUCT MARKET PLAN GEOGRAPHY ASSIGNMENT	DWR_PROD_MKT_PLN_GEO_ASGN
PRODUCT MARKET PLAN GROUP	DWR_PROD_MKT_PLN_GRP
PRODUCT MARKET PLAN GROUP ASSIGNMENT	DWR_PROD_MKT_PLN_GRP_ASGN
PRODUCT MARKET PLAN GROUP TYPE	DWL_PROD_MKT_PLN_GRP_TYP
PRODUCT MARKET PLAN RELATIONSHIP	DWR_PROD_MKT_PLN_RLTN
PRODUCT MARKET PLAN RELATIONSHIP TYPE	DWL_PROD_MKT_PLN_RLTN_TYP
PRODUCT MARKET PLAN TYPE	DWL_PROD_MKT_PLN_TYP
PRODUCT NETWORK ASSIGNMENT	DWR_PROD_NTWK_ASGN
PRODUCT PACKAGE	DWR_PROD_PKG
PRODUCT PACKAGE ASSIGNMENT	DWR_PROD_PKG_ASGN
PRODUCT PACKAGE CHARGE TYPE	DWL_PROD_PKG_CHRG_TYP
PRODUCT RATING PLAN	DWR_PROD_RTNG_PLN
PRODUCT RATING PLAN DETAIL	DWR_PROD_RTNG_PLN_DTL
PRODUCT RATING PLAN TYPE	DWL_PROD_RTNG_PLN_TYP
PRODUCT STATUS HISTORY	DWB_PROD_STAT_HIST
PRODUCT STATUS TYPE	DWL_PROD_STAT_TYP
PRODUCT TYPE	DWL_PROD_TYP
PRODUCT USERNAME	DWR_PROD_USRNM
PRODUCT VERSION	DWR_PROD_VRSN
PROMOTION	DWR_PRMTN
PROMOTION CLUSTER USAGE	DWB_PRMTN_CLSTR_USG
PROMOTION CONTACT LIST UTILIZATION	DWB_PRMTN_CNCT_LST_UTLZTN
PROMOTION COST	DWB_PRMTN_COST
PROMOTION MANAGEMENT HISTORY	DWB_PRMTN_MGMT_HIST

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
PROMOTION MARKET PLAN ASSIGNMENT	DWR_PRMTN_MKT_PLN_ASGN
PROMOTION MESSAGE RENDERING	DWR_PRMTN_MSG_RNDRNG
PROMOTION PRODUCT ASSIGNMENT	DWR_PRMTN_PROD_ASGN
PROMOTION PRODUCT CATALOG ASSIGNMENT	DWR_PRMTN_PROD_CTLG_ASGN
PROMOTION RELATIONSHIP	DWR_PRMTN_RLTN
PROMOTION RESULT TYPE	DWL_PRMTN_RSLT_TYP
PROMOTION SALES CHANNEL ASSIGNMENT	DWR_PRMTN_SL_CHNL_ASGN
PROMOTION TERM TYPE	DWL_PRMTN_TERM_TYP
PROMOTION TERM VALUE	DWB_PRMTN_TERM_VAL
PROMOTION TYPE	DWL_PRMTN_TYP
PROPERTY	DWR_PRPTY
PROPERTY ADDRESS LOCATION ASSIGNMENT	DWR_PRPTY_ADDR_LOC_ASGN
PROPOSAL	DWR_PROPOSAL
PROPOSAL RELATIONSHIP	DWR_PROPOSAL_RLTN
PROSPECT	DWR_PRSPCT
PROSPECT INDIVIDUAL	DWR_PRSPCT_INDVL
PROSPECT ORGANIZATION	DWR_PRSPCT_ORG
PROSPECT PRIORITY TYPE	DWL_PRSPCT_PRIORITY_TYP
PROSPECT QUALITY SCORE TYPE	DWL_PRSPCT_QLTY_SCR_TYP
PROSPECT QUALITY SCORE VALUE	DWR_PRSPCT_QLTY_SCR_VAL
PROSPECT REJECT REASON	DWL_PRSPCT_REJECT_RSN
PROTOCOL	DWR_PROTCL
PTV FULL CHANNEL ACTIVATION	DWB_PTV_FULL_CHNL_ACTVTN
PTV QPI SERVICE EVENT	DWB_PTV_QPI_SRVC_EVT
PTV USAGE EVENT	DWB_PTV_USG_EVT
PUBLICATION	DWR_PBLCTN
PUBLICATION TYPE	DWL_PBLCTN_TYP
PV BIT STRING VALUE	DWR_PV_BIT_STRING_VAL
PV BOOLEAN VALUE	DWR_PV_BOLEN_VAL
PV INTEGER VALUE	DWR_PV_INTEGER_VAL
PV IP ADDRESS VALUE	DWR_PV_IP_ADDR_VAL
PV STRING VALUE	DWR_PV_STRING_VAL
PVAR BIT STRING VARIABLE	DWR_PVAR_BIT_STRING_VARBLE
PVAR STRING VARIABLE	DWR_PVAR_STRING_VARBLE
QOS SERVICE	DWR_QOS_SRVC
QOS SERVICE SPEC TYPE	No physical table is associated with this entity.
QUARTER HOUR	DWR_QTR_HR

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

Entity	Table or View
QUARTER TO DATE TRANSFORMATION	DWR_QTR_TODATE_TRANS
QUARTER TRANSFORMATION	DWR_QTR_TRANS
RACK	DWR_RACK
RATED NETWORK EVENT	DWB_RTD_NTWK_EVT
RATING METHOD TYPE	DWL_RTNG_MTHD_TYP
RAW MMS EVENT	DWB_RAW_MMS_EVT
RAW WIRELESS CALL EVENT	DWB_RAW_WRLS_CALL_EVT
RECHARGE REVENUE SLAB	DWL_RECHRG_RVN_SLB
RECURRING PMP RATING PLAN DETAIL	DWR_RCRNG_PMP_RTNG_PLN_DTL
REDEMPTION DAY DRVD	DWD_RDMPN_DAY
REDEMPTION MO AGGR	DWA_RDMPN_MO
REDEMPTION TYPE	DWL_RDMPN_TYP
RESOURCE FACING SERVICE	DWR_RESRE_FCNG_SRVC
RESOURCE FACING SERVICE ROLE	DWR_RESRE_FCNG_SRVC_RL
RESOURCE FACING SERVICE SPEC VERSION	DWR_RESRE_FCNG_SRVC_SPEC_VRSN
RESOURCE FACING SERVICE SPECROLE	DWR_RESRE_FCNG_SRVC_SPEC_RL
RESOURCE ORDER	DWB_RESRE_ORDR
RESOURCE ORDER ITEM	DWB_RESRE_ORDR_ITEM
RESOURCE PERFORMANCE SPEC	DWR_RESRE_PRFMNC_SPEC
RESOURCE PORT	DWR_RESRE_PRT
RESOURCE SPEC PERF ROLE	DWR_RESRE_SPEC_PERF_RL
RETAIL STORE	DWR_RTL_STORE
RF CARRIER	DWR_RF_CARRIER
RF NETWORK CAPACITY DAY DRVD	DWD_RF_NTWK_CPCTY_DAY
RF NETWORK CAPACITY MONTH AGGR	DWA_RF_NTWK_CPCTY_MO
RFS SPEC VERSION DETAIL	DWR_RFS_SPEC_VRSN_DTL
RINGTONE	DWR_RNGTN
ROAMING TYPE	DWL_RMNG_TYP
ROLE	DWR_RL
ROLES HIERARCHY	DWR_RLS_HRCHY
ROOT ENTITY	DWR_ROOT_ENT
ROUTED PROTOCOL	DWR_ROUTED_PROTCL
ROUTER	DWR_ROUTER
ROUTING DEVICE	DWR_RUTNG_DVC
ROUTING PROTOCOL	DWR_RUTNG_PROTCL
ROUTING ROLE	DWR_RUTNG_RL
SALES CAMPAIGN SUMMARY DAY DRVD	DWD_SL_CMPGN_SUMM_DAY

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

Entity	Table or View
SALES CAMPAIGN SUMMARY MONTH AGGR	DWA_SL_CMPGN_SUMM_MO
SALES CHANNEL	DWR_SL_CHNL
SALES CHANNEL REPRESENTATIVE	DWR_SL_CHNL_RPRSTV
SALES COMMISSION DETAIL	DWB_SL_CMISN_DTL
SALES COMMISSION PAYROLL	DWB_SL_CMISN_PYRL
SALES COMMISSION PLAN	DWR_SL_CMISN_PLN
SALES COMMISSION PLAN DETAIL	DWR_SL_CMISN_PLN_DTL
SALES DAY DRVD	DWD_SL_DAY
SALES MONTH AGGR	DWA_SL_MO
SALES REPRESENTATIVE STATISTICS DRVD	DWD_SL_RPRSTV_STTSTC
SCD2 MULTILANGUAGE	No table generated.
SCRIPT	DWR_SCRIPT
SCRIPT QUESTION	DWR_SCRIPT_QUES
SCRIPT QUESTION TYPE	DWL_SCRIPT_QUES_TYP
SEASON	DWL_SEASON
SECOND	DWR_SCND
SECURE HOLDER	DWR_SECURE_HLDR
SECURITY REQUIRED TYPE	DWL_SCRTY_REQD_TYP
SEGMENT CRITERIA	DWR_SGMNT_CRTRA
SEGMENT TYPE	DWL_SGMNT_TYP
SELLING LOCATION	DWR_SLNG_LOC
SELLING LOCATION TYPE	DWL_SLNG_LOC_TYP
SERVICE	DWR_SRVC
SERVICE BUNDLE	DWR_SRVC_BNDL
SERVICE BUNDLE SPEC	DWR_SRVC_BNDL_SPEC
SERVICE BUNDLE SPEC ATOMIC	DWR_SRVC_BNDL_SPEC_ATMC
SERVICE BUNDLE SPEC COMPOSITE	DWR_SRVC_BNDL_SPEC_CMPST
SERVICE BUSINESS ACTOR	No table generated.
SERVICE CHARACTERISTIC	DWR_SRVC_CHTRSTC
SERVICE CHARACTERISTIC ASSIGNMENT	DWR_SRVC_CHTRSTC_ASGN
SERVICE CHARACTERISTIC RELATIONSHIP	DWR_SRVC_CHTRSTC_RLTN
SERVICE CHARACTERISTIC VALUE	DWR_SRVC_CHTRSTC_VAL
SERVICE CHARACTERISTIC VALUE ASSIGNMENT	DWR_SRVC_CHTRSTC_VAL_ASGN
SERVICE CHARACTERISTIC VALUE RELATIONSHIP	DWR_SRVC_CHTRSTC_VAL_RLTN
SERVICE CLASS	DWL_SRVC_CLASS
SERVICE CLASS TYPE	DWL_SRVC_CLASS_TYP
SERVICE COVERAGE AREA	DWR_SRVC_COVRG_AREA



**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
SERVICE COVERAGE AREA TYPE	DWL_SRVC_COVRG_AREA_TYP
SERVICE COVERAGE GEO DETAIL	DWR_SRVC_COVRG_GEO_DTL
SERVICE DEPENDENCY	DWR_SRVC_DPNDCY
SERVICE DEVICE INTERFACE ASSIGNMENT	DWR_SRVC_DVC_INTRFC_ASGN
SERVICE EQUIPMENT ASSIGNMENT	DWR_SRVC_EQPMNT_ASGN
SERVICE LEVEL AGREEMENT	DWR_SRVC_LVL_AGRMNT
SERVICE LEVEL AGREEMENT ITEM	DWR_SRVC_LVL_AGRMNT_ITEM
SERVICE LEVEL AGREEMENT TYPE	DWL_SRVC_LVL_AGRMNT_TYP
SERVICE LEVEL OBJECTIVE	DWR_SRVC_LVL_OBJCTV
SERVICE LEVEL SPECIFICATION	DWR_SRVC_LVL_SPECFTN
SERVICE LEVEL SPEC APPLICABILITY	DWR_SRVC_LVL_SPEC_APLBLETY
SERVICE LEVEL SPEC CONSEQUENCE	DWR_SRVC_LVL_SPEC_CNSEQ
SERVICE LEVEL SPEC PARAMETER	DWR_SRVC_LVL_SPEC_PRMTR
SERVICE LEVEL UNMET CONSEQUENCE TYPE	DWL_SRVC_LVL_UNMET_CNSEQ_TYP
SERVICE LR DEPENDENCY	DWR_SRVC_LR_DPNDCY
SERVICE NETWORK ELEMENT ASSIGNMENT	DWR_SRVC_NTWK_ELMNT_ASGN
SERVICE ORDER	DWB_SRVC_ORDR
SERVICE ORDER LINE ITEM	DWB_SRVC_ORDR_LN_ITEM
SERVICE PACKAGE	DWR_SRVC_PKG
SERVICE PACKAGE BUNDLE ASSIGNMENT	No physical table is associated with this entity.
SERVICE PACKAGE BUNDLE DETAIL	DWR_SRVC_PKG_BNDL_DTL
SERVICE PACKAGE SPEC	DWL_SRVC_PKG_SPEC
SERVICE PACKAGE SPEC ATOMIC	DWL_SRVC_PKG_SPEC_ATMC
SERVICE PACKAGE SPEC COMPOSITE	DWL_SRVC_PKG_SPEC_CMPST
SERVICE PERFORMANCE SPEC	DWR_SRVC_PRFMNC_SPEC
SERVICE PR DEPENDENCY	DWR_SRVC_PR_DPNDCY
SERVICE REQUEST	DWB_SRVC_RQST
SERVICE ROLE	DWR_SRVC_RL
SERVICE SPEC	DWR_SRVC_SPEC
SERVICE SPEC ATOMIC	DWR_SRVC_SPEC_ATMC
SERVICE SPEC COMPOSITE	DWR_SRVC_SPEC_CMPST
SERVICE SPEC NETWORK ELEMENT TYPE RELATIONSHIP	DWR_SVCSPEC_NTWK_ELETYP_RLTN
SERVICE SPEC PRODUCT RELATIONSHIP	DWR_SRVC_SPEC_PROD_RLTN
SERVICE SPEC VERSION	DWR_SRVC_SPEC_VRSN
SERVICE SPECIFICATION ROLE	DWR_SRVC_SPECFTN_RL
SERVICE USAGE TYPE	DWL_SRVC_USG_TYP

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

Entity	Table or View
SET TOP BOX	DWR_SET_TOP_BOX
SET TOP BOX MODEL	DWR_SET_TOP_BOX_MDL
SHARED PACKAGE USAGE STATISTICS DAY DRVD	DWD_SHARED_PKG_USG_STTSTC_DAY
SHARED PACKAGE USAGE STATISTICS MO AGGR	DWA_SHARED_PKG_USG_STTSTC_MO
SHELF	DWR_SHELF
SHOP EFFICIENCY DAY DRVD	DWD_SHOP_EFFNCY_DAY
SHOP EFFICIENCY MONTH AGGR	DWA_SHOP_EFFNCY_MO
SIC ASSIGNMENT	DWR_SIC_ASGN
SIC ASSIGNMENT REASON	DWL_SIC_ASGN_RSN
SIC CLASSIFICATION	DWL_SIC_CLSFCTN
SIC DIVISION	DWR_SIC_DIV
SIC INDUSTRY GROUP	DWL_SIC_INDSTRY_GRP
SIGNALING PROTOCOL	DWR_SGNLNG_PROTCL
SIM CARD	DWR_SIM_CARD
SIM CARD ACCESS METHOD ASSIGNMENT	DWR_SIM_CARD_ACCS_MTHD_ASGN
SIM CARD ACCESS METHOD REASON	DWL_SIM_CARD_ACCS_MTHD_RSN
SIM CARD ACTIVATION REASON	DWL_SIM_CARD_ACTVTN_RSN
SIM CARD ACTIVATION TYPE	DWL_SIM_CARD_ACTVTN_TYP
SIM CARD HANDSET ASSIGNMENT	DWR_SIM_CARD_HNDST_ASGN
SIM CARD SUBSCRIPTION ASSIGNMENT	DWR_SIM_CARD_SBRP_ASGN
SIM CARD SUBSCRIPTION REASON	DWL_SIM_CARD_SBRP_RSN
SIM CARD TYPE	DWL_SIM_CARD_TYP
SITE	DWR_SITE
SITE INTERFACE ROLE	DWR_SITE_INTRFC_RL
SITE TYPE	DWL_SITE_TYP
SKILL TYPE	DWL_SKILL_TYP
SLOT	DWR_SLT
SLOT RELATIONSHIP	DWR_SLT_RLTN
SMS EVENT	DWB_SMS_EVT
SMS RATING PLAN	DWR_SMS_RTNG_PLN
SOC JOB	DWR_SOC_JB
SOC JOB CATEGORY	DWR_SOC_JB_CTGRY
SOC JOB GROUP	DWR_SOC_JB_GRP
SOC JOB MAJOR GROUP	DWR_SOC_JB_MJR_GRP
SOFTWARE	DWR_SOFTWARE
SOFTWARE ATOMIC	DWR_SOFTWARE_ATMC
SOFTWARE COMMAND	DWR_SOFTWARE_CMND

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
SOFTWARE COMPOSITE	DWR_SOFTWARE_CMPST
SOFTWARE FEATURE SETS	DWR_SOFTWARE_FTR_SETS
SOFTWARE OS RELATIONSHIP	DWR_SOFTWARE_OS_RLTN
SOURCE SYSTEM	DWR_SRC_SYS
SOURCE SYSTEM KEY MAPPING	DWR_SRC_SYS_KEY_MAPPING
SOURCE SYSTEM TYPE	DWL_SRC_SYS_TYP
SPECIFICATION	DWR_SPECFTN
SPECIFICATION ROLE	DWR_SPECFTN_RL
SPECTRUM COVERAGE AREA	DWR_SPTRUM_COVRG_AREA
STATISTICAL ENTITY	DWR_STTSTCL_ENT
SUB NETWORK	DWR_SB_NTWK
SUBSCRIBER ACTIVATION REASON	DWL_SBSCR_P_ACTVTN_RSN
SUBSCRIPTION	DWR_SBRP
SUBSCRIPTION ASSIGNMENT	DWR_SBRP_ASGN
SUBSCRIPTION ASSIGNMENT TYPE	DWL_SBRP_ASGN_TYP
SUBSCRIPTION EVENT TYPE	DWL_SBRP_EVT_TYP
SUBSCRIPTION NETWORK ELEMENT ROLE ASSIGNMENT	DWR_SBRP_NTWK_ELMNT_RL_ASGN
SUBSCRIPTION PMP ASSIGNMENT	DWR_SBRP_PMP_ASGN
SUBSCRIPTION PRICE	DWR_SBRP_PRICE
SUBSCRIPTION PRICE ALTERATION	DWR_SBRP_PRICE_ALTRTN
SUBSCRIPTION PRICE CHARGE	DWR_SBRP_PRICE_CHRG
SUBSCRIPTION PRICE PARTY ROLE ASSIGNMENT	DWR_SBRP_PRICE_PRTY_RL_ASGN
SUBSCRIPTION SERVICE CLASS ASSIGNMENT	DWR_SBRP_SRVC_CLASS_ASGN
SUBSCRIPTION STATISTIC MONTH AGGR	DWA_SBRP_STTSTC_MO
SUBSCRIPTION STATUS	DWL_SBRP_STAT
SUBSCRIPTION STATUS CATEGORY	DWL_SBRP_STAT_CTGRY
SUBSCRIPTION STATUS HISTORY	DWB_SBRP_STAT_HIST
SUBSCRIPTION STATUS REASON	DWL_SBRP_STAT_RSN
SUBSCRIPTION TERM TYPE	DWL_SBRP_TERM_TYP
SUBSCRIPTION TERM VALUE	DWB_SBRP_TERM_VAL
SUBSCRIPTION TYPE	DWL_SBRP_TYP
SUBSIDY AMOUNT DRVD	DWD_SUBSDY_AMT
SUBSIDY AMOUNT MONTH AGGR	DWA_SUBSDY_AMT_MO
SUBSIDY TYPE	DWL_SUBSDY_TYP
SUPPLEMENTARY SERVICE	DWR_SPLMNTR_SRVC
SUPPLEMENTARY SERVICE USAGE MONTH AGGR	DWA_SPLMNTR_SRVC_USG_MO

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

Entity	Table or View
SUPPLEMENTARY SERVICE USAGE MONTH DRVD	DWD_SPLMNTR_SRVC_USG
SURVEY	DWR_SURVEY
SWITCH	DWR_SWTCH
SWITCH CAPABILITY	DWR_SWTCH_CAPBLTY
SWITCH CAPABILITY TYPE	DWL_SWTCH_CAPBLTY_TYP
SWITCH COMMAND	DWR_SWTCH_CMMND
SWITCH ROUTING DEVICE ASSIGNMENT	DWR_SWTCH_RUTNG_DVC_ASGN
SWITCH TYPE	DWL_SWTCH_TYP
SWITCHING PROTOCOL	DWR_SWTCHNG_PROTCL
SWITCHING ROLE	DWR_SWTCHNG_RL
SWOT TYPE	DWL_SWOT_TYP
TAP IN WIRELESS ROAMING EVENT	DWB_TAP_IN_WRLS_RMNG_EVT
TAP OUT WIRELESS ROAMING EVENT	DWB_TAP_OUT_WRLS_RMNG_EVT
TARGET ACCESS METHOD	DWR_TRGT_ACCS_MTHD
TARGET ACCOUNT	DWR_TRGT_ACCT
TARGET CONTRACT	DWR_TRGT_CNRT
TARGET GEOGRAPHY AREA	DWR_TRGT_GEO_AREA
TARGET MARKET SEGMENT	DWR_TRGT_MKT_SGMNT
TARGET TYPE	DWL_TRGT_TYP
TAX AUTHORITY	DWR_TAX_AUTH
TAX CATEGORY	DWL_TAX_CTGRY
TAX EXEMPT	DWL_TAX_EXMPT
TCH TYPE	DWL_TCH_TYP
TECHNOLOGY	DWL_TECH
TECHNOLOGY TYPE	DWL_TECH_TYP
TELEPHONE NUMBER	DWR_PHONE_NBR
TELEPHONE NUMBER POOL	DWR_PHONE_NBR_POOL
TEMPLATE SERVICE LEVEL SPEC	DWR_TEMPLATE_SRVC_LVL_SPEC
TERMINATION POINT	DWR_TMNT_PNT
TIME BAND	DWL_TIME_BND
TIME SLOT	DWR_TIME_SLT
TIME STANDARD BY DAY	DWR_TIME_STNDRD_BY_DAY
TIME STANDARD BY WEEK	DWR_TIME_STNDRD_BY_WK
TIME ZONE	DWL_TIME_ZN
TRAIL	DWR_TRAIL
TRAIL TERMINATION POINT	DWR_TRAIL_TMNT_PNT
TV CHANNEL	DWR_TV_CHNL

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
UMS ACCESS TYPE	DWL_UMS_ACCS_TYP
UMS EVENT	DWB_UMS_EVT
UMS EVENT TYPE	DWL_UMS_EVT_TYP
UNIT OF MEASURE	DWL_UOM
URBAN PROPERTY ADDRESS	DWR_URBN_PRPTY_ADDR
USER	DWR_USER
VALUE ADDED SERVICE	DWR_VAL_ADD_SRVC
VALUE CUSTOM	DWR_VAL_CSTM
VALUE STANDARD	DWR_VAL_STNDRD
VALUE TYPE	DWL_VAL_TYP
VARIABLE CUSTOM	DWR_VARBLE_CSTM
VARIABLE STANDARD	DWR_VARBLE_STNDRD
VAS SUBSCRIPTION	DWR_VAS_SBRP
VAS SUBSCRIPTION QUICK SUMMARY DRVD	DWD_VAS_SBRP_QCK_SUMM
VAS SUBSCRIPTION QUICK SUMMARY MO AGGR	DWA_VAS_SBRP_QCK_SUMM_MO
VAS USAGE DAY DRVD	DWD_VAS_USG_DAY
VAS USAGE MONTH AGGR	DWA_VAS_USG_MO
VENDOR	DWR_VNDR
VENDOR APPOINTMENT	DWB_VNDR_APNMNT
VENDOR CLASS	DWL_VNDR_CLASS
VENDOR CONTRACT	DWR_VNDR_CNRT
VENDOR FACTOR COMPANY ASSIGNMENT	DWR_VNDR_FCTR_CMPNY_ASGN
VENDOR RATING	DWR_VNDR_RTNG
VENDOR RATING TYPE	DWL_VNDR_RTNG_TYP
VENDOR SITE	DWR_VNDR_SITE
VENDOR SITE COURIER ASSIGNMENT	DWR_VNDR_SITE_COURIER_ASGN
VENDOR SITE TYPE	DWL_VNDR_SITE_TYP
VIRTUAL TEAM	DWR_VRTL_TEAM
VOICE CALL DAY DRVD	DWD_VOI_CALL_DAY
VOICE CALL MONTH AGGR	DWA_VOI_CALL_MO
VOICE MESSAGE SERVICE	DWR_VOI_MSG_SRVC
VOIP CALL EVENT	DWB_VOIP_CALL_EVT
VOLUME BAND	DWL_VOL_BND
VPN LOGICAL DEVICE ROLE	DWR_VPN_LGICL_DVC_RL
WAN PROTOCOL	DWR_WAN_PROTCL
WEATHER CONDITION	DWR_WEATHR_CNDTN
WEB PAGE	DWR_WEB_PG

**Table 5–2 (Cont.) Entity Mapping Table: Logical to Physical Mapping P to Z**

<b>Entity</b>	<b>Table or View</b>
WEB PAGE CONTENT	DWR_WEB_PG_CNTNT
WEB PAGE TYPE	DWL_WEB_PG_TYP
WEEK TODATE TRANSFORMATION	DWR_WK_TODATE_TRANS
WEEK TRANSFORMATION	DWR_WK_TRANS
WEEKDAY	DWR_WKDAY
WIRELESS CALL EVENT	DWB_WRLS_CALL_EVT
WIRELESS CONTENT DOWNLOADING EVENT	DWB_WRLS_CNTNT_DNLDG_EVT
WIRELESS NETWORK ELEMENT	DWR_WRLS_NTWK_ELMNT
WIRELESS RATING PLAN	DWR_WRLS_RTNG_PLN
WIRELESS ROAMING EVENT	DWB_WRLS_RMNG_EVT
WIRELESS ROAMING EVENT BATCH	DWB_WRLS_RMNG_EVT_BTCH
WIRELESS SPECTRUM	DWR_WRLS_SPTRUM
YEAR TRANSFORMATION	DWR_YR_TRANS

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## Oracle Communications Data Model Partitioning

This chapter provides the partitioning strategy for the Oracle Communications Data Model physical base, derived, and aggregate tables.

This chapter includes the following section:

- [About Oracle Communications Data Model Partitioning, Compression, and Parallelism](#)
- [Partitioning Strategy for Oracle Communications Data Model](#)

### About Oracle Communications Data Model Partitioning, Compression, and Parallelism

All base, derived, and aggregate tables are partitioned, with the (standard) compression and parallel option activated by default. These tables are partitioned due to their nature (size) for performance and scalability and to improve performance. The default partition method used is INTERVAL partitioning, which creates automatically equi-sized partitions as data arrives. For partitioning, usually, a column of data type DATE is used (DAY or MONTH level).

If Exadata is used with the Hybrid Columnar Compression option, the option is leveraged for use with Oracle Communications Data Model.

For more information, see *Oracle Communications Data Model Implementation and Operations Guide*.

### Partitioning Strategy for Oracle Communications Data Model

[Table 6–1](#) shows the partitioning strategy for the Oracle Communications Data Model physical base, derived, and aggregate tables.

**Table 6–1 Physical Data Model Partitioning**

Physical Table Name	Partition Key Column	Partition Level	Default Tablespace Name
DWA_ACCT_DEBT_MO	DT	Quarter	TBS_MV
DWA_ACCT_PYMT_MO	DT	Quarter	TBS_MV
DWA_ACCT_PYMT_MTHD_STAT_HIST	DT	Quarter	TBS_MV
DWA_ACCT_RFND_MO	DT	Quarter	TBS_MV
DWA_ACCT_STAT_TYP	DT	Quarter	TBS_MV
DWA_ACCT_STTSTC_TYP	DT	Quarter	TBS_MV

**Table 6–1 (Cont.) Physical Data Model Partitioning**

Physical Table Name	Partition Key Column	Partition Level	Default Tablespace Name
DWA_ARPU_BASE_CUST_TYP	DT	Quarter	TBS_MV
DWA_BER_FER_ERR_RATIO_MO	DT	Quarter	TBS_MV
DWA_CALL_CNTR_CALL_MO	DT	Quarter	TBS_MV
DWA_CALL_CNTR_CASE_MO	DT	Quarter	TBS_MV
DWA_CANBLZTN_DTL_MO	DT	Quarter	TBS_MV
DWA_CELL_STTSTC_MO	DT	Quarter	TBS_MV
DWA_CMISN_MO	DT	Quarter	TBS_MV
DWA_CNCT_DSCNCT_MO	DT	Quarter	TBS_MV
DWA_CNRT_MO	DT	Quarter	TBS_MV
DWA_COST_CUST_MO	DT	Quarter	TBS_MV
DWA_COST_ORG_MO	DT	Quarter	TBS_MV
DWA_CRDT_CTGRY_MO	DT	Quarter	TBS_MV
DWA_CUST_ACQSTN_SUMM_MO	DT	Quarter	TBS_MV
DWA_CUST_DEBT_COLLCTN_MO	DT	Quarter	TBS_MV
DWA_CUST_EQPMNT_INSTLTN_MO	DT	Quarter	TBS_MV
DWA_DATA_USG_MO	DT	Quarter	TBS_MV
DWA_EXTRNL_DEBT_COLLCTN_MO	DT	Quarter	TBS_MV
DWA_GIVE_AWAY_ITEM_MO	DT	Quarter	TBS_MV
DWA_GPRS_PCU_MO	DT	Quarter	TBS_MV
DWA_GPRS_SRVCS_MO	DT	Quarter	TBS_MV
DWA_HNDST_STCK_MO	DT	Quarter	TBS_MV
DWA_HNDST_SUBSDY_MO	DT	Quarter	TBS_MV
DWA_INTRNL_DEBT_COLLCTN_MO	DT	Quarter	TBS_MV
DWA_INVC_ADJ_MO	DT	Quarter	TBS_MV
DWA_INVC_CUST_TYP	DT	Quarter	TBS_MV
DWA_IN_PLTFRM_MO	DT	Quarter	TBS_MV
DWA_LN_ACTVTN_TMNT_MO	DT	Quarter	TBS_MV
DWA_LYLTY_PROG_MO	DT	Quarter	TBS_MV
DWA_MKT_SHARE	DT	Quarter	TBS_MV
DWA_MSC_TRFC_MO	DT	Quarter	TBS_MV
DWA_NBR_PRT_MO	DT	Quarter	TBS_MV
DWA_NTWK_AVLBLTY_MO	DT	Quarter	TBS_MV
DWA_NTWK_TCHPNT_MO	DT	Quarter	TBS_MV
DWA_PRPD_ACCT_STTSTC_SGMNT	DT	Quarter	TBS_MV
DWA_PRPD_ALWNCE_MO	DT	Quarter	TBS_MV
DWA_PRPD_CALL_SUMM_MO	DT	Quarter	TBS_MV
DWA_PRTNR_STLMNT_MO	DT	Quarter	TBS_MV
DWA_PYMT_AGNG_MO	DT	Quarter	TBS_MV
DWA_RDMPTN_MO	DT	Quarter	TBS_MV
DWA_RF_NTWK_CPCTY_MO	DT	Quarter	TBS_MV
DWA_SHARED_PKG_USG_STTSTC_MO	DT	Quarter	TBS_MV
DWA_SHOP_EFFNCY_MO	DT	Quarter	TBS_MV



**Table 6–1 (Cont.) Physical Data Model Partitioning**

Physical Table Name	Partition Key Column	Partition Level	Default Tablespace Name
DWA_SL_CMPGN_SUMM_MO	DT	Quarter	TBS_MV
DWA_SL_MO	DT	Quarter	TBS_MV
DWA_SPLMNTR_SRVC_USG_MO	DT	Quarter	TBS_MV
DWA_SUBSDY_AMT_MO	DT	Quarter	TBS_MV
DWA_VAS_SBRP_QCK_SUMM_MO	DT	Quarter	TBS_MV
DWA_VAS_USG_MO	DT	Quarter	TBS_MV
DWA_VOI_CALL_MO	DT	Quarter	TBS_MV
DWB_ACCS_MTHD_PORT_HIST	ACT_CTVR_DT	MONTH	TBS_BASE
DWB_ACCS_MTHD_STAT_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_ACCT_BAL_HIST	BAL_DT	MONTH	TBS_BASE
DWB_ACCT_COST	INCURR_DT	MONTH	TBS_BASE
DWB_ACCT_CRDT_LMT	EFF_FROM_DT	MONTH	TBS_BASE
DWB_ACCT_MNGMNT_HIST	ASGN_STRT_DT	MONTH	TBS_BASE
DWB_ACCT_PMP_PRTCPTN_HIST	RLTN_STRT_DT	MONTH	TBS_BASE
DWB_ACCT_PYMT	PYMT_DT	MONTH	TBS_BASE
DWB_ACCT_PYMT_MTHD_STAT	EFF_FROM_DT	MONTH	TBS_BASE
DWB_ACCT_RFND	PYMT_DT	MONTH	TBS_BASE
DWB_ACCT_STAT_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_APNMNT_CLNDR	DAY_KEY	DAY	TBS_BASE
DWB_BLK_LST_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_BRDBND_USG_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_BSNS_UNIT_COST	INCURR_DT	MONTH	TBS_BASE
DWB_CELL_SITE_COST	INCURR_DT	MONTH	TBS_BASE
DWB_CHNL_COST	INCURR_DT	MONTH	TBS_BASE
DWB_CMPGN_COST	INCURR_DT	MONTH	TBS_BASE
DWB_CMPGN_MSG_CRTVE	CRTN_DT	MONTH	TBS_BASE
DWB_CNCT_LST_COST	INCURR_DT	MONTH	TBS_BASE
DWB_CNRT_APRVL	CNRT_APRVL_DT	MONTH	TBS_BASE
DWB_CNRT_STAT	EFF_FROM_DT	MONTH	TBS_BASE
DWB_CNRT_TERM_VAL	TERM_PRD_STRT_DT	MONTH	TBS_BASE
DWB_CNTNT_DLVRV_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_COST	INCURR_DT	MONTH	TBS_BASE
DWB_COST_CNTR_BDGT	EFF_FROM_DT	MONTH	TBS_BASE
DWB_CRCUT_RNTL	EFF_FROM_DT	MONTH	TBS_BASE
DWB_CRCUT_TRFC	EFF_STRT_DT	MONTH	TBS_BASE
DWB_CUST_COST	INCURR_DT	MONTH	TBS_BASE
DWB_CUST_FLD_INSTLTN	FLD_ACTVTY_STRT_DT	MONTH	TBS_BASE
DWB_CUST_FLD_SPPRT	FLD_ACTVTY_STRT_DT	MONTH	TBS_BASE
DWB_CUST_FLD_SRVC_ACTVTY	FLD_ACTVTY_STRT_DT	MONTH	TBS_BASE
DWB_CUST_FLD_SRVC_DTL	ACTN_DT	MONTH	TBS_BASE
DWB_CUST_ORDR	ORGNL_ORDR_DT	MONTH	TBS_BASE
DWB_CUST_ORDR_LN_ITEM	ORGNL_ORDR_DT	MONTH	TBS_BASE

**Table 6–1 (Cont.) Physical Data Model Partitioning**

Physical Table Name	Partition Key Column	Partition Level	Default Tablespace Name
DWB_CUST_ORDR_LN_ITEM_ST_ASGN	ORDR_LN_ITEM_STATE_BEGIN_DT	MONTH	TBS_BASE
DWB_CUST_ORDR_PYMT	PYMT_DT	MONTH	TBS_BASE
DWB_CUST_ORDR_STATE_ASGN	ORDR_STATE_BEGIN_DT	MONTH	TBS_BASE
DWB_DATA_SRVC_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_DEBT_COLLCTN	INTRACN_THRD_STRT_DT	MONTH	TBS_BASE
DWB_DEBT_COLLCTN_ASGN	ASGN_DT	MONTH	TBS_BASE
DWB_DEBT_COLLCTN_ASGN_BTCH	ASGN_DT	MONTH	TBS_BASE
DWB_EMP_ACT_LBR_HRLY	DAY_KEY	DAY	TBS_BASE
DWB_EMP_ACT_LBR_SALARIED	DAY_KEY	DAY	TBS_BASE
DWB_EMP_COST	INCURR_DT	MONTH	TBS_BASE
DWB_EMP_TRNG_REC	TRNG_STRT_DT	MONTH	TBS_BASE
DWB_EQPMNT_CNTR_COST	INCURR_DT	MONTH	TBS_BASE
DWB_EQPMNT_INSTNC_STAT_HIST	EFF_BEGIN_DT	MONTH	TBS_BASE
DWB_EVT	STRT_DT	DAY	TBS_BASE
DWB_EVT_ACCS_MTHD_ACTVTY	STRT_DT	DAY	TBS_BASE
DWB_EVT_ACCT	STRT_DT	MONTH	TBS_BASE
DWB_EVT_ASGN	EFF_FROM_DT	DAY	TBS_BASE
DWB_EVT_COST	INCURR_DT	MONTH	TBS_BASE
DWB_EVT_CRCUT_RNTL	STRT_DT	MONTH	TBS_BASE
DWB_EVT_EMP_PYRL	STRT_DT	MONTH	TBS_BASE
DWB_EVT_EQPMNT_INSTNC	STRT_DT	MONTH	TBS_BASE
DWB_EVT_FINCL	STRT_DT	MONTH	TBS_BASE
DWB_EVT_GEO	STRT_DT	MONTH	TBS_BASE
DWB_EVT_GFT_RDMPTN	STRT_DT	MONTH	TBS_BASE
DWB_EVT_INVC_DLVRV	STRT_DT	MONTH	TBS_BASE
DWB_EVT_LYLTY_PROG	STRT_DT	MONTH	TBS_BASE
DWB_EVT_LYLTY_PROG_ACMLTN	STRT_DT	MONTH	TBS_BASE
DWB_EVT_LYLTY_PROG_RDMPTN	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PROD_PKG	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PRPD_MBL	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PRTY_ASGN	EFF_DT	DAY	TBS_BASE
DWB_EVT_PRTY_INTRACN	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PRTY_INTRACN_CALL	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PRTY_INTRACN_EML	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PRTY_INTRACN_LITR	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PRTY_INTRACN_VST	STRT_DT	MONTH	TBS_BASE
DWB_EVT_PRTY_PRFL	STRT_DT	MONTH	TBS_BASE
DWB_EVT_SBRP	STRT_DT	MONTH	TBS_BASE
DWB_EVT_SBRP_CHNG	STRT_DT	MONTH	TBS_BASE
DWB_EVT_SIM_CARD	STRT_DT	MONTH	TBS_BASE
DWB_EVT_STAT	EFF_FROM_DT	DAY	TBS_BASE

**Table 6–1 (Cont.) Physical Data Model Partitioning**

Physical Table Name	Partition Key Column	Partition Level	Default Tablespace Name
DWB_EVT_WEB_RGSTRN	STRT_DT	MONTH	TBS_BASE
DWB_FIXED_LN_CALL_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_IDD_CALL_EVT	EVT_BEGIN_DT	MONTH	TBS_BASE
DWB_INTRNT_ACCS_EVT	EVT_BEGIN_DT	MONTH	TBS_BASE
DWB_INVC	BLLG_DT	MONTH	TBS_BASE
DWB_INVC_ADJ	STRT_DT	MONTH	TBS_BASE
DWB_INVC_DISC	BLLG_DT	MONTH	TBS_BASE
DWB_INVC_ITEM	BLLG_DT	MONTH	TBS_BASE
DWB_INVC_ITEM_DTL	BLLG_DT	MONTH	TBS_BASE
DWB_INVC_PYMT_ASGN	EFF_FROM_DT	MONTH	TBS_BASE
DWB_ISP_USG_EVT	EVT_BEGIN_DT	MONTH	TBS_BASE
DWB_LYLTY_PROG_PTS_BAL	EFF_FROM_DT	MONTH	TBS_BASE
DWB_MDTD_CALL_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_MEDIA_OBJ_COST	INCURR_DT	MONTH	TBS_BASE
DWB_MKT_PLN_MGMT	MNG_ACTN_DT	MONTH	TBS_BASE
DWB_MMS_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_MNT_ALLWNC	BAL_DT	MONTH	TBS_BASE
DWB_NP_RQST_HDR	APLCTN_DT	MONTH	TBS_BASE
DWB_NP_RQST_LN_ITEM	NP_STEP_STRT_DT	MONTH	TBS_BASE
DWB_NP_RQST_LN_ITEM_STATE_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_NP_RQST_STATE_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_NTWK_ELMNT_COST	INCURR_DT	MONTH	TBS_BASE
DWB_NTWK_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_NTWK_FLT	OPEN_DT	MONTH	TBS_BASE
DWB_PRMTN_COST	INCURR_DT	MONTH	TBS_BASE
DWB_PRMTN_MGMT_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_PRMTN_TERM_VAL	TERM_PRD_STRT	MONTH	TBS_BASE
DWB_PROD_COST	INCURR_DT	MONTH	TBS_BASE
DWB_PROD_MKT_PLN_COST	INCURR_DT	MONTH	TBS_BASE
DWB_PRPD_RCHRG	PYMT_DT	MONTH	TBS_BASE
DWB_PRTY_AM_PMP_ASGN_HIST	ASGN_BEGIN_DT	MONTH	TBS_BASE
DWB_PRTY_AM_PMP_ASGN_STAT	ASGN_BEGIN_DT	MONTH	TBS_BASE
DWB_PRTY_INTRACN_THRD	INTRACN_THRD_STRT_DT	MONTH	TBS_BASE
DWB_PRTY_ORDR_ASGN	EFF_FROM_DT	MONTH	TBS_BASE
DWB_PRTY_PRMTN_RESPN	RESPN_DT	MONTH	TBS_BASE
DWB_PRTY_STAT_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_PTV_FULL_CHNL_ACTVTN	EVT_BEGIN_DT	MONTH	TBS_BASE
DWB_PTV_QPI_SRVC_EVT	EVT_BEGIN_DT	MONTH	TBS_BASE
DWB_PTV_USG_EVT	EVT_BEGIN_DT	MONTH	TBS_BASE
DWB_SBRP_STAT_HIST	EFF_FROM_DT	MONTH	TBS_BASE
DWB_SBRP_TERM_VAL	TERM_PRD_STRT_DT	MONTH	TBS_BASE
DWB_SL_CMISN_DTL	EFF_FROM_DT	MONTH	TBS_BASE

**Table 6–1 (Cont.) Physical Data Model Partitioning**

<b>Physical Table Name</b>	<b>Partition Key Column</b>	<b>Partition Level</b>	<b>Default Tablespace Name</b>
DWB_SL_CMISN_PYRL	PAY_DT	MONTH	TBS_BASE
DWB_SMS_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_SRVC_RQST	INTRACN_THRD_STRT_DT	MONTH	TBS_BASE
DWB_UMS_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_VNDR_APNMNT	VNDR_APNMNT_DT	MONTH	TBS_BASE
DWB_VOIP_CALL_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_WRLS_CALL_EVT	EVT_BEGIN_DT	DAY	TBS_BASE
DWB_WRLS_CNTNT_DNLDG_EVT	EVT_BEGIN_DT	MONTH	TBS_BASE
DWD_ACCT_DEBT_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_ACCT_PYMT_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_ACCT_PYMT_MTHD_STAT_HIST	MO_KEY	MONTH	TBS_DERIVED
DWD_ACCT_RFND_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_ACCT_STAT	MO_KEY	MONTH	TBS_DERIVED
DWD_ACCT_STTSTC	MO_KEY	MONTH	TBS_DERIVED
DWD_ARPU_BASE	MO_KEY	MONTH	TBS_DERIVED
DWD_BER_FER_ERR_RATIO_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_CALL_CNTR_CALL_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_CALL_CNTR_CASE_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_CANBLZTN_DTL_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_CELL_STTSTC_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_CHRN_PRDCT_SRC	MO_KEY	MONTH	TBS_DERIVED
DWD_CMISN_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_CNCT_DSCNCT_DAY	DAY_KEY	DAY	TBS_DERIVED
DWD_CNRT	MO_KEY	MONTH	TBS_DERIVED
DWD_CNRT_CHNG	MO_KEY	MONTH	TBS_DERIVED
DWD_COST_CUST	MO_KEY	MONTH	TBS_DERIVED
DWD_COST_ORG	MO_KEY	MONTH	TBS_DERIVED
DWD_CRDT_CTGRY	MO_KEY	MONTH	TBS_DERIVED
DWD_CUST_ACQSTN_SUMM_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_CUST_DEBT_COLLCTN	MO_KEY	MONTH	TBS_DERIVED
DWD_CUST_EQPMNT_INSTLTN_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_DATA_USG_DAY	DAY_KEY	DAY	TBS_DERIVED
DWD_EXTRNL_DEBT_COLLCTN_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_GIVE_AWAY_ITEM_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_GPRS_PCU_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_GPRS_SRVCS_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_HNDST_STCK_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_HNDST_SUBSDY_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_INTRNL_DEBT_COLLCTN_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_INVC	MO_KEY	MONTH	TBS_DERIVED
DWD_INVC_ADJ	MO_KEY	MONTH	TBS_DERIVED
DWD_IN_PLTFRM_DAY	MO_KEY	MONTH	TBS_DERIVED

**Table 6–1 (Cont.) Physical Data Model Partitioning**

<b>Physical Table Name</b>	<b>Partition Key Column</b>	<b>Partition Level</b>	<b>Default Tablespace Name</b>
DWD_LN_ACTVTN_TMNT_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_LYLTYPROG_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_MKT_OPRTR_PRTNG	MO_KEY	MONTH	TBS_DERIVED
DWD_MKT_SHARE	MO_KEY	MONTH	TBS_DERIVED
DWD_MSC_TRFC_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_NBR_PRT_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_NTWK_AVLBLTY_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_NTWK_TCHPNT	MO_KEY	MONTH	TBS_DERIVED
DWD_PRPD_ACCT_STTSTC	MO_KEY	MONTH	TBS_DERIVED
DWD_PRPD_ALWNCE_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_PRPD_CALL_SUMM_DAY	DAY_KEY	DAY	TBS_DERIVED
DWD_PRTNR_STLMNT	MO_KEY	MONTH	TBS_DERIVED
DWD_PYMT_AGNG_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_RDMPNTN_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_RF_NTWK_CPCTY_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_SBCRBR_CHRN_STTSTC	MO_KEY	MONTH	TBS_DERIVED
DWD_SHARED_PKG_USG_STTSTC_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_SHOP_EFFNCY_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_SL_CMPGN_SUMM_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_SL_DAY	MO_KEY	MONTH	TBS_DERIVED
DWD_SL_RPRSTV_STTSTC	MO_KEY	MONTH	TBS_DERIVED
DWD_SPLMNTR_SRVC_USG	MO_KEY	MONTH	TBS_DERIVED
DWD_SUBSDY_AMT	MO_KEY	MONTH	TBS_DERIVED
DWD_VAS_SBRP_QCK_SUMM	MO_KEY	MONTH	TBS_DERIVED
DWD_VAS_USG_DAY	DAY_KEY	DAY	TBS_DERIVED
DWD_VOI_CALL_DAY	DAY_KEY	DAY	TBS_DERIVED



# Part II

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## Intra-ETL, OLAP, Data Mining, and Utility Scripts

This part provides information on Oracle Communications Data Model Intra-ETL Mapping, OLAP, Data Mining, and Utility Scripts.

Part II contains the following chapters:

- [Chapter 7, "Oracle Communications Data Model Intra-ETL"](#)
- [Chapter 8, "Oracle Communications Data Model OLAP Model Dimensions"](#)
- [Chapter 9, "Oracle Communications Data Model OLAP Model Cubes"](#)
- [Chapter 10, "Oracle Communications Data Model Data Mining Models"](#)
- [Chapter 11, "Oracle Communications Data Model Utility Scripts"](#)





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# Oracle Communications Data Model Intra-ETL

This chapter includes the following sections:

- [Introduction to Oracle Communications Data Model Intra-ETL](#)
- [Value Lookup Models for ETL Mappings](#)
- [Intra-ETL Source and Target Tables](#)
- [Intra-ETL PL/SQL Mapping Packages for Source and Target Tables](#)
- [Intra-ETL Process Flows](#)

## Introduction to Oracle Communications Data Model Intra-ETL

In Oracle Communications Data Model, reference and lookup tables store master, reference, and dimensional data; and the base, derived, and aggregate tables store transaction and fact data at different granularities. The base tables store the transaction data at the lowest level of granularity, while the derived and aggregate tables store consolidated and summary transaction data.

Two types of Extract, Transform, and Load (ETL) operations populate the tables with data. The source-ETL operations populate the reference, lookup, and base tables with data from the source On-Line Transaction Processing (OTLP) applications. Additional Intra-ETL operations populate the derived and aggregate tables with the data in the base, reference, and lookup tables. While the source ETL operations are not a part of Oracle Communications Data Model, the Intra-ETL operations are.

There are two categories of Intra-ETL operations (scripts):

- **Derived Population:** A database package containing scripts that populate the derived tables based on the content of the base, reference, and lookup tables.
- **Aggregate Population:** A database package containing scripts to refresh the Oracle Communications Data Model aggregate tables, mostly Materialized Views, based on the content of the derived tables and some reference tables.

Derived tables are implemented using Oracle tables, while the Aggregate tables are implemented using Materialized Views.

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**Note:** Changes to intra-ETL cannot be supported. But it is expected that if the business needs require a change in the business logic of the intra-ETLs, some customer adaptations could be necessary even if they are not supported.

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The INTRA\_ETL\_FLW is actually a process flow designed using the Oracle Warehouse Builder Workflow component which includes the dependency of each individual sub process flow and executes each process flow in the proper order. The result of each table loading is tracked in DWC\_control tables.

For more information, see "[Intra-ETL Process Flows](#)" and *Oracle Communications Data Model Implementation and Operations Guide*.

## Value Lookup Models for ETL Mappings

Oracle Communications Data Model Value\_Lookup values contains the Lookup tables and its values which are used in Intra-ETL mapping. Hardcoded values contains the list of tables and values which are used in Join conditions & Filter conditions in Intra-ETL mapping.

Table 7-1 Shows the lookup tables and values which are used in Intra-ETL mapping.

**Table 7-1 Value Lookup Values for Intra-ETL Mapping**

SI No.	Hard Coded Value Table Name	Hard Coded Value Column	Value used	ETL Program Name	ETL Usage Type
1	DWB_ACCT_DEBT_DTL	ACCT_DEBT_DTL_TYP_CD	BILL, PNLTY	DWD_ACCT_DEBT_DAY	Hardcoded
2	DWB_ACCT_PYMT	PYMT_MTHD_TYP_CD	BNK	DWD_ACCT_PYMT_DAY	Hardcoded
3	DWB_ACCT_PYMT	PYMT_TRX_TYP_CD	LTPAY, DPST, PNLTY, INVC	DWD_ACCT_PYMT_DAY	Hardcoded
4	DWB_EVT_ACCT	ACCT_EVT_TYP_CD	CRT, VOLDEACT, VOLSUSP, RECNC, RFSUS, TMNT, INDEACT, DISCNCTN, INSUSP, ACTVTN	DWD_ACCT_STAT	Hardcoded
5	DWR_PROD	PROD_CD	PAYTV, HOMTEL, IDD, WRLS, BRDBND	DWD_ACCT _ STTSTC	Hardcoded
6	DWB_ACCT_STAT_HIST	ACCT_STAT_TYP_CD	CHRN	DWD_ACCT _ STTSTC	Hardcoded
7	DWB_EVT_LYLTYP_PROG	LYLTYP_PROG_EVT_TYP_CD	ACMLTN, RDMPN	DWD_ACCT _ STTSTC	Hardcoded
8	DWB_INVN_ITEM	PROD_CHRG_TYP_CD	SRVC, SLPROD, AIRTM	DWD_ARPU_BASE	Hardcoded
9	DWB_COST	COST_SUBTYP_CD	AQSNOCOST, RETNCOST, CCNTCOST, OPRNCOST	DWD_ARPU_BASE	Hardcoded
10	DWB_EVT_PRTY_INTRACN_CALL	INTRACN_RSN_CD	CUSTCOMP	DWD_CALL_CNTR_CALL_DAY	Hardcoded
		INTRACN_RSLT_TYP_CD	RESLVD, PNDNG	DWD_CALL_CNTR_CALL_DAY	Hardcoded
11	DWR_CNRT_ASGN	CNRT_ASGN_RSN_CD	OPINIT, CUSTCHNG	DWD_CANBLZTN_DTL_DAY	Hardcoded

**Table 7-1 (Cont.) Value Lookup Values for Intra-ETL Mapping**

SI No.	Hard Coded Value Table Name	Hard Coded Value Column	Value used	ETL Program Name	ETL Usage Type
14	DWD_CNRT_CHNG_MO	CNRT_CHNG_TYP_CD	RPLC, TMNT	DWD_CNRT	Hardcoded
15	DWB_INVN_ITEM	INVC_ITEM_TYP_CD	MTHLYFEE, PNLTY	DWD_CNRT	Hardcoded
16	DWR_CMPGN	CMPGN_PRPS	ACQR, RTNTN	DWD_CNRT	Hardcoded
17	DWR_PRMTN	PRMTN_TYP_CD	PRMM	DWD_CNRT	Hardcoded
18	DWB_CNRT_TERM_VAL	CNRT_TERM_TYP_CD	MONAMT	DWD_CNRT_CHNG	Hardcoded
19	DWR_CNRT_ASGN	CNRT_ASGN_TYP_CD	RPLC	DWD_CNRT_CHNG	Hardcoded
20	DWB_CNRT_STAT	CNRT_STAT_TYP_CD	TMNT	DWD_CNRT_CHNG	Hardcoded
		CNRT_STAT_RSN_CD	PRMTN, PRODUPGD, CMLPN	DWD_CNRT_CHNG	Hardcoded
21	DWB_CUST_COST	COST_SUBTYP_CD	AQSNOCOST, RETNCOST, CMSN, NTWKOCOST, CCOCOST, RHCOGS, AHCOSG, ACMSNP, ACMSNC, DMREPY, DMCNRT, OTRCOST, SCCPREPY, SCCCNRT, SLNGCOST, OPRNCOST	DWD_COST_CUST	Hardcoded
22	DWB_BSNS_UNIT_COST	COST_SUBTYP_CD	OTRCOST, OPRNCOST, INSTCOST, ADVRCOST, CBUDGET, CATNCOST	DWD_COST_ORG	Hardcoded
23	DWB_CNRT_TERM_VAL	CNRT_TERM_TYP_CD	CNRTVAL	DWD_CUST_ ACQSTN_SUMM_ DAY	Hardcoded
24	DWB_EVT_SBRP	EVT_TYP_CD	ACTV, TMNT	DWD_CUST_ ACQSTN_SUMM_ DAY	Hardcoded
25	DWB_ACCT_DEBT_DTL	ACCT_DEBT_DTL_ TYP_CD	PNLTY	DWD_EXTRNL_ DEBT_COLLCTN_ DAY	Hardcoded
26	DWR_ITEM	ITEM_TYPE_CD	HNDST	DWD_HNDST_ SUBSDY_DAY	Hardcoded
27	DWR_PROD	PROD_NAME	HANDSET	DWD_HNDST_ SUBSDY_DAY	Hardcoded
28	DWB_ACCT_DEBT_DTL	ACCT_DEBT_DTL_ TYP_CD	PNLTY	DWD_INTRNL_ DEBT_COLLCTN_ DAY	Hardcoded

**Table 7-1 (Cont.) Value Lookup Values for Intra-ETL Mapping**

SI No.	Hard Coded Value Table Name	Hard Coded Value Column	Value used	ETL Program Name	ETL Usage Type
29	DWB_EVT_ACCT	ACCT_EVT_TYP_CD	CRT, TMNATMPT, TMNT	DWD_LN_ACTVTN_TMNT_DAY	Hardcoded
30	DWR_CMPGN	CMPGN_PRPS_TYP_CD	RTNTN, CONDATE	DWD_LN_ACTVTN_TMNT_DAY	Hardcoded
31	DWB_MNT_ALLWNC	PPA_CTGRY_CD	FLANSWER, FLCALL	DWD_PRPD_ALWNCE_DAY	Hardcoded
32	DWR_PROD_MKT_PLN	PROD_MKT_PLN_TYP_CD	PRPD	DWD_PRPD_CALL_SUMM_DAY	Hardcoded
33	DWR_EVT_PRTY_RL	EVT_PRTY_RL_CD	OPRT	DWD_RDMPPTN_DAY	Hardcoded
34	DWB_UMS_EVT	UMS_EVT_TYP_CD	RCVD, DEL	DWD_VAS_USAGE_DAY	Hardcoded
35	DWB_WRLS_CALL_EVT	DVRT_RTRV_TYP_CD	RTRV, DVRT	DWD_VAS_USAGE_DAY	Hardcoded
36	DWB_EVT_LYLTYP_PROG	LYLTYP_PROG_EVT_TYP_CD	ACMLTN	DWD_SBCRBR_CHRN_STTSTC	Hardcoded
37	DWB_WRLS_CALL_EVT	CALL_TMNT_RSN_CD	DRPD, CNCL		Hardcoded
38	DWB_CNRT_TERM_VAL	CNRT_TERM_TYP_CD	NBRLNS	DWD_SHRD_PKG_USG_STTSTC_DAY	Hardcoded
39	DWR_PROD_CAPBLTY	PROD_CAPBLTY_CD	NBRLNS	DWD_SHRD_PKG_USG_STTSTC_DAY	Hardcoded
40	DWB_EVT	EVT_RSLT_CD	SUCC, FAIL	DWD_SL_RPRSTV_STTSTC_MO	Hardcoded
41	DWR_PROD_MKT_PLN_ASGN	PROD_MKT_PLN_ASGN_CD	GIFT	DWD_SUBSDY_AMT	Hardcoded
44	DWR_PROD	PROD_NAME	CALL, SMS, MMS	DWD_SUBSDY_AMT	Hardcoded
1	DWL_DEBT_AGNG_BND	DEBT_AGNG_BND_CD	DAB1, DAB3, DAB2, DAB4,	DWD_ACCT_DEBT_DAY, DWD_ACCT_STTSTC, DWD_CRDT_CTGRY_MO, DWD_PYMT_AGNG_DAY, DWD_SBCRBR_CHRN_STTSTC	Value Lookup
2	DWL_AGE_ON_NET_BND	AGE_ON_NET_BND_CD	M1, M3, M6, M12, M24, M36, M60, M96, M120, M240, M240+,	DWD_ACCT_PYMT_DAY, DWD_CRDT_CTGRY_MO, DWD_HNDST_SUBSDY_DAY, DWD_INVC, DWD_ACCT_STTSTC, DWD_PRPD_ACCT_STTSTC, DWD_PYMT_AGNG_DAY, DWD_RDMPPTN_DAY, DWD_LYLTYP_PROG_DAY, DWD_SBCRBR_CHRN_STTSTC	Value Lookup

Table 7-1 (Cont.) Value Lookup Values for Intra-ETL Mapping

SI No.	Hard Coded Value Table Name	Hard Coded Value Column	Value used	ETL Program Name	ETL Usage Type
3	DWL_AGE_ON_NET_BND	AGE_ON_NET_BND_ FROM	0 , 3 , 6 , 12, 25 , 36 , 51 , 101, 201 , 271 , 401 ,	DWD_ACCT_PYMT_ DAY	Value_ Lookup
4	DWL_AGE_ON_NET_BND	AGE_ON_NET_BND_TO	2 , 5 , 11, 24 , 35 , 50 , 100, 200 , 270 , 400 , 9999999999,	DWD_ACCT_PYMT_ DAY	Value_ Lookup
6	DWL_AGE_BND	AGE_BND_CD	AGBND1 , AGBND2 , AGBND3 , AGBND4 , AGBND5	DWD_ACCT_ STTSTC, DWD_ SBCRBR_CHRN_ STTSTC	Value_ Lookup
7	DWL_CHRN_RSN	CHRN_RSN_CD	NORSN , SVFLR , CRELOC , CHRNDFLT, CHRNSRVC , RLCTN, DISSAT , SVCTMNT , NONPAID	DWD_ACCT _ STTSTC	Value_ Lookup
8	DWL_CUST_RVN_BND	CUST_RVN_BND_CD	BAND100 , BAND200 , BAND300 , BAND400 , BAND500 , BAND600 , BAND700 , BAND800 , BAND900 , BAND1000 , BAND1100 , BAND1600 , BAND1500 , BAND1400 , BAND1300 , BAND1200 , BAND1700 , BAND1800 , BAND1900 , BAND2000 , BND2000+	DWD_ACCT _ STTSTC, DWD_ SBCRBR_CHRN_ STTSTC	Value_ Lookup
9	DWL_ARPU_BAND	ARPU_BND_CD	ARPU7500+ , ARPU1000 , ARPU2500 , ARPU5000 , ARPU7500	DWD_ACCT_ STTSTC, DWD_ SBCRBR_CHRN_ STTSTC	Value_ Lookup
10	DWL_PK_OFPK_TIME	PK_OFPK_TIME_CD	PK , OFPK	DWD_CDR_WRLS_ DAY, DWD_PRPD_ CALL_SUMM_DAY, DWD_VAS_USAGE_ DAY	Value_ Lookup

**Table 7-1 (Cont.) Value Lookup Values for Intra-ETL Mapping**

SI No.	Hard Coded Value Table Name	Hard Coded Value Column	Value used	ETL Program Name	ETL Usage Type
16	DWL_RECHRG_RVN_SLB	RECHRG_RVN_SLB_CD	\$0-25, \$25-50, \$50-100, \$100+	DWD_PRPD_ACCT_ STTSTC	Value_ Lookup
17	DWL_INTRACN_RSN	INTRACN_RSN_CD	CMPLN, DECOLL, SRVC, IBMKTG, OBMKTG, CUSTCOMP	DWD_PRPD_ACCT_ STTSTC	Value_ Lookup
18	DWL_PRMTN_RSLT_TYP	PRMTN_RSLT_TYP_CD	OFRACPT, PREVENT	DWD_SL_CMPGN_ DTL_DAY	Value_ Lookup

## Intra-ETL Source and Target Tables

Shows the packages to populate the derived tables. The naming convention by default is the physical name of the target table plus, "\_PKG"

### DWD\_ACCT\_DEBT\_DAY\_PKG Package

Populate target table DWD\_ACCT\_DEBT\_DAY. For more information, see [ACCOUNT DEBT DAY DRVD](#).

**Table 7-2 DWD\_ACCT\_DEBT\_DAY\_PKG Package**

Source Table Name
DWB_ACCT_BAL_HIST
DWB_ACCT_BAL_ADJ
DWB_ACCT_PYMT
DWL_DEBT_AGNG_BND
DWR_ACCT
DWR_ADDR_LOC
DWR_CUST
DWR_DAY

### DWD\_ACCT\_PYMT\_DAY\_PKG Package

Populate target table DWD\_ACCT\_PYMT\_DAY. For more information, see [ACCOUNT PAYMENT DAY DRVD](#).

**Table 7-3 DWD\_ACCT\_PYMT\_DAY\_PKG Package**

Source Table Name
DWB_ACCT_PYMT
DWB_DEBT_COLLCTN_ASGN
DWB_INV_PYMT_ASGN
DWB_INV
DWL_AGE_ON_NET_BND

**Table 7-3 (Cont.) DWD\_ACCT\_PYMT\_DAY\_PKG Package****Source Table Name**


---

DWR\_ACCT  
DWR\_BSNS\_MO  
DWR\_ADDR\_LOC  
DWR\_CUST

---

**DWD\_ACCT\_PYMT\_MTHD\_STAT\_HIST\_PKG Package**

Populate target table DWD\_ACCT\_PYMT\_MTHD\_STAT\_HIST. For more information, see [ACCOUNT PAYMENT METHOD STATUS HIST DRVD](#).

**Table 7-4 DWD\_ACCT\_PYMT\_MTHD\_STAT\_HIST\_PKG Package****Source Table Name**


---

DWB\_ACCT\_CRDT\_LMT  
DWB\_ACCT\_PYMT\_MTHD\_STAT  
DWB\_CNRT\_TERM\_VAL  
DWL\_AGE\_ON\_NET\_BND  
DWR\_ACCT  
DWR\_ACCT\_PREF\_PYMT\_MTHD  
DWR\_BSNS\_MO  
DWR\_CNRT  
DWR\_CUST

---

**DWD\_ACCT\_RFND\_DAY\_PKG Package**

Populate target table DWD\_ACCT\_RFND\_DAY. For more information, see [ACCOUNT REFUND DAY DRVD](#).

**Table 7-5 DWD\_ACCT\_RFND\_DAY\_PKG Package****Source Table Name**


---

DWB\_ACCT\_PYMT  
DWB\_ACCT\_RFND  
DWB\_INVC  
DWB\_INVC\_ADJ  
DWB\_INVC\_ITEM  
DWR\_ADDR\_LOC  
DWR\_CUST  
DWR\_DAY

---

## DWD\_ACCT\_STAT\_PKG Package

Populate target table DWD\_ACCT\_STAT. For more information, see [ACCOUNT STATUS DRVD](#).

**Table 7-6 DWD\_ACCT\_STAT\_PKG Package**

---

**Source Table Name**

---

DWB\_ACCT\_RFND  
DWB\_EVT\_ACCT  
DWR\_ACCT  
DWR\_ADDR\_LOC  
DWR\_BSNS\_MO  
DWR\_CUST  
DWR\_PRTY\_LYLTY\_PROG\_PRTCPTN  
DWR\_SBRP

---

## DWD\_ARPU\_BASE\_PKG Package

Populate target table DWD\_ARPU\_BASE. For more information, see [ARPU BASE DRVD](#).

**Table 7-7 DWD\_ARPU\_BASE\_PKG Package**

---

**Source Table Name**

---

DWB\_ACCT\_COST  
DWB\_INVC  
DWB\_INVC\_ITEM  
DWB\_PROD\_COST  
DWB\_SL\_CMISN\_DTL  
DWD\_VOI\_CALL\_DAY  
DWL\_RECHRG\_RVN\_SLB  
DWR\_ACCT  
DWR\_ADDR\_LOC  
DWR\_BSNS\_MO  
DWR\_CUST  
DWR\_SBRP  
DWR\_SL\_CHNL\_RPRSTV

---

## DWD\_CALL\_CNTR\_CALL\_DAY\_PKG Package

Populate target table DWD\_CALL\_CNTR\_CALL\_DAY. For more information, see [CALL CENTER CALL DAY DRVD](#).



**Table 7–8 DWD\_CALL\_CNTR\_CALL\_DAY\_PKG Package****Source Table Name**


---

DWB\_EVT\_PRTY\_INTRACN\_CALL  
DWR\_ACCT  
DWR\_DAY  
DWR\_TIME\_SLT

---

**DWD\_CALL\_CNTR\_CASE\_DAY\_PKG Package**

Populate target table DWD\_CALL\_CNTR\_CASE\_DAY. For more information, see [CALL CENTER CASE DAY DRVD](#).

**Table 7–9 DWD\_CALL\_CNTR\_CASE\_DAY\_PKG Package****Source Table Name**


---

DWB\_PRTY\_INTRACN\_THRD  
DWR\_CUST  
DWR\_DAY

---

**DWD\_CANBLZTN\_DTL\_DAY\_PKG Package**

Populate target table DWD\_CANBLZTN\_DTL\_DAY. For more information, see [CANNIBALIZATION DETAIL DAY DRVD](#).

**Table 7–10 DWD\_CANBLZTN\_DTL\_DAY\_PKG Package****Source Table Name**


---

DWR\_CHNL  
DWR\_CNRT\_ASGN  
DWR\_CNRT\_NEW  
DWR\_CNRT\_OLD  
DWR\_DAY  
DWR\_PROD\_MKT\_PLN1  
DWR\_PROD\_MKT\_PLN2

---

**DWD\_CMISN\_DAY\_PKG Package**

Populate target table DWD\_CMISN\_DAY. For more information, see [COMMISSION DAY DRVD](#).

**Table 7–11 DWD\_CMISN\_DAY\_PKG Package****Source Table Name**


---

DWB\_CNRT\_TERM\_VAL  
DWB\_INVC\_ITEM  
DWB\_SL\_CMISN\_DTL

---

**Table 7–11 (Cont.) DWD\_CMISN\_DAY\_PKG Package**

---

**Source Table Name**

---

DWR\_CNRT

DWR\_DAY

DWR\_SBRP

---

## DWD\_CNCT\_DSCNCT\_DAY\_PKG Package

Populate target table DWD\_CNCT\_DSCNCT\_DAY. For more information, see [CONNECT DISCONNECT DAY DRVD](#).

Contains connect and disconnect information of particular subscriber.

**Table 7–12 DWD\_CNCT\_DSCNCT\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_EVT

DWB\_EVT\_ACCS\_MTHD\_ACTVTY

DWR\_ACCS\_MTHD

DWR\_ADDR\_LOC

DWR\_DAY

DWR\_EVT\_LOC

---

## DWD\_CNRT\_PKG Package

Populate target table DWD\_CNRT. For more information, see [CONTRACT DRVD](#).

**Table 7–13 DWD\_CNRT\_PKG Package**

---

**Source Table Name**

---

DWB\_CNRT\_TERM\_VAL

DWB\_INVC

DWB\_INVC\_ITEM

DWD\_CNRT\_CHNG

DWL\_AGE\_ON\_NET\_BND

DWR\_ACCT

DWR\_ADDR\_LOC

DWR\_BSNS\_MO

DWR\_CMPGN

DWR\_CNRT

DWR\_CUST

DWR\_PRMTN

DWR\_SBRP

---

## DWD\_CNRT\_CHNG\_PKG Package

Populate target table DWD\_CNRT\_CHNG. For more information, see [CONTRACT CHANGED DRVD](#).

**Table 7-14 DWD\_CNRT\_CHNG\_PKG Package**

Source Table Name
DWB_CNRT_STAT
DWB_CNRT_TERM_VAL
DWB_CNRT_TERM_VAL_NEW
DWB_CNRT_TERM_VAL_OLD
DWR_BSNS_MO
DWR_CNRT
DWR_CNRT_ASGN
DWR_CNRT_NEW
DWR_CNRT_OLD
DWR_DAY
DWR_DAY_1
DWR_DAY_OLD_END_DAY
DWR_DAY_OLD_STRT_DAY

## DWD\_COST\_CUST\_PKG Package

Populate target table DWD\_COST\_CUST. For more information, see [COST CUSTOMER DRVD](#).

**Table 7-15 DWD\_COST\_CUST\_PKG Package**

Source Table Name
DWB_CUST_COST
DWR_BSNS_MO
DWR_CUST
DWR_SL_CHNL_RPRSTV

## DWD\_COST\_ORG\_PKG Package

Populate target table DWD\_COST\_ORG. For more information, see [COST ORGANIZATIONAL DRVD](#).

**Table 7-16 DWD\_COST\_ORG\_PKG Package**

Source Table Name
DWB_BSNS_UNIT_COST
DWR_BSNS_MO
DWR_ORG_BSNS_UNIT

## DWD\_CRDT\_CTGRY\_PKG Package

Populate target table DWD\_CRDT\_CTGRY. For more information, see [CREDIT CATEGORY DRVD](#).

**Table 7-17 DWD\_CRDT\_CTGRY\_PKG Package**

---

**Source Table Name**

---

DWB\_ACCT\_CRDT\_LMT  
DWL\_AGE\_ON\_NET\_BND  
DWR\_BSNS\_MO  
DWR\_CNRT  
DWR\_SBRP

---

## DWD\_CUST\_ACQSTN\_SUMM\_DAY\_PKG Package

Populate target table DWD\_CUST\_ACQSTN\_SUMM\_DAY. For more information, see [CUSTOMER ACQUISITION SUMMARY DAY DRVD](#).

**Table 7-18 DWD\_CUST\_ACQSTN\_SUMM\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_CNRT\_TERM\_VAL  
DWB\_EVT\_SBRP  
DWR\_ADDR\_LOC  
DWR\_CNRT  
DWR\_CUST  
DWR\_DAY  
DWR\_PRMTN  
DWR\_SBRP  
DWR\_SBRP\_1  
DWR\_SL\_CHNL\_RPRSTV

---

## DWD\_EXTRNL\_DEBT\_COLLCTN\_DAY\_PKG Package

Populate target table DWD\_EXTRNL\_DEBT\_COLLCTN\_DAY. For more information, see [EXTERNAL DEBT COLLECTION DAY DRVD](#).

**Table 7-19 DWD\_EXTRNL\_DEBT\_COLLCTN\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_ACCT\_BAL\_ADJ  
DWB\_ACCT\_BAL\_HIST  
DWB\_ACCT\_PYMT  
DWB\_DEBT\_COLLCTN\_ASGN  
DWR\_ACCT  
DWR\_DAY

---

## DWD\_GIVE\_AWAY\_ITEM\_DAY\_PKG Package

Populate target table DWD\_GIVE\_AWAY\_ITEM\_DAY. For more information see [GIVE\\_AWAY\\_ITEM\\_DAY\\_DRVD](#).

**Table 7–20 DWD\_GIVE\_AWAY\_ITEM\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_EVT\_LYLTY\_PROG  
 DWB\_EVT\_LYLTY\_PROG\_RDMPTN  
 DWR\_CNRT  
 DWR\_DAY  
 DWR\_PROD\_MKT\_PLN  
 DWR\_PROD\_RTNG\_PLN\_DTL

---

## DWD\_INTRNL\_DEBT\_COLLCTN\_DAY\_PKG Package

Populate target table DWD\_INTRNL\_DEBT\_COLLCTN\_DAY. For more information, see [INTERNAL\\_DEBT\\_COLLECTION\\_DAY\\_DRVD](#).

**Table 7–21 DWD\_INTRNL\_DEBT\_COLLCTN\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_ACCT\_BAL\_ADJ  
 DWB\_ACCT\_BAL\_HIST  
 DWB\_ACCT\_PYMT  
 DWB\_DEBT\_COLLCTN  
 DWR\_ACCT  
 DWR\_DAY

---

## DWD\_INVC\_PKG Package

Populate target table DWD\_INVC. For more information, see [INVOICE\\_DRVD](#).

**Table 7–22 DWD\_INVC\_PKG Package**

---

**Source Table Name**

---

DWB\_ACCT\_CRDT\_LMT  
 DWB\_INVC  
 DWB\_INVC\_ADJ  
 DWB\_INVC\_ITEM  
 DWL\_AGE\_ON\_NET\_BND  
 DWR\_ACCT  
 DWR\_ADDR\_LOC  
 DWR\_BSNS\_MO

**Table 7–22 (Cont.) DWD\_INVC\_PKG Package**

---

**Source Table Name**

---

DWR\_CNRT  
DWR\_CUST  
DWR\_SBRP

---

## DWD\_INVC\_ADJ\_PKG Package

Populate target table DWD\_INVC\_ADJ. For more information, see [INVOICE ADJUSTMENT DRVD](#).

**Table 7–23 DWD\_INVC\_ADJ\_PKG Package**

---

**Source Table Name**

---

DWB\_INVC  
DWB\_INVC\_ADJ  
DWB\_INVC\_ITEM  
DWR\_ACCT  
DWR\_ADDR\_LOC  
DWR\_BSNS\_MO  
DWR\_CUST  
DWR\_SBRP

---

## DWD\_LYLTY\_PROG\_DAY\_PKG Package

Populate target table DWD\_LYLTY\_PROG\_DAY. For more information, see [LOYALTY PROGRAM DAY DRVD](#).

**Table 7–24 DWD\_LYLTY\_PROG\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_ACCT\_CRDT\_LMT  
DWB\_EVT  
DWB\_EVT\_LYLTY\_PROG  
DWB\_LYLTY\_PROG\_PTS\_BAL  
DWL\_AGE\_ON\_NET\_BND  
DWR\_ACCT  
DWR\_CNRT  
DWR\_CUST  
DWR\_DAY  
DWR\_SBRP

---

## DWD\_MKT\_OPRTR\_PRTNG\_PKG Package

Populate target table DWD\_MKT\_OPRTR\_PRTNG. For more information, see [MARKET OPERATOR PORTING DERIVED](#).

The summary information about succeeded Number Porting between operators.

**Table 7–25 DWD\_MKT\_OPRTR\_PRTNG\_PKG Package**

Source Table Name
DWB_ACCS_MTHD_PORT_HIST
DWR_BSNS_MO

## DWD\_PRPD\_ACCT\_STTSTC\_PKG Package

Populate target table DWD\_PRPD\_ACCT\_STTSTC. For more information, see [PREPAID ACCOUNT STATISTIC DRVD](#).

**Table 7–26 DWD\_PRPD\_ACCT\_STTSTC\_PKG Package**

Source Table Name
DWB_ACCT_BAL_HIST
DWB_EVT_PRTY_INTRACN
DWB_PRPD_RCHRG
DWL_AGE_ON_NET_BND
DWL_INTRACN_RSN
DWL_RECHRG_RVN_SLB
DWR_ACCT
DWR_BSNS_MO
DWR_CNRT
DWR_PROD_MKT_PLN

## DWD\_PRPD\_ALWNCE\_DAY\_PKG Package

Populate target table DWD\_PRPD\_ALWNCE\_DAY. For more information, see [PREPAID ALLOWANCE DAY DRVD](#).

**Table 7–27 DWD\_PRPD\_ALWNCE\_DAY\_PKG Package**

Source Table Name
DWB_MNT_ALLWNC
DWR_DAY
DWR_SL_CHNL_RPRSTV

## DWD\_PYMT\_AGNG\_DAY\_PKG Package

Populate target table DWD\_PYMT\_AGNG\_DAY. For more information, see [PAYMENT AGING DAY DRVD](#).

**Table 7-28 DWD\_PYMT\_AGNG\_DAY\_PKG Package****Source Table Name**

---

DWB\_ACCT\_BAL\_HIST  
DWB\_ACCT\_PYMT  
DWB\_INV\_PYMT\_ASGN  
DWB\_INVC  
DWL\_AGE\_ON\_NET\_BND  
DWL\_DEBT\_AGNG\_BND  
DWR\_ACCT  
DWR\_CUST  
DWR\_DAY  
DWR\_PRTY\_ASGN  
DWR\_SL\_CHNL\_RPRSTV

---

**DWD\_RDMPN\_DAY\_PKG Package**

Populate target table DWD\_RDMPN\_DAY. For more information, see [REDEMPTION DAY DRVD](#).

**Table 7-29 DWD\_RDMPN\_DAY\_PKG Package****Source Table Name**

---

DWB\_ACCT\_CRDT\_LMT  
DWB\_EVT  
DWB\_EVT\_LYLT\_PROG  
DWB\_EVT\_LYLT\_PROG\_RDMPN  
DWB\_EVT\_PRTY\_ASGN  
DWB\_EVT\_PRTY\_INTRACN  
DWL\_AGE\_ON\_NET\_BND  
DWR\_ACCT  
DWR\_CNRT  
DWR\_DAY  
DWR\_EVT\_PRTY\_RL

---

**DWD\_SHOP\_EFFNCY\_DAY\_PKG Package**

Populate target table DWD\_SHOP\_EFFNCY\_DAY. For more information, see [SHOP EFFICIENCY DAY DRVD](#).

**Table 7-30 DWD\_SHOP\_EFFNCY\_DAY\_MAP****Source Table Name**

---

DWB\_EVT  
DWB\_EVT\_ASGN  
DWB\_EVT\_PRTY\_INTRACN\_VST



**Table 7–30 (Cont.) DWD\_SHOP\_EFFNCY\_DAY\_MAP****Source Table Name**


---

DWR\_ADDR\_LOC  
DWR\_DAY  
DWR\_ORG\_BSNS\_UNIT

---

**DWD\_SL\_DAY\_PKG Package**

Populate target table DWD\_SL\_DAY. For more information, see [SALES DAY DRVD](#).

**Table 7–31 DWD\_SHOP\_EFFNCY\_DAY\_MAP****Source Table Name**


---

DWB\_CUST\_ORDR  
DWB\_CUST\_ORDR\_LN\_ITEM  
DWB\_CUST\_ORDR\_PYMT  
DWB\_PRTY\_ORDR\_ASGN  
DWR\_CNRT  
DWR\_DAY

---

**DWD\_SL\_RPRSTV\_STTSTC\_MO\_PKG Package**

Populate target table DWD\_SL\_RPRSTV\_STTSTC\_MO. For more information, see [SALES REPRESENTATIVE STATISTICS DRVD](#).

**Table 7–32 DWD\_SL\_RPRSTV\_STTSTC\_MO\_PKG Package****Source Table Name**


---

DWB\_CNRT\_TERM\_VAL  
DWB\_EVT  
DWB\_EVT\_EQPMNT\_INSTNC  
DWB\_SL\_CMISN\_DTL  
DWR\_BSNS\_MO  
DWR\_CNRT  
DWR\_SBRP  
DWR\_SL\_CHNL\_RPRSTV  
DWR\_SL\_CMISN\_PLN\_DTL

---

**DWD\_SPLMNTR\_SRVC\_USG\_MAP Mapping**

Populate the table DWD\_SPLMNTR\_SRVC\_USG. For more information, see [SUPPLEMENTARY SERVICE USAGE DRVD](#).

**Table 7–33 DWD\_SPLMNTR\_SRVC\_USG\_PKG Package**

**Source Table Name**

---

DWB\_INV  
 DWB\_INV\_ITEM  
 DWB\_NTWK\_EVT  
 DWR\_BSNS\_MO  
 DWR\_SPLMNTR\_SRVC

---

**DWD\_VAS\_SBRP\_QCK\_SUMM\_PKG Package**

Populate target table DWD\_VAS\_SBRP\_QCK\_SUMM. For more information, see [VAS SUBSCRIPTION QUICK SUMMARY DRVD](#).

**Table 7–34 DWD\_VAS\_SBRP\_QCK\_SUMM\_PKG Package**

**Source Table Name**

---

DWR\_BSNS\_MO  
 DWR\_CUST  
 DWR\_PROD  
 DWR\_SBRP

---

**Intra-ETL PL/SQL Mapping Packages for Source and Target Tables**

Shows the PL/SQL mapping to populate derived tables.

**DWD\_DATA\_USG\_DAY\_PKG Package**

Populate target table DWD\_DATA\_USG\_DAY. For more information, see [DATA USAGE DAY DRVD](#).

**Table 7–35 DWD\_DATA\_USG\_DAY\_PKG Package**

**Source Table Name**

---

DWB\_CNTNT\_DLVRY\_EVT  
 DWB\_NTWK\_EVT  
 DWB\_WRLS\_CNTNT\_DNLDG\_EVT  
 DWC\_INTRA\_ETL\_ACTIVITY  
 DWR\_ACCS\_MTHD  
 DWR\_CNTNT  
 DWR\_CUST  
 DWR\_DAY  
 DWR\_TIME\_SLT

---

## DWD\_VAS\_USG\_DAY\_PKG Package

Populate target table DWD\_VAS\_USG\_DAY. For more information, see [VAS USAGE DAY DRVD](#).

**Table 7–36 DWD\_VAS\_USG\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_ISP\_USG\_EVT  
 DWB\_NTWK\_EVT  
 DWB\_UMS\_EVT  
 DWB\_WRLS\_CALL\_EVT  
 DWC\_INTRA\_ETL\_ACTIVITY  
 DWL\_PK\_OFFPK\_TIME  
 DWR\_CUST  
 DWR\_DAY  
 DWR\_MAILBOX  
 DWR\_TIME\_SLT  
 DWR\_VAL\_ADD\_SRVC

---

## DWD\_VOI\_CALL\_DAY\_PKG Package

Populate target table DWD\_VOI\_CALL\_DAY. For more information, see [VOICE CALL DAY DRVD](#).

**Table 7–37 DWD\_VOI\_CALL\_DAY\_PKG Package**

---

**Source Table Name**

---

DWB\_CRNCY\_EXCHNG\_RATE  
 DWB\_MDTD\_CALL\_EVT  
 DWB\_WRLS\_CALL\_EVT  
 DWC\_INTRA\_ETL\_ACTIVITY  
 DWL\_CALL\_TYP  
 DWL\_PK\_OFFPK\_TIME  
 DWR\_ADDR\_LOC  
 DWR\_CUST  
 DWR\_DAY  
 DWR\_ORG\_BSNS\_UNIT  
 DWR\_TIME\_SLT

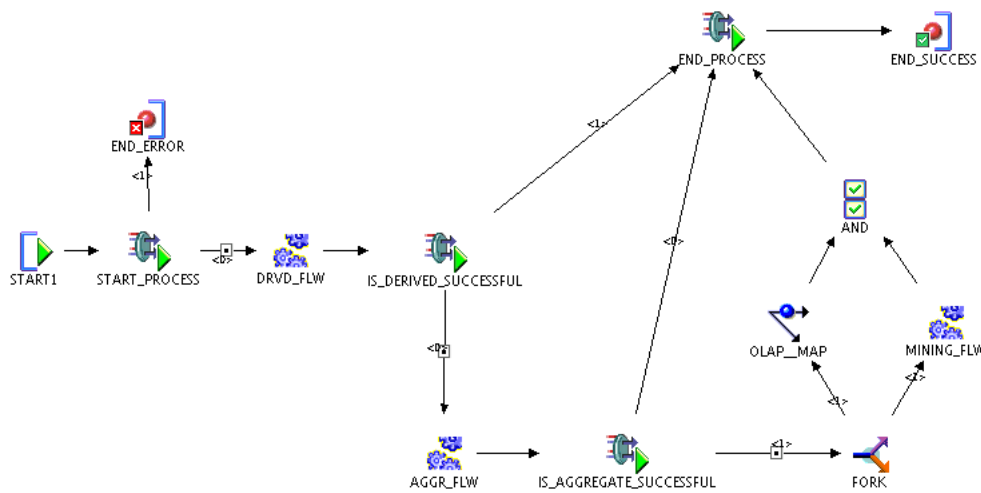
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## Intra-ETL Process Flows

The INTRA\_ETL\_FLW is the complete Intra-ETL process designed using Oracle Warehouse Builder, and is composed of individual sub-process flows to populate derived aggregate tables, and relational materialized views where the data originates from base, reference, and lookup tables. This process flow respects the dependency of each individual program.

[Figure 7–1](#) shows the main process flow INTRA\_ETL\_FLW.

**Figure 7-1 Intra-ETL Main Process Flow**



The process flow INTRA\_ETL\_FLW is initialized from START\_PROCESS, and this checks if any previous process flows are running. If any process is running then START\_PROCESS jumps to END\_ERROR or START\_PROCESS generate the process number from the sequence. This process number is sent as input to the Derived Flow.

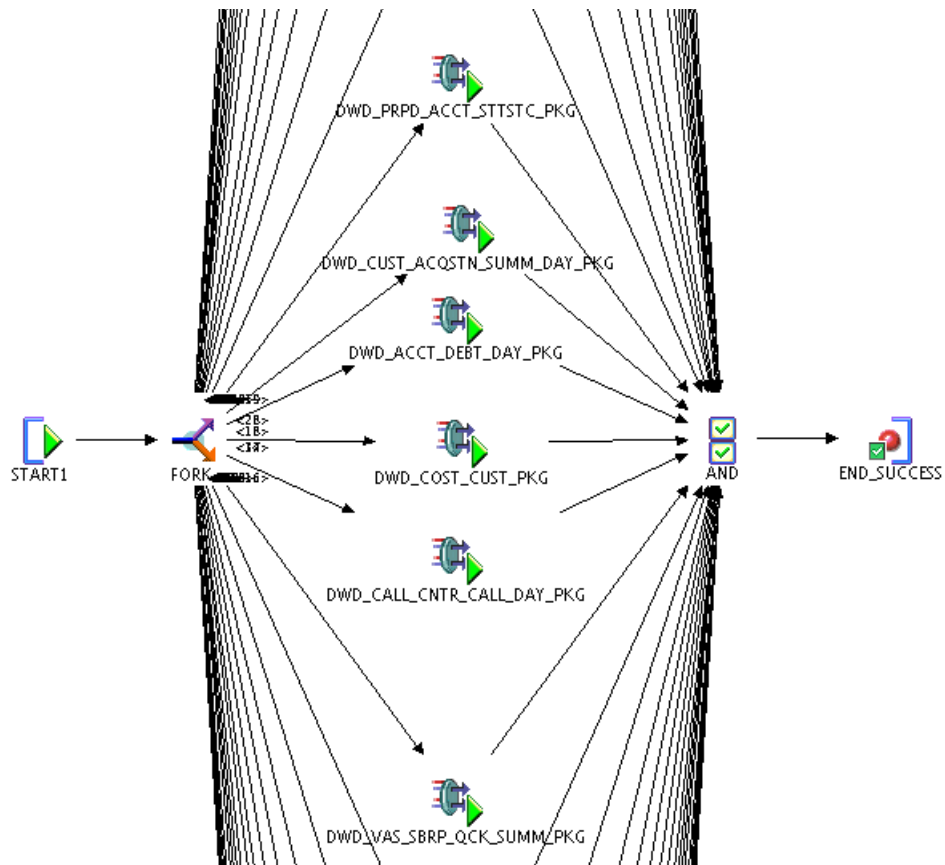
In the DRVD\_FLW when the START process is initiated this generates the process number and is sent as input to the Derived mapping. Once the number is generated it updates the status at backend (Control Tables). If derived mapping is successful then the derived mapping checks the status in control tables.

### Details of the DRVD\_FLW Intra-ETL Flow

The DRVD\_FLW sub-process flow contains all the Oracle Warehouse Builder mappings for populating derived tables, based on the content of the base, reference, and lookup tables. This sub-process flow has a dependency on the AGGR\_FLW. If the DRVD\_FLW is successful then it navigates to AGGR\_FLW otherwise the process ends.

Figure 7-2 shows the DRVD\_FLW sub-process flow for populating the derived tables.

**Figure 7-2 Intra-ETL Derived Flow Sub-process (DRVD\_FLW)**



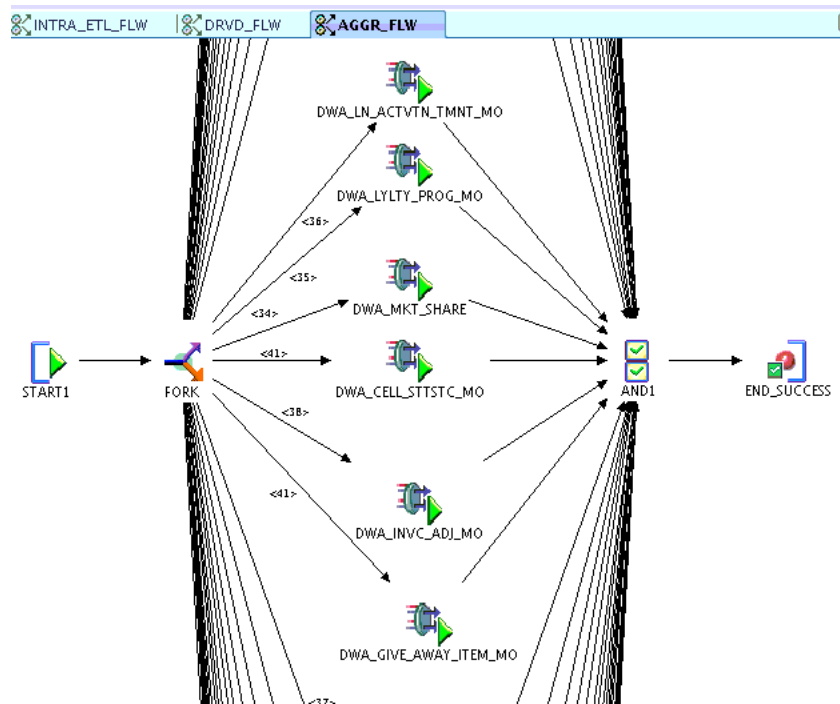
After the DRVD\_FLW starts successfully, it moves to the fork. The sub-process FORK performs the derived mappings (these run in parallel). Once the activity is started then Start\_Activity inserts one record in the control table, DWC\_INTRA\_ETL\_ACTIVITY, and the state is set to 'Running'. The End\_Activity updates the status in control tables (the state mapping is COMPLETED-SUCCESS or COMPLETED-ERROR) in the control tables. The AND activity specifies whether all the parallel mappings have been completed or not and then switches to the next activity, for example END\_SUCCESS. This DRVD\_FLW depends on the AGGR\_FLW sub-process flow.

### Details of the AGGR\_FLW Intra-ETL Flow

The AGGR\_FLW sub-process flow contains PL/SQL code using Partitions Change Tracking Strategy for refreshing all the aggregate tables which are Materialized Views in Oracle Communications Data Model.

Figure 7-3 shows the AGGR\_FLW sub-process flow for refreshing all the aggregate tables.

**Figure 7-3 Intra-ETL Aggregate Flow Sub-process (AGGR\_FLW)**



After the AGGR\_FLW is initiated and started successfully it is moved to the Fork. The FORK process makes the aggregates to run in parallel. The AND activity specifies that all the parallel aggregates have been completed or not and then switches over to the next activity, (for example, END\_SUCCESS).

### Details of the OLAP\_MAP Intra-ETL Flow

The OLAP\_MAP sub-process flow triggers the OLAP package which can load data from Oracle Communications Data Model aggregate tables to Oracle Communications Data Model Analytical Workspace and calculate the forecast data. It reads OLAP ETL parameters from DWC\_OLAP\_ETL\_PARAMETER table.

Figure 7-4 shows the OLAP\_MAP sub-process flow that triggers the OLAP packages.

**Figure 7-4 Intra-ETL OLAP Flow Sub-process (OLAP\_MAP)**



### Details of the MINING\_FLW Intra-ETL Flow

The MINING\_FLW sub process flow triggers the data mining model.

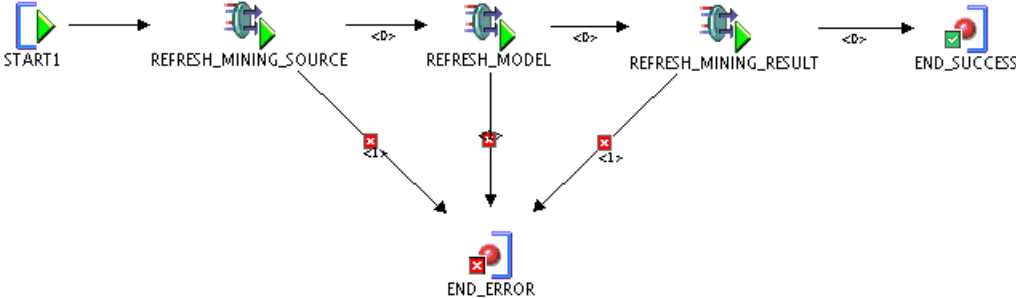
The window of data is decided by following variables:

- churn\_interval\_months
- ltv\_age\_interval\_years
- dwc\_etl\_parameter.to\_date\_etl

The dwc\_etl\_parameter.to\_date\_etl limits the end date for data and first two parameters limit the start date of data for the churn models and life time value models respectively.

Figure 7-5 shows the MINING\_FLW sub-process flow.

Figure 7-5 Intra-ETL Mining Flow Sub-process (MINING\_FLW)







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# Oracle Communications Data Model OLAP Model Dimensions

This chapter of Oracle Communications Data Model Reference describes the Data Flow between fact tables and dimension tables of Oracle Communications Data Model relational part to target materialize views and cubes to support the module Oracle Communications Data Model OLAP.

This chapter includes the following sections:

- [Introduction to OLAP Architecture](#)
- [Oracle Communications Data Model OLAP Dimensions](#)

For more information, see [Chapter 9, "Oracle Communications Data Model OLAP Model Cubes"](#).

## Introduction to OLAP Architecture

Oracle Data Warehouse for Communications (Oracle Communications Data Model Relational) contains the lowest level CDR details, low level combination of base tables and the summary, average, and so on, of Base and Derived data. Oracle Communications Data Model Relational was developed in a relational database.

## General Process to Populate the OLAP Module in Oracle Communications Data Model

Oracle Communications Data Model `ocdm_sys` schema does the following:

- Directly maps the leaf level data from the relational table/mv into the OLAP cube.
- Cube organized materialized views represent the cube to SQL-based applications as materialized views that you can use for both refresh and query rewrite. With Query Re-write enabled, Oracle will automatically re-write SQL queries targeted against relational tables. to use the Cube-Organized Materialized View. To use this feature the OLAP cubes and relational components are in a single schema (`ocdm_sys`).
- All cubes are available for the end user SQL based Query Tool access through CUBE\_TABLE based SQL Views, which are created and maintained automatically during the cube build/update process.
- Cubes are built from level 0 DWA materialized views or DWB/DWD tables (which, when a date is present, usually means at the month level).

Using SQL to access the cubes and dimensions is a significant feature of Oracle OLAP because it enables reporting tools that only generate SQL to use all of the powerful features of the analytic workspace. In Oracle Database 11g this is achieved by the use

of the CUBE\_TABLE function that extracts multidimensional data from a cube in an analytic workspace and presents it to the relational SQL engine in the form of a two dimensional table, such as, a set of rows and columns. It provides a mapping between the cube in the analytic workspace and the rows and columns that the SQL sees.

## Query Rewrite to Cube Organized Materialized Views

Oracle Communications Data Model uses SQL to query the relational base tables and the optimizer transparently translates the SQL to access either the table materialized views or the cube materialized views (and hence the analytic workspace cubes and dimensions) depending upon which provides the better performance. This allows all of the benefits of the analytic workspace to be easily available to any product using regular SQL.

## Oracle Communications Data Model OLAP Dimensions

The dimensions section describes the detail information for all the dimensions. Each dimension includes the following information:

- Levels
- Hierarchies
- Attributes and Attribute mappings

Table 8–1 lists the dimensions.

**Table 8–1** *Dimensions*

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### Dimensions

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Account Refund Reason: ARRSN

Churn Reason: CRNRSN

Collection Agency: CAGNCY

Commission Type: CMTYP

Customer: CUST

Customer Segment: CSGMNT

Customer Type: CUSTYP

Debt Aging Band: DAB

Geography: GEO

Handset Model: HSMDL

Invoice Adjustment Reason: IARSN

Invoice Adjustment Type: IATYP

Mining Churn Type: MNCT

Mining Life Time Survival Band: MNLSB

Mining Life Time Value Band: MNLVB

Mining Sentiment Category: MNSC

Network Element: NELMNT

Organization: ORG

Payment Channel: PCHNL

**Table 8–1 (Cont.) Dimensions****Dimensions**

Payment Method Type: PMTYP

Payment Transaction Type: PTITYP

Peak Offpeak Time: POPT

Product: PROD

Product Market Plan: PMP

Sales Channel: SLCHNL

Time: TIME

Time Slot: TSLT

**Account Refund Reason: ARRSN**

This dimension keeps all the information of the reason why this refund occurs.

**Table 8–2 Account Refund Reason (ARRSN) Levels and Hierarchies**

Level	Description	Account Refund Reason Hierarchy (HARRSN)
TARRSN	Total Account Refund Reason	TARRSN
ARRSN	Account Refund Reason	ARRSN

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–3 Account Refund Reason Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TARRSN	"Total Account Refund Reason"
ARRSN	DWL_ACCT_RFND_RSN.ACCT_RFND_RSN_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–4 Account Refund Reason Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TARRSN	"Total Account Refund Reason"
ARRSN	DWL_ACCT_RFND_RSN.ACCT_RFND_RSN_CD

**Churn Reason: CRNRSN**

This dimension keeps all the information of the Churn Reason. This dimension stores information regarding the reason for subscriber churn. This information is required for churn analysis.

**Table 8–5 Churn Reason (CRNRSN) Levels and Hierarchies**

Level	Description	Churn Reason Hierarchy (HCRNRSN)
TCRNRSN	Total Churn Reason	TCRNRSN
CRNRSN	Churn Reason	CRNRSN

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–6 Churn Reason Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TCRNRSN	"Total Churn Reason"
CRNRSN	DWL_CHRN_RSN.CHRN_RSN_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–7 Churn Reason Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TCRNRSN	"Total Churn Reason"
CRNRSN	DWL_CHRN_RSN.CHRN_RSN_CD

## Collection Agency: CAGNCY

This dimension keeps all the information of the collection agency. Commission type is all type of commissions to the sales representatives.

**Table 8–8 Collection Agency (CAGNCY) Levels and Hierarchies**

Level	Description	Collection Agency Hierarchy (HCAGNCY)
TCAGNCY	Total Collection Agency	TCAGNCY
CAGNCY	Collection Agency	CAGNCY

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–9 Collection Agency Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TCAGNCY	"Total Collection Agency"
CAGNCY	DWR_COLLCTN_AGENCY.PRTY_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–10 Collection Agency Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TCAGNCY	"Total Collection Agency"
CAGNCY	DWR_COLLCTN_AGENCY.COLLECTN_AGENCY_CD

Attribute Name: Agency Manager(MGR\_NAME)

**Table 8–11 Collection Agency Agency Manager Attribute Mapping**

Level	Mapping (Physical Column)
TCAGNCY	
CAGNCY	DWR_COLLCTN_AGENCY.MGR_NAME

Attribute Name: Domestic Indicator(DMSTC\_IND)

**Table 8–12 Collection Agency Domestic Indicator Attribute Mapping**

Level	Mapping (Physical Column)
TCAGNCY	
CAGNCY	DWR_COLLCTN_AGENCY.DMSTC_IND

## Commission Type: CMTYP

This dimension keeps all the information of the commission type. Commission type is all type of commissions to the sales representatives.

**Table 8–13 Commission Type (CMTYP) Levels and Hierarchies**

Level	Description	Commission Type Hierarchy (HCMTYP)
TCMTYP	Total Commission Type	TCMTYP
CMTYP	Commission Type	CMTYP

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–14 Commission Type Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TCMTYP	"Total Commission Type"
CMTYP	DWL_CMISN_TYP.CMISN_TYP_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–15 Commission Type Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TCMTYP	"Total Commission Type"
CMTYP	DWL_CMISN_TYP.CMISN_TYP_NAME

## Customer: CUST

This dimension keeps all the information of individual customers.

**Table 8–16 Customer (CUST) Levels and Hierarchies**

Level	Description	Customer Hierarchy (HCUST)
TCUST	Total customer	TCUST
CUSTYP	Customer Type	CUSTYP
ICUST	Individual Customer	ICUST

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–17 Customer Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TCUST	"Total Customer"
CUSTYP	DWL_CUST_TYP.CUST_TYP_NAME
ICUST	DWR_CUST.NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–18 Customer Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TCUST	"Total Customer"
CUSTYP	DWL_CUST_TYP.CUST_TYP_CD
ICUST	DWR_CUST.CUST_CD

## Customer Segment: CSGMNT

This dimension keeps all the information of the Customer Segment. The Segments table holds details of all marketing segments. A segment identifies distinct groupings of customers or accounts with similar characteristics. The segments are typically used in marketing campaigns.

**Table 8–19 Customer Segment (CSGMNT) Levels and Hierarchies**

Level	Description	Customer Segment Hierarchy (HCSGMNT)
TCSGMNT	Total Customer Segment	TCSGMNT
CSGMNT	Customer Segment	CSGMNT

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–20 Customer Segment Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TCSGMNT	"Total Customer Segment"
CSGMNT	DWR_CUST_SGMNT.CUST_SGMNT_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–21 Customer Segment Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TCSGMNT	"Total Customer Segment"
CSGMNT	DWR_CUST_SGMNT.CUST_SGMNT_CD

## Customer Type: CUSTYP

This dimension keeps all the information of customer type

**Table 8–22 Customer Type (CUSTYP) Levels and Hierarchies**

Level	Description	Customer Type Hierarchy (HCUSTYP)
TCUSTYP	Total Customer Type	TCUSTYP
CUSTYP	Customer Type	CUSTYP

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–23 Customer Type Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TCUSTYP	"Total Customer Type"
CUSTYP	DWL_CUST_TYP:CUST_TYP_DESC

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–24 Customer Type Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TCUSTYP	"Total Customer Type"
CUSTYP	DWL_CUST_TYP:CUST_TYP_NAME

## Debt Aging Band: DAB

This dimension keeps all the information of debt aging band. There are customers who have not paid or partially paid one or more bills. This is called as Aging for the bill payment. Based on the age of unpaid or partial paid bill those amounts are put into different buckets for each customer.

**Table 8–25 Debt Aging Band (DAB) Levels and Hierarchies**

Level	Description	Debt Aging Band Hierarchy (HDAB)
TDAB	Total Aging Band	TDAB
DAB	Aging Band	DAB

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–26 Debt Aging Band Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TDAB	"Total Aging Band"
DAB	DWL_DEBT_AGNG_BND.DEBT_AGNG_BND_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–27 Debt Aging Band Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TDAB	"Total Aging Band"
DAB	DWL_DEBT_AGNG_BND.DEBT_AGNG_BND_CD

## Geography: GEO

This dimension keeps all the geography information.

**Table 8–28 Geography (GEO) Levels and Hierarchies**

Level	Description	Geography Hierarchy (HGEO)
TGEO	Total Geography	TGEO
WORLD	World	WORLD
REGION	Region	REGION
SUB_REGION	Sub Region	SUB_REGION
COUNTRY	Country	COUNTRY
STATE	State	STATE
CITY	City	CITY
COUNTY	County	COUNTY

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–29 Geography Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TGEO	"Total Geography"
WORLD	DWR_GEO_WORLD.WORLD_NAME
REGION	DWR_GEO_RGN.RGN_NAME
SUB_REGION	DWR_GEO_SBRGN.SB_RGN_NAME
COUNTRY	DWR_GEO_CNTRY.CNTRY_NAME
STATE	DWR_GEO_STATE.STATE_NAME
CITY	DWR_GEO_CITY.CITY_NAME
COUNTY	DWR_GEO_CNTY.CNTY_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–30 Geography Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TGEO	"Total Geography"
WORLD	DWR_GEO_WORLD.WORLD_CD
REGION	DWR_GEO_RGN.RGN_CD
SUB_REGION	DWR_GEO_SBRGN.SB_RGN_CD
COUNTRY	DWR_GEO_CNTRY.CNTRY_CD
STATE	DWR_GEO_STATE.STATE_CD
CITY	DWR_GEO_CITY.CITY_CD
COUNTY	DWR_GEO_CNTY.CNTY_CD

Attribute Name: County Name(CNTY\_NAME)

**Table 8–31 Geography County Name Attribute Mapping**

Level	Mapping (Physical Column)
TGEO	



**Table 8–31 (Cont.) Geography County Name Attribute Mapping**

Level	Mapping (Physical Column)
WORLD	
REGION	
SUB_REGION	
COUNTRY	
STATE	
CITY	
COUNTY	DWR_GEO_CNTY.CNTY_NAME

Attribute Name: County Code(CNTY\_CD)

**Table 8–32 Geography County Code Attribute Mapping**

Level	Mapping (Physical Column)
TGEO	
WORLD	
REGION	
SUB_REGION	
COUNTRY	
STATE	
CITY	
COUNTY	DWR_GEO_CNTY.CNTY_CD

## Handset Model: HSMDL

This dimension keeps all the information about models of handsets.

**Table 8–33 Handset Model (HSMDL) Levels and Hierarchies**

Level	Description	Handset Model Hierarchy (HHSMDL)
THSMDL	Total Handset Model	THSMDL
HSMDL	Handset Model	HSMDL

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–34 Handset Model Long Description Attribute Mapping**

Level	Mapping (Physical Column)
THSMDL	"Total Handset Model"
HSMDL	DWR_HNDST_MDL.HNDST_MDL_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–35 Handset Model Short Description Attribute Mapping**

Level	Mapping (Physical Column)
THSMDL	"Total Handset Model"

**Table 8–35 (Cont.) Handset Model Short Description Attribute Mapping**

Level	Mapping (Physical Column)
HSMDL	DWR_HNDST_MDL.HNDST_MDL_CD

## Invoice Adjustment Reason: IARSN

This dimension keeps all the information of invoice adjustment reason. The reason why the adjustment was put on the invoice.

**Table 8–36 Invoice Adjustment Reason (IARSN) Levels and Hierarchies**

Level	Description	Invoice Adjustment Reason Hierarchy (HIARSN)
TIARSN	Total Invoice Adjustment Reason	TIARSN
IARSN	Invoice Adjustment Reason	IARSN

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–37 Invoice Adjustment Reason Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TIARSN	"Total Invoice Adjustment Reason"
IARSN	DWL_INVC_ADJ_RSN.INVC_ADJ_RSN_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–38 Invoice Adjustment Reason Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TIARSN	"Total Invoice Adjustment Reason"
IARSN	DWL_INVC_ADJ_RSN.INVC_ADJ_RSN_CD

## Invoice Adjustment Type: IATYP

This dimension keeps all the information of invoice adjustment type. The categories of adjustment applied to a Customer Invoices.

**Table 8–39 Invoice Adjustment Type (IATYP) Levels and Hierarchies**

Level	Description	Invoice Adjustment Type Hierarchy (HIATYP)
TIATYP	Total invoice adjustment type	TIATYP
IATYP	Invoice adjustment type	IATYP

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–40 Invoice Adjustment Type Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TIATYP	"Total Invoice Adjustment Type"
IATYP	DWL_INVC_ADJ_TYP.INVC_ADJ_TYP_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–41 Invoice Adjustment Type Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TIATYP	"Total Invoice Adjustment Type"
IATYP	DWL_INVC_ADJ_TYP.INVC_ADJ_TYP_CD

## Mining Churn Type: MNCT

This dimension keeps all the information of Mining Churn Type.

**Table 8–42 Mining Churn Type (MNCT) Levels and Hierarchies**

Level	Description	Mining Churn Type Hierarchy (HMNCT)
TMNCT	Total Mining Churn Type	TMNCT
MNCT	Mining Churn Type	MNCT

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–43 Mining Churn Type Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNCT	"Total Mining Churn Type"
MNCT	DWL_MNNG_CHRN_TYP.CHRN_TYP_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–44 Mining Churn Type Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNCT	"Total Mining Churn Type"
MNCT	DWL_MNNG_CHRN_TYP.CHRN_TYP_CD

## Mining Life Time Survival Band: MNLSB

This dimension keeps all the information of Mining Life Time Survival Band.

**Table 8–45 Mining Life Time Survival Band (MNLSB) Levels and Hierarchies**

Level	Description	Mining Life Time Survival Band Hierarchy (HMNLSB)
TMNLSB	Total Mining Life Time Survival Band	TMNLSB
MNLSB	Mining Life Time Survival Band	MNLSB

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–46 Mining Life Time Survival Band Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNLVB	"Total Mining Life Time Survival Band"
MNLVB	DWL_MNNG_LT_SRVVL_BAND.LT_SRVVL_BAND_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–47 Mining Life Time Survival Band Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNLVB	"Total Mining Life Time Survival Band"
MNLVB	DWL_MNNG_LT_SRVVL_BAND.LT_SRVVL_BAND_CD

## Mining Life Time Value Band: MNLVB

This dimension keeps all the information of Mining Life Time Value Band.

**Table 8–48 Mining Life Time Value Band (MNLVB) Levels and Hierarchies**

Level	Description	Mining Life Time Value Band Hierarchy (HMNLVB)
TMNLVB	Total Mining Life Time Value Band	TMNLVB
MNLVB	Mining Life Time Value Band	MNLVB

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–49 Mining Life Time Value Band Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNLVB	"Total Mining Life Time Value Band"
MNLVB	DWL_MNNG_LTV_BAND.LTV_BAND_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–50 Mining Life Time Value Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNLVB	"Total Mining Life Time Value Band"
MNLVB	DWL_MNNG_LTV_BAND.LTV_BAND_CD

## Mining Sentiment Category: MNSC

This dimension keeps all the information of Mining Sentiment Category.

**Table 8–51 Mining Sentiment Category (MNSC) Levels and Hierarchies**

Level	Description	Mining Sentiment Category Hierarchy (HMNSC)
TMNSC	Total Mining Sentiment Category	TMNSC
MNSC	Mining Sentiment Category	MNSC

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–52 Mining Sentiment Category Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNSC	"Total Mining Sentiment Category"
MNSC	DWL_MNNG_SNTMNT_CTGRY.SNTMNT_CTGRY_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–53 Mining Sentiment Category Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TMNSC	"Total Mining Sentiment Category"
MNSC	DWL_MNNG_SNTMNT_CTGRY.SNTMNT_CTGRY_CD

## Network Element: NELMNT

This dimension keeps all the information of Network Element. Network Element is For analytical purpose, derived from "BTS/Switch/Network".

**Table 8–54 Network Element (NELMNT) Levels and Hierarchies**

Level	Description	Network Element Hierarchy (HNELMNT)
TNELMNT	Total Network Element	TNELMNT
NELMNT	Network Element	NELMNT

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–55 Network Element Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TNELMNT	"Total Network Element"
NELMNT	DWR_NTWK_ELMNT.NTWK_ELMNT_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–56 Network Element Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TNELMNT	"Total Network Element"
NELMNT	DWR_NTWK_ELMNT.NTWK_ELMNT_CD

## Organization: ORG

This dimension keeps all the information of organization

Default Hierarchy: HCHAIN

**Table 8–57 Organization (ORG) Levels and Hierarchies**

Level	Description	Corporation Hierarchy (HCORPORATE)	Banner Hierarchy (HBANNER)	Chain Hierarchy (HCHAIN)
TORG	Organization Total	TORG	TORG	TORG
CORPORATION	Head Office or Parent Company.	CORPORATION	CORPORATION	CORPORATION
COMPANY	Company, it includes branch company or subsidiary company.			COMPANY
DIVISION	The parent level of business unit. It is to organize the organization business units according to their functional role, for example, call center, warehouse, and so on.	DIVISION		

**Table 8–57 (Cont.) Organization (ORG) Levels and Hierarchies**

Level	Description	Corporation Hierarchy (HCORPORATE)	Banner Hierarchy (HBANNER)	Chain Hierarchy (HCHAIN)
BANNER	Holds the information about different organization banners under which product or service are sold.		BANNER	
CHAIN	Chain of outlets through which the organization conducts business.			CHAIN
AREA	Areas within a organization chain.			AREA
REGION	Holds region within a company, chain area.			REGION
DISTRICT	Holds districts within a company, chain, area, region.			DISTRICT
BU	Organization Business Unit contains 2 kinds of information -store and branch company. In the higher level is branch company. Some customer cannot belong to a particular store, in that case, they are associated with a branch company. So branch company are put in organization business unit level.	BU	BU	BU

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–58 Organization Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TORG	'Total Organization'
CORPORATION	DWR_ORG_RGN.RGN_NAME
COMPANY	DWR_ORG_CMPNY.CMPNY_NAME
DIVISION	DWR_ORG_DIV.DIV_NAME
BANNER	DWR_ORG_BNR.BNR_NAME
CHAIN	DWR_ORG_CHAIN.CHAIN_NAME
AREA	DWR_ORG_AREA.AREA_NAME
REGION	DWR_ORG_RGN.RGN_NAME
DISTRICT	DWR_ORG_RGN.RGN_NAME
BU	DWR_ORG_BSNS_UNIT.PRTY_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–59 Organization Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TORG	
CORPORATION	DWR_ORG_CRPRT.CRPRT_CD
COMPANY	DWR_ORG_CMPNY.CMPNY_CD

**Table 8–59 (Cont.) Organization Short Description Attribute Mapping**

<b>Level</b>	<b>Mapping (Physical Column)</b>
DIVISION	DWR_ORG_DIV.DIV_CD
BANNER	DWR_ORG_BNR.BNR_CD
CHAIN	DWR_ORG_CHAIN.CHAIN_CD
AREA	DWR_ORG_AREA.AREA_CD
REGION	DWR_ORG_RGN.RGN_CD
DISTRICT	DWR_ORG_DSTRCT.DSTRCT_CD
BU	DWR_ORG_BSNS_UNIT.PRTY_CD

Attribute Name: Store Name (STORE\_NAME)

**Table 8–60 Organization Store Name Attribute Mapping**

<b>Level</b>	<b>Mapping (Physical Column)</b>
TORG	
CORPORATION	
COMPANY	
DIVISION	
BANNER	
CHAIN	
AREA	
REGION	
DISTRICT	
BU	DWR_ORG_BSNS_UNIT.PRTY_NAME

Attribute Name: Store Description (STORE\_DESC)

**Table 8–61 Organization Store Description Attribute Mapping**

<b>Level</b>	<b>Mapping (Physical Column)</b>
TORG	
CORPORATION	
COMPANY	
DIVISION	
BANNER	
CHAIN	
AREA	
REGION	
DISTRICT	
BU	DWR_ORG_BSNS_UNIT.PRTY_DESC

Attribute Name: Store Manager (STORE\_MANAGER)

**Table 8–62 Organization Store Manager Attribute Mapping**

Level	Mapping (Physical Column)
TORG	
CORPORATION	
COMPANY	
DIVISION	
BANNER	
CHAIN	
AREA	
REGION	
DISTRICT	
BU	DWR_ORG_BSNS_UNIT.MGR_NAME

Attribute Name: Store Open Date (STORE\_OPEN\_DT)

**Table 8–63 Organization Store Open Date Attribute Mapping**

Level	Mapping (Physical Column)
TORG	
CORPORATION	
COMPANY	
DIVISION	
BANNER	
CHAIN	
AREA	
REGION	
DISTRICT	
BU	DWR_ORG_BSNS_UNIT.VALID_STRT_DT

Attribute Name: Store Close Date (STORE\_CLOSE\_DT)

**Table 8–64 Organization Store Close Date Attribute Mapping**

Level	Mapping (Physical Column)
TORG	
CORPORATION	
COMPANY	
DIVISION	
BANNER	
CHAIN	
AREA	
REGION	
DISTRICT	



**Table 8–64 (Cont.) Organization Store Close Date Attribute Mapping**

Level	Mapping (Physical Column)
BU	DWR_ORG_BSNS_UNIT.VALID_END_DT

## Payment Channel: PCHNL

This dimension keeps all the information of Channel which customer used to pay for the services.

**Table 8–65 Payment Channel (PCHNL) Levels and Hierarchies**

Level	Description	Payment Channel Hierarchy (HPCHNL)
TPCHNL	Total Payment Channel	TPCHNL
PCHNLTYP	Type of the payment channel	PCHNLTYP
PCHNL	Channel which customer used to pay for the services.	PCHNL

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–66 Payment Channel Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TPCHNL	"Total Payment Channel"
PCHNLTYP	DWL_CHNL_TYP.CHNL_TYP_NAME
PCHNL	DWR_PYMT_CHNL.CHNL_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–67 Payment Channel Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TPCHNL	"Total Payment Channel"
PCHNLTYP	DWL_CHNL_TYP.CHNL_TYP_CD
PCHNL	DWR_PYMT_CHNL.PYMNT_CHNL_CD

Attribute Name: Capacity Quantity (CPCTY\_QTY):

The number of transaction that a Channel can handle, at a point of time.

**Table 8–68 Payment Channel Capacity Quantity Attribute Mapping**

Level	Mapping (Physical Column)
TPCHNL	
PCHNLTYP	
PCHNL	DWR_PYMT_CHNL.CPCTY_QTY

## Payment Method Type: PMTYP

This dimension keeps all the information of the payment method type. Payment method type describes the different methods by which payments may be made.

Customers can pay their bills, deposits, other charges by different modes of payment such as: Cash, Check, Inter-bank transfer, Postal order, Wire transfer, Voucher.

**Table 8–69 Payment Method Type (PMTYP) Levels and Hierarchies**

Level	Description	Payment Method Type Hierarchy (HPMTYP)
TPMTYP	Total Payment Method Type	TPMTYP
PMTYP	Payment Method Type	PMTYP

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–70 Payment Method Type Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TPMTYP	"Total Payment Method Type"
PMTYP	DWL_PYMT_MTHD_TYP.PYMT_MTHD_TYP_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–71 Payment Method Type Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TPMTYP	"Total Account Payment Method Status Type"
PMTYP	DWL_PYMT_MTHD_TYP.PYMT_MTHD_TYP_CD

## Payment Transaction Type: PTTYT

This dimension keeps all the information of the type of transaction.

**Table 8–72 Payment Transaction Type (PTTYP) Levels and Hierarchies**

Level	Description	Payment Transaction Type Hierarchy (HPTTYP)
TPTTYP	Total Payment Transaction Type	TPTTYP
PTTYP	Payment transaction type	PTTYP

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–73 Payment Transaction Type Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TPTTYP	"Total Payment Transaction Type"
PTTYP	DWL_PYMT_TRX_TYP.PYMT_TRX_TYP_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–74 Payment Transaction Type Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TPTTYP	"Total Payment Transaction Type"
PTTYP	DWL_PYMT_TRX_TYP.PYMT_TRX_TYP_CD

## Peak Offpeak Time: POPT

This dimension keeps all the information of the peak and offpeak time. Based on the usage or traffic on the network each day is divided into various time slots such as the time when the usage is highest is called as the peak time slot

**Table 8–75 Peak Offpeak Time (POPT) Levels and Hierarchies**

Level	Description	Peak Offpeak Time Hierarchy (HPOPT)
TPOPT	Total Peak Offpeak Time	TPOPT
POPT	Peak Offpeak Time	POPT

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–76 Peak Offpeak Time Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TPOPT	"Total Peak Offpeak Time"
POPT	DWL_PK_OFFPK_TIME.PK_OFFPK_TIME_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–77 Peak Offpeak Time Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TPOPT	"Total Peak Offpeak Time"
POPT	DWL_PK_OFFPK_TIME.PK_OFFPK_TIME_CD

Attribute Name: Peak Offpeak Start Time(PK\_OFFPK\_STRT)

**Table 8–78 Peak Offpeak Time Peak Offpeak Start Time Attribute Mapping**

Level	Mapping (Physical Column)
TPOPT	
POPT	DWL_PK_OFFPK_TIME.PK_OFFPK_STRT

Attribute Name: Peak Offpeak End Time(PK\_OFFPK\_END)

**Table 8–79 Peak Offpeak Time Peak Offpeak End Time Attribute Mapping**

Level	Mapping (Physical Column)
TPOPT	
POPT	DWL_PK_OFFPK_TIME.PK_OFFPK_END

Attribute Name: Holiday Indicator (HOLIDY\_IND)

**Table 8–80 Peak Offpeak Time Holiday Indicator Attribute Mapping**

Level	Mapping (Physical Column)
TPOPT	
POPT	DWL_PK_OFFPK_TIME.HOLIDY_IND

Attribute Name: Weekend Indicator (WEEKEND\_IND)

**Table 8–81 Peak Offpeak Time Weekend Indicator Attribute Mapping**

Level	Mapping (Physical Column)
TPOPT	
POPT	DWL_PK_OFPK_TIME.WKEND_IND

## Product: PROD

This dimension keeps all the information of products, services and value added features offering by the telecommunication company.

**Table 8–82 Product (PROD) Levels and Hierarchies**

Level	Description	Product Hierarchy (HPROD)
TPROD	Total Product	TPROD
PRODTYP	Type of the product	PRODTYP
PROD	The product provided by the carrier.	PROD

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–83 Product Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TPROD	"Total Product"
PRODTYP	DWL_PROD_TYP.PROD_TYP_NAME
PROD	DWR_PROD.PROD_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–84 Product Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TPROD	"Total Product"
PRODTYP	DWL_PROD_TYP.PROD_TYP_CD
PROD	DWR_PROD.PROD_CD

Attribute Name: IN Platform Key(IN\_PLTFRM\_KEY)

Id for IN Platform

**Table 8–85 Product IN Platform Key Attribute Mapping**

Level	Mapping (Physical Column)
TPROD	
PRODTYP	
PROD	DWR_PROD.IN_PLTFRM_KEY

## Product Market Plan: PMP

The product package was rendered to market through market plan, which usually contains some gifts and discount.

**Table 8–86 Product Market Plan (PMP) Levels and Hierarchies**

Level	Description	Product Market Plan Hierarchy (HPMP)
TPMP	Total Product Market Plan	TPMP
PMPTYP	Type of the product market plan	PMPTYP
PMP	The product package was rendered to market through market plan.	PMP

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–87 Product Market Plan Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TPMP	"Total Product Market Plan"
PMPTYP	DWL_PROD_MKT_PLN_TYP.MKT_PLN_TYP_NAME
PMP	DWR_PROD_MKT_PLN.MKT_PLN_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–88 Product Market Plan Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TPMP	"Total Product Market Plan"
PMPTYP	DWL_PROD_MKT_PLN_TYP.MKT_PLN_TYP_CD
PMP	DWR_PROD_MKT_PLN.MKT_PLN_CD

Attribute Name: New Customer Only Indicator (NC\_IND)

**Table 8–89 Product Market Plan New Customer Only Indicator Attribute Mapping**

Level	Mapping (Physical Column)
TPMP	
PMPTYP	
PMP	DWR_PROD_MKT_PLN.NEW_CUST_ONLY_IND

Attribute Name: Joint Program Indicator (JP\_IND)

**Table 8–90 Product Market Plan Joint Program Indicator Attribute Mapping**

Level	Mapping (Physical Column)
TPMP	
PMPTYP	
PMP	DWR_PROD_MKT_PLN.JNT_PROG_IND

Attribute Name: Loyalty Program Indicator (LP\_IND)

**Table 8–91 Product Market Plan Loyalty Program Indicator Attribute Mapping**

Level	Mapping (Physical Column)
TPMP	
PMPTYP	
PMP	DWR_PROD_MKT_PLN.LYLTY_PROG_IND

Attribute Name: VAS Indicator (VAS\_IND)

**Table 8–92 Product Market Plan VAS Indicator Attribute Mapping**

Level	Mapping (Physical Column)
TPMP	
PMPTYP	
PMP	DWR_PROD_MKT_PLN.VAS_IND

## Promotion: PRMTN

This dimension keeps one promotion action in the campaign. You can use this dimension to evaluate effectiveness of a campaign. For example, target customer or promotion channel.

Default Hierarchy: HPRMTN

**Table 8–93 Promotion (PRMTN) Levels and Hierarchies**

Level	Description	Promotion Type Hierarchy (HPRMTN)	Promotion Campaign Hierarchy (HCMPGN)
TPRMTN	Total promotion	TPRMTN	TPRMTN
PRMTNTYP	Type of the promotion	PRMTNTYP	
CMPGN	Campaign		CMPGN
PRMTN	Promotion	PRMTN	PRMTN

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–94 Promotion Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TPRMTN	"Total Promotion"
PRMTNTYP	DWL_PRMTN_TYP.PRMTN_TYP_NAME
CMPGN	DWR_CMPGN.CMPGN_DESC
PRMTN	DWR_PRMTN.PRMTN_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–95 Promotion Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TPRMTN	"Total Promotion"
PRMTNTYP	DWL_PRMTN_TYP.PRMTN_TYP_CD

**Table 8–95 (Cont.) Promotion Short Description Attribute Mapping**

Level	Mapping (Physical Column)
CMPGN	DWR_CMPGN.CMPGN_CD
PRMTN	DWR_PRMTN.PRMTN_CD

## Sales Channel: SLCHNL

This dimension keeps all the information of Sales Channel.

**Table 8–96 Sales Channel (SLCHNL) Levels and Hierarchies**

Level	Description	Sales Channel Hierarchy (HSLCHNL)
TSLCHNL	Total Sales Channel	TSLCHNL
SLCHNL	Sales Channel	SLCHNL

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–97 Sales Channel Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TSLCHNL	"Total Sales Channel"
SLCHNL	DWR_SL_CHNL.CHNL_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–98 Sales Channel Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TSLCHNL	"Total Sales Channel"
SLCHNL	DWR_SL_CHNL.CHNL_CD

Attribute Name: Capacity Quantity (CPCTY\_QTY):

The number of transaction that a Channel can handle, at a point of time.

**Table 8–99 Sales Channel Capacity Quantity Attribute Mapping**

Level	Mapping (Physical Column)
TSLCHNL	
SLCHNL	DWR_SL_CHNL.CPCTY_QTY

## Time: TIME

This dimension keeps all the information of time.

**Table 8–100 Time (TIME) Levels and Hierarchies**

Level	Description	Time Business Hierarchy (HTBSNS)
TTIME	Time Total	TTIME
BSNS_YR	Business Year	BSNS_YR

**Table 8–100 (Cont.) Time (TIME) Levels and Hierarchies**

Level	Description	Time Business Hierarchy (HTBSNS)
BSNS_HLF_YR	Business Half Year	BSNS_HLF_YR
BSNS_QTR	Business Quarter	BSNS_QTR
BSNS_MO	Business Month	BSNS_MO

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–101 Time Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TTIME	DWR_TIME_TOT.TOT_DESC
BSNS_YR	DWR_BSNS_YR.BSNS_YR_DESC
BSNS_HLF_YR	DWR_BSNS_HLF_YR.BSNS_HLF_YR_DESC
BSNS_QTR	DWR_BSNS_QTR.BSNS_QTR_DESC
BSNS_MO	DWR_BSNS_MO.BSNS_MO_DESC

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–102 Time Short Description Attribute Mapping**

Level	Mapping (Physical Column)
TTIME	DWR_TIME_TOT.TOT_CD
BSNS_YR	DWR_BSNS_YR.BSNS_YR_CD
BSNS_HLF_YR	DWR_BSNS_HLF_YR.BSNS_HLF_YR_CD
BSNS_QTR	DWR_BSNS_QTR.BSNS_QTR_CD
BSNS_MO	DWR_BSNS_MO.BSNS_MO_CD

Attribute Name: Time Number(TIME\_NBR)

**Table 8–103 Time Time Number Attribute Mapping**

Level	Mapping (Physical Column)
TTIME	DWR_TIME_TOT.TOT_NBR
BSNS_YR	DWR_BSNS_YR.BSNS_YR_NBR
BSNS_HLF_YR	DWR_BSNS_HLF_YR.BSNS_HLF_YR_NBR
BSNS_QTR	DWR_BSNS_QTR.BSNS_QTR_NBR
BSNS_MO	DWR_BSNS_MO.BSNS_MO_NBR

Attribute Name: Time Span(TIME\_SPAN)

**Table 8–104 Time Time Span Attribute Mapping**

Level	Mapping (Physical Column)
TTIME	DWR_TIME_TOT.TOT_TIMESPN
BSNS_YR	DWR_BSNS_YR.BSNS_YR_TIMESPN
BSNS_HLF_YR	DWR_BSNS_HLF_YR.BSNS_HLF_YR_TIMESPN



**Table 8–104 (Cont.) Time Time Span Attribute Mapping**

Level	Mapping (Physical Column)
BSNS_QTR	DWR_BSNS_QTR.BSNS_QTR_TIMESPN
BSNS_MO	DWR_BSNS_MO.BSNS_MO_TIMESPN

Attribute Name: Start Date(START\_DATE)

**Table 8–105 Time Start Date Attribute Mapping**

Level	Mapping (Physical Column)
TTIME	DWR_TIME_TOT.TOT_STRT_DT
BSNS_YR	DWR_BSNS_YR.BSNS_YR_STRT_DT
BSNS_HLF_YR	DWR_BSNS_HLF_YR.BSNS_HLF_YR_STRT_DT
BSNS_QTR	DWR_BSNS_QTR.BSNS_QTR_STRT_DT
BSNS_MO	DWR_BSNS_MO.BSNS_MO_STRT_DT

Attribute Name: End Date(END\_DATE)

**Table 8–106 Time End Date Attribute Mapping**

Level	Mapping (Physical Column)
TTIME	DWR_TIME_TOT.TOT_END_DT
BSNS_YR	DWR_BSNS_YR.BSNS_YR_END_DT
BSNS_HLF_YR	DWR_BSNS_HLF_YR.BSNS_HLF_YR_END_DT
BSNS_QTR	DWR_BSNS_QTR.BSNS_QTR_END_DT
BSNS_MO	DWR_BSNS_MO.BSNS_MO_END_DT

## Time Slot: TSLT

This dimension keeps information for Time Slot.

Default Hierarchy: HTSLT

**Table 8–107 Time Slot (TSLT) Levels and Hierarchies**

Level	Description	Time Slot Hierarchy (HTSLT)
TTSLT	Total Time Slot	TTSLT
TSLT	Time Slot	TSLT

Attribute Name: Long Description(LONG\_DESCRIPTION)

**Table 8–108 Time Slot Long Description Attribute Mapping**

Level	Mapping (Physical Column)
TTSLT	"Total Time Slot"
TSLT	DWR_TIME_SLT.TIME_SLT_NAME

Attribute Name: Short Description(SHORT\_DESCRIPTION)

**Table 8–109 Time Slot Short Description Attribute Mapping**

<b>Level</b>	<b>Mapping (Physical Column)</b>
TTSLT	"Total Time Slot"
TSLT	DWR_TIME_SLT.TIME_SLT_CD

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# Oracle Communications Data Model OLAP Model Cubes

This chapter of Oracle Communications Data Model Reference describes the Data Flow between fact tables and dimension tables of Oracle Communications Data Model relational part to target materialize views and cubes to support the module Oracle Communications Data Model OLAP.

This chapter includes the following section:

- [Oracle Communications Data Model OLAP Cubes](#)

For more information, see [Chapter 8, "Oracle Communications Data Model OLAP Model Dimensions"](#).

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**Note:** All materialized views underlying the OLAP cubes are disabled by default. To enable the cube materialized views, you must follow the steps outlined in *Oracle Communications Data Model Implementation and Operations Guide*.

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## Oracle Communications Data Model OLAP Cubes

For each cube, each section includes the following cube information:

- Description
- Dimensions (leaf load level and load sequence)
- Base Measures with Physical Mapping and Description
- Derived Measure with the Logical Name and the Calculations

[Table 9-1](#) lists the Oracle Communications Data Model OLAP cubes.

**Table 9-1** *OLAP Cubes*

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### Cubes

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[Account Debt Cube](#)

[Account Payment Cube](#)

[Account Refund Cube](#)

[Cell Statistic Cube](#)

[Commission Cube](#)

[Contract Cube](#)

**Table 9–1 (Cont.) OLAP Cubes**

<b>Cubes</b>
Cost Organizational Cube
Cost Product Market Plan Cube
Customer Acquisition Cube
External Debt Collection Cube
Handset Stock Cube
Invoice Adjustment Cube
Invoice Customer Type Cube
Revenue Cube
Subscriber Churn Statistic Cube
Customer Acquisition Forecast Cube
Customer Acquisition Forecast Statistic Cube
Cell Statistic Forecast Cube
Handset Stock Forecast Cube
Revenue Forecast Cube

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**Note:** Oracle Communications Data Model includes base measures with format such as, XXXX1. These base measures are intended for internal; Oracle Communications Data Model uses these base measures to calculate EOP\_XXXX (end of period value). Do not uses these measures for reporting.

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## Account Debt Cube

The summarized daily status of customer debt per customer type and collection agency.

**Physical Name: ADM**

### Dimensions and Load Level

The fact data of Account Debt Cube will be loaded from the relational schema at these dimension levels (leaf level).

**Table 9–2 Account Debt Cube Dimensions and Load Level**

<b>Dimension Name</b>	<b>Load level</b>
Time	Business Month
Customer Type	Customer Type
Debt Aging Band	Account Refund Reason

**Table 9–2 (Cont.) Account Debt Cube Dimensions and Load Level**

Dimension Name	Load level
Collection Agency	Collection Agency
Organization	Business Unit
Geography	County

**Aggregation Order/Operator**

The Account Debt Cube is aggregated by the order and operators on dimensions shown in [Table 9–3](#).

**Table 9–3 Account Debt Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Debt Aging Band	Sum	3
Collection Agency	Sum	4
Organization	Sum	5
Geography	Sum	6

**Base Measures**

[Table 9–4](#) shows the base measures.

**Table 9–4 Account Debt Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
ACNT1	Account Count	DWA_ACCT_DEBT_MO.ACCT_CNT	Number of Accounts.
DCNT1	Debt Count	DWA_ACCT_DEBT_MO.DEBT_CNT	Debt Count
DAMT1	Debt Amount	DWA_ACCT_DEBT_MO.DEBT_AMT	Debt Amount
RAMT	Recovered Amount	DWA_ACCT_DEBT_MO.RCV_AMT	How much was collected from customer at the end.
WAMT	Waiving Amount	DWA_ACCT_DEBT_MO.WVNG_AMT	How much waiving made to the customer.
PAMT	Penalty Amount	DWA_ACCT_DEBT_MO.PNLTY_AMT	Penalty amount.

**Derived Measures**

The possible derived measure of this data cube are.

**Table 9–5 Account Debt Cube Derived Measures**

Physical Name	Logical Name	Definition
EOP_ACNT	EOP Account Count	OLAP_DML_EXPRESSION('ADM_ACNT1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_DAMT	EOP Debt Amount	OLAP_DML_EXPRESSION('ADM_DAMT1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_DCNT	EOP Debt Count	OLAP_DML_EXPRESSION('ADM_DCNT1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)

**Table 9–5 (Cont.) Account Debt Cube Derived Measures**

Physical Name	Logical Name	Definition
PAMT_YTD	Penalty Amount YTD	SUM(ADM.PAMT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PAMT_DAB	Penalty Amount Share of DAB Parent	SHARE(ADM.PAMT OF DAB.HDAB PARENT)
SHR_PAMT_GEO	Penalty Amount Share of Geography Parent	SHARE(ADM.PAMT OF GEO.HGEO PARENT)
SHR_PAMT_CUSTYP	Penalty Amount Share of CUSTYP Parent	SHARE(ADM.PAMT OF CUSTYP.HCUSTYP PARENT)
RANK_PAMT_DAB	Penalty Amount Rank of DAB Parent	RANK() OVER HIERARCHY (DAB.HDAB ORDER BY ADM.PAMT DESC NULLS LAST WITHIN PARENT)
RANK_PAMT_GEO	Penalty Amount Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ADM.PAMT DESC NULLS LAST WITHIN PARENT)
RANK_PAMT_CUSTYP	Penalty Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ADM.PAMT DESC NULLS LAST WITHIN PARENT)
PAMT_LP	Penalty Amount Last Period	LAG(ADM.PAMT, 1) OVER HIERARCHY ("TIME".HTBSNS)
PAMT_LY	Penalty Amount Last Year	LAG(ADM.PAMT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAMT_YTD_LY	Penalty Amount YTD Last Year	LAG(ADM.PAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAMT_YTD_LY_PCT_CHG	Penalty Amount YTD % change Last Year	LAG_VARIANCE_PERCENT(ADM.PAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RAMT_YTD	Recovered Amount YTD	SUM(ADM.RAMT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_RAMT_DAB	Recovered Amount Share of DAR Parent	SHARE(ADM.RAMT OF DAB.HDAB PARENT)
SHR_RAMT_GEO	Recovered Amount Share of Geography Parent	SHARE(ADM.RAMT OF GEO.HGEO PARENT)
SHR_RAMT_CUSTYP	Recovered Amount Share of CUSTYP Parent	SHARE(ADM.RAMT OF CUSTYP.HCUSTYP PARENT)
RANK_RAMT_DAB	Recovered Amount Rank of DAB Parent	RANK() OVER HIERARCHY (DAB.HDAB ORDER BY ADM.RAMT DESC NULLS LAST WITHIN PARENT)
RANK_RAMT_GEO	Recovered Amount Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ADM.RAMT DESC NULLS LAST WITHIN PARENT)
RANK_RAMT_CUSTYP	Recovered Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ADM.RAMT DESC NULLS LAST WITHIN PARENT)
RAMT_LP	Recovered Amount LP	LAG(ADM.RAMT, 1) OVER HIERARCHY ("TIME".HTBSNS)
RAMT_LY	Recovered Amount Last Year	LAG(ADM.RAMT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RAMT_YTD_LY	Recovered Amount YTD Last Year	LAG(ADM.RAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RAMT_YTD_LY_PCT_CHG	Recovered Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(ADM.RAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–5 (Cont.) Account Debt Cube Derived Measures**

Physical Name	Logical Name	Definition
WAMT_YTD	Waiving Amount YTD	SUM(ADM.WAMT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_WAMT_DAB	Waiving Amount Share of DAB Parent	SHARE(ADM.WAMT OF DAB.HDAB PARENT)
SHR_WAMT_GEO	Waiving Amount Share of Geography Parent	SHARE(ADM.WAMT OF GEO.HGEO PARENT)
SHR_WAMT_CUSTYP	Waiving Amount Share of CUSTYP Parent	SHARE(ADM.WAMT OF CUSTYP.HCUSTYP PARENT)
RANK_WAMT_DAB	Waiving Amount Rank of DAB Parent	RANK() OVER HIERARCHY (DAB.HDAB ORDER BY ADM.WAMT DESC NULLS LAST WITHIN PARENT)
RANK_WAMT_GEO	Waiving Amount Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ADM.WAMT DESC NULLS LAST WITHIN PARENT)
RANK_WAMT_CUSTYP	Waiving Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ADM.WAMT DESC NULLS LAST WITHIN PARENT)
WAMT_LP	Waiving Amount LP	LAG(ADM.WAMT, 1) OVER HIERARCHY ("TIME".HTBSNS)
WAMT_LY	Waiving Amount Last Year	LAG(ADM.WAMT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
WAMT_YTD_LY	Waiving Amount YTD Last Year	LAG(ADM.WAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
WAMT_YTD_LY_PCT_CHG	Waiving Amount YTD % ChangeLast Year	LAG_VARIANCE_PERCENT(ADM.WAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_PAMT_ORG	Penalty Amount Share of Organization Parent	SHARE(ADM.PAMT OF ORG.HCHAIN PARENT)
RANK_PAMT_ORG	Penalty Amount Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ADM.PAMT DESC NULLS LAST WITHIN PARENT)
SHR_RAMT_ORG	Recovered Amount Share of Organization Parent	SHARE(ADM.RAMT OF ORG.HCHAIN PARENT)
RANK_RAMT_ORG	Recovered Amount Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ADM.RAMT DESC NULLS LAST WITHIN PARENT)
SHR_WAMT_ORG	Waiving Amount Share of Organization Parent	SHARE(ADM.WAMT OF ORG.HCHAIN PARENT)
RANK_WAMT_ORG	Waiving Amount Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ADM.WAMT DESC NULLS LAST WITHIN PARENT)
SHR_PAMT_CAGNCY	Penalty Amount Share of CAGNCY Parent	SHARE(ADM.PAMT OF CAGNCY.HCAGNCY PARENT)
RANK_PAMT_CAGNCY	Penalty Amount Rank of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY ADM.PAMT DESC NULLS LAST WITHIN PARENT)
SHR_RAMT_CAGNCY	Recovered Amount Share of CAGNCY Parent	SHARE(ADM.RAMT OF CAGNCY.HCAGNCY PARENT)
RANK_RAMT_CAGNCY	Recovered Amount Rank of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY ADM.RAMT DESC NULLS LAST WITHIN PARENT)
SHR_WAMT_CAGNCY	Waiving Amount Share of CAGNCY Parent	SHARE(ADM.WAMT OF CAGNCY.HCAGNCY PARENT)
RANK_WAMT_CAGNCY	Waiving Amount Rank of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY ADM.WAMT DESC NULLS LAST WITHIN PARENT)
EOP_DAMT_LY	EOP Debt Amount Last Year	LAG(ADM.EOP_DAMT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–5 (Cont.) Account Debt Cube Derived Measures**

Physical Name	Logical Name	Definition
EOP_DCNT_LY	EOP Debt Count Last Year	LAG(ADM.EOP_DCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_DAMT_LY_PCT_CHG	EOP Debt Amount % Chg Last Year	LAG_VARIANCE_PERCENT(ADM.EOP_DAMT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_DCNT_LY_PCT_CHG	EOP Debt Count % Chg Last Year	LAG_VARIANCE_PERCENT(ADM.EOP_DCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
WAMT_LY_PCT_CHG	Waiving Amount % Chg Last Year	LAG_VARIANCE_PERCENT(ADM.WAMT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

## Account Payment Cube

Once the bills are processed and invoices sent to the customers, customers pay the bill through different channels (shops/outlets) or through banks.

Customer payments are collected in shops by cash, check, or by credit cards. Customers can pay complete bill amount at once or in parts. Also customers can pay bill amount by one single method or by multiple methods like part by check and part by cash.

Product dimension is included in this aggregate table. In some business, like prepaid mobile, the product code can be identified for each payment, while for others, each payment might pay for several product usage. In later case, customer needs to divide the payment into different products during ETL.

### Physical Name: APM

### Dimensions and Load Level

The fact data of Account Payment Cube will be loaded from the relational schema at these dimension levels (leaf level).

**Table 9–6 Account Payment Cube Dimensions and Load Level**

Dimension Name	Load level
Time	Business Month
Customer Type	Customer Type
Payment Transaction Type	Payment Transaction Type
Payment Method Type	Payment Method Type
Payment Channel	Payment Channel
Organization	Organization Business Unit
Geography	Product Market Plan

### Aggregation Order/Operator

The Account Payment Cube will be aggregated by the following order and operators on dimensions.



**Table 9–7 Account Payment Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Payment Transaction Type	Sum	3
Payment Method Type	Sum	4
Payment Channel	Sum	5
Organization	Sum	6
Geography	Sum	7

**Base Measures**

The base measure of this data cube are:

**Table 9–8 Account Payment Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
LPCD	Late Payment Charges Due	DWA_ACCT_PYMT_MO.LATE_PYMT_CHRGS_DUE	Late Payment Charges and/or Finance Charges Due.
PAYC	Payment Count	DWA_ACCT_PYMT_MO.PYMT_CNT	
BCAB	Bill Collection Amount By Bank	DWA_ACCT_PYMT_MO.BILL_COLLCTN_AMT_BY_BNK	
RLS	Revenue Loss Due To Settlement	DWA_ACCT_PYMT_MO.RVN_LOSS_DUE_TO_STLMNT	The amount of money incurred by the settlement deal with customer or collection agency.
PENA	Penalty Amount	DWA_ACCT_PYMT_MO.PNLTY_AMT	
PAYA	Payment Amount	DWA_ACCT_PYMT_MO.PYMT_AMT	Amount paid
DA	Deposit Amount	DWA_ACCT_PYMT_MO.DPST_AMT	Deposit Amount used for payment in current month
CVC	Collection Vendor Commission	DWA_ACCT_PYMT_MO.COLLECTN_VNDR_CMISN	
PD	Payment Due	DWA_ACCT_PYMT_MO.PYMT_DUE	
LPCC	Late Payment Charges Collected	DWA_ACCT_PYMT_MO.LATE_PYMT_CHRGS_COLCTD	Late Payment Charges and/or Finance Charges Collected.

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–9 Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
BCAB_YTD	Bill Collection Amount By Bank YTD	SUM(APM.BCAB) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_BCAB_PTTYP	Bill Collection Amount Share of PTTYP Parent	SHARE(APM.BCAB OF PTTYP.HPTTYP PARENT)
SHR_BCAB_GEO	Bill Collection Amount Share of Geography Parent	SHARE(APM.BCAB OF GEO.HGEO PARENT)
SHR_BCAB_CUSTYP	Bill Collection Amount Share of CUSTYP Parent	SHARE(APM.BCAB OF CUSTYP.HCUSTYP PARENT)

**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_BCAB_PMTYP	Bill Collection Amount Share of PMTYP Parent	SHARE(APM.BCAB OF PMTYP.HPMTYP PARENT)
SHR_BCAB_PCHNL	Bill Collection Amount Share of PCHNL Parent	SHARE(APM.BCAB OF PCHNL.HPCHNL PARENT)
SHR_BCAB_ORG	Bill Collection Amount Share of Organization Parent	SHARE(APM.BCAB OF ORG.HCHAIN PARENT)
RANK_BCAB_PTTYP	Bill Collection Amount Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.BCAB DESC NULLS LAST WITHIN PARENT)
RANK_BCAB_GEO	Bill Collection Amount Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.BCAB DESC NULLS LAST WITHIN PARENT)
RANK_BCAB_CUSTYP	Bill Collection Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.BCAB DESC NULLS LAST WITHIN PARENT)
RANK_BCAB_PMTYP	Bill Collection Amount Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.BCAB DESC NULLS LAST WITHIN PARENT)
RANK_BCAB_PCHNL	Bill Collection Amount Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.BCAB DESC NULLS LAST WITHIN PARENT)
RANK_BCAB_ORG	Bill Collection Amount Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.BCAB DESC NULLS LAST WITHIN PARENT)
BCAB_LP	Bill Collection Amount LP	LAG(APM.BCAB, 1) OVER HIERARCHY ("TIME".HTBSNS)
BCAB_LY	Bill Collection Amount Last Year	LAG(APM.BCAB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BCAB_YTD_LY	Bill Collection Amount YTD Last Year	LAG(APM.BCAB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BCAB_YTD_LY_PCT_CHG	Bill Collection Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.BCAB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CVC_YTD	Collection Vendor Commission YTD	SUM(APM.CVC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_CVC_PTTYP	Collection Vendor Commission Share of PTTYP Parent	SHARE(APM.CVC OF PTTYP.HPTTYP PARENT)
SHR_CVC_GEO	Collection Vendor Commission Share of Geography Parent	SHARE(APM.CVC OF GEO.HGEO PARENT)
SHR_CVC_CUSTYP	Collection Vendor Commission Share of CUSTYP Parent	SHARE(APM.CVC OF CUSTYP.HCUSTYP PARENT)
SHR_CVC_PMTYP	Collection Vendor Commission Share of PMTYP Parent	SHARE(APM.CVC OF PMTYP.HPMTYP PARENT)
SHR_CVC_PCHNL	Collection Vendor Commission Share of PCHNL Parent	SHARE(APM.CVC OF PCHNL.HPCHNL PARENT)
SHR_CVC_ORG	Collection Vendor Commission Share of Organization Parent	SHARE(APM.CVC OF ORG.HCHAIN PARENT)
RANK_CVC_PTTYP	Collection Vendor Commission Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.CVC DESC NULLS LAST WITHIN PARENT)

**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_CVC_GEO	Collection Vendor Commission Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.CVC DESC NULLS LAST WITHIN PARENT)
RANK_CVC_CUSTYP	Collection Vendor Commission Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.CVC DESC NULLS LAST WITHIN PARENT)
RANK_CVC_PMTYP	Collection Vendor Commission Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.CVC DESC NULLS LAST WITHIN PARENT)
RANK_CVC_PCHNL	Collection Vendor Commission Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.CVC DESC NULLS LAST WITHIN PARENT)
RANK_CVC_ORG	Collection Vendor Commission Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.CVC DESC NULLS LAST WITHIN PARENT)
CVC_LP	Collection Vendor Commission LP	LAG(APM.CVC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CVC_LY	Collection Vendor Commission Last Year	LAG(APM.CVC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CVC_YTD_LY	Collection Vendor Commission YTD Last Year	LAG(APM.CVC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CVC_YTD_LY_PCT_CHG	Collection Vendor Commission YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.CVC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DA_YTD	Deposit Amount YTD	SUM(APM.DA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_DA_PTTYP	Deposit Amount Share of PTTYP Parent	SHARE(APM.DA OF PTTYP.HPTTYP PARENT)
SHR_DA_GEO	Deposit Amount Share of Geography Parent	SHARE(APM.DA OF GEO.HGEO PARENT)
SHR_DA_CUSTYP	Deposit Amount Share of CUSTYP Parent	SHARE(APM.DA OF CUSTYP.HCUSTYP PARENT)
SHR_DA_PMTYP	Deposit Amount Share of PMTYP Parent	SHARE(APM.DA OF PMTYP.HPMTYP PARENT)
SHR_DA_PCHNL	Deposit Amount Share of PCHNL Parent	SHARE(APM.DA OF PCHNL.HPCHNL PARENT)
SHR_DA_ORG	Deposit Amount Share of Organization Parent	SHARE(APM.DA OF ORG.HCHAIN PARENT)
RANK_DA_PTTYP	Deposit Amount Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.DA DESC NULLS LAST WITHIN PARENT)
RANK_DA_GEO	Deposit Amount Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.DA DESC NULLS LAST WITHIN PARENT)
RANK_DA_CUSTYP	Deposit Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.DA DESC NULLS LAST WITHIN PARENT)
RANK_DA_PMTYP	Deposit Amount Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.DA DESC NULLS LAST WITHIN PARENT)
RANK_DA_PCHNL	Deposit Amount Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.DA DESC NULLS LAST WITHIN PARENT)
RANK_DA_ORG	Deposit Amount Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.DA DESC NULLS LAST WITHIN PARENT)
DA_LP	Deposit Amount Rank LP	LAG(APM.DA, 1) OVER HIERARCHY ("TIME".HTBSNS)

**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
DA_LY	Deposit Amount Rank Last Year	LAG(APM.DA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DA_YTD_LY	Deposit Amount Rank YTD Last Year	LAG(APM.DA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DA_YTD_LY_PCT_CHG	Deposit Amount Rank YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.DA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LPCC_YTD	Late Payment Charges Collected YTD	SUM(APM.LPCC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_LPCC_PTTY	Late Payment Charges Collected Share of PTTY Parent	SHARE(APM.LPCC OF PTTY.HPTTY PARENT)
SHR_LPCC_GEO	Late Payment Charges Collected Share of Geography Parent	SHARE(APM.LPCC OF GEO.HGEO PARENT)
SHR_LPCC_CUSTYP	Late Payment Charges Collected Share of CUSTYP Parent	SHARE(APM.LPCC OF CUSTYP.HCUSTYP PARENT)
SHR_LPCC_PMTYP	Late Payment Charges Collected Share of PMTYP Parent	SHARE(APM.LPCC OF PMTYP.HPMTYP PARENT)
SHR_LPCC_PCHNL	Late Payment Charges Collected Share of PCHNL Parent	SHARE(APM.LPCC OF PCHNL.HPCHNL PARENT)
SHR_LPCC_ORG	Late Payment Charges Collected Share of Organization Parent	SHARE(APM.LPCC OF ORG.HCHAIN PARENT)
RANK_LPCC_PTTY	Late Payment Charges Collected Rank of PTTY Parent	RANK() OVER HIERARCHY (PTTY.HPTTY ORDER BY APM.LPCC DESC NULLS LAST WITHIN PARENT)
RANK_LPCC_GEO	Late Payment Charges Collected Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.LPCC DESC NULLS LAST WITHIN PARENT)
RANK_LPCC_CUSTYP	Late Payment Charges Collected Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.LPCC DESC NULLS LAST WITHIN PARENT)
RANK_LPCC_PMTYP	Late Payment Charges Collected Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.LPCC DESC NULLS LAST WITHIN PARENT)
RANK_LPCC_PCHNL	Late Payment Charges Collected Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.LPCC DESC NULLS LAST WITHIN PARENT)
RANK_LPCC_ORG	Late Payment Charges Collected Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.LPCC DESC NULLS LAST WITHIN PARENT)
LPCC_LP	Late Payment Charges Collected LP	LAG(APM.LPCC, 1) OVER HIERARCHY ("TIME".HTBSNS)
LPCC_LY	Late Payment Charges Collected Last Year	LAG(APM.LPCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LPCC_YTD_LY	Late Payment Charges Collected YTD Last Year	LAG(APM.LPCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LPCC_YTD_LY_PCT_CHG	Late Payment Charges Collected YTD % Changed Last Year	LAG_VARIANCE_PERCENT(APM.LPCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
LPCD_YTD	Late Payment Charges Due YTD	SUM(APM.LPCD) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_LPCD_PTTYP	Late Payment Charges Due Share of PTTYP Parent	SHARE(APM.LPCD OF PTTYP.HPTTYP PARENT)
SHR_LPCD_GEO	Late Payment Charges Due Share of PTTYP Parent	SHARE(APM.LPCD OF GEO.HGEO PARENT)
SHR_LPCD_CUSTYP	Late Payment Charges Due Share of CUSTYP Parent	SHARE(APM.LPCD OF CUSTYP.HCUSTYP PARENT)
SHR_LPCD_PMTYP	Late Payment Charges Due Share of PMTYP Parent	SHARE(APM.LPCD OF PMTYP.HPMTYP PARENT)
SHR_LPCD_PCHNL	Late Payment Charges Due Share of PMTYP Parent	SHARE(APM.LPCD OF PCHNL.HPCHNL PARENT)
SHR_LPCD_ORG	Late Payment Charges Due Share of Organization Parent	SHARE(APM.LPCD OF ORG.HCHAIN PARENT)
RANK_LPCD_PTTYP	Late Payment Charges Due Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.LPCD DESC NULLS LAST WITHIN PARENT)
RANK_LPCD_GEO	Late Payment Charges Due Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.LPCD DESC NULLS LAST WITHIN PARENT)
RANK_LPCD_CUSTYP	Late Payment Charges Due Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.LPCD DESC NULLS LAST WITHIN PARENT)
RANK_LPCD_PMTYP	Late Payment Charges Due Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.LPCD DESC NULLS LAST WITHIN PARENT)
RANK_LPCD_PCHNL	Late Payment Charges Due Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.LPCD DESC NULLS LAST WITHIN PARENT)
RANK_LPCD_ORG	Late Payment Charges Due Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.LPCD DESC NULLS LAST WITHIN PARENT)
LPCD_LP	Late Payment Charges Due Rank of Organization Parent	LAG(APM.LPCD, 1) OVER HIERARCHY ("TIME".HTBSNS)
LPCD_LY	Late Payment Charges Due Last Year	LAG(APM.LPCD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LPCD_YTD_LY	Late Payment Charges Due YTD Last Year	LAG(APM.LPCD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LPCD_YTD_LY_PCT_CHG	Late Payment Charges Due YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.LPCD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAYA_YTD	Payment Amount YTD	SUM(APM.PAYA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PAYA_PTTYP	Payment Amount Share of PTTYP Parent	SHARE(APM.PAYA OF PTTYP.HPTTYP PARENT)

**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_PAYA_GEO	Payment Amount Share of Geography Parent	SHARE(APM.PAYA OF GEO.HGEO PARENT)
SHR_PAYA_CUSTYP	Payment Amount Share of CUSTYP Parent	SHARE(APM.PAYA OF CUSTYP.HCUSTYP PARENT)
SHR_PAYA_PMTYP	Payment Amount Share of PMTYP Parent	SHARE(APM.PAYA OF PMTYP.HPMTYP PARENT)
SHR_PAYA_PCHNL	Payment Amount Share of PCHNL Parent	SHARE(APM.PAYA OF PCHNL.HPCHNL PARENT)
SHR_PAYA_ORG	Payment Amount Share of Organization Parent	SHARE(APM.PAYA OF ORG.HCHAIN PARENT)
RANK_PAYA_PTTYP	Payment Amount Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.PAYA DESC NULLS LAST WITHIN PARENT)
RANK_PAYA_GEO	Payment Amount Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.PAYA DESC NULLS LAST WITHIN PARENT)
RANK_PAYA_CUSTYP	Payment Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.PAYA DESC NULLS LAST WITHIN PARENT)
RANK_PAYA_PMTYP	Payment Amount Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.PAYA DESC NULLS LAST WITHIN PARENT)
RANK_PAYA_PCHNL	Payment Amount Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.PAYA DESC NULLS LAST WITHIN PARENT)
RANK_PAYA_ORG	Payment Amount Rank of PCHNL Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.PAYA DESC NULLS LAST WITHIN PARENT)
PAYA_LP	Payment Amount LP	LAG(APM.PAYA, 1) OVER HIERARCHY ("TIME".HTBSNS)
PAYA_LY	Payment Amount Last Year	LAG(APM.PAYA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAYA_YTD_LY	Payment Amount YTD Last Year	LAG(APM.PAYA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAYA_YTD_LY_PCT_CHG	Payment Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.PAYA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAYC_YTD	Payment Count YTD	SUM(APM.PAYC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PAYC_PTTYP	Payment Count Share of PTTYP Parent	SHARE(APM.PAYC OF PTTYP.HPTTYP PARENT)
SHR_PAYC_GEO	Payment Count Share of Geography Parent	SHARE(APM.PAYC OF GEO.HGEO PARENT)
SHR_PAYC_CUSTYP	Payment Count Share of CUSTYP Parent	SHARE(APM.PAYC OF CUSTYP.HCUSTYP PARENT)
SHR_PAYC_PMTYP	Payment Count Share of PMTYP Parent	SHARE(APM.PAYC OF PMTYP.HPMTYP PARENT)
SHR_PAYC_PCHNL	Payment Count Share of PCHNL Parent	SHARE(APM.PAYC OF PCHNL.HPCHNL PARENT)
SHR_PAYC_ORG	Payment Count Share of Organization Parent	SHARE(APM.PAYC OF ORG.HCHAIN PARENT)
RANK_PAYC_PTTYP	Payment Count Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.PAYC DESC NULLS LAST WITHIN PARENT)
RANK_PAYC_GEO	Payment Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.PAYC DESC NULLS LAST WITHIN PARENT)

**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_PAYC_CUSTYP	Payment Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.PAYC DESC NULLS LAST WITHIN PARENT)
RANK_PAYC_PMTYP	Payment Count Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.PAYC DESC NULLS LAST WITHIN PARENT)
RANK_PAYC_PCHNL	Payment Count Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.PAYC DESC NULLS LAST WITHIN PARENT)
RANK_PAYC_ORG	Payment Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.PAYC DESC NULLS LAST WITHIN PARENT)
PAYC_LP	Payment Count LP	LAG(APM.PAYC, 1) OVER HIERARCHY ("TIME".HTBSNS)
PAYC_LY	Payment Count Last Year	LAG(APM.PAYC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAYC_YTD_LY	Payment Count YTD Last Year	LAG(APM.PAYC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAYC_YTD_LY_PCT_CHG	Payment Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.PAYC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PD_YTD	Payment Due YTD	SUM(APM.PD) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PD_PTTYP	Payment Due Share of PTTYP Parent	SHARE(APM.PD OF PTTYP.HPTTYP PARENT)
SHR_PD_GEO	Payment Due Share of Geography Parent	SHARE(APM.PD OF GEO.HGEO PARENT)
SHR_PD_CUSTYP	Payment Due Share of CUSTYP Parent	SHARE(APM.PD OF CUSTYP.HCUSTYP PARENT)
SHR_PD_PMTYP	Payment Due Share of PMTYP Parent	SHARE(APM.PD OF PMTYP.HPMTYP PARENT)
SHR_PD_PCHNL	Payment Due Share of PCHNL Parent	SHARE(APM.PD OF PCHNL.HPCHNL PARENT)
SHR_PD_ORG	Payment Due Share of Organization Parent	SHARE(APM.PD OF ORG.HCHAIN PARENT)
RANK_PD_PTTYP	Payment Due Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.PD DESC NULLS LAST WITHIN PARENT)
RANK_PD_GEO	Payment Due Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.PD DESC NULLS LAST WITHIN PARENT)
RANK_PD_CUSTYP	Payment Due Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.PD DESC NULLS LAST WITHIN PARENT)
RANK_PD_PMTYP	Payment Due Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.PD DESC NULLS LAST WITHIN PARENT)
RANK_PD_PCHNL	Payment Due Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.PD DESC NULLS LAST WITHIN PARENT)
RANK_PD_ORG	Payment Due Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.PD DESC NULLS LAST WITHIN PARENT)
PD_LP	Payment Due LP	LAG(APM.PD, 1) OVER HIERARCHY ("TIME".HTBSNS)
PD_LY	Payment Due Last Year	LAG(APM.PD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PD_YTD_LY	Payment Due YTD Last Year	LAG(APM.PD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PD_YTD_LY_PCT_CHG	Payment Due YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.PD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
PENA_YTD	Penalty Amount YTD	SUM(APM.PENA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PENA_PTTYP	Penalty Amount Share of PTTYP Parent	SHARE(APM.PENA OF PTTYP.HPTTYP PARENT)
SHR_PENA_GEO	Penalty Amount Share of Geography Parent	SHARE(APM.PENA OF GEO.HGEO PARENT)
SHR_PENA_CUSTYP	Penalty Amount Share of CUSTYP Parent	SHARE(APM.PENA OF CUSTYP.HCUSTYP PARENT)
SHR_PENA_PMTYP	Penalty Amount Share of PMTYP Parent	SHARE(APM.PENA OF PMTYP.HPMTYP PARENT)
SHR_PENA_PCHNL	Penalty Amount Share of PCHNL Parent	SHARE(APM.PENA OF PCHNL.HPCHNL PARENT)
SHR_PENA_ORG	Penalty Amount Share of Organization Parent	SHARE(APM.PENA OF ORG.HCHAIN PARENT)
RANK_PENA_PTTYP	Penalty Amount Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.PENA DESC NULLS LAST WITHIN PARENT)
RANK_PENA_GEO	Penalty Amount Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.PENA DESC NULLS LAST WITHIN PARENT)
RANK_PENA_CUSTYP	Penalty Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.PENA DESC NULLS LAST WITHIN PARENT)
RANK_PENA_PMTYP	Penalty Amount Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.PENA DESC NULLS LAST WITHIN PARENT)
RANK_PENA_PCHNL	Penalty Amount Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.PENA DESC NULLS LAST WITHIN PARENT)
RANK_PENA_ORG	Penalty Amount Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.PENA DESC NULLS LAST WITHIN PARENT)
PENA_LP	Penalty Amount LP	LAG(APM.PENA, 1) OVER HIERARCHY ("TIME".HTBSNS)
PENA_LY	Penalty Amount Last Year	LAG(APM.PENA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PENA_YTD_LY	Penalty Amount YTD Last Year	LAG(APM.PENA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PENA_YTD_LY_PCT_CHG	Penalty Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.PENA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLS_YTD	Revenue Loss Due to Settlement YTD	SUM(APM.RLS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_RLS_PTTYP	Revenue Loss Due to Settlement Share of PTTYP Parent	SHARE(APM.RLS OF PTTYP.HPTTYP PARENT)
SHR_RLS_GEO	Revenue Loss Due to Settlement Share of Geography Parent	SHARE(APM.RLS OF GEO.HGEO PARENT)
SHR_RLS_CUSTYP	Revenue Loss Due to Settlement Share of CUSTYP Parent	SHARE(APM.RLS OF CUSTYP.HCUSTYP PARENT)
SHR_RLS_PMTYP	Revenue Loss Due to Settlement Share of PMTYP Parent	SHARE(APM.RLS OF PMTYP.HPMTYP PARENT)
SHR_RLS_PCHNL	Revenue Loss Due to Settlement Share of PCHNL Parent	SHARE(APM.RLS OF PCHNL.HPCHNL PARENT)



**Table 9–9 (Cont.) Account Payment Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_RLS_ORG	Revenue Loss Due to Settlement Share of Organization Parent	SHARE(APM.RLS OF ORG.HCHAIN PARENT)
RANK_RLS_PTTYP	Revenue Loss Due to Settlement Rank of PTTYP Parent	RANK() OVER HIERARCHY (PTTYP.HPTTYP ORDER BY APM.RLS DESC NULLS LAST WITHIN PARENT)
RANK_RLS_GEO	Revenue Loss Due to Settlement Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY APM.RLS DESC NULLS LAST WITHIN PARENT)
RANK_RLS_CUSTYP	Revenue Loss Due to Settlement Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY APM.RLS DESC NULLS LAST WITHIN PARENT)
RANK_RLS_PMTYP	Revenue Loss Due to Settlement Rank of PMTYP Parent	RANK() OVER HIERARCHY (PMTYP.HPMTYP ORDER BY APM.RLS DESC NULLS LAST WITHIN PARENT)
RANK_RLS_PCHNL	Revenue Loss Due to Settlement Rank of PCHNL Parent	RANK() OVER HIERARCHY (PCHNL.HPCHNL ORDER BY APM.RLS DESC NULLS LAST WITHIN PARENT)
RANK_RLS_ORG	Revenue Loss Due to Settlement Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY APM.RLS DESC NULLS LAST WITHIN PARENT)
RLS_LP	Revenue Loss Due to Settlement LP	LAG(APM.RLS, 1) OVER HIERARCHY ("TIME".HTBSNS)
RLS_LY	Revenue Loss Due to Settlement Last Year	LAG(APM.RLS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLS_YTD_LY	Revenue Loss Due to Settlement YTD Last Year	LAG(APM.RLS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLS_YTD_LY_PCT_CHG	Revenue Loss Due to Settlement YTD % Change Last Year	LAG_VARIANCE_PERCENT(APM.RLS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

## Account Refund Cube

Once the bills are processed and invoices sent to the customers, customers pay the bill through different channels (shops/outlets) or through banks.

This cube collects information about the refund per refund reason, customer type, and Business Unit.

**Physical Name: ARM**

### Dimensions and Load Level

The fact data of Account Refund Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–10 Account Refund Cube Dimensions and Load Level**

Dimension Name	Load level
Time	Business Month
Customer Type	Customer Type
Account Refund Reason	Account Refund Reason

**Table 9–10 (Cont.) Account Refund Cube Dimensions and Load Level**

Dimension Name	Load level
Product Market Plan	Product Market Plan
Organization	Business Unit
Geography	County

**Aggregation Order/Operator**

The Account Refund Cube will be aggregated by the following order and operators on dimensions

**Table 9–11 Account Refund Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Account Refund Reason	Sum	3
Product Market Plan	Sum	4
Organization	Sum	5
Geography	Sum	6

**Base Measures**

The base measure of this data cube are:

**Table 9–12 Account Refund Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
RC	Refund Count	DWA_ACCT_RFND_MO.RFND_CNT	Refund Count
RLDS	Revenue Loss Due To Settlement	DWA_ACCT_RFND_MO.RVN_LOSS_DUE_TO_STLMNT	Revenue Loss Due To Settlement
RA	Refund Amount	DWA_ACCT_RFND_MO.RFND_AMT	Amount Paid

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–13 Account Refund Cube Derived Measures**

Physical Name	Logical Name	Definition
RLDS_YTD	Revenue Loss Due to Settlement YTD	SUM( ARM.RLDS) OVER HIERARCHY ( "TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_RLDS_CUSTYP	Revenue Loss Due to Settlement Share of CUSTYP Parent	SHARE( ARM.RLDS OF CUSTYP.HCUSTYP PARENT)
RANK_RLDS_CUSTYP	Revenue Loss Due to Settlement Rank of CUSTYP Parent	RANK() OVER HIERARCHY ( CUSTYP.HCUSTYP ORDER BY ARM.RLDS DESC NULLS LAST WITHIN PARENT)
RLDS_LP	Revenue Loss Due to Settlement LP	LAG( ARM.RLDS, 1) OVER HIERARCHY ( "TIME".HTBSNS)
RLDS_LY	Revenue Loss Due to Settlement Last Year	LAG( ARM.RLDS, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–13 (Cont.) Account Refund Cube Derived Measures**

Physical Name	Logical Name	Definition
RLDS_LY_PCT_CHG	Revenue Loss Due to Settlement % Change Last Year	LAG_VARIANCE_PERCENT( ARM.RLDS, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLDS_YTD_LY	Revenue Loss Due to Settlement YTD Last Year	LAG( ARM.RLDS_YTD, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLDS_YTD_LY_PCT_CHG	Revenue Loss Due to Settlement YTD % Change Last Year	LAG_VARIANCE_PERCENT( ARM.RLDS_YTD, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RA_YTD	Refund Amount YTD	SUM( ARM.RA) OVER HIERARCHY ( "TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_RA_CUSTYP	Refund Amount Share of CUSTYP Parent	SHARE( ARM.RA OF CUSTYP.HCUSTYP PARENT)
RANK_RA_CUSTYP	Refund Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY ( CUSTYP.HCUSTYP ORDER BY ARM.RA DESC NULLS LAST WITHIN PARENT)
RA_LP	Refund Amount LP	LAG( ARM.RA, 1) OVER HIERARCHY ( "TIME".HTBSNS)
RA_LY	Refund Amount Last Year	LAG( ARM.RA, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RA_LY_PCT_CHG	Refund Amount % change Last Year	LAG_VARIANCE_PERCENT( ARM.RA, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RA_YTD_LY	Refund Amount YTD Last Year	LAG( ARM.RA_YTD, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RA_YTD_LY_PCT_CHG	Refund Amount YTD % change Last Year	LAG_VARIANCE_PERCENT( ARM.RA_YTD, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_RLDS_ORG	Revenue Loss Due To Settlement Share of Organization Parent	SHARE( ARM.RLDS OF ORG.HCHAIN PARENT)
RANK_RLDS_ORG	Revenue Loss Due To Settlement Rank of Organization Parent	RANK() OVER HIERARCHY ( ORG.HCHAIN ORDER BY ARM.RLDS DESC NULLS LAST WITHIN PARENT)
SHR_RLDS_ARRSN	Revenue Loss Due To Settlement Share of ARRSN Parent	SHARE( ARM.RLDS OF ARRSN.HARRSN PARENT)
RANK_RLDS_ARRSN	Revenue Loss Due To Settlement Rank of ARRSN Parent	RANK() OVER HIERARCHY ( ARRSN.HARRSN ORDER BY ARM.RLDS DESC NULLS LAST WITHIN PARENT)
SHR_RLDS_GEO	Revenue Loss Due To Settlement Share of Geography Parent	SHARE( ARM.RLDS OF GEO.HGEO PARENT)
RANK_RLDS_GEO	Revenue Loss Due To Settlement Rank of Geography Parent	RANK() OVER HIERARCHY ( GEO.HGEO ORDER BY ARM.RLDS DESC NULLS LAST WITHIN PARENT)
SHR_RLDS_PMP	Revenue Loss Due To Settlement Share of PMP Parent	SHARE( ARM.RLDS OF PMP.HPMP PARENT)
RANK_RLDS_PMP	Revenue Loss Due To Settlement Rank of PMP Parent	RANK() OVER HIERARCHY ( PMP.HPMP ORDER BY ARM.RLDS DESC NULLS LAST WITHIN PARENT)
SHR_RA_PMP	Refund Amount Share of PMP Parent	SHARE( ARM.RA OF PMP.HPMP PARENT)
RANK_RA_PMP	Refund Amount Rank of PMP Parent	RANK() OVER HIERARCHY ( PMP.HPMP ORDER BY ARM.RA DESC NULLS LAST WITHIN PARENT)

**Table 9–13 (Cont.) Account Refund Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_RA_GEO	Refund Amount Share of Geography Parent	SHARE( ARM.RA OF GEO.HGEO PARENT)
RANK_RA_GEO	Refund Amount Rank of Geography Parent	RANK() OVER HIERARCHY ( GEO.HGEO ORDER BY ARM.RA DESC NULLS LAST WITHIN PARENT)
SHR_RA_ARRSN	Refund Amount Share of ARRSN Parent	SHARE( ARM.RA OF ARRSN.HARRSN PARENT)
RANK_RA_ARRSN	Refund Amount Rank of ARRSN Parent	RANK() OVER HIERARCHY ( ARRSN.HARRSN ORDER BY ARM.RA DESC NULLS LAST WITHIN PARENT)
SHR_RA_ORG	Refund Amount Share of Organization Parent	SHARE( ARM.RA OF ORG.HCHAIN PARENT)
RANK_RA_ORG	Refund Amount Rank of Organization Parent	RANK() OVER HIERARCHY ( ORG.HCHAIN ORDER BY ARM.RA DESC NULLS LAST WITHIN PARENT)
RC_YTD	Refund Count YTD	SUM( ARM.RC) OVER HIERARCHY ( "TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_RC_CUSTYP	Refund Count Share of CUSTYP Parent	SHARE( ARM.RC OF CUSTYP.HCUSTYP PARENT)
RANK_RC_CUSTYP	Refund Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY ( CUSTYP.HCUSTYP ORDER BY ARM.RC DESC NULLS LAST WITHIN PARENT)
RC_LP	Refund Count LP	LAG( ARM.RC, 1) OVER HIERARCHY ( "TIME".HTBSNS)
RC_LY	Refund Count Last Year	LAG( ARM.RC, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RC_LY_PCT_CHG	Refund Count % Change Last Year	LAG_VARIANCE_PERCENT( ARM.RC, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RC_YTD_LY	Refund Count YTD Last Year	LAG( ARM.RC_YTD, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RC_YTD_LY_PCT_CHG	Refund Count YTD % Change Last Year	LAG_VARIANCE_PERCENT( ARM.RC_YTD, 1) OVER HIERARCHY ( "TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_RC_ORG	Refund Count Share of Organization Parent	SHARE( ARM.RC OF ORG.HCHAIN PARENT)
RANK_RC_ORG	Refund Count Rank of Organization Parent	RANK() OVER HIERARCHY ( ORG.HCHAIN ORDER BY ARM.RC DESC NULLS LAST WITHIN PARENT)
SHR_RC_ARRSN	Refund Count Share of ARRSN Parent	SHARE( ARM.RC OF ARRSN.HARRSN PARENT)
RANK_RC_ARRSN	Refund Count Rank of ARRSN Parent	RANK() OVER HIERARCHY ( ARRSN.HARRSN ORDER BY ARM.RC DESC NULLS LAST WITHIN PARENT)
SHR_RC_GEO	Refund Count Share of Geography Parent	SHARE( ARM.RC OF GEO.HGEO PARENT)
RANK_RC_GEO	Refund Count Rank of Geography Parent	RANK() OVER HIERARCHY ( GEO.HGEO ORDER BY ARM.RC DESC NULLS LAST WITHIN PARENT)
SHR_RC_PMP	Refund Count Share of PMP Parent	SHARE( ARM.RC OF PMP.HPMP PARENT)
RANK_RC_PMP	Refund Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ARM.RC DESC NULLS LAST WITHIN PARENT)

## Cell Statistic Cube

Most of the network parameters are captured at the cell level and aggregating the cell level parameters can derive the network level parameters. Cell statistics cube will be used to collect most of the cell parameters. In addition, the Cell Statistic Cube could be adapted to work for other network elements than cell.

**Physical Name: CSM****Dimensions and Load Level**

The fact data of Cell statistics will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–14 Cell Statistic Cube Dimensions and Load Level**

Dimension Name	Load level
Time	Business Month
Peak Offpeak Time	Peak Offpeak Time
Network Element	Network Element
Time Slot	Time Slot
Geography	County

**Aggregation Order/Operator**

The Cell statistics Cube will be aggregated by the following order and operators on dimensions

**Table 9–15 Cell Statistic Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Peak Offpeak Time	Sum	2
Network Element	Sum	3
Time Slot	Sum	4
Geography	Sum	5

**Base Measures**

The base measure of this data cube are.

**Table 9–16 Cell Statistic Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
PBSS	Power Budget Signal Strength	DWA_CELL_STTSTC_MO.POWR_BDGT_SGNL_STRNGTH	Number of attempted outgoing intercell ho due to power budget assessment.
NOC	Number Of Calls	DWA_CELL_STTSTC_MO.NBR_OF_CALLS	
NCA	Number Of Call Attempts	DWA_CELL_STTSTC_MO.NBR_OF_CALL_ATTPTS	Number of call attempts.
NCAWT	Num Call Attempts WO Transit	DWA_CELL_STTSTC_MO.NBR_OF_CALL_ATTPTS_WO_TRNST	Number of call attempts without transit.
TCM	Total Call Minutes	DWA_CELL_STTSTC_MO.TOT_CALL_MNTS	
CCE	Cell Carried Erlangs	DWA_CELL_STTSTC_MO.CELL_CARRIED_ERLNGS	Actual erlangs.
SIOT	SMS INIT on TCH	DWA_CELL_STTSTC_MO.SMS_INIT_ON_TCH	Number of SMS transactions.
SIOS	SMS INIT on SDCCH	DWA_CELL_STTSTC_MO.SMS_INIT_ON_SDCCH	Number of SMS transactions related to TCH.

**Table 9–16 (Cont.) Cell Statistic Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
OR AHL	O INTRA BS HO LOS	DWA_CELL_STTSTC_MO.O_INTRA_BS_HO_LOS	Number of failed intra-BSS Handovers in which the MS also failed to recover to the original BSS.
OERHS	O INTER BS HO SUC	DWA_CELL_STTSTC_MO.O_INTR_BS_HO_SUC	Number of successful inter-BSS handovers.
OERHR	O INTER BS HO RET	DWA_CELL_STTSTC_MO.O_INTR_BS_HO_RET	Number of failed inter-BSS Handovers in which the MS Recovered to the original BSS/channel.
OERHA	O INTER BS HO ATM	DWA_CELL_STTSTC_MO.O_INTR_BS_HO_ATM	Number of assignment commands sent to MS during an inter-BSS handovers.
OR AHC	O INTRA BS HO CLR	DWA_CELL_STTSTC_MO.O_INTRA_BS_HO_CLR	Number of outgoing intra-BSS handovers aborted due to call clearing.
OR AHA	O INTRA BS HO ATM	DWA_CELL_STTSTC_MO.O_INTRA_BS_HO_ATM	Number of assignment commands sent to MS during an intra-BSS Handover.
OR AHS	O INTRA BS HO SUC	DWA_CELL_STTSTC_MO.O_INTRA_BS_HO_SUC	Number of successful intra-BSS handovers.
OEREF	O INTER BS EQ FA	DWA_CELL_STTSTC_MO.O_INTR_BS_EQ_FA	Number of attempted inter-BSS handover failures due to equipment failure.
OERRM	O INTER BS RQ MSC	DWA_CELL_STTSTC_MO.O_INTR_BS_RQ_MSC	Number of outgoing inter bss handover requests.
ASF	ALLOC SDCCH FAIL	DWA_CELL_STTSTC_MO.ALLOC_SDCCH_FAIL	Number of unsuccessful sdcch allocations.
SH	ALLOC SDCCH	DWA_CELL_STTSTC_MO.ALLOC_SDCCH	Number of successful sdcch allocations.
LU	Location Update	DWA_CELL_STTSTC_MO.LOC_UPDT	Number of location update requests.
LS	Location Services	DWA_CELL_STTSTC_MO.LOC_SRVCS	Number of Location Measurement Unit service requests for location services.
PRFM	Page Req From MSC	DWA_CELL_STTSTC_MO.PG_REQ_FROM_MSC	Number of paging requests received from MSC.
SPM	Spare TCH Max	DWA_CELL_STTSTC_MO.SPARE_TCH_MAX	Difference between available and used channels.
SSM	Spare SDCCH Max	DWA_CELL_STTSTC_MO.SPARE_SDCCH_MAX	Difference between available and busy channels.
BSM	Busy SDCCH Max	DWA_CELL_STTSTC_MO.BUSY_SDCCH_MAX	Busy signaling data channels for a cell.
BTM	Busy TCH Max	DWA_CELL_STTSTC_MO.BUSY_TCH_MAX	Used Traffic channels.
ASM	Available SDCCH Max	DWA_CELL_STTSTC_MO.AVLBL_SDCCH_MAX	Available signaling data channels for a cell.
ATM	Available TCH Max	DWA_CELL_STTSTC_MO.AVLBL_TCH_MAX	Available Traffic Channels for a cell.
COE1	Cell Offered Erlangs	DWA_CELL_STTSTC_MO.CELL_OFRD_ERLNGS	Offered erlangs.
USL	Uplink Signal Level	DWA_CELL_STTSTC_MO.UPLNK_SGNL_LVL	Number of attempted outgoing intercell ho due to uplink signal level.
USQ	Uplink Signal Quality	DWA_CELL_STTSTC_MO.UPLNK_SGNL_QLTY	Number of attempted outgoing intercell ho due to uplink signal quality.
AR	Assign Redirect	DWA_CELL_STTSTC_MO.ASGN_REDRCT	Number of times call assignment is redirected to another cell.
TQR	TCH Q Removed	DWA_CELL_STTSTC_MO.TCH_Q_REMVD	Queued call is assigned to a Traffic Channel (TCH).

**Table 9–16 (Cont.) Cell Statistic Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
ICHS	Intra Cell HO Suc	DWA_CELL_STTSTC_MO.INTRA_CELL_HO_SUC	Number of successful intra-cell handovers.
ICHA	Intra Cell HO Atm	DWA_CELL_STTSTC_MO.INTRA_CELL_HO_ATM	Number of assignment commands sent to MS during an intra-cell handover.
IERHS	I Inter BS HO Suc	DWA_CELL_STTSTC_MO.I_INTR_BS_HO_SUC	Number of successful incoming inter-BSS handovers.
IRAHC	I Intra BS HO Suc	DWA_CELL_STTSTC_MO.I_INTRA_BS_HO_SUC	Number of successful incoming intra-BSS handovers.
CSRC	CM Serv Req Call	DWA_CELL_STTSTC_MO.CM_SERV_REQ_CALL	Number of MS (Mobile Station) requests for originating service.
IECR	Inv Est Cause Rach	DWA_CELL_STTSTC_MO.INV_EST_CAUSE_RACH	Number of RACHs with invalid establishment cause.
ADDB	Air DL Data Blks	DWA_CELL_STTSTC_MO.AIR_DL_DATA_BLKS	Number of data blocks in downlink.
AUDB	Air UL Data Blks	DWA_CELL_STTSTC_MO.AIR_UL_DATA_BLKS	Number of data blocks in uplink.
CR	CM Reestablish	DWA_CELL_STTSTC_MO.CM_RESTBLSH	Number of failed MS requests for service in which the call recovered.
ACM	Air Call Minutes	DWA_CELL_STTSTC_MO.AIR_CALL_MNTS	
AT	Alloc Tch	DWA_CELL_STTSTC_MO.ALLOC_TCH	Number of successful TCH allocations.
CSRE	CM Serv Req Emrg	DWA_CELL_STTSTC_MO.CM_SERV_REQ_EMRG	Number of MS requests for Emergency call service.
LFRS	Loc Flw Req SMS	DWA_CELL_STTSTC_MO.LOC_FLW_REQ_NRM	Location Update follow-on request-SMS.
ATF	Alloc TCH Fail	DWA_CELL_STTSTC_MO.ALLOC_TCH_FAIL	Number of unsuccessful allocations of TCH.
CRR	Channel Reqs Reject	DWA_CELL_STTSTC_MO.CHNL_REQS_REJECT	Number of requests rejected by PCU for GPRS.
ACI	Adjacent Channel Interference	DWA_CELL_STTSTC_MO.ADJ_CHNL_INTRFRNCE	Number of attempted outgoing intercell ho due to adjacent channel interference.
RLTR	RF Loss TCH Roll	DWA_CELL_STTSTC_MO.RF_LOSS_TCH_ROLL	This statistics tracks the number of calls lost while using a TCH.
PR	Page Response	DWA_CELL_STTSTC_MO.PG_RESPN	Number of MS page request responses.
OHCA	Out HO Cause Attempts	DWA_CELL_STTSTC_MO.OUT_HO_CAUSE_ATTPTS	Total out handover from cell.
CRMB	Chan Req MS Blk	DWA_CELL_STTSTC_MO.CHAN_REQ_MS_BLK	Number of times a MS has been refused access to a channel.
CD	Call Duration	DWA_CELL_STTSTC_MO.CALL_DRTN	Duration of calls.
ID	IMSI Detach	DWA_CELL_STTSTC_MO.IMSI_DETACH	Number of received imsi detach requests.
OAPSR	OK ACC PROC SUC R	DWA_CELL_STTSTC_MO.OK_ACC_PROC_SUC_R	Successful Channel Request messages on the RACH of a cell.
MTLOS	MT LCS ON SDDCH	DWA_CELL_STTSTC_MO.MT_LCS_ON_SDDCH	This statistics counts the number of mobile terminated SDCCH sessions for location services.
TT	Total Traffic	DWA_CELL_STTSTC_MO.TOT_TRFC	Traffic in Erlangs.
CHRR	Channel Reqs Rec	DWA_CELL_STTSTC_MO.CHNL_REQS_REC	Number of requests received by PCU for GPRS.
HU	Hour Usage	DWA_CELL_STTSTC_MO.HR_USG	Total time for which cell capacity was used.

**Table 9–16 (Cont.) Cell Statistic Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
DSQ	Downlink Signal Quality	DWA_CELL_STTSTC_MO.DNLNK_SGNL_QLTY	Number of attempted outgoing intercell ho due to downlink signal quality.
CISC	Congestion In Source Cell	DWA_CELL_STTSTC_MO.CONGSTN_IN_SRC_CELL	Number of attempted outgoing intercell ho due to traffic channel congestion.
NOCE	Number Of Cells	DWA_CELL_STTSTC_MO.NBR_OF_CELLS	For BTS , number of cells this BTS Serves.
CNNTS	Connections	DWA_CELL_STTSTC_MO.CNCTNS	Number of connection.
DSL	Downlink Signal Level	DWA_CELL_STTSTC_MO.DNLNK_SGNL_LVL	Number of attempted outgoing intercell ho due to downlink signal level.
CSRS	CM Serv Req SMS	DWA_CELL_STTSTC_MO.CM_SERV_REQ_SMS	Number of MS requests for SMS service.
ICHL	Intra Cell HO Los	DWA_CELL_STTSTC_MO.INTRA_CELL_HO_LOS	Number of failed intra-cell handovers that also failed to recover to the original cell.
CSRSP	CM Serv Req Supp	DWA_CELL_STTSTC_MO.CM_SERV_REQ_SUPP	Number of requests for supplementary services.
CONNR	Connections Refuse	DWA_CELL_STTSTC_MO.CNCTNS_REFUSE	Number of connection refusals.
LFRRN	LOC FLW REQ NRM	DWA_CELL_STTSTC_MO.LOC_FLW_REQ_NRM	
CRFR	CHAN REQ FAIL ROL	DWA_CELL_STTSTC_MO.CHAN_REQ_FAIL_ROL	Number of times that the BSS times out while waiting for the MS to establish on the SDCCCH that was assigned to it during the immediate assignment procedure.
SSD	Signal Source Distance	DWA_CELL_STTSTC_MO.SGNL_SRC_DSTNC	Number of attempted outgoing intercell ho due to weak signal due to distance.

### Derived Measures

The possible derived measure of this data cube are:

**Table 9–17 Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
EOP_COE	EOP Cell Offered Erlangs	OLAP_DML_EXPRESSION('CSM_COE1(time if time_levelrel eq "BSNS_MO" then time else stlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
ACI_YTD	Adjacent Channel Interference YTD	SUM(CSM.ACI) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ACI_LP	Adjacent Channel Interference Last Period	LAG(CSM.ACI, 1) OVER HIERARCHY ("TIME".HTBSNS)
ACI_LY	Adjacent Channel Interference Last Year	LAG(CSM.ACI, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACI_LY_PCT_CHG	Adjacent Channel Interference % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ACI, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACI_YTD_LY	Adjacent Channel Interference YTD Last Year	LAG(CSM.ACI_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACI_YTD_LY_PCT_CHG	Adjacent Channel Interference % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ACI_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)



**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
ACM_YTD	Air Call Minutes YTD	SUM(CSM.ACM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ACM_LP	Air Call Minutes Last Period	LAG(CSM.ACM, 1) OVER HIERARCHY ("TIME".HTBSNS)
ACM_LY	Air Call Minutes Last Year	LAG(CSM.ACM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACM_LY_PCT_CHG	Air Call Minutes % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ACM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACM_YTD_LY	Air Call Minutes YTD Last Year	LAG(CSM.ACM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACM_YTD_LY_PCT_CHG	Air Call Minutes YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ACM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADDB_YTD	Air DL Data Blocks YTD	SUM(CSM.ADDB) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ADDB_LP	Air DL Data Blocks YTD Last Period	LAG(CSM.ADDB, 1) OVER HIERARCHY ("TIME".HTBSNS)
ADDB_LY	Air DL Data Blocks Last Year	LAG(CSM.ADDB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADDB_LY_PCT_CHG	Air DL Data Blocks % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ADDB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADDB_YTD_LY	Air DL Data Blocks YTD Last Year	LAG(CSM.ADDB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADDB_YTD_LY_PCT_CHG	Air DL Data Blocks YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ADDB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AR_YTD	Assign Redirect YTD	SUM(CSM.AR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AR_LP	Assign Redirect Last Period	LAG(CSM.AR, 1) OVER HIERARCHY ("TIME".HTBSNS)
AR_LY	Assign Redirect Last Year	LAG(CSM.AR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AR_LY_PCT_CHG	Assign Redirect % Change Last Year	LAG_VARIANCE_PERCENT(CSM.AR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AR_YTD_LY	Assign Redirect YTD Last Year	LAG(CSM.AR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AR_YTD_LY_PCT_CHG	Assign Redirect YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.AR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ASF_YTD	Alloc SDCCH Fail YTD	SUM(CSM.ASF) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ASF_LP	Alloc SDCCH Fail Last Period	LAG(CSM.ASF, 1) OVER HIERARCHY ("TIME".HTBSNS)
ASF_LY	Alloc SDCCH Fail Last Year	LAG(CSM.ASF, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
ASF_LY_PCT_CHG	Alloc SDCCH Fail % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ASF, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ASF_YTD_LY	Alloc SDCCH Fail YTD Last Year	LAG(CSM.ASF_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ASF_YTD_LY_PCT_CHG	Alloc SDCCH Fail YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ASF_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ASM_YTD	Available SDCCH Max YTD	SUM(CSM.ASM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ASM_LP	Available SDCCH Max Last Period	LAG(CSM.ASM, 1) OVER HIERARCHY ("TIME".HTBSNS)
ASM_LY	Available SDCCH Max Last Year	LAG(CSM.ASM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ASM_LY_PCT_CHG	Available SDCCH Max % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ASM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ASM_YTD_LY	Available SDCCH Max YTD Last Year	LAG(CSM.ASM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ASM_YTD_LY_PCT_CHG	Available SDCCH Max YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ASM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AT_YTD	Alloc TCH YTD	SUM(CSM."AT") OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AT_LP	Alloc TCH Last Period	LAG(CSM."AT", 1) OVER HIERARCHY ("TIME".HTBSNS)
AT_LY	Alloc TCH Last Year	LAG(CSM."AT", 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AT_LY_PCT_CHG	Alloc TCH % Change Last Year	LAG_VARIANCE_PERCENT(CSM."AT", 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AT_YTD_LY	Alloc TCH YTD Last Year	LAG(CSM.AT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AT_YTD_LY_PCT_CHG	Alloc TCH YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.AT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATF_YTD	Alloc TCH Fail YTD	SUM(CSM.ATF) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ATF_LP	Alloc TCH Fail Last Period	LAG(CSM.ATF, 1) OVER HIERARCHY ("TIME".HTBSNS)
ATF_LY	Alloc TCH Fail Last Year	LAG(CSM.ATF, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATF_LY_PCT_CHG	Alloc TCH Fail % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ATF, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATF_YTD_LY	Alloc TCH Fail YTD Last Year	LAG(CSM.ATF_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
ATF_YTD_LY_PCT_CHG	Alloc TCH Fail YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ATF_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATM_YTD	Available TCH Max YTD	SUM(CSM.ATM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ATM_LP	Available TCH Max Last Period	LAG(CSM.ATM, 1) OVER HIERARCHY ("TIME".HTBSNS)
ATM_LY	Available TCH Max Last Year	LAG(CSM.ATM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATM_LY_PCT_CHG	Available TCH Max % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ATM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATM_YTD_LY	Available TCH Max YTD Last Year	LAG(CSM.ATM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATM_YTD_LY_PCT_CHG	Available TCH Max YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ATM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AUDB_YTD	Air UL Data Blks YTD	SUM(CSM.AUDB) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AUDB_LP	Air UL Data Blks Last Period	LAG(CSM.AUDB, 1) OVER HIERARCHY ("TIME".HTBSNS)
AUDB_LY	Air UL Data Blks Last Year	LAG(CSM.AUDB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AUDB_LY_PCT_CHG	Air UL Data Blks % Change Last Year	LAG_VARIANCE_PERCENT(CSM.AUDB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AUDB_YTD_LY	Air UL Data Blks YTD Last Year	LAG(CSM.AUDB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AUDB_YTD_LY_PCT_CHG	Air UL Data Blks YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.AUDB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BSM_YTD	Busy SDCCH Max YTD	SUM(CSM.BSM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
BSM_LP	Busy SDCCH Max Last Period	LAG(CSM.BSM, 1) OVER HIERARCHY ("TIME".HTBSNS)
BSM_LY	Busy SDCCH Max Last Year	LAG(CSM.BSM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BSM_LY_PCT_CHG	Busy SDCCH Max % Change Last Year	LAG_VARIANCE_PERCENT(CSM.BSM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BSM_YTD_LY	Busy SDCCH Max YTD Last Year	LAG(CSM.BSM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BSM_YTD_LY_PCT_CHG	Busy SDCCH Max YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.BSM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BTM_YTD	Busy TCH Max YTD	SUM(CSM.BTM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
BTM_LP	Busy TCH Max Last Period	LAG(CSM.BTM, 1) OVER HIERARCHY ("TIME".HTBSNS)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
BTM_LY	Busy TCH Max Last Year	LAG(CSM.BTM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BTM_LY_PCT_CHG	Busy TCH Max % Change Last Year	LAG_VARIANCE_PERCENT(CSM.BTM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BTM_YTD_LY	Busy TCH Max YTD Last Year	LAG(CSM.BTM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BTM_YTD_LY_PCT_CHG	Busy TCH Max YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.BTM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCE_YTD	Cell Carried Erlangs YTD	SUM(CSM.CCE) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CCE_LP	Cell Carried Erlangs Last Period	LAG(CSM.CCE, 1) OVER HIERARCHY ("TIME".HTBSNS)
CCE_LY	Cell Carried Erlangs Last Year	LAG(CSM.CCE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCE_LY_PCT_CHG	Cell Carried Erlangs % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CCE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCE_YTD_LY	Cell Carried Erlangs YTD Last Year	LAG(CSM.CCE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCE_YTD_LY_PCT_CHG	Cell Carried Erlangs YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CCE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CD_YTD	Call Duration YTD	SUM(CSM.CD) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CD_LP	Call Duration Last Period	LAG(CSM.CD, 1) OVER HIERARCHY ("TIME".HTBSNS)
CD_LY	Call Duration Last Year	LAG(CSM.CD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CD_LY_PCT_CHG	Call Duration % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CD_YTD_LY	Call Duration YTD Last Year	LAG(CSM.CD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CD_YTD_LY_PCT_CHG	Call Duration YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CHRR_YTD	Channel Reqs Rec YTD	SUM(CSM.CHRR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CHRR_LP	Channel Reqs Rec Last Period	LAG(CSM.CHRR, 1) OVER HIERARCHY ("TIME".HTBSNS)
CHRR_LY	Channel Reqs Rec Last Year	LAG(CSM.CHRR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CHRR_LY_PCT_CHG	Channel Reqs Rec % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CHRR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
CHRR_YTD_LY	Channel Reqs Rec YTD Last Year	LAG(CSM.CHRR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CHRR_YTD_LY_PCT_CHG	Channel Reqs Rec YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CHRR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CISC_YTD	Congestion In Source Cell YTD	SUM(CSM.CISC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CISC_LP	Congestion In Source Cell Last Period	LAG(CSM.CISC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CISC_LY	Congestion In Source Cell Last Year	LAG(CSM.CISC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CISC_LY_PCT_CHG	Congestion In Source Cell % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CISC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CISC_YTD_LY	Congestion In Source Cell YTD Last Year	LAG(CSM.CISC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CISC_YTD_LY_PCT_CHG	Congestion In Source Cell YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CISC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CNNTS_YTD	Connections YTD	SUM(CSM.CNNTS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CNNTS_LP	Connections Last Period	LAG(CSM.CNNTS, 1) OVER HIERARCHY ("TIME".HTBSNS)
CNNTS_LY	Connections Last Year	LAG(CSM.CNNTS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CNNTS_LY_PCT_CHG	Connections % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CNNTS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CNNTS_YTD_LY	Connections YTD Last Year	LAG(CSM.CNNTS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CNNTS_YTD_LY_PCT_CHG	Connections YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CNNTS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_COE_YTD	EOP Cell Offered Erlangs YTD	SUM(CSM.EOP_COE) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
EOP_COE_LP	EOP Cell Offered Erlangs Last Period	LAG(CSM.EOP_COE, 1) OVER HIERARCHY ("TIME".HTBSNS)
EOP_COE_LY	EOP Cell Offered Erlangs Last Year	LAG(CSM.EOP_COE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_COE_LY_PCT_CHG	EOP Cell Offered Erlangs % Change Last Year	LAG_VARIANCE_PERCENT(CSM.EOP_COE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_COE_YTD_LY	EOP Cell Offered Erlangs YTD Last Year	LAG(CSM.EOP_COE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_COE_YTD_LY_PCT_CHG	EOP Cell Offered Erlangs % Change Last Year	LAG_VARIANCE_PERCENT(CSM.EOP_COE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
CONN_R_YTD	Connections Refuse YTD	SUM(CSM.CONNR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CONN_R_LP	Connections Refuse Last Period	LAG(CSM.CONNR, 1) OVER HIERARCHY ("TIME".HTBSNS)
CONN_R_LY	Connections Refuse Last Year	LAG(CSM.CONNR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CONN_R_LY_PCT_CHG	Connections Refuse % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CONNR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CONN_R_YTD_LY	Connections Refuse YTD Last Year	LAG(CSM.CONNR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CONN_R_YTD_LY_PCT_CHG	Connections Refuse YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CONNR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CR_YTD	CM Reestablish YTD	SUM(CSM.CR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CR_LP	CM Reestablish Last Period	LAG(CSM.CR, 1) OVER HIERARCHY ("TIME".HTBSNS)
CR_LY	CM Reestablish Last Year	LAG(CSM.CR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CR_LY_PCT_CHG	CM Reestablish % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CR_YTD_LY	CM Reestablish YTD Last Year	LAG(CSM.CR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CR_YTD_LY_PCT_CHG	CM Reestablish YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRFR_YTD	Chan Req Fail Rol YTD	SUM(CSM.CRFR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CRFR_LP	Chan Req Fail Rol Last Period	LAG(CSM.CRFR, 1) OVER HIERARCHY ("TIME".HTBSNS)
CRFR_LY	Chan Req Fail Rol Last Year	LAG(CSM.CRFR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRFR_LY_PCT_CHG	Chan Req Fail Rol % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CRFR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRFR_YTD_LY	Chan Req Fail Rol YTD Last Year	LAG(CSM.CRFR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRFR_YTD_LY_PCT_CHG	Chan Req Fail Rol YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CRFR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRMB_YTD	Chan Req MS Blk YTD	SUM(CSM.CRMB) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CRMB_LP	Chan Req MS Blk Last Period	LAG(CSM.CRMB, 1) OVER HIERARCHY ("TIME".HTBSNS)
CRMB_LY	Chan Req MS Blk Last Year	LAG(CSM.CRMB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
CRMB_LY_PCT_CHG	Chan Req MS Blk % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CRMB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRMB_YTD_LY	Chan Req MS Blk YTD Last Year	LAG(CSM.CRMB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRMB_YTD_LY_PCT_CHG	Chan Req MS Blk YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CRMB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRR_YTD	Channel Reqs Reject YTD	SUM(CSM.CRR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CRR_LP	Channel Reqs Reject Last Period	LAG(CSM.CRR, 1) OVER HIERARCHY ("TIME".HTBSNS)
CRR_LY	Channel Reqs Reject Last Year	LAG(CSM.CRR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRR_LY_PCT_CHG	Channel Reqs Reject % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CRR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRR_YTD_LY	Channel Reqs Reject YTD Last Year	LAG(CSM.CRR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CRR_YTD_LY_PCT_CHG	Channel Reqs Reject YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CRR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRC_YTD	CM Serv Req Call YTD	SUM(CSM.CSRC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CSRC_LP	CM Serv Req Call Last Period	LAG(CSM.CSRC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CSRC_LY	CM Serv Req Call Last Year	LAG(CSM.CSRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRC_LY_PCT_CHG	CM Serv Req Call % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRC_YTD_LY	CM Serv Req Call YTD Last Year	LAG(CSM.CSRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRC_YTD_LY_PCT_CHG	CM Serv Req Call YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRE_YTD	CM Serv Req Emrg YTD	SUM(CSM.CSRE) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CSRE_LP	CM Serv Req Emrg Last Period	LAG(CSM.CSRE, 1) OVER HIERARCHY ("TIME".HTBSNS)
CSRE_LY	CM Serv Req Emrg Last Year	LAG(CSM.CSRE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRE_LY_PCT_CHG	CM Serv Req Emrg % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRE_YTD_LY	CM Serv Req Emrg YTD Last Year	LAG(CSM.CSRE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
CSRE_YTD_LY_PCT_CHG	CM Serv Req Emrg % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRS_YTD	CM Serv Req SMS YTD	SUM(CSM.CSRS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CSRS_LP	CM Serv Req SMS Last Period	LAG(CSM.CSRS, 1) OVER HIERARCHY ("TIME".HTBSNS)
CSRS_LY	CM Serv Req SMS Last Year	LAG(CSM.CSRS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRS_LY_PCT_CHG	CM Serv Req SMS % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRS_YTD_LY	CM Serv Req SMS YTD Last Year	LAG(CSM.CSRS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRS_YTD_LY_PCT_CHG	CM Serv Req SMS YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRSP_YTD	CM Serv Req Supp YTD	SUM(CSM.CSRSP) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CSRSP_LP	CM Serv Req Supp Last period	LAG(CSM.CSRSP, 1) OVER HIERARCHY ("TIME".HTBSNS)
CSRSP_LY	CM Serv Req Supp Last Year	LAG(CSM.CSRSP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRSP_LY_PCT_CHG	CM Serv Req Supp % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRSP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRSP_YTD_LY	CM Serv Req Supp YTD Last Year	LAG(CSM.CSRSP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSRSP_YTD_LY_PCT_CHG	CM Serv Req Supp % Change Last Year	LAG_VARIANCE_PERCENT(CSM.CSRSP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSL_YTD	Downlink Signal Level YTD	SUM(CSM.DSL) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
DSL_LP	Downlink Signal Level Last Period	LAG(CSM.DSL, 1) OVER HIERARCHY ("TIME".HTBSNS)
DSL_LY	Downlink Signal Level Last Year	LAG(CSM.DSL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSL_LY_PCT_CHG	Downlink Signal Level % Change Last Year	LAG_VARIANCE_PERCENT(CSM.DSL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSL_YTD_LY	Downlink Signal Level YTD Last Year	LAG(CSM.DSL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSL_YTD_LY_PCT_CHG	Downlink Signal Level YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.DSL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSQ_YTD	Downlink Signal Quality YTD	SUM(CSM.DSQ) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
DSQ_LP	Downlink Signal Quality Last Period	LAG(CSM.DSQ, 1) OVER HIERARCHY ("TIME".HTBSNS)



**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
DSQ_LY	Downlink Signal Quality Last Year	LAG(CSM.DSQ, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSQ_LY_PCT_CHG	Downlink Signal Quality % Change Last Year	LAG_VARIANCE_PERCENT(CSM.DSQ, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSQ_YTD_LY	Downlink Signal Quality YTD Last Year	LAG(CSM.DSQ_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSQ_YTD_LY_PCT_CHG	Downlink Signal Quality YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.DSQ_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HU_YTD	Hour Usage YTD	SUM(CSM.HU) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
HU_LP	Hour Usage Last Period	LAG(CSM.HU, 1) OVER HIERARCHY ("TIME".HTBSNS)
HU_LY	Hour Usage Last Year	LAG(CSM.HU, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HU_LY_PCT_CHG	Hour Usage % Change Last Year	LAG_VARIANCE_PERCENT(CSM.HU, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HU_YTD_LY	Hour Usage YTD Last Year	LAG(CSM.HU_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HU_YTD_LY_PCT_CHG	Hour Usage YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.HU_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHA_YTD	Intra Cell HO Atm YTD	SUM(CSM.ICHA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ICHA_LP	Intra Cell HO Atm Last Period	LAG(CSM.ICHA, 1) OVER HIERARCHY ("TIME".HTBSNS)
ICHA_LY	Intra Cell HO Atm Last Year	LAG(CSM.ICHA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHA_LY_PCT_CHG	Intra Cell HO Atm % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ICHA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHA_YTD_LY	Intra Cell HO Atm YTD Last Year	LAG(CSM.ICHA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHA_YTD_LY_PCT_CHG	Intra Cell HO Atm YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ICHA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHL_YTD	Intra Cell HO Los YTD	SUM(CSM.ICHL) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ICHL_LP	Intra Cell HO Los Last Period	LAG(CSM.ICHL, 1) OVER HIERARCHY ("TIME".HTBSNS)
ICHL_LY	Intra Cell HO Los Last Year	LAG(CSM.ICHL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHL_LY_PCT_CHG	Intra Cell HO Los % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ICHL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHL_YTD_LY	Intra Cell HO Los YTD Last Year	LAG(CSM.ICHL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
ICHL_YTD_LY_PCT_CHG	Intra Cell HO Los YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ICHL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHS_YTD	Intra Cell HO Suc YTD	SUM(CSM.ICHS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ICHS_LP	Intra Cell HO Suc Last Period	LAG(CSM.ICHS, 1) OVER HIERARCHY ("TIME".HTBSNS)
ICHS_LY	Intra Cell HO Suc Last Year	LAG(CSM.ICHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHS_LY_PCT_CHG	Intra Cell HO Suc % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ICHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHS_YTD_LY	Intra Cell HO Suc YTD Last Year	LAG(CSM.ICHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICHS_YTD_LY_PCT_CHG	Intra Cell HO Suc YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ICHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ID_YTD	IMSI Detach YTD	SUM(CSM.ID) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ID_LP	IMSI Detach Last Period	LAG(CSM.ID, 1) OVER HIERARCHY ("TIME".HTBSNS)
ID_LY	IMSI Detach Last Year	LAG(CSM.ID, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ID_LY_PCT_CHG	IMSI Detach % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ID, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ID_YTD_LY	IMSI Detach YTD Last Year	LAG(CSM.ID_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ID_YTD_LY_PCT_CHG	IMSI Detach YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ID_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IECR_YTD	Inv Est Cause Rach YTD	SUM(CSM.IECR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
IECR_LP	Inv Est Cause Rach Last Period	LAG(CSM.IECR, 1) OVER HIERARCHY ("TIME".HTBSNS)
IECR_LY	Inv Est Cause Rach Last Year	LAG(CSM.IECR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IECR_LY_PCT_CHG	Inv Est Cause Rach % Change Last Year	LAG_VARIANCE_PERCENT(CSM.IECR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IECR_YTD_LY	Inv Est Cause Rach YTD Last Year	LAG(CSM.IECR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IECR_YTD_LY_PCT_CHG	Inv Est Cause Rach YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.IECR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IERHS_YTD	I Inter BS HO Suc YTD	SUM(CSM.IERHS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
IERHS_LP	I Inter BS HO Suc Last Period	LAG(CSM.IERHS, 1) OVER HIERARCHY ("TIME".HTBSNS)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
IERHS_LY	I Inter BS HO Suc Last Year	LAG(CSM.IERHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IERHS_LY_PCT_CHG	I Inter BS HO Suc % Change Last Year	LAG_VARIANCE_PERCENT(CSM.IERHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IERHS_YTD_LY	I Inter BS HO Suc YTD Last Year	LAG(CSM.IERHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IERHS_YTD_LY_PCT_CHG	I Inter BS HO Suc YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.IERHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IRAHC_YTD	I Intra BS HO Suc YTD	SUM(CSM.IRAHC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
IRAHC_LP	I Intra BS HO Suc Last Period	LAG(CSM.IRAHC, 1) OVER HIERARCHY ("TIME".HTBSNS)
IRAHC_LY	I Intra BS HO Suc Last Year	LAG(CSM.IRAHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IRAHC_LY_PCT_CHG	I Intra BS HO Suc % Change Last Year	LAG_VARIANCE_PERCENT(CSM.IRAHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IRAHC_YTD_LY	I Intra BS HO Suc YTD Last Year	LAG(CSM.IRAHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IRAHC_YTD_LY_PCT_CHG	I Intra BS HO Suc YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.IRAHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LFRRN_YTD	LOC FLW REQ NRM YTD	SUM(CSM.LFRRN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
LFRRN_LP	LOC FLW REQ NRM Last Period	LAG(CSM.LFRRN, 1) OVER HIERARCHY ("TIME".HTBSNS)
LFRRN_LY	LOC FLW REQ NRM Last Year	LAG(CSM.LFRRN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LFRRN_LY_PCT_CHG	LOC FLW REQ NRM Last Year	LAG_VARIANCE_PERCENT(CSM.LFRRN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LFRRN_YTD_LY	LOC FLW REQ NRM YTD Last Year	LAG(CSM.LFRRN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LFRRN_YTD_LY_PCT_CHG	LOC FLW REQ NRM YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.LFRRN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LFRS_YTD	Loc Flw Req SMS YTD	SUM(CSM.LFRS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
LFRS_LP	Loc Flw Req SMS Last Period	LAG(CSM.LFRS, 1) OVER HIERARCHY ("TIME".HTBSNS)
LFRS_LY	Loc Flw Req SMS Last Year	LAG(CSM.LFRS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LFRS_LY_PCT_CHG	Loc Flw Req SMS % Change Last Year	LAG_VARIANCE_PERCENT(CSM.LFRS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
LFRS_YTD_LY	Loc Flw Req SMS YTD Last Year	LAG(CSM.LFRS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LFRS_YTD_LY_PCT_CHG	Loc Flw Req SMS YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.LFRS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LS_YTD	Location Services YTD	SUM(CSM.LS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
LS_LP	Location Services Last Period	LAG(CSM.LS, 1) OVER HIERARCHY ("TIME".HTBSNS)
LS_LY	Location Services Last Year	LAG(CSM.LS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LS_LY_PCT_CHG	Location Services % Change Last Year	LAG_VARIANCE_PERCENT(CSM.LS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LS_YTD_LY	Location Services YTD Last Year	LAG(CSM.LS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LS_YTD_LY_PCT_CHG	Location Services YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.LS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LU_YTD	Location Update YTD	SUM(CSM.LU) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
LU_LP	Location Update Last Period	LAG(CSM.LU, 1) OVER HIERARCHY ("TIME".HTBSNS)
LU_LY	Location Update Last Year	LAG(CSM.LU, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LU_LY_PCT_CHG	Location Update % Change Last Year	LAG_VARIANCE_PERCENT(CSM.LU, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LU_YTD_LY	Location Update YTD Last Year	LAG(CSM.LU_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LU_YTD_LY_PCT_CHG	Location Update YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.LU_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
MTLOS_YTD	MT LCS ON SDDCH YTD	SUM(CSM.MTLOS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
MTLOS_LP	MT LCS ON SDDCH Last Period	LAG(CSM.MTLOS, 1) OVER HIERARCHY ("TIME".HTBSNS)
MTLOS_LY	MT LCS ON SDDCH Last Year	LAG(CSM.MTLOS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
MTLOS_LY_PCT_CHG	MT LCS ON SDDCH % Change Last Year	LAG_VARIANCE_PERCENT(CSM.MTLOS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
MTLOS_YTD_LY	MT LCS ON SDDCH YTD Last Year	LAG(CSM.MTLOS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
MTLOS_YTD_LY_PCT_CHG	MT LCS ON SDDCH YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.MTLOS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
NCA_YTD	Number Of Call Attempts YTD	SUM(CSM.NCA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NCA_LP	Number Of Call Attempts Last Period	LAG(CSM.NCA, 1) OVER HIERARCHY ("TIME".HTBSNS)
NCA_LY	Number Of Call Attempts Last Year	LAG(CSM.NCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCA_LY_PCT_CHG	Number Of Call Attempts % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCA_YTD_LY	Number Of Call Attempts YTD Last Year	LAG(CSM.NCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCA_YTD_LY_PCT_CHG	Number Of Call Attempts YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCAWT_YTD	Num Call Attempts WO Transit YTD	SUM(CSM.NCAWT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NCAWT_LP	Num Call Attempts WO Transit Last Period	LAG(CSM.NCAWT, 1) OVER HIERARCHY ("TIME".HTBSNS)
NCAWT_LY	Num Call Attempts WO Transit Last Year	LAG(CSM.NCAWT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCAWT_LY_PCT_CHG	Num Call Attempts WO Transit % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NCAWT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCAWT_YTD_LY	Num Call Attempts WO Transit YTD Last Year	LAG(CSM.NCAWT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCAWT_YTD_LY_PCT_CHG	Num Call Attempts WO Transit YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NCAWT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NOC_YTD	Number Of Calls YTD	SUM(CSM.NOC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NOC_LP	Number Of Calls Last Period	LAG(CSM.NOC, 1) OVER HIERARCHY ("TIME".HTBSNS)
NOC_LY	Number Of Calls Last Year	LAG(CSM.NOC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NOC_LY_PCT_CHG	Number Of Calls % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NOC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NOC_YTD_LY	Number Of Calls YTD Last Year	LAG(CSM.NOC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NOC_YTD_LY_PCT_CHG	Number Of Calls YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NOC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NOCE_YTD	Number Of Cells YTD	SUM(CSM.NOCE) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NOCE_LP	Number Of Cells Last Period	LAG(CSM.NOCE, 1) OVER HIERARCHY ("TIME".HTBSNS)
NOCE_LY	Number Of Cells Last Year	LAG(CSM.NOCE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
NOCE_LY_PCT_CHG	Number Of Cells % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NOCE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NOCE_YTD_LY	Number Of Cells YTD Last Year	LAG(CSM.NOCE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NOCE_YTD_LY_PCT_CHG	Number Of Cells YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.NOCE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OAPSR_YTD	OK ACC PROC SUC R YTD	SUM(CSM.OAPSR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OAPSR_LP	OK ACC PROC SUC R Last Period	LAG(CSM.OAPSR, 1) OVER HIERARCHY ("TIME".HTBSNS)
OAPSR_LY	OK ACC PROC SUC R Last Year	LAG(CSM.OAPSR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OAPSR_LY_PCT_CHG	OK ACC PROC SUC R % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OAPSR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OAPSR_YTD_LY	OK ACC PROC SUC R YTD Last Year	LAG(CSM.OAPSR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OAPSR_YTD_LY_PCT_CHG	OK ACC PROC SUC R % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OAPSR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OEREF_YTD	O INTER BS EQ FA YTD	SUM(CSM.OEREF) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OEREF_LP	O INTER BS EQ FA Last Period	LAG(CSM.OEREF, 1) OVER HIERARCHY ("TIME".HTBSNS)
OEREF_LY	O INTER BS EQ FA Last Year	LAG(CSM.OEREF, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OEREF_LY_PCT_CHG	O INTER BS EQ FA % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OEREF, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OEREF_YTD_LY	O INTER BS EQ FA YTD Last Year	LAG(CSM.OEREF_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OEREF_YTD_LY_PCT_CHG	O INTER BS EQ FA YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OEREF_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHA_YTD	O INTER BS HO ATM YTD	SUM(CSM.OERHA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OERHA_LP	O INTER BS HO ATM Last Period	LAG(CSM.OERHA, 1) OVER HIERARCHY ("TIME".HTBSNS)
OERHA_LY	O INTER BS HO ATM Last Year	LAG(CSM.OERHA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHA_LY_PCT_CHG	O INTER BS HO ATM % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERHA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHA_YTD_LY	O INTER BS HO ATM YTD Last Year	LAG(CSM.OERHA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
OERHA_YTD_LY_PCT_CHG	O INTER BS HO ATM YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERHA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHR_YTD	O INTER BS HO RET YTD	SUM(CSM.OERHR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OERHR_LP	O INTER BS HO RET Last Period	LAG(CSM.OERHR, 1) OVER HIERARCHY ("TIME".HTBSNS)
OERHR_LY	O INTER BS HO RET Last Year	LAG(CSM.OERHR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHR_LY_PCT_CHG	O INTER BS HO RET % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERHR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHR_YTD_LY	O INTER BS HO RET YTD Last Year	LAG(CSM.OERHR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHR_YTD_LY_PCT_CHG	O INTER BS HO RET YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERHR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHS_YTD	O INTER BS HO SUC YTD	SUM(CSM.OERHS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OERHS_LP	O INTER BS HO SUC YTD Last Period	LAG(CSM.OERHS, 1) OVER HIERARCHY ("TIME".HTBSNS)
OERHS_LY	O INTER BS HO SUC YTD Last Year	LAG(CSM.OERHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHS_LY_PCT_CHG	O INTER BS HO SUC % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHS_YTD_LY	O INTER BS HO SUC YTD Last Year	LAG(CSM.OERHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERHS_YTD_LY_PCT_CHG	O INTER BS HO SUC YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERRM_YTD	O INTER BS RQ MSC YTD	SUM(CSM.OERRM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OERRM_LP	O INTER BS RQ MSC Last Period	LAG(CSM.OERRM, 1) OVER HIERARCHY ("TIME".HTBSNS)
OERRM_LY	O INTER BS RQ MSC Last Year	LAG(CSM.OERRM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERRM_LY_PCT_CHG	O INTER BS RQ MSC % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERRM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERRM_YTD_LY	O INTER BS RQ MSC YTD Last Year	LAG(CSM.OERRM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OERRM_YTD_LY_PCT_CHG	O INTER BS RQ MSC YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OERRM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OHCA_YTD	Out HO Cause Attempts YTD	SUM(CSM.OHCA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
OHCA_LP	Out HO Cause Attempts Last Period	LAG(CSM.OHCA, 1) OVER HIERARCHY ("TIME".HTBSNS)
OHCA_LY	Out HO Cause Attempts Last Year	LAG(CSM.OHCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OHCA_LY_PCT_CHG	Out HO Cause Attempts % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OHCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OHCA_YTD_LY	Out HO Cause Attempts YTD Last Year	LAG(CSM.OHCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OHCA_YTD_LY_PCT_CHG	Out HO Cause Attempts YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OHCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHA_YTD	O INTRA BS HO ATM YTD	SUM(CSM.ORAHA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ORAHA_LP	O INTRA BS HO ATM Last Period	LAG(CSM.ORAHA, 1) OVER HIERARCHY ("TIME".HTBSNS)
ORAHA_LY	O INTRA BS HO ATM Last Year	LAG(CSM.ORAHA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHA_LY_PCT_CHG	O INTRA BS HO ATM % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ORAHA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHA_YTD_LY	O INTRA BS HO ATM YTD Last Year	LAG(CSM.ORAHA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHA_YTD_LY_PCT_CHG	O INTRA BS HO ATM YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ORAHA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHC_YTD	O INTRA BS HO CLR YTD	SUM(CSM.ORAHC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ORAHC_LP	O INTRA BS HO CLR Last Period	LAG(CSM.ORAHC, 1) OVER HIERARCHY ("TIME".HTBSNS)
ORAHC_LY	O INTRA BS HO CLR Last Year	LAG(CSM.ORAHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHC_LY_PCT_CHG	O INTRA BS HO CLR % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ORAHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHC_YTD_LY	O INTRA BS HO CLR YTD Last Year	LAG(CSM.ORAHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHC_YTD_LY_PCT_CHG	O INTRA BS HO CLR YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.ORAHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ORAHL_YTD	O INTRA BS HO LOS YTD	SUM(CSM.ORAHL) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ORAHL_LP	O INTRA BS HO LOS Last Period	LAG(CSM.ORAHL, 1) OVER HIERARCHY ("TIME".HTBSNS)
ORAHL_LY	O INTRA BS HO LOS Last Year	LAG(CSM.ORAHL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)



**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
OR AHL_LY_PCT_CHG	O INTRA BS HO LOS % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OR AHL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OR AHL_YTD_LY	O INTRA BS HO LOS YTD Last Year	LAG(CSM.OR AHL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OR AHL_YTD_LY_PCT_CHG	O INTRA BS HO LOS YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OR AHL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OR AHS_YTD	O INTRA BS HO SUC YTD	SUM(CSM.OR AHS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OR AHS_LP	O INTRA BS HO SUC YTD Last Period	LAG(CSM.OR AHS, 1) OVER HIERARCHY ("TIME".HTBSNS)
OR AHS_LY	O INTRA BS HO SUC YTD Last Year	LAG(CSM.OR AHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OR AHS_LY_PCT_CHG	O INTRA BS HO SUC % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OR AHS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OR AHS_YTD_LY	O INTRA BS HO SUC YTD Last Year	LAG(CSM.OR AHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OR AHS_YTD_LY_PCT_CHG	O INTRA BS HO SUC YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.OR AHS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PBSS_YTD	Power Budget Signal Strength YTD	SUM(CSM.PBSS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
PBSS_LP	Power Budget Signal Strength Last Period	LAG(CSM.PBSS, 1) OVER HIERARCHY ("TIME".HTBSNS)
PBSS_LY	Power Budget Signal Strength Last Year	LAG(CSM.PBSS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PBSS_LY_PCT_CHG	Power Budget Signal Strength % Change Last Year	LAG_VARIANCE_PERCENT(CSM.PBSS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PBSS_YTD_LY	Power Budget Signal Strength YTD Last Year	LAG(CSM.PBSS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PBSS_YTD_LY_PCT_CHG	Power Budget Signal Strength YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.PBSS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PR_YTD	Page Response YTD	SUM(CSM.PR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
PR_LP	Page Response Last Period	LAG(CSM.PR, 1) OVER HIERARCHY ("TIME".HTBSNS)
PR_LY	Page Response Last Year	LAG(CSM.PR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PR_LY_PCT_CHG	Page Response % Change Last Year	LAG_VARIANCE_PERCENT(CSM.PR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PR_YTD_LY	Page Response YTD Last Year	LAG(CSM.PR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
PR_YTD_LY_PCT_CHG	Page Response YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.PR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRFM_YTD	Page Req From MSC YTD	SUM(CSM.PRFM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
PRFM_LP	Page Req From MSC Last Period	LAG(CSM.PRFM, 1) OVER HIERARCHY ("TIME".HTBSNS)
PRFM_LY	Page Req From MSC Last Year	LAG(CSM.PRFM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRFM_LY_PCT_CHG	Page Req From MSC % Change Last Year	LAG_VARIANCE_PERCENT(CSM.PRFM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRFM_YTD_LY	Page Req From MSC YTD Last Year	LAG(CSM.PRFM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRFM_YTD_LY_PCT_CHG	Page Req From MSC YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.PRFM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLTR_YTD	RF Loss TCH Roll YTD	SUM(CSM.RLTR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
RLTR_LP	RF Loss TCH Roll Last Period	LAG(CSM.RLTR, 1) OVER HIERARCHY ("TIME".HTBSNS)
RLTR_LY	RF Loss TCH Roll Last Year	LAG(CSM.RLTR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLTR_LY_PCT_CHG	RF Loss TCH Roll % Change Last Year	LAG_VARIANCE_PERCENT(CSM.RLTR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLTR_YTD_LY	RF Loss TCH Roll YTD Last Year	LAG(CSM.RLTR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RLTR_YTD_LY_PCT_CHG	RF Loss TCH Roll YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.RLTR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SH_YTD	Alloc SDCCH YTD	SUM(CSM.SH) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SH_LP	Alloc SDCCH Last Period	LAG(CSM.SH, 1) OVER HIERARCHY ("TIME".HTBSNS)
SH_LY	Alloc SDCCH Last Year	LAG(CSM.SH, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SH_LY_PCT_CHG	Alloc SDCCH % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SH, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SH_YTD_LY	Alloc SDCCH YTD Last Year	LAG(CSM.SH_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SH_YTD_LY_PCT_CHG	Alloc SDCCH YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SH_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOS_YTD	SMS INIT on SDCCH YTD	SUM(CSM.SIOS) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SIOS_LP	SMS INIT on SDCCH Last Period	LAG(CSM.SIOS, 1) OVER HIERARCHY ("TIME".HTBSNS)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
SIOS_LY	SMS INIT on SDCCH Last Year	LAG(CSM.SIOS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOS_LY_PCT_CHG	SMS INIT on SDCCH % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SIOS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOS_YTD_LY	SMS INIT on SDCCH YTD Last Year	LAG(CSM.SIOS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOS_YTD_LY_PCT_CHG	SMS INIT on SDCCH YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SIOS_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOT_YTD	SMS INIT on TCH YTD	SUM(CSM.SIOT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SIOT_LP	SMS INIT on TCH Last Period	LAG(CSM.SIOT, 1) OVER HIERARCHY ("TIME".HTBSNS)
SIOT_LY	SMS INIT on TCH Last Year	LAG(CSM.SIOT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOT_LY_PCT_CHG	SMS INIT on TCH % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SIOT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOT_YTD_LY	SMS INIT on TCH YTD Last Year	LAG(CSM.SIOT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SIOT_YTD_LY_PCT_CHG	SMS INIT on TCH YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SIOT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SPM_YTD	Spare TCH Max YTD	SUM(CSM.SPM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SPM_LP	Spare TCH Max Last Period	LAG(CSM.SPM, 1) OVER HIERARCHY ("TIME".HTBSNS)
SPM_LY	Spare TCH Max Last Year	LAG(CSM.SPM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SPM_LY_PCT_CHG	Spare TCH Max % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SPM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SPM_YTD_LY	Spare TCH Max YTD Last Year	LAG(CSM.SPM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SPM_YTD_LY_PCT_CHG	Spare TCH Max YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SPM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SSD_YTD	Signal Source Distance YTD	SUM(CSM.SSD) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SSD_LP	Signal Source Distance Last Period	LAG(CSM.SSD, 1) OVER HIERARCHY ("TIME".HTBSNS)
SSD_LY	Signal Source Distance Last Year	LAG(CSM.SSD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SSD_LY_PCT_CHG	Signal Source Distance % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SSD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
SSD_YTD_LY	Signal Source Distance YTD Last Year	LAG(CSM.SSD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SSD_YTD_LY_PCT_CHG	Signal Source Distance YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SSD_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SSM_YTD	Spare SDCCH Max YTD	SUM(CSM.SSM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SSM_LP	Spare SDCCH Max Last Period	LAG(CSM.SSM, 1) OVER HIERARCHY ("TIME".HTBSNS)
SSM_LY	Spare SDCCH Max Last Year	LAG(CSM.SSM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SSM_LY_PCT_CHG	Spare SDCCH Max % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SSM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SSM_YTD_LY	Spare SDCCH Max YTD Last Year	LAG(CSM.SSM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SSM_YTD_LY_PCT_CHG	Spare SDCCH Max YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.SSM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TCM_YTD	Total Call Minutes YTD	SUM(CSM.TCM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TCM_LP	Total Call Minutes Last Period	LAG(CSM.TCM, 1) OVER HIERARCHY ("TIME".HTBSNS)
TCM_LY	Total Call Minutes Last Year	LAG(CSM.TCM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TCM_LY_PCT_CHG	Total Call Minutes % Change Last Year	LAG_VARIANCE_PERCENT(CSM.TCM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TCM_YTD_LY	Total Call Minutes YTD Last Year	LAG(CSM.TCM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TCM_YTD_LY_PCT_CHG	Total Call Minutes YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.TCM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TQR_YTD	TCH Q Removed YTD	SUM(CSM.TQR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TQR_LP	TCH Q Removed Last Period	LAG(CSM.TQR, 1) OVER HIERARCHY ("TIME".HTBSNS)
TQR_LY	TCH Q Removed Last Year	LAG(CSM.TQR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TQR_LY_PCT_CHG	TCH Q Removed % Change Last Year	LAG_VARIANCE_PERCENT(CSM.TQR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TQR_YTD_LY	TCH Q Removed YTD Last Year	LAG(CSM.TQR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TQR_YTD_LY_PCT_CHG	TCH Q Removed YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.TQR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TT_YTD	Total Traffic YTD	SUM(CSM.TT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
TT_LP	Total Traffic YTD Last Period	LAG(CSM.TT, 1) OVER HIERARCHY ("TIME".HTBSNS)
TT_LY	Total Traffic YTD Last Year	LAG(CSM.TT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TT_LY_PCT_CHG	Total Traffic % Change Last Year	LAG_VARIANCE_PERCENT(CSM.TT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TT_YTD_LY	Total Traffic YTD Last Year	LAG(CSM.TT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TT_YTD_LY_PCT_CHG	Total Traffic YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.TT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USL_YTD	Uplink Signal Level YTD	SUM(CSM.USL) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
USL_LP	Uplink Signal Level Last Period	LAG(CSM.USL, 1) OVER HIERARCHY ("TIME".HTBSNS)
USL_LY	Uplink Signal Level Last Year	LAG(CSM.USL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USL_LY_PCT_CHG	Uplink Signal Level % Change Last Year	LAG_VARIANCE_PERCENT(CSM.USL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USL_YTD_LY	Uplink Signal Level YTD Last Year	LAG(CSM.USL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USL_YTD_LY_PCT_CHG	Uplink Signal Level YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.USL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USQ_YTD	Uplink Signal Quality YTD	SUM(CSM.USQ) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
USQ_LP	Uplink Signal Quality Last Period	LAG(CSM.USQ, 1) OVER HIERARCHY ("TIME".HTBSNS)
USQ_LY	Uplink Signal Quality Last Year	LAG(CSM.USQ, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USQ_LY_PCT_CHG	Uplink Signal Quality % Change Last Year	LAG_VARIANCE_PERCENT(CSM.USQ, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USQ_YTD_LY	Uplink Signal Quality YTD Last Year	LAG(CSM.USQ_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
USQ_YTD_LY_PCT_CHG	Uplink Signal Quality YTD % Change Last Year	LAG_VARIANCE_PERCENT(CSM.USQ_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_ACI_POPT	Adjacent Channel Interference Share of POPT Parent	SHARE(CSM.ACI OF POPT.HPOPT PARENT)
RANK_ACI_POPT	Adjacent Channel Interference Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ACI DESC NULLS LAST WITHIN PARENT)
SHR_ACI_TSLT	Adjacent Channel Interference Share of TSLT Parent	SHARE(CSM.ACI OF TSLT.HTSLT PARENT)
RANK_ACI_TSLT	Adjacent Channel Interference Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ACI DESC NULLS LAST WITHIN PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_ACI_NELMNT	Adjacent Channel Interference Share of Network Element Parent	SHARE(CSM.ACI OF NELMNT.HNELMNT PARENT)
RANK_ACI_NELMNT	Adjacent Channel Interference Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ACI DESC NULLS LAST WITHIN PARENT)
SHR_ACM_POPT	Air Call Minutes Share of POPT Parent	SHARE(CSM.ACM OF POPT.HPOPT PARENT)
RANK_ACM_POPT	Air Call Minutes Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ACM DESC NULLS LAST WITHIN PARENT)
SHR_ACM_TSLT	Air Call Minutes Share of TSLT Parent	SHARE(CSM.ACM OF TSLT.HTSLT PARENT)
RANK_ACM_TSLT	Air Call Minutes Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ACM DESC NULLS LAST WITHIN PARENT)
SHR_ACM_NELMNT	Air Call Minutes Share of Network Element Parent	SHARE(CSM.ACM OF NELMNT.HNELMNT PARENT)
RANK_ACM_NELMNT	Air Call Minutes Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ACM DESC NULLS LAST WITHIN PARENT)
SHR_ADDB_POPT	Air DL Data Blks Share of POPT Parent	SHARE(CSM.ADDB OF POPT.HPOPT PARENT)
RANK_ADDB_POPT	Air DL Data Blks Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ADDB DESC NULLS LAST WITHIN PARENT)
SHR_ADDB_TSLT	Air DL Data Blks Share of TSLT Parent	SHARE(CSM.ADDB OF TSLT.HTSLT PARENT)
RANK_ADDB_TSLT	Air DL Data Blks Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ADDB DESC NULLS LAST WITHIN PARENT)
SHR_ADDB_NELMNT	Air DL Data Blks Share of NELMNT Parent	SHARE(CSM.ADDB OF NELMNT.HNELMNT PARENT)
RANK_ADDB_NELMNT	Air DL Data Blks Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ADDB DESC NULLS LAST WITHIN PARENT)
SHR_AR_POPT	Assign Redirect Share of POPT Parent	SHARE(CSM.AR OF POPT.HPOPT PARENT)
RANK_AR_POPT	Assign Redirect Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.AR DESC NULLS LAST WITHIN PARENT)
SHR_AR_TSLT	Assign Redirect Share of TSLT Parent	SHARE(CSM.AR OF TSLT.HTSLT PARENT)
RANK_AR_TSLT	Assign Redirect Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.AR DESC NULLS LAST WITHIN PARENT)
SHR_AR_NELMNT	Assign Redirect Rank of Network Element Parent	SHARE(CSM.AR OF NELMNT.HNELMNT PARENT)
RANK_AR_NELMNT	Assign Redirect Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.AR DESC NULLS LAST WITHIN PARENT)
SHR_ASF_POPT	ALLOC SDCCH Fail Share of POPT Parent	SHARE(CSM.ASF OF POPT.HPOPT PARENT)
RANK_ASF_POPT	ALLOC SDCCH Fail Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ASF DESC NULLS LAST WITHIN PARENT)
SHR_ASF_TSLT	ALLOC SDCCH Fail Share of TSLT Parent	SHARE(CSM.ASF OF TSLT.HTSLT PARENT)
RANK_ASF_TSLT	ALLOC SDCCH Fail Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ASF DESC NULLS LAST WITHIN PARENT)
SHR_ASF_NELMNT	ALLOC SDCCH Fail Share of Network Element Parent	SHARE(CSM.ASF OF NELMNT.HNELMNT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_ASF_NELMNT	ALLOC SDCCH Fail Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ASF DESC NULLS LAST WITHIN PARENT)
SHR_ASM_POPT	Available SDCCH Max Share of POPT Parent	SHARE(CSM.ASM OF POPT.HPOPT PARENT)
RANK_ASM_POPT	Available SDCCH Max Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ASM DESC NULLS LAST WITHIN PARENT)
SHR_ASM_TSLT	Available SDCCH Max Share of TSLT Parent	SHARE(CSM.ASM OF TSLT.HTSLT PARENT)
RANK_ASM_TSLT	Available SDCCH Max Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ASM DESC NULLS LAST WITHIN PARENT)
SHR_ASM_NELMNT	Available SDCCH Max Share of Network Element Parent	SHARE(CSM.ASM OF NELMNT.HNELMNT PARENT)
RANK_ASM_NELMNT	Available SDCCH Max Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ASM DESC NULLS LAST WITHIN PARENT)
SHR_AT_POPT	Alloc Tch Share of POPT Parent	SHARE(CSM."AT" OF POPT.HPOPT PARENT)
RANK_AT_POPT	Alloc Tch Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM."AT" DESC NULLS LAST WITHIN PARENT)
SHR_AT_TSLT	Alloc Tch Share of TSLT Parent	SHARE(CSM."AT" OF TSLT.HTSLT PARENT)
RANK_AT_TSLT	Alloc Tch Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM."AT" DESC NULLS LAST WITHIN PARENT)
SHR_AT_NELMNT	Alloc Tch Share of NELMNT Parent	SHARE(CSM."AT" OF NELMNT.HNELMNT PARENT)
RANK_AT_NELMNT	Alloc Tch Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM."AT" DESC NULLS LAST WITHIN PARENT)
SHR_ATF_POPT	Alloc TCH Fail Share of POPT Parent	SHARE(CSM.ATF OF POPT.HPOPT PARENT)
RANK_ATF_POPT	Alloc TCH Fail Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ATF DESC NULLS LAST WITHIN PARENT)
SHR_ATF_TSLT	Alloc TCH Fail Share of TSLT Parent	SHARE(CSM.ATF OF TSLT.HTSLT PARENT)
RANK_ATF_TSLT	Alloc TCH Fail Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ATF DESC NULLS LAST WITHIN PARENT)
SHR_ATF_NELMNT	Alloc TCH Fail Share of Network Element Parent	SHARE(CSM.ATF OF NELMNT.HNELMNT PARENT)
RANK_ATF_NELMNT	Alloc TCH Fail Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ATF DESC NULLS LAST WITHIN PARENT)
SHR_ATM_POPT	O INTER BS HO ATM Share of POPT Parent	SHARE(CSM.ATM OF POPT.HPOPT PARENT)
RANK_ATM_POPT	O INTER BS HO ATM Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ATM DESC NULLS LAST WITHIN PARENT)
SHR_ATM_TSLT	O INTER BS HO ATM Share of POPT Parent	SHARE(CSM.ATM OF TSLT.HTSLT PARENT)
RANK_ATM_TSLT	O INTER BS HO ATM Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ATM DESC NULLS LAST WITHIN PARENT)
SHR_ATM_NELMNT	O INTER BS HO ATM Share of Network Element Parent	SHARE(CSM.ATM OF NELMNT.HNELMNT PARENT)
RANK_ATM_NELMNT	O INTER BS HO ATM Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ATM DESC NULLS LAST WITHIN PARENT)
SHR_AUDB_POPT	Air UL Data Blks Share of POPT Parent	SHARE(CSM.AUDB OF POPT.HPOPT PARENT)
RANK_AUDB_POPT	Air UL Data Blks Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.AUDB DESC NULLS LAST WITHIN PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_AUDB_TSLT	Air UL Data Blks Share of TSLT Parent	SHARE(CSM.AUDB OF TSLT.HTSLT PARENT)
RANK_AUDB_TSLT	Air UL Data Blks Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.AUDB DESC NULLS LAST WITHIN PARENT)
SHR_AUDB_NELMNT	Air UL Data Blks Share of Network Element Parent	SHARE(CSM.AUDB OF NELMNT.HNELMNT PARENT)
RANK_AUDB_NELMNT	Air UL Data Blks Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.AUDB DESC NULLS LAST WITHIN PARENT)
SHR_BSM_POPT	Busy SDCCH Max Share of POPT Parent	SHARE(CSM.BSM OF POPT.HPOPT PARENT)
RANK_BSM_POPT	Busy SDCCH Max Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.BSM DESC NULLS LAST WITHIN PARENT)
SHR_BSM_TSLT	Busy SDCCH Max Share of TSLT Parent	SHARE(CSM.BSM OF TSLT.HTSLT PARENT)
RANK_BSM_TSLT	Busy SDCCH Max Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.BSM DESC NULLS LAST WITHIN PARENT)
SHR_BSM_NELMNT	Busy SDCCH Max Share of Network Element Parent	SHARE(CSM.BSM OF NELMNT.HNELMNT PARENT)
RANK_BSM_NELMNT	Busy SDCCH Max Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.BSM DESC NULLS LAST WITHIN PARENT)
SHR_BTM_POPT	Busy TCH Max Share of POPT Parent	SHARE(CSM.BTM OF POPT.HPOPT PARENT)
RANK_BTM_POPT	Busy TCH Max Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.BTM DESC NULLS LAST WITHIN PARENT)
SHR_BTM_TSLT	Busy TCH Max Share of TSLT Parent	SHARE(CSM.BTM OF TSLT.HTSLT PARENT)
RANK_BTM_TSLT	Busy TCH Max Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.BTM DESC NULLS LAST WITHIN PARENT)
SHR_BTM_NELMNT	Busy TCH Max Share of Network Element Parent	SHARE(CSM.BTM OF NELMNT.HNELMNT PARENT)
RANK_BTM_NELMNT	Busy TCH Max Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.BTM DESC NULLS LAST WITHIN PARENT)
SHR_CCE_POPT	Cell Carried Erlangs Share of POPT Parent	SHARE(CSM.CCE OF POPT.HPOPT PARENT)
RANK_CCE_POPT	Cell Carried Erlangs Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CCE DESC NULLS LAST WITHIN PARENT)
SHR_CCE_TSLT	Cell Carried Erlangs Share of TSLT Parent	SHARE(CSM.CCE OF TSLT.HTSLT PARENT)
RANK_CCE_TSLT	Cell Carried Erlangs Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CCE DESC NULLS LAST WITHIN PARENT)
SHR_CCE_NELMNT	Cell Carried Erlangs Share of Network Element Parent	SHARE(CSM.CCE OF NELMNT.HNELMNT PARENT)
RANK_CCE_NELMNT	Cell Carried Erlangs Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CCE DESC NULLS LAST WITHIN PARENT)
SHR_CD_POPT	Call Duration Share of POPT Parent	SHARE(CSM.CD OF POPT.HPOPT PARENT)
RANK_CD_POPT	Call Duration Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CD DESC NULLS LAST WITHIN PARENT)
SHR_CD_TSLT	Call Duration Share of TSLT Parent	SHARE(CSM.CD OF TSLT.HTSLT PARENT)
RANK_CD_TSLT	Call Duration Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CD DESC NULLS LAST WITHIN PARENT)



**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_CD_NELMNT	Call Duration Rank of Network Element Parent	SHARE(CSM.CD OF NELMNT.HNELMNT PARENT)
RANK_CD_NELMNT	Call Duration Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CD DESC NULLS LAST WITHIN PARENT)
SHR_CHRR_POPT	Channel Reqs Rec Share of POPT Parent	SHARE(CSM.CHRR OF POPT.HPOPT PARENT)
RANK_CHRR_POPT	Channel Reqs Rec Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CHRR DESC NULLS LAST WITHIN PARENT)
SHR_CHRR_TSLT	Channel Reqs Rec Share of TSLT Parent	SHARE(CSM.CHRR OF TSLT.HTSLT PARENT)
RANK_CHRR_TSLT	Channel Reqs Rec Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CHRR DESC NULLS LAST WITHIN PARENT)
SHR_CHRR_NELMNT	Channel Reqs Rec Share of Network Element Parent	SHARE(CSM.CHRR OF NELMNT.HNELMNT PARENT)
RANK_CHRR_NELMNT	Channel Reqs Rec Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CHRR DESC NULLS LAST WITHIN PARENT)
SHR_CISC_POPT	Congestion In Source Cell Share of POPT Parent	SHARE(CSM.CISC OF POPT.HPOPT PARENT)
RANK_CISC_POPT	Congestion In Source Cell Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CISC DESC NULLS LAST WITHIN PARENT)
SHR_CISC_TSLT	Congestion In Source Cell Share of TSLT Parent	SHARE(CSM.CISC OF TSLT.HTSLT PARENT)
RANK_CISC_TSLT	Congestion In Source Cell Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CISC DESC NULLS LAST WITHIN PARENT)
SHR_CISC_NELMNT	Congestion In Source Cell Share of Network Element Parent	SHARE(CSM.CISC OF NELMNT.HNELMNT PARENT)
RANK_CISC_NELMNT	Congestion In Source Cell Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CISC DESC NULLS LAST WITHIN PARENT)
SHR_CNNTS_POPT	Connections Share of POPT Parent	SHARE(CSM.CNNTS OF POPT.HPOPT PARENT)
RANK_CNNTS_POPT	Connections Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CNNTS DESC NULLS LAST WITHIN PARENT)
SHR_CNNTS_TSLT	Connections Share of TSLT Parent	SHARE(CSM.CNNTS OF TSLT.HTSLT PARENT)
RANK_CNNTS_TSLT	Connections Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CNNTS DESC NULLS LAST WITHIN PARENT)
SHR_CNNTS_NELMNT	Connections Share of Network Element Parent	SHARE(CSM.CNNTS OF NELMNT.HNELMNT PARENT)
RANK_CNNTS_NELMNT	Connections Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CNNTS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_COE_POPT	EOP Cell Offered Erlangs Share of POPT Parent	SHARE(CSM.EOP_COE OF POPT.HPOPT PARENT)
RANK_EOP_COE_POPT	EOP Cell Offered Erlangs Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.EOP_COE DESC NULLS LAST WITHIN PARENT)
SHR_EOP_COE_TSLT	EOP Cell Offered Erlangs Share of TSLT Parent	SHARE(CSM.EOP_COE OF TSLT.HTSLT PARENT)
RANK_EOP_COE_TSLT	EOP Cell Offered Erlangs Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.EOP_COE DESC NULLS LAST WITHIN PARENT)
SHR_EOP_COE_NELMNT	EOP Cell Offered Erlangs Rank of Network Element Parent	SHARE(CSM.EOP_COE OF NELMNT.HNELMNT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_EOP_COE_NELMNT	EOP Cell Offered Erlangs Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.EOP_COE DESC NULLS LAST WITHIN PARENT)
SHR_CONNR_POPT	Connection Refuse Share of POPT Parent	SHARE(CSM.CONNR OF POPT.HPOPT PARENT)
RANK_CONNR_POPT	Connection Refuse Share of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CONNR DESC NULLS LAST WITHIN PARENT)
SHR_CONNR_TSLT	Connection Refuse Share of TSLT Parent	SHARE(CSM.CONNR OF TSLT.HTSLT PARENT)
RANK_CONNR_TSLT	Connection Refuse Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CONNR DESC NULLS LAST WITHIN PARENT)
SHR_CONNR_NELMNT	Connection Refuse Share of Network Element Parent	SHARE(CSM.CONNR OF NELMNT.HNELMNT PARENT)
RANK_CONNR_NELMNT	Connection Refuse Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CONNR DESC NULLS LAST WITHIN PARENT)
SHR_CR_POPT	CM Reestablish Share of POPT Parent	SHARE(CSM.CR OF POPT.HPOPT PARENT)
RANK_CR_POPT	CM Reestablish Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CR DESC NULLS LAST WITHIN PARENT)
SHR_CR_TSLT	CM Reestablish Share of TSLT Parent	SHARE(CSM.CR OF TSLT.HTSLT PARENT)
RANK_CR_TSLT	CM Reestablish Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CR DESC NULLS LAST WITHIN PARENT)
SHR_CR_NELMNT	CM Reestablish Share of Network Element Parent	SHARE(CSM.CR OF NELMNT.HNELMNT PARENT)
RANK_CR_NELMNT	CM Reestablish Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CR DESC NULLS LAST WITHIN PARENT)
SHR_CRFR_POPT	CHAN REQ FAIL ROL Share of POPT Parent	SHARE(CSM.CRFR OF POPT.HPOPT PARENT)
RANK_CRFR_POPT	CHAN REQ FAIL ROL Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CRFR DESC NULLS LAST WITHIN PARENT)
SHR_CRFR_TSLT	CHAN REQ FAIL ROL Share of TSLT Parent	SHARE(CSM.CRFR OF TSLT.HTSLT PARENT)
RANK_CRFR_TSLT	CHAN REQ FAIL ROL Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CRFR DESC NULLS LAST WITHIN PARENT)
SHR_CRFR_NELMNT	CHAN REQ FAIL ROL Share of Network Element Parent	SHARE(CSM.CRFR OF NELMNT.HNELMNT PARENT)
RANK_CRFR_NELMNT	CHAN REQ FAIL ROL Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CRFR DESC NULLS LAST WITHIN PARENT)
SHR_CRMB_POPT	Chan Req MS Blk Share of POPT Parent	SHARE(CSM.CRMB OF POPT.HPOPT PARENT)
RANK_CRMB_POPT	Chan Req MS Blk Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CRMB DESC NULLS LAST WITHIN PARENT)
SHR_CRMB_TSLT	Chan Req MS Blk Share of TSLT Parent	SHARE(CSM.CRMB OF TSLT.HTSLT PARENT)
RANK_CRMB_TSLT	Chan Req MS Blk Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CRMB DESC NULLS LAST WITHIN PARENT)
SHR_CRMB_NELMNT	Chan Req MS Blk Share of NELMNT Parent	SHARE(CSM.CRMB OF NELMNT.HNELMNT PARENT)
RANK_CRMB_NELMNT	Chan Req MS Blk Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CRMB DESC NULLS LAST WITHIN PARENT)
SHR_CRR_POPT	Channel Reqs Reject Share of POPT Parent	SHARE(CSM.CRR OF POPT.HPOPT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_CRR_POPT	Channel Reqs Reject Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CRR DESC NULLS LAST WITHIN PARENT)
SHR_CRR_TSLT	Channel Reqs Reject Share of TSLT Parent	SHARE(CSM.CRR OF TSLT.HTSLT PARENT)
RANK_CRR_TSLT	Channel Reqs Reject Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CRR DESC NULLS LAST WITHIN PARENT)
SHR_CRR_NELMNT	Channel Reqs Reject Share of NELMNT Parent	SHARE(CSM.CRR OF NELMNT.HNELMNT PARENT)
RANK_CRR_NELMNT	Channel Reqs Reject Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CRR DESC NULLS LAST WITHIN PARENT)
SHR_CSRC_POPT	CM Serv Req Call Share of POPT Parent	SHARE(CSM.CSRC OF POPT.HPOPT PARENT)
RANK_CSRC_POPT	CM Serv Req Call Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CSRC DESC NULLS LAST WITHIN PARENT)
SHR_CSRC_TSLT	CM Serv Req Call Share of TSLT Parent	SHARE(CSM.CSRC OF TSLT.HTSLT PARENT)
RANK_CSRC_TSLT	CM Serv Req Call rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CSRC DESC NULLS LAST WITHIN PARENT)
SHR_CSRC_NELMNT	CM Serv Req Call Share of NELMNT Parent	SHARE(CSM.CSRC OF NELMNT.HNELMNT PARENT)
RANK_CSRC_NELMNT	CM Serv Req Call Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CSRC DESC NULLS LAST WITHIN PARENT)
SHR_CSRE_POPT	CM Serv Req Emrg Share of POPT Parent	SHARE(CSM.CSRE OF POPT.HPOPT PARENT)
RANK_CSRE_POPT	CM Serv Req Emrg Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CSRE DESC NULLS LAST WITHIN PARENT)
SHR_CSRE_TSLT	CM Serv Req Emrg Share of TSLT Parent	SHARE(CSM.CSRE OF TSLT.HTSLT PARENT)
RANK_CSRE_TSLT	CM Serv Req Emrg Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CSRE DESC NULLS LAST WITHIN PARENT)
SHR_CSRE_NELMNT	CM Serv Req Emrg Share of NELMNT Parent	SHARE(CSM.CSRE OF NELMNT.HNELMNT PARENT)
RANK_CSRE_NELMNT	CM Serv Req Emrg Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CSRE DESC NULLS LAST WITHIN PARENT)
SHR_CSRS_POPT	CM Serv Req SMS Share of POPT Parent	SHARE(CSM.CSRS OF POPT.HPOPT PARENT)
RANK_CSRS_POPT	CM Serv Req SMS Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CSRS DESC NULLS LAST WITHIN PARENT)
SHR_CSRS_TSLT	CM Serv Req SMS Share of TSLT Parent	SHARE(CSM.CSRS OF TSLT.HTSLT PARENT)
RANK_CSRS_TSLT	CM Serv Req SMS Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CSRS DESC NULLS LAST WITHIN PARENT)
SHR_CSRS_NELMNT	CM Serv Req SMS Share of NELMNT Parent	SHARE(CSM.CSRS OF NELMNT.HNELMNT PARENT)
RANK_CSRS_NELMNT	CM Serv Req SMS Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CSRS DESC NULLS LAST WITHIN PARENT)
SHR_CSRSP_POPT	CM Serv Req Supp Share of POPT Parent	SHARE(CSM.CSRSP OF POPT.HPOPT PARENT)
RANK_CSRSP_POPT	CM Serv Req Supp Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.CSRSP DESC NULLS LAST WITHIN PARENT)
SHR_CSRSP_TSLT	CM Serv Req Supp Share of TSLT Parent	SHARE(CSM.CSRSP OF TSLT.HTSLT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_CSRSP_TSLT	CM Serv Req Supp Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.CSRSP DESC NULLS LAST WITHIN PARENT)
SHR_CSRSP_NELMNT	CM Serv Req Supp Share of NELMNT Parent	SHARE(CSM.CSRSP OF NELMNT.HNELMNT PARENT)
RANK_CSRSP_NELMNT	CM Serv Req Supp Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.CSRSP DESC NULLS LAST WITHIN PARENT)
SHR_DSL_POPT	Downlink Signal Level Share of POPT Parent	SHARE(CSM.DSL OF POPT.HPOPT PARENT)
RANK_DSL_POPT	Downlink Signal Rank Share of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.DSL DESC NULLS LAST WITHIN PARENT)
SHR_DSL_TSLT	Downlink Signal Level Share of TSLT Parent	SHARE(CSM.DSL OF TSLT.HTSLT PARENT)
RANK_DSL_TSLT	Downlink Signal Level Share of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.DSL DESC NULLS LAST WITHIN PARENT)
SHR_DSL_NELMNT	Downlink Signal Level Share of NELMNT Parent	SHARE(CSM.DSL OF NELMNT.HNELMNT PARENT)
RANK_DSL_NELMNT	Downlink Signal Level Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.DSL DESC NULLS LAST WITHIN PARENT)
SHR_DSQ_POPT	Downlink Signal Quality Share of POPT Parent	SHARE(CSM.DSQ OF POPT.HPOPT PARENT)
RANK_DSQ_POPT	Downlink Signal Quality Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.DSQ DESC NULLS LAST WITHIN PARENT)
SHR_DSQ_TSLT	Downlink Signal Quality Share of TSLT Parent	SHARE(CSM.DSQ OF TSLT.HTSLT PARENT)
RANK_DSQ_TSLT	Downlink Signal Quality Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.DSQ DESC NULLS LAST WITHIN PARENT)
SHR_DSQ_NELMNT	Downlink Signal Quality Share of NELMNT Parent	SHARE(CSM.DSQ OF NELMNT.HNELMNT PARENT)
RANK_DSQ_NELMNT	Downlink Signal Quality Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.DSQ DESC NULLS LAST WITHIN PARENT)
SHR_HU_POPT	Hour Usage Share of POPT Parent	SHARE(CSM.HU OF POPT.HPOPT PARENT)
RANK_HU_POPT	Hour Usage Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.HU DESC NULLS LAST WITHIN PARENT)
SHR_HU_TSLT	Hour Usage Share of TSLT Parent	SHARE(CSM.HU OF TSLT.HTSLT PARENT)
RANK_HU_TSLT	Hour Usage Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.HU DESC NULLS LAST WITHIN PARENT)
SHR_HU_NELMNT	Hour Usage Share of NELMNT Parent	SHARE(CSM.HU OF NELMNT.HNELMNT PARENT)
RANK_HU_NELMNT	Hour Usage Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.HU DESC NULLS LAST WITHIN PARENT)
SHR_ICHA_POPT	Intra Cell HO Atm Share of POPT Parent	SHARE(CSM.ICHA OF POPT.HPOPT PARENT)
RANK_ICHA_POPT	Intra Cell HO Atm Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ICHA DESC NULLS LAST WITHIN PARENT)
SHR_ICHA_TSLT	Intra Cell HO Atm Share of TSLT Parent	SHARE(CSM.ICHA OF TSLT.HTSLT PARENT)
RANK_ICHA_TSLT	Intra Cell HO Atm Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ICHA DESC NULLS LAST WITHIN PARENT)
SHR_ICHA_NELMNT	Intra Cell HO Atm Share of NELMNT Parent	SHARE(CSM.ICHA OF NELMNT.HNELMNT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_ICHA_NELMNT	Intra Cell HO Atm Share of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ICHA DESC NULLS LAST WITHIN PARENT)
SHR_ICHL_POPT	Intra Cell HO Los Share of POPT Parent	SHARE(CSM.ICHL OF POPT.HPOPT PARENT)
RANK_ICHL_POPT	Intra Cell HO Los Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ICHL DESC NULLS LAST WITHIN PARENT)
SHR_ICHL_TSLT	Intra Cell HO Los Share of TSLT Parent	SHARE(CSM.ICHL OF TSLT.HTSLT PARENT)
RANK_ICHL_TSLT	Intra Cell HO Los Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ICHL DESC NULLS LAST WITHIN PARENT)
SHR_ICHL_NELMNT	Intra Cell HO Los Share of NELMNT Parent	SHARE(CSM.ICHL OF NELMNT.HNELMNT PARENT)
RANK_ICHL_NELMNT	Intra Cell HO Los Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ICHL DESC NULLS LAST WITHIN PARENT)
SHR_ICHS_POPT	Intra Cell HO Suc Share of POPT Parent	SHARE(CSM.ICHS OF POPT.HPOPT PARENT)
RANK_ICHS_POPT	Intra Cell HO Suc Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ICHS DESC NULLS LAST WITHIN PARENT)
SHR_ICHS_TSLT	Intra Cell HO Suc Share of TSLT Parent	SHARE(CSM.ICHS OF TSLT.HTSLT PARENT)
RANK_ICHS_TSLT	Intra Cell HO Suc Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ICHS DESC NULLS LAST WITHIN PARENT)
SHR_ICHS_NELMNT	Intra Cell HO Suc Share of NEMNT Parent	SHARE(CSM.ICHS OF NELMNT.HNELMNT PARENT)
RANK_ICHS_NELMNT	Intra Cell HO Suc Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ICHS DESC NULLS LAST WITHIN PARENT)
SHR_ID_POPT	IMSI Detach Share of POPT Parent	SHARE(CSM.ID OF POPT.HPOPT PARENT)
RANK_ID_POPT	IMSI Detach Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ID DESC NULLS LAST WITHIN PARENT)
SHR_ID_TSLT	IMSI Detach Share of TSLT Parent	SHARE(CSM.ID OF TSLT.HTSLT PARENT)
RANK_ID_TSLT	IMSI Detach Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ID DESC NULLS LAST WITHIN PARENT)
SHR_ID_NELMNT	IMSI Detach Share of NELMNT Parent	SHARE(CSM.ID OF NELMNT.HNELMNT PARENT)
RANK_ID_NELMNT	IMSI Detach Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ID DESC NULLS LAST WITHIN PARENT)
SHR_IECR_POPT	IMSI Detach Share of POPT Parent	SHARE(CSM.IECR OF POPT.HPOPT PARENT)
RANK_IECR_POPT	IMSI Detach Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.IECR DESC NULLS LAST WITHIN PARENT)
SHR_IECR_TSLT	IMSI Detach Share of TSLT Parent	SHARE(CSM.IECR OF TSLT.HTSLT PARENT)
RANK_IECR_TSLT	IMSI Detach Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.IECR DESC NULLS LAST WITHIN PARENT)
SHR_IECR_NELMNT	IMSI Detach Share of NELMNT Parent	SHARE(CSM.IECR OF NELMNT.HNELMNT PARENT)
RANK_IECR_NELMNT	IMSI Detach Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.IECR DESC NULLS LAST WITHIN PARENT)
SHR_IERHS_POPT	I Inter BS HO Suc Share of POPT Parent	SHARE(CSM.IERHS OF POPT.HPOPT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_IERHS_POPT	I Inter BS HO Suc Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.IERHS DESC NULLS LAST WITHIN PARENT)
SHR_IERHS_TSLT	I Inter BS HO Suc Share of TSLT Parent	SHARE(CSM.IERHS OF TSLT.HTSLT PARENT)
RANK_IERHS_TSLT	I Inter BS HO Suc Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.IERHS DESC NULLS LAST WITHIN PARENT)
SHR_IERHS_NELMNT	I Inter BS HO Suc Share of NELMNT Parent	SHARE(CSM.IERHS OF NELMNT.HNELMNT PARENT)
RANK_IERHS_NELMNT	I Inter BS HO Suc Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.IERHS DESC NULLS LAST WITHIN PARENT)
SHR_IRAHC_POPT	I Intra BS HO Suc Share of POPT Parent	SHARE(CSM.IRAHC OF POPT.HPOPT PARENT)
RANK_IRAHC_POPT	I Intra BS HO Suc Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.IRAHC DESC NULLS LAST WITHIN PARENT)
SHR_IRAHC_TSLT	I Intra BS HO Suc Share of TSLT Parent	SHARE(CSM.IRAHC OF TSLT.HTSLT PARENT)
RANK_IRAHC_TSLT	I Intra BS HO Suc Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.IRAHC DESC NULLS LAST WITHIN PARENT)
SHR_IRAHC_NELMNT	I Intra BS HO Suc Share of NELMNT Parent	SHARE(CSM.IRAHC OF NELMNT.HNELMNT PARENT)
RANK_IRAHC_NELMNT	I Intra BS HO Suc Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.IRAHC DESC NULLS LAST WITHIN PARENT)
SHR_LFRRN_POPT	LOC FLW REQ NRM Share of POPT Parent	SHARE(CSM.LFRRN OF POPT.HPOPT PARENT)
RANK_LFRRN_POPT	LOC FLW REQ NRM Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.LFRRN DESC NULLS LAST WITHIN PARENT)
SHR_LFRRN_TSLT	LOC FLW REQ NRM Share of TSLT Parent	SHARE(CSM.LFRRN OF TSLT.HTSLT PARENT)
RANK_LFRRN_TSLT	LOC FLW REQ NRM Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.LFRRN DESC NULLS LAST WITHIN PARENT)
SHR_LFRRN_NELMNT	LOC FLW REQ NRM Share of NELMNT Parent	SHARE(CSM.LFRRN OF NELMNT.HNELMNT PARENT)
RANK_LFRRN_NELMNT	LOC FLW REQ NRM Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.LFRRN DESC NULLS LAST WITHIN PARENT)
SHR_LFRS_POPT	Loc Flw Req SMS Share of POPT Parent	SHARE(CSM.LFRS OF POPT.HPOPT PARENT)
RANK_LFRS_POPT	Loc Flw Req SMS Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.LFRS DESC NULLS LAST WITHIN PARENT)
SHR_LFRS_TSLT	Loc Flw Req SMS Share of TSLT Parent	SHARE(CSM.LFRS OF TSLT.HTSLT PARENT)
RANK_LFRS_TSLT	Loc Flw Req SMS Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.LFRS DESC NULLS LAST WITHIN PARENT)
SHR_LFRS_NELMNT	Loc Flw Req SMS Share of NELMNT Parent	SHARE(CSM.LFRS OF NELMNT.HNELMNT PARENT)
RANK_LFRS_NELMNT	Loc Flw Req SMS Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.LFRS DESC NULLS LAST WITHIN PARENT)
SHR_LS_POPT	Location Services Share of POPT Parent	SHARE(CSM.LS OF POPT.HPOPT PARENT)
RANK_LS_POPT	Location Services Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.LS DESC NULLS LAST WITHIN PARENT)
SHR_LS_TSLT	Location Services Share of TSLT Parent	SHARE(CSM.LS OF TSLT.HTSLT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_LS_TSLT	Location Services Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.LS DESC NULLS LAST WITHIN PARENT)
SHR_LS_NELMNT	Location Services Share of NELMNT Parent	SHARE(CSM.LS OF NELMNT.HNELMNT PARENT)
RANK_LS_NELMNT	Location Services Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.LS DESC NULLS LAST WITHIN PARENT)
SHR_LU_POPT	Location Update Share of POPT Parent	SHARE(CSM.LU OF POPT.HPOPT PARENT)
RANK_LU_POPT	Location Update Share of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.LU DESC NULLS LAST WITHIN PARENT)
SHR_LU_TSLT	Location Update Share of TSLT Parent	SHARE(CSM.LU OF TSLT.HTSLT PARENT)
RANK_LU_TSLT	Location Update Share of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.LU DESC NULLS LAST WITHIN PARENT)
SHR_LU_NELMNT	Location Update Share of NELMNT Parent	SHARE(CSM.LU OF NELMNT.HNELMNT PARENT)
RANK_LU_NELMNT	Location Update Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.LU DESC NULLS LAST WITHIN PARENT)
SHR_MTLOS_POPT	MT LCS ON SDDCH Share of POPT Parent	SHARE(CSM.MTLOS OF POPT.HPOPT PARENT)
RANK_MTLOS_POPT	MT LCS ON SDDCH Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.MTLOS DESC NULLS LAST WITHIN PARENT)
SHR_MTLOS_TSLT	MT LCS ON SDDCH Share of TSLT Parent	SHARE(CSM.MTLOS OF TSLT.HTSLT PARENT)
RANK_MTLOS_TSLT	MT LCS ON SDDCH Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.MTLOS DESC NULLS LAST WITHIN PARENT)
SHR_MTLOS_NELMNT	MT LCS ON SDDCH Share of NELMNT Parent	SHARE(CSM.MTLOS OF NELMNT.HNELMNT PARENT)
RANK_MTLOS_NELMNT	MT LCS ON SDDCH Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.MTLOS DESC NULLS LAST WITHIN PARENT)
SHR_NCA_POPT	Number Of Call Attempts Share of POPT Parent	SHARE(CSM.NCA OF POPT.HPOPT PARENT)
RANK_NCA_POPT	Number Of Call Attempts Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.NCA DESC NULLS LAST WITHIN PARENT)
SHR_NCA_TSLT	Number Of Call Attempts Share of TSLT Parent	SHARE(CSM.NCA OF TSLT.HTSLT PARENT)
RANK_NCA_TSLT	Number Of Call Attempts Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.NCA DESC NULLS LAST WITHIN PARENT)
SHR_NCA_NELMNT	Number Of Call Attempts Share of NELMNT Parent	SHARE(CSM.NCA OF NELMNT.HNELMNT PARENT)
RANK_NCA_NELMNT	Number Of Call Attempts Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.NCA DESC NULLS LAST WITHIN PARENT)
SHR_NCAWT_POPT	Num Call Attempts WO Transit Share of POPT Parent	SHARE(CSM.NCAWT OF POPT.HPOPT PARENT)
RANK_NCAWT_POPT	Num Call Attempts WO Transit Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.NCAWT DESC NULLS LAST WITHIN PARENT)
SHR_NCAWT_TSLT	Num Call Attempts WO Transit Share of TSLT Parent	SHARE(CSM.NCAWT OF TSLT.HTSLT PARENT)
RANK_NCAWT_TSLT	Num Call Attempts WO Transit Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.NCAWT DESC NULLS LAST WITHIN PARENT)
SHR_NCAWT_NELMNT	Num Call Attempts WO Transit Share of NELMNT Parent	SHARE(CSM.NCAWT OF NELMNT.HNELMNT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_NCAWT_NELMNT	Num Call Attempts WO Transit Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.NCAWT DESC NULLS LAST WITHIN PARENT)
SHR_NOC_POPT	Number Of Calls Share of POPT Parent	SHARE(CSM.NOC OF POPT.HPOPT PARENT)
RANK_NOC_POPT	Number Of Calls Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.NOC DESC NULLS LAST WITHIN PARENT)
SHR_NOC_TSLT	Number Of Calls Share of TSLT Parent	SHARE(CSM.NOC OF TSLT.HTSLT PARENT)
RANK_NOC_TSLT	Number Of Calls Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.NOC DESC NULLS LAST WITHIN PARENT)
SHR_NOC_NELMNT	Number Of Calls Share of NELMNT Parent	SHARE(CSM.NOC OF NELMNT.HNELMNT PARENT)
RANK_NOC_NELMNT	Number Of Calls Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.NOC DESC NULLS LAST WITHIN PARENT)
SHR_NOCE_POPT	Number Of Cells Share of POPT Parent	SHARE(CSM.NOCE OF POPT.HPOPT PARENT)
RANK_NOCE_POPT	Number Of Cells Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.NOCE DESC NULLS LAST WITHIN PARENT)
SHR_NOCE_TSLT	Number Of Cells Share of TSLT Parent	SHARE(CSM.NOCE OF TSLT.HTSLT PARENT)
RANK_NOCE_TSLT	Number Of Cells Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.NOCE DESC NULLS LAST WITHIN PARENT)
SHR_NOCE_NELMNT	Number Of Cells Share of NELMNT Parent	SHARE(CSM.NOCE OF NELMNT.HNELMNT PARENT)
RANK_NOCE_NELMNT	Number Of Cells Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.NOCE DESC NULLS LAST WITHIN PARENT)
SHR_OAPSR_POPT	OK ACC PROC SUC R Share of POPT Parent	SHARE(CSM.OAPSR OF POPT.HPOPT PARENT)
RANK_OAPSR_POPT	OK ACC PROC SUC R Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.OAPSR DESC NULLS LAST WITHIN PARENT)
SHR_OAPSR_TSLT	OK ACC PROC SUC R Share of TSLT Parent	SHARE(CSM.OAPSR OF TSLT.HTSLT PARENT)
RANK_OAPSR_TSLT	OK ACC PROC SUC R Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.OAPSR DESC NULLS LAST WITHIN PARENT)
SHR_OAPSR_NELMNT	OK ACC PROC SUC R Share of NELMNT Parent	SHARE(CSM.OAPSR OF NELMNT.HNELMNT PARENT)
RANK_OAPSR_NELMNT	OK ACC PROC SUC R Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.OAPSR DESC NULLS LAST WITHIN PARENT)
SHR_OEREF_POPT	OK ACC PROC SUC R Share of POPT Parent	SHARE(CSM.OEREF OF POPT.HPOPT PARENT)
RANK_OEREF_POPT	OK ACC PROC SUC R Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.OEREF DESC NULLS LAST WITHIN PARENT)
SHR_OEREF_TSLT	OK ACC PROC SUC R Share of TSLT Parent	SHARE(CSM.OEREF OF TSLT.HTSLT PARENT)
RANK_OEREF_TSLT	OK ACC PROC SUC R Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.OEREF DESC NULLS LAST WITHIN PARENT)
SHR_OEREF_NELMNT	OK ACC PROC SUC R Share of NELMNT Parent	SHARE(CSM.OEREF OF NELMNT.HNELMNT PARENT)
RANK_OEREF_NELMNT	OK ACC PROC SUC R Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.OEREF DESC NULLS LAST WITHIN PARENT)
SHR_OERHA_POPT	O Inter BS HO ATM Share of POPT Parent	SHARE(CSM.OERHA OF POPT.HPOPT PARENT)



**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_OERHA_POPT	O Inter BS HO ATM Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.OERHA DESC NULLS LAST WITHIN PARENT)
SHR_OERHA_TSLT	O Inter BS HO ATM Share of TSLT Parent	SHARE(CSM.OERHA OF TSLT.HTSLT PARENT)
RANK_OERHA_TSLT	O Inter BS HO ATM Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.OERHA DESC NULLS LAST WITHIN PARENT)
SHR_OERHA_NELMNT	O Inter BS HO ATM Share of NELMNT Parent	SHARE(CSM.OERHA OF NELMNT.HNELMNT PARENT)
RANK_OERHA_NELMNT	O Inter BS HO ATM Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.OERHA DESC NULLS LAST WITHIN PARENT)
SHR_OERHR_POPT	O INTER BS HO RET ATM Share of POPT Parent	SHARE(CSM.OERHR OF POPT.HPOPT PARENT)
RANK_OERHR_POPT	O INTER BS HO RET ATM Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.OERHR DESC NULLS LAST WITHIN PARENT)
SHR_OERHR_TSLT	O INTER BS HO RET ATM Share of TSLT Parent	SHARE(CSM.OERHR OF TSLT.HTSLT PARENT)
RANK_OERHR_TSLT	O INTER BS HO RET ATM Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.OERHR DESC NULLS LAST WITHIN PARENT)
SHR_OERHR_NELMNT	O INTER BS HO RET ATM Share of NELMNT Parent	SHARE(CSM.OERHR OF NELMNT.HNELMNT PARENT)
RANK_OERHR_NELMNT	O INTER BS HO RET ATM Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.OERHR DESC NULLS LAST WITHIN PARENT)
SHR_OERHS_POPT	O INTER BS HO SUC Share of POPT Parent	SHARE(CSM.OERHS OF POPT.HPOPT PARENT)
RANK_OERHS_POPT	O INTER BS HO SUC Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.OERHS DESC NULLS LAST WITHIN PARENT)
SHR_OERHS_TSLT	O INTER BS HO SUC Share of TSLT Parent	SHARE(CSM.OERHS OF TSLT.HTSLT PARENT)
RANK_OERHS_TSLT	O INTER BS HO SUC Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.OERHS DESC NULLS LAST WITHIN PARENT)
SHR_OERHS_NELMNT	O INTER BS HO SUC Share of NELMNT Parent	SHARE(CSM.OERHS OF NELMNT.HNELMNT PARENT)
RANK_OERHS_NELMNT	O INTER BS HO SUC Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.OERHS DESC NULLS LAST WITHIN PARENT)
SHR_OERRM_POPT	O INTER BS RQ MSC Share of POPT Parent	SHARE(CSM.OERRM OF POPT.HPOPT PARENT)
RANK_OERRM_POPT	O INTER BS RQ MSC Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.OERRM DESC NULLS LAST WITHIN PARENT)
SHR_OERRM_TSLT	O INTER BS RQ MSC Share of TSLT Parent	SHARE(CSM.OERRM OF TSLT.HTSLT PARENT)
RANK_OERRM_TSLT	O INTER BS RQ MSC Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.OERRM DESC NULLS LAST WITHIN PARENT)
SHR_OERRM_NELMNT	O INTER BS RQ MSC Share of NELMNT Parent	SHARE(CSM.OERRM OF NELMNT.HNELMNT PARENT)
RANK_OERRM_NELMNT	O INTER BS RQ MSC Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.OERRM DESC NULLS LAST WITHIN PARENT)
SHR_OHCA_POPT	Out HO Cause Attempts Share of POPT Parent	SHARE(CSM.OHCA OF POPT.HPOPT PARENT)
RANK_OHCA_POPT	Out HO Cause Attempts Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.OHCA DESC NULLS LAST WITHIN PARENT)
SHR_OHCA_TSLT	Out HO Cause Attempts Share of TSLT Parent	SHARE(CSM.OHCA OF TSLT.HTSLT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_OHCA_TSLT	Out HO Cause Attempts Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.OHCA DESC NULLS LAST WITHIN PARENT)
SHR_OHCA_NELMNT	Out HO Cause Attempts Share of NELMNT Parent	SHARE(CSM.OHCA OF NELMNT.HNELMNT PARENT)
RANK_OHCA_NELMNT	Out HO Cause Attempts Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.OHCA DESC NULLS LAST WITHIN PARENT)
SHR_ORAHA_POPT	O INTRA BS HO ATM Share of POPT Parent	SHARE(CSM.ORAHA OF POPT.HPOPT PARENT)
RANK_ORAHA_POPT	O INTRA BS HO ATM Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ORAHA DESC NULLS LAST WITHIN PARENT)
SHR_ORAHA_TSLT	O INTRA BS HO ATM Share of TSLT Parent	SHARE(CSM.ORAHA OF TSLT.HTSLT PARENT)
RANK_ORAHA_TSLT	O INTRA BS HO ATM Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ORAHA DESC NULLS LAST WITHIN PARENT)
SHR_ORAHA_NELMNT	O INTRA BS HO ATM Share of NELMNT Parent	SHARE(CSM.ORAHA OF NELMNT.HNELMNT PARENT)
RANK_ORAHA_NELMNT	O INTRA BS HO ATM Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ORAHA DESC NULLS LAST WITHIN PARENT)
SHR_ORAHC_POPT	O INTRA BS HO CLR Share of POPT Parent	SHARE(CSM.ORAHC OF POPT.HPOPT PARENT)
RANK_ORAHC_POPT	O INTRA BS HO CLR Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ORAHC DESC NULLS LAST WITHIN PARENT)
SHR_ORAHC_TSLT	O INTRA BS HO CLR Share of TSLT Parent	SHARE(CSM.ORAHC OF TSLT.HTSLT PARENT)
RANK_ORAHC_TSLT	O INTRA BS HO CLR Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ORAHC DESC NULLS LAST WITHIN PARENT)
SHR_ORAHC_NELMNT	O INTRA BS HO CLR Share of NELMNT Parent	SHARE(CSM.ORAHC OF NELMNT.HNELMNT PARENT)
RANK_ORAHC_NELMNT	O INTRA BS HO CLR Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ORAHC DESC NULLS LAST WITHIN PARENT)
SHR_ORAHL_POPT	O INTRA BS HO LOS Share of POPT Parent	SHARE(CSM.ORAHL OF POPT.HPOPT PARENT)
RANK_ORAHL_POPT	O INTRA BS HO LOS Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ORAHL DESC NULLS LAST WITHIN PARENT)
SHR_ORAHL_TSLT	O INTRA BS HO LOS Share of TSLT Parent	SHARE(CSM.ORAHL OF TSLT.HTSLT PARENT)
RANK_ORAHL_TSLT	O INTRA BS HO LOS Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ORAHL DESC NULLS LAST WITHIN PARENT)
SHR_ORAHL_NELMNT	O INTRA BS HO LOS Share of NELMNT Parent	SHARE(CSM.ORAHL OF NELMNT.HNELMNT PARENT)
RANK_ORAHL_NELMNT	O INTRA BS HO LOS Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ORAHL DESC NULLS LAST WITHIN PARENT)
SHR_ORAHS_POPT	O INTRA BS HO SUC Share of POPT Parent	SHARE(CSM.ORAHS OF POPT.HPOPT PARENT)
RANK_ORAHS_POPT	O INTRA BS HO SUC Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.ORAHS DESC NULLS LAST WITHIN PARENT)
SHR_ORAHS_TSLT	O INTRA BS HO SUC Share of TSLT Parent	SHARE(CSM.ORAHS OF TSLT.HTSLT PARENT)
RANK_ORAHS_TSLT	O INTRA BS HO SUC Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.ORAHS DESC NULLS LAST WITHIN PARENT)
SHR_ORAHS_NELMNT	O INTRA BS HO SUC Share of NELMNT Parent	SHARE(CSM.ORAHS OF NELMNT.HNELMNT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_ORAHS_NELMNT	O INTRA BS HO SUC Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.ORAHS DESC NULLS LAST WITHIN PARENT)
SHR_PBSS_POPT	Power Budget Signal Strength Share of POPT Parent	SHARE(CSM.PBSS OF POPT.HPOPT PARENT)
RANK_PBSS_POPT	Power Budget Signal Strength Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.PBSS DESC NULLS LAST WITHIN PARENT)
SHR_PBSS_TSLT	Power Budget Signal Strength Share of TSLT Parent	SHARE(CSM.PBSS OF TSLT.HTSLT PARENT)
RANK_PBSS_TSLT	Power Budget Signal Strength Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.PBSS DESC NULLS LAST WITHIN PARENT)
SHR_PBSS_NELMNT	Power Budget Signal Strength Share of NELMNT Parent	SHARE(CSM.PBSS OF NELMNT.HNELMNT PARENT)
RANK_PBSS_NELMNT	Power Budget Signal Strength Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.PBSS DESC NULLS LAST WITHIN PARENT)
SHR_PR_POPT	Power Budget Signal Strength Share of POPT Parent	SHARE(CSM.PR OF POPT.HPOPT PARENT)
RANK_PR_POPT	Power Budget Signal Strength Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.PR DESC NULLS LAST WITHIN PARENT)
SHR_PR_TSLT	Power Budget Signal Strength Share of TSLT Parent	SHARE(CSM.PR OF TSLT.HTSLT PARENT)
RANK_PR_TSLT	Power Budget Signal Strength Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.PR DESC NULLS LAST WITHIN PARENT)
SHR_PR_NELMNT	Power Budget Signal Strength Share of NELMNT Parent	SHARE(CSM.PR OF NELMNT.HNELMNT PARENT)
RANK_PR_NELMNT	Power Budget Signal Strength Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.PR DESC NULLS LAST WITHIN PARENT)
SHR_PRFM_POPT	Page Req From MSC Share of POPT Parent	SHARE(CSM.PRFM OF POPT.HPOPT PARENT)
RANK_PRFM_POPT	Page Req From MSC Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.PRFM DESC NULLS LAST WITHIN PARENT)
SHR_PRFM_TSLT	Page Req From MSC Share of TSLT Parent	SHARE(CSM.PRFM OF TSLT.HTSLT PARENT)
RANK_PRFM_TSLT	Page Req From MSC Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.PRFM DESC NULLS LAST WITHIN PARENT)
SHR_PRFM_NELMNT	Page Req From MSC Share of NELMNT Parent	SHARE(CSM.PRFM OF NELMNT.HNELMNT PARENT)
RANK_PRFM_NELMNT	Page Req From MSC Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.PRFM DESC NULLS LAST WITHIN PARENT)
SHR_RLTR_POPT	RF Loss TCH Roll Share of POPT Parent	SHARE(CSM.RLTR OF POPT.HPOPT PARENT)
RANK_RLTR_POPT	RF Loss TCH Roll Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.RLTR DESC NULLS LAST WITHIN PARENT)
SHR_RLTR_TSLT	RF Loss TCH Roll Share of TSLT Parent	SHARE(CSM.RLTR OF TSLT.HTSLT PARENT)
RANK_RLTR_TSLT	RF Loss TCH Roll Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.RLTR DESC NULLS LAST WITHIN PARENT)
SHR_RLTR_NELMNT	RF Loss TCH Roll Share of NELMNT Parent	SHARE(CSM.RLTR OF NELMNT.HNELMNT PARENT)
RANK_RLTR_NELMNT	RF Loss TCH Roll Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.RLTR DESC NULLS LAST WITHIN PARENT)
SHR_SH_POPT	ALLOC SDCCH Share of POPT Parent	SHARE(CSM.SH OF POPT.HPOPT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_SH_POPT	ALLOC SDCCH Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.SH DESC NULLS LAST WITHIN PARENT)
SHR_SH_TSLT	ALLOC SDCCH Share of TSLT Parent	SHARE(CSM.SH OF TSLT.HTSLT PARENT)
RANK_SH_TSLT	ALLOC SDCCH Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.SH DESC NULLS LAST WITHIN PARENT)
SHR_SH_NELMNT	ALLOC SDCCH Share of NELMNT Parent	SHARE(CSM.SH OF NELMNT.HNELMNT PARENT)
RANK_SH_NELMNT	ALLOC SDCCH Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.SH DESC NULLS LAST WITHIN PARENT)
SHR_SIOS_POPT	SMS INIT on SDCCH Share of POPT Parent	SHARE(CSM.SIOS OF POPT.HPOPT PARENT)
RANK_SIOS_POPT	SMS INIT on SDCCH Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.SIOS DESC NULLS LAST WITHIN PARENT)
SHR_SIOS_TSLT	SMS INIT on SDCCH Share of TSLT Parent	SHARE(CSM.SIOS OF TSLT.HTSLT PARENT)
RANK_SIOS_TSLT	SMS INIT on SDCCH Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.SIOS DESC NULLS LAST WITHIN PARENT)
SHR_SIOS_NELMNT	SMS INIT on SDCCH Share of NELMNT Parent	SHARE(CSM.SIOS OF NELMNT.HNELMNT PARENT)
RANK_SIOS_NELMNT	SMS INIT on SDCCH Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.SIOS DESC NULLS LAST WITHIN PARENT)
SHR_SIOT_POPT	SMS INIT on TCH Share of POPT Parent	SHARE(CSM.SIOT OF POPT.HPOPT PARENT)
RANK_SIOT_POPT	SMS INIT on TCH Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.SIOT DESC NULLS LAST WITHIN PARENT)
SHR_SIOT_TSLT	SMS INIT on TCH Share of TSLT Parent	SHARE(CSM.SIOT OF TSLT.HTSLT PARENT)
RANK_SIOT_TSLT	SMS INIT on TCH Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.SIOT DESC NULLS LAST WITHIN PARENT)
SHR_SIOT_NELMNT	SMS INIT on TCH Share of NELMNT Parent	SHARE(CSM.SIOT OF NELMNT.HNELMNT PARENT)
RANK_SIOT_NELMNT	SMS INIT on TCH Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.SIOT DESC NULLS LAST WITHIN PARENT)
SHR_SPM_POPT	Spare TCH Max Share of POPT Parent	SHARE(CSM.SPM OF POPT.HPOPT PARENT)
RANK_SPM_POPT	Spare TCH Max Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.SPM DESC NULLS LAST WITHIN PARENT)
SHR_SPM_TSLT	Spare TCH Max Share of TSLT Parent	SHARE(CSM.SPM OF TSLT.HTSLT PARENT)
RANK_SPM_TSLT	Spare TCH Max Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.SPM DESC NULLS LAST WITHIN PARENT)
SHR_SPM_NELMNT	Spare TCH Max Share of NELMNT Parent	SHARE(CSM.SPM OF NELMNT.HNELMNT PARENT)
RANK_SPM_NELMNT	Spare TCH Max Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.SPM DESC NULLS LAST WITHIN PARENT)
SHR_SSD_POPT	Signal Source Distance Share of POPT Parent	SHARE(CSM.SSD OF POPT.HPOPT PARENT)
RANK_SSD_POPT	Signal Source Distance Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.SSD DESC NULLS LAST WITHIN PARENT)
SHR_SSD_TSLT	Signal Source Distance Share of TSLT Parent	SHARE(CSM.SSD OF TSLT.HTSLT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_SSD_TSLT	Signal Source Distance Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.SSD DESC NULLS LAST WITHIN PARENT)
SHR_SSD_NELMNT	Signal Source Distance Share of NELMNT Parent	SHARE(CSM.SSD OF NELMNT.HNELMNT PARENT)
RANK_SSD_NELMNT	Signal Source Distance Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.SSD DESC NULLS LAST WITHIN PARENT)
SHR_SSM_POPT	Spare SDCCH Max Share of POPT Parent	SHARE(CSM.SSM OF POPT.HPOPT PARENT)
RANK_SSM_POPT	Spare SDCCH Max Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.SSM DESC NULLS LAST WITHIN PARENT)
SHR_SSM_TSLT	Spare SDCCH Max Share of TSLT Parent	SHARE(CSM.SSM OF TSLT.HTSLT PARENT)
RANK_SSM_TSLT	Spare SDCCH Max Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.SSM DESC NULLS LAST WITHIN PARENT)
SHR_SSM_NELMNT	Spare SDCCH Max Share of NELMNT Parent	SHARE(CSM.SSM OF NELMNT.HNELMNT PARENT)
RANK_SSM_NELMNT	Spare SDCCH Max Share of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.SSM DESC NULLS LAST WITHIN PARENT)
SHR_TCM_POPT	Total Call Minutes Share of POPT Parent	SHARE(CSM.TCM OF POPT.HPOPT PARENT)
RANK_TCM_POPT	Total Call Minutes Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.TCM DESC NULLS LAST WITHIN PARENT)
SHR_TCM_TSLT	Total Call Minutes Share of TSLT Parent	SHARE(CSM.TCM OF TSLT.HTSLT PARENT)
RANK_TCM_TSLT	Total Call Minutes Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.TCM DESC NULLS LAST WITHIN PARENT)
SHR_TCM_NELMNT	Total Call Minutes Share of NELMNT Parent	SHARE(CSM.TCM OF NELMNT.HNELMNT PARENT)
RANK_TCM_NELMNT	Total Call Minutes Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.TCM DESC NULLS LAST WITHIN PARENT)
SHR_TQR_POPT	TCH Q Removed Share of POPT Parent	SHARE(CSM.TQR OF POPT.HPOPT PARENT)
RANK_TQR_POPT	TCH Q Removed Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.TQR DESC NULLS LAST WITHIN PARENT)
SHR_TQR_TSLT	TCH Q Removed Share of TSLT Parent	SHARE(CSM.TQR OF TSLT.HTSLT PARENT)
RANK_TQR_TSLT	TCH Q Removed Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.TQR DESC NULLS LAST WITHIN PARENT)
SHR_TQR_NELMNT	TCH Q Removed Share of NELMNT Parent	SHARE(CSM.TQR OF NELMNT.HNELMNT PARENT)
RANK_TQR_NELMNT	TCH Q Removed Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.TQR DESC NULLS LAST WITHIN PARENT)
SHR_TT_POPT	Total Traffic Share of POPT Parent	SHARE(CSM.TT OF POPT.HPOPT PARENT)
RANK_TT_POPT	Total Traffic Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.TT DESC NULLS LAST WITHIN PARENT)
SHR_TT_TSLT	Total Traffic Share of TSLT Parent	SHARE(CSM.TT OF TSLT.HTSLT PARENT)
RANK_TT_TSLT	Total Traffic Share of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.TT DESC NULLS LAST WITHIN PARENT)
SHR_TT_NELMNT	Total Traffic Share of NELMNT Parent	SHARE(CSM.TT OF NELMNT.HNELMNT PARENT)

**Table 9–17 (Cont.) Cell Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_TT_NELMNT	Total Traffic Rank of NELMNT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.TT DESC NULLS LAST WITHIN PARENT)
SHR_USL_POPT	Uplink Signal Level Share of POPT Parent	SHARE(CSM.USL OF POPT.HPOPT PARENT)
RANK_USL_POPT	Uplink Signal Level Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.USL DESC NULLS LAST WITHIN PARENT)
SHR_USL_TSLT	Uplink Signal Level Share of TSLT Parent	SHARE(CSM.USL OF TSLT.HTSLT PARENT)
RANK_USL_TSLT	Uplink Signal Level Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.USL DESC NULLS LAST WITHIN PARENT)
SHR_USL_NELMNT	Uplink Signal Level Share of NELMENT Parent	SHARE(CSM.USL OF NELMNT.HNELMNT PARENT)
RANK_USL_NELMNT	Uplink Signal Level Rank of NELMENT Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.USL DESC NULLS LAST WITHIN PARENT)
SHR_USQ_POPT	Uplink Signal Quality Share of POPT Parent	SHARE(CSM.USQ OF POPT.HPOPT PARENT)
RANK_USQ_POPT	Uplink Signal Quality Rank of POPT Parent	RANK() OVER HIERARCHY (POPT.HPOPT ORDER BY CSM.USQ DESC NULLS LAST WITHIN PARENT)
SHR_USQ_TSLT	Uplink Signal Quality Share of TSLT Parent	SHARE(CSM.USQ OF TSLT.HTSLT PARENT)
RANK_USQ_TSLT	Uplink Signal Quality Rank of TSLT Parent	RANK() OVER HIERARCHY (TSLT.HTSLT ORDER BY CSM.USQ DESC NULLS LAST WITHIN PARENT)
SHR_USQ_NELMNT	Uplink Signal Quality Share of Network Element Parent	SHARE(CSM.USQ OF NELMNT.HNELMNT PARENT)
RANK_USQ_NELMNT	Uplink Signal Quality Rank of Network Element Parent	RANK() OVER HIERARCHY (NELMNT.HNELMNT ORDER BY CSM.USQ DESC NULLS LAST WITHIN PARENT)
TT_FCST	Total Traffic Forecast	CSM_FCST.TT_FCST

## Commission Cube

This cube is to store the received commissions for sales representatives and dealers for the sales of products and services in the given period. There are various ways and criteria to calculate and give commissions. Information about these ways and criteria are maintained in the commission fact. Individual commission break up is not important from the analytical view point. Hence the commission fact maintains the total commission values by time.

**Physical Name: CMSN**

### Dimensions and Load Level

The fact data of Commission Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–18 Commission Cube Dimensions and Load Level**

Dimension Name	Load level
Time	Business Month
Product	Product
Commission Type	Commission Type

**Aggregation Order/Operator**

The Commission Cube will be aggregated by the following order and operators on dimensions

**Table 9–19 Commission Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Product	Sum	2
Commission Type	Sum	3

**Base Measures**

The base measure of this data cube are.

**Table 9–20 Commission Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
CC1	Customers Count	DWA_CMISN_MO.CUSTS_CNT	
TR	Total Revenue	DWA_CMISN_MO.TOT_RVN	
CMA	Commission Amount	DWA_CMISN_MO.CMISN_AMT	

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–21 Commission Cube Derived Measures**

Physical Name	Logical Name	Definition
CMA_YTD	Commission Amount YTD	SUM(CMSN.CMA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CMA_LP	Commission Amount Last Period	LAG(CMSN.CMA, 1) OVER HIERARCHY ("TIME".HTBSNS)
CMA_LY	Commission Amount Last Year	LAG(CMSN.CMA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CMA_LY_PCT_CHG	Commission Amount % Change Last Year	LAG_VARIANCE_PERCENT(CMSN.CMA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CMA_YTD_LY	Commission Amount YTD Last Year	LAG(CMSN.CMA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CMA_YTD_LY_PCT_CHG	Commission Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(CMSN.CMA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_CMA_PROD	Commission Amount Share Product	SHARE(CMSN.CMA OF PROD.HPROD PARENT)
RANK_CMA_PROD	Commission Amount Rank Product	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CMSN.CMA DESC NULLS LAST WITHIN PARENT)
TR_YTD	Total Revenue YTD	SUM(CMSN.TR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TR_LP	Total Revenue Last Period	LAG(CMSN.TR, 1) OVER HIERARCHY ("TIME".HTBSNS)
TR_LY	Total Revenue Last Year	LAG(CMSN.TR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–21 (Cont.) Commission Cube Derived Measures**

Physical Name	Logical Name	Definition
TR_LY_PCT_CHG	Total Revenue % Change Last Year	LAG_VARIANCE_PERCENT(CMSN.TR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TR_YTD_LY	Total Revenue YTD Last Year	LAG(CMSN.TR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TR_YTD_LY_PCT_CHG	Total Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(CMSN.TR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_TR_PROD	Total Revenue Share of Product Parent	SHARE(CMSN.TR OF PROD.HPROD PARENT)
RANK_TR_PROD	Total Revenue Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CMSN.TR DESC NULLS LAST WITHIN PARENT)
EOP_CC	EOP Customers Count	OLAP_DML_EXPRESSION('CMSN_CC1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
ARPU	ARPU	CMSN.TR / CMSN.EOP_CC
EOP_CC_LY	EOP Customers Count Last Year	LAG(CMSN.EOP_CC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CC_LY_PCT_CHG	EOP Customers Count % Chg Last Year	LAG_VARIANCE_PERCENT(CMSN.EOP_CC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARPU_LY	ARPU Last Year	CMSN.TR_LY / CMSN.EOP_CC_LY
ARPU_LY_PCT_CHG	ARPU % Chg Last Year	(CMSN.ARPU - CMSN.ARPU_LY) / CMSN.ARPU_LY

## Contract Cube

This Cube is to store derived information about customer's current/future contract for analytical purpose. The entity only contains changed contract(current or future).

**Physical Name: CM**

### Dimensions and Load Level

The fact data of Contract Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–22 Contract Cube Dimensions and Load Level**

Dimension Name	Load level
Time	Business Month
Customer Type	Customer Type
Product Market Plan	Product Market Plan
Organization	Organization Business Unit
Geography	Product Market Plan

### Aggregation Order/Operator

The Contract Cube will be aggregated by the following order and operators on dimensions



**Table 9–23 Contract Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Product Market Plan	Sum	3
Organization	Sum	4
Geography	Sum	5

**Base Measures**

The base measure of this data cube are:

**Table 9–24 Contract Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
AMSC	Amortized Standard Cost	DWA_CNRT_MO.AMRTZD_STNDRD_COST	
NRCA	New Retention Contract Amount	DWA_CNRT_MO.NEW_RTNTN_CNRT_AMT	
NACA	New Acquisition Contract Amount	DWA_CNRT_MO.NEW_ACQSTN_CNRT_AMT	
CLA	Contract Loss Amount	DWA_CNRT_MO.CNRT_LOSS_AMT	
BRA	Billed Revenue Amount	DWA_CNRT_MO.BLLD_RVN_AMT	
NCA	Net Retention Contract Amount	DWA_CNRT_MO.NET_RTNTN_CNRT_AMT	
RCA1	Remaining Contract Amount	DWA_CNRT_MO.RMNG_CNRT_AMT	Remaining contract sum value for current customer.
LDC	Liquidated Damage Charge	DWA_CNRT_MO.LQDTD_DMG_CHRG	When customer terminate the contract, to recover some contract loss, telco operate charge customer penalty for the termination.
AMP	Acquisition Marketing Premium	DWA_CNRT_MO.ACQSTN_MKTG_PRMM	
RMP	Retention Marketing Premium	DWA_CNRT_MO.RTNTN_MKTG_PRMM	
CCS1	Customer Contract Sum	DWA_CNRT_MO.CUST_CNRT_SUM	
AC	Actual Cost	DWA_CNRT_MO.ACT_COST	
SC	Standard Cost	DWA_CNRT_MO.STNDRD_COST	
AAC	Amortized Actual Cost	DWA_CNRT_MO.AMRTZD_ACT_COST	
CFCA	Cancelled Future Contract Amount	DWA_CNRT_MO.CNCL_FUTRE_CNRT_AMT	
FBR	FTG Billed Revenue	DWA_CNRT_MO.FTG_BLLD_RVN	Free-to-go billing revenue
NAA	Net Acquisition Contract Amount	DWA_CNRT_MO.NET_ACQSTN_CNRT_AMT	

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–25 Contract Cube Derived Measures**

Physical Name	Logical Name	Definition
AAC_YTD	Amortized Actual Cost YTD	SUM(CM.AAC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AAC_LP	Amortized Actual Cost Last Period	LAG(CM.AAC, 1) OVER HIERARCHY ("TIME".HTBSNS)
AAC_LY	Amortized Actual Cost Last Year	LAG(CM.AAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AAC_LY_PCT_CHG	Amortized Actual Cost % Change Last Year	LAG_VARIANCE_PERCENT(CM.AAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AAC_YTD_LY	Amortized Actual Cost YTD Last Year	LAG(CM.AAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AAC_YTD_LY_PCT_CHG	Amortized Actual Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.AAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AC_YTD	Actual Cost YTD	SUM(CM.AC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AC_LP	Actual Cost Last Period	LAG(CM.AC, 1) OVER HIERARCHY ("TIME".HTBSNS)
AC_LY	Actual Cost Last Year	LAG(CM.AC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AC_LY_PCT_CHG	Actual Cost % Change Last Year	LAG_VARIANCE_PERCENT(CM.AC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AC_YTD_LY	Actual Cost YTD Last Year	LAG(CM.AC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AC_YTD_LY_PCT_CHG	Actual Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.AC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMP_YTD	Acquisition Marketing Premium YTD	SUM(CM.AMP) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AMP_LP	Acquisition Marketing Premium Last Period	LAG(CM.AMP, 1) OVER HIERARCHY ("TIME".HTBSNS)
AMP_LY	Acquisition Marketing Premium Last Year	LAG(CM.AMP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMP_LY_PCT_CHG	Acquisition Marketing Premium % Change Last Year	LAG_VARIANCE_PERCENT(CM.AMP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMP_YTD_LY	Acquisition Marketing Premium YTD Last Year	LAG(CM.AMP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMP_YTD_LY_PCT_CHG	Acquisition Marketing Premium YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.AMP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMSC_YTD	Amortized Standard Cost YTD	SUM(CM.AMSC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AMSC_LP	Amortized Standard Cost Last Period	LAG(CM.AMSC, 1) OVER HIERARCHY ("TIME".HTBSNS)

**Table 9–25 (Cont.) Contract Cube Derived Measures**

Physical Name	Logical Name	Definition
AMSC_LY	Amortized Standard Cost Last Year	LAG(CM.AMSC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMSC_LY_PCT_CHG	Amortized Standard Cost % Changed Last Year	LAG_VARIANCE_PERCENT(CM.AMSC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMSC_YTD_LY	Amortized Standard Cost YTD Last Year	LAG(CM.AMSC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AMSC_YTD_LY_PCT_CHG	Amortized Standard Cost YTD % Changed Last Year	LAG_VARIANCE_PERCENT(CM.AMSC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BRA_YTD	Billed Revenue Amount YTD	SUM(CM.BRA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
BRA_LP	Billed Revenue Amount Last Period	LAG(CM.BRA, 1) OVER HIERARCHY ("TIME".HTBSNS)
BRA_LY	Billed Revenue Amount Last Year	LAG(CM.BRA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BRA_LY_PCT_CHG	Billed Revenue Amount % Change Last Year	LAG_VARIANCE_PERCENT(CM.BRA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BRA_YTD_LY	Billed Revenue Amount YTD Last Year	LAG(CM.BRA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BRA_YTD_LY_PCT_CHG	Billed Revenue Amount YTD Last Year	LAG_VARIANCE_PERCENT(CM.BRA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CFCA_YTD	Cancelled Future Contract Amount YTD	SUM(CM.CFCA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CFCA_LP	Cancelled Future Contract Amount Last Period	LAG(CM.CFCA, 1) OVER HIERARCHY ("TIME".HTBSNS)
CFCA_LY	Cancelled Future Contract Amount Last Year	LAG(CM.CFCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CFCA_LY_PCT_CHG	Cancelled Future Contract Amount % Change LY	LAG_VARIANCE_PERCENT(CM.CFCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CFCA_YTD_LY	Cancelled Future Contract Amount YTD LY	LAG(CM.CFCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CFCA_YTD_LY_PCT_CHG	Cancelled Future Contract Amount YTD % Change LY	LAG_VARIANCE_PERCENT(CM.CFCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CLA_YTD	Contract Loss Amount YTD	SUM(CM.CLA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CLA_LP	Contract Loss Amount LP	LAG(CM.CLA, 1) OVER HIERARCHY ("TIME".HTBSNS)
CLA_LY	Contract Loss Amount Last Year	LAG(CM.CLA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CLA_LY_PCT_CHG	Contract Loss Amount % change Last Year	LAG_VARIANCE_PERCENT(CM.CLA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–25 (Cont.) Contract Cube Derived Measures**

Physical Name	Logical Name	Definition
CLA_YTD_LY	Contract Loss Amount YTD Last Year	LAG(CM.CLA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CLA_YTD_LY_PCT_CHG	Contract Loss Amount YTD % change Last Year	LAG_VARIANCE_PERCENT(CM.CLA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
FBR_YTD	FTG Billed Revenue YTD	SUM(CM.FBR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
FBR_LP	FTG Billed Revenue Last Period	LAG(CM.FBR, 1) OVER HIERARCHY ("TIME".HTBSNS)
FBR_LY	FTG Billed Revenue Last Year	LAG(CM.FBR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
FBR_LY_PCT_CHG	FTG Billed Revenue % Change Last Year	LAG_VARIANCE_PERCENT(CM.FBR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
FBR_YTD_LY	FTG Billed Revenue YTD Last Year	LAG(CM.FBR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
FBR_YTD_LY_PCT_CHG	FTG Billed Revenue % Change Last Year	LAG_VARIANCE_PERCENT(CM.FBR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LDC_YTD	Liquidated Damage Charge YTD	SUM(CM.LDC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
LDC_LP	Liquidated Damage Charge Last Period	LAG(CM.LDC, 1) OVER HIERARCHY ("TIME".HTBSNS)
LDC_LY	Liquidated Damage Charge Last Year	LAG(CM.LDC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LDC_LY_PCT_CHG	Liquidated Damage Charge % Change Last Year	LAG_VARIANCE_PERCENT(CM.LDC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LDC_YTD_LY	Liquidated Damage Charge YTD Last Year	LAG(CM.LDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
LDC_YTD_LY_PCT_CHG	Liquidated Damage Charge YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.LDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NAA_YTD	Net Acquisition Contract Amount YTD	SUM(CM.NAA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NAA_LP	Net Acquisition Contract Amount Last Period	LAG(CM.NAA, 1) OVER HIERARCHY ("TIME".HTBSNS)
NAA_LY	Net Acquisition Contract Amount Last Year	LAG(CM.NAA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NAA_LY_PCT_CHG	Net Acquisition Contract Amount % Change Last Year	LAG_VARIANCE_PERCENT(CM.NAA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NAA_YTD_LY	Net Acquisition Contract Amount YTD Last Year	LAG(CM.NAA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NAA_YTD_LY_PCT_CHG	Net Acquisition Contract Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.NAA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–25 (Cont.) Contract Cube Derived Measures**

Physical Name	Logical Name	Definition
NACA_YTD	New Acquisition Contract Amount YTD	SUM(CM.NACA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NACA_LP	New Acquisition Contract Amount Last Period	LAG(CM.NACA, 1) OVER HIERARCHY ("TIME".HTBSNS)
NACA_LY	New Acquisition Contract Amount Last Year	LAG(CM.NACA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NACA_LY_PCT_CHG	New Acquisition Contract Amount % Change Last Year	LAG_VARIANCE_PERCENT(CM.NACA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NACA_YTD_LY	New Acquisition Contract Amount YTD Last Year	LAG(CM.NACA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NACA_YTD_LY_PCT_CHG	New Acquisition Contract Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.NACA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCA_YTD	Net Retention Contract Amount YTD	SUM(CM.NCA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NCA_LP	Net Retention Contract Amount Last Period	LAG(CM.NCA, 1) OVER HIERARCHY ("TIME".HTBSNS)
NCA_LY	Net Retention Contract Amount Last Year	LAG(CM.NCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCA_LY_PCT_CHG	Net Retention Contract Amount % Change Last Year	LAG_VARIANCE_PERCENT(CM.NCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCA_YTD_LY	Net Retention Contract Amount YTD Last Year	LAG(CM.NCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCA_YTD_LY_PCT_CHG	Net Retention Contract Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.NCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NRCA_YTD	New Retention Contract Amount YTD	SUM(CM.NRCA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NRCA_LP	New Retention Contract Amount Last Period	LAG(CM.NRCA, 1) OVER HIERARCHY ("TIME".HTBSNS)
NRCA_LY	New Retention Contract Amount Last Year	LAG(CM.NRCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NRCA_LY_PCT_CHG	New Retention Contract Amount % Change Last Year	LAG_VARIANCE_PERCENT(CM.NRCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NRCA_YTD_LY	New Retention Contract Amount YTD Last Year	LAG(CM.NRCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NRCA_YTD_LY_PCT_CHG	New Retention Contract Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.NRCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RMP_YTD	Retention Marketing Premium YTD	SUM(CM.RMP) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
RMP_LP	Retention Marketing Premium Last Period	LAG(CM.RMP, 1) OVER HIERARCHY ("TIME".HTBSNS)

**Table 9–25 (Cont.) Contract Cube Derived Measures**

Physical Name	Logical Name	Definition
RMP_LY	Retention Marketing Premium Last Year	LAG(CM.RMP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RMP_LY_PCT_CHG	Retention Marketing Premium % Change Last Year	LAG_VARIANCE_PERCENT(CM.RMP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RMP_YTD_LY	Retention Marketing Premium YTD Last Year	LAG(CM.RMP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RMP_YTD_LY_PCT_CHG	Retention Marketing Premium YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.RMP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_YTD	Standard Cost YTD	SUM(CM.SC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SC_LP	Standard Cost Last Period	LAG(CM.SC, 1) OVER HIERARCHY ("TIME".HTBSNS)
SC_LY	Standard Cost Last Year	LAG(CM.SC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_LY_PCT_CHG	Standard Cost % Change Last Year	LAG_VARIANCE_PERCENT(CM.SC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_YTD_LY	Standard Cost YTD Last Year	LAG(CM.SC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_YTD_LY_PCT_CHG	Standard Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CM.SC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RANK_AAC_ORG	Amortized Actual Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CM.AAC DESC NULLS LAST WITHIN PARENT)
SHR_AAC_PMP	Amortized Actual Cost Share of PMP Parent	SHARE(CM.AAC OF PMP.HPMP PARENT)
RANK_AAC_PMP	Amortized Actual Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CM.AAC DESC NULLS LAST WITHIN PARENT)
SHR_AAC_CUSTYP	Amortized Actual Cost Share of CUSTYP Parent	SHARE(CM.AAC OF CUSTYP.HCUSTYP PARENT)
RANK_AAC_CUSTYP	Amortized Actual Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CM.AAC DESC NULLS LAST WITHIN PARENT)
SHR_AAC_GEO	Amortized Actual Cost Rank of Geography Parent	SHARE(CM.AAC OF GEO.HGEO PARENT)
RANK_AAC_GEO	Amortized Actual Cost Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CM.AAC DESC NULLS LAST WITHIN PARENT)
SHR_AC_ORG	Amortized Actual Cost Share of Organization Parent	SHARE(CM.AC OF ORG.HCHAIN PARENT)
RANK_AC_ORG	Actual Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CM.AC DESC NULLS LAST WITHIN PARENT)
SHR_AC_PMP	Actual Cost Share of PMP Parent	SHARE(CM.AC OF PMP.HPMP PARENT)
RANK_AC_PMP	Actual Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CM.AC DESC NULLS LAST WITHIN PARENT)

## Cost Organizational Cube

This cube is to store aggregated expense information on each business unit inside the carrier. You can use this cube for auditing and budgeting.

**Physical Name: COM****Dimensions and Load Level**

The fact data of Cost Organizational Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–26 Cost Organizational Cube Dimensions and Load Level**

Dimension Name	Load level
Time	Business Month
Organization	Organization Business Unit

**Aggregation Order/Operator**

The Cost Organizational Cube will be aggregated by the following order and operators on dimensions.

**Table 9–27 Cost Organizational Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Organization	Sum	2

**Base Measures**

The base measure of this data cube are.

**Table 9–28 Cost Organizational Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
CAC	Controlling Attrition Cost	DWD_COST_ORG.CONTRLNG_ATTRTN_COST	
CB	Cost Budget	DWD_COST_ORG.COST_BDGT	
IC	Investment Cost	DWD_COST_ORG.INVSTMNT_COST	
AC	Advertising Cost	DWD_COST_ORG.ADVR_COST	
OC	Operating Cost	DWD_COST_ORG.OPERTNG_COST	
TC	Total Cost	DWD_COST_ORG.TOT_COST	
OTRC	Other Cost	DWD_COST_ORG.OTHR_COST	
RVN	Revenue	DWD_COST_ORG.RVN	

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–29 Cost Organizational Cube Derived Measures**

Physical Name	Logical Name	Definition
AC_YTD	Advertising Cost YTD	SUM(COM.AC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AC_LP	Advertising Cost Last Period	LAG(COM.AC, 1) OVER HIERARCHY ("TIME".HTBSNS)
AC_LY	Advertising Cost Last Year	LAG(COM.AC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–29 (Cont.) Cost Organizational Cube Derived Measures**

Physical Name	Logical Name	Definition
AC_LY_PCT_CHG	Advertising Cost % Change Last Year	LAG_VARIANCE_PERCENT(COM.AC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AC_YTD_LY	Advertising Cost YTD Last Year	LAG(COM.AC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AC_YTD_LY_PCT_CHG	Advertising Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.AC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CAC_YTD	Controlling Attrition Cost YTD	SUM(COM.CAC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CAC_LP	Controlling Attrition Cost Last Period	LAG(COM.CAC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CAC_LY	Controlling Attrition Cost Last Year	LAG(COM.CAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CAC_LY_PCT_CHG	Controlling Attrition Cost % Change Last Year	LAG_VARIANCE_PERCENT(COM.CAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CAC_YTD_LY	Controlling Attrition Cost YTD Last Year	LAG(COM.CAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CAC_YTD_LY_PCT_CHG	Controlling Attrition Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.CAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CB_YTD	Cost Budget YTD	SUM(COM.CB) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CB_LP	Cost Budget Last Period	LAG(COM.CB, 1) OVER HIERARCHY ("TIME".HTBSNS)
CB_LY	Cost Budget Last Year	LAG(COM.CB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CB_LY_PCT_CHG	Cost Budget % Change Last Year	LAG_VARIANCE_PERCENT(COM.CB, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CB_YTD_LY	Cost Budget YTD Last Year	LAG(COM.CB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CB_YTD_LY_PCT_CHG	Cost Budget YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.CB_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_YTD	Investment Cost YTD	SUM(COM.IC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
IC_LP	Investment Cost Last Period	LAG(COM.IC, 1) OVER HIERARCHY ("TIME".HTBSNS)
IC_LY	Investment Cost Last Year	LAG(COM.IC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_LY_PCT_CHG	Investment Cost % Change Last Year	LAG_VARIANCE_PERCENT(COM.IC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_YTD_LY	Investment Cost YTD Last Year	LAG(COM.IC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_YTD_LY_PCT_CHG	Investment Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.IC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)



**Table 9–29 (Cont.) Cost Organizational Cube Derived Measures**

Physical Name	Logical Name	Definition
OC_YTD	Operating Cost YTD	SUM(COM.OC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OC_LP	Operating Cost Last Period	LAG(COM.OC, 1) OVER HIERARCHY ("TIME".HTBSNS)
OC_LY	Operating Cost Last Year	LAG(COM.OC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OC_LY_PCT_CHG	Operating Cost % Change Last Year	LAG_VARIANCE_PERCENT(COM.OC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OC_YTD_LY	Operating Cost YTD Last Year	LAG(COM.OC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OC_YTD_LY_PCT_CHG	Operating Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.OC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OTRC_YTD	Other Cost YTD	SUM(COM.OTRC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OTRC_LP	Other Cost Last Period	LAG(COM.OTRC, 1) OVER HIERARCHY ("TIME".HTBSNS)
OTRC_LY	Other Cost Last Year	LAG(COM.OTRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OTRC_LY_PCT_CHG	Other Cost % Change Last Year	LAG_VARIANCE_PERCENT(COM.OTRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OTRC_YTD_LY	Other Cost YTD Last Year	LAG(COM.OTRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OTRC_YTD_LY_PCT_CHG	Other Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.OTRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RVN_YTD	Revenue YTD	SUM(COM.RVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
RVN_LP	Revenue Last Period	LAG(COM.RVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
RVN_LY	Revenue Last Year	LAG(COM.RVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RVN_LY_PCT_CHG	Revenue % Change Last Year	LAG_VARIANCE_PERCENT(COM.RVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RVN_YTD_LY	Revenue YTD Last Year	LAG(COM.RVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RVN_YTD_LY_PCT_CHG	Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.RVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TC_YTD	Total Cost YTD	SUM(COM.TC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TC_LP	Total Cost Last Period	LAG(COM.TC, 1) OVER HIERARCHY ("TIME".HTBSNS)
TC_LY	Total Cost Last Year	LAG(COM.TC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TC_LY_PCT_CHG	Total Cost % Change Last Year	LAG_VARIANCE_PERCENT(COM.TC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–29 (Cont.) Cost Organizational Cube Derived Measures**

Physical Name	Logical Name	Definition
TC_YTD_LY	Total Cost YTD Last Year	LAG(COM.TC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TC_YTD_LY_PCT_CHG	Total Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(COM.TC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_AC_ORG	Advertising Cost Share of Organization Parent	SHARE(COM.AC OF ORG.HCHAIN PARENT)
RANK_AC_ORG	Advertising Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.AC DESC NULLS LAST WITHIN PARENT)
SHR_CAC_ORG	Controlling Attrition Cost Share of Organization Parent	SHARE(COM.CAC OF ORG.HCHAIN PARENT)
RANK_CAC_ORG	Controlling Attrition Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.CAC DESC NULLS LAST WITHIN PARENT)
SHR_CB_ORG	Cost Budget Share of Organization Parent	SHARE(COM.CB OF ORG.HCHAIN PARENT)
RANK_CB_ORG	Cost Budget Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.CB DESC NULLS LAST WITHIN PARENT)
SHR_IC_ORG	Investment Cost Share of Organization Parent	SHARE(COM.IC OF ORG.HCHAIN PARENT)
RANK_IC_ORG	Investment Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.IC DESC NULLS LAST WITHIN PARENT)
SHR_OC_ORG	Operating Cost Share of Organization Parent	SHARE(COM.OC OF ORG.HCHAIN PARENT)
RANK_OC_ORG	Operating Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.OC DESC NULLS LAST WITHIN PARENT)
SHR_OTRC_ORG	Other Cost Share of Organization Parent	SHARE(COM.OTRC OF ORG.HCHAIN PARENT)
RANK_OTRC_ORG	Other Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.OTRC DESC NULLS LAST WITHIN PARENT)
SHR_RVN_ORG	Revenue Share of Organization Parent	SHARE(COM.RVN OF ORG.HCHAIN PARENT)
RANK_RVN_ORG	Revenue Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.RVN DESC NULLS LAST WITHIN PARENT)
SHR_TC_ORG	Total Cost Share of Organization Parent	SHARE(COM.TC OF ORG.HCHAIN PARENT)
RANK_TC_ORG	Total Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY COM.TC DESC NULLS LAST WITHIN PARENT)

## Cost Product Market Plan Cube

This Cube is used to store various cost values incurred by the carrier and are important from the analysis point of view such as subscriber acquisition cost, Subscriber retention cost, and so on.

### Physical Name: CCM

### Dimensions and Load Level

The fact data of Cost Product Market Plan Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–30 Cost Product Market Plan Cube Dimensions and Load Level**

Dimension Name	Load level
Time	Business Month
Customer Type	Customer Type
Product Market Plan	Product Market Plan

**Aggregation Order/Operator**

The Cost Product Market Plan Cube will be aggregated by the following order and operators on dimensions

**Table 9–31 Cost Product Market Plan Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Product Market Plan	Sum	3

**Base Measures**

The base measure of this data cube are.

**Table 9–32 Cost Product Market Plan Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
CA	Commission Amount	DWA_COST_CUST_MO.CMISN_AMT	Total commission paid to all channels
TC	Total Cost	DWA_COST_CUST_MO.TOT_COST	Total costs
SAC	Subscriber Acquisition Cost	DWA_COST_CUST_MO.SBCRBR_AQSTN_COST	Cost to acquire a new subscriber
SRC	Subscriber Retention Cost	DWA_COST_CUST_MO.SBCRBR_RTNTN_COST	Cost to retain customer
CCC	Call Center Cost	DWA_COST_CUST_MO.CALL_CNTR_COST	Call Center Cost
SC	Selling Costs	DWA_COST_CUST_MO.SLNG_COSTS	Selling Costs
OC	Operating Cost	DWA_COST_CUST_MO.OPERTNG_COST	Operating Cost
OTRC	Other Cost	DWA_COST_CUST_MO.OTHR_COST	Other Cost
NC	Network Cost	DWA_COST_CUST_MO.NTWK_COST	Network Cost
SCCC	Sim Card Cost Contract	DWA_COST_CUST_MO.SIM_CARD_COST_CNRT	Cost of SIM Cards due to Acquisition Contract.
SCCP	Sim Card Cost Prepay	DWA_COST_CUST_MO.SIM_CARD_COST_PREPY	Cost of SIM Cards due to Acquisition Prepay.
DMC	Dealer Marketing Contract	DWA_COST_CUST_MO.DLR_MKTG_CNRT	Cost of Contribution to Dealer' Marketing Cost Contract
DMP	Dealer Marketing Prepay	DWA_COST_CUST_MO.DLR_MKTG_PREPY	Cost of Contribution to Dealer's Marketing Costs Prepay
RHC	Retention Handset Cogs	DWA_COST_CUST_MO.RTNTN_HNDST_COGS	Cost of good sold (CoGS) of the Handsets given to Customer in Retention Contract

**Table 9–32 (Cont.) Cost Product Market Plan Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
AHC	Acquisition Handset Cogs	DWA_COST_CUST_MO.ACQSTN_HNDST_COGS	COGS Handset Customer Acquisition Subscriber
ACC	Acquisition Commission Contract	DWA_COST_CUST_MO.ACQSTN_CMISN_CNRT	Cost of Acquisition Commission Contract
ACP	Acquisition Commission Prepay	DWA_COST_CUST_MO.ACQSTN_CMISN_PREPY	Cost of Acquisition Commission Prepay.

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–33 Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
ACC_YTD	Acquisition Commission Contract YTD	SUM(CCM.ACC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ACC_LP	Acquisition Commission Contract LP	LAG(CCM.ACC, 1) OVER HIERARCHY ("TIME".HTBSNS)
ACC_LY	Acquisition Commission Contract Last Year	LAG(CCM.ACC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACC_LY_PCT_CHG	Acquisition Commission Contract % Change Last Year	LAG_VARIANCE_PERCENT(CCM.ACC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACC_YTD_LY	Acquisition Commission Contract YTD Last Year	LAG(CCM.ACC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACC_YTD_LY_PCT_CHG	Acquisition Commission Contract YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.ACC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACP_YTD	Acquisition Commission Prepay YTD	SUM(CCM.ACP) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ACP_LP	Acquisition Commission Prepay LP	LAG(CCM.ACP, 1) OVER HIERARCHY ("TIME".HTBSNS)
ACP_LY	Acquisition Commission Prepay Last Year	LAG(CCM.ACP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACP_LY_PCT_CHG	Acquisition Commission Prepay Change Last Year	LAG_VARIANCE_PERCENT(CCM.ACP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACP_YTD_LY	Acquisition Commission Prepay YTD Last Year	LAG(CCM.ACP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ACP_YTD_LY_PCT_CHG	Acquisition Commission Prepay YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.ACP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AHC_YTD	Acquisition Handset Cost YTD	SUM(CCM.AHC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AHC_LP	Acquisition Handset Cost LP	LAG(CCM.AHC, 1) OVER HIERARCHY ("TIME".HTBSNS)
AHC_LY	Acquisition Handset Cost Last Year	LAG(CCM.AHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–33 (Cont.) Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
AHC_LY_PCT_CHG	Acquisition Handset Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.AHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AHC_YTD_LY	Acquisition Handset Cost YTD Last Year	LAG(CCM.AHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AHC_YTD_LY_PCT_CHG	Acquisition Handset Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.AHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_YTD	Commission Amount YTD	SUM(CCM.CA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CA_LP	Commission Amount LP	LAG(CCM.CA, 1) OVER HIERARCHY ("TIME".HTBSNS)
CA_LY	Commission Amount Last Year	LAG(CCM.CA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_LY_PCT_CHG	Commission Amount % Change Last Year	LAG_VARIANCE_PERCENT(CCM.CA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_YTD_LY	Commission Amount YTD Last Year	LAG(CCM.CA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_YTD_LY_PCT_CHG	Commission Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.CA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCC_YTD	Call Center Cost YTD	SUM(CCM.CCC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CCC_LP	Call Center Cost LP	LAG(CCM.CCC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CCC_LY	Call Center Cost Last Year	LAG(CCM.CCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCC_LY_PCT_CHG	Call Center Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.CCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCC_YTD_LY	Call Center Cost YTD Last Year	LAG(CCM.CCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CCC_YTD_LY_PCT_CHG	Call Center Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.CCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DMC_YTD	Dealer Marketing Contract YTD	SUM(CCM.DMC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
DMC_LP	Dealer Marketing Contract LP	LAG(CCM.DMC, 1) OVER HIERARCHY ("TIME".HTBSNS)
DMC_LY	Dealer Marketing Contract Last Year	LAG(CCM.DMC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DMC_LY_PCT_CHG	Dealer Marketing Contract % Change Last Year	LAG_VARIANCE_PERCENT(CCM.DMC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DMC_YTD_LY	Dealer Marketing Contract % Change Last Year	LAG(CCM.DMC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DMC_YTD_LY_PCT_CHG	Dealer Marketing Contract YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.DMC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–33 (Cont.) Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
DMP_YTD	Dealer Marketing Prepay YTD	SUM(CCM.DMP) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
DMP_LP		LAG(CCM.DMP, 1) OVER HIERARCHY ("TIME".HTBSNS)
DMP_LY	Dealer Marketing Prepay Last Year	LAG(CCM.DMP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DMP_LY_PCT_CHG	Dealer Marketing Prepay % Change Last Year	LAG_VARIANCE_PERCENT(CCM.DMP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DMP_YTD_LY	Dealer Marketing Prepay YTD Last Year	LAG(CCM.DMP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DMP_YTD_LY_PCT_CHG	Dealer Marketing Prepay YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.DMP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NC_YTD	Network Cost YTD	SUM(CCM.NC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NC_LP	Network Cost LP	LAG(CCM.NC, 1) OVER HIERARCHY ("TIME".HTBSNS)
NC_LY	Network Cost Last Year	LAG(CCM.NC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NC_LY_PCT_CHG	Network Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.NC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NC_YTD_LY	Network Cost YTD Last Year	LAG(CCM.NC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NC_YTD_LY_PCT_CHG	Network Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.NC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OC_YTD	Operating Cost YTD	SUM(CCM.OC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OC_LP	Operating Cost LP	LAG(CCM.OC, 1) OVER HIERARCHY ("TIME".HTBSNS)
OC_LY	Operating Cost Last Year	LAG(CCM.OC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OC_LY_PCT_CHG	Operating Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.OC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OC_YTD_LY	Operating Cost YTD Last Year	LAG(CCM.OC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OC_YTD_LY_PCT_CHG	Operating Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.OC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OTRC_YTD	Other Cost YTD	SUM(CCM.OTRC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OTRC_LP	Other Cost LP	LAG(CCM.OTRC, 1) OVER HIERARCHY ("TIME".HTBSNS)
OTRC_LY	Other Cost Last Year	LAG(CCM.OTRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OTRC_LY_PCT_CHG	Other Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.OTRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–33 (Cont.) Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
OTRC_YTD_LY	Other Cost YTD Last Year	LAG(CCM.OTRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OTRC_YTD_LY_PCT_CHG	Other Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.OTRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RHC_YTD	Retention Handset Cost YTD	SUM(CCM.RHC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
RHC_LP	Retention Handset Cost LP	LAG(CCM.RHC, 1) OVER HIERARCHY ("TIME".HTBSNS)
RHC_LY	Retention Handset Cost Last Year	LAG(CCM.RHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RHC_LY_PCT_CHG	Retention Handset Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.RHC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RHC_YTD_LY	Retention Handset Cost YTD Last Year	LAG(CCM.RHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
RHC_YTD_LY_PCT_CHG	Retention Handset Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.RHC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SAC_YTD	Subscriber Acquisition Cost YTD	SUM(CCM.SAC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SAC_LP	Subscriber Acquisition Cost LP	LAG(CCM.SAC, 1) OVER HIERARCHY ("TIME".HTBSNS)
SAC_LY	Subscriber Acquisition Cost Last Year	LAG(CCM.SAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SAC_LY_PCT_CHG	Subscriber Acquisition Cost % Change Cost Last Year	LAG_VARIANCE_PERCENT(CCM.SAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SAC_YTD_LY	Subscriber Acquisition Cost YTD Last Year	LAG(CCM.SAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SAC_YTD_LY_PCT_CHG	Subscriber Acquisition Cost YTD % Change Cost Last Year	LAG_VARIANCE_PERCENT(CCM.SAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_YTD	Selling Cost YTD	SUM(CCM.SC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SC_LP	Selling Cost LP	LAG(CCM.SC, 1) OVER HIERARCHY ("TIME".HTBSNS)
SC_LY	Selling Cost Last Year	LAG(CCM.SC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_LY_PCT_CHG	Selling Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_YTD_LY	Selling Cost YTD Last Year	LAG(CCM.SC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SC_YTD_LY_PCT_CHG	Selling Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCC_YTD	Sim Card Cost Contract YTD	SUM(CCM.SCCC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)

**Table 9–33 (Cont.) Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
SCCC_LP	Sim Card Cost Contract LP	LAG(CCM.SCCC, 1) OVER HIERARCHY ("TIME".HTBSNS)
SCCC_LY	Sim Card Cost Contract Last Year	LAG(CCM.SCCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCC_LY_PCT_CHG	Sim Card Cost Contract % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SCCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCC_YTD_LY		LAG(CCM.SCCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCC_YTD_LY_PCT_CHG	Sim Card Cost Contract YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SCCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCP_YTD	Sim Card Cost Prepay YTD	SUM(CCM.SCCP) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SCCP_LP	Sim Card Cost Prepay LP	LAG(CCM.SCCP, 1) OVER HIERARCHY ("TIME".HTBSNS)
SCCP_LY	Sim Card Cost Prepay Last Year	LAG(CCM.SCCP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCP_LY_PCT_CHG	Sim Card Cost Prepay % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SCCP, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCP_YTD_LY	Sim Card Cost Prepay YTD Last Year	LAG(CCM.SCCP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SCCP_YTD_LY_PCT_CHG	Sim Card Cost Prepay YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SCCP_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SRC_YTD	Subscriber Retention Cost YTD	SUM(CCM.SRC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SRC_LP	Subscriber Retention Cost LP	LAG(CCM.SRC, 1) OVER HIERARCHY ("TIME".HTBSNS)
SRC_LY	Subscriber Retention Cost Last Year	LAG(CCM.SRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SRC_LY_PCT_CHG	Subscriber Retention Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SRC_YTD_LY	Subscriber Retention Cost YTD Last Year	LAG(CCM.SRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SRC_YTD_LY_PCT_CHG	Subscriber Retention Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.SRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TC_YTD	Total Cost YTD	SUM(CCM.TC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TC_LP	Total Cost LP	LAG(CCM.TC, 1) OVER HIERARCHY ("TIME".HTBSNS)
TC_LY	Total Cost Last Year	LAG(CCM.TC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TC_LY_PCT_CHG	Total Cost % Change Last Year	LAG_VARIANCE_PERCENT(CCM.TC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)



**Table 9–33 (Cont.) Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
TC_YTD_LY		LAG(CCM.TC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TC_YTD_LY_PCT_CHG	Total Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CCM.TC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_ACC_PMP	Acquisition Commission Contract Share of PMP Parent	SHARE(CCM.ACC OF PMP.HPMP PARENT)
RANK_ACC_PMP	Acquisition Commission Contract Share of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.ACC DESC NULLS LAST WITHIN PARENT)
SHR_ACC_CUSTYP	Acquisition Commission Contract Share of CUSTYP Parent	SHARE(CCM.ACC OF CUSTYP.HCUSTYP PARENT)
RANK_ACC_CUSTYP	Acquisition Commission Contract Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.ACC DESC NULLS LAST WITHIN PARENT)
SHR_ACP_PMP	Acquisition Commission Prepay Share of PMP Parent	SHARE(CCM.ACP OF PMP.HPMP PARENT)
RANK_ACP_PMP	Acquisition Commission Prepay Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.ACP DESC NULLS LAST WITHIN PARENT)
SHR_ACP_CUSTYP	Acquisition Commission Prepay Share of PMP Parent	SHARE(CCM.ACP OF CUSTYP.HCUSTYP PARENT)
RANK_ACP_CUSTYP	Acquisition Commission Prepay Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.ACP DESC NULLS LAST WITHIN PARENT)
SHR_AHC_PMP	Acquisition Handset Cost Share of PMP Parent	SHARE(CCM.AHC OF PMP.HPMP PARENT)
RANK_AHC_PMP	Acquisition Handset Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.AHC DESC NULLS LAST WITHIN PARENT)
SHR_AHC_CUSTYP	Acquisition Handset Cost Share of CUSTYP Parent	SHARE(CCM.AHC OF CUSTYP.HCUSTYP PARENT)
RANK_AHC_CUSTYP	Acquisition Handset Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.AHC DESC NULLS LAST WITHIN PARENT)
SHR_CA_PMP	Commission Amount Share of PMP Parent	SHARE(CCM.CA OF PMP.HPMP PARENT)
RANK_CA_PMP	Commission Amount Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.CA DESC NULLS LAST WITHIN PARENT)
SHR_CA_CUSTYP	Commission Amount Share of CUSTYP Parent	SHARE(CCM.CA OF CUSTYP.HCUSTYP PARENT)
RANK_CA_CUSTYP	Commission Amount Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.CA DESC NULLS LAST WITHIN PARENT)
SHR_CCC_PMP	Call Center Cost Share of PMP Parent	SHARE(CCM.CCC OF PMP.HPMP PARENT)
RANK_CCC_PMP	Call Center Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.CCC DESC NULLS LAST WITHIN PARENT)
SHR_CCC_CUSTYP	Call Center Cost Share of CUSTYP Parent	SHARE(CCM.CCC OF CUSTYP.HCUSTYP PARENT)
RANK_CCC_CUSTYP	Call Center Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.CCC DESC NULLS LAST WITHIN PARENT)
SHR_DMC_PMP	Dealer Marketing Contract Share of PMP Parent	SHARE(CCM.DMC OF PMP.HPMP PARENT)

**Table 9–33 (Cont.) Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
RANK_DMC_PMP	Dealer Marketing Contract Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.DMC DESC NULLS LAST WITHIN PARENT)
SHR_DMC_CUSTYP	Dealer Marketing Contract Share of CUSTYP Parent	SHARE(CCM.DMC OF CUSTYP.HCUSTYP PARENT)
RANK_DMC_CUSTYP	Dealer Marketing Contract Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.DMC DESC NULLS LAST WITHIN PARENT)
SHR_DMP_PMP	Dealer Marketing Prepay Share of PMP Parent	SHARE(CCM.DMP OF PMP.HPMP PARENT)
RANK_DMP_PMP	Dealer Marketing Prepay Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.DMP DESC NULLS LAST WITHIN PARENT)
SHR_DMP_CUSTYP	Dealer Marketing Prepay Share of CUSTYP Parent	SHARE(CCM.DMP OF CUSTYP.HCUSTYP PARENT)
RANK_DMP_CUSTYP	Dealer Marketing Prepay Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.DMP DESC NULLS LAST WITHIN PARENT)
SHR_NC_PMP	Network Cost Share of PMP Parent	SHARE(CCM.NC OF PMP.HPMP PARENT)
RANK_NC_PMP	Network Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.NC DESC NULLS LAST WITHIN PARENT)
SHR_NC_CUSTYP	Network Cost Share of CUSTYP Parent	SHARE(CCM.NC OF CUSTYP.HCUSTYP PARENT)
RANK_NC_CUSTYP	Network Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.NC DESC NULLS LAST WITHIN PARENT)
SHR_OC_PMP	Operating Cost Share of PMP Parent	SHARE(CCM.OC OF PMP.HPMP PARENT)
RANK_OC_PMP	Operating Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.OC DESC NULLS LAST WITHIN PARENT)
SHR_OC_CUSTYP	Operating Cost Share of CUSTYP Parent	SHARE(CCM.OC OF CUSTYP.HCUSTYP PARENT)
RANK_OC_CUSTYP	Operating Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.OC DESC NULLS LAST WITHIN PARENT)
SHR_OTRC_PMP	Other Cost Share of PMP Parent	SHARE(CCM.OTRC OF PMP.HPMP PARENT)
RANK_OTRC_PMP	Other Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.OTRC DESC NULLS LAST WITHIN PARENT)
SHR_OTRC_CUSTYP	Other Cost Share of CUSTYP Parent	SHARE(CCM.OTRC OF CUSTYP.HCUSTYP PARENT)
RANK_OTRC_CUSTYP	Other Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.OTRC DESC NULLS LAST WITHIN PARENT)
SHR_RHC_PMP	Retention Handset Cost Share of PMP Parent	SHARE(CCM.RHC OF PMP.HPMP PARENT)
RANK_RHC_PMP	Retention Handset Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.RHC DESC NULLS LAST WITHIN PARENT)
SHR_RHC_CUSTYP	Retention Handset Cost Share of CUSTYP Parent	SHARE(CCM.RHC OF CUSTYP.HCUSTYP PARENT)
RANK_RHC_CUSTYP	Retention Handset Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.RHC DESC NULLS LAST WITHIN PARENT)
SHR_SAC_PMP	Subscriber Acquisition Cost Share of PMP Parent	SHARE(CCM.SAC OF PMP.HPMP PARENT)
RANK_SAC_PMP	Subscriber Acquisition Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.SAC DESC NULLS LAST WITHIN PARENT)
SHR_SAC_CUSTYP	Subscriber Acquisition Cost Share of CUSTYP Parent	SHARE(CCM.SAC OF CUSTYP.HCUSTYP PARENT)

**Table 9–33 (Cont.) Cost Product Market Plan Derived Measures**

Physical Name	Logical Name	Definition
RANK_SAC_CUSTYP	Subscriber Acquisition Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.SAC DESC NULLS LAST WITHIN PARENT)
SHR_SC_PMP	Selling Costs Share of PMP Parent	SHARE(CCM.SC OF PMP.HPMP PARENT)
RANK_SC_PMP	Selling Costs Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.SC DESC NULLS LAST WITHIN PARENT)
SHR_SC_CUSTYP	Selling Costs Share of CUSTYP Parent	SHARE(CCM.SC OF CUSTYP.HCUSTYP PARENT)
RANK_SC_CUSTYP	Selling Costs Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.SC DESC NULLS LAST WITHIN PARENT)
SHR_SCCC_PMP	Sim Card Cost Contract Share of PMP Parent	SHARE(CCM.SCCC OF PMP.HPMP PARENT)
RANK_SCCC_PMP	Sim Card Cost Contract Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.SCCC DESC NULLS LAST WITHIN PARENT)
SHR_SCCC_CUSTYP	Sim Card Cost Contract Share of CUSTYP Parent	SHARE(CCM.SCCC OF CUSTYP.HCUSTYP PARENT)
RANK_SCCC_CUSTYP	Sim Card Cost Contract Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.SCCC DESC NULLS LAST WITHIN PARENT)
SHR_SCCP_PMP	Sim Card Cost Prepay Share of PMP Parent	SHARE(CCM.SCCP OF PMP.HPMP PARENT)
RANK_SCCP_PMP	Sim Card Cost Prepay Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.SCCP DESC NULLS LAST WITHIN PARENT)
SHR_SCCP_CUSTYP	Sim Card Cost Prepay Share of CUSTYP Parent	SHARE(CCM.SCCP OF CUSTYP.HCUSTYP PARENT)
RANK_SCCP_CUSTYP	Sim Card Cost Prepay Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.SCCP DESC NULLS LAST WITHIN PARENT)
SHR_SRC_PMP	Subscriber Retention Cost Share of PMP Parent	SHARE(CCM.SRC OF PMP.HPMP PARENT)
RANK_SRC_PMP	Subscriber Retention Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.SRC DESC NULLS LAST WITHIN PARENT)
SHR_SRC_CUSTYP	Subscriber Retention Cost Share of CUSTYP Parent	SHARE(CCM.SRC OF CUSTYP.HCUSTYP PARENT)
RANK_SRC_CUSTYP	Subscriber Retention Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.SRC DESC NULLS LAST WITHIN PARENT)
SHR_TC_PMP	Total Cost Share of PMP Parent	SHARE(CCM.TC OF PMP.HPMP PARENT)
RANK_TC_PMP	Total Cost Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CCM.TC DESC NULLS LAST WITHIN PARENT)
SHR_TC_CUSTYP	Total Cost Share of CUSTYP Parent	SHARE(CCM.TC OF CUSTYP.HCUSTYP PARENT)
RANK_TC_CUSTYP	Total Cost Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CCM.TC DESC NULLS LAST WITHIN PARENT)

## Customer Acquisition Cube

Customer count summary for each month and product.

**Physical Name: ACM**

### Dimensions and Load Level

The fact data of Customer Acquisition Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–34 Customer Acquisition Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Customer Type	Customer Type	
Product	Product	
Product Market Plan	Product Market Plan	
Geography	County	

**Aggregation Order/Operator**

The Customer Acquisition Cube will be aggregated by the following order and operators on dimensions.

**Table 9–35 Customer Acquisition Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Product	Sum	3
Product Market Plan	Sum	4
Geography	Sum	5

**Base Measures**

The base measure of this data cube are.

**Table 9–36 Customer Acquisition Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
PRVN	Planned Revenue	DWA_CUST_ACQSTN_SUMM_MO.PLND_RVN	Planned Revenue
AAC	Actual Acquisition Count	DWA_CUST_ACQSTN_SUMM_MO.ACT_ACQSTN_CNT	Actual Number of Acquisition
ARC	Actual Reactivations Count	DWA_CUST_ACQSTN_SUMM_MO.ACT_REACTVTNS_CNT	Actual Number of Reactivations
ADC	Actual Deactivations Count	DWA_CUST_ACQSTN_SUMM_MO.ACT_DEACTVTNS_CNT	Actual Number of Deactivations
ARVN	Actual Revenue	DWA_CUST_ACQSTN_SUMM_MO.ACT_RVN	Actual Revenue
PAC	Planned Acquisition Count	DWA_CUST_ACQSTN_SUMM_MO.PLND_ACQSTN_CNT	Planned Number of Acquisition
PRC	Planned Reactivations Count	DWA_CUST_ACQSTN_SUMM_MO.PLND_REACTVTNS_CNT	Planned Number of Reactivations
PDC	Planned Deactivations Count	DWA_CUST_ACQSTN_SUMM_MO.PLND_DEACTVTNS_CNT	Planned Number of Deactivations
ARLDC	Actual Reload Count	DWA_CUST_ACQSTN_SUMM_MO.ACT_RELOAD_CNT	Actual Number of Reload
PRLDC	Planned Reload Count	DWA_CUST_ACQSTN_SUMM_MO.PLND_RELOAD_CNT	Planned Number of Reload

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–37 Customer Acquisition Cube Derived Measures**

Physical Name	Logical Name	Definition
AAC_YTD	Actual Acquisition Count YTD	SUM(ACM.AAC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_AAC_PMP	Actual Acquisition Count Share of PMP Parent	SHARE(ACM.AAC OF PMP.HPMP PARENT)
SHR_AAC_GEO	Actual Acquisition Count Share of Geography Parent	SHARE(ACM.AAC OF GEO.HGEO PARENT)
SHR_AAC_PROD	Actual Acquisition Count Share of Product Parent	SHARE(ACM.AAC OF PROD.HPROD PARENT)
SHR_AAC_CUSTYP	Actual Acquisition Count Share of Customer Type Parent	SHARE(ACM.AAC OF CUSTYP.HCUSTYP PARENT)
RANK_AAC_PMP	Actual Acquisition Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.AAC DESC NULLS LAST WITHIN PARENT)
RANK_AAC_GEO	Actual Acquisition Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.AAC DESC NULLS LAST WITHIN PARENT)
RANK_AAC_PROD	Actual Acquisition Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.AAC DESC NULLS LAST WITHIN PARENT)
RANK_AAC_CUSTYP	Actual Acquisition Count Rank of Customer Type Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.AAC DESC NULLS LAST WITHIN PARENT)
AAC_LP	Actual Acquisition Count Last Period	LAG(ACM.AAC, 1) OVER HIERARCHY ("TIME".HTBSNS)
AAC_LY	Actual Acquisition Count Last Year	LAG(ACM.AAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AAC_YTD_LY	Actual Acquisition Count YTD Last Year	LAG(ACM.AAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AAC_YTD_LY_PCT_CHG	Actual Acquisition Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.AAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADC_YTD	Actual Deactivation Count YTD	SUM(ACM.ADC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_ADC_PMP	Actual Deactivation Count Share of PMP Parent	SHARE(ACM.ADC OF PMP.HPMP PARENT)
SHR_ADC_GEO	Actual Deactivation Count Share of Geography Parent	SHARE(ACM.ADC OF GEO.HGEO PARENT)
SHR_ADC_PROD	Actual Deactivation Count Share of Product Parent	SHARE(ACM.ADC OF PROD.HPROD PARENT)
SHR_ADC_CUSTYP	Actual Deactivation Count Share of CUSTYP Parent	SHARE(ACM.ADC OF CUSTYP.HCUSTYP PARENT)

**Table 9–37 (Cont.) Customer Acquisition Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_ADC_PMP	Actual Deactivation Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.ADC DESC NULLS LAST WITHIN PARENT)
RANK_ADC_GEO	Actual Deactivation Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.ADC DESC NULLS LAST WITHIN PARENT)
RANK_ADC_PROD	Actual Deactivation Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.ADC DESC NULLS LAST WITHIN PARENT)
RANK_ADC_CUSTYP	Actual Deactivation Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.ADC DESC NULLS LAST WITHIN PARENT)
ADC_LP	Actual Deactivation Count Last Period	LAG(ACM.ADC, 1) OVER HIERARCHY ("TIME".HTBSNS)
ADC_LY	Actual Deactivation Count Last Year	LAG(ACM.ADC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADC_YTD_LY	Actual Deactivation Count YTD Last Year	LAG(ACM.ADC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADC_YTD_LY_PCT_CHG	Actual Deactivation Count YTD % change Last Year	LAG_VARIANCE_PERCENT(ACM.ADC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARC_YTD	Actual Reactivation Count YTD	SUM(ACM.ARC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_ARC_PMP	Actual Reactivation Count Share of PMP Parent	SHARE(ACM.ARC OF PMP.HPMP PARENT)
SHR_ARC_GEO	Actual Reactivation Count Share of Geography Parent	SHARE(ACM.ARC OF GEO.HGEO PARENT)
SHR_ARC_PROD	Actual Reactivation Count Share of Product Parent	SHARE(ACM.ARC OF PROD.HPROD PARENT)
SHR_ARC_CUSTYP	Actual Reactivation Count Share of CUSTYP Parent	SHARE(ACM.ARC OF CUSTYP.HCUSTYP PARENT)
RANK_ARC_PMP	Actual Reactivation Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.ARC DESC NULLS LAST WITHIN PARENT)
RANK_ARC_GEO	Actual Reactivation Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.ARC DESC NULLS LAST WITHIN PARENT)
RANK_ARC_PROD	Actual Reactivation Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.ARC DESC NULLS LAST WITHIN PARENT)
RANK_ARC_CUSTYP	Actual Reactivation Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.ARC DESC NULLS LAST WITHIN PARENT)
ARC_LP	Actual Reactivation Count Last Period	LAG(ACM.ARC, 1) OVER HIERARCHY ("TIME".HTBSNS)
ARC_LY	Actual Reactivation Count Last Year	LAG(ACM.ARC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARC_YTD_LY	Actual Reactivation Count YTD Last Year	LAG(ACM.ARC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–37 (Cont.) Customer Acquisition Cube Derived Measures**

Physical Name	Logical Name	Definition
ARC_YTD_LY_PCT_CHG	Actual Reactivation Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.ARC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARLDC_YTD	Actual Reload Count YTD	SUM(ACM.ARLDC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_ARLDC_PMP	Actual Reload Count Share of PMP Parent	SHARE(ACM.ARLDC OF PMP.HPMP PARENT)
SHR_ARLDC_GEO	Actual Reload Count Share of Geography Parent	SHARE(ACM.ARLDC OF GEO.HGEO PARENT)
SHR_ARLDC_PROD	Actual Reload Count Share of Product Parent	SHARE(ACM.ARLDC OF PROD.HPROD PARENT)
SHR_ARLDC_CUSTYP	Actual Reload Count Share of CUSTYP Parent	SHARE(ACM.ARLDC OF CUSTYP.HCUSTYP PARENT)
RANK_ARLDC_PMP	Actual Reload Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.ARLDC DESC NULLS LAST WITHIN PARENT)
RANK_ARLDC_GEO	Actual Reload Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.ARLDC DESC NULLS LAST WITHIN PARENT)
RANK_ARLDC_PROD	Actual Reload Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.ARLDC DESC NULLS LAST WITHIN PARENT)
RANK_ARLDC_CUSTYP	Actual Reload Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.ARLDC DESC NULLS LAST WITHIN PARENT)
ARLDC_LP	Actual Reload Count Last Period	LAG(ACM.ARLDC, 1) OVER HIERARCHY ("TIME".HTBSNS)
ARLDC_LY	Actual Reload Count Last Year	LAG(ACM.ARLDC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARLDC_YTD_LY	Actual Reload Count YTD Last Year	LAG(ACM.ARLDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARLDC_YTD_LY_PCT_CHG	Actual Reload Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.ARLDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARVN_YTD	Actual Revenue YTD	SUM(ACM.ARVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_ARVN_PMP	Actual Reload Count Share of PMP Parent	SHARE(ACM.ARVN OF PMP.HPMP PARENT)
SHR_ARVN_GEO	Actual Reload Count Share of Geography Parent	SHARE(ACM.ARVN OF GEO.HGEO PARENT)
SHR_ARVN_PROD	Actual Reload Count Share of Product Parent	SHARE(ACM.ARVN OF PROD.HPROD PARENT)
SHR_ARVN_CUSTYP	Actual Reload Count Share of CUSTYP Parent	SHARE(ACM.ARVN OF CUSTYP.HCUSTYP PARENT)
RANK_ARVN_PMP	Actual Reload Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.ARVN DESC NULLS LAST WITHIN PARENT)
RANK_ARVN_GEO	Actual Reload Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.ARVN DESC NULLS LAST WITHIN PARENT)
RANK_ARVN_PROD	Actual Reload Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.ARVN DESC NULLS LAST WITHIN PARENT)

**Table 9–37 (Cont.) Customer Acquisition Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_ARVN_CUSTYP	Actual Reload Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.ARVN DESC NULLS LAST WITHIN PARENT)
ARVN_LP	Actual Reload Count Last Period	LAG(ACM.ARVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
ARVN_LY	Actual Reload Count Last Year	LAG(ACM.ARVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARVN_YTD_LY	Actual Reload Count YTD Last Year	LAG(ACM.ARVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARVN_YTD_LY_PCT_CHG	Actual Reload Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.ARVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAC_YTD	Planned Acquisition Count YTD	SUM(ACM.PAC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PAC_PMP	Planned Acquisition Count Share of PMP Parent	SHARE(ACM.PAC OF PMP.HPMP PARENT)
SHR_PAC_GEO	Planned Acquisition Count Share of Geography Parent	SHARE(ACM.PAC OF GEO.HGEO PARENT)
SHR_PAC_PROD	Planned Acquisition Count Share of Product Parent	SHARE(ACM.PAC OF PROD.HPROD PARENT)
SHR_PAC_CUSTYP	Planned Acquisition Count Share of CUSTYP Parent	SHARE(ACM.PAC OF CUSTYP.HCUSTYP PARENT)
RANK_PAC_PMP	Planned Acquisition Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.PAC DESC NULLS LAST WITHIN PARENT)
RANK_PAC_GEO	Planned Acquisition Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.PAC DESC NULLS LAST WITHIN PARENT)
RANK_PAC_PROD	Planned Acquisition Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.PAC DESC NULLS LAST WITHIN PARENT)
RANK_PAC_CUSTYP	Planned Acquisition Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.PAC DESC NULLS LAST WITHIN PARENT)
PAC_LP	Planned Acquisition Count Last Period	LAG(ACM.PAC, 1) OVER HIERARCHY ("TIME".HTBSNS)
PAC_LY	Planned Acquisition Count Last Year	LAG(ACM.PAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAC_YTD_LY	Planned Acquisition Count YTD Last Year	LAG(ACM.PAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PAC_YTD_LY_PCT_CHG	Planned Acquisition Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.PAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PDC_YTD	Planned Deactivations Count YTD	SUM(ACM.PDC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PDC_PMP	Planned Deactivations Count Share of PMP Parent	SHARE(ACM.PDC OF PMP.HPMP PARENT)



**Table 9–37 (Cont.) Customer Acquisition Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_PDC_GEO	Planned Deactivations Count Share of Geography Parent	SHARE(ACM.PDC OF GEO.HGEO PARENT)
SHR_PDC_PROD	Planned Deactivations Count Share of Product Parent	SHARE(ACM.PDC OF PROD.HPROD PARENT)
SHR_PDC_CUSTYP	Planned Deactivations Count Share of CUSTYP Parent	SHARE(ACM.PDC OF CUSTYP.HCUSTYP PARENT)
RANK_PDC_PMP	Planned Deactivations Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.PDC DESC NULLS LAST WITHIN PARENT)
RANK_PDC_GEO	Planned Deactivations Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.PDC DESC NULLS LAST WITHIN PARENT)
RANK_PDC_PROD	Planned Deactivations Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.PDC DESC NULLS LAST WITHIN PARENT)
RANK_PDC_CUSTYP	Planned Deactivations Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.PDC DESC NULLS LAST WITHIN PARENT)
PDC_LP	Planned Deactivations Count Last Period	LAG(ACM.PDC, 1) OVER HIERARCHY ("TIME".HTBSNS)
PDC_LY	Planned Deactivations Count Last Year	LAG(ACM.PDC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PDC_YTD_LY	Planned Deactivations Count YTD Last Year	LAG(ACM.PDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PDC_YTD_LY_PCT_ CHG	Planned Deactivations Count YTD % change Last Year	LAG_VARIANCE_PERCENT(ACM.PDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRC_YTD	Planned Reactivations Count YTD	SUM(ACM.PRC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PRC_PMP	Planned Reactivations Count Share of PMP Parent	SHARE(ACM.PRC OF PMP.HPMP PARENT)
SHR_PRC_GEO	Planned Reactivations Count Share of Geography Parent	SHARE(ACM.PRC OF GEO.HGEO PARENT)
SHR_PRC_PROD	Planned Reactivations Count Share of Product Parent	SHARE(ACM.PRC OF PROD.HPROD PARENT)
SHR_PRC_CUSTYP	Planned Reactivations Count Share of CUSTYP Parent	SHARE(ACM.PRC OF CUSTYP.HCUSTYP PARENT)
RANK_PRC_PMP	Planned Reactivations Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.PRC DESC NULLS LAST WITHIN PARENT)
RANK_PRC_GEO	Planned Reactivations Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.PRC DESC NULLS LAST WITHIN PARENT)
RANK_PRC_PROD	Planned Reactivations Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.PRC DESC NULLS LAST WITHIN PARENT)

**Table 9–37 (Cont.) Customer Acquisition Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_PRC_CUSTYP	Planned Reactivations Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.PRC DESC NULLS LAST WITHIN PARENT)
PRC_LP	Planned Reactivations Count Last Period	LAG(ACM.PRC, 1) OVER HIERARCHY ("TIME".HTBSNS)
PRC_LY	Planned Reactivations Count Last Year	LAG(ACM.PRC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRC_YTD_LY	Planned Reactivations Count YTD Last Year	LAG(ACM.PRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRC_YTD_LY_PCT_CHG	Planned Reactivations Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.PRC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRLDC_YTD	Planned Reload Count YTD	SUM(ACM.PRLDC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PRLDC_PMP	Planned Reload Count Share of PMP Parent	SHARE(ACM.PRLDC OF PMP.HPMP PARENT)
SHR_PRLDC_GEO	Planned Reload Count Share of Geography Parent	SHARE(ACM.PRLDC OF GEO.HGEO PARENT)
SHR_PRLDC_PROD	Planned Reload Count Share of Product Parent	SHARE(ACM.PRLDC OF PROD.HPROD PARENT)
SHR_PRLDC_CUSTYP	Planned Reload Count Share of CUSTYP Parent	SHARE(ACM.PRLDC OF CUSTYP.HCUSTYP PARENT)
RANK_PRLDC_PMP	Planned Reload Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.PRLDC DESC NULLS LAST WITHIN PARENT)
RANK_PRLDC_GEO	Planned Reload Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.PRLDC DESC NULLS LAST WITHIN PARENT)
RANK_PRLDC_PROD	Planned Reload Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.PRLDC DESC NULLS LAST WITHIN PARENT)
RANK_PRLDC_CUSTYP	Planned Reload Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.PRLDC DESC NULLS LAST WITHIN PARENT)
PRLDC_LP	Planned Reload Count Last Period	LAG(ACM.PRLDC, 1) OVER HIERARCHY ("TIME".HTBSNS)
PRLDC_LY	Planned Reload Count Last Year	LAG(ACM.PRLDC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRLDC_YTD_LY	Planned Reload Count YTD Last Year	LAG(ACM.PRLDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRLDC_YTD_LY_PCT_CHG	Planned Reload Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.PRLDC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRVN_YTD	Planned Revenue YTD	SUM(ACM.PRVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_PRVN_PMP	Planned Revenue Share of PMP Parent	SHARE(ACM.PRVN OF PMP.HPMP PARENT)
SHR_PRVN_GEO	Planned Revenue Share of Geography Parent	SHARE(ACM.PRVN OF GEO.HGEO PARENT)
SHR_PRVN_PROD	Planned Revenue Share of Product Parent	SHARE(ACM.PRVN OF PROD.HPROD PARENT)

**Table 9–37 (Cont.) Customer Acquisition Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_PRVN_CUSTYP	Planned Revenue Share of CUSTYP Parent	SHARE(ACM.PRVN OF CUSTYP.HCUSTYP PARENT)
RANK_PRVN_PMP	Planned Revenue Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ACM.PRVN DESC NULLS LAST WITHIN PARENT)
RANK_PRVN_GEO	Planned Revenue Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ACM.PRVN DESC NULLS LAST WITHIN PARENT)
RANK_PRVN_PROD	Planned Revenue Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ACM.PRVN DESC NULLS LAST WITHIN PARENT)
RANK_PRVN_CUSTYP	Planned Revenue Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ACM.PRVN DESC NULLS LAST WITHIN PARENT)
PRVN_LP	Planned Revenue Last Period	LAG(ACM.PRVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
PRVN_LY	Planned Revenue Last Year	LAG(ACM.PRVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRVN_YTD_LY	Planned Revenue YTD Last Year	LAG(ACM.PRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PRVN_YTD_LY_PCT_CHG	Planned Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(ACM.PRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

## External Debt Collection Cube

This cube stores the summary of payment and collection by external collector.

**Physical Name: EDCM**

### Dimensions and Load Level

The fact data of External Debt Collection Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–38 External Debt Collection Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Collection Agency	Payment Channel	
Organization	Organization Business Unit	

### Aggregation Order/Operator

The External Debt Collection Cube will be aggregated by the following order and operators on dimensions.

**Table 9–39 External Debt CollectionCube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Collection Agency	Sum	2
Organization	Sum	3

### Base Measures

The base measure of this data cube are:

**Table 9–40 External Debt Collection Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
PPC	Promised Payment Count	DWA_EXTRNL_DEBT_COLLCTN_MO.PRMS_PYMT_CNT	
PCC	Payment Collected Count	DWA_EXTRNL_DEBT_COLLCTN_MO.PYMT_COLCTD_CNT	
TAC	Total Assignment Count	DWA_EXTRNL_DEBT_COLLCTN_MO.TOT_ASGN_CNT	
WC	Waiving Count	DWA_EXTRNL_DEBT_COLLCTN_MO.WVNG_CNT	
PNCC1	Pending Collection Count	DWA_EXTRNL_DEBT_COLLCTN_MO.PNDNG_COLLCTN_CNT	Count of pending collection.
WA	Waiving Amount	DWA_EXTRNL_DEBT_COLLCTN_MO.WVNG_AMT	
PCA	Payment Collected Amount	DWA_EXTRNL_DEBT_COLLCTN_MO.PYMT_COLCTD_AMT	
PA	Penalty Amount	DWA_EXTRNL_DEBT_COLLCTN_MO.PNLTY_AMT	

**Derived Measures**

The possible derived measure of this data cube are

**Table 9–41 External Debt Collection Cube Derived Measures**

Physical Name	Logical Name	Definition
PA_YTD	Penalty Amount YTD	SUM(EDCM.PA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
PA_LP	Penalty Amount Last Period	LAG(EDCM.PA, 1) OVER HIERARCHY ("TIME".HTBSNS)
PA_LY	Penalty Amount Last Year	LAG(EDCM.PA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PA_LY_PCT_CHG	Penalty Amount Last Year	LAG_VARIANCE_PERCENT(EDCM.PA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PA_YTD_LY	Penalty Amount YTD Last Year	LAG(EDCM.PA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PA_YTD_LY_PCT_CHG	Penalty Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.PA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PCA_YTD	Payment Collected Amount YTD	SUM(EDCM.PCA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
PCA_LP	Payment Collected Amount Last Period	LAG(EDCM.PCA, 1) OVER HIERARCHY ("TIME".HTBSNS)
PCA_LY	Payment Collected Amount Last Year	LAG(EDCM.PCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PCA_LY_PCT_CHG	Payment Collected Amount % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.PCA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PCA_YTD_LY	Payment Collected Amount YTD Last Year	LAG(EDCM.PCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PCA_YTD_LY_PCT_CHG	Payment Collected Amount YTD % Changes Last Year	LAG_VARIANCE_PERCENT(EDCM.PCA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–41 (Cont.) External Debt Collection Cube Derived Measures**

<b>Physical Name</b>	<b>Logical Name</b>	<b>Definition</b>
PCC_YTD	Payment Collected Count YTD	SUM(EDCM.PCC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
PCC_LP	Payment Collected Count Last Period	LAG(EDCM.PCC, 1) OVER HIERARCHY ("TIME".HTBSNS)
PCC_LY	Payment Collected Count Last Year	LAG(EDCM.PCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PCC_LY_PCT_CHG	Payment Collected Count % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.PCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PCC_YTD_LY	Payment Collected Count YTD Last Year	LAG(EDCM.PCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PCC_YTD_LY_PCT_CHG	Payment Collected Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.PCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PPC_YTD	Promised Payment Count YTD	SUM(EDCM.PPC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
PPC_LP	Promised Payment Count Last Period	LAG(EDCM.PPC, 1) OVER HIERARCHY ("TIME".HTBSNS)
PPC_LY	Promised Payment Count Last Year	LAG(EDCM.PPC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PPC_LY_PCT_CHG	Promised Payment Count % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.PPC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PPC_YTD_LY	Promised Payment Count YTD Last Year	LAG(EDCM.PPC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
PPC_YTD_LY_PCT_CHG	Promised Payment Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.PPC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TAC_YTD	Total Assignment Count YTD	SUM(EDCM.TAC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TAC_LP	Total Assignment Count Last Period	LAG(EDCM.TAC, 1) OVER HIERARCHY ("TIME".HTBSNS)
TAC_LY	Total Assignment Count Last Year	LAG(EDCM.TAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TAC_LY_PCT_CHG	Total Assignment Count % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.TAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TAC_YTD_LY	Total Assignment Count YTD Last Year	LAG(EDCM.TAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TAC_YTD_LY_PCT_CHG	Total Assignment Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.TAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
WA_YTD	Waiving Amount YTD	SUM(EDCM.WA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
WA_LP	Waiving Amount Last Period	LAG(EDCM.WA, 1) OVER HIERARCHY ("TIME".HTBSNS)
WA_LY	Waiving Amount Last Year	LAG(EDCM.WA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–41 (Cont.) External Debt Collection Cube Derived Measures**

Physical Name	Logical Name	Definition
WA_LY_PCT_CHG	Waiving Amount % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.WA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
WA_YTD_LY	Waiving Amount YTD Last Year	LAG(EDCM.WA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
WA_YTD_LY_PCT_CHG	Waiving Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(EDCM.WA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_PA_ORG	Penalty Amount Share Of Organization Parent	SHARE(EDCM.PA OF ORG.HCHAIN PARENT)
RANK_PA_ORG	Penalty Amount Rank Of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY EDCM.PA DESC NULLS LAST WITHIN PARENT)
SHR_PCA_ORG	Payment Collected Amount Share Of Organization Parent	SHARE(EDCM.PCA OF ORG.HCHAIN PARENT)
RANK_PCA_ORG	Payment Collected Amount Rank Of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY EDCM.PCA DESC NULLS LAST WITHIN PARENT)
SHR_PCC_ORG	Payment Collected Count Share Of Organization Parent	SHARE(EDCM.PCC OF ORG.HCHAIN PARENT)
RANK_PCC_ORG	Payment Collected Count Rank Of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY EDCM.PCC DESC NULLS LAST WITHIN PARENT)
SHR_PPC_ORG	Promised Payment Count Share Of Organization Parent	SHARE(EDCM.PPC OF ORG.HCHAIN PARENT)
RANK_PPC_ORG	Promised Payment Count Rank Of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY EDCM.PPC DESC NULLS LAST WITHIN PARENT)
SHR_TAC_ORG	Total Assignment Count Share Of Organization Parent	SHARE(EDCM.TAC OF ORG.HCHAIN PARENT)
RANK_TAC_ORG	Total Assignment Count Rank Of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY EDCM.TAC DESC NULLS LAST WITHIN PARENT)
SHR_WA_ORG	Waiving Count Share Of Organization Parent	SHARE(EDCM.WA OF ORG.HCHAIN PARENT)
RANK_WA_ORG	Waiving Amount Rank Of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY EDCM.WA DESC NULLS LAST WITHIN PARENT)
SHR_WC_ORG	Waiving Count Share Of Organization Parent	SHARE(EDCM.WC OF ORG.HCHAIN PARENT)
RANK_WC_ORG	Waiving Count Rank Of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY EDCM.WC DESC NULLS LAST WITHIN PARENT)
SHR_PA_CAGNCY	Penalty Amount Share Of CAGNCY Parent	SHARE(EDCM.PA OF CAGNCY.HCAGNCY PARENT)
RANK_PA_CAGNCY	Penalty Amount Rank Of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY EDCM.PA DESC NULLS LAST WITHIN PARENT)
SHR_PCA_CAGNCY	Payment Collected Amount Share Of CAGNCY Parent	SHARE(EDCM.PCA OF CAGNCY.HCAGNCY PARENT)
RANK_PCA_CAGNCY	Payment Collected Amount Rank Of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY EDCM.PCA DESC NULLS LAST WITHIN PARENT)

**Table 9–41 (Cont.) External Debt Collection Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_PCC_CAGNCY	Payment Collected Count Share Of CAGNCY Parent	SHARE(EDCM.PCC OF CAGNCY.HCAGNCY PARENT)
RANK_PCC_CAGNCY	Payment Collected Count Rank Of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY EDCM.PCC DESC NULLS LAST WITHIN PARENT)
SHR_PPC_CAGNCY	Promised Payment Count Share Of CAGNCY Parent	SHARE(EDCM.PPC OF CAGNCY.HCAGNCY PARENT)
RANK_PPC_CAGNCY	Promised Payment Count Rank Of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY EDCM.PPC DESC NULLS LAST WITHIN PARENT)
SHR_TAC_CAGNCY	Total Assignment Count Share Of CAGNCY Parent	SHARE(EDCM.TAC OF CAGNCY.HCAGNCY PARENT)
RANK_TAC_CAGNCY	Total Assignment Count Rank Of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY EDCM.TAC DESC NULLS LAST WITHIN PARENT)
SHR_WA_CAGNCY	Waiving Amount Share Of CAGNCY Parent	SHARE(EDCM.WA OF CAGNCY.HCAGNCY PARENT)
RANK_WA_CAGNCY	Waiving Amount Rank Of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY EDCM.WA DESC NULLS LAST WITHIN PARENT)
SHR_WC_CAGNCY	Waiving Count Share Of CAGNCY Parent	SHARE(EDCM.WC OF CAGNCY.HCAGNCY PARENT)
RANK_WC_CAGNCY	Waiving Count Rank Of CAGNCY Parent	RANK() OVER HIERARCHY (CAGNCY.HCAGNCY ORDER BY EDCM.WC DESC NULLS LAST WITHIN PARENT)
EOP_PNCC	EOP Pending Collection Count	OLAP_DML_EXPRESSION('EDCM_PNCC1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_PNCC_LY	EOP Pending Collection Count Last Year	LAG(EDCM.EOP_PNCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_PNCC_LY_PCT_CHG	EOP Pending Collection Count % Chg Last Year	LAG_VARIANCE_PERCENT(EDCM.EOP_PNCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

## Handset Stock Cube

Representatives handle the sales to the VIP, or direct customers, that is, they personally visit the customers and sell the products and services to them.

For this kind of customer, a VIP with possibly a specific loyalty program, a certain number of handsets may be reserved, considering the possible customer order. This is the "actual stock". Additionally, when a number of handsets are reserved for demos or displays to customers, these are the "display stock". The information about this stock is maintained in the Stock Fact. More generally, this cube could handle the global handset stock or any terminal of choice (with some adaptation of the Intra-ETL feeding this cube)."

**Physical Name: HSKM**

### Dimensions and Load Level

The fact data of Handset Stock Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–42 Handset Stock Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Sales Channel	Sales Channel	
Handset Model	Handset Model	

**Aggregation Order/Operator**

The Handset Stock Cube will be aggregated by the following order and operators on dimensions

**Table 9–43 Handset Stock Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Sales Channel	Sum	2
Handset Model	Sum	3

**Base Measures**

The base measure of this data cube are.

**Table 9–44 Handset Stock Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
DSTK1	Display Stock	DWA_HNDST_STCK_MO.DSPLY_STCK	Number of handsets for display.
ASTK1	Actual Stock	DWA_HNDST_STCK_MO.ACT_STCK	Number of handsets in stock.
HCNT	Handset Sale Count	DWA_HNDST_STCK_MO.HNDST_SL_CNT	
HSA	Handset Sale Amount	DWA_HNDST_STCK_MO.HNDST_SL_AMT	

**Derived Measures**

The possible derived measure of this data cube are.

**Table 9–45 Handset Stock Cube Derived Measures**

Physical Name	Logical Name	Definition
EOP_ASTK	EOP Actual Stock	OLAP_DML_EXPRESSION('HSMK_ASTK1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_DSTK	EOP Display Stock	OLAP_DML_EXPRESSION('HSMK_DSTK1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
HCNT_YTD	Handset Sale Count YTD	SUM(HSKM.HCNT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
HCNT_LP	Handset Sale Count Last Period	LAG(HSKM.HCNT, 1) OVER HIERARCHY ("TIME".HTBSNS)
HCNT_LY	Handset Sale Count Last Year	LAG(HSKM.HCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HCNT_LY_PCT_CHG	Handset Sale Count % Change Last Year	LAG_VARIANCE_PERCENT(HSKM.HCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HCNT_YTD_LY	Handset Sale Count YTD Last Year	LAG(HSKM.HCNT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)



**Table 9–45 (Cont.) Handset Stock Cube Derived Measures**

Physical Name	Logical Name	Definition
HCNT_YTD_LY_PCT_CHG	Handset Sale Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(HSKM.HCNT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HSA_YTD	Handset Sale Amount YTD	SUM(HSKM.HSA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
HSA_LP	Handset Sale Amount Last Period	LAG(HSKM.HSA, 1) OVER HIERARCHY ("TIME".HTBSNS)
HSA_LY	Handset Sale Amount Last Year	LAG(HSKM.HSA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HSA_LY_PCT_CHG	Handset Sale Amount % Change Last Year	LAG_VARIANCE_PERCENT(HSKM.HSA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HSA_YTD_LY	Handset Sale Amount YTD Last Year	LAG(HSKM.HSA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
HSA_YTD_LY_PCT_CHG	Handset Sale Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(HSKM.HSA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_ASTK_LY	EOP Actual Stock Last Year	LAG(HSKM.EOP_ASTK, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_ASTK_LY_PCT_CHG	EOP Actual Stock % Chg Last Year	LAG_VARIANCE_PERCENT(HSKM.EOP_ASTK, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_DSTK_LY	EOP Display Stock Last Year	LAG(HSKM.EOP_DSTK, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_DSTK_LY_PCT_CHG	EOP Display Stock % Chg Last Year	LAG_VARIANCE_PERCENT(HSKM.EOP_DSTK, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_EOP_ASTK_SLCHNL	EOP Actual Stock Share Of SLCHNL Parent	SHARE(HSKM.EOP_ASTK OF SLCHNL.HSLCHNL PARENT)
RANK_EOP_ASTK_SLCHNL	EOP Actual Stock Rank Of SLCHNL Parent	RANK() OVER HIERARCHY (SLCHNL.HSLCHNL ORDER BY HSKM.EOP_ASTK DESC NULLS LAST WITHIN PARENT)
SHR_EOP_ASTK_HSMDL	EOP Actual Stock Share Of HSMDL Parent	SHARE(HSKM.EOP_ASTK OF HSMDL.HHSMDL PARENT)
RANK_EOP_ASTK_HSMDL	EOP Actual Stock Rank Of HSMDL Parent	RANK() OVER HIERARCHY (HSMDL.HHSMDL ORDER BY HSKM.EOP_ASTK DESC NULLS LAST WITHIN PARENT)
SHR_EOP_DSTK_SLCHNL	EOP Display Stock Share Of SLCHNL Parent	SHARE(HSKM.EOP_DSTK OF SLCHNL.HSLCHNL PARENT)
RANK_EOP_DSTK_SLCHNL	EOP Display Stock Rank Of SLCHNL Parent	RANK() OVER HIERARCHY (SLCHNL.HSLCHNL ORDER BY HSKM.EOP_DSTK DESC NULLS LAST WITHIN PARENT)
SHR_EOP_DSTK_HSMDL	EOP Display Stock Share Of HSMDL Parent	SHARE(HSKM.EOP_DSTK OF HSMDL.HHSMDL PARENT)
RANK_EOP_DSTK_HSMDL	EOP Display Stock Rank Of HSMDL Parent	RANK() OVER HIERARCHY (HSMDL.HHSMDL ORDER BY HSKM.EOP_DSTK DESC NULLS LAST WITHIN PARENT)
SHR_HCNT_SLCHNL	Handset Sale Count Share Of SLCHNL Parent	SHARE(HSKM.HCNT OF SLCHNL.HSLCHNL PARENT)

**Table 9–45 (Cont.) Handset Stock Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_HCNT_SLCHNL	Handset Sale Count Rank Of SLCHNL Parent	RANK() OVER HIERARCHY (SLCHNL.HSLCHNL ORDER BY HSKM.HCNT DESC NULLS LAST WITHIN PARENT)
SHR_HCNT_HSMDL	Handset Sale Count Share Of HSMDL Parent	SHARE(HSKM.HCNT OF HSMDL.HHSMDL PARENT)
RANK_HCNT_HSMDL	Handset Sale Count Rank Of HSMDL Parent	RANK() OVER HIERARCHY (HSMDL.HHSMDL ORDER BY HSKM.HCNT DESC NULLS LAST WITHIN PARENT)
SHR_HSA_SLCHNL	Handset Sale Amount Share Of SLCHNL Parent	SHARE(HSKM.HSA OF SLCHNL.HSLCHNL PARENT)
RANK_HSA_SLCHNL	Handset Sale Amount Rank Of SLCHNL Parent	RANK() OVER HIERARCHY (SLCHNL.HSLCHNL ORDER BY HSKM.HSA DESC NULLS LAST WITHIN PARENT)
SHR_HSA_HSMDL	Handset Sale Amount Share Of HSMDL Parent	SHARE(HSKM.HSA OF HSMDL.HHSMDL PARENT)
RANK_HSA_HSMDL	Handset Sale Amount Rank Of HSMDL Parent	RANK() OVER HIERARCHY (HSMDL.HHSMDL ORDER BY HSKM.HSA DESC NULLS LAST WITHIN PARENT)
EOP_ASTK_FCST	EOP Actual Stock Forecast	HSKM_FCST.EOP_ASTK_FCST
HCNT_FCST	Handset Sales Count Forecast	HSKM_FCST.HCNT_FCST

## Invoice Adjustment Cube

This cube is to store all adjustment made on the invoices. In current design, Adjustment ID & Invoices code serve the primary, therefore, 1 adjustment could make change to multiple invoices.

**Physical Name: IAM**

### Dimensions and Load Level

The fact data of Invoice Adjustment Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–46 Invoice Adjustment Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Customer Type	Customer Type	
Invoice Adjustment Reason	Invoice Adjustment Reason	
Invoice Adjustment Type	Invoice Adjustment Type	
Promotion	Promotion	
Product	Product	
Organization	Organization Business Unit	
Geography	County	

**Aggregation Order/Operator**

The Invoice Adjustment Cube will be aggregated by the following order and operators on dimensions.

**Table 9–47 Invoice Adjustment Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Invoice Adjustment Reason	Sum	3
Invoice Adjustment Type	Sum	4
Promotion	Sum	5
Product	Sum	6
Organization	Sum	7
Geography	Sum	8

**Base Measures**

The base measure of this data cube are.

**Table 9–48 Invoice Adjustment Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
AA	Adjustment Amount	DWA_INV_C_ADJ_MO.ADJ_AMT	
ADJCNT	Adjustment Count	DWA_INV_C_ADJ_MO.ADJ_CNT	The amount adjusted to the invoice.

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–49 Invoice Adjustment Cube Derived Measures**

Physical Name	Logical Name	Definition
AA_YTD	Adjustment Amount YTD	SUM(IAM.AA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
AA_LP	Adjustment Amount Last Period	LAG(IAM.AA, 1) OVER HIERARCHY ("TIME".HTBSNS)
AA_LY	Adjustment Amount Last Year	LAG(IAM.AA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AA_LY_PCT_CHG	Adjustment Amount % Change Last Year	LAG_VARIANCE_PERCENT(IAM.AA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AA_YTD_LY	Adjustment Amount YTD Last Year	LAG(IAM.AA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
AA_YTD_LY_PCT_CHG	Adjustment Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(IAM.AA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADJCNT_YTD	Adjustment Count YTD	SUM(IAM.ADJCNT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ADJCNT_LP	Adjustment Count Last Period	LAG(IAM.ADJCNT, 1) OVER HIERARCHY ("TIME".HTBSNS)
ADJCNT_LY	Adjustment Count Last Year	LAG(IAM.ADJCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–49 (Cont.) Invoice Adjustment Cube Derived Measures**

Physical Name	Logical Name	Definition
ADJCNT_LY_PCT_CHG	Adjustment Count % Change Last Year	LAG_VARIANCE_PERCENT(IAM.ADJCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADJCNT_YTD_LY	Adjustment Count YTD Last Year	LAG(IAM.ADJCNT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ADJCNT_YTD_LY_PCT_CHG	Adjustment Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(IAM.ADJCNT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_AA_CUSTYP	Adjustment Amount Share Of CUSTYP Parent	SHARE(IAM.AA OF CUSTYP.HCUSTYP PARENT)
RANK_AA_CUSTYP	Adjustment Amount Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY IAM.AA DESC NULLS LAST WITHIN PARENT)
SHR_ADJCNT_CUSTYP	Adjustment Count Share Of CUSTYP Parent	SHARE(IAM.ADJCNT OF CUSTYP.HCUSTYP PARENT)
RANK_ADJCNT_CUSTYP	Adjustment Count Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY IAM.ADJCNT DESC NULLS LAST WITHIN PARENT)
SHR_ADJCNT_PRMTN	Adjustment Count Share Of PRMTN Parent	SHARE(IAM.ADJCNT OF PRMTN.HPRMTN PARENT)
RANK_ADJCNT_PRMTN	Adjustment Count Rank Of PRMTN Parent	RANK() OVER HIERARCHY (PRMTN.HPRMTN ORDER BY IAM.ADJCNT DESC NULLS LAST WITHIN PARENT)
SHR_AA_PRMTN	Adjustment Amount Share Of PRMTN Parent	SHARE(IAM.AA OF PRMTN.HPRMTN PARENT)
RANK_AA_PRMTN	Adjustment Amount Rank Of PRMTN Parent	RANK() OVER HIERARCHY (PRMTN.HPRMTN ORDER BY IAM.AA DESC NULLS LAST WITHIN PARENT)
SHR_AA_PROD	Adjustment Amount Shared Of PROD Parent	SHARE(IAM.AA OF PROD.HPROD PARENT)
RANK_AA_PROD	Adjustment Amount Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY IAM.AA DESC NULLS LAST WITHIN PARENT)
SHR_ADJCNT_PROD	Adjustment Count Share Of PROD Parent	SHARE(IAM.ADJCNT OF PROD.HPROD PARENT)
RANK_ADJCNT_PROD	Adjustment Count Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY IAM.ADJCNT DESC NULLS LAST WITHIN PARENT)
SHR_ADJCNT_GEO	Adjustment Count Share Of Geo Parent	SHARE(IAM.ADJCNT OF GEO.HGEO PARENT)
RANK_ADJCNT_GEO	Adjustment Count Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY IAM.ADJCNT DESC NULLS LAST WITHIN PARENT)
SHR_AA_GEO	Adjustment Amount Share Of Geo Parent	SHARE(IAM.AA OF GEO.HGEO PARENT)
RANK_AA_GEO	Adjustment Amount Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY IAM.AA DESC NULLS LAST WITHIN PARENT)
SHR_AA_IATYP	Adjustment Amount Share Of IATYP Parent	SHARE(IAM.AA OF IATYP.HIATYP PARENT)
RANK_AA_IATYP	Adjustment Amount Rank Of IATYP Parent	RANK() OVER HIERARCHY (IATYP.HIATYP ORDER BY IAM.AA DESC NULLS LAST WITHIN PARENT)
SHR_ADJCNT_IATYP	Adjustment Count Share Of IATYP Parent	SHARE(IAM.ADJCNT OF IATYP.HIATYP PARENT)

**Table 9–49 (Cont.) Invoice Adjustment Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_ADJCNT_IATYP	Adjustment Count Rank Of IATYP Parent	RANK() OVER HIERARCHY (IATYP.HIATYP ORDER BY IAM.ADJCNT DESC NULLS LAST WITHIN PARENT)
SHR_ADJCNT_IARSN	Adjustment Count Share Of IARSN Parent	SHARE(IAM.ADJCNT OF IARSN.HIARSN PARENT)
RANK_ADJCNT_IARSN	Adjustment Count Rank Of IARSN Parent	RANK() OVER HIERARCHY (IARSN.HIARSN ORDER BY IAM.ADJCNT DESC NULLS LAST WITHIN PARENT)
SHR_AA_IARSN	Adjustment Amount Share Of IARSN Parent	SHARE(IAM.AA OF IARSN.HIARSN PARENT)
RANK_AA_IARSN	Adjustment Amount Rank Of IARSN Parent	RANK() OVER HIERARCHY (IARSN.HIARSN ORDER BY IAM.AA DESC NULLS LAST WITHIN PARENT)
SHR_AA_ORG	Adjustment Amount Share Of Org Parent	SHARE(IAM.AA OF ORG.HCHAIN PARENT)
RANK_AA_ORG	Adjustment Amount Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY IAM.AA DESC NULLS LAST WITHIN PARENT)
SHR_ADJCNT_ORG	Adjustment Count Share Of Org Parent	SHARE(IAM.ADJCNT OF ORG.HCHAIN PARENT)
RANK_ADJCNT_ORG	Adjustment Count Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY IAM.ADJCNT DESC NULLS LAST WITHIN PARENT)

## Invoice Customer Type Cube

Post paid customers are billed/invoiced for the usage of services on monthly basis. That is, bill for every subscriber based on his package, category, and usage is calculated, printed and sent to the customer account address for payment.

**Physical Name: ICT**

### Dimensions and Load Level

The fact data of Invoice Customer Type Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–50 Invoice Customer Type Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Customer Type	Customer Type	
Product	Product	
Product Market Plan	Product Market Plan	
Organization	Organization Business Unit	
Geography	County	

### Aggregation Order/Operator

The Invoice Customer Type will be aggregated by the following order and operators on dimensions.

**Table 9–51 Invoice Customer Type Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2

**Table 9–51 (Cont.) Invoice Customer Type Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Product	Sum	3
Product Market Plan	Sum	4
Organization	Sum	5
Geography	Sum	6

**Base Measures**

The base measure of this data cube are:

**Table 9–52 Invoice Customer Type Base Measures**

Physical Name	Logical Name	Physical Column	Description
IAAT	Invoice Amount After Tax	DWA_INVC_CUST_TYP.INVC_AMT_AFTR_TAX	Total invoice amount after tax.
TBA	Total Billable Amount	DWA_INVC_CUST_TYP.TOT_BILLBL_AMT	
IABT	Invoice Amount Before Tax	DWA_INVC_CUST_TYP.INVC_AMT_BFR_TAX	
GA	GST Amount	DWA_INVC_CUST_TYP.GST_AMT	
DA	Discount Amount	DWA_INVC_CUST_TYP.DISC_AMT	The amount of discount for the call.
CQ	Charge Quantity	DWA_INVC_CUST_TYP.CHRG_QTY	How much network usage has this item been charged on. The type of usage are defined by the invoice item type entity. A number that describes a numeric fact of a charge of a billing statement (for example, talk time used for a product or service).
CA	Charge Amount	DWA_INVC_CUST_TYP.CHRG_AMT	Single invoice item 's charge amount.
ITA	Invoice Tax Amount	DWA_INVC_CUST_TYP.INVC_TAX_AMT	Tax amount
BA	Bill Amount	DWA_INVC_CUST_TYP.BILL_AMT	Actual billing amount. It's from "Charge amount-discount amount"
IC	Invoice Count	DWA_INVC_CUST_TYP.INVC_CNT	Number of Invoices

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–53 Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
IC	Invoice Count	
BA_YTD	Bill Amount YTD	SUM(ICT.BA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
BA_LP	Bill Amount Last period	LAG(ICT.BA, 1) OVER HIERARCHY ("TIME".HTBSNS)
BA_LY	Bill Amount Last Year	LAG(ICT.BA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BA_LY_PCT_CHG	Bill Amount % Change Last Year	LAG_VARIANCE_PERCENT(ICT.BA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BA_YTD_LY	Bill Amount YTD Last Year	LAG(ICT.BA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–53 (Cont.) Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
BA_YTD_LY_PCT_CHG	Bill Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.BA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_YTD	Charge Amount YTD	SUM(ICT.CA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CA_LP	Charge Amount Last Period	LAG(ICT.CA, 1) OVER HIERARCHY ("TIME".HTBSNS)
CA_LY	Charge Amount Last Year	LAG(ICT.CA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_LY_PCT_CHG	Charge Amount % Change Last Year	LAG_VARIANCE_PERCENT(ICT.CA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_YTD_LY	Charge Amount YTD Last Year	LAG(ICT.CA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CA_YTD_LY_PCT_CHG	Charge Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.CA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CQ_YTD	Charge Quantity YTD	SUM(ICT.CQ) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CQ_LP	Charge Quantity Last Period	LAG(ICT.CQ, 1) OVER HIERARCHY ("TIME".HTBSNS)
CQ_LY	Charge Quantity Last Year	LAG(ICT.CQ, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CQ_LY_PCT_CHG	Charge Quantity % Change Last Year	LAG_VARIANCE_PERCENT(ICT.CQ, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CQ_YTD_LY	Charge Quantity YTD Last Year	LAG(ICT.CQ_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CQ_YTD_LY_PCT_CHG	Charge Quantity YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.CQ_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DA_YTD	Discount Amount YTD	SUM(ICT.DA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
DA_LP	Discount Amount Last Period	LAG(ICT.DA, 1) OVER HIERARCHY ("TIME".HTBSNS)
DA_LY	Discount Amount Last Year	LAG(ICT.DA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DA_LY_PCT_CHG	Discount Amount % Change Last Year	LAG_VARIANCE_PERCENT(ICT.DA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DA_YTD_LY	Discount Amount YTD Last Year	LAG(ICT.DA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DA_YTD_LY_PCT_CHG	Discount Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.DA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
GA_YTD	GST Amount YTD	SUM(ICT.GA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
GA_LP	GST Amount Last Period	LAG(ICT.GA, 1) OVER HIERARCHY ("TIME".HTBSNS)
GA_LY	GST Amount Last Year	LAG(ICT.GA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–53 (Cont.) Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
GA_LY_PCT_CHG	GST Amount % Change Last Year	LAG_VARIANCE_PERCENT(ICT.GA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
GA_YTD_LY	GST Amount YTD Last Year	LAG(ICT.GA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
GA_YTD_LY_PCT_CHG	GST Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.GA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IAAT_YTD	Invoice Amount After Tax YTD	SUM(ICT.IAAT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
IAAT_LP	Invoice Amount After Tax Last Period	LAG(ICT.IAAT, 1) OVER HIERARCHY ("TIME".HTBSNS)
IAAT_LY	Invoice Amount After Tax Last Year	LAG(ICT.IAAT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IAAT_LY_PCT_CHG	Invoice Amount After Tax % Change Last Year	LAG_VARIANCE_PERCENT(ICT.IAAT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IAAT_YTD_LY	Invoice Amount After Tax YTD Last Year	LAG(ICT.IAAT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IAAT_YTD_LY_PCT_CHG	Invoice Amount After Tax YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.IAAT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IABT_YTD	Invoice Amount Before Tax YTD	SUM(ICT.IABT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
IABT_LP	Invoice Amount Before Tax Last Period	LAG(ICT.IABT, 1) OVER HIERARCHY ("TIME".HTBSNS)
IABT_LY	Invoice Amount Before Tax Last Year	LAG(ICT.IABT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IABT_LY_PCT_CHG	Invoice Amount Before Tax % Change Last Year	LAG_VARIANCE_PERCENT(ICT.IABT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IABT_YTD_LY	Invoice Amount Before Tax YTD Last Year	LAG(ICT.IABT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IABT_YTD_LY_PCT_CHG	Invoice Amount Before Tax YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.IABT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_YTD	Invoice Count YTD	SUM(ICT.IC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
IC_LP	Invoice Count Last Period	LAG(ICT.IC, 1) OVER HIERARCHY ("TIME".HTBSNS)
IC_LY	Invoice Count Last Year	LAG(ICT.IC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_LY_PCT_CHG	Invoice Count % Change Last Year	LAG_VARIANCE_PERCENT(ICT.IC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_YTD_LY	Invoice Count YTD Last Year	LAG(ICT.IC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
IC_YTD_LY_PCT_CHG	Invoice Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.IC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)



**Table 9–53 (Cont.) Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
ITA_YTD	Invoice Tax Amount YTD	SUM(ICT.ITA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ITA_LP	Invoice Tax Amount Last Period	LAG(ICT.ITA, 1) OVER HIERARCHY ("TIME".HTBSNS)
ITA_LY	Invoice Tax Amount Last Year	LAG(ICT.ITA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ITA_LY_PCT_CHG	Invoice Tax Amount % Change Last Year	LAG_VARIANCE_PERCENT(ICT.ITA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ITA_YTD_LY	Invoice Tax Amount YTD Last Year	LAG(ICT.ITA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ITA_YTD_LY_PCT_CHG	Invoice Tax Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.ITA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TBA_YTD	Total Billable Amount YTD	SUM(ICT.TBA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TBA_LP	Total Billable Amount Last Period	LAG(ICT.TBA, 1) OVER HIERARCHY ("TIME".HTBSNS)
TBA_LY	Total Billable Amount Last Year	LAG(ICT.TBA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TBA_LY_PCT_CHG	Total Billable Amount % Change Last Year	LAG_VARIANCE_PERCENT(ICT.TBA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TBA_YTD_LY	Total Billable Amount YTD Last Year	LAG(ICT.TBA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TBA_YTD_LY_PCT_CHG	Total Billable Amount YTD % Change Last Year	LAG_VARIANCE_PERCENT(ICT.TBA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_BA_ORG	Bill Amount Share Of Org Parent	SHARE(ICT.BA OF ORG.HCHAIN PARENT)
RANK_BA_ORG	Bill Amount Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.BA DESC NULLS LAST WITHIN PARENT)
SHR_CA_ORG	Charge Amount Share Of Org Parent	SHARE(ICT.CA OF ORG.HCHAIN PARENT)
RANK_CA_ORG	Charge Amount Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.CA DESC NULLS LAST WITHIN PARENT)
SHR_CQ_ORG	Charge Quantity Share Of Org Parent	SHARE(ICT.CQ OF ORG.HCHAIN PARENT)
RANK_CQ_ORG	Charge Quantity Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.CQ DESC NULLS LAST WITHIN PARENT)
SHR_DA_ORG	Discount Amount Share Of Org Parent	SHARE(ICT.DA OF ORG.HCHAIN PARENT)
RANK_DA_ORG	Discount Amount Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.DA DESC NULLS LAST WITHIN PARENT)
SHR_GA_ORG	GST Amount Share Of Org Parent	SHARE(ICT.GA OF ORG.HCHAIN PARENT)
RANK_GA_ORG	GST Amount Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.GA DESC NULLS LAST WITHIN PARENT)
SHR_IAAT_ORG	Invoice Amount After Tax Share Of Org Parent	SHARE(ICT.IAAT OF ORG.HCHAIN PARENT)

**Table 9–53 (Cont.) Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
RANK_IAAT_ORG	Invoice Amount After Tax Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.IAAT DESC NULLS LAST WITHIN PARENT)
SHR_IABT_ORG	Invoice Amount Before Tax Share Of Org Parent	SHARE(ICT.IABT OF ORG.HCHAIN PARENT)
RANK_IABT_ORG	Invoice Amount Before Tax Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.IABT DESC NULLS LAST WITHIN PARENT)
SHR_IC_ORG	Invoice Count Share Of Org Parent	SHARE(ICT.IC OF ORG.HCHAIN PARENT)
RANK_IC_ORG	Invoice Count Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.IC DESC NULLS LAST WITHIN PARENT)
SHR_ITA_ORG	Invoice Tax Amount Share Of Org Parent	SHARE(ICT.ITA OF ORG.HCHAIN PARENT)
RANK_ITA_ORG	Invoice Tax Amount Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.ITA DESC NULLS LAST WITHIN PARENT)
SHR_TBA_ORG	Total Billable Amount Share Of Org Parent	SHARE(ICT.TBA OF ORG.HCHAIN PARENT)
RANK_TBA_ORG	Total Billable Amount Rank Of Org Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY ICT.TBA DESC NULLS LAST WITHIN PARENT)
SHR_TBA_PMP	Total Billable Amount Share Of PMP Parent	SHARE(ICT.TBA OF PMP.HPMP PARENT)
RANK_TBA_PMP	Total Billable Amount Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.TBA DESC NULLS LAST WITHIN PARENT)
SHR_ITA_PMP	Invoice Tax Amount Share Of PMP Parent	SHARE(ICT.ITA OF PMP.HPMP PARENT)
RANK_ITA_PMP	Invoice Tax Amount Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.ITA DESC NULLS LAST WITHIN PARENT)
SHR_IC_PMP	Invoice Count Share Of PMP Parent	SHARE(ICT.IC OF PMP.HPMP PARENT)
RANK_IC_PMP	Invoice Count Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.IC DESC NULLS LAST WITHIN PARENT)
SHR_IABT_PMP	Invoice Amount Before Tax Share Of PMP Parent	SHARE(ICT.IABT OF PMP.HPMP PARENT)
RANK_IABT_PMP	Invoice Amount Before Tax Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.IABT DESC NULLS LAST WITHIN PARENT)
SHR_IAAT_PMP	Invoice Amount After Tax Share Of PMP Parent	SHARE(ICT.IAAT OF PMP.HPMP PARENT)
RANK_IAAT_PMP	Invoice Amount After Tax Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.IAAT DESC NULLS LAST WITHIN PARENT)
SHR_GA_PMP	GST Amount Share Of PMP Parent	SHARE(ICT.GA OF PMP.HPMP PARENT)
RANK_GA_PMP	GST Amount Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.GA DESC NULLS LAST WITHIN PARENT)
SHR_DA_PMP	Discount Amount Share Of PMP Parent	SHARE(ICT.DA OF PMP.HPMP PARENT)
RANK_DA_PMP	Discount Amount Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.DA DESC NULLS LAST WITHIN PARENT)
SHR_CQ_PMP	Charge Quantity Share Of PMP Parent	SHARE(ICT.CQ OF PMP.HPMP PARENT)

**Table 9–53 (Cont.) Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
RANK_CQ_PMP	Charge Quantity Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.CQ DESC NULLS LAST WITHIN PARENT)
SHR_CA_PMP	Charge Amount Share Of PMP Parent	SHARE(ICT.CA OF PMP.HPMP PARENT)
RANK_CA_PMP	Charge Amount Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.CA DESC NULLS LAST WITHIN PARENT)
SHR_BA_PMP	Bill Amount Share Of PMP Parent	SHARE(ICT.BA OF PMP.HPMP PARENT)
RANK_BA_PMP	Bill Amount Rank Of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY ICT.BA DESC NULLS LAST WITHIN PARENT)
SHR_BA_CUSTYP	Bill Amount Share Of CUSTYP Parent	SHARE(ICT.BA OF CUSTYP.HCUSTYP PARENT)
RANK_BA_CUSTYP	Bill Amount Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.BA DESC NULLS LAST WITHIN PARENT)
SHR_CA_CUSTYP	Charge Amount Share Of CUSTYP Parent	SHARE(ICT.CA OF CUSTYP.HCUSTYP PARENT)
RANK_CA_CUSTYP	Charge Amount Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.CA DESC NULLS LAST WITHIN PARENT)
SHR_CQ_CUSTYP	Charge Quantity Share Of CUSTYP Parent	SHARE(ICT.CQ OF CUSTYP.HCUSTYP PARENT)
RANK_CQ_CUSTYP	Charge Quantity Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.CQ DESC NULLS LAST WITHIN PARENT)
SHR_DA_CUSTYP	Discount Amount Share Of CUSTYP Parent	SHARE(ICT.DA OF CUSTYP.HCUSTYP PARENT)
RANK_DA_CUSTYP	Discount Amount Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.DA DESC NULLS LAST WITHIN PARENT)
SHR_GA_CUSTYP	GST Amount Share Of CUSTYP Parent	SHARE(ICT.GA OF CUSTYP.HCUSTYP PARENT)
RANK_GA_CUSTYP	GST Amount Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.GA DESC NULLS LAST WITHIN PARENT)
SHR_IAAT_CUSTYP	Invoice Amount After Tax Share Of CUSTYP Parent	SHARE(ICT.IAAT OF CUSTYP.HCUSTYP PARENT)
RANK_IAAT_CUSTYP	Invoice Amount After Tax Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.IAAT DESC NULLS LAST WITHIN PARENT)
SHR_IABT_CUSTYP	Invoice Amount Before Tax Share Of CUSTYP Parent	SHARE(ICT.IABT OF CUSTYP.HCUSTYP PARENT)
RANK_IABT_CUSTYP	Invoice Amount Before Tax Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.IABT DESC NULLS LAST WITHIN PARENT)
SHR_IC_CUSTYP	Invoice Count Share Of CUSTYP Parent	SHARE(ICT.IC OF CUSTYP.HCUSTYP PARENT)
RANK_IC_CUSTYP	Invoice Count Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.IC DESC NULLS LAST WITHIN PARENT)
SHR_ITA_CUSTYP	Invoice Tax Amount Share Of CUSTYP Parent	SHARE(ICT.ITA OF CUSTYP.HCUSTYP PARENT)
RANK_ITA_CUSTYP	Invoice Tax Amount Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.ITA DESC NULLS LAST WITHIN PARENT)

**Table 9–53 (Cont.) Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
SHR_TBA_CUSTYP	Total Billable Amount Share Of CUSTYP Parent	SHARE(ICT.TBA OF CUSTYP.HCUSTYP PARENT)
RANK_TBA_CUSTYP	Total Billable Amount Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY ICT.TBA DESC NULLS LAST WITHIN PARENT)
SHR_TBA_PROD	Total Billable Amount Share Of Prod Parent	SHARE(ICT.TBA OF PROD.HPROD PARENT)
RANK_TBA_PROD	Total Billable Amount Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.TBA DESC NULLS LAST WITHIN PARENT)
SHR_ITA_PROD	Invoice Tax Amount Share Of Prod Parent	SHARE(ICT.ITA OF PROD.HPROD PARENT)
RANK_ITA_PROD	Invoice Tax Amount Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.ITA DESC NULLS LAST WITHIN PARENT)
SHR_IC_PROD	Invoice Count Share Of Prod Parent	SHARE(ICT.IC OF PROD.HPROD PARENT)
RANK_IC_PROD	Invoice Count Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.IC DESC NULLS LAST WITHIN PARENT)
SHR_IABT_PROD	Invoice Amount Before Tax Share Of Prod Parent	SHARE(ICT.IABT OF PROD.HPROD PARENT)
RANK_IABT_PROD	Invoice Amount Before Tax Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.IABT DESC NULLS LAST WITHIN PARENT)
SHR_IAAT_PROD	Invoice Amount After Tax Share Of Prod Parent	SHARE(ICT.IAAT OF PROD.HPROD PARENT)
RANK_IAAT_PROD	Invoice Amount After Tax Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.IAAT DESC NULLS LAST WITHIN PARENT)
SHR_GA_PROD	GST Amount Share Of Prod Parent	SHARE(ICT.GA OF PROD.HPROD PARENT)
RANK_GA_PROD	GST Amount Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.GA DESC NULLS LAST WITHIN PARENT)
SHR_DA_PROD	Discount Amount Share Of Prod Parent	SHARE(ICT.DA OF PROD.HPROD PARENT)
RANK_DA_PROD	Discount Amount Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.DA DESC NULLS LAST WITHIN PARENT)
SHR_CQ_PROD	Charge Quantity Share Of Prod Parent	SHARE(ICT.CQ OF PROD.HPROD PARENT)
RANK_CQ_PROD	Charge Quantity Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.CQ DESC NULLS LAST WITHIN PARENT)
SHR_CA_PROD	Charge Amount Share Of Prod Parent	SHARE(ICT.CA OF PROD.HPROD PARENT)
RANK_CA_PROD	Charge Amount Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.CA DESC NULLS LAST WITHIN PARENT)
SHR_BA_PROD	Bill Amount Share Of Prod Parent	SHARE(ICT.BA OF PROD.HPROD PARENT)
RANK_BA_PROD	Bill Amount Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY ICT.BA DESC NULLS LAST WITHIN PARENT)
SHR_BA_GEO	Bill Amount Share Of Geo Parent	SHARE(ICT.BA OF GEO.HGEO PARENT)
RANK_BA_GEO	Bill Amount Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.BA DESC NULLS LAST WITHIN PARENT)

**Table 9–53 (Cont.) Invoice Customer Type Derived Measures**

Physical Name	Logical Name	Definition
SHR_CA_GEO	Charge Amount Share Of Geo Parent	SHARE(ICT.CA OF GEO.HGEO PARENT)
RANK_CA_GEO	Charge Amount Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.CA DESC NULLS LAST WITHIN PARENT)
SHR_CQ_GEO	Charge Quantity Share Of Geo Parent	SHARE(ICT.CQ OF GEO.HGEO PARENT)
RANK_CQ_GEO	Charge Quantity Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.CQ DESC NULLS LAST WITHIN PARENT)
SHR_DA_GEO	Discount Amount Share Of Geo Parent	SHARE(ICT.DA OF GEO.HGEO PARENT)
RANK_DA_GEO	Discount Amount Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.DA DESC NULLS LAST WITHIN PARENT)
SHR_GA_GEO	GST Amount Share Of Geo Parent	SHARE(ICT.GA OF GEO.HGEO PARENT)
RANK_GA_GEO	GST Amount Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.GA DESC NULLS LAST WITHIN PARENT)
SHR_IAAT_GEO	Invoice Amount After Tax Share Of Geo Parent	SHARE(ICT.IAAT OF GEO.HGEO PARENT)
RANK_IAAT_GEO	Invoice Amount After Tax Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.IAAT DESC NULLS LAST WITHIN PARENT)
SHR_IABT_GEO	Invoice Amount Before Tax Share Of Geo Parent	SHARE(ICT.IABT OF GEO.HGEO PARENT)
RANK_IABT_GEO	Invoice Amount Before Tax Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.IABT DESC NULLS LAST WITHIN PARENT)
SHR_IC_GEO	Invoice Count Share Of Geo Parent	SHARE(ICT.IC OF GEO.HGEO PARENT)
RANK_IC_GEO	Invoice Count Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.IC DESC NULLS LAST WITHIN PARENT)
SHR_ITA_GEO	Invoice Tax Amount Share Of Geo Parent	SHARE(ICT.ITA OF GEO.HGEO PARENT)
RANK_ITA_GEO	Invoice Tax Amount Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.ITA DESC NULLS LAST WITHIN PARENT)
SHR_TBA_GEO	Total Billable Amount Share Of Geo Parent	SHARE(ICT.TBA OF GEO.HGEO PARENT)
RANK_TBA_GEO	Total Billable Amount Rank Of Geo Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY ICT.TBA DESC NULLS LAST WITHIN PARENT)
IAAT_LM	Invoice Amount After Tax Last Month	LAG(ICT.IAAT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_MO POSITION FROM BEGINNING)
IAAT_LM_PCT_CHG	Invoice Amount After Tax % Chg Last Month	LAG_VARIANCE_PERCENT(ICT.IAAT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_MO POSITION FROM BEGINNING)
IABT_LM	Invoice Amount Before Tax Last Month	LAG(ICT.IABT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_MO POSITION FROM BEGINNING)

## Revenue Cube

This datacube is used to store the monthly summary of the revenue values and its components along with the subscriber base count, which will be used to calculate the ARPU values.

**Physical Name: RVN**

**Dimensions and Load Level**

The fact data of Revenue Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–54 Revenue Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Customer Type	Customer Type	
Product	Product	
Organization	Organization Business Unit	
Geography	County	

**Aggregation Order/Operator**

The Revenue Cube will be aggregated by the following order and operators on dimensions.

**Table 9–55 Revenue Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Product	Sum	3
Organization	Sum	4
Geography	Sum	5

**Base Measures**

The base measure of this data cube are:

**Table 9–56 Revenue Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
URVN	Usage Revenue	DWA_ARPU_BASE_CUST_TYP.USG_RVN	
TRVN	Total Revenue	DWA_ARPU_BASE_CUST_TYP.TOT_RVN	Total revenue = (sales + bill)
BRVN	Billed Revenue	DWA_ARPU_BASE_CUST_TYP.BLLD_RVN	Usage Revenue including Subscription Fees.
SLRVN	Sales Revenue	DWA_ARPU_BASE_CUST_TYP.SL_RVN	Revenue for sales.For example revenue from other Provider.
ATRVN	AirTime Revenue	DWA_ARPU_BASE_CUST_TYP.AIRTM_RVN	
CAMT	Commission Amount	DWA_ARPU_BASE_CUST_TYP.CMISN_AMT	
ARVN	Amortized Revenue	DWA_ARPU_BASE_CUST_TYP.AMRTZD_RVN	
ICRVN	Revenue by Incoming Call	DWA_ARPU_BASE_CUST_TYP.RVN_BY_INCMNG_CALL	Revenue generated by incoming calls to the customer.
SACOST	Subscriber Acquisition Cost	DWA_ARPU_BASE_CUST_TYP.SBCRBR_ACQSTN_COST	

**Table 9–56 (Cont.) Revenue Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
SRCOST	Subscriber Retention Cost	DWA_ARPU_BASE_CUST_TYP.SBCRBR_RTNTN_COST	
OPTCOST	Operation Cost	DWA_ARPU_BASE_CUST_TYP.OPRN_COST	
CALVAL	Call value	DWA_ARPU_BASE_CUST_TYP.CALL_VAL	
SBRPFEE	Subscription Fee	DWA_ARPU_BASE_CUST_TYP.SBRP_FEE	
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization	DWA_ARPU_BASE_CUST_TYP.EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization. EBITDA for the customer.
CUSTCNT1	Customer Count	DWA_ARPU_BASE_CUST_TYP.CUST_CNT	How many customers there is at this billing month.

**Derived Measures**

The possible derived measure of this data cube are:

**Table 9–57 Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
TRVN_YTD	Total Revenue YTD	SUM(RVN.TRVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_TRVN_ORG	Total Revenue Share Of ORG Parent	SHARE(RVN.TRVN OF ORG.HBANNER PARENT)
SHR_TRVN_GEO	Total Revenue Share Of Geo Parent	SHARE(RVN.TRVN OF GEO.HGEO PARENT)
SHR_TRVN_PROD	Total Revenue Share Of Prod Parent	SHARE(RVN.TRVN OF PROD.HPROD PARENT)
SHR_TRVN_CUSTYP	Total Revenue Share Of CUSTYP Parent	SHARE(RVN.TRVN OF CUSTYP.HCUSTYP PARENT)
RANK_TRVN_ORG	Total Revenue Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.TRVN DESC NULLS LAST WITHIN PARENT)
RANK_TRVN_GEO	Total Revenue Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.TRVN DESC NULLS LAST WITHIN PARENT)
RANK_TRVN_PROD	Total Revenue Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.TRVN DESC NULLS LAST WITHIN PARENT)
RANK_TRVN_CUSTYP	Total Revenue Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.TRVN DESC NULLS LAST WITHIN PARENT)
TRVN_LP	Total Revenue Last Period	LAG(RVN.TRVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
TRVN_LY	Total Revenue Last Year	LAG(RVN.TRVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TRVN_YTD_LY	Total Revenue YTD Last Year	LAG(RVN.TRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TRVN_YTD_LY_PCT_CHG	Total Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.TRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_URVN_ORG	Usage Revenue Share Of ORG Parent	SHARE(RVN.URVN OF ORG.HBANNER PARENT)
SHR_URVN_GEO	Usage Revenue Share Of GEO Parent	SHARE(RVN.URVN OF GEO.HGEO PARENT)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_URVN_PROD	Usage Revenue Share Of PROD Parent	SHARE(RVN.URVN OF PROD.HPROD PARENT)
SHR_URVN_CUSTYP	Usage Revenue Share Of CUSTYP Parent	SHARE(RVN.URVN OF CUSTYP.HCUSTYP PARENT)
RANK_URVN_ORG	Usage Revenue Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.URVN DESC NULLS LAST WITHIN PARENT)
RANK_URVN_GEO	Usage Revenue Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.URVN DESC NULLS LAST WITHIN PARENT)
RANK_URVN_PROD	Usage Revenue Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.URVN DESC NULLS LAST WITHIN PARENT)
RANK_URVN_CUSTYP	Usage Revenue Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.URVN DESC NULLS LAST WITHIN PARENT)
URVN_YTD	Usage Revenue YTD	SUM(RVN.URVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
URVN_YTD_LY	Usage Revenue YTD Last Year	LAG(RVN.URVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
URVN_YTD_LY_CHG	Usage Revenue YTD Change Last Year	LAG_VARIANCE(RVN.URVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
URVN_YTD_LY_PCT_CHG	Usage Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.URVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TRVN_YTD_LY_CHG	Total Revenue YTD Change Last Year	LAG_VARIANCE(RVN.TRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
URVN_LP	Usage Revenue Last Period	LAG(RVN.URVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
URVN_LY	Usage Revenue Last Year	LAG(RVN.URVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_BRVN_ORG	Billed Revenue Share Of ORG Parent	SHARE(RVN.BRVN OF ORG.HBANNER PARENT)
SHR_BRVN_GEO	Billed Revenue Share Of GEO Parent	SHARE(RVN.BRVN OF GEO.HGEO PARENT)
SHR_BRVN_PROD	Billed Revenue Share Of PROD Parent	SHARE(RVN.BRVN OF PROD.HPROD PARENT)
SHR_BRVN_CUSTYP	Billed Revenue Share Of CUSTYP Parent	SHARE(RVN.BRVN OF CUSTYP.HCUSTYP PARENT)
RANK_BRVN_ORG	Billed Revenue Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.BRVN DESC NULLS LAST WITHIN PARENT)
RANK_BRVN_GEO	Billed Revenue Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.BRVN DESC NULLS LAST WITHIN PARENT)
RANK_BRVN_PROD	Billed Revenue Rank Of Prod Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.BRVN DESC NULLS LAST WITHIN PARENT)
RANK_BRVN_CUSTYP	Billed Revenue Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.BRVN DESC NULLS LAST WITHIN PARENT)
BRVN_LP	Billed Revenue Last Period	LAG(RVN.BRVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
BRVN_LY	Billed Revenue Last Year	LAG(RVN.BRVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BRVN_YTD	Billed Revenue Year to Date	SUM(RVN.BRVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)



**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
BRVN_YTD_LY	Billed Revenue YTD Last Year	LAG(RVN.BRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BRVN_YTD_LY_CHG	Billed Revenue YTD Change Last Year	LAG_VARIANCE(RVN.BRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BRVN_YTD_LY_PCT_CHG	Billed Revenue YTD % Chg Last Year	LAG_VARIANCE_PERCENT(RVN.BRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_SLRVN_ORG	Sales Revenue Share Of ORG Parent	SHARE(RVN.SLRVN OF ORG.HBANNER PARENT)
SHR_SLRVN_GEO	Sales Revenue Share Of GEO Parent	SHARE(RVN.SLRVN OF GEO.HGEO PARENT)
SHR_SLRVN_PROD	Sales Revenue Share Of PROD Parent	SHARE(RVN.SLRVN OF PROD.HPROD PARENT)
SHR_SLRVN_CUSTYP	Sales Revenue Share Of CUSTYP Parent	SHARE(RVN.SLRVN OF CUSTYP.HCUSTYP PARENT)
RANK_SLRVN_ORG	Sales Revenue Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.SLRVN DESC NULLS LAST WITHIN PARENT)
RANK_SLRVN_GEO	Sales Revenue Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.SLRVN DESC NULLS LAST WITHIN PARENT)
RANK_SLRVN_PROD	Sales Revenue Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.SLRVN DESC NULLS LAST WITHIN PARENT)
RANK_SLRVN_CUSTYP	Sales Revenue Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.SLRVN DESC NULLS LAST WITHIN PARENT)
SLRVN_LP	Sales Revenue Last Period	LAG(RVN.SLRVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
SLRVN_LY	Sales Revenue Last Year	LAG(RVN.SLRVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SLRVN_YTD	Sales Revenue YTD	SUM(RVN.SLRVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SLRVN_YTD_LY	Sales Revenue YTD Last Year	LAG(RVN.SLRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SLRVN_YTD_LY_CHG	Sales Revenue YTD Change Last Year	LAG_VARIANCE(RVN.SLRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SLRVN_YTD_LY_PCT_CHG	Sales Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.SLRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_ATRVN_ORG	AirTime Revenue Share Of ORG Parent	SHARE(RVN.ATRVN OF ORG.HBANNER PARENT)
SHR_ATRVN_GEO	AirTime Revenue Share Of GEO Parent	SHARE(RVN.ATRVN OF GEO.HGEO PARENT)
SHR_ATRVN_PROD	AirTime Revenue Share Of PROD Parent	SHARE(RVN.ATRVN OF PROD.HPROD PARENT)
SHR_ATRVN_CUSTYP	AirTime Revenue Share Of CUSTYP Parent	SHARE(RVN.ATRVN OF CUSTYP.HCUSTYP PARENT)
RANK_ATRVN_ORG	AirTime Revenue Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.ATRVN DESC NULLS LAST WITHIN PARENT)
RANK_ATRVN_GEO	AirTime Revenue Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.ATRVN DESC NULLS LAST WITHIN PARENT)
RANK_ATRVN_PROD	AirTime Revenue Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.ATRVN DESC NULLS LAST WITHIN PARENT)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_ATRVN_CUSTYP	AirTime Revenue Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.ATRVN DESC NULLS LAST WITHIN PARENT)
ATRVN_LP	AirTime Revenue Last Period	LAG(RVN.ATRVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
ATRVN_LY	AirTime Revenue Last Year	LAG(RVN.ATRVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATRVN_YTD	AirTime Revenue Year to Date	SUM(RVN.ATRVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ATRVN_YTD_LY	AirTime Revenue YTD Last Year	LAG(RVN.ATRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATRVN_YTD_LY_CHG	AirTime Revenue YTD Change Last Year	LAG_VARIANCE(RVN.ATRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ATRVN_YTD_LY_PCT_CHG	AirTime Revenue YTD % Chg Last Year	LAG_VARIANCE_PERCENT(RVN.ATRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_CAMT_ORG	Commission Amount Share Of ORG Parent	SHARE(RVN.CAMT OF ORG.HBANNER PARENT)
SHR_CAMT_GEO	Commission Amount Share Of GEO Parent	SHARE(RVN.CAMT OF GEO.HGEO PARENT)
SHR_CAMT_PROD	Commission Amount Share Of PROD Parent	SHARE(RVN.CAMT OF PROD.HPROD PARENT)
SHR_CAMT_CUSTYP	Commission Amount Share Of CUSTYP Parent	SHARE(RVN.CAMT OF CUSTYP.HCUSTYP PARENT)
RANK_CAMT_ORG	Commission Amount RANK Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.CAMT DESC NULLS LAST WITHIN PARENT)
RANK_CAMT_GEO	Commission Amount RANK Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.CAMT DESC NULLS LAST WITHIN PARENT)
RANK_CAMT_PROD	Commission Amount RANK Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.CAMT DESC NULLS LAST WITHIN PARENT)
RANK_CAMT_CUSTYP	Commission Amount RANK Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.CAMT DESC NULLS LAST WITHIN PARENT)
CAMT_LP	Commission Amount Last Period	LAG(RVN.CAMT, 1) OVER HIERARCHY ("TIME".HTBSNS)
CAMT_LY	Commission Amount Last Year	LAG(RVN.CAMT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CAMT_YTD	Commission Amount Year to Date	SUM(RVN.CAMT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CAMT_YTD_LY	Commission Amount YTD Last Year	LAG(RVN.CAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CAMT_YTD_LY_CHG	Commission Amount YTD Change Last Year	LAG_VARIANCE(RVN.CAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CAMT_YTD_LY_PCT_CHG	Commission Amount YTD % Chg Last Year	LAG_VARIANCE_PERCENT(RVN.CAMT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_ARVN_ORG	Amortized Revenue Share Of ORG Parent	SHARE(RVN.ARVN OF ORG.HBANNER PARENT)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_ARVN_GEO	Amortized Revenue Share Of GEO Parent	SHARE(RVN.ARVN OF GEO.HGEO PARENT)
SHR_ARVN_PROD	Amortized Revenue Share Of PROD Parent	SHARE(RVN.ARVN OF PROD.HPROD PARENT)
SHR_ARVN_CUSTYP	Amortized Revenue Share Of CUSTYP Parent	SHARE(RVN.ARVN OF CUSTYP.HCUSTYP PARENT)
RANK_ARVN_ORG	Amortized Revenue Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.ARVN DESC NULLS LAST WITHIN PARENT)
RANK_ARVN_GEO	Amortized Revenue Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.ARVN DESC NULLS LAST WITHIN PARENT)
RANK_ARVN_PROD	Amortized Revenue Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.ARVN DESC NULLS LAST WITHIN PARENT)
RANK_ARVN_CUSTYP	Amortized Revenue Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.ARVN DESC NULLS LAST WITHIN PARENT)
ARVN_LP	Amortized Revenue Last Period	LAG(RVN.ARVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
ARVN_LY	Amortized Revenue Last Year	LAG(RVN.ARVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARVN_YTD	Amortized Revenue Year to Date	SUM(RVN.ARVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ARVN_YTD_LY	Amortized Revenue YTD Last Year	LAG(RVN.ARVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARVN_YTD_LY_CHG	Amortized Revenue YTD Change Last Year	LAG_VARIANCE(RVN.ARVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ARVN_YTD_LY_PCT_CHG	Amortized Revenue YTD % Chg Last Year	LAG_VARIANCE_PERCENT(RVN.ARVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_ICRVN_ORG	Revenue by Incoming Call Share Of ORG Parent	SHARE(RVN.ICRVN OF ORG.HBANNER PARENT)
SHR_ICRVN_GEO	Revenue by Incoming Call Share Of GEO Parent	SHARE(RVN.ICRVN OF GEO.HGEO PARENT)
SHR_ICRVN_PROD	Revenue by Incoming Call Share Of PROD Parent	SHARE(RVN.ICRVN OF PROD.HPROD PARENT)
SHR_ICRVN_CUSTYP	Revenue by Incoming Call Share Of CUSTYP Parent	SHARE(RVN.ICRVN OF CUSTYP.HCUSTYP PARENT)
RANK_ICRVN_ORG	Revenue by Incoming Call Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.ICRVN DESC NULLS LAST WITHIN PARENT)
RANK_ICRVN_GEO	Revenue by Incoming Call Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.ICRVN DESC NULLS LAST WITHIN PARENT)
RANK_ICRVN_PROD	Revenue by Incoming Call Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.ICRVN DESC NULLS LAST WITHIN PARENT)
RANK_ICRVN_CUSTYP	Revenue by Incoming Call Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.ICRVN DESC NULLS LAST WITHIN PARENT)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
ICRVN_LP	Revenue by Incoming Call Last Period	LAG(RVN.ICRVN, 1) OVER HIERARCHY ("TIME".HTBSNS)
ICRVN_LY	Revenue by Incoming Call Last Year	LAG(RVN.ICRVN, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICRVN_YTD	Revenue by Incoming Call YTD	SUM(RVN.ICRVN) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
ICRVN_YTD_LY	Revenue by Incoming Call YTD Last Year	LAG(RVN.ICRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICRVN_YTD_LY_CHG	Revenue by Incoming Call YTD Change Last Year	LAG_VARIANCE(RVN.ICRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
ICRVN_YTD_LY_PCT_CHG	Revenue by Incoming Call YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.ICRVN_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_SACOST_ORG	Subscriber Acquisition Cost Share Of ORG Parent	SHARE(RVN.SACOST OF ORG.HBANNER PARENT)
SHR_SACOST_GEO	Subscriber Acquisition Cost Share Of GEO Parent	SHARE(RVN.SACOST OF GEO.HGEO PARENT)
SHR_SACOST_PROD	Subscriber Acquisition Cost Share Of PROD Parent	SHARE(RVN.SACOST OF PROD.HPROD PARENT)
SHR_SACOST_CUSTYP	Subscriber Acquisition Cost Share Of CUSTYP Parent	SHARE(RVN.SACOST OF CUSTYP.HCUSTYP PARENT)
RANK_SACOST_ORG	Subscriber Acquisition Cost Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.SACOST DESC NULLS LAST WITHIN PARENT)
RANK_SACOST_GEO	Subscriber Acquisition Cost Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.SACOST DESC NULLS LAST WITHIN PARENT)
RANK_SACOST_PROD	Subscriber Acquisition Cost Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.SACOST DESC NULLS LAST WITHIN PARENT)
RANK_SACOST_CUSTYP	Subscriber Acquisition Cost Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.SACOST DESC NULLS LAST WITHIN PARENT)
SACOST_LP	Subscriber Acquisition Cost Last Period	LAG(RVN.SACOST, 1) OVER HIERARCHY ("TIME".HTBSNS)
SACOST_LY	Subscriber Acquisition Cost Last Year	LAG(RVN.SACOST, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SACOST_YTD	Subscriber Acquisition Cost YTD	SUM(RVN.SACOST) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SACOST_YTD_LY	Subscriber Acquisition Cost YTD Last Year	LAG(RVN.SACOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SACOST_YTD_LY_CHG	Subscriber Acquisition Cost YTD Change Last Year	LAG_VARIANCE(RVN.SACOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SACOST_YTD_LY_PCT_CHG	Subscriber Acquisition Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.SACOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_SRCOST_ORG	Subscriber Retention Cost Share Of ORG Parent	SHARE(RVN.SRCOST OF ORG.HBANNER PARENT)
SHR_SRCOST_GEO	Subscriber Retention Cost Share Of GEO Parent	SHARE(RVN.SRCOST OF GEO.HGEO PARENT)
SHR_SRCOST_PROD	Subscriber Retention Cost Share Of PROD Parent	SHARE(RVN.SRCOST OF PROD.HPROD PARENT)
SHR_SRCOST_CUSTYP	Subscriber Retention Cost Share Of CUSTYP Parent	SHARE(RVN.SRCOST OF CUSTYP.HCUSTYP PARENT)
RANK_SRCOST_ORG	Subscriber Retention Cost RANK Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.SRCOST DESC NULLS LAST WITHIN PARENT)
RANK_SRCOST_GEO	Subscriber Retention Cost RANK Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.SRCOST DESC NULLS LAST WITHIN PARENT)
RANK_SRCOST_PROD	Subscriber Retention Cost RANK Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.SRCOST DESC NULLS LAST WITHIN PARENT)
RANK_SRCOST_CUSTYP	Subscriber Retention Cost RANK Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.SRCOST DESC NULLS LAST WITHIN PARENT)
SRCOST_LP	Subscriber Retention Cost Last Period	LAG(RVN.SRCOST, 1) OVER HIERARCHY ("TIME".HTBSNS)
SRCOST_LY	Subscriber Retention Cost Last Year	LAG(RVN.SRCOST, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SRCOST_YTD	Subscriber Retention Cost YTD	SUM(RVN.SRCOST) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SRCOST_YTD_LY	Subscriber Retention Cost YTD Last Year	LAG(RVN.SRCOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SRCOST_YTD_LY_CHG	Subscriber Retention Cost YTD Change Last Year	LAG_VARIANCE(RVN.SRCOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SRCOST_YTD_LY_PCT_CHG	Subscriber Retention Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.SRCOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_OPTCOST_ORG	Operation Cost Share Of ORG Parent	SHARE(RVN.OPTCOST OF ORG.HBANNER PARENT)
SHR_OPTCOST_GEO	Operation Cost Share Of GEO Parent	SHARE(RVN.OPTCOST OF GEO.HGEO PARENT)
SHR_OPTCOST_PROD	Operation Cost Share Of PROD Parent	SHARE(RVN.OPTCOST OF PROD.HPROD PARENT)
SHR_OPTCOST_CUSTYP	Operation Cost Share Of CUSTYP Parent	SHARE(RVN.OPTCOST OF CUSTYP.HCUSTYP PARENT)
RANK_OPTCOST_ORG	Operation Cost Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.OPTCOST DESC NULLS LAST WITHIN PARENT)
RANK_OPTCOST_GEO	Operation Cost Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.OPTCOST DESC NULLS LAST WITHIN PARENT)
RANK_OPTCOST_PROD	Operation Cost Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.OPTCOST DESC NULLS LAST WITHIN PARENT)
RANK_OPTCOST_CUSTYP	Operation Cost Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.OPTCOST DESC NULLS LAST WITHIN PARENT)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
OPTCOST_LP	Operation Cost Last Period	LAG(RVN.OPTCOST, 1) OVER HIERARCHY ("TIME".HTBSNS)
OPTCOST_LY	Operation Cost Last Year	LAG(RVN.OPTCOST, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OPTCOST_YTD	Operation Cost YTD	SUM(RVN.OPTCOST) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
OPTCOST_YTD_LY	Operation Cost YTD Last Year	LAG(RVN.OPTCOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OPTCOST_YTD_LY_CHG	Operation Cost YTD Change Last Year	LAG_VARIANCE(RVN.OPTCOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
OPTCOST_YTD_LY_PCT_CHG	Operation Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.OPTCOST_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_CALVAL_ORG	Call value Share Of ORG Parent	SHARE(RVN.CALVAL OF ORG.HBANNER PARENT)
SHR_CALVAL_GEO	Call value Share Of GEO Parent	SHARE(RVN.CALVAL OF GEO.HGEO PARENT)
SHR_CALVAL_PROD	Call value Share Of PROD Parent	SHARE(RVN.CALVAL OF PROD.HPROD PARENT)
SHR_CALVAL_CUSTYP	Call value Share Of CUSTYP Parent	SHARE(RVN.CALVAL OF CUSTYP.HCUSTYP PARENT)
RANK_CALVAL_ORG	Call value Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.CALVAL DESC NULLS LAST WITHIN PARENT)
RANK_CALVAL_GEO	Call value Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.CALVAL DESC NULLS LAST WITHIN PARENT)
RANK_CALVAL_PROD	Call value Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.CALVAL DESC NULLS LAST WITHIN PARENT)
RANK_CALVAL_CUSTYP	Call value Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.CALVAL DESC NULLS LAST WITHIN PARENT)
CALVAL_LP	Call Value Last Period	LAG(RVN.CALVAL, 1) OVER HIERARCHY ("TIME".HTBSNS)
CALVAL_LY	Call Value Last Year	LAG(RVN.CALVAL, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CALVAL_YTD	Call Value Year to Date	SUM(RVN.CALVAL) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CALVAL_YTD_LY	Call Value YTD Last Year	LAG(RVN.CALVAL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CALVAL_YTD_LY_CHG	Call Value YTD Change Last Year	LAG_VARIANCE(RVN.CALVAL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CALVAL_YTD_LY_PCT_CHG	Call Value YTD % Chg Last Year	LAG_VARIANCE_PERCENT(RVN.CALVAL_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_SBRPFEE_ORG	Subscription Fee Share Of ORG Parent	SHARE(RVN.SBRPFEE OF ORG.HBANNER PARENT)
SHR_SBRPFEE_GEO	Subscription Fee Share Of GEO Parent	SHARE(RVN.SBRPFEE OF GEO.HGEO PARENT)
SHR_SBRPFEE_PROD	Subscription Fee Share Of PROD Parent	SHARE(RVN.SBRPFEE OF PROD.HPROD PARENT)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
SHR_SBRPFEE_CUSTYP	Subscription Fee Share Of CUSTYP Parent	SHARE(RVN.SBRPFEE OF CUSTYP.HCUSTYP PARENT)
RANK_SBRPFEE_ORG	Subscription Fee Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.SBRPFEE DESC NULLS LAST WITHIN PARENT)
RANK_SBRPFEE_GEO	Subscription Fee Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.SBRPFEE DESC NULLS LAST WITHIN PARENT)
RANK_SBRPFEE_PROD	Subscription Fee Rank Of PROD Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.SBRPFEE DESC NULLS LAST WITHIN PARENT)
RANK_SBRPFEE_CUSTYP	Subscription Fee Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.SBRPFEE DESC NULLS LAST WITHIN PARENT)
SBRPFEE_LP	Subscription Fee Last Period	LAG(RVN.SBRPFEE, 1) OVER HIERARCHY ("TIME".HTBSNS)
SBRPFEE_LY	Subscription Fee Last Year	LAG(RVN.SBRPFEE, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SBRPFEE_YTD	Subscription Fee YTD	SUM(RVN.SBRPFEE) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SBRPFEE_YTD_LY	Subscription Fee YTD Last Year	LAG(RVN.SBRPFEE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SBRPFEE_YTD_LY_CHG	Subscription Fee YTD Change Last Year	LAG_VARIANCE(RVN.SBRPFEE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SBRPFEE_YTD_LY_PCT_CHG	Subscription Fee YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.SBRPFEE_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EBITDA_YTD	Subscription Fee YTD % Change Last Year	SUM(RVN.EBITDA) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
SHR_EBITDA_ORG	Earnings Before Interest, Taxes, Depreciation and Amortization Share Of ORG Parent	SHARE(RVN.EBITDA OF ORG.HBANNER PARENT)
SHR_EBITDA_GEO	Earnings Before Interest, Taxes, Depreciation and Amortization Share Of GEO Parent	SHARE(RVN.EBITDA OF GEO.HGEO PARENT)
SHR_EBITDA_PROD	Earnings Before Interest, Taxes, Depreciation and Amortization Share Of PROD Parent	SHARE(RVN.EBITDA OF PROD.HPROD PARENT)
SHR_EBITDA_CUSTYP	Earnings Before Interest, Taxes, Depreciation and Amortization Share Of CUSTYP Parent	SHARE(RVN.EBITDA OF CUSTYP.HCUSTYP PARENT)
RANK_EBITDA_ORG	Earnings Before Interest, Taxes, Depreciation and Amortization Rank Of ORG Parent	RANK() OVER HIERARCHY (ORG.HBANNER ORDER BY RVN.EBITDA DESC NULLS LAST WITHIN PARENT)

**Table 9–57 (Cont.) Revenue Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_EBITDA_GEO	Earnings Before Interest, Taxes, Depreciation and Amortization Rank Of GEO Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY RVN.EBITDA DESC NULLS LAST WITHIN PARENT)
RANK_EBITDA_PROD	Earnings Before Interest, Taxes, Depreciation and Amortization Rank Of GEO Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY RVN.EBITDA DESC NULLS LAST WITHIN PARENT)
RANK_EBITDA_CUSTYP	Earnings Before Interest, Taxes, Depreciation and Amortization Rank Of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY RVN.EBITDA DESC NULLS LAST WITHIN PARENT)
EBITDA_LP	EBITDA Last Period	LAG(RVN.EBITDA, 1) OVER HIERARCHY ("TIME".HTBSNS)
EBITDA_LY	EBITDA Last Year	LAG(RVN.EBITDA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EBITDA_YTD_LY	EBITDA_YTD Last Year	LAG(RVN.EBITDA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EBITDA_YTD_LY_PCT_CHG	EBITDA_YTD % Change Last Year	LAG_VARIANCE_PERCENT(RVN.EBITDA_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EBITDA_LY_PCT_CHG	EBITDA % Chg Last Year	LAG_VARIANCE_PERCENT(RVN.EBITDA, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CUSTCNT	EOP Customer Count	OLAP_DML_EXPRESSION('RVN_CUSTCNT1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_CUSTCNT_LY	EOP Customer Count Last Year	LAG(RVN.EOP_CUSTCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CUSTCNT_LY_PCT_CHG	EOP Customer Count % Chg Last Year	LAG_VARIANCE_PERCENT(RVN.EOP_CUSTCNT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_EOP_CUSTCNT_CUSTYP	Customer Count Share of Customer Type Parent	SHARE(RVN.EOP_CUSTCNT OF CUSTYP.HCUSTYP PARENT)
SHR_EOP_CUSTCNT_GEO	Customer Count Share of GEO Parent	SHARE(RVN.EOP_CUSTCNT OF GEO.HGEO PARENT)
SHR_EOP_CUSTCNT_ORG	Customer Count Share of ORG Parent	SHARE(RVN.EOP_CUSTCNT OF ORG.HBANNER PARENT)
SHR_EOP_CUSTCNT_PROD	Customer Count Share of Product Parent	SHARE(RVN.EOP_CUSTCNT OF PROD.HPROD PARENT)
BRVN_FCST	Bill Revenue Forecast	RVN_FCST.BRVN_FCST
EOP_CUSTCNT_FCST	EOP Customer Count Forecast	RVN_FCST.EOP_CUSTCNT_FCST
SLRVN_FCST	Sales Revenue Forecast	RVN_FCST.SLRVN_FCST
TRVN_FCST	Total Revenue Forecast	RVN_FCST.TRVN_FCST

## Subscriber Churn Statistic Cube

This Cube is to analyze the Churned Subscribers based on the subscription status for each product.



**Physical Name: CHRN****Dimensions and Load Level**

The fact data of Subscriber Churn Statistic Cube will be loaded from the relational schema at these dimension levels(leaf level).

**Table 9–58 Subscriber Churn Statistic Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Customer Type	Customer Type	
Churn Reason	Churn Reason	
Product	Product	
Product Market Plan	Product Market Plan	
Organization	Organization Business Unit	
Geography	Product Market Plan	

**Aggregation Order/Operator**

The Subscriber Churn Statistic Cube will be aggregated by the following order and operators on dimensions

**Table 9–59 Subscriber Churn Statistic Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Churn Reason	Sum	3
Product	Sum	4
Product Market Plan	Sum	5
Organization	Sum	6
Geography	Sum	7

**Base Measures**

The base measure of this data cube are.

**Table 9–60 Subscriber Churn Statistic Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
DSC	Depending Subscription Count	DWA_SBCBRB_CHRN_STTSTC_MO.DPNDNG_SBRP_CNT	count of subscription based on this by subscription relationship.
VHCC1	Valid Handsets Contract Count	DWA_SBCBRB_CHRN_STTSTC_MO.VALID_HNDSETS_CNRT_CNT	Number of Valid Handsets Contract
DLC	Disconnected Lines Count	DWA_SBCBRB_CHRN_STTSTC_MO.DISCNCTD_LNS_CNT	Number of Disconnected Lines
CSC	Connections Subscribed Count	DWA_SBCBRB_CHRN_STTSTC_MO.CNCTNS_SBRB_CNT	Number of Connections Subscribed.
CLC1	Complaint Lifetime Count	DWA_SBCBRB_CHRN_STTSTC_MO.CMPLNT_LFTM_CNT	Number of complaints to call center in life time.

**Table 9–60 (Cont.) Subscriber Churn Statistic Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
CMC	Complaint Month Count	DWA_SBCRBR_CHRN_STTSTC_MO.CMPLNT_MO_CNT	Number of complaints to call center at this month.
ALC1	Active Lines Count	DWA_SBCRBR_CHRN_STTSTC_MO.ACTV_LNS_CNT	Number of Active Lines.
SC1	Suspension Count	DWA_SBCRBR_CHRN_STTSTC_MO.SSPNSN_CNT	The total suspension count in the life-time of the account.
CLD1	Contract Left Days	DWA_SBCRBR_CHRN_STTSTC_MO.CNRT_LFT_DAYS	The days before the current contract expire.
LS1	Life Span	DWA_SBCRBR_CHRN_STTSTC_MO.LIFE_SPN	The days before the current contract expire
BPTM	Bonus Point This Month	DWA_SBCRBR_CHRN_STTSTC_MO.BONUS_PNT_THIS_MO	
NT	Net Terminations	DWA_SBCRBR_CHRN_STTSTC_MO.NET_TMNTS	
NCC	New Contracts Count	DWA_SBCRBR_CHRN_STTSTC_MO.NEW_CNRTS_CNT	Number of New Contracts
TLC	Terminated Lines Count	DWA_SBCRBR_CHRN_STTSTC_MO.TRMNTD_LNS_CNT	Number of Terminated Lines.
SLV1	Subscription Left Value	DWA_SBCRBR_CHRN_STTSTC_MO.SBRP_LFT_VAL	Deposit value left in the account at the time of churn.
TPR	Total Payment Revenue	DWA_SBCRBR_CHRN_STTSTC_MO.TOT_PYMT_RVN	Total revenue paid since activation of the account.
TR	Total Revenue	DWA_SBCRBR_CHRN_STTSTC_MO.TOT_RVN	Total revenue generated since activation of account, considered the costs and other type of revenue like LAC.
EAC	Estimated Acquisition Cost	DWA_SBCRBR_CHRN_STTSTC_MO.ESTMD_ACQSTN_COST	
RCS1	Remaining Contract Sum	DWA_SBCRBR_CHRN_STTSTC_MO.RMNG_CNRT_SUM	Sum of contract term value multiplied by left months where term is monthly charge, if variant term value, use term period.
CS1	Contract Sum	DWA_SBCRBR_CHRN_STTSTC_MO.CNRT_SUM	
CHRNC	Churner Count	DWA_SBCRBR_CHRN_STTSTC_MO.CHRNR_CNT	How many customer Churned at this month.

### Derived Measures

The possible derived measure of this data cube are:

**Table 9–61 Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
BPTM_YTD	Bonus Point This Month YTD	SUM(CHRN.BPTM) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
BPTM_LP	Bonus Point This Month LP	LAG(CHRN.BPTM, 1) OVER HIERARCHY ("TIME".HTBSNS)
BPTM_LY	Bonus Point This Month Last Year	LAG(CHRN.BPTM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BPTM_LY_PCT_CHG	Bonus Point This Month % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.BPTM, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
BPTM_YTD_LY	Bonus Point This Month YTD Last Year	LAG(CHRN.BPTM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
BPTM_YTD_LY_PCT_CHG	Bonus Point This Month YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.BPTM_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CHRNC_YTD	Churner Count YTD	SUM(CHRN.CHRNC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CHRNC_LP	Churner Count LP	LAG(CHRN.CHRNC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CHRNC_LY	Churner Count Last Year	LAG(CHRN.CHRNC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CHRNC_LY_PCT_CHG	Churner Count % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.CHRNC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CHRNC_YTD_LY	Churner Count YTD Last Year	LAG(CHRN.CHRNC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CHRNC_YTD_LY_PCT_CHG	Churner Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.CHRNC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CMC_YTD	Complaint Month Count YTD	SUM(CHRN.CMC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CMC_LP	Complaint Month Count LP	LAG(CHRN.CMC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CMC_LY	Complaint Month Count Last Year	LAG(CHRN.CMC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CMC_LY_PCT_CHG	Complaint Month Count % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.CMC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CMC_YTD_LY	Complaint Month Count YTD Last Year	LAG(CHRN.CMC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CMC_YTD_LY_PCT_CHG	Complaint Month Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.CMC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSC_YTD	Connections Subscribed Count YTD	SUM(CHRN.CSC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
CSC_LP	Connections Subscribed Count LP	LAG(CHRN.CSC, 1) OVER HIERARCHY ("TIME".HTBSNS)
CSC_LY	Connections Subscribed Count Last Year	LAG(CHRN.CSC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSC_LY_PCT_CHG	Connections Subscribed Count % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.CSC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSC_YTD_LY	Connections Subscribed Count YTD Last Year	LAG(CHRN.CSC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
CSC_YTD_LY_PCT_CHG	Connections Subscribed Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.CSC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
DLC_YTD	Disconnected Lines Count YTD	SUM(CHRN.DLC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
DLC_LP	Disconnected Lines Count LP	LAG(CHRN.DLC, 1) OVER HIERARCHY ("TIME".HTBSNS)
DLC_LY	Disconnected Lines Count Last Year	LAG(CHRN.DLC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DLC_LY_PCT_CHG	Disconnected Lines Count % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.DLC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DLC_YTD_LY	Disconnected Lines Count YTD Last Year	LAG(CHRN.DLC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DLC_YTD_LY_PCT_CHG	Disconnected Lines Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.DLC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSC_YTD	Depending Subscription Count YTD	SUM(CHRN.DSC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
DSC_LP	Depending Subscription Count LP	LAG(CHRN.DSC, 1) OVER HIERARCHY ("TIME".HTBSNS)
DSC_LY	Depending Subscription Count Last Year	LAG(CHRN.DSC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSC_LY_PCT_CHG	Depending Subscription Count % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.DSC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSC_YTD_LY	Depending Subscription Count YTD Last Year	LAG(CHRN.DSC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
DSC_YTD_LY_PCT_CHG	Depending Subscription Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.DSC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EAC_YTD	Estimated Acquisition Cost YTD	SUM(CHRN.EAC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
EAC_LP	Estimated Acquisition Cost LP	LAG(CHRN.EAC, 1) OVER HIERARCHY ("TIME".HTBSNS)
EAC_LY	Estimated Acquisition Cost Last Year	LAG(CHRN.EAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EAC_LY_PCT_CHG	Estimated Acquisition Cost % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.EAC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EAC_YTD_LY	Estimated Acquisition Cost YTD Last Year	LAG(CHRN.EAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EAC_YTD_LY_PCT_CHG	Estimated Acquisition Cost YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.EAC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCC_YTD	New Contracts Count YTD	SUM(CHRN.NCC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NCC_LP	New Contracts Count LP	LAG(CHRN.NCC, 1) OVER HIERARCHY ("TIME".HTBSNS)
NCC_LY	New Contracts Count Last Year	LAG(CHRN.NCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
NCC_LY_PCT_CHG	New Contracts Count % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.NCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCC_YTD_LY	New Contracts Count YTD Last Year	LAG(CHRN.NCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NCC_YTD_LY_PCT_CHG	New Contracts Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.NCC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NT_YTD	Net Terminations YTD	SUM(CHRN.NT) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
NT_LP	Net Terminations LP	LAG(CHRN.NT, 1) OVER HIERARCHY ("TIME".HTBSNS)
NT_LY	Net Terminations Last Year	LAG(CHRN.NT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NT_LY_PCT_CHG	Net Terminations % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.NT, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NT_YTD_LY	Net Terminations YTD Last Year	LAG(CHRN.NT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
NT_YTD_LY_PCT_CHG	Net Terminations YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.NT_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TLC_YTD	Terminated Lines Count YTD	SUM(CHRN.TLC) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TLC_LP	Terminated Lines Count LP	LAG(CHRN.TLC, 1) OVER HIERARCHY ("TIME".HTBSNS)
TLC_LY	Terminated Lines Count Last Year	LAG(CHRN.TLC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TLC_LY_PCT_CHG	Terminated Lines Count % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.TLC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TLC_YTD_LY	Terminated Lines Count YTD Last Year	LAG(CHRN.TLC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TLC_YTD_LY_PCT_CHG	Terminated Lines Count YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.TLC_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TPR_YTD	Total Payment Revenue YTD	SUM(CHRN.TPR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TPR_LP	Total Payment Revenue YTD	LAG(CHRN.TPR, 1) OVER HIERARCHY ("TIME".HTBSNS)
TPR_LY	Total Payment Revenue Last Year	LAG(CHRN.TPR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TPR_LY_PCT_CHG	Total Payment Revenue % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.TPR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TPR_YTD_LY	Total Payment Revenue YTD Last Year	LAG(CHRN.TPR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TPR_YTD_LY_PCT_CHG	Total Payment Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.TPR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
TR_YTD	Total Revenue YTD	SUM(CHRN.TR) OVER HIERARCHY ("TIME".HTBSNS BETWEEN UNBOUNDED PRECEDING AND CURRENT MEMBER WITHIN ANCESTOR AT LEVEL "TIME".BSNS_YR)
TR_LP	Total Revenue LP	LAG(CHRN.TR, 1) OVER HIERARCHY ("TIME".HTBSNS)
TR_LY	Total Revenue Last Year	LAG(CHRN.TR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TR_LY_PCT_CHG	Total Revenue % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.TR, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TR_YTD_LY	Total Revenue YTD Last Year	LAG(CHRN.TR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
TR_YTD_LY_PCT_CHG	Total Revenue YTD % Change Last Year	LAG_VARIANCE_PERCENT(CHRN.TR_YTD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_ALC	EOP Active Lines Count	OLAP_DML_EXPRESSION('CHRN_ALC1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_CLC	EOP Complaint Lifetime Count	OLAP_DML_EXPRESSION('CHRN_CLC1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_CLD	EOP Contract Left Days	OLAP_DML_EXPRESSION('CHRN_CLD1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_CS	EOP Contract Sum	OLAP_DML_EXPRESSION('CHRN_CS1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_LS	EOP Life Span	OLAP_DML_EXPRESSION('CHRN_LS1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_RCS	EOP Remaining Contract Sum	OLAP_DML_EXPRESSION('CHRN_RCS1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_SC	EOP Suspension Count	OLAP_DML_EXPRESSION('CHRN_SC1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_SLV	EOP Subscription Left Value	OLAP_DML_EXPRESSION('CHRN_SLV1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_VHCC	EOP Valid Handsets Contract Count	OLAP_DML_EXPRESSION('CHRN_VHCC1(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)
EOP_ALC_LY	EOP Active Lines Count Last Year	LAG(CHRN.EOP_ALC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_ALC_LY_PCT_CHG	EOP Active Lines Count % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_ALC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CLC_LY	EOP Complaint Lifetime Count Last Year	LAG(CHRN.EOP_CLC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CLC_LY_PCT_CHG	EOP Complaint Lifetime Count Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_CLC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
EOP_CLD_LY	EOP Contract Left Days Last Year	LAG(CHRN.EOP_CLD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CLD_LY_PCT_CHG	EOP Contract Leaf Days % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_CLD, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CS_LY	EOP Contract Sum Last Year	LAG(CHRN.EOP_CS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_CS_LY_PCT_CHG	EOP Contract Sum % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_CS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_LS_LY	EOP Life Span Last Year	LAG(CHRN.EOP_LS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_LS_LY_PCT_CHG	EOP Life Span % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_LS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_RCS_LY	EOP Remaining Contract Sum Last Year	LAG(CHRN.EOP_RCS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_RCS_LY_PCT_CHG	EOP Remaining Contract Sum % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_RCS, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_SC_LY	EOP Suspension Count Last Year	LAG(CHRN.EOP_SC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_SC_LY_PCT_CHG	EOP Suspension Count % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_SC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_SLV_LY	EOP Subscription Left Value Last Year	LAG(CHRN.EOP_SLV, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_SLV_LY_PCT_CHG	EOP Subscription Left Value % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_SLV, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_VHCC_LY	EOP Valid Handsets Contract Count Last Year	LAG(CHRN.EOP_VHCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
EOP_VHCC_LY_PCT_CHG	EOP Valid Handsets Contract Count % Chg Last Year	LAG_VARIANCE_PERCENT(CHRN.EOP_VHCC, 1) OVER HIERARCHY ("TIME".HTBSNS BY ANCESTOR AT LEVEL "TIME".HTBSNS.BSNS_YR POSITION FROM BEGINNING)
SHR_EOP_ALC_ORG	EOP Active Lines Count Share of Organization Parent	SHARE(CHRN.EOP_ALC OF ORG.HCHAIN PARENT)
RANK_EOP_ALC_ORG	EOP Active Lines Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EOP_ALC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_ALC_CRNRSN	EOP Active Lines Count Share of CRNRSN Parent	SHARE(CHRN.EOP_ALC OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_ALC_CRNRSN	EOP Active Lines Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EOP_ALC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_ALC_PMP	EOP Active Lines Count Share of PMP Parent	SHARE(CHRN.EOP_ALC OF PMP.HPMP PARENT)
RANK_EOP_ALC_PMP	EOP Active Lines Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EOP_ALC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_ALC_GEO	EOP Active Lines Count Share of Geography Parent	SHARE(CHRN.EOP_ALC OF GEO.HGEO PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_EOP_ALC_GEO	EOP Active Lines Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EOP_ALC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_ALC_PROD	EOP Active Lines Count Share of Product Parent	SHARE(CHRN.EOP_ALC OF PROD.HPROD PARENT)
RANK_EOP_ALC_PROD	EOP Active Lines Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EOP_ALC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_ALC_CUSTYP	EOP Active Lines Count Share of CUSTYP Parent	SHARE(CHRN.EOP_ALC OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_ALC_CUSTYP	EOP Active Lines Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_ALC DESC NULLS LAST WITHIN PARENT)
SHR_BPTM_ORG	Bonus Point This Month Share of Organization Parent	SHARE(CHRN.BPTM OF ORG.HCHAIN PARENT)
RANK_BPTM_ORG	Bonus Point This Month Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.BPTM DESC NULLS LAST WITHIN PARENT)
SHR_BPTM_CRNRSN	Bonus Point This Month Share of CRNRSN Parent	SHARE(CHRN.BPTM OF CRNRSN.HCRNRSN PARENT)
RANK_BPTM_CRNRSN	Bonus Point This Month Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.BPTM DESC NULLS LAST WITHIN PARENT)
SHR_BPTM_PMP	Bonus Point This Month Share of PMP Parent	SHARE(CHRN.BPTM OF PMP.HPMP PARENT)
RANK_BPTM_PMP	Bonus Point This Month Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.BPTM DESC NULLS LAST WITHIN PARENT)
SHR_BPTM_GEO	Bonus Point This Month Share of Geography Parent	SHARE(CHRN.BPTM OF GEO.HGEO PARENT)
RANK_BPTM_GEO	Bonus Point This Month Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.BPTM DESC NULLS LAST WITHIN PARENT)
SHR_BPTM_PROD	Bonus Point This Month Share of Product Parent	SHARE(CHRN.BPTM OF PROD.HPROD PARENT)
RANK_BPTM_PROD	Bonus Point This Month Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.BPTM DESC NULLS LAST WITHIN PARENT)
SHR_BPTM_CUSTYP	Bonus Point This Month Share of CUSTYP Parent	SHARE(CHRN.BPTM OF CUSTYP.HCUSTYP PARENT)
RANK_BPTM_CUSTYP	Bonus Point This Month Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.BPTM DESC NULLS LAST WITHIN PARENT)
SHR_CHRNC_ORG	Churner Count Share of Organization Parent	SHARE(CHRN.CHRNC OF ORG.HCHAIN PARENT)
RANK_CHRNC_ORG	Churner Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.CHRNC DESC NULLS LAST WITHIN PARENT)
SHR_CHRNC_CRNRSN	Churner Count Share of CRNRSN Parent	SHARE(CHRN.CHRNC OF CRNRSN.HCRNRSN PARENT)
RANK_CHRNC_CRNRSN	Churner Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.CHRNC DESC NULLS LAST WITHIN PARENT)
SHR_CHRNC_PMP	Churner Count Share of PMP Parent	SHARE(CHRN.CHRNC OF PMP.HPMP PARENT)
RANK_CHRNC_PMP	Churner Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.CHRNC DESC NULLS LAST WITHIN PARENT)
SHR_CHRNC_GEO	Churner Count Share of Geography Parent	SHARE(CHRN.CHRNC OF GEO.HGEO PARENT)
RANK_CHRNC_GEO	Churner Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.CHRNC DESC NULLS LAST WITHIN PARENT)
SHR_CHRNC_PROD	Churner Count Share of Product Parent	SHARE(CHRN.CHRNC OF PROD.HPROD PARENT)



**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_CHRNC_PROD	Churner Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRNC.CHRNC DESC NULLS LAST WITHIN PARENT)
SHR_CHRNC_CUSTYP	Churner Count Share of CUSTYP Parent	SHARE(CHRNC.CHRNC OF CUSTYP.HCUSTYP PARENT)
RANK_CHRNC_CUSTYP	Churner Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRNC.CHRNC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLC_ORG	EOP Complaint Lifetime Count Share of Organization Parent	SHARE(CHRNC.EOP_CLC OF ORG.HCHAIN PARENT)
RANK_EOP_CLC_ORG	EOP Complaint Lifetime Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRNC.EOP_CLC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLC_CRNRSN	EOP Complaint Lifetime Count Share of CRNRSN Parent	SHARE(CHRNC.EOP_CLC OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_CLC_CRNRSN	EOP Complaint Lifetime Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRNC.EOP_CLC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLC_PMP	EOP Complaint Lifetime Count Share of PMP Parent	SHARE(CHRNC.EOP_CLC OF PMP.HPMP PARENT)
RANK_EOP_CLC_PMP	EOP Complaint Lifetime Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRNC.EOP_CLC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLC_GEO	EOP Complaint Lifetime Count Share of Geography Parent	SHARE(CHRNC.EOP_CLC OF GEO.HGEO PARENT)
RANK_EOP_CLC_GEO	EOP Complaint Lifetime Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRNC.EOP_CLC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLC_PROD	EOP Complaint Lifetime Count Share of Product Parent	SHARE(CHRNC.EOP_CLC OF PROD.HPROD PARENT)
RANK_EOP_CLC_PROD	EOP Complaint Lifetime Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRNC.EOP_CLC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLC_CUSTYP		SHARE(CHRNC.EOP_CLC OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_CLC_CUSTYP	EOP Complaint Lifetime Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRNC.EOP_CLC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLD_ORG	EOP Contract Left Days Share of Organization Parent	SHARE(CHRNC.EOP_CLD OF ORG.HCHAIN PARENT)
RANK_EOP_CLD_ORG	EOP Contract Left Days Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRNC.EOP_CLD DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLD_CRNRSN	EOP Contract Left Days Share of CRNRSN Parent	SHARE(CHRNC.EOP_CLD OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_CLD_CRNRSN	EOP Contract Left Days Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRNC.EOP_CLD DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLD_PMP	EOP Contract Left Days Share of PMP Parent	SHARE(CHRNC.EOP_CLD OF PMP.HPMP PARENT)
RANK_EOP_CLD_PMP	EOP Contract Left Days Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRNC.EOP_CLD DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLD_GEO	EOP Contract Left Days Share of Geography Parent	SHARE(CHRNC.EOP_CLD OF GEO.HGEO PARENT)
RANK_EOP_CLD_GEO	EOP Contract Left Days Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRNC.EOP_CLD DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLD_PROD	EOP Contract Left Days Share of Product Parent	SHARE(CHRNC.EOP_CLD OF PROD.HPROD PARENT)
RANK_EOP_CLD_PROD	EOP Contract Left Days Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRNC.EOP_CLD DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CLD_CUSTYP	EOP Contract Left Days Share of CUSTYP Parent	SHARE(CHRNC.EOP_CLD OF CUSTYP.HCUSTYP PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_EOP_CLD_CUSTYP	EOP Contract Left Days Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_CLD DESC NULLS LAST WITHIN PARENT)
SHR_CMC_ORG	EOP Complaint Month Count Share of Organization Parent	SHARE(CHRN.CMC OF ORG.HCHAIN PARENT)
RANK_CMC_ORG	EOP Complaint Month Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.CMC DESC NULLS LAST WITHIN PARENT)
SHR_CMC_CRNRSN	EOP Complaint Month Count Share of CRRSN Parent	SHARE(CHRN.CMC OF CRNRSN.HCRNRSN PARENT)
RANK_CMC_CRNRSN	EOP Complaint Month Count Rank of CRRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.CMC DESC NULLS LAST WITHIN PARENT)
SHR_CMC_PMP	EOP Complaint Month Count Share of PMP Parent	SHARE(CHRN.CMC OF PMP.HPMP PARENT)
RANK_CMC_PMP	EOP Complaint Month Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.CMC DESC NULLS LAST WITHIN PARENT)
SHR_CMC_GEO	EOP Complaint Month Count Share of Geography Parent	SHARE(CHRN.CMC OF GEO.HGEO PARENT)
RANK_CMC_GEO	EOP Complaint Month Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.CMC DESC NULLS LAST WITHIN PARENT)
SHR_CMC_PROD	EOP Complaint Month Count Share of Product Parent	SHARE(CHRN.CMC OF PROD.HPROD PARENT)
RANK_CMC_PROD	EOP Complaint Month Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.CMC DESC NULLS LAST WITHIN PARENT)
SHR_CMC_CUSTYP	EOP Complaint Month Count Share of CUSTYP Parent	SHARE(CHRN.CMC OF CUSTYP.HCUSTYP PARENT)
RANK_CMC_CUSTYP	EOP Complaint Month Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.CMC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CS_ORG	EOP Contract Sum Share of Organization Parent	SHARE(CHRN.EOP_CS OF ORG.HCHAIN PARENT)
RANK_EOP_CS_ORG	EOP Contract Sum Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EOP_CS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CS_CRNRSN	EOP Contract Sum Share of CRNRSN Parent	SHARE(CHRN.EOP_CS OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_CS_CRNRSN	EOP Contract Sum Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EOP_CS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CS_PMP	EOP Contract Sum Share of PMP Parent	SHARE(CHRN.EOP_CS OF PMP.HPMP PARENT)
RANK_EOP_CS_PMP	EOP Contract Sum Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EOP_CS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CS_GEO	EOP Contract Sum Share of Geography Parent	SHARE(CHRN.EOP_CS OF GEO.HGEO PARENT)
RANK_EOP_CS_GEO	EOP Contract Sum Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EOP_CS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CS_PROD	EOP Contract Sum Share of Product Parent	SHARE(CHRN.EOP_CS OF PROD.HPROD PARENT)
RANK_EOP_CS_PROD	EOP Contract Sum Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EOP_CS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_CS_CUSTYP	EOP Contract Sum Share of CUSTYP Parent	SHARE(CHRN.EOP_CS OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_CS_CUSTYP	EOP Contract Sum Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_CS DESC NULLS LAST WITHIN PARENT)
SHR_CSC_ORG	EOP Connections Subscribed Count Share of Organization Parent	SHARE(CHRN.CSC OF ORG.HCHAIN PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_CSC_ORG	EOP Connections Subscribed Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.CSC DESC NULLS LAST WITHIN PARENT)
SHR_CSC_CRNRSN	EOP Connections Subscribed Count Share of CRRSN Parent	SHARE(CHRN.CSC OF CRNRSN.HCRNRSN PARENT)
RANK_CSC_CRNRSN	EOP Connections Subscribed Count Rank of CRRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.CSC DESC NULLS LAST WITHIN PARENT)
SHR_CSC_PMP	EOP Connections Subscribed Share of PMP Parent	SHARE(CHRN.CSC OF PMP.HPMP PARENT)
RANK_CSC_PMP	EOP Connections Subscribed Rank Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.CSC DESC NULLS LAST WITHIN PARENT)
SHR_CSC_GEO	EOP Connections Subscribed Share of Geography Parent	SHARE(CHRN.CSC OF GEO.HGEO PARENT)
RANK_CSC_GEO	EOP Connections Subscribed Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.CSC DESC NULLS LAST WITHIN PARENT)
SHR_CSC_PROD	EOP Connections Subscribed Share of Product Parent	SHARE(CHRN.CSC OF PROD.HPROD PARENT)
RANK_CSC_PROD	EOP Connections Subscribed Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.CSC DESC NULLS LAST WITHIN PARENT)
SHR_CSC_CUSTYP	EOP Connections Subscribed Share of CUSTYP Parent	SHARE(CHRN.CSC OF CUSTYP.HCUSTYP PARENT)
RANK_CSC_CUSTYP	EOP Connections Subscribed Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.CSC DESC NULLS LAST WITHIN PARENT)
SHR_DLC_ORG	EOP Connections Subscribed Share of Organization Parent	SHARE(CHRN.DLC OF ORG.HCHAIN PARENT)
RANK_DLC_ORG	EOP Connections Subscribed Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.DLC DESC NULLS LAST WITHIN PARENT)
SHR_DLC_CRNRSN	EOP Connections Subscribed Rank of CRNRSN Parent	SHARE(CHRN.DLC OF CRNRSN.HCRNRSN PARENT)
RANK_DLC_CRNRSN	EOP Connections Subscribed Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.DLC DESC NULLS LAST WITHIN PARENT)
SHR_DLC_PMP	EOP Disconnected Lines Count Share of PMP Parent	SHARE(CHRN.DLC OF PMP.HPMP PARENT)
RANK_DLC_PMP	EOP Disconnected Lines Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.DLC DESC NULLS LAST WITHIN PARENT)
SHR_DLC_GEO	EOP Disconnected Lines Count Share of Geography Parent	SHARE(CHRN.DLC OF GEO.HGEO PARENT)
RANK_DLC_GEO	EOP Disconnected Lines Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.DLC DESC NULLS LAST WITHIN PARENT)
SHR_DLC_PROD	EOP Disconnected Lines Count Share of Product Parent	SHARE(CHRN.DLC OF PROD.HPROD PARENT)
RANK_DLC_PROD	EOP Disconnected Lines Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.DLC DESC NULLS LAST WITHIN PARENT)
SHR_DLC_CUSTYP	EOP Disconnected Lines Count Share of CUSTYP Parent	SHARE(CHRN.DLC OF CUSTYP.HCUSTYP PARENT)
RANK_DLC_CUSTYP	EOP Disconnected Lines Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.DLC DESC NULLS LAST WITHIN PARENT)
SHR_DSC_ORG	EOP Disconnected Lines Count Share of Organization Parent	SHARE(CHRN.DSC OF ORG.HCHAIN PARENT)
RANK_DSC_ORG	EOP Disconnected Lines Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.DSC DESC NULLS LAST WITHIN PARENT)
SHR_DSC_CRNRSN	EOP Disconnected Lines Count Share of CRNRSN Parent	SHARE(CHRN.DSC OF CRNRSN.HCRNRSN PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_DSC_CRNRSN	EOP Disconnected Lines Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.DSC DESC NULLS LAST WITHIN PARENT)
SHR_DSC_PMP	EOP Depending Subscription Count Share of CRNRSN Parent	SHARE(CHRN.DSC OF PMP.HPMP PARENT)
RANK_DSC_PMP	EOP Depending Subscription Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.DSC DESC NULLS LAST WITHIN PARENT)
SHR_DSC_GEO	EOP Depending Subscription Count Share of Geography Parent	SHARE(CHRN.DSC OF GEO.HGEO PARENT)
RANK_DSC_GEO	EOP Depending Subscription Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.DSC DESC NULLS LAST WITHIN PARENT)
SHR_DSC_PROD	EOP Depending Subscription Count Rank of Geography Parent	SHARE(CHRN.DSC OF PROD.HPROD PARENT)
RANK_DSC_PROD	EOP Depending Subscription Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.DSC DESC NULLS LAST WITHIN PARENT)
SHR_DSC_CUSTYP	EOP Depending Subscription Count Share of CUSTYP Parent	SHARE(CHRN.DSC OF CUSTYP.HCUSTYP PARENT)
RANK_DSC_CUSTYP	EOP Depending Subscription Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.DSC DESC NULLS LAST WITHIN PARENT)
SHR_EAC_ORG	EOP Estimated Acquisition Cost Share of Organization Parent	SHARE(CHRN.EAC OF ORG.HCHAIN PARENT)
RANK_EAC_ORG	EOP Estimated Acquisition Cost Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EAC DESC NULLS LAST WITHIN PARENT)
SHR_EAC_CRNRSN	EOP Estimated Acquisition Cost Share of CRNRSN Parent	SHARE(CHRN.EAC OF CRNRSN.HCRNRSN PARENT)
RANK_EAC_CRNRSN	EOP Estimated Acquisition Cost Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EAC DESC NULLS LAST WITHIN PARENT)
SHR_EAC_PMP	EOP Estimated Acquisition Share of PMP Parent	SHARE(CHRN.EAC OF PMP.HPMP PARENT)
RANK_EAC_PMP	EOP Estimated Acquisition Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EAC DESC NULLS LAST WITHIN PARENT)
SHR_EAC_GEO	EOP Estimated Acquisition Share of Geography Parent	SHARE(CHRN.EAC OF GEO.HGEO PARENT)
RANK_EAC_GEO	EOP Estimated Acquisition Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EAC DESC NULLS LAST WITHIN PARENT)
SHR_EAC_PROD	EOP Estimated Acquisition Share of Product Parent	SHARE(CHRN.EAC OF PROD.HPROD PARENT)
RANK_EAC_PROD	EOP Estimated Acquisition Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EAC DESC NULLS LAST WITHIN PARENT)
SHR_EAC_CUSTYP	EOP Estimated Acquisition Share of CUSTYP Parent	SHARE(CHRN.EAC OF CUSTYP.HCUSTYP PARENT)
RANK_EAC_CUSTYP	EOP Estimated Acquisition Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EAC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_LS_ORG	EOP Life Span Share of Organization Parent	SHARE(CHRN.EOP_LS OF ORG.HCHAIN PARENT)
RANK_EOP_LS_ORG	EOP Life Span Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EOP_LS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_LS_CRNRSN	EOP Life Span Share of CRNRSN Parent	SHARE(CHRN.EOP_LS OF CRNRSN.HCRNRSN PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_EOP_LS_CRNRSN	EOP Life Span Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EOP_LS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_LS_PMP	EOP Life Span Share of PMP Parent	SHARE(CHRN.EOP_LS OF PMP.HPMP PARENT)
RANK_EOP_LS_PMP	EOP Life Span Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EOP_LS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_LS_GEO	EOP Life Span Share of Geography Parent	SHARE(CHRN.EOP_LS OF GEO.HGEO PARENT)
RANK_EOP_LS_GEO	EOP Life Span Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EOP_LS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_LS_PROD	EOP Life Span Share of Product Parent	SHARE(CHRN.EOP_LS OF PROD.HPROD PARENT)
RANK_EOP_LS_PROD	EOP Life Span Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EOP_LS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_LS_CUSTYP	EOP Life Span Share of CUSTYP Parent	SHARE(CHRN.EOP_LS OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_LS_CUSTYP	EOP Life Span Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_LS DESC NULLS LAST WITHIN PARENT)
SHR_NCC_ORG	New Contracts Count Share of Organization Parent	SHARE(CHRN.NCC OF ORG.HCHAIN PARENT)
RANK_NCC_ORG	New Contracts Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.NCC DESC NULLS LAST WITHIN PARENT)
SHR_NCC_CRNRSN	New Contracts Count Share of CRNRSN Parent	SHARE(CHRN.NCC OF CRNRSN.HCRNRSN PARENT)
RANK_NCC_CRNRSN	New Contracts Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.NCC DESC NULLS LAST WITHIN PARENT)
SHR_NCC_PMP	New Contracts Count Share of PMP Parent	SHARE(CHRN.NCC OF PMP.HPMP PARENT)
RANK_NCC_PMP	New Contracts Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.NCC DESC NULLS LAST WITHIN PARENT)
SHR_NCC_GEO	New Contracts Count Share of Geography Parent	SHARE(CHRN.NCC OF GEO.HGEO PARENT)
RANK_NCC_GEO	New Contracts Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.NCC DESC NULLS LAST WITHIN PARENT)
SHR_NCC_PROD	New Contracts Count Share of Product Parent	SHARE(CHRN.NCC OF PROD.HPROD PARENT)
RANK_NCC_PROD	New Contracts Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.NCC DESC NULLS LAST WITHIN PARENT)
SHR_NCC_CUSTYP	New Contracts Count Share of CUSTYP Parent	SHARE(CHRN.NCC OF CUSTYP.HCUSTYP PARENT)
RANK_NCC_CUSTYP	New Contracts Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.NCC DESC NULLS LAST WITHIN PARENT)
SHR_NT_ORG	Net Terminations Share of Organization Parent	SHARE(CHRN.NT OF ORG.HCHAIN PARENT)
RANK_NT_ORG	Net Terminations Share of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.NT DESC NULLS LAST WITHIN PARENT)
SHR_NT_CRNRSN	Net Terminations Share of CRNRSN Parent	SHARE(CHRN.NT OF CRNRSN.HCRNRSN PARENT)
RANK_NT_CRNRSN	Net Terminations Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.NT DESC NULLS LAST WITHIN PARENT)
SHR_NT_PMP	Net Terminations Share of PMP Parent	SHARE(CHRN.NT OF PMP.HPMP PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_NT_PMP	Net Terminations Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.NT DESC NULLS LAST WITHIN PARENT)
SHR_NT_GEO	Net Terminations Share of Geography Parent	SHARE(CHRN.NT OF GEO.HGEO PARENT)
RANK_NT_GEO	Net Terminations Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.NT DESC NULLS LAST WITHIN PARENT)
SHR_NT_PROD	Net Terminations Share of Product Parent	SHARE(CHRN.NT OF PROD.HPROD PARENT)
RANK_NT_PROD	Net Terminations Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.NT DESC NULLS LAST WITHIN PARENT)
SHR_NT_CUSTYP	Net Terminations Share of CUSTYP Parent	SHARE(CHRN.NT OF CUSTYP.HCUSTYP PARENT)
RANK_NT_CUSTYP	Net Terminations Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.NT DESC NULLS LAST WITHIN PARENT)
SHR_EOP_RCS_ORG	EOP Remaining Contract Sum Share of Organization Parent	SHARE(CHRN.EOP_RCS OF ORG.HCHAIN PARENT)
RANK_EOP_RCS_ORG	EOP Remaining Contract Sum Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EOP_RCS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_RCS_CRNRSN	EOP Remaining Contract Sum Share of CRNRSN Parent	SHARE(CHRN.EOP_RCS OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_RCS_CRNRSN	EOP Remaining Contract Sum Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EOP_RCS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_RCS_PMP	EOP Remaining Contract Sum Share of PMP Parent	SHARE(CHRN.EOP_RCS OF PMP.HPMP PARENT)
RANK_EOP_RCS_PMP	EOP Remaining Contract Sum Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EOP_RCS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_RCS_GEO	EOP Remaining Contract Sum Share of Geography Parent	SHARE(CHRN.EOP_RCS OF GEO.HGEO PARENT)
RANK_EOP_RCS_GEO	EOP Remaining Contract Sum Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EOP_RCS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_RCS_PROD	EOP Remaining Contract Sum Share of Product Parent	SHARE(CHRN.EOP_RCS OF PROD.HPROD PARENT)
RANK_EOP_RCS_PROD	EOP Remaining Contract Sum Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EOP_RCS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_RCS_CUSTYP	EOP Remaining Contract Sum Share of CUSTYP Parent	SHARE(CHRN.EOP_RCS OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_RCS_CUSTYP	EOP Remaining Contract Sum Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_RCS DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SC_ORG	EOP Suspension Count Share of Organization Parent	SHARE(CHRN.EOP_SC OF ORG.HCHAIN PARENT)
RANK_EOP_SC_ORG	EOP Suspension Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EOP_SC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SC_CRNRSN	EOP Suspension Count Share of CRNRSN Parent	SHARE(CHRN.EOP_SC OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_SC_CRNRSN	EOP Suspension Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EOP_SC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SC_PMP	EOP Suspension Count Share of PMP Parent	SHARE(CHRN.EOP_SC OF PMP.HPMP PARENT)
RANK_EOP_SC_PMP	EOP Suspension Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EOP_SC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SC_GEO	EOP Suspension Count Share of Geography Parent	SHARE(CHRN.EOP_SC OF GEO.HGEO PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_EOP_SC_GEO	EOP Suspension Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EOP_SC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SC_PROD	EOP Suspension Count Share of Product Parent	SHARE(CHRN.EOP_SC OF PROD.HPROD PARENT)
RANK_EOP_SC_PROD	EOP Suspension Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EOP_SC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SC_CUSTYP	EOP Suspension Count Share of CUSTYP Parent	SHARE(CHRN.EOP_SC OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_SC_CUSTYP	EOP Suspension Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_SC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SLV_ORG	EOP Subscription Left Value Share of Organization Parent	SHARE(CHRN.EOP_SLV OF ORG.HCHAIN PARENT)
RANK_EOP_SLV_ORG	EOP Subscription Left Value Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EOP_SLV DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SLV_CRNRSN	EOP Subscription Left Value Share of CRNRSN Parent	SHARE(CHRN.EOP_SLV OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_SLV_CRNRSN	EOP Subscription Left Value Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EOP_SLV DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SLV_PMP	EOP Subscription Left Value Share of PMP Parent	SHARE(CHRN.EOP_SLV OF PMP.HPMP PARENT)
RANK_EOP_SLV_PMP	EOP Subscription Left Value Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EOP_SLV DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SLV_GEO	EOP Subscription Left Value Share of Geography Parent	SHARE(CHRN.EOP_SLV OF GEO.HGEO PARENT)
RANK_EOP_SLV_GEO	EOP Subscription Left Value Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EOP_SLV DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SLV_PROD	EOP Subscription Left Value Share of Product Parent	SHARE(CHRN.EOP_SLV OF PROD.HPROD PARENT)
RANK_EOP_SLV_PROD	EOP Subscription Left Value Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EOP_SLV DESC NULLS LAST WITHIN PARENT)
SHR_EOP_SLV_CUSTYP	EOP Subscription Left Value Share of CUSTYP Parent	SHARE(CHRN.EOP_SLV OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_SLV_CUSTYP	EOP Subscription Left Value Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_SLV DESC NULLS LAST WITHIN PARENT)
SHR_TLC_ORG	Terminated Lines Count Share of Organization Parent	SHARE(CHRN.TLC OF ORG.HCHAIN PARENT)
RANK_TLC_ORG	Terminated Lines Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.TLC DESC NULLS LAST WITHIN PARENT)
SHR_TLC_CRNRSN	Terminated Lines Count Share of CRNRSN Parent	SHARE(CHRN.TLC OF CRNRSN.HCRNRSN PARENT)
RANK_TLC_CRNRSN	Terminated Lines Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.TLC DESC NULLS LAST WITHIN PARENT)
SHR_TLC_PMP	Terminated Lines Count Share of PMP Parent	SHARE(CHRN.TLC OF PMP.HPMP PARENT)
RANK_TLC_PMP	Terminated Lines Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.TLC DESC NULLS LAST WITHIN PARENT)
SHR_TLC_GEO	Terminated Lines Count Share of Geography Parent	SHARE(CHRN.TLC OF GEO.HGEO PARENT)
RANK_TLC_GEO	Terminated Lines Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.TLC DESC NULLS LAST WITHIN PARENT)
SHR_TLC_PROD	Terminated Lines Count Share of Product Parent	SHARE(CHRN.TLC OF PROD.HPROD PARENT)

**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_TLC_PROD	Terminated Lines Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.TLC DESC NULLS LAST WITHIN PARENT)
SHR_TLC_CUSTYP	Terminated Lines Count Share of CUSTYP Parent	SHARE(CHRN.TLC OF CUSTYP.HCUSTYP PARENT)
RANK_TLC_CUSTYP	Terminated Lines Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.TLC DESC NULLS LAST WITHIN PARENT)
SHR_TPR_ORG	Total Payment Revenue Share of Organization Parent	SHARE(CHRN.TPR OF ORG.HCHAIN PARENT)
RANK_TPR_ORG	Total Payment Revenue Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.TPR DESC NULLS LAST WITHIN PARENT)
SHR_TPR_CRNRSN	Total Payment Revenue Share of CRNRSN Parent	SHARE(CHRN.TPR OF CRNRSN.HCRNRSN PARENT)
RANK_TPR_CRNRSN	Total Payment Revenue Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.TPR DESC NULLS LAST WITHIN PARENT)
SHR_TPR_PMP	Total Payment Revenue Share of PMP Parent	SHARE(CHRN.TPR OF PMP.HPMP PARENT)
RANK_TPR_PMP	Total Payment Revenue Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.TPR DESC NULLS LAST WITHIN PARENT)
SHR_TPR_GEO	Total Payment Revenue Share of Geography Parent	SHARE(CHRN.TPR OF GEO.HGEO PARENT)
RANK_TPR_GEO	Total Payment Revenue Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.TPR DESC NULLS LAST WITHIN PARENT)
SHR_TPR_PROD	Total Payment Revenue Share of Product Parent	SHARE(CHRN.TPR OF PROD.HPROD PARENT)
RANK_TPR_PROD	Total Payment Revenue Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.TPR DESC NULLS LAST WITHIN PARENT)
SHR_TPR_CUSTYP	Total Payment Revenue Share of CUSTYP Parent	SHARE(CHRN.TPR OF CUSTYP.HCUSTYP PARENT)
RANK_TPR_CUSTYP	Total Payment Revenue Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.TPR DESC NULLS LAST WITHIN PARENT)
SHR_TR_ORG	Total Revenue Share of Organization Parent	SHARE(CHRN.TR OF ORG.HCHAIN PARENT)
RANK_TR_ORG	Total Revenue Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.TR DESC NULLS LAST WITHIN PARENT)
SHR_TR_CRNRSN	Total Revenue Share of CRNRSN Parent	SHARE(CHRN.TR OF CRNRSN.HCRNRSN PARENT)
RANK_TR_CRNRSN	Total Revenue Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.TR DESC NULLS LAST WITHIN PARENT)
SHR_TR_PMP	Total Revenue Share of PMP Parent	SHARE(CHRN.TR OF PMP.HPMP PARENT)
RANK_TR_PMP	Total Revenue Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.TR DESC NULLS LAST WITHIN PARENT)
SHR_TR_GEO	Total Revenue Share of Geography Parent	SHARE(CHRN.TR OF GEO.HGEO PARENT)
RANK_TR_GEO	Total Revenue Share of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.TR DESC NULLS LAST WITHIN PARENT)
SHR_TR_PROD	Total Revenue Share of Product Parent	SHARE(CHRN.TR OF PROD.HPROD PARENT)
RANK_TR_PROD	Total Revenue Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.TR DESC NULLS LAST WITHIN PARENT)
SHR_TR_CUSTYP	Total Revenue Share of CUSTYP Parent	SHARE(CHRN.TR OF CUSTYP.HCUSTYP PARENT)



**Table 9–61 (Cont.) Subscriber Churn Statistic Cube Derived Measures**

Physical Name	Logical Name	Definition
RANK_TR_CUSTYP	Total Revenue Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.TR DESC NULLS LAST WITHIN PARENT)
SHR_EOP_VHCC_ORG	EOP Valid Handsets Contract Count of Organization Parent	SHARE(CHRN.EOP_VHCC OF ORG.HCHAIN PARENT)
RANK_EOP_VHCC_ORG	EOP Valid Handsets Contract Count Rank of Organization Parent	RANK() OVER HIERARCHY (ORG.HCHAIN ORDER BY CHRN.EOP_VHCC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_VHCC_CRNRSN	EOP Valid Handsets Contract Count Share of CRNRSN Parent	SHARE(CHRN.EOP_VHCC OF CRNRSN.HCRNRSN PARENT)
RANK_EOP_VHCC_CRNRSN	EOP Valid Handsets Contract Count Rank of CRNRSN Parent	RANK() OVER HIERARCHY (CRNRSN.HCRNRSN ORDER BY CHRN.EOP_VHCC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_VHCC_PMP	EOP Valid Handsets Contract Count Share of PMP Parent	SHARE(CHRN.EOP_VHCC OF PMP.HPMP PARENT)
RANK_EOP_VHCC_PMP	EOP Valid Handsets Contract Count Rank of PMP Parent	RANK() OVER HIERARCHY (PMP.HPMP ORDER BY CHRN.EOP_VHCC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_VHCC_GEO	EOP Valid Handsets Contract Count Share of Geography Parent	SHARE(CHRN.EOP_VHCC OF GEO.HGEO PARENT)
RANK_EOP_VHCC_GEO	EOP Valid Handsets Contract Count Rank of Geography Parent	RANK() OVER HIERARCHY (GEO.HGEO ORDER BY CHRN.EOP_VHCC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_VHCC_PROD	EOP Valid Handsets Contract Count Share of Product Parent	SHARE(CHRN.EOP_VHCC OF PROD.HPROD PARENT)
RANK_EOP_VHCC_PROD	EOP Valid Handsets Contract Count Rank of Product Parent	RANK() OVER HIERARCHY (PROD.HPROD ORDER BY CHRN.EOP_VHCC DESC NULLS LAST WITHIN PARENT)
SHR_EOP_VHCC_CUSTYP	EOP Valid Handsets Contract Count Share of CUSTYP Parent	SHARE(CHRN.EOP_VHCC OF CUSTYP.HCUSTYP PARENT)
RANK_EOP_VHCC_CUSTYP	EOP Valid Handsets Contract Count Rank of CUSTYP Parent	RANK() OVER HIERARCHY (CUSTYP.HCUSTYP ORDER BY CHRN.EOP_VHCC DESC NULLS LAST WITHIN PARENT)

## Customer Acquisition Forecast Cube

This cube provides information on customer acquisition forecasting.

**Physical Name:** ACM\_FCST

### Dimensions and Load Level

The fact data of Customer Acquisition Forecast Cube is loaded by the forecast program from the ACM cube at these dimension levels (leaf level).

**Table 9–62 Customer Acquisition Forecast Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Customer Type	Customer Type	
Product	Product	
Product Market Plan	Product Market Plan	
Geography	County	

**Aggregation Order/Operator**

The Customer Acquisition Forecast Cube will be aggregated by the following order and operators on dimensions

**Table 9–63 Customer Acquisition Forecast Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Product	Sum	3
Product Market Plan	Sum	4
Geography	Sum	5

**Base Measures**

The base measure of this data cube are:

**Table 9–64 Customer Acquisition Forecast Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
AAC_FCST	Actual Acquisition Count Forecast		

**Customer Acquisition Forecast Statistic Cube**

This cube provides information on customer acquisition forecasting statistics.

**Physical Name: ACM\_FCST\_STTSTC**

**Dimensions and Load Level**

The fact data for the Customer Acquisition Forecast Statistic Cube is loaded by the forecast program at these dimension levels (leaf level). The Customer Acquisition Forecast Statistic Cube stores the details about the forecast calculation, such as which forecast method the Geneva engine is using and what are the values of the parameters for this forecast method, and so on. There is no time dimension in this cube because all the forecasts in Oracle Communications Data Model use a time series forecast.

**Table 9–65 Customer Acquisition Forecast Statistic Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Customer Type	Customer Type	
Product	Product	
Product Market Plan	Product Market Plan	
Geography	County	

**Aggregation Order/Operator**

The Customer Acquisition Forecast Cube will be aggregated by the following order and operators on dimensions.

**Table 9–66 Customer Acquisition Forecast Statistic Aggregation Operator and Order**

Dimension Name	Operator	Order
Customer Type	Sum	2

**Table 9–66 (Cont.) Customer Acquisition Forecast Statistic Aggregation Operator and**

Dimension Name	Operator	Order
Product	Sum	3
Product Market Plan	Sum	4
Geography	Sum	5

**Base Measures**

The base measure of this data cube are:

**Table 9–67 Customer Acquisition Forecast Statistic Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
AAC_STTSTC	Actual Acquisition Count Forecast Statistic		

**Cell Statistic Forecast Cube**

Provides information on cell statistics forecasting.

**Physical Name: CSM\_FCST**

**Dimensions and Load Level**

The fact data of Cell Statistic Forecast Cube is loaded by the forecast program from the CSM cube at these dimension levels(leaf level).

**Table 9–68 Cell Statistic Forecast Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Peak Offpeak Time	Peak Offpeak Time	
Network Element	Network Element	
Time Slot	Time Slot	
Geography	County	

**Aggregation Order/Operator**

The Cell Statistic Forecast Cube will be aggregated by the following order and operators on dimensions.

**Table 9–69 Cell Statistic Forecast Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Peak Offpeak Time	Sum	2
Network Element	Sum	3
Time Slot	Sum	4
Geography	Sum	5

**Base Measures**

The base measure of this data cube are:

**Table 9–70 Cell Statistic Forecast Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
TT_FCST	Total Traffic Forecast		

## Handset Stock Forecast Cube

Provides information on handset stock forecasting.

**Physical Name: HSKM\_FCST**

### Dimensions and Load level

The fact data of Handset Stock Forecast Cube is loaded by the forecast program from the HSKM cube at these dimension levels(leaf level).

**Table 9–71 Handset Stock Forecast Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Sales Channel	Sales Channel	
Handset Model	Handset Model	

### Aggregation Order/Operator

The fact data of Handset Stock Forecast Cube is loaded by the forecast program from the HSKM cube at these dimension levels (leaf level).

**Table 9–72 Handset Stock Forecast Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Sales Channel	Sum	2
Handset Model	Sum	3

### Base Measures

The base measure of this data cube are:

**Table 9–73 Handset Stock Forecast Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
ASTK1_FCST	Actual Stock Forecast		
HCNT_FCST	Handset Sales Count Forecast		

### Derived Measures

The possible derived measure of this data cube are:

**Table 9–74 Handset Stock Forecast Cube Derived Measures**

Physical Name	Logical Name	Definition
EOP_ASTK_FCST	EOP Actual Stock Forecast	OLAP_DML_EXPRESSION('HSKM_FCST_ASTK1_FCST(time if time_levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)

## Revenue Forecast Cube

Provides information on revenue forecasting.

**Physical Name:** RVN\_FCST

### Dimensions and Load level

The fact data of Revenue Forecast Cube is loaded by the forecast program from the RVN cube at these dimension levels (leaf level).

**Table 9–75 Revenue Forecast Cube Dimensions and Load Level**

Dimension Name	Load level	Description
Time	Business Month	
Customer Type	Customer Type	
Product	Product	
Organization	Organization Business Unit	
Geography	County	

### Aggregation Order/Operator

The Revenue Cube will be aggregated by the following order and operators on dimensions.

**Table 9–76 Revenue Forecast Cube Aggregation Operator and Order**

Dimension Name	Operator	Order
Time	Sum	1
Customer Type	Sum	2
Product	Sum	3
Organization	Sum	4
Geography	Sum	5

### Base Measures

The base measure of this data cube are:

**Table 9–77 Revenue Forecast Cube Base Measures**

Physical Name	Logical Name	Physical Column	Description
BRVN_FCST	Bill Revenue Forecast		
SLRVN_FCST	Sales Revenue Forecast		
TRVN_FCST	Total Revenue Forecast		
CUSTCNT1_FCST	Customer Count Forecast		

### Derived Measures

The possible derived measure of this data cube are:

**Table 9–78 Revenue Forecast Cube Derived Measures**

Physical Name	Logical Name	Definition
EOP_CUSTCNT_ FCST	EOP Customer Count Forecast	OLAP_DML_EXPRESSION('RVN_FCST_CUSTCNT1_FCST(time if time_ levelrel eq "BSNS_MO" then time else statlast(limit(time to bottomdescendants using time_parentrel time(time time))))', NUMBER)

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## Oracle Communications Data Model Data Mining Models

This chapter provides reference information about the data mining models provided with Oracle Communications Data Model.

This chapter includes the following sections:

- [About Data Mining in Oracle Communications Data Model](#)
- [Oracle Communications Data Model Mining Result Tables](#)
- [Model 1: Churn Prediction](#)
- [Model 2: Customer Profiling](#)
- [Model 3: Customer Churn Factor](#)
- [Model 4: Cross-Sell Opportunity](#)
- [Model 5: Customer Sentiment Detection](#)
- [Model 6: Life Time Value \(LTV\) Prediction](#)

### About Data Mining in Oracle Communications Data Model

Oracle Communications Data Model mining models include data mining packages, source tables (MV) and target tables. The source tables are extracted from Oracle Communications Data Model main schema and are used to train the models. The target tables contain the mining result data, for example, mined rules. Data mining packages pull in the source data, feed it into the data mining packages, and populate the target tables with the results. The data in the target tables can be presented in reports.

**Note:** Modified or new mining models are not supported by Oracle as part of the standard Oracle Communications Data Model support. However, it is recommended that you adapt the supplied mining models to your needs or create new mining models, as required.

As shown in [Table 10–1](#), the Oracle Communications Data Model mining models use the specified algorithms for the specific problem.

**Table 10–1 Oracle Communications Data Model Algorithm Types Used by Model**

Model	Algorithms Used by Data Mining Model
Model 1: Churn Prediction	Decision Tree (DT), Support Vector Machine (SVM)
Model 2: Customer Profiling	<i>k</i> -Means (KM)
Model 3: Customer Churn Factor	Support Vector Machine (SVM)
Model 4: Cross-Sell Opportunity	Support Vector Machine (SVM)
Model 5: Customer Sentiment Detection	Support Vector Machine (SVM)
Model 6: Life Time Value (LTV) Prediction	Generalized Linear Models (GLM)

## Understanding the Mining Model Schema and Architecture

The Oracle Communications Data Model mining consists of two schemas: `ocdm_mining` and `ocdm_sys`. Figure 10–1 shows how these schemas function in Oracle Communications Data Model mining.

The `ocdm_mining` schema includes the following:

- Mining Model Package (`pkg_ocdm_mining`): Given source data in the views, the mining package generates Mined Rules, Predicted Results, and additional information.
- Mining Model Source Views: Materialized views transform the data from `ocdm_sys` schema and present them to Oracle Mining algorithms as multiple materialized views. All tables are implemented as MVs, not physical tables.
- Mining Model Support Tables: The mining model support tables are primarily intermediate tables used during the mining model creation or testing process. Most of the mining model support tables have names that start with "DM\$".

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**Note:** Do not delete the mining model support tables; the DM\$ tables can be very difficult to reconstruct if they are deleted.

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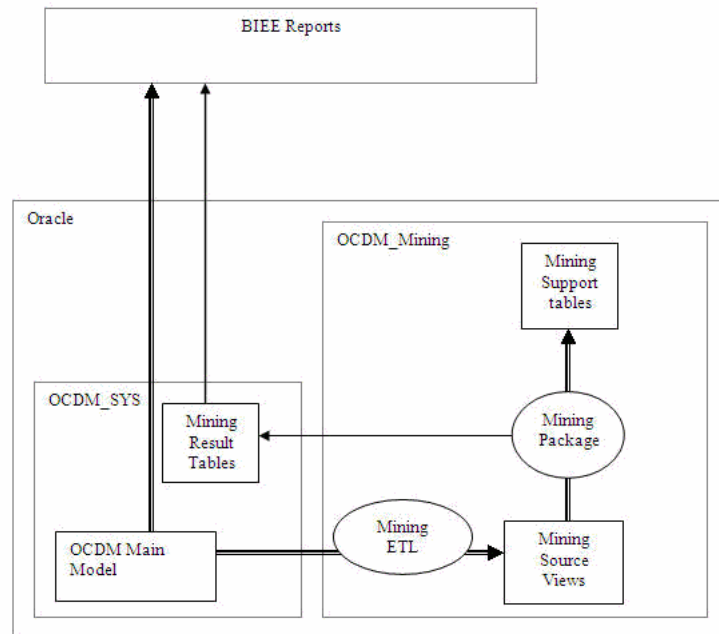


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The `ocdm_sys` schema includes the following:

- OCDM Main Model, which are all the base, reference, lookup, derived and aggregate tables.
- Mining Result Tables: Mining Result Tables save the output from Mining models. This output is normally produced from mining apply process. The tables are created in `ocdm_sys` schema.



**Figure 10–1 Oracle Communications Data Model Mining Schemas**

## Using the Mining Model Refresh Procedure

Over time, the customer information and the customer behavior may change. Therefore, you may want to refresh the trained mining models based on the latest customer and usage data. The mining model refresh process is generally divided into three tasks:

1. **Data Preparation:** Load and transform the data into a format that the mining algorithms can understand. Also a customer needs to prepare two sets of data corresponding to next two tasks:
  - Training Data
  - Scoring data
2. **Training:** Based on part of customer data, user can run certain algorithms and then a mining model is generated.
3. **Scoring (applying):** The trained model can be applied onto other customer data. This applies the model to do the prediction or other missions the model is designed to perform.

For more information about the Oracle Mining training and Scoring (applying) process, see *Oracle Data Mining Concepts*.

To refresh all six mining models based on latest customer data, call the procedure named `pkg_ocdm_mining.refresh_model`. This procedure performs the following tasks for each model:

1. Refreshes the mining source materialized views based on latest data from `OCDM_SYS`.
2. Trains each model again using the new training data.
3. Applies each model onto the new apply data set.

This procedure has been integrated into Oracle Communications Data Model Intra-ETL workflow.

The errors that occur during mining model refresh are saved into the table named: `DWC_INTRA_ETL_ACTIVITY` as is other standard Oracle Communications Data Model Intra-ETL package errors and information.

## Oracle Communications Data Model Mining Result Tables

Table 10-2 shows the `dwd_cust_mnng` result table.

**Table 10-2** *dwd\_cust\_mnng Data Mining Result Table*

Name	Type	Description
MO_CD	VARCHAR2 (50),	Month code when the month was trained and applied. In current version it was set as Null.
CUST_KEY	VARCHAR2 (50),	Customer key to uniquely identify the customer.
PRDCT_CHURN_SVM_IND	VARCHAR2 (1),	Boolean value whether customer will churn in next three months according to SVM model.
PRDCT_CHURN_SVM_PROB	NUMBER (16, 12),	The probability value of how likely customer will churn in next 3 months. This is the probability that the SVM prediction is correct.
PRDCT_CHURN_DT_IND	VARCHAR2 (1),	Boolean value whether customer will churn in next three months according to DT model.
PRDCT_CHURN_DT_ND_NBR	VARCHAR2 (50),	The ID of the node in the decision tree where the customer is assigned.
clstr_sgmnt_code	VARCHAR2 (50),	The k-Means algorithm divides the set of all customers into segments. This value identifies the segment that the customer belongs to.
LTV_band_cd	VARCHAR2 (50),	The band code of customer lifetime value, predicted by LTV Generalized Linear Models Regression. For more information, see <i>Oracle Data Mining Concepts</i> .
LTV_value	NUMBER (16, 2),	The real value of Customer Lifetime value, predicted by LTV (GLMR) Mode.
LT_srvvl_cd	VARCHAR2 (50),	The band code of Customer Survival period (Life Expectancy), predicted by Life_Exp (GLMR) Model.
LT_srvvl_val	NUMBER (16, 2),	The value of Customer Survival period (Life Expectancy), predicted by Life_Exp (GLMR) Mode.
sntmnt_ctgry_cd	VARCHAR2 (50),	The customer sentiment category detected by Customer sentiment model (SVM + Text). This is an SVM model on transformed TEXTs (transformed into a words matrix).
MANUAL_sntmnt_ctgry	VARCHAR2 (50),	The manual score applied by end user. The end user generates this model. For example, an employee from the operator might generate this model. Usually this is the call center agent. For example, when the message is recorded, there could be a manual tag associated with the message indicating that the customer is happy or upset.
sntmnt_prob	NUMBER (16, 12)	The probability of which customer is in possible model (Happy). This is the probability that customer is happy with their service. For example, a value of 60% means there is 60% chance that customer is happy with the service and a 40% chance that customer is not happy.

Table 10–3 shows the `dwd_cust_prod_affltn` result table.

**Table 10–3** *dwd\_cust\_prod\_affltn Data Mining Result Table*

Name	Type	Description
<code>mo_cd</code>	<code>VARCHAR2 (50)</code> ,	Month code when the month was trained and applied. In current version it was set as Null.
<code>CUST_KEY</code>	<code>VARCHAR2 (50)</code> ,	Customer key to uniquely identify the customer.
<code>PROD_CD</code>	<code>VARCHAR2 (50)</code> ,	The product code which was predicted against. This is target product for promotion.
<code>AFFLTN_PROB</code>	<code>NUMBER (20, 18)</code> ,	The likelihood, predicted by the SVM model, that the customer will purchase the product.
<code>BUY_IND</code>	<code>VARCHAR2 (1)</code>	Boolean value to indicate whether customer may purchase the product. This indicates that a value 1 is BUY and a value of 0 is "NOT to BUY".

Table 10–4 shows the `dwd_chrn_svm_factor` result table.

**Table 10–4** *dwd\_chrn\_svm\_factor Data Mining Result Table*

Name	Type	Description
<code>ATTRIBUTE_NAME</code>	<code>VARCHAR2 (4000)</code>	Name of the factor.
<code>ATTRIBUTE_SUBNAME</code>	<code>VARCHAR2 (4000)</code>	Subname of the factor if there is any. For example, if the <code>ATTRIBUTE_NAME</code> has the value, "Payment_Method", then the <code>ATTRIBUTE_SUBNAME</code> could be and of the following: <ul style="list-style-type: none"> <li>▪ Debit_Card</li> <li>▪ Cash</li> </ul> Each <code>ATTRIBUTE_SUBNAME</code> has a different weight, coefficient, in the model.
<code>ATTRIBUTE_VALUE</code>	<code>VARCHAR2 (4000)</code>	Value of the factor, if there is any. For example, for payment method, value of "cash" and "direct debit" might have different influence and ranking.
<code>COEFFICIENT</code>	<code>NUMBER</code>	Importance of the factor. The factors are ranked according to this value.

## Model 1: Churn Prediction

The churn prediction model identifies the characteristics of a customer likely to churn. When you apply the model you get a prediction of how likely a particular customer is to churn. This is based on customer information such as customer demographic information, service quality, last tariff plan, calling usage, and other factors. Using the patterns learned, the model can also perform the calculation over current customer base (called 'Apply') to predict who are the customers mostly like to churn in next few months. With this knowledge, operators can initiate certain retention programs to reduce the customer churn rate. However, the churn prediction produces a likely to churn value. Further processing may be required to determine if it is desirable to retain a customer that is likely to churn. For example, you may only want to initiate retention programs for high value customers.

### Churn Prediction Churner Definition

There are several levels to define churn, namely Customer, Account, and subscription. For some operators with only limited business line, customer and account churn at

same time, while subscription is at a lower level. Customer can stop using some products (termination of subscription) while continue to use the other products. In later case, operator still have the customer and may promote other products in the future. However, if customer completely stopped using any products from the operator, it is very difficult for operator to bring customer back.

In Oracle Communications Data Model, the churn was defined at Customer Level, which is, a customer is recognized as a churner only when he stop using any product from the operator.

If customers churn at a given month, we may receive the data only 3 months after the actual Churn. So time window should be adjusted.

## Churn Prediction Source

Table 10-5 shows the attributes identified from the Foundation Data Warehouse as input source variables for the DT model.

**Table 10-5 DMV\_CUST\_CHRN\_SRC\_ALL**

Attribute	Description
CUST_KEY	Primary Key for customer
CHRN_IND	Target column of churn model
FUTRE_CNRT_CNT_3MO	Number of future contract count in last 3 months
SBRP_CNT_3MO	Subscription count in last 3 months
SSPNSN_CNT_3MO	Suspension count in last 3 months
CNRT_CNT_3MO	Contract count in last 3 months
CMPLNT_MO_CNT_3MO	Complaint count in last 3 months
CMPLNT_CALL_MO_CNT_3MO	Complaint call count to call center in last 3 months
CMPLNT_CALL_LFTM_CNT_3MO	Complaint call count to call center in the life time in last 3 months
CNRT_LFT_DAYS_3MO	Contract left days in last 3 months
ACCT_LFT_VAL_3MO	Account left value in last 3 months
RMNG_CNRT_SUM_3MO	Remaining contract sum in last 3 months
DEBT_VAL_3MO	Debt total in last 3 months
LYLTY_PROG_BAL_3MO	Loyalty program balance in last 3 months
TOT_PYMT_RVN_3MO	Total payment revenue in last 3 months
MO_RVN_3MO	Monthly revenue (arpu) in last 3 months
CNRT_ARPU_3MO	Contract arpu amount in last 3 months
PRTY_TYP_CD	Party type code, individual or organizational in last 3 months
BSNS_LEGAL_STAT_CD	Business legal status
MRTL_STAT_CD	Marital status for individual user
HH_SZ	Household size
JB_CD	Job Code
NTNLTY_CD	Nationality code
EDU_CD	Education level
GNDR_CD	Gender

**Table 10-5 (Cont.) DMV\_CUST\_CHRN\_SRC\_ALL**

<b>Attribute</b>	<b>Description</b>
DRVR_LICNS_IND	Driver license indicator
JB_CNRT_TYP	Job contract type, it is permanent employee or contracted.
BARNG_RSN_CD	Barring reason code if in barring status
POST_CD	Post code
CITY	CITY
STATE	STATE
CNTRY	Country
NAME_PRFX	Name prefix such as, Dr, Ms, and so on.
NAME_OF_WKPLC	Name of workplace
PLC_OF_BRTH	Place of birth
JB_POSN	Job position
LEGAL_TTL_TO_HSNG	The customer's legal title to home (rents, owns, and so on)
ETHNIC_BCKGRND	ETHNIC BACKGROUND
PREV_EMPLYR_TAX_NBR	Previous employer tax number
NBR_OF_CHLDRN	Number of children
NBR_OF_DPNDNT	Number of dependents
DWLNG_TENR	Tenure of dwelling in month
DWLNG_SZ	Dwelling size
ETHNCTY	Ethnicity
FROM_OF_EMPMNT	Classifies the individual for minority reporting purposes.
DWLNG_TYP	Dwelling type
DWLNG_STAT	Dwelling Status
SRC_OF_INCM	Source of income
CUST_TYP_CD	Customer type code
CUST_SGMNT_KEY	Customer segment code
ADDR_LOC_KEY	Address loc key
CUST_SCR_KEY	Customer score key
PRMRY_STAT_CD	Primary status code
PRMRY_STAT_RSN_CD	Primary status reason code
SOC_JB_KEY	Job code in SOC classification
EXTRNL_ORG_TYP_CD	Organization type
LANG_CD	Language code
CNCT_ADDR_EFF_DT	For how long contact address is in effective, in days
BNKRPT_STRT_DT	Bankrupt status start date in days
BNKRPT_STAT	Bankrupt status
BLLG_ADDR_EFF_DT	For how long billing address is in effective, in days
PYMT_ACCT_OPEN_DT	For how long payment account is in effective, in days

**Table 10–5 (Cont.) DMV\_CUST\_CHRN\_SRC\_ALL**

<b>Attribute</b>	<b>Description</b>
MAIL_ALWD_IND	Mail allowed indicator
CUST_PYMT_RESPBL_IND	Whether the customer is responsible for payment
LVNG_AT_CURR_ADDR_SINCE	For how long customer lives in current location, in days
END_OF_JB_CNRT	End of job contract date
STRT_OF_EMPMNT	Start of job date
ECNMCLY_ACTV_IND	Economical active indicator
AGE_ON_NET_BND_CD	Age on net band code
AGE_ON_NET_NBR	Age on net number
CRDT_CTGRY_KEY	Credit category
AGE_BND_CD	Age band
DEBT_AGNG_BND_CD	Debt aging band
PYMT_MTHD_TYP_CD	Payment method type
ARPU_BND_CD	Arpu band code
SL_CHNL_KEY	Sales channel key
SL_CHNL_RPRSTV_KEY	Sales channel representative key
ORG_BSNS_UNIT_KEY	Organization business unit key
CUST_RVN_BND_CD	Customer revenue band code
FUTRE_CNRT_CNT	Number of future contract count in last 3 months
SBRP_CNT	Subscription count in last 3 months
SSPNSN_CNT	Suspension count
CNRT_CNT	Contract count
CMPLNT_LFTM_CNT	Complaint count in the life time
CMPLNT_MO_CNT	Complaint count
CMPLNT_CALL_MO_CNT	Complaint call count to call center
CMPLNT_CALL_LFTM_CNT	Complaint call count to call center in the life time
LIFE_SPN	Life Span in days
CNRT_LFT_DAYS	Contract left days
ACCT_LFT_VAL	Account left value
RMNG_CNRT_SUM	Remaining contract sum
DEBT_VAL	Debt total
LYLTY_PROG_BAL	Loyalty program balance
TOT_PYMT_RVN	Total payment revenue
TOT_RVN	Total Revenue as of current month
MO_RVN	Monthly revenue (arpu)
LFTM_ARPU	Life time revenue
CNRT_ARPU	Contract arpu amount
ESTMD_ACQSTN_COST	Estimated acquisition cost (optional attribute)

**Table 10–5 (Cont.) DMV\_CUST\_CHRN\_SRC\_ALL**

Attribute	Description
BRDBND_IND	Whether the customer uses the Broadband product
PAY_TV_IND	Whether the customer uses PayTV product
IDD_IND	Whether the customer uses IDD product
HOMTEL_IND	Whether the customer uses fixed line telephone product
WRLS_IND	Whether the customer uses wireless telephone product
NEW_ACCT_IND	Whether the customer is a new customer
NBR_4_CNT	Number of digit 4 in the customer phone number
NBR_13_CNT	Number of digit 13 in the customer phone number
NBR_6_CNT	Number of digit 6 in the customer phone number
NBR_9_CNT	Number of digit 9 in the customer phone number
NBR_RTNG	Score of customer number for customer specific rating program
PORT_IN_FROM	From which operator customer ported in from
PORT_IN_CNT	How many times customer ported in
PORT_OUT_CNT	How many times customer ported out

All the data from `dmv_cust_chrn_src_all` contains non-null value in the `CHRN_IND` column. This table is then divided into two tables: `dmv_cust_chrn_src_prd` and `dmv_cust_chrn_src_tst`. The table `dmv_cust_chrn_src_prd` has about 60% of the customers and `dmv_cust_chrn_src_tst` has the rest of the customers. The churn prediction model was trained on table `dmv_cust_chrn_src_prd` and then tested on `dmv_cust_chrn_src_tst` for its accuracy.

During the training process, a temporary prediction model `OCDM_CHURN_DT_NEW` is built and compared with the existing prediction model `OCDM_CHURN_DT`. If the new temporary model `OCDM_CHURN_DT_NEW` outperforms the existing model in accuracy, it replaces the existing model, otherwise, it is dropped.

The table `dmv_cuts_chrn_src_all` is derived from the tables:

- `ocdm_sys.DWR_CUST`
- `ocdm_sys.DWD_ACCT_STTSTC`
- `ocdm_sys.DWR_BSNS_MO`
- `ocdm_sys.DWR_HH`
- `ocdm_sys.DWR_JB`

## Churn Prediction Output

The mined results are saved into the target table with the following columns:

- `dwd_cust_mnng.PRDCT_CHURN_SVM_IND`
- `dwd_cust_mnng.PRDCT_CHURN_SVM_PROB`
- `dwd_cust_mnng.PRDCT_CHURN_DT_IND`
- `dwd_cust_mnng.PRDCT_CHURN_DT_ND_NBR`

For more information on these four columns, refer to the Mining target data dictionary.

## Churn Prediction Algorithm

The two mining algorithms are used separately and the two mining models for churn prediction problem:

- Decision Trees Classification
- SVM Classification

For more information on mining algorithms, see *Oracle Data Mining Concepts* and *Oracle Data Mining Application Developer's Guide*.

## Model 2: Customer Profiling

The business problem is to group customers into generally homogeneous groups (Segments) based on customer demographic value, usage pattern and list of telecom products they subscribe to (customer subscriber history). Business Analysts can look into each segment to further understand the customer group discovered by the model and name each segments.

The discovered clustering rules draw a profile of the customers along with their product subscription. Thus, the clustering rules generated for each profile group will show the most important similar characteristics in each group. For example, an operator may have a group having significantly more short message (SMS) usage than any other groups. Alternatively, there may be a group with extremely higher profit than any other group (covering high end customers).

### Customer Profiling Source

Customer profiling model use source view `DMV_CUST_PROFILE_SRC`, which is a subset of table `dmv_cust_chrn_apply_all`. It contains those information:

### Customer Profiling Output

The mined results are saved into target table with the following columns:

- `dwd_cust_mnng.clstr_sgmnt_code`

### Customer Profiling: Algorithm

K-means Clustering

## Model 3: Customer Churn Factor

The business problem is to identify which factor may have the biggest influence on customer churn problem or Customer Revenue. The marketing department should leverage those information to better understand customer behavior. The major factors, namely, Geography Demography, Customer Segment/Group, VAS usage should be included. The attributes are mostly categorical for business user to understand customer profile.

This model is derived from the Churn Prediction model through the SVM algorithm, but due to its usefulness, it is shown as a separate model.



## Customer Churn Factor Source

The source attributes for this model is same as churn model.

## Customer Churn Factor Output

Table 10–6 shows the columns where the customer churn factor model saves results in the table `dwd_chrn_svm_factor`.

**Table 10–6 Customer Churn Factor Output Columns in `dwd_chrn_svm_factor` Table**

Attribute	Datatype	Description
ATTRIBUTE_NAME	VARCHAR2 (4000)	Name of the factor.
ATTRIBUTE_SUBNAME	VARCHAR2 (4000)	Subname of the factor if there is any. Each ATTRIBUTE_SUBNAME has a different weight, coefficient, in the model.
ATTRIBUTE_VALUE	VARCHAR2 (4000)	Value of the factor, if there is any. For example, for payment method, value of "cash" and "direct debit" might have different influence and ranking.
COEFFICIENT	NUMBER	Importance of the factor. The factors are ranked according to this value.

## Customer Churn Factor Algorithm

SVM

## Model 4: Cross-Sell Opportunity

The business problem is to identify the patterns of which products are typically purchased together or one after another over the lifetime of a customer. This helps in providing recommendations about which products should be presented to customers according to their potential acceptance score. A typical scenario is call center can call certain customers with some specific purpose to cross-sell some products. Operators need the list of customers to save promotion cost and improve efficiency.

The trained model generates recommendations about promotion target products. This is done based on what products the customer has subscribed to taking into account other factors such as customers credit history and the risk involved in offering the particular product to the customer.

## Cross-Sell Opportunity Source

Table `dmv_prod_mix_src` is the input into mining algorithm for model training. This table is derived from the following tables:

- `ocdm_mining.dmv_cust_chrn_src_all`
- `ocdm_sys.dwd_vas_sbrp_qck_summ`

## Cross-Sell Opportunity Output

For a given product to do promotion, the model generates list of customer most likely to buy. The prediction was done by SVM algorithm. The result is saved into table `dwd_cust_prod_affltn` in the following columns.

**Table 10–7 Cross-Sell Opportunity Output Columns in `dwd_cust_prod_affltn` Table**

Attribute	Datatype	Description
mo_cd	VARCHAR2 (50) ,	Month code when the month was trained and applied. In current version it was set as Null.
CUST_KEY	VARCHAR2 (50) ,	Customer key to uniquely identify the customer.
PROD_CD	VARCHAR2 (50) ,	The product code which was predicted against. This is target product for promotion.
AFFLTN_PROB	NUMBER	The probability output from SVM algorithm, serve as likelihood customer may purchase the product.
BUY_IND	VARCHAR2 (1)	Boolean value to indicate whether the customer may purchase the product. This indicates that a value 1 is BUY and a value of 0 is "NOT to BUY"

## Cross-Sell Model Algorithm

SVM.

## Model 5: Customer Sentiment Detection

The business problem is to measure customer sentiment regarding the service quality according to any text message received from the customer. Those text messages may be emails from customer, or written down by call center agents during call center calls, and so on.

This model leverages Text mining capability provided by Oracle database. For more information, see *Oracle Data Mining Concepts*.

## Customer Sentiment Detection Source

The source table into mining algorithm is: `dm_cust_cmmnt`, which has columns of:

**Table 10–8 Data Mining Source Columns in `dm_cust_cmmnt` Table**

Attribute	Datatype	Description
CUST_KEY	NUMBER (30)	Customer Key
manual_score	VARCHAR2 (40)	Manual scores or manually adjusted after reading
sentiment	VARCHAR2 (40)	Sentiment scored by Mining Model
plusprob	NUMBER (20, 16)	The probability of customer belonging to happy group
minusprob	NUMBER (20, 16)	The probability of customer belonging to un-happy group
CUST_CMMNT	VARCHAR2 (4000)	The text messages all together from the customer.

The text mining sentiment analysis can be refined by extending the dictionary table `DWD_CUST_SNTMNT_MANUAL_SCORE` to improve the performance of the model.

The procedure `pkg_ocdm_mining.create_sentiment_svm_model(month_code)` refreshes data in the table `dm_cust_cmmnt` and then refreshes the sentiment mining model. This procedure also populates the sentiment mining result table `DWD_CUST_MNNG`.

For more information, see "[Oracle Communications Data Model Mining Result Tables](#)".

## Customer Sentiment Detection Output

The mined results are saved into target table with the following columns:

- `dwd_cust_mnng.SNTMNT_CTGRY_CD`
- `dwd_cust_mnng.MANUAL_SNTMNT_CTGRY`
- `dwd_cust_mnng.SNTMNT_PROB`

## Customer Sentiment Detection Algorithms

Oracle Text option to transform the text

SVM algorithm to train the model

## Model 6: Life Time Value (LTV) Prediction

We want to tell how long customer will likely to continue to use the service (Survival), rather than leaving. And also we want to know how much value customer is likely to bring into the operator along their lifetime. This is a regression model. The source data are those customers on net at least 5 years ago; the model target is the age of customer. For those customers churned in less than 5 years, we know the exact age, but for those still on net, the age will be total lifetime.

The difference of this model to the Model 1 (Churn Prediction) is that this is a regression model rather than classification. The target Lifetime is a continuous real value.

## Life Time Value (LTV) Prediction Source

The `dmv_cust_ltv_prdct_src` is the source table for LTV prediction model. This table is subset of the churn model source table `dmv_cust_chrm_src_all`. The customer joined in less than three years are filtered out from the training data set to provide a valid input into the model.

## Life Time Value (LTV) Prediction Output

Life Time Span and Life Time Value (LTV) are the two target measures to predict. The results are saved into table `dwd_cust_mining`:

- `dwd_cust_mnng.LTV_BAND_CD`
- `dwd_cust_mnng.LTV_VALUE`
- `dwd_cust_mnng.LT_SRVVL_CD`
- `dwd_cust_mnng.LT_SRVVL_VAL`

The `LTV_value` and `LT_SRVVL_VAL` are the predicted real value from the model, and then binned into ten categories and form the other two columns: `LTV_BAND_CD` and `LT_SRVVL_CD`.

## Life Time Value (LTV) Prediction Algorithm

Generalized Linear Model (GLM)



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# Oracle Communications Data Model Utility Scripts

This chapter describes the Oracle Communications Data Model utility scripts.

This chapter includes the following sections:

- [Calendar Population](#)

## Calendar Population

The Calendar population scripts consist of two one-time installation packages.

### Calendar Population Scripts

The Calendar population scripts include the following packages:

- `calendar_population_header.sql`
- `calendar_population_body.sql`

Running these packages does the following:

1. Prepares necessary changes for the OCDM\_SYS schema.
2. Creates the Calendar\_Population package that contains the following procedures:
  - `RUN(in_setup_start_date, in_setup_no_years)` is the main procedure to populate everything about calendar.
  - `RBIW_Base_Time_Tables_ddl` creates the base table needed to support multiple hierarchies: Business or Calendar.
  - `RBIW_Populate_Time_Hier_Bsns(in_setup_start_date, in_setup_no_years)` sets up the data in base table for the Business hierarchy as specified in setup or install section.
  - `RBIW_Populate_Time_Hier_Clnr(in_setup_start_date, in_setup_no_years)` sets up the data in base table for the Calendar hierarchy as specified in setup or install section.
  - `RBIW_Time_hier_Star` sets up the Time hierarchy reporting layer tables.
  - `RBIW_Time_Views` sets up the Time hierarchy reporting layer views, star and hybrid snowflake views.
  - `RBIW_Populate_Time_Transform` populates the Time transformation tables using the base Time tables or views created above. It populates transformation data for both hierarchies: Business and Calendar.

## How to Populate Calendar Data

To populate calendar data:

1. Log in to OCDM\_SYS user.
2. Execute the following SQL statement:

```
exec Calendar_Population.run(date,num_years);
```

where, *date* is the start date with which you want to populate calendar data. It is of type CHAR and should be input in the format 'YYYY-MM-DD' (for example, '2005-05-18'). *num\_years* is the number of years to populate calendar data, which should be INTEGER.

# Part III

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## Sample Reports and Adapters

This part includes information on Oracle Communications Data Model sample reports and adapters.

Part III contains the following chapters:

- [Chapter 12, "Oracle Communications Data Model Sample Reports"](#)
- [Chapter 13, "Oracle Communications Data Model NCC Application Adapter"](#)
- [Chapter 14, "Oracle Communications Data Model BRM Application Adapter"](#)





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# Oracle Communications Data Model Sample Reports

This chapter provides Oracle Communications Data Model sample reports.

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**Note:** Some of the reports shown may appear incomplete. The sample reports shown use manually generated data, and for data privacy and regulatory reasons, it shows only made up customers (with real data). Hence, if you notice data inconsistency between the reports, this is not due to Oracle Communications Data Model, but due to the sample data.

The reports shown in this chapter appear as shown when you install Oracle Communications Data Model with the sample data.

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This chapter includes the following sections:

- [Cost and Contribution Sample Reports](#)
- [Customer Management Sample Reports](#)
- [Marketing Sample Reports](#)
- [Network Sample Reports](#)
- [Partner Management Sample Reports](#)
- [Product Management Sample Reports](#)
- [Provisioning and Activation Sample Reports](#)
- [Revenue Sample Reports](#)

## Cost and Contribution Sample Reports

The cost and contribution sample reports include the following areas: Operational Finance Analysis and Profitability Analysis.

This area includes the following:

- [Operational Finance Analysis](#)
- [Profitability Analysis](#)

## Operational Finance Analysis

This area includes the reports: [Operating Cost](#), [Average Operating Cost per Customer](#), [Average operating Cost per Employee](#), [Investment Cost](#), [Average Cost of Controlling Attrition per Employee](#), and [Advertising Cost Report](#).

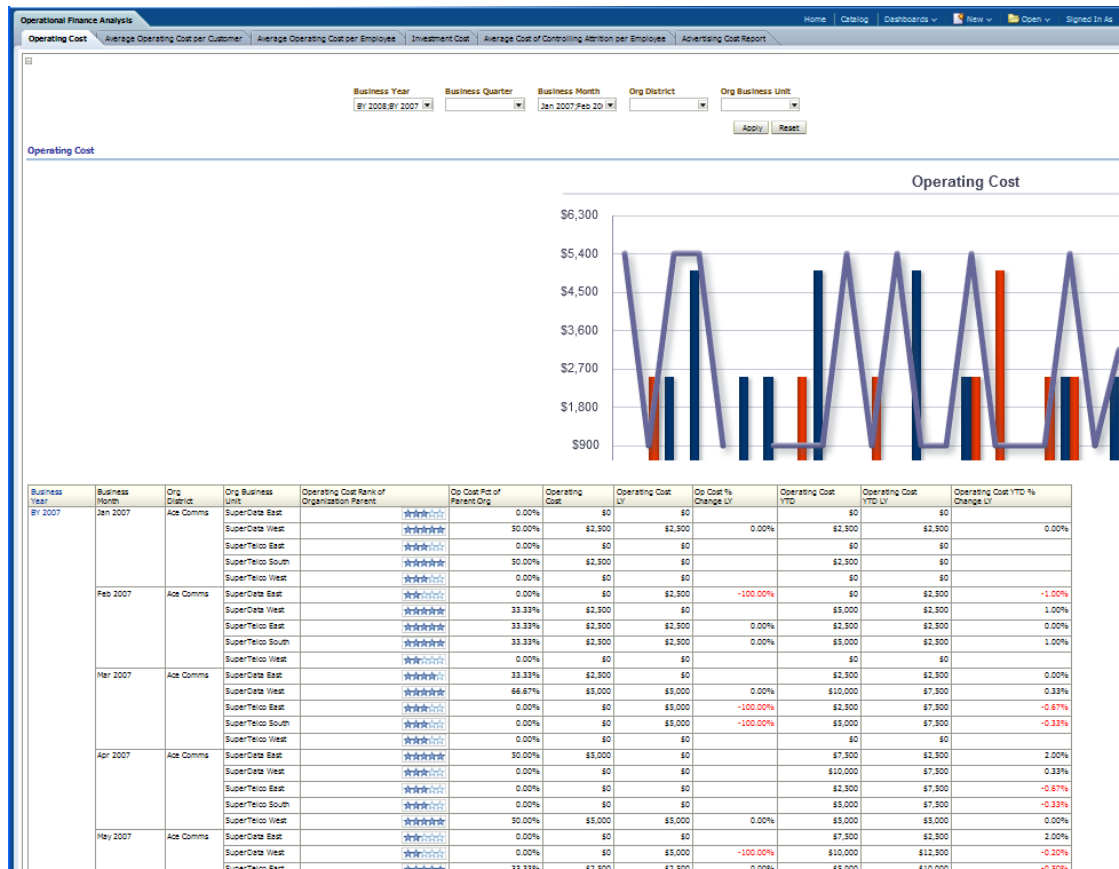
### Operating Cost

This report, as shown in [Figure 12-1](#) provides the current year month-level "Operating Cost" information for each organization business unit. It also ranks all organization business units according to their cost in their parent "Organization". The end user can compare the cost with last years metrics such as: LY, % Change LY, YTD, YTD LY, YTD % Change LY.

Report dimensions are:

- Business Time
- Organization

**Figure 12-1 Operating Cost Sample Report**



### Average Operating Cost per Customer

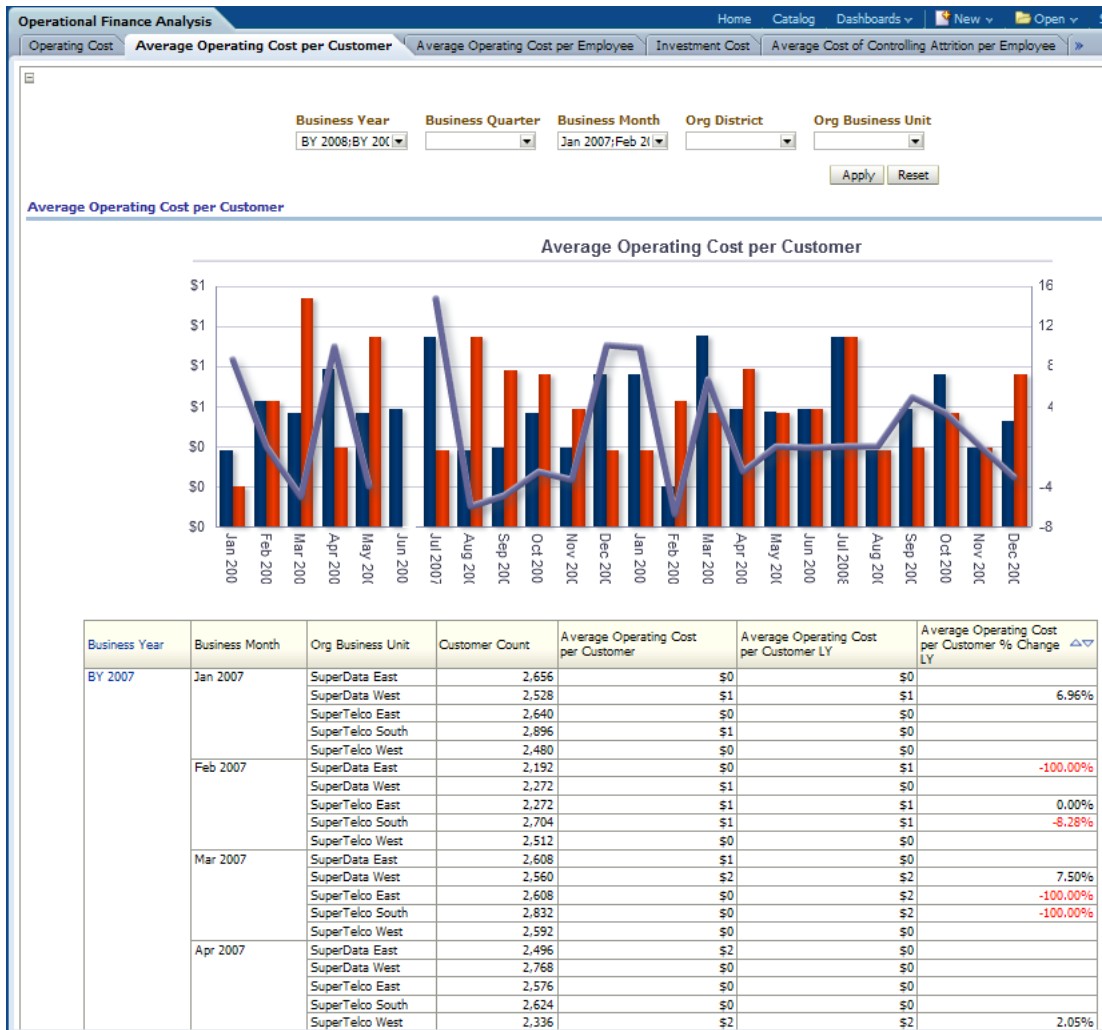
This report, as shown in [Figure 12-2](#) provides the current year month-level "Average Operating Cost per Customer" information based on "Organization Unit" which can be compared with last years metrics like LY, % Change LY.

Report dimensions are:

- Business Time

- Organization

**Figure 12–2 Average Operating Cost per Customer Sample Report**



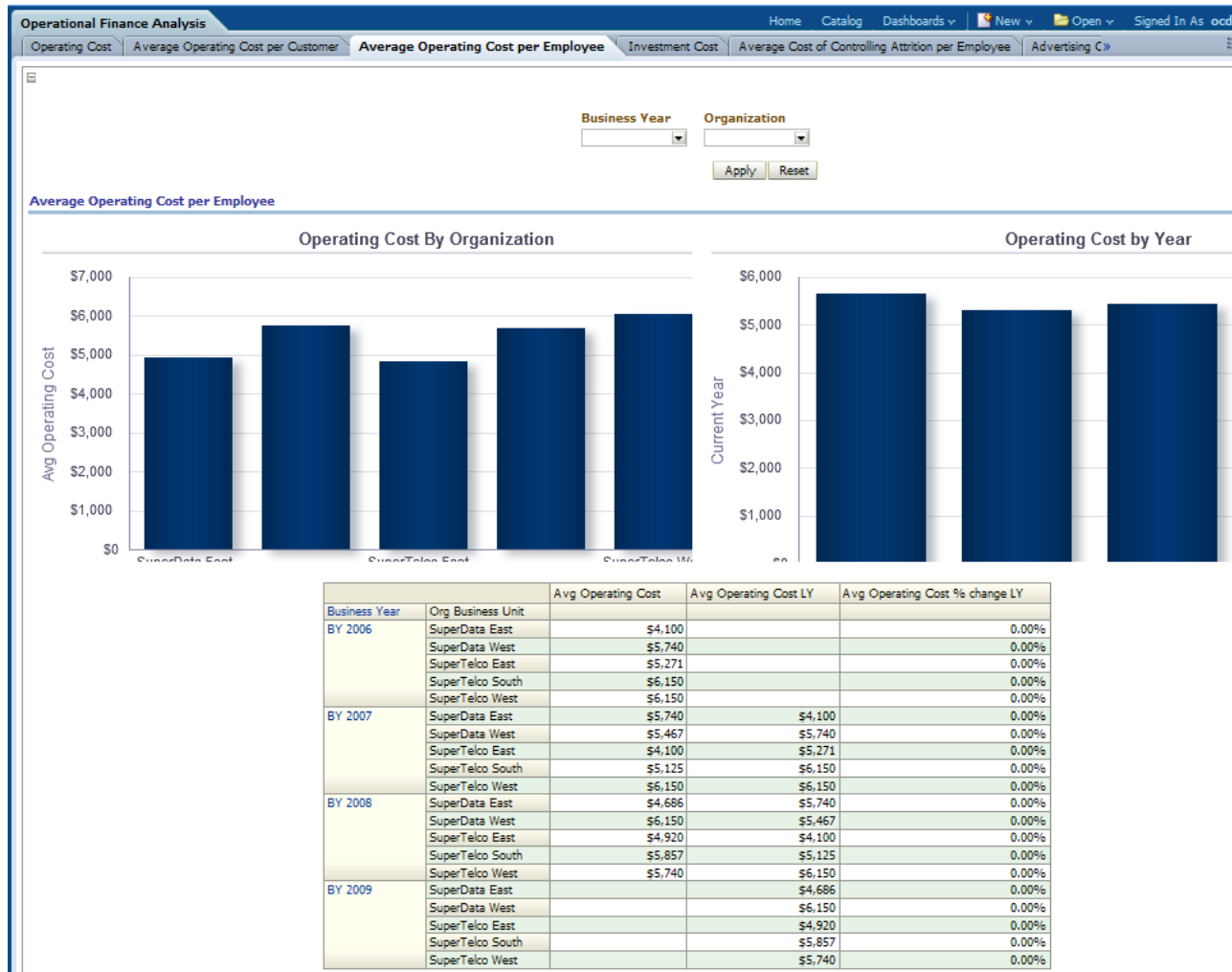
**Average operating Cost per Employee**

This report, as shown in Figure 12–3 provides the current year "Average Operating Cost per Employee" information based on "Organization Business Unit" which can be compared with last years metrics such as: LY, % Change LY.

Report dimensions are:

- Business Time
- Organization

Figure 12-3 Cost: Average Operating Cost per Employee



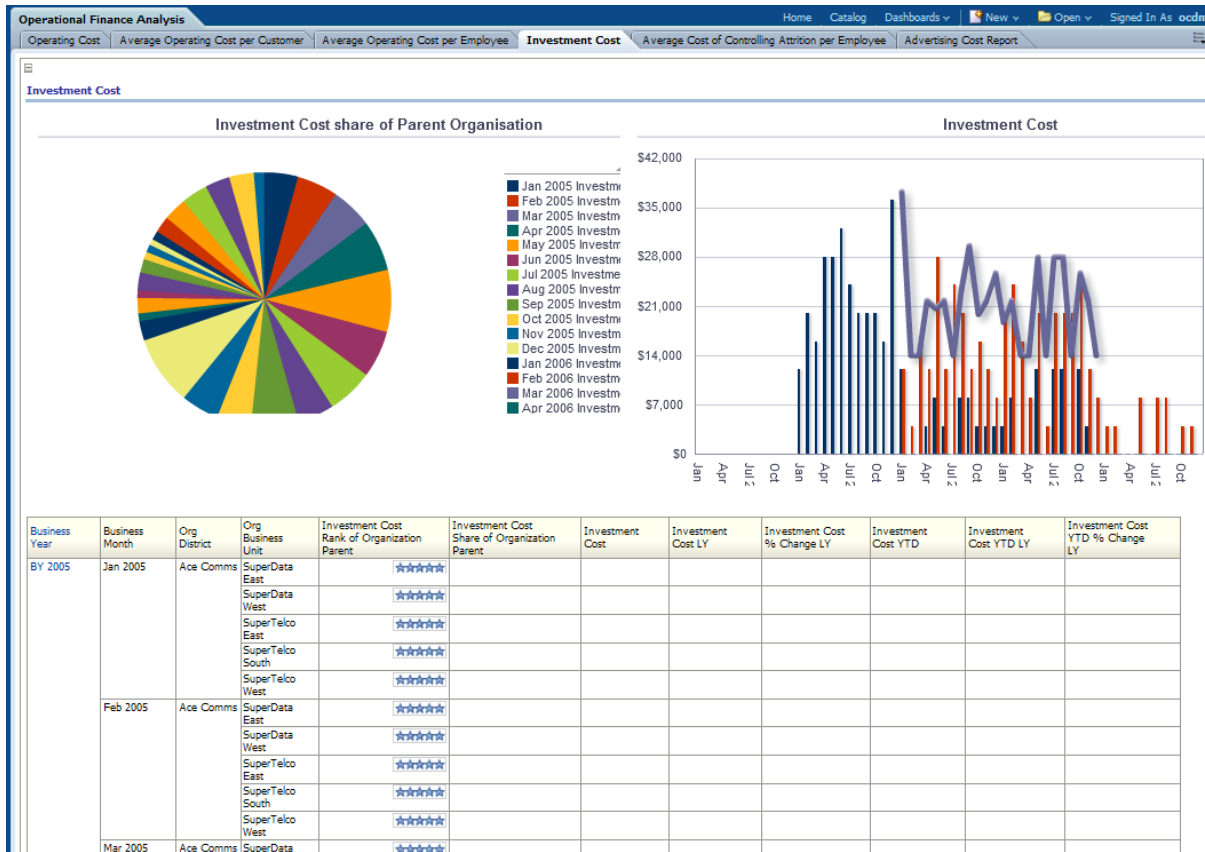
**Investment Cost**

This report, as shown in Figure 12-4 provides the current year month-level "Investment Cost" and "Investment Cost share of parent Organization" information based on "Organization Unit and district" which can be compared with last years metrics like LY, % Change LY, YTD, YTD LY and YTD % Change LY.

Report dimensions are:

- Business Time
- Organization

Figure 12-4 Investment Cost Sample Report



**Average Cost of Controlling Attrition per Employee**

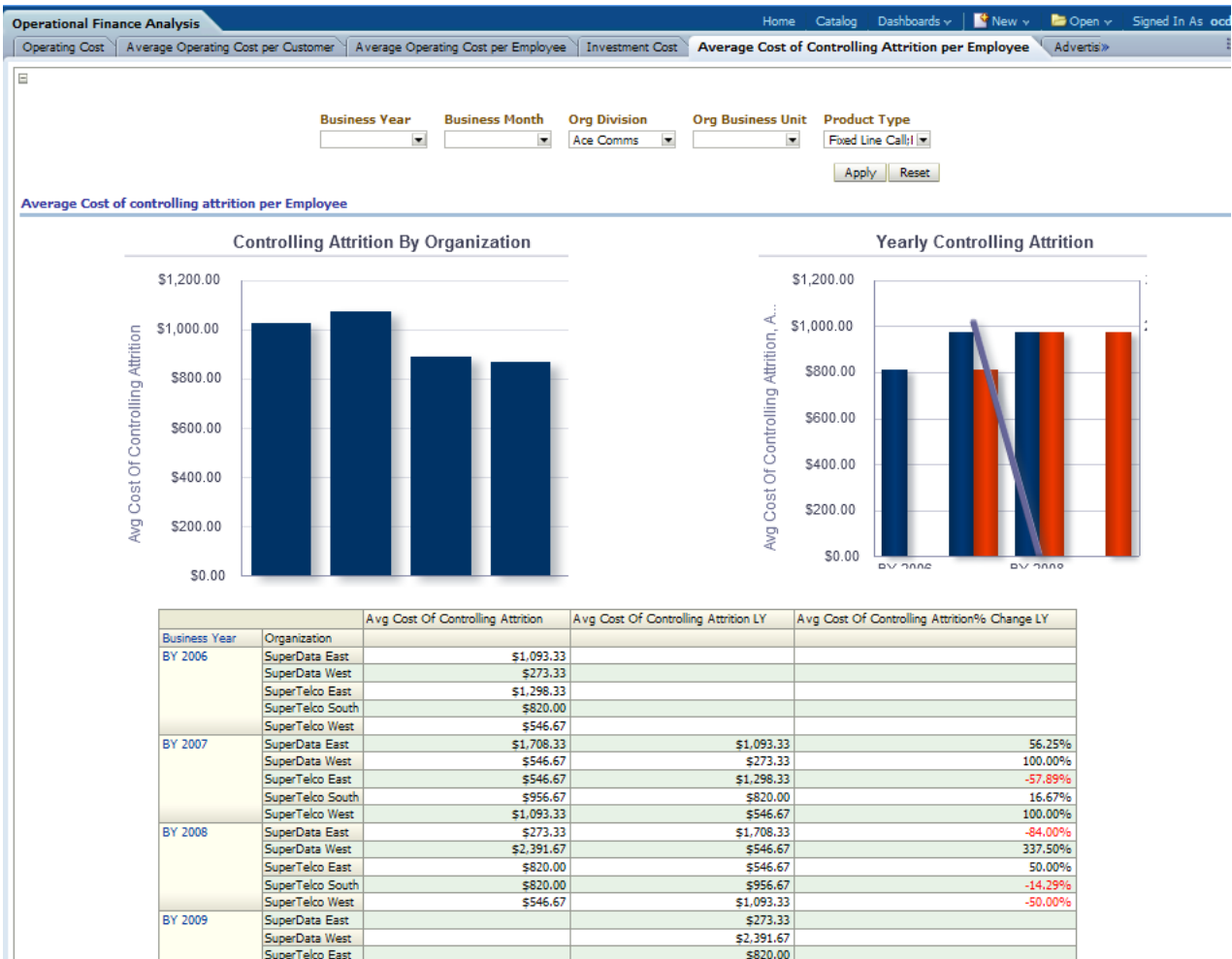
This report, as shown in Figure 12-5 provides the current year Level "Controlling Attribution by organization" and "Yearly Controlling Attribution" information based on "Organization" which can be compared with last years metrics like LY and % Change LY.

The attrition cost should be defined by the service operator.

Report dimensions are:

- Business Time
- Organization
- Product

Figure 12–5 Average Cost of Controlling Attrition per Employee



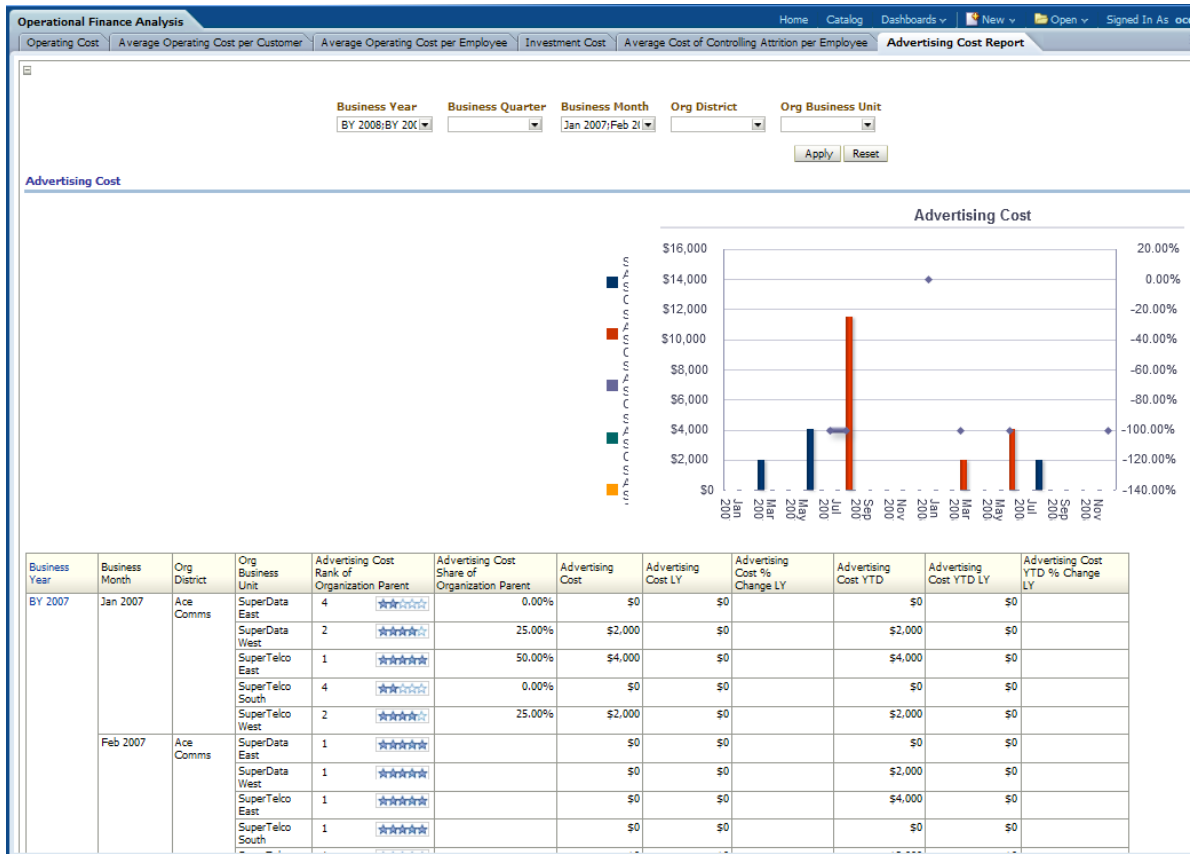
**Advertising Cost Report**

This report, as shown in Figure 12–6 provides the current year month-level "Advertising Cost" information based on "Organization Parent" which internally can be compared with last years metrics like LY,% Change LY, YTD, YTD LY, YTD % Change LY.

Report dimensions are:

- Business Time
- Organization

Figure 12–6 Advertising Cost Report Sample Report



### Profitability Analysis

This area includes the reports: [Total Profit](#), [Average Profit per Customer](#), [Average Profit per Employee](#), and [Inventory Out-of-Stock \(Handset Model\)](#).

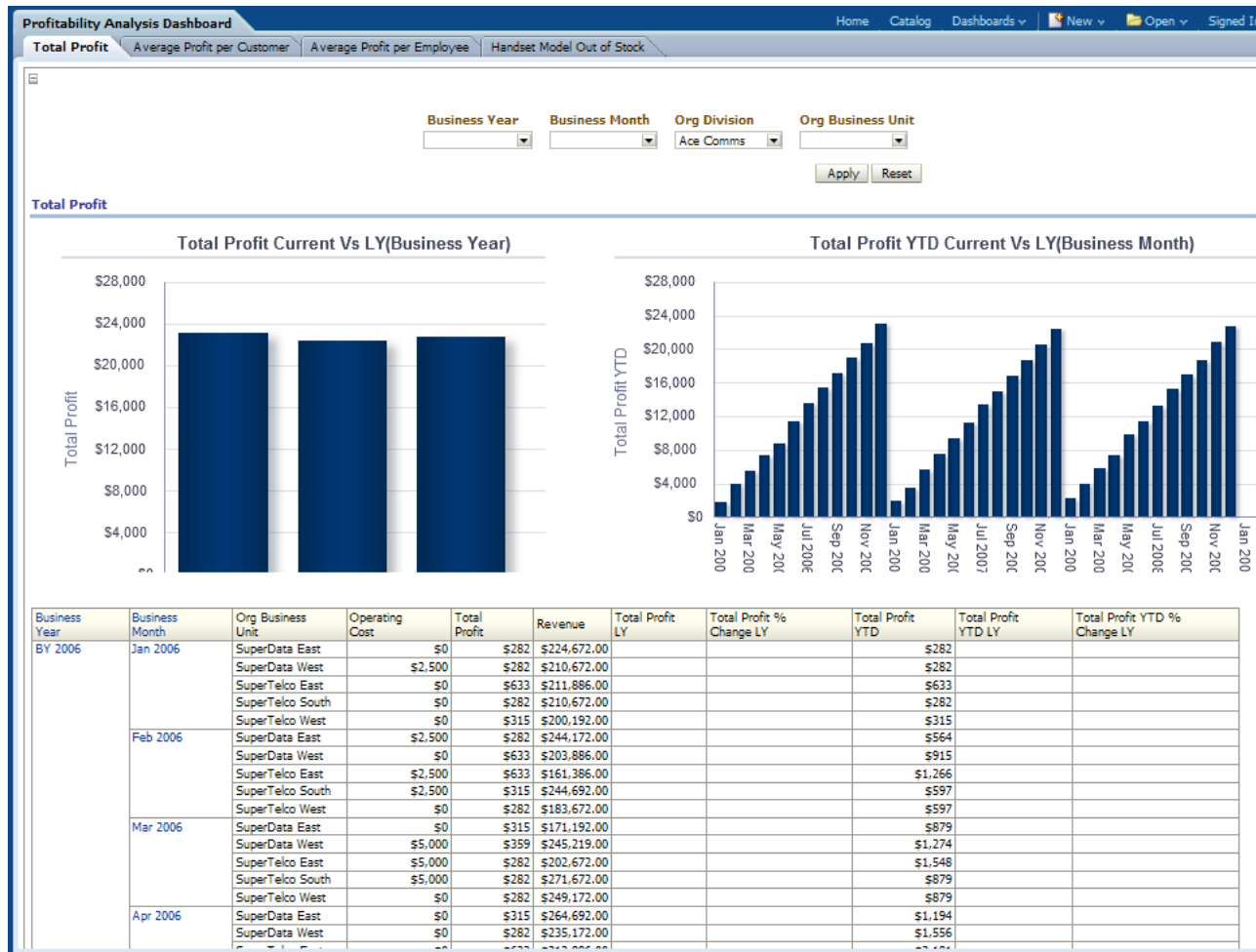
#### Total Profit

This report, as shown in [Figure 12–7](#) provides the current year and month-level "Total Profit" information based on "Organization" which internally can be compared with last years metrics like LY,% Change LY, YTD, YTD LY, YTD % Change LY.

Report dimensions are:

- Business Time
- Organization

Figure 12-7 Total Profit Sample Report



**Average Profit per Customer**

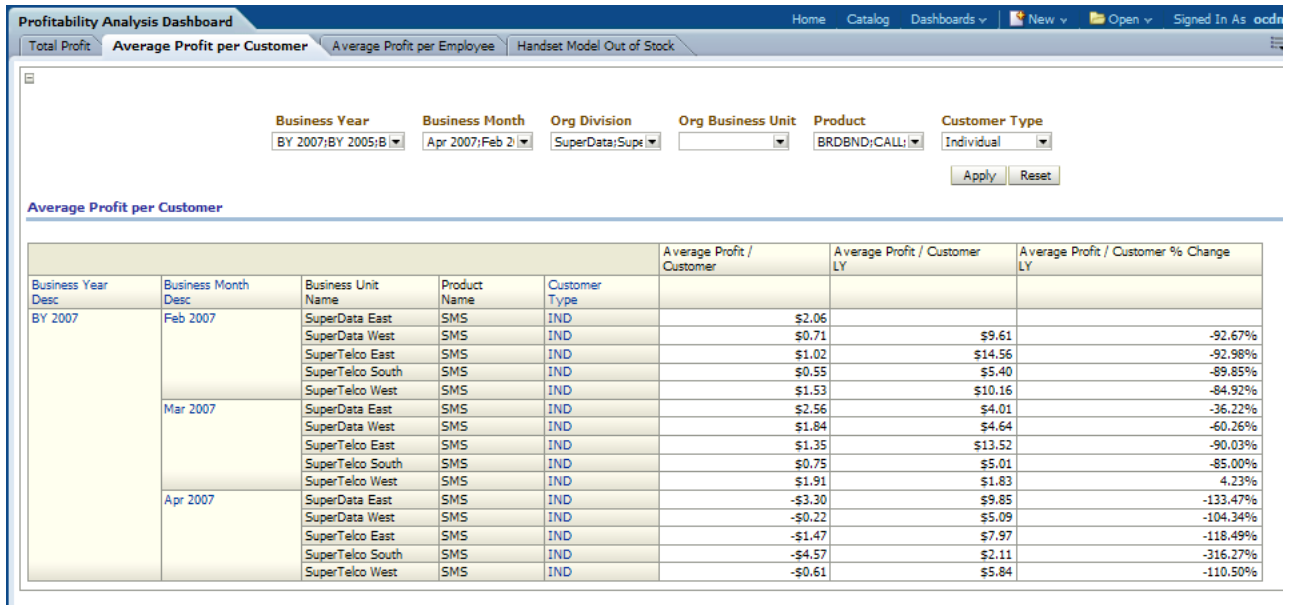
This report, as shown in Figure 12-8 provides the current year and month-level "Average Profit" information based on "Customer" and "Customer by Product" which internally can be compared with metrics such as LY, % Change LY for last year.

Report dimensions are:

- Business Time
- Organization
- Product
- Customer Type



Figure 12–8 Profit: Average Profit per Customer Sample Report



### Average Profit per Employee

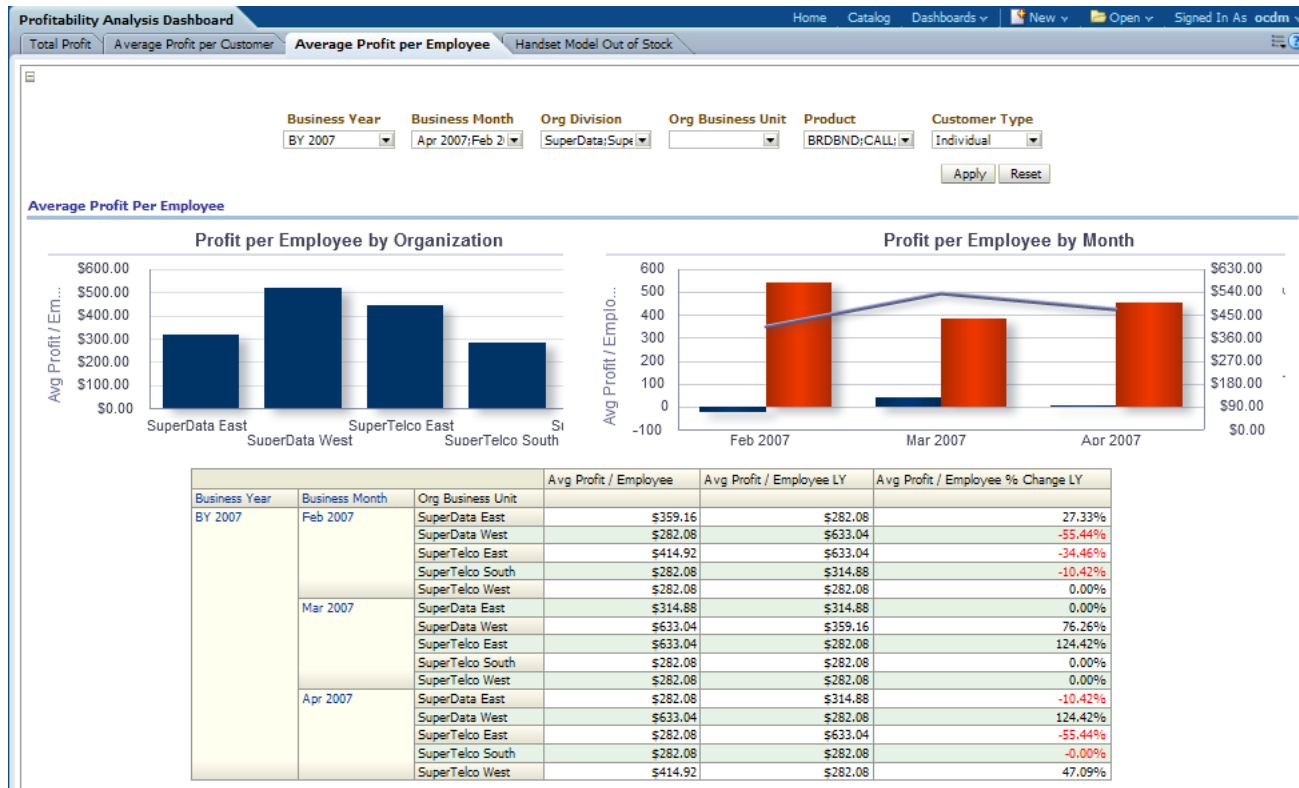
This report, as shown in Figure 12–9 provides the current year and month-level "Average Profit" information based on "Employee" and "Org Business Unit" which can be compared with last years metrics like LY, % Change LY.

The average profit is calculated by dividing the total profit by the number of employees.

Report dimensions are:

- Business Time
- Organization
- Product
- Customer Type

**Figure 12–9 Profit: Average Profit per Employee Sample Report**



**Inventory Out-of-Stock (Handset Model)**

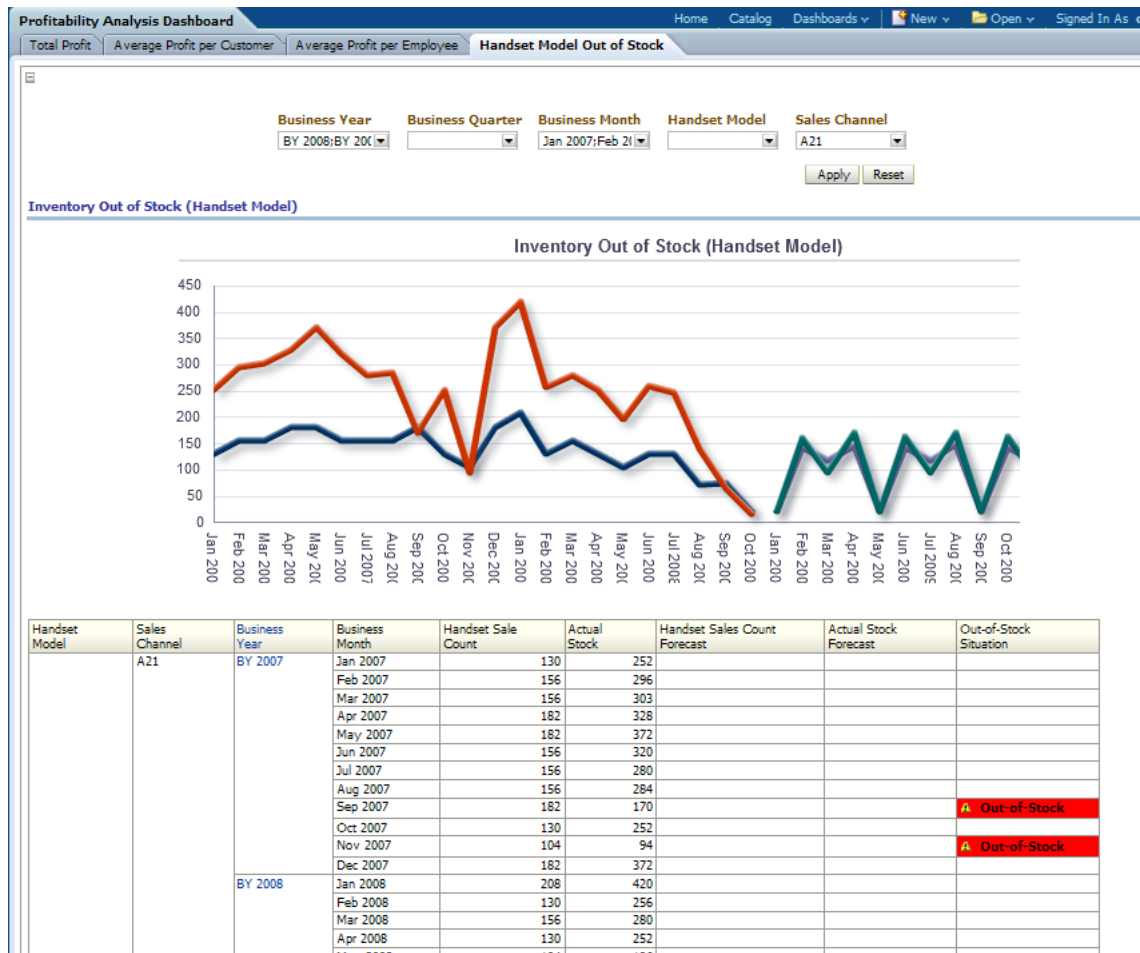
This report, as shown in Figure 12–10, provides the information related to the Handset Model for Current Year and Current Month like average handset stock sold stock in hand, handset sales forecasting, actual stock forecasting and information relating to handset out of stock situation.

By comparing the actual handset stock level to the forecast handset sales, you can identify some time point when the actual handset stock may be lower than the expected Sales number. This situation is called Out of Stock and may lead to revenue loss.

Report dimensions are:

- Business Time
- Organization
- Sales Channel
- Handset Model

Figure 12–10 Inventory Out-of-Stock (Handset Model) Sample Report



## Customer Management Sample Reports

The customer management sample reports include the following areas:

- Customer Acquisition
- Customer Growth Rate
- Customer Segmentation
- Customer Life Time Value
- Customer Churn Analysis
- Customer Churn Prediction

### Customer Acquisition

This area includes the reports: [Customer Acquisition](#), and [Customer Acquisition Forecast](#).

#### Customer Acquisition

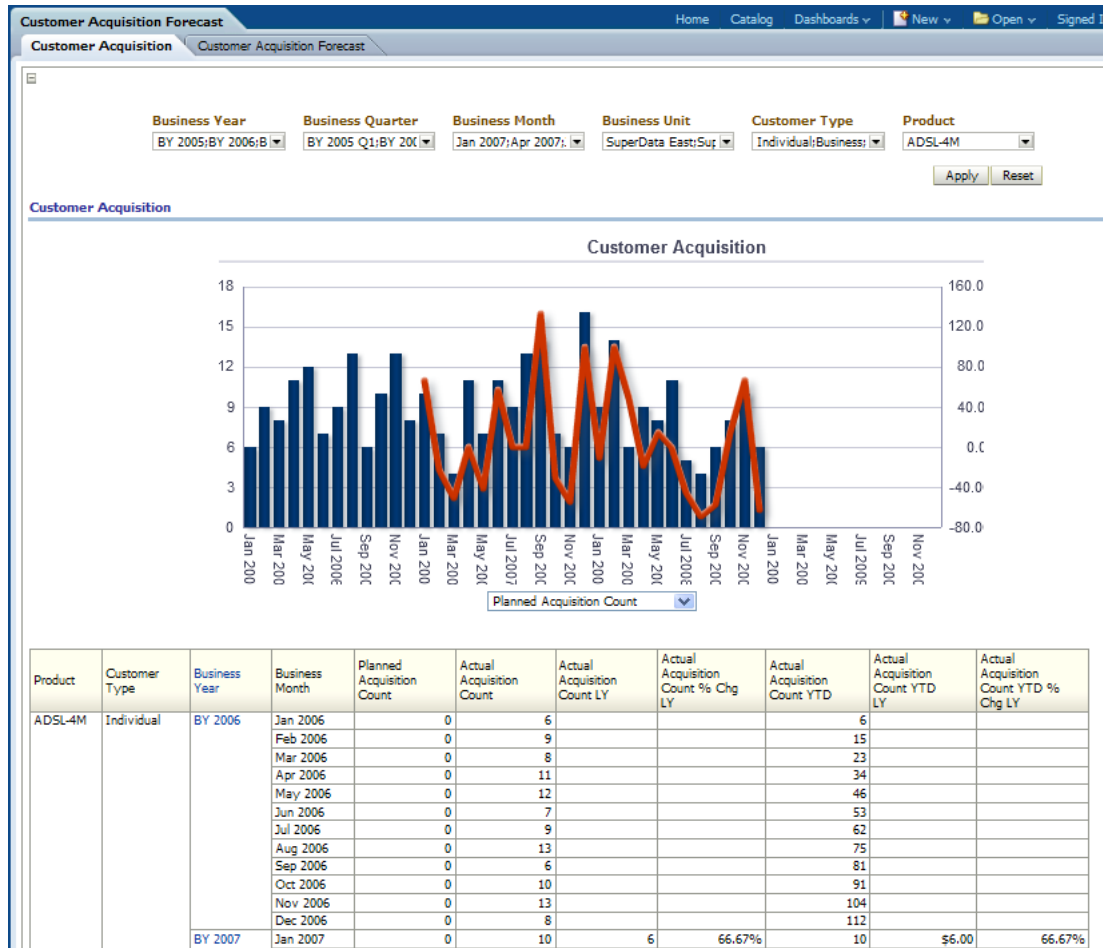
This report, as shown in [Figure 12–11](#) provides the yearly and monthly number of customers to be acquired compared with actual customers acquired by product and with respective to customers type. All time transformation variation of Customer

Acquisition numbers are displayed, including Last Year (LY) and Year to Date (YTD). Users can select certain products, organizations, and customer's type to narrow down the customer numbers

Report dimensions are:

- Business Time
- Product
- Customer

**Figure 12–11 Customer Acquisition Sample Report**



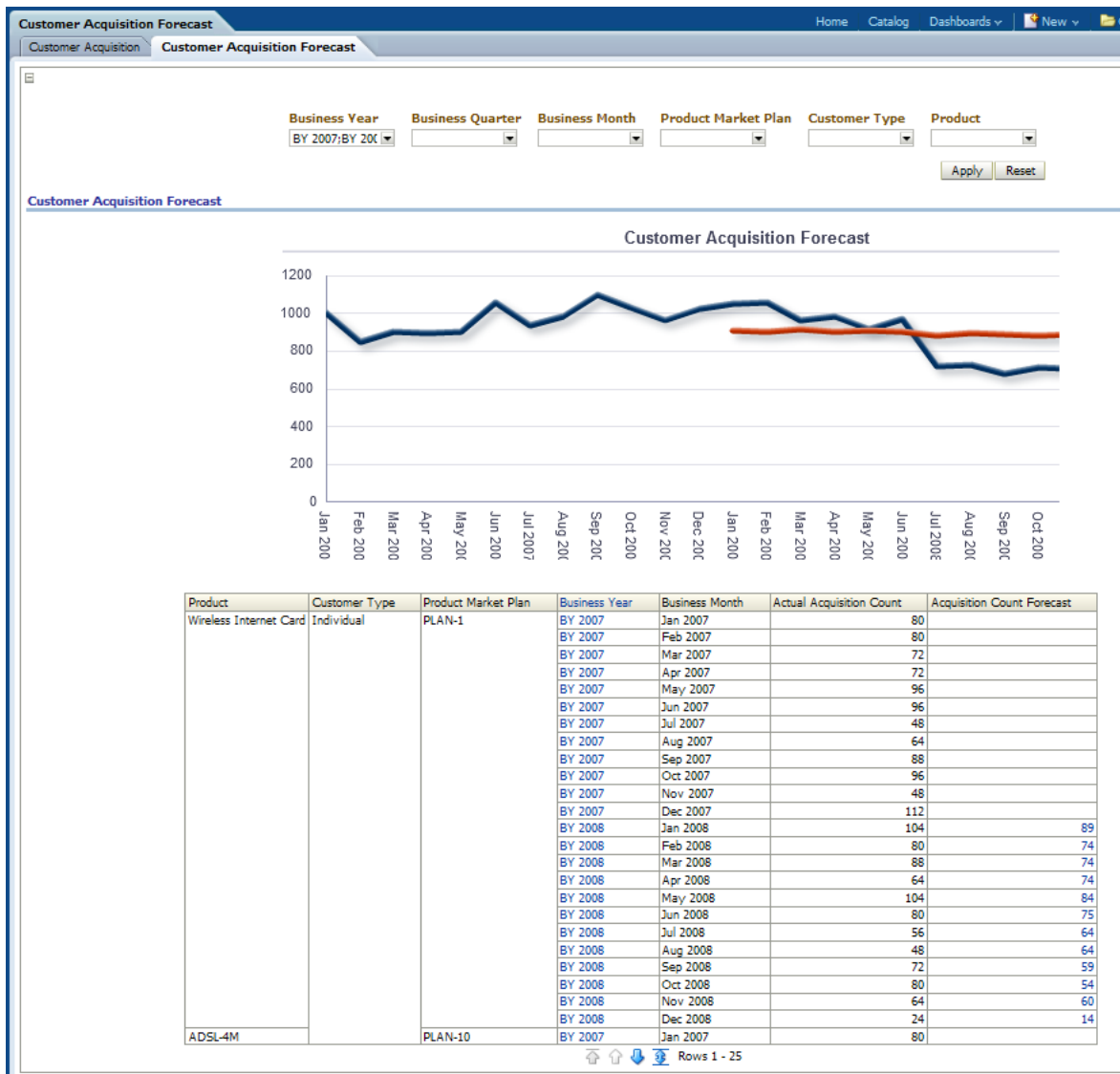
**Customer Acquisition Forecast**

This report, as shown in Figure 12–12 provides the yearly and monthly level forecasting of customers count to be acquired versus the actual customers acquired by product market plan and customers type.

Report dimensions are:

- Business Time
- Product
- Customer Type
- Product Market Plan

Figure 12–12 Customer Acquisition Forecast Sample Report



## Customer Growth Rate

This area includes the reports: [Customer Growth Rate](#) and [Customer Growth Trend Forecast](#).

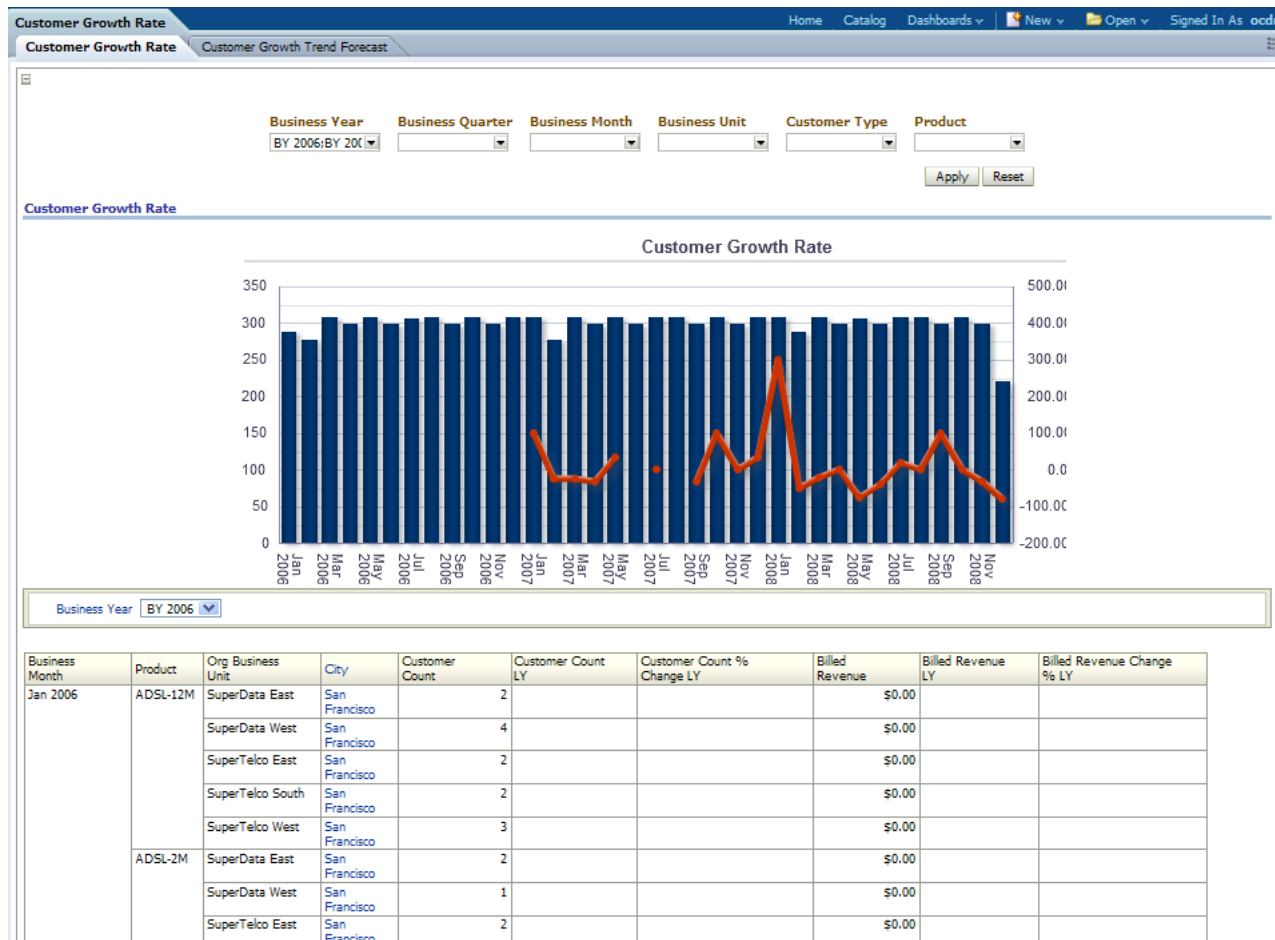
### Customer Growth Rate

This report, as shown in [Figure 12–13](#) provides the yearly and monthly customer count and revenue growth rate over products and geographical boundaries

Report dimensions are:

- Business Time
- Organization
- Product
- Geography

Figure 12–13 Customer Growth Rate Sample Report



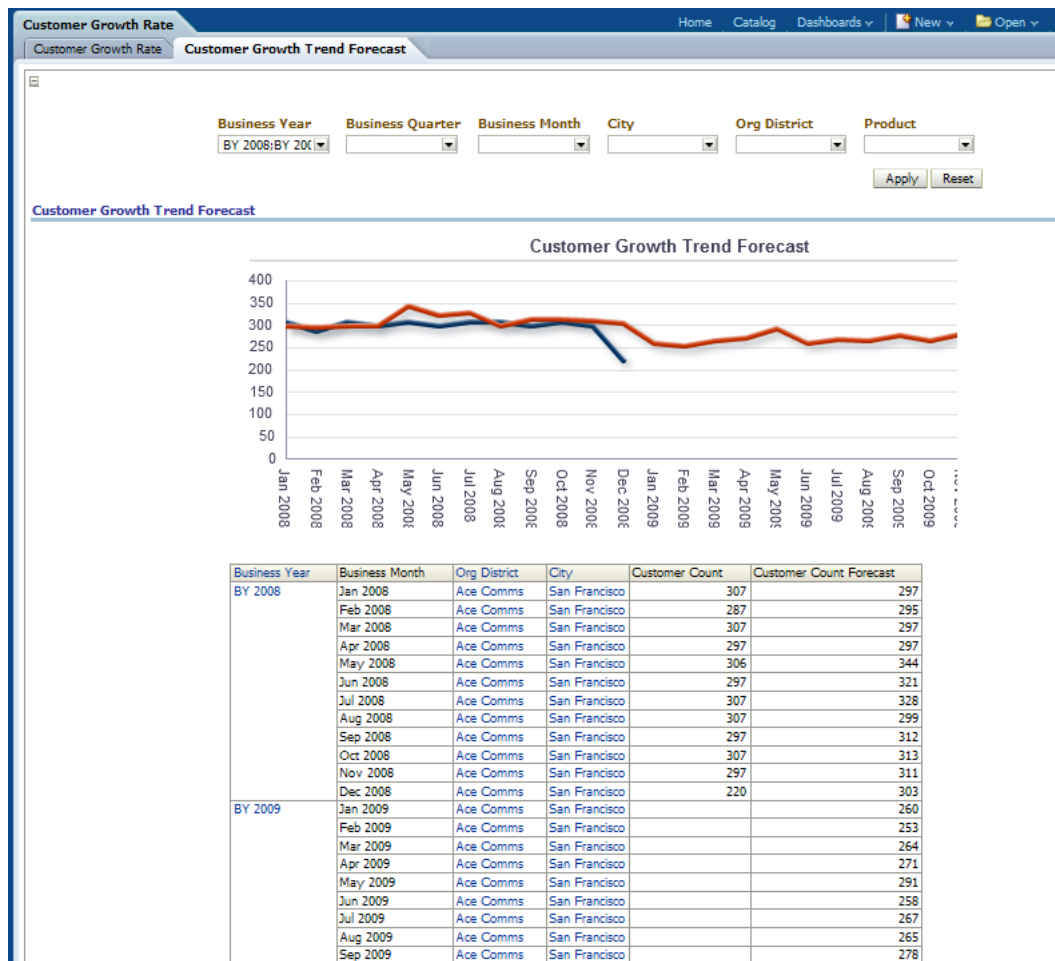
**Customer Growth Trend Forecast**

This report as shown in Figure 12–14 provides the month level number of customers for organization, products, and geographical boundaries. The future number of customers forecast for the next six months, or twelve months, can be forecast by Oracle OLAP forecast settings.

Report dimensions are:

- Business Time
- Organization
- Product
- Geography

Figure 12–14 Customer Growth Trend Forecast Sample Report



## Customer Segmentation

This area includes the reports: [Customer Segments](#) and [Customer Segmentation Details](#).

### Customer Segments

This report, as shown in [Figure 12–15](#) shows customer segments.

This report displays the customer segmentation model result. The customer segmentation model groups customers into ten segments according to how similar they are to each other. The similarity is calculated based on customer demographic value (education, income, and so on), usage pattern and list of telecom products they subscribe to (customer subscriber history). The grouping rules are derived automatically by K-Means algorithm implemented inside Oracle Database. Business Analysts can look into each segment to further understand the customer group discovered by the algorithm and name each segments.

By default, the summary information about each segment is displayed in the bottom table. For each segment, the Average Contract Value, Avg Debt Value, and Avg monthly revenue (in last 6 months) are displayed. Those three values are depicted in three pie charts above the table respectively, to show the distribution among customer segments.

The prompt "SVM Predict Churner Indicator" can be used to filter the customer. If user select "1", then for each segment, only those customer who were predicted as "churner" by SVM churn model is counted in. Then the number would be less than all customers in the segment.

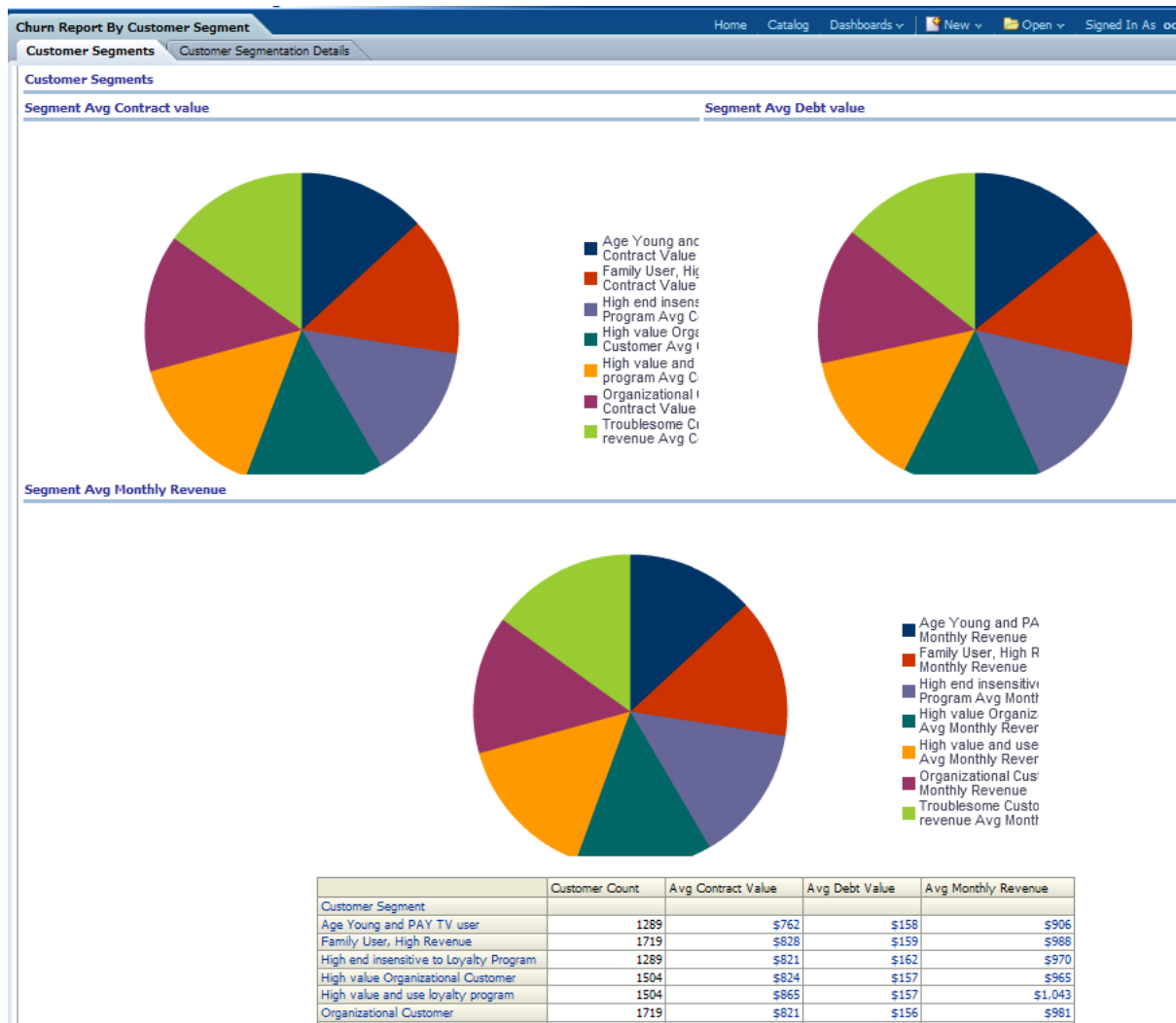
Similarly, "DT Predict Churner Indicator" can filter customers to be only those who were predicted as "churner" by Decision Tree churn model

Note: This groups all the customers, not only churners.

Report dimensions are:

- Customer

Figure 12–15 Customer Segments Sample Report



### Customer Segmentation Details

This report, as shown in Figure 12–16 provides the customer segmentation details on basis of certain customer statistical metrics such as contract value, month revenue, debt value and so on.

For the given customer, the report also displays the contract value, month revenue, debt value and so on. In fact, the end user can easily extend this report by adding any



relational aggregated information about the customer into this report. For example, number of calls, number of complaints, and so on. They can use BIEE Answers to add those additional measures into the report.

Report dimensions are:

- Customer

Figure 12–16 Customer Segmentation Details Sample Report

Customer Segment	Customer Name	Cell Phone No.	Contract Value	Month Revenue	Debt Value	LTV Band	LTV Value	LTV Hours	ARPU Band	Churn Indicator	Sentiment	Churn Probability	Customer Segment Key	Community Role	Community Size	Churner Ratio in Community	Avg Revenue of Community
Age Young and PAY TV user	Beverly Wan	9985007046	\$18,000.00	\$15,600.00	\$140.00	LTV_1	\$41,000.00	44	ARPU7500+		▲ +	59	104	LOCAL	3	0.00%	\$1.00
	Bradley Johnson	9985007989	\$18,000.00	\$16,200.00	\$444.00		\$49,000.00	32			▲ +	45	104	PASSIVE	3	0.00%	\$0.00
	Ethan Nielley	9985006289	\$18,000.00	\$16,800.00	\$140.00		\$34,000.00	43		● Probability of Churning is very high	▼ -	71	104	LOCAL	4	0.00%	\$2.33
	Gale Lazar	9985003794	\$18,000.00	\$14,000.00	\$140.00		\$82,000.00	37	ARPU7500		▲ +	16	104	PASSIVE	7	2.00%	\$8.73
	Bernard Vaughn	9985001144	\$6,000.00	\$5,478.26	\$260.00		\$85,000.00	43	ARPU9000		▲ +	19	104	LOCAL	4	1.00%	\$3.00
	Bertha Lucza	9985001103	\$6,000.00	\$5,555.56	\$444.00		\$56,000.00	11		● Probability of Churning is very high	▼ -	76	104				\$3.50
	Bele Webber	9985000294	\$6,000.00	\$5,538.46	\$180.00		\$76,000.00	17			▲ +	16	104				\$5.00
	Bobby Rudyhook	9985006982	\$6,000.00	\$5,428.58	\$260.00		\$73,000.00	11			▲ +	36	104	SOCIAL	4	0.00%	\$9.40
	Deanna Folk	9985003123	\$6,000.00	\$5,200.00	\$444.00		\$79,000.00	4			▲ +	34	104				\$4.00
	Dylan Doar	9985004280	\$6,000.00	\$5,368.42	\$260.00		\$33,000.00	5			▲ +	65	104	BRIDGE	1	0.00%	\$0.00
	Granville Bendwell	9985001244	\$6,000.00	\$5,454.54	\$260.00		\$81,000.00	22			▲ +	33	104				
	Herman Klamm	9985006007	\$6,000.00	\$5,971.42	\$260.00		\$90,000.00	11			▲ +	47	104	LOCAL	3	0.00%	\$1.50
	Jayden Shea	9985001887	\$6,000.00	\$5,333.34	\$260.00		\$96,000.00	19			▲ +	46	104				\$5.73
		9985007632	\$6,000.00	\$5,250.00	\$260.00		\$61,000.00	7			▲ +	40	104				\$1.42
	Loretta Carmud	9985000616	\$6,000.00	\$5,500.00	\$444.00		\$51,000.00	11		● Probability of Churning is very high	▼ -	78	104	PASSIVE	5	0.00%	\$0.50
	Morris Lipscombe	9985003723	\$6,000.00	\$5,538.46	\$260.00		\$73,000.00	13			▲ +	58	104				\$1.00
	One Paris	9985006373	\$6,000.00	\$5,454.54	\$180.00		\$78,000.00	12			▲ +	36	104	BRIDGE	4	1.00%	\$4.00
	Orrilla Grover	9985001787	\$6,000.00	\$5,971.42	\$260.00		\$39,000.00	41			▲ +	49	104	BRIDGE	3	0.00%	\$2.80
	Fabio Kuntala	9985004344	\$6,000.00	\$5,076.92	\$260.00		\$32,000.00	28			▲ +	59	104				\$3.50
	Primrose Usterback	9985006096	\$6,000.00	\$5,368.42	\$260.00		\$84,000.00	11			▲ +	30	104	PASSIVE	2	0.00%	\$4.67
	Tasha Ziegler	9985003694	\$6,000.00	\$5,368.42	\$444.00		\$85,000.00	9			▲ +	38	104				\$2.00
	Tess Duval	9985001137	\$6,000.00	\$5,500.00	\$140.00		\$53,000.00	8			▲ +	43	104	SOCIAL	3	0.00%	\$4.00
	Walter Kivwell	9985007639	\$6,000.00	\$5,200.00	\$260.00		\$32,000.00	43		● Probability of Churning is very high	▼ -	80	104	PASSIVE	5	0.00%	\$4.00

## Customer Life Time Value

This area includes the reports: [Customer Life Time Value](#), [Customer by Life Time Value Band](#), [Customer by Life Time Span Category](#), and [Customer Life Time Span Detail](#).

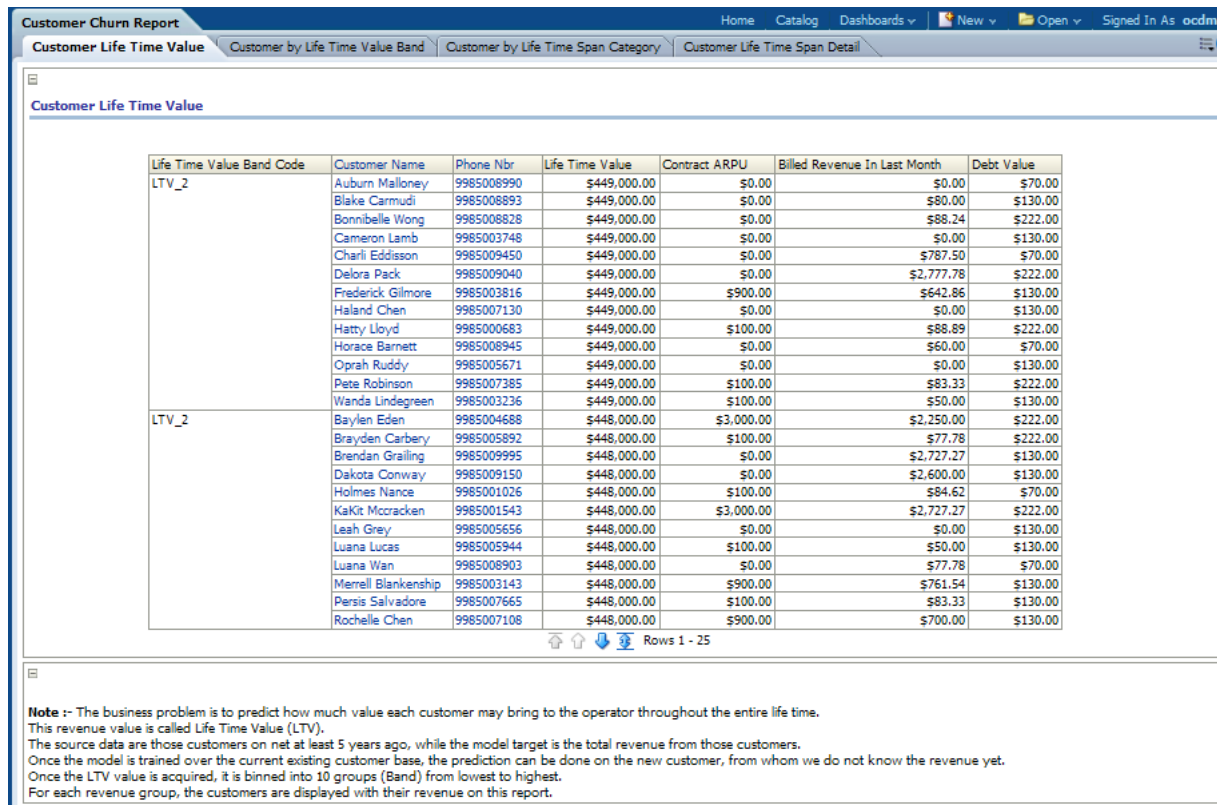
### Customer Life Time Value

This report as shown in [Figure 12–17](#) provides the predicted Life Time Value (LTV) for all customers grouped by LTV Band Code. It also shows some additional aggregated information about the customer.

Report dimensions are:

- Customer
- Customer Mining

**Figure 12–17 Customer Life Time Value Sample Report**



### Customer by Life Time Value Band

This report, as shown in Figure 12–18 provides the churn prediction result for the customers belonging to a certain Life time Value Band (that is, the customers likely to be with the service provider compared with the customers that already left the service provider.)

Report dimensions are:

- Customer
- Customer Mining

Figure 12–18 Customer by Life Time Value Band Sample Report

Life Time Value Band Code	Customer Name	Phone Nbr	Predict Churn SVM Probability
LTV_1	Abbie Anderson	9985010557	0.79
	Abbie Anderson		0.85
	Abbie Chin	9985001018	0.18
	Abbie Chin	9985007834	0.80
	Abbie Tamayo	9985008079	0.76
	Abbie Tansey	9985005079	0.13
	Abner Everett	9985010289	0.65
	Abner Kenney	9985010201	0.63
	Abner Robbinette	9985004894	0.33
	Abraham Sadworth	9985003089	0.15
	Absolom Eastwood	9985002072	0.65
	Absolom Eastwood	9985007273	0.72
	Absolom Sampson	9985003077	0.46
	Absolom Sampson	9985008822	0.80
	Ada Kitchens	9985003435	0.80
	Ada Kitchens	9985010204	0.71
	Ada Maine	9985002878	0.17
	Ada Maine	9985007469	0.59
	Ada Maine		0.81

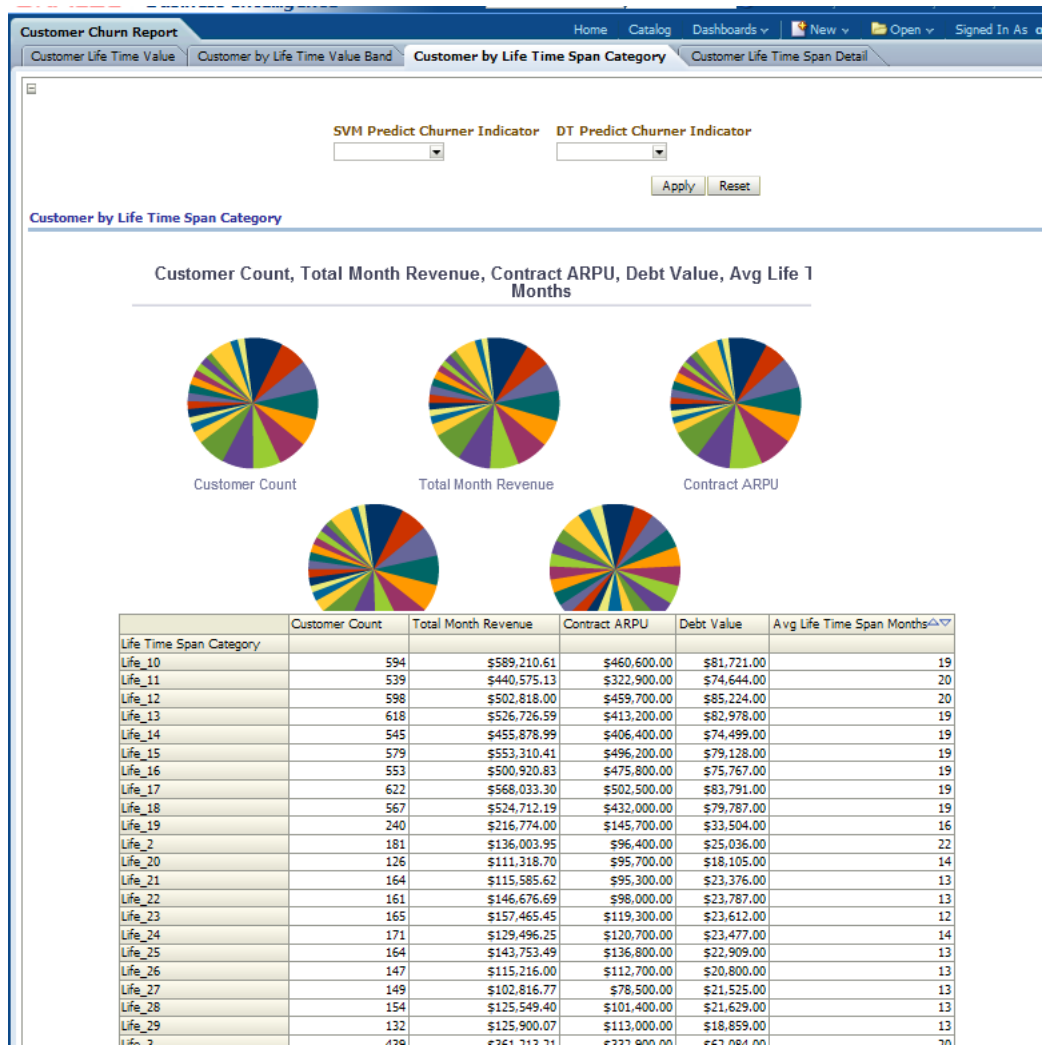
### Customer by Life Time Span Category

This report, as shown in [Figure 12–19](#) provides the customer life time span with the service provider on the basis of certain mining metrics such as average life time span months, total month revenue, contract Average Revenue Per User (ARPU) and so on. The Life time span value is measured by Months, therefore, a value of "22" in "Avg Life Time Span Months" means the customer is very likely to use the services for at least 22 months. The customers are binned into Life Time Span Category according to the value of Life time span.

Report dimensions are:

- Customer
- Customer Mining

**Figure 12–19 Customer by Life Time Span Category Sample Report**



**Customer Life Time Span Detail**

This report, as shown in [Figure 12–20](#) provides more information about the customers in each life time span category than report "Customer by Life Time Span Category".

Report dimensions are:

- Customer
- Customer Mining

Figure 12–20 Customer Life Time Span Detail Sample Report

Life Time Span Category	Customer Name	Phone Nbr	Churn Ind	Predicted Life Time Span Months	Contract ARPU	Debt Value	Month Revenue
Life_10	Abner Kenney	9985010201		26	\$0.00	\$222.00	\$0.00
	Abner Robbinette	9985007309	● Pattern shows Customer has very high probability of Churning out	11	\$900.00	\$130.00	\$805.26
	Abraham Sadworth	9985008696		31	\$0.00	\$130.00	
	Ada Kitchens	9985010204	● Pattern shows Customer has very high probability of Churning out	37	\$0.00	\$70.00	\$0.00
	Adity Kennedy	9985010598		13	\$0.00	\$90.00	\$8,181.82
	Adriana Roy	9985003600	● Pattern shows Customer has very high probability of Churning out	4	\$3,000.00	\$222.00	\$2,793.10
	Ange Lauderdale	9985002162		8	\$100.00	\$70.00	\$90.48
	Annie Barr	9985007025		15	\$3,000.00	\$130.00	\$2,647.06
		9985007674		9	\$3,000.00	\$130.00	\$2,500.00
	Annie Gilmour	9985004167		24	\$0.00	\$70.00	
	August Jeffreys	9985010707		13	\$0.00	\$222.00	\$736.36
	August Laycock	9985003249		23	\$0.00	\$70.00	\$0.00
	Austin Sands	9985002359		6	\$0.00	\$222.00	\$0.00
	Austin Stone	9985008996		34	\$0.00	\$222.00	
	Azalea Janney	9985001970	● Pattern shows Customer has very high probability of Churning out	19	\$900.00	\$70.00	\$720.00
	Babetta Jewell	9985001972		25	\$900.00	\$90.00	\$700.00
		9985007717	● Pattern shows Customer has very high probability of Churning out	4	\$900.00	\$130.00	\$642.86
	Babetta Lent	9985002905		18	\$900.00	\$90.00	\$642.86
	Bailey Parkburg	9985003628		5	\$100.00	\$130.00	\$92.31
	Baird Rogers	9985009304		37	\$0.00	\$90.00	
	Barnaby Hummer	9985009376		19	\$0.00	\$70.00	\$91.67
	Barrett Brooks	9985003635	● Pattern shows Customer has very high probability of Churning out	19	\$100.00	\$130.00	\$92.00
	Barrett Feathers	9985009840		21	\$0.00	\$222.00	\$642.86
Barrett Grubb	9985005028		5	\$0.00	\$130.00	\$0.00	
Bartholomew Krider	9985005135		13	\$0.00	\$130.00	\$0.00	

## Customer Churn Analysis

This area includes the reports: [Customer Churn Rate](#), [Customer Churn Statistics](#), [Churn Reason Distribution](#), [Churn Outlier by Site \(Building\)](#), [Churn Outlier by Sales Agent](#), and [Complain Rate Outlier by Business Unit](#).

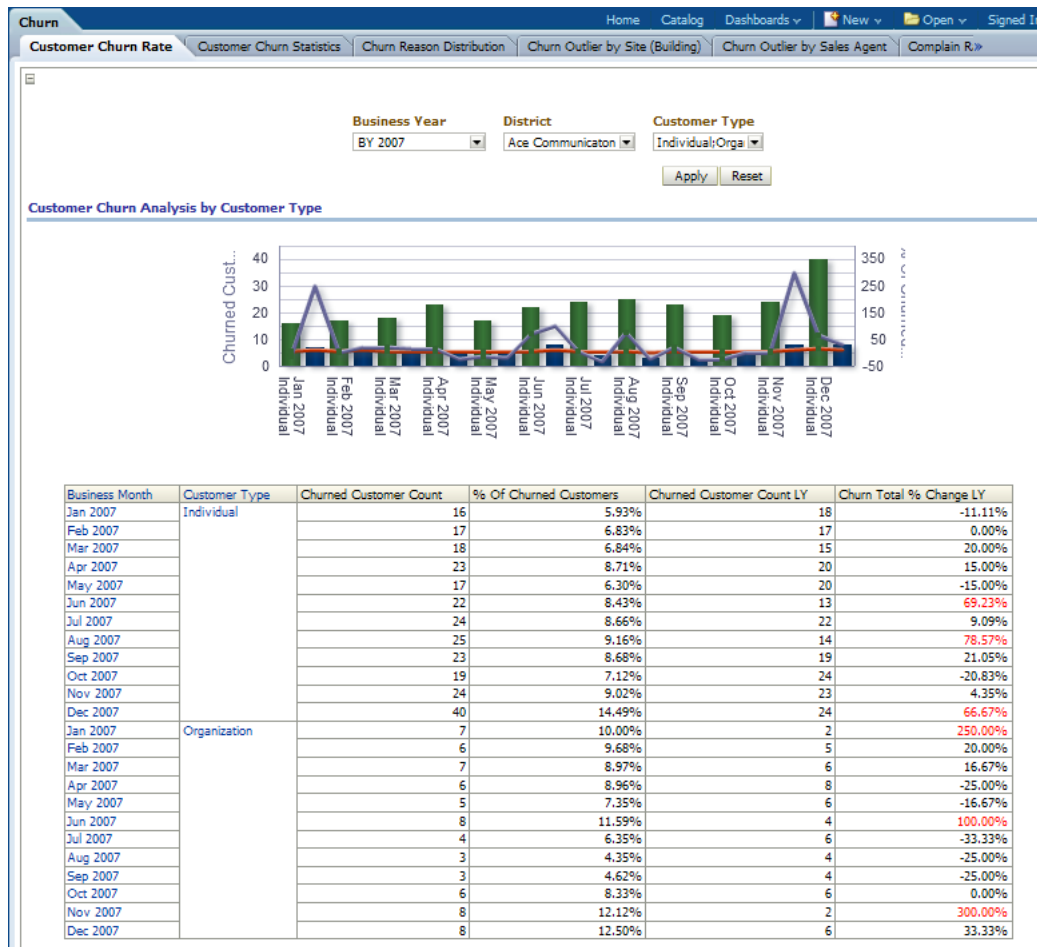
### Customer Churn Rate

This report, as shown in [Figure 12–21](#) provides year-level churn rate information of an organization based on Customer type. It also shows the Last year information for the user to see differences.

Report dimensions are:

- Organization
- Business Time
- Customer

Figure 12–21 Customer Churn Rate Sample Report



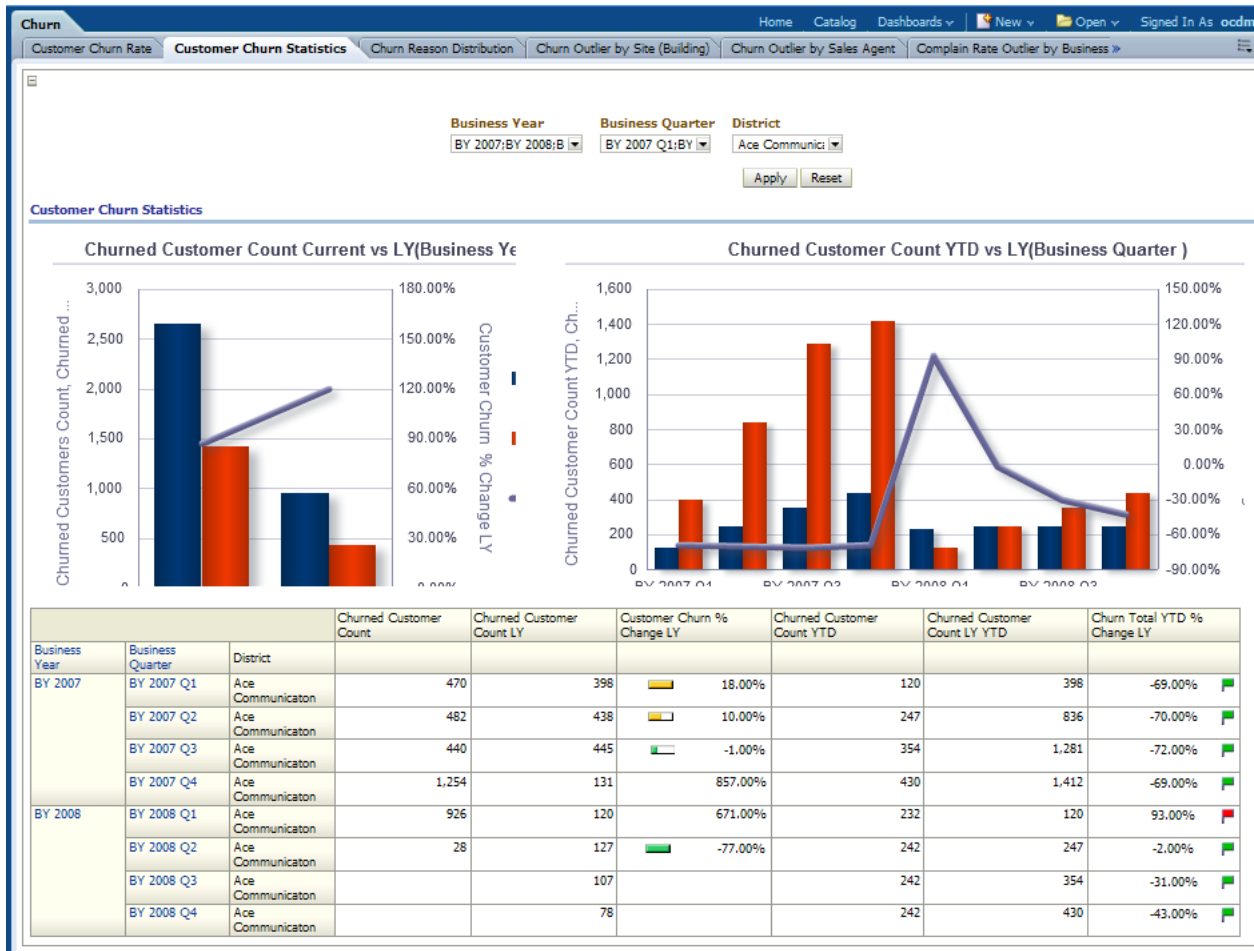
**Customer Churn Statistics**

This report, as shown in Figure 12–22 provides year-level subscription performance based on churn statistics relating to a Customer, such as high churn rate analysis for a subscription, and so on. Oracle Communications Data Model provides certain operational measures such as forecasting, prediction, and so on, to over come this problem This data can be analyzed together with LY and YTD data.

Report dimensions are:

- Organization
- Business Time
- Customer

Figure 12–22 Customer Churn Statistics Sample Report



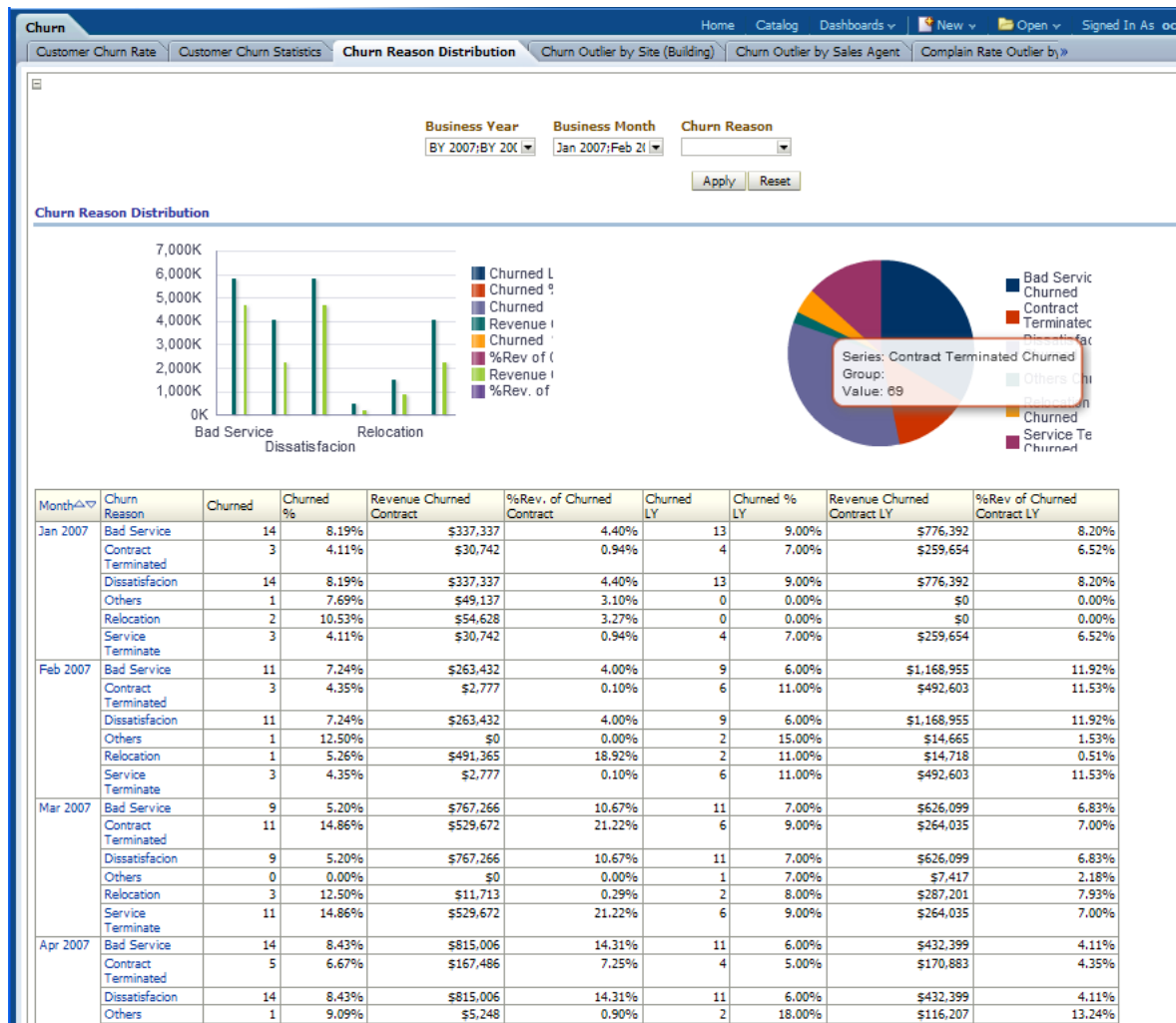
**Churn Reason Distribution**

This report as shown in Figure 12–23 identifies the year level top reasons that lead the customers to move out of the service providers. It also gives the flexibility to compare the same with last year churn information. Thus, it gives the service providers a way to analyze the churn situation according to customer stated churn reasons.

Report dimensions are:

- Business Time
- Churn Reason

Figure 12–23 Churn Reason Distribution Sample Report



**Churn Outlier by Site (Building)**

This report, as shown in Figure 12–24 mainly speaks about the broadband or Fix Line related churn analysis pertaining to one building or an area. The churn rates are displayed for all building in selected area, and those extremely high churn rates are identified as “Churn Outlier” beside the churn rate, marked by number “1” and background as RED.

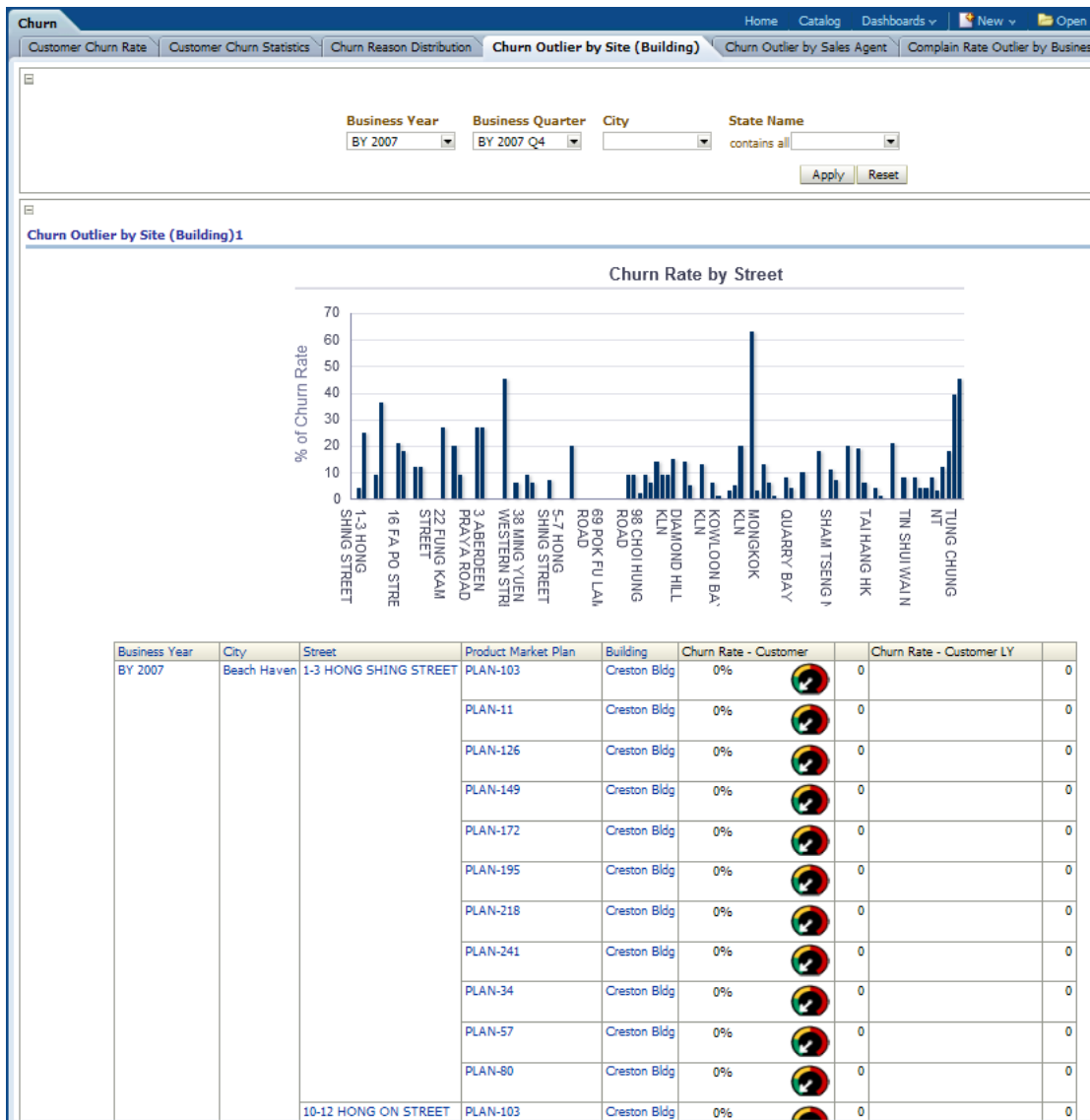
It can help identify the churn related problem such as network problems, arrival of new competitors, and so on. For example, when competitors launch a promotion or your network fails, the churn rate may go up. This report can help identify the problem before huge revenue loss occurs.

Report dimensions are:

- Business Time
- Geography
- Product Market Plan



Figure 12–24 Churn Outlier by Site (Building) Sample Report



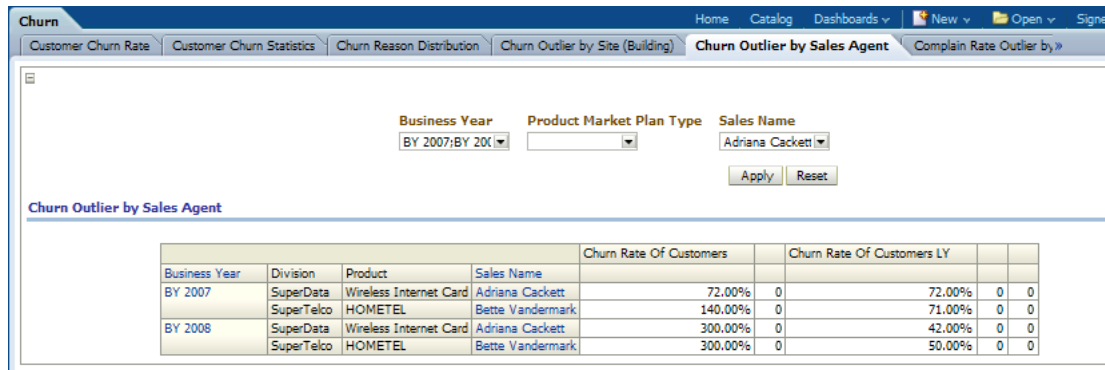
**Churn Outlier by Sales Agent**

This report, as shown in Figure 12–25 identifies the extremely high churn rate in the customers brought in by certain sales representative agents. For example, the sales agent may introduce the package to those incapable of paying the bill, or to his friends who churn right after acquiring the promotion gifts. Thus it enables a service providers to identify fraud cases by sales agents.

Report dimensions are:

- Business Time
- Organization
- Product Market Plan
- Sales Channel Representative

**Figure 12–25 Churn Outlier by Sales Agent Sample Report**



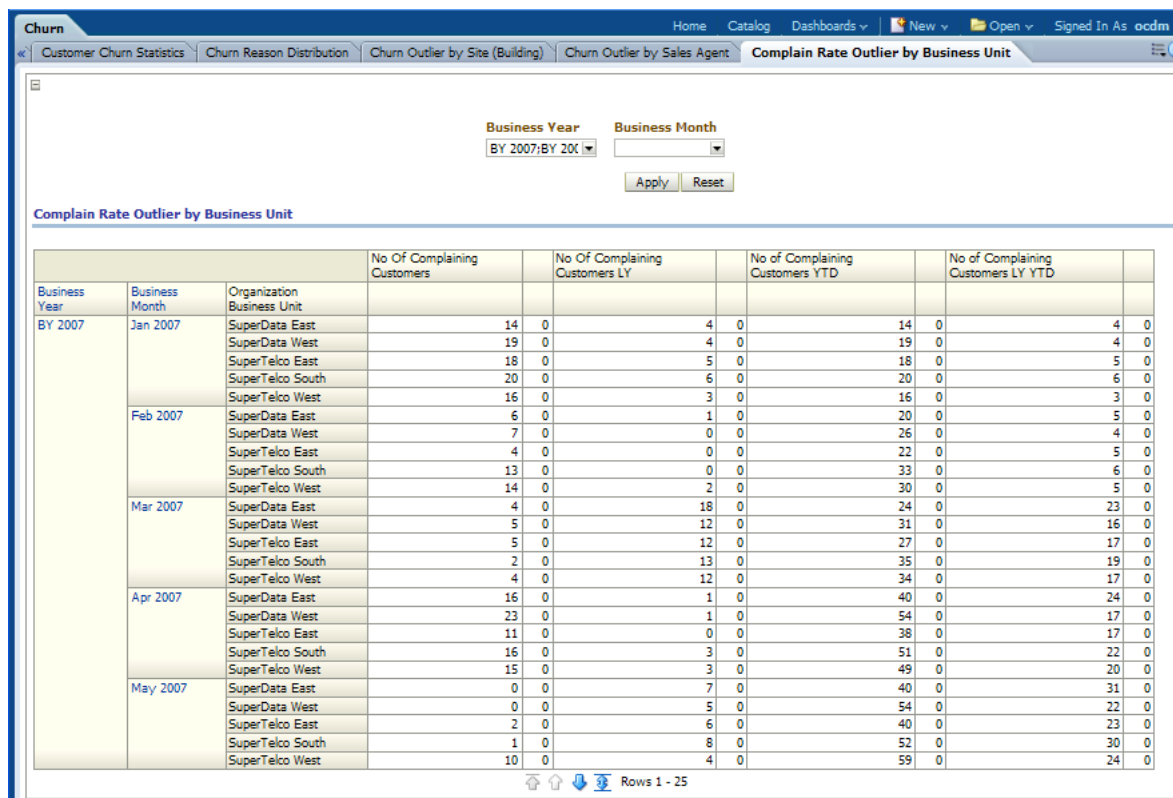
**Complain Rate Outlier by Business Unit**

This report, as shown in Figure 12–26 works in the same way as the report “Churn Outlier by Building”. However, instead of detecting a high churn rate, which already incurred revenue loss, this report tries to identify those areas where an extremely high compliant rate is observed. The report also shows the complaint rate in LY, YTD and LY YTD.

Report dimensions are:

- Business Time

**Figure 12–26 Complain Rate by Business Unit**



## Customer Churn Prediction

This area includes the reports: [Predicted Churner Life Time Value Chart \(by SVM\)](#), [Retention Cumulative Gain](#), [Churn Factor Rank](#), [Predicted Churn Customer Report by Revenue Band](#), [Churn Profile DT \(Decision Tree\) Rule](#), and [Churn Prediction by \(SVM result\)](#).

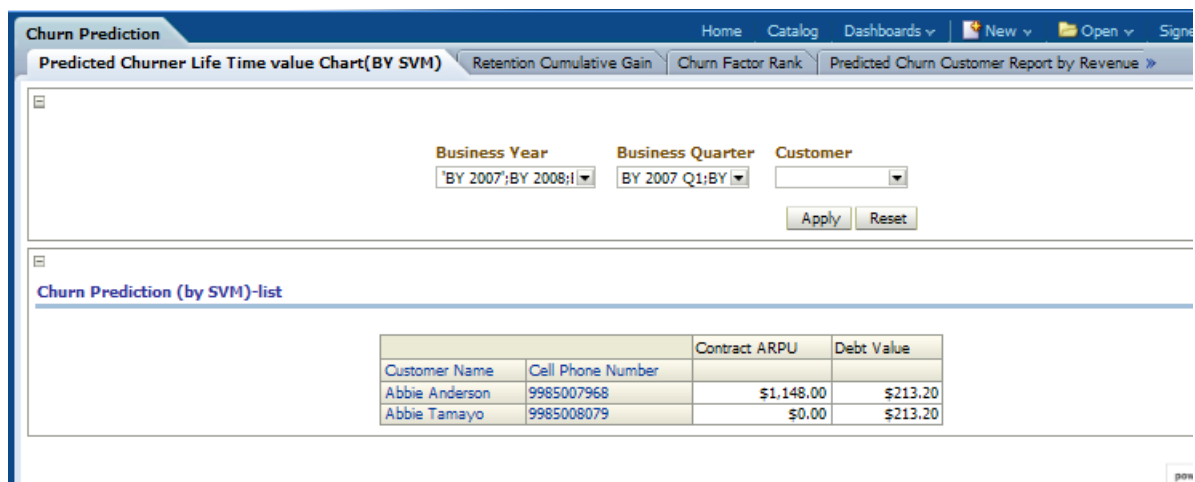
### Predicted Churner Life Time Value Chart (by SVM)

This report as shown in [Figure 12–27](#), mainly speaks about a customers ARPU and Debt Value based on year and month level.

Report dimensions are:

- Customer
- Business Time

**Figure 12–27 Predicted Churner Life Time Value (by SVM) Sample Report**



### Retention Cumulative Gain

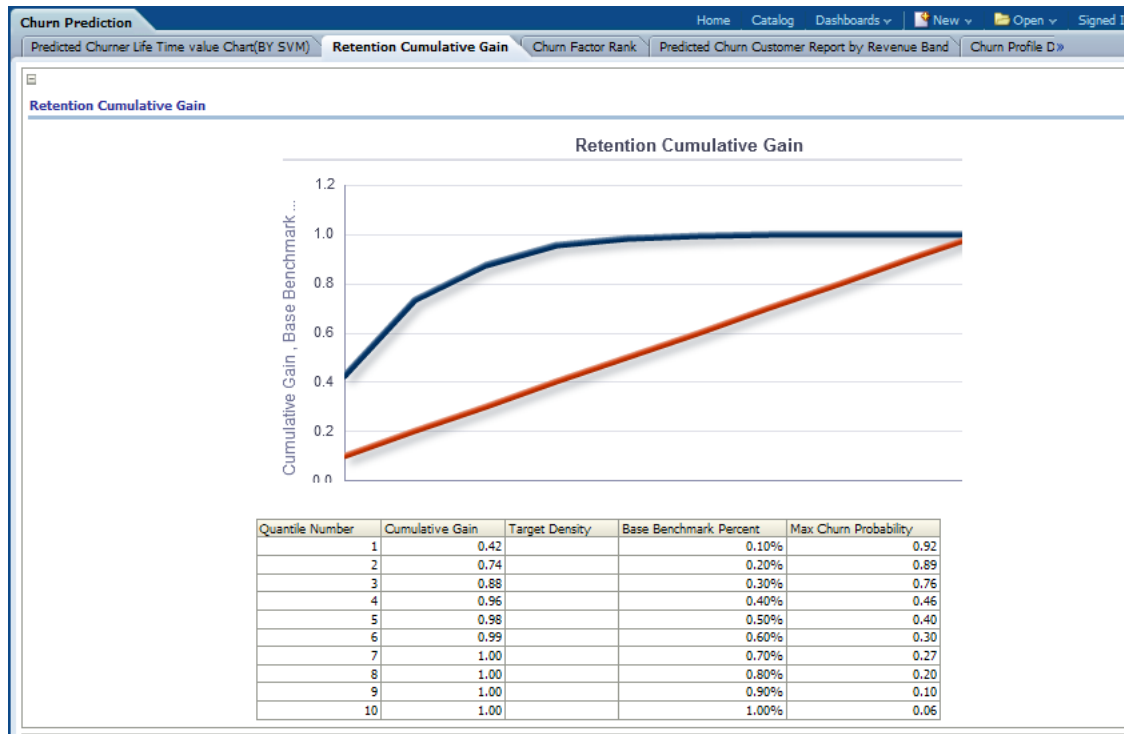
This report as shown in [Figure 12–28](#) shows the Oracle Communications Data Model Churn prediction Model performance; this helps you determine a threshold for the percent of customers to run in the retention program. This retention can be done using phone calls or email. For example, according to the details in [Figure 12–28](#), if the service provider selects 20% of MOST Likely churners according to the Oracle Communications Data Model Churn Prediction model, they can cover about 74% of real churners.

The chart here shows the accuracy of customers so identified under retention program prediction rather than picking on random selection of customers (shown as a straight line).

Report dimensions are:

- Churn SVM ROC

**Figure 12–28 Retention Cumulative Gain Sample Report**



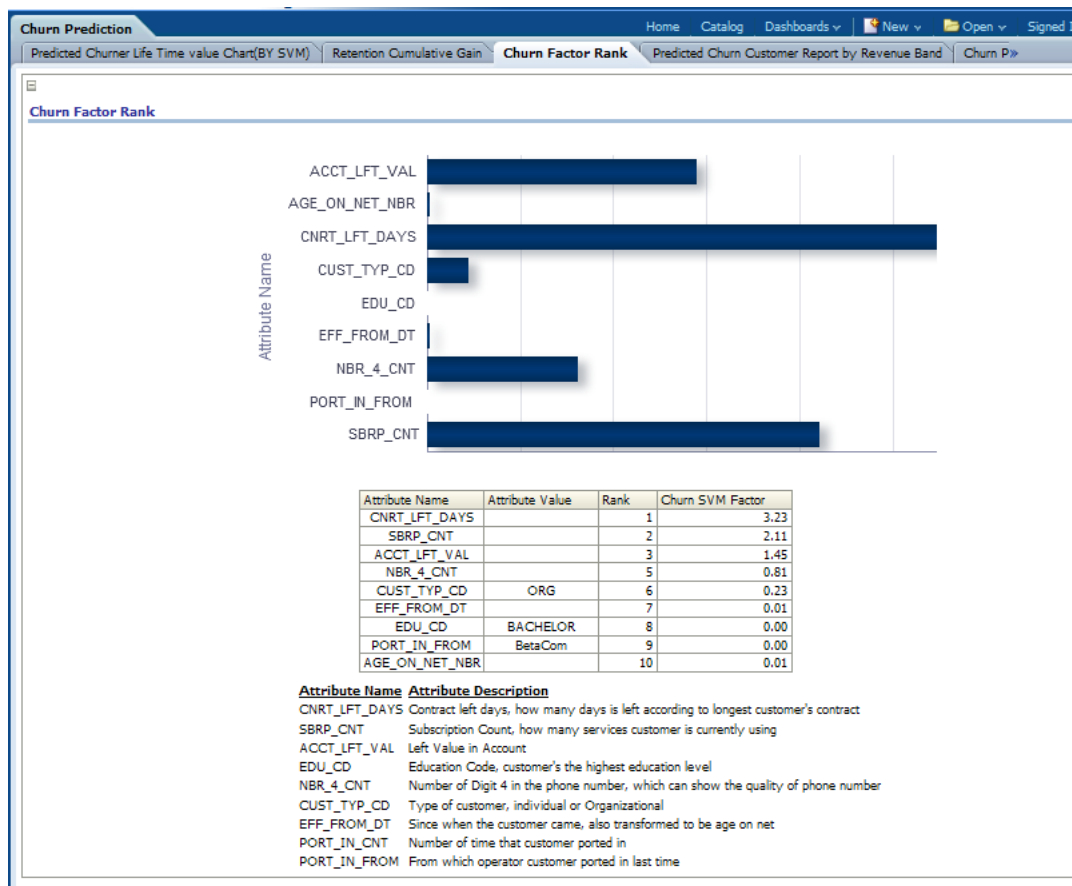
**Churn Factor Rank**

This as shown in [Figure 12–29](#) can help you understand which attribute is more important in determining a customer churning pattern. The factors are ranked according to the SVM Coefficients from the Churn prediction model. The chart can help marketing understand the customers for a better campaign strategy.

Report dimensions are:

- Churn SVM ROC

Figure 12–29 Churn Factor Rank Sample Report



### Predicted Churn Customer Report by Revenue Band

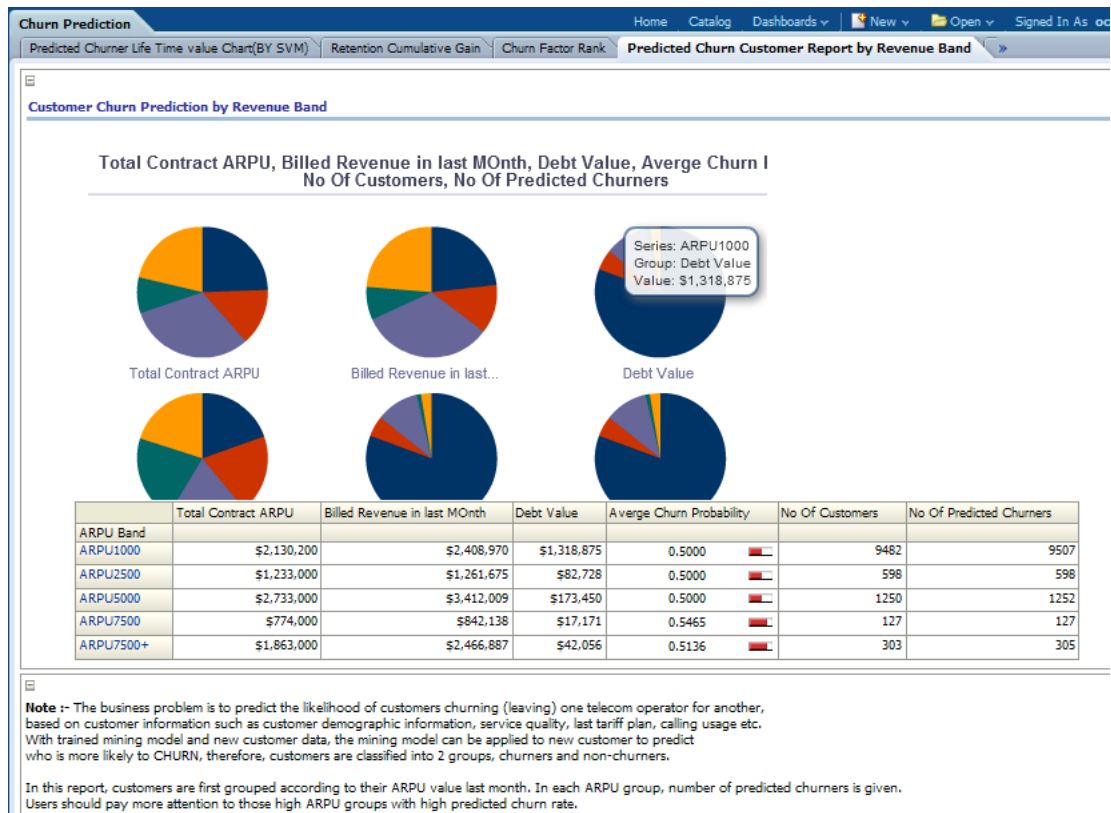
This report, as shown in [Figure 12–30](#) shows the summary of customers and the summary of who may churn in the next month. The customers are binned into ARPU Band according to their last month revenue ARPU. In each ARPU band, the total revenue, debt value and Number of Predicted churners are displayed.

You can drill down into each ARPU band by clicking the ARPU band to see a customer list belonging to that ARPU band.

Report dimensions are:

- ARPU Band

**Figure 12–30 Customer Churn Prediction by Revenue Band Sample Report**



**Churn Profile DT (Decision Tree) Rule**

This report as shown in [Figure 12–31](#), mainly speaks about the customers churn profiling for each Decision Tree node generated by the decision tree Churn Prediction model.

Figure 12–31 Churn Profile Decision Tree Rule Sample Report

Node	Rule	Prediction	Confidence	Support
1	CUST_TYP_CD in ('IND')	0	0.78	0.80
10	CUST_TYP_CD in ('ORG')	0	0.89	0.20
11	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY <= 104.5	0	0.87	0.12
12	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY <= 101.5	0	0.94	0.04
13	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY > 104.5	0	0.93	0.08
14	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY > 104.5 AND ADDR_LOC_KEY > 3574.5	0	0.95	0.02
15	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 101.5 AND ADDR_LOC_KEY <= 908.5	0	0.88	0.03
16	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 101.5 AND ADDR_LOC_KEY > 908.5 AND SL_CHNL_RPRSTV_KEY <= 50	0	1.00	0.00
17	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 101.5 AND ADDR_LOC_KEY > 908.5 AND SL_CHNL_RPRSTV_KEY > 50	0	0.69	0.00
18	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY > 101.5 AND CUST_SGMNT_KEY <= 102.5 AND ADDR_LOC_KEY <= 4288.5 AND SBRP_CNT_3MO <= 21	1	0.80	0.00
19	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY > 101.5 AND CUST_SGMNT_KEY <= 102.5 AND ADDR_LOC_KEY <= 4288.5 AND SBRP_CNT_3MO > 21	0	0.97	0.01
2	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 104.5	0	0.74	0.46
20	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY > 101.5 AND CUST_SGMNT_KEY <= 102.5 AND ADDR_LOC_KEY > 4288.5	0	0.63	0.01
21	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY > 102.5 AND CUST_SGMNT_KEY <= 103.5	0	0.69	0.11
22	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 104.5 AND CUST_SGMNT_KEY > 103.5 AND SBRP_CNT_3MO <= 21	1	0.64	0.00
23	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 104.5 AND CUST_SGMNT_KEY > 103.5 AND SBRP_CNT_3MO > 21	0	1.00	0.00
24	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY > 104.5	0	0.84	0.34
25	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY <= 101.5 AND ADDR_LOC_KEY <= 3581.5	0	0.92	0.02
26	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY <= 101.5 AND ADDR_LOC_KEY > 3581.5	0	1.00	0.01
27	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY <= 104.5 AND CUST_SGMNT_KEY > 101.5	0	0.84	0.08
28	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY > 104.5 AND ADDR_LOC_KEY <= 3574.5	0	0.92	0.06
29	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY > 104.5 AND ADDR_LOC_KEY > 3574.5 AND ADDR_LOC_KEY <= 4289	0	1.00	0.01
3	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 101.5	0	0.86	0.12
30	CUST_TYP_CD in ('ORG') AND CUST_SGMNT_KEY > 104.5 AND ADDR_LOC_KEY > 4289	0	0.89	0.01
4	CUST_TYP_CD in ('IND') AND CUST_SGMNT_KEY <= 101.5 AND ADDR_LOC_KEY > 908.5	0	0.85	0.09

### Churn Prediction by (SVM result)

This as shown in Figure 12–32, identifies the patterns of customers churning (leaving) based on customer information such as customer demographic information, service quality, last tariff plan, calling usage, and other factors. Base lining on these patterns, the model can also do the calculation over current customer base (called 'Apply') to predict who the customers are mostly like to churn in next few months. With these predictions, operators can initiate certain retention programs to reduce the customer churn rate.

Report dimensions are:

- Business Time
- Organization
- Customer

Figure 12–32 Churn Prediction List Sample Report

ARPU Band Name	Customer ID	Customer Name	Cell Phone Number	Contract ARPU	Total Revenue	Debt Value
ARPU1000 BAND	CUST-7200	Heidi Newkirk	9985007202	\$5,904.00	\$812.90	\$590.40
	CUST-7203	Isaac Yarmus	9985007205	\$328.00	\$90.32	\$426.40
	CUST-7206	Terrie Washington	9985007208	\$316.00	\$164.32	\$426.40
	CUST-7207	Wynnee Zimmer	9985007209	\$328.00	\$90.32	\$426.40
	CUST-7212	Wylie Stockman	9985007214	\$328.00	\$171.32	\$426.40
	CUST-7214	Gideon Roche	9985007216	\$328.00	\$87.10	\$728.16
	CUST-7226	Gale Wright	9985007228	\$304.00	\$162.10	\$728.16
	CUST-7227	Hamilton Alexander	9985007229	\$328.00	\$87.10	\$426.40
	CUST-7228	Page Rudder	9985007230	\$296.00	\$151.20	\$426.40
	CUST-7230	Sarah Moy	9985007232	\$328.00	\$83.87	\$426.40
				\$256.00	\$132.87	\$426.40
				\$328.00	\$80.65	\$295.20
				\$272.00	\$138.65	\$295.20
				\$4,592.00	\$564.52	\$852.80
			\$328.00	\$80.65	\$229.60	
			\$264.00	\$136.25	\$229.60	

## Marketing Sample Reports

The marketing area sample reports include the following areas:

- Targeted Promotion Lift and List
- Current Customer Base Analysis

### Targeted Promotion Lift and List

This area includes the report [Customer Promotion List](#).

#### Customer Promotion List

This report, as shown in [Figure 12–33](#) provides a list of customers ranked by their probability of buying a product. For each customer, the life time value , ARPU, and Debt value are displayed for quick reference.

The buying probability of each customer on the product is calculated by Oracle Communications Data Model Targeted Promotion Mining model.

Report dimensions are:

- Customer



Figure 12–33 Customer Promotion List Sample Report

Customer Name	Cell Phone No	Buy Probability	Debt Value	Contract ARPU	Life Time Value
Rollo Gibb	9985004552	1.00	\$520	\$12,000	\$102,000
Lotus Ridgeway	9985007567	1.00	\$280	\$12,000	\$162,000
Denis Drescher	9985008483	1.00	\$280	\$0	\$206,000
Trudy Gilboy	9985009690	1.00	\$888	\$0	\$219,000
Inez Parks	9985009996	1.00	\$888	\$0	\$334,000
Baxter Barlow	9985005873	1.00	\$520	\$3,600	\$169,000
Patricia White	9985007391	1.00	\$360	\$3,600	\$91,000
Deb Coe	9985007393	1.00	\$888	\$3,600	\$697,000
Raleigh Kaden	9985008279	1.00	\$360	\$0	\$71,000
Denis Mccracken	9985008586	1.00	\$360	\$0	\$224,000
Blake Carmudi	9985008885	1.00	\$888	\$0	\$372,000
Andrew Cackett	9985009794	1.00	\$520	\$0	\$91,000
Tesia Wiley	9985010406	1.00	\$520	\$0	\$172,000
Grant Dade	9985006984	1.00	\$520	\$3,600	\$141,000
Sadie Eaton	9985002464	1.00	\$580	\$2,800	\$210,000
Harry Stuhler	9985006385	1.00	\$520	\$2,800	\$111,000
Brady Ladd	9985007578	1.00	\$520	\$2,800	\$304,000
Gregory Mannings	9985001002	1.00	\$520	\$3,600	\$80,000

## Customer Market Share Analysis

This area includes the reports: [Customer Market Share Report](#), [Customer Life Time Span Detail](#), and [Life Time Value \(LTV\)](#).

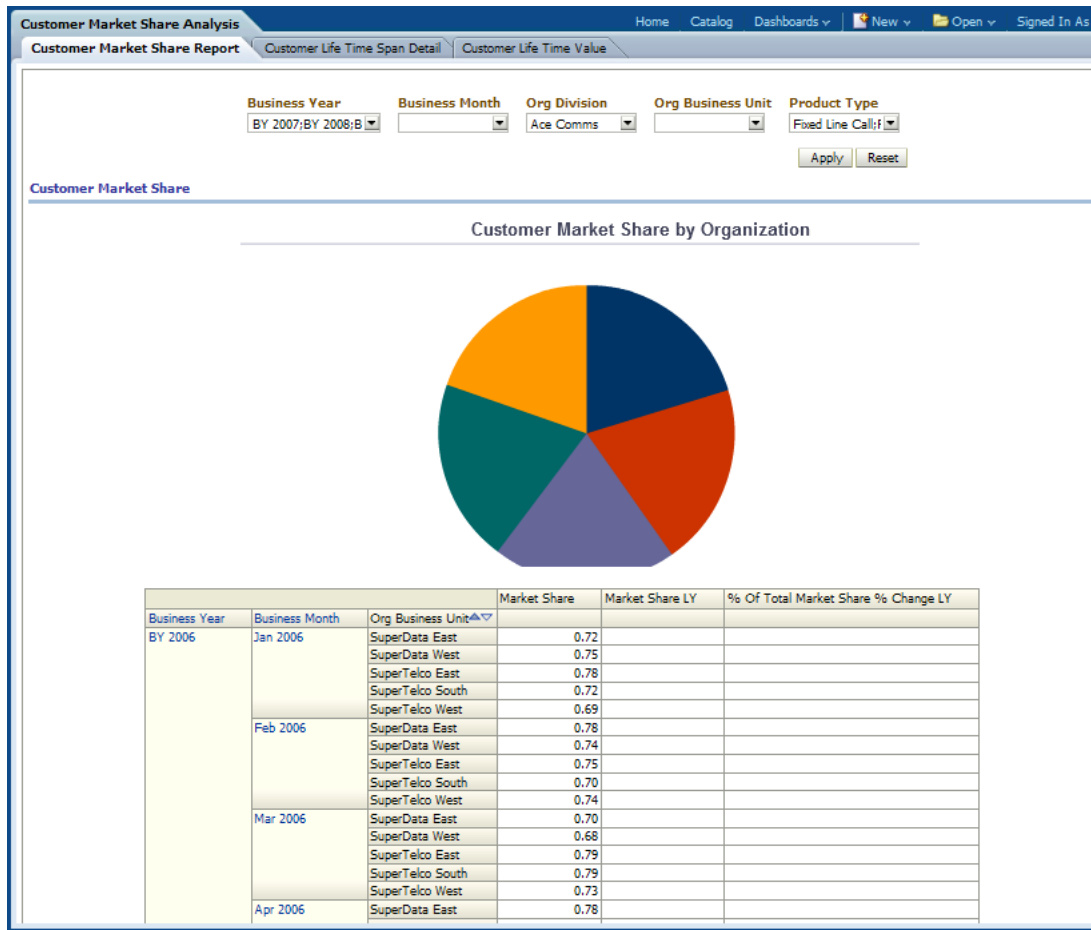
### Customer Market Share Report

This report as shown in [Figure 12–34](#) shows month-level Customer Market share, comparing with competitors. The data is acquired from an external marketing source.

Report dimensions are:

- Business Time
- Organization
- Product Type

**Figure 12–34 Customer Market Share Analysis Sample Report**



**Customer Life Time Span Detail**

This report, as shown in [Figure 12–35](#) provides month-level transaction activity information based on customer life time span measures, for one or more customers.

Report dimensions are:

- Customer

Figure 12–35 Customer Life Time Span Detail Sample Report

Life Time Span Category	Customer Name	Phone Nbr	Churn Ind	Predicted Life Time Span Months	Contract ARPU	Debt Value	Month Revenue
Life_10	Abner Kenney	9985010201		26	\$0.00	\$222.00	\$0.00
	Abner Robbinette	9985007309	● Pattern shows Customer has very high probability of Churning out	11	\$900.00	\$130.00	\$805.26
	Abraham Sadworth	9985008696		31	\$0.00	\$130.00	
	Ada Kitchens	9985010204	● Pattern shows Customer has very high probability of Churning out	37	\$0.00	\$70.00	\$0.00
	Adity Kennedy	9985010598		13	\$0.00	\$90.00	\$8,181.82
	Adriana Roy	9985003600	● Pattern shows Customer has very high probability of Churning out	4	\$3,000.00	\$222.00	\$2,793.10
	Angle Lauderdale	9985002162		8	\$100.00	\$70.00	\$90.48
	Annie Barr	9985007025		15	\$3,000.00	\$130.00	\$2,647.06
		9985007674		9	\$3,000.00	\$130.00	\$2,500.00
	Annie Gilmour	9985004167		24	\$0.00	\$70.00	
	August Jeffreys	9985010707		13	\$0.00	\$222.00	\$736.36
	August Laycock	9985003249		23	\$0.00	\$70.00	\$0.00
	Austin Sands	9985002359		6	\$0.00	\$222.00	\$0.00
	Austin Stone	9985008996		34	\$0.00	\$222.00	
	Azalea Janney	9985001970	● Pattern shows Customer has very high probability of Churning out	19	\$900.00	\$70.00	\$720.00
	Babetta Jewell	9985001972		25	\$900.00	\$90.00	\$700.00
		9985007717	● Pattern shows Customer has very high probability of Churning out	4	\$900.00	\$130.00	\$642.86
	Babetta Lent	9985002905		18	\$900.00	\$90.00	\$642.86
	Bailey Parkburg	9985003628		5	\$100.00	\$130.00	\$92.31
	Baird Rogers	9985009304		37	\$0.00	\$90.00	
Barnaby Hummer	9985009376		19	\$0.00	\$70.00	\$91.67	
Barrett Brooks	9985003635	● Pattern shows Customer has very high probability of Churning out	19	\$100.00	\$130.00	\$92.00	
Barrett Feathers	9985009840		21	\$0.00	\$222.00	\$642.86	
Barrett Grubb	9985005028		5	\$0.00	\$130.00	\$0.00	
Bartholomew Krider	9985005135		13	\$0.00	\$130.00	\$0.00	

### Life Time Value (LTV)

This report, as shown in Figure 12–36 shows life time value of a customer. Customer lifetime value has intuitive appeal as a marketing concept, because in theory it represents exactly how much each customer is worth in monetary terms, and therefore exactly how much a marketing department should be willing to spend to acquire each customer. Customer relationships are often divided into two categories. In contractual or retention situations, customers who do not renew are considered "lost for good". In customer migration situations, a customer who does not buy (in a given period or from a given catalog) is still considered a customer of the firm because she may very well buy at some point in the future. In customer retention situations, the firm knows when the relationship is over. One of the challenges for firms in customer migration situations is that the firm may not know when the relationship is over (as far as the customer is concerned).

Report dimensions are:

- Customer

**Figure 12–36 Life Time Value (LTV) Sample Report**

Life Time Value Band Code	Customer Name	Phone Nbr	Life Time Value	Contract ARPU	Billed Revenue In Last Month	Debt Value	
LTV_2	Auburn Malloney	9985008990	\$449,000.00	\$0.00	\$0.00	\$70.00	
	Blake Carmudi	9985008893	\$449,000.00	\$0.00	\$80.00	\$130.00	
	Bonnbelle Wong	9985008828	\$449,000.00	\$0.00	\$88.24	\$222.00	
	Cameron Lamb	9985003748	\$449,000.00	\$0.00	\$0.00	\$130.00	
	Charli Eddisson	9985009450	\$449,000.00	\$0.00	\$787.50	\$70.00	
	Delora Pack	9985009040	\$449,000.00	\$0.00	\$2,777.78	\$222.00	
	Frederick Gilmore	9985003816	\$449,000.00	\$900.00	\$642.86	\$130.00	
	Haland Chen	9985007130	\$449,000.00	\$0.00	\$0.00	\$130.00	
	Hatty Lloyd	9985000683	\$449,000.00	\$100.00	\$88.89	\$222.00	
	Horace Barnett	9985008945	\$449,000.00	\$0.00	\$60.00	\$70.00	
	Oprah Ruddy	9985005671	\$449,000.00	\$0.00	\$0.00	\$130.00	
	Pete Robinson	9985007385	\$449,000.00	\$100.00	\$83.33	\$222.00	
	Wanda Lindegreen	9985003236	\$449,000.00	\$100.00	\$50.00	\$130.00	
	LTV_2	Baylen Eden	9985004688	\$448,000.00	\$3,000.00	\$2,250.00	\$222.00
		Brayden Carbery	9985005892	\$448,000.00	\$100.00	\$77.78	\$222.00
		Brendan Grailing	9985009995	\$448,000.00	\$0.00	\$2,727.27	\$130.00
Dakota Conway		9985009150	\$448,000.00	\$0.00	\$2,600.00	\$130.00	
Holmes Nance		9985001026	\$448,000.00	\$100.00	\$84.62	\$70.00	
KaKit Mccracken		9985001543	\$448,000.00	\$3,000.00	\$2,727.27	\$222.00	
Leah Grey		9985005656	\$448,000.00	\$0.00	\$0.00	\$130.00	
Luana Lucas		9985005944	\$448,000.00	\$100.00	\$50.00	\$130.00	
Luana Wan		9985008903	\$448,000.00	\$0.00	\$77.78	\$70.00	
Merrill Blankenship		9985003143	\$448,000.00	\$900.00	\$761.54	\$130.00	
Persis Salvatore		9985007665	\$448,000.00	\$100.00	\$83.33	\$130.00	
Rochelle Chen		9985007108	\$448,000.00	\$900.00	\$700.00	\$130.00	

### Current Customer Base Analysis

This area includes the reports: [Current Customer Base](#), [Customer Base Organization Share](#), and [Customer Base Product Share](#).

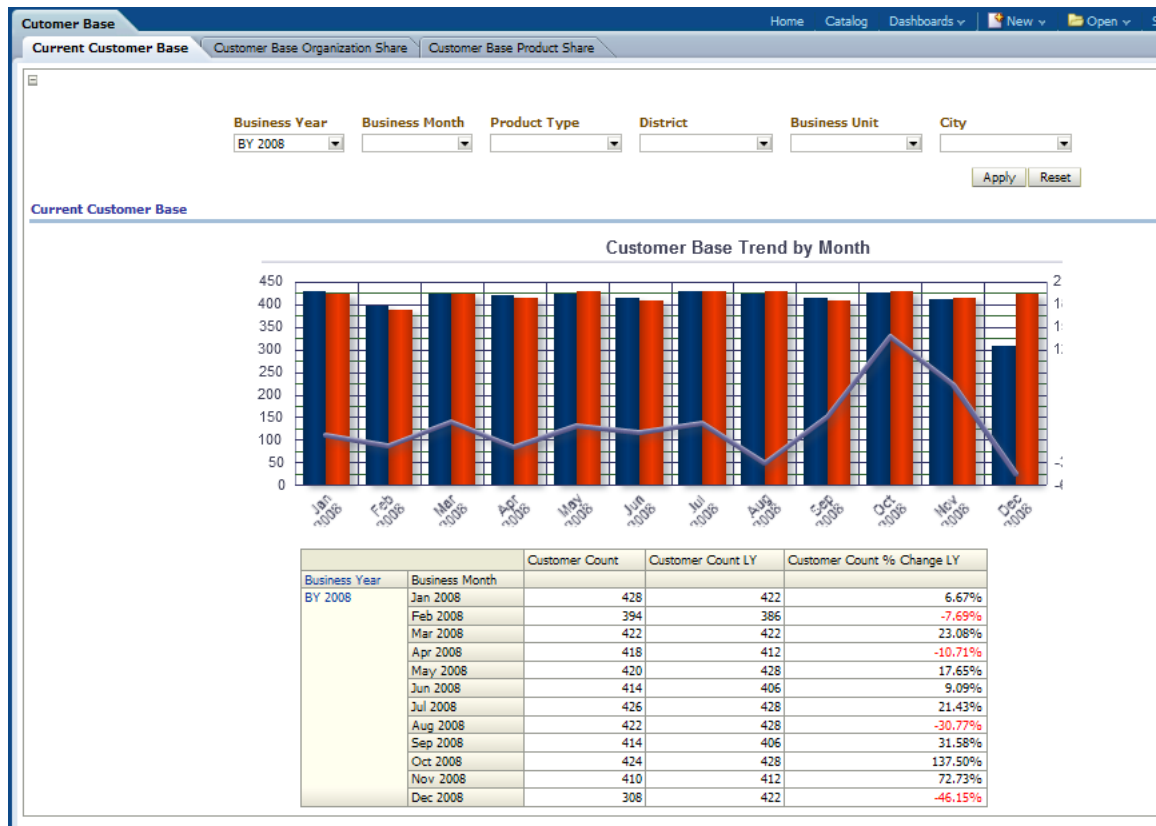
#### Current Customer Base

This report, as shown in [Figure 12–37](#) provides month-level transaction activity information based on no of customer measures, for one or more locations.

Report dimensions are:

- Business Time
- Organization
- Product
- Geography

Figure 12–37 Current Customer Base Sample Report



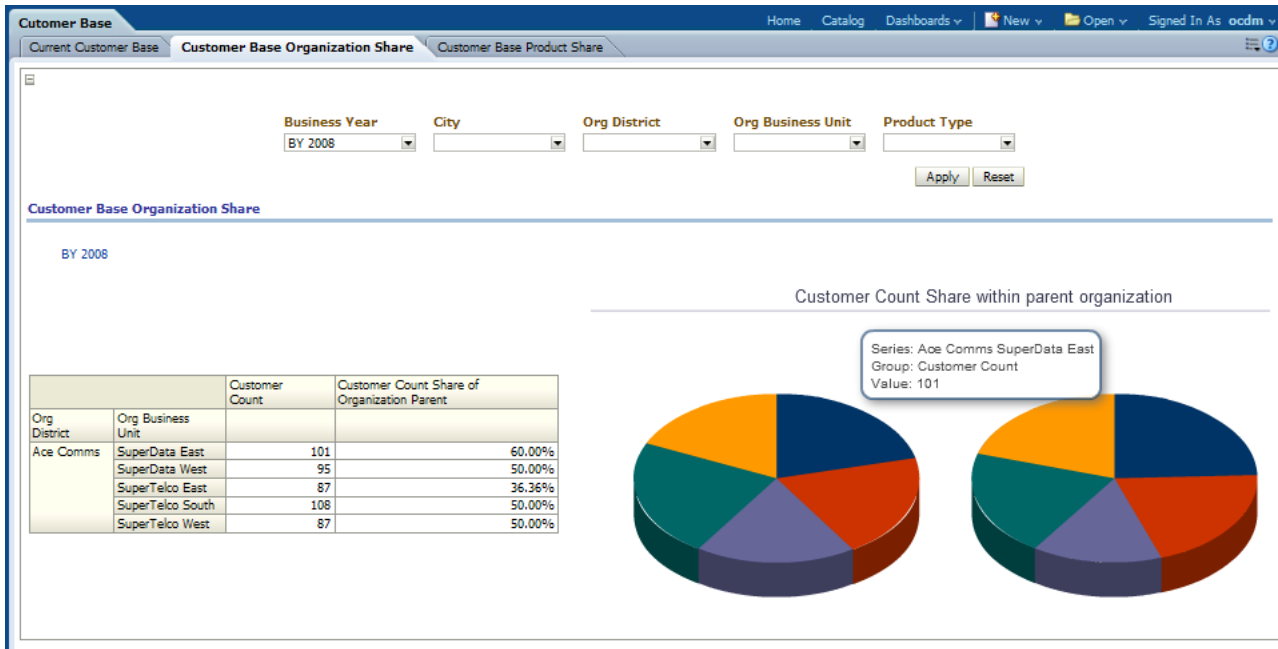
### Customer Base Organization Share

This as shown in Figure 12–38 provides month-level number of customers for each organization business unit, and also gives the share of customer count inside their parent organization.

Report dimensions are:

- Business Time
- Organization
- Product Type

**Figure 12–38 Customer Base Organization Share Sample Report**



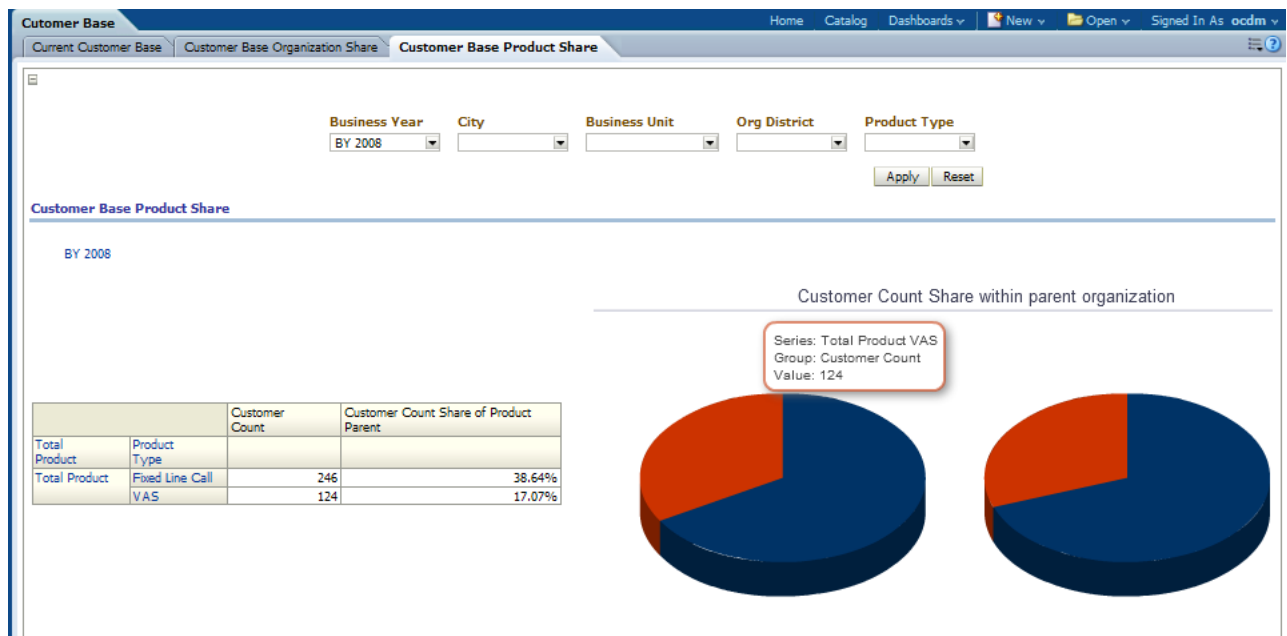
**Customer Base Product Share**

This as shown in [Figure 12–39](#) provides month-level number of customers for each products (subscription). The customer share of each product is listed for the selected products and organizations.

Report dimensions are:

- Business Time
- Organization
- Product Type

Figure 12–39 Customer Base Product Share Sample Report



## Network Sample Reports

The network area sample reports include the following areas:

- [Network Analysis](#)
- [Network Health Analysis](#)
- [Network Usage](#)

## Network Analysis

This area includes the reports: [Network Capacity](#), [Minutes of Usage](#), [Airtime per Subscription](#), and [Load During Busy Hours](#).

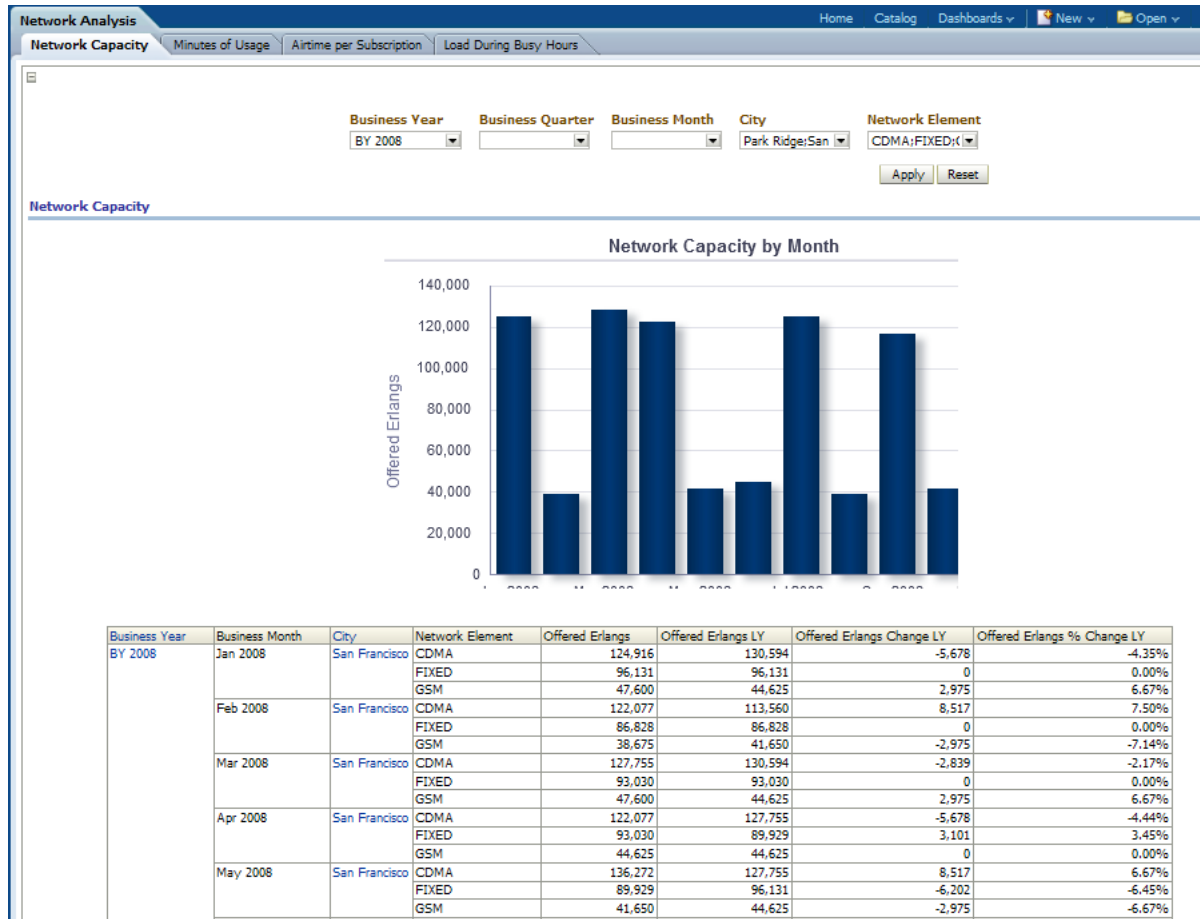
### Network Capacity

This report, as shown in [Figure 12–40](#) provides month-level transaction activity information based on network capacity measures, for one or more locations.

Report dimensions are:

- Business Time
- Geography
- Network Element

**Figure 12–40 Network Capacity Sample Report**



**Minutes of Usage**

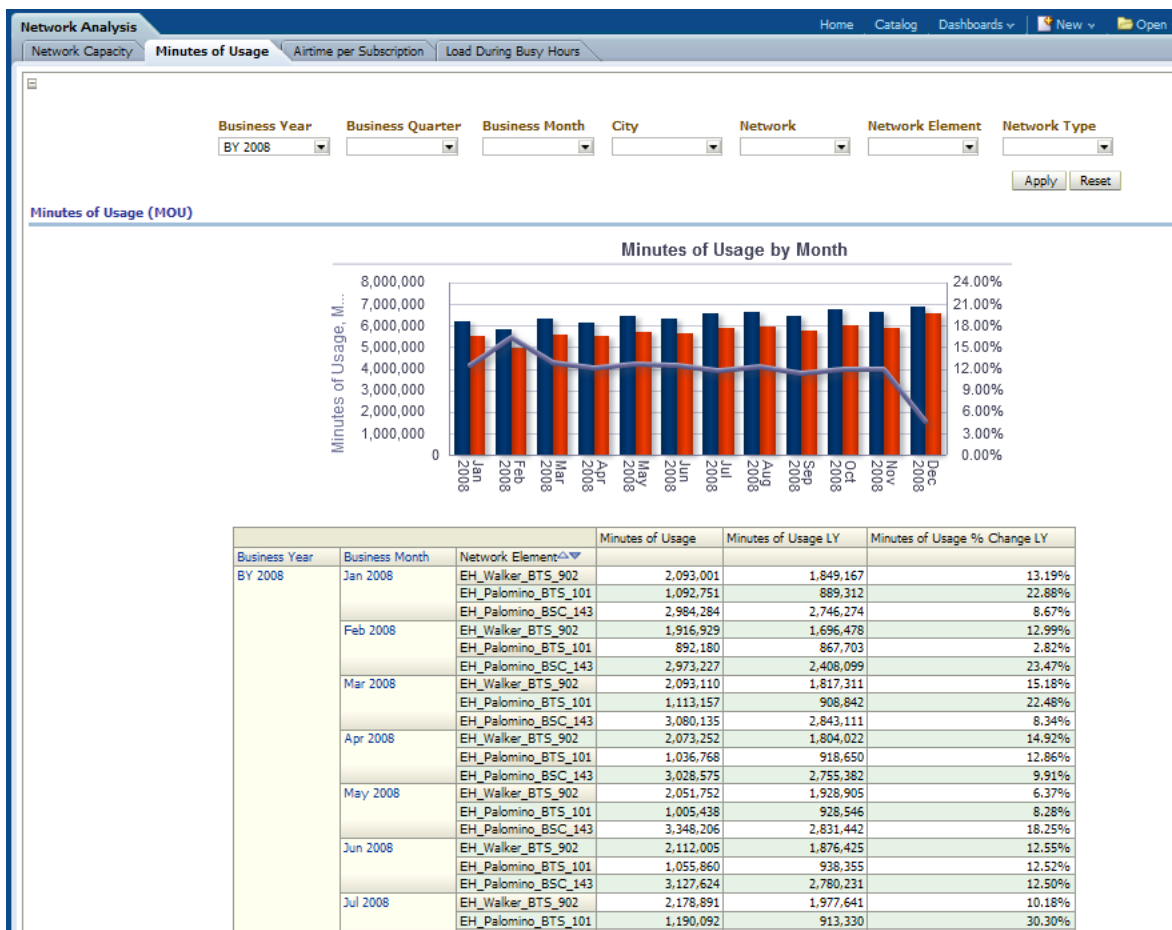
This as shown in [Figure 12–41](#) provides month-level call usage summary information based on call duration in minutes, in certain areas and the network elements.

Report dimensions are:

- Business Time
- Network Element



Figure 12-41 Minutes of Usage Sample Report



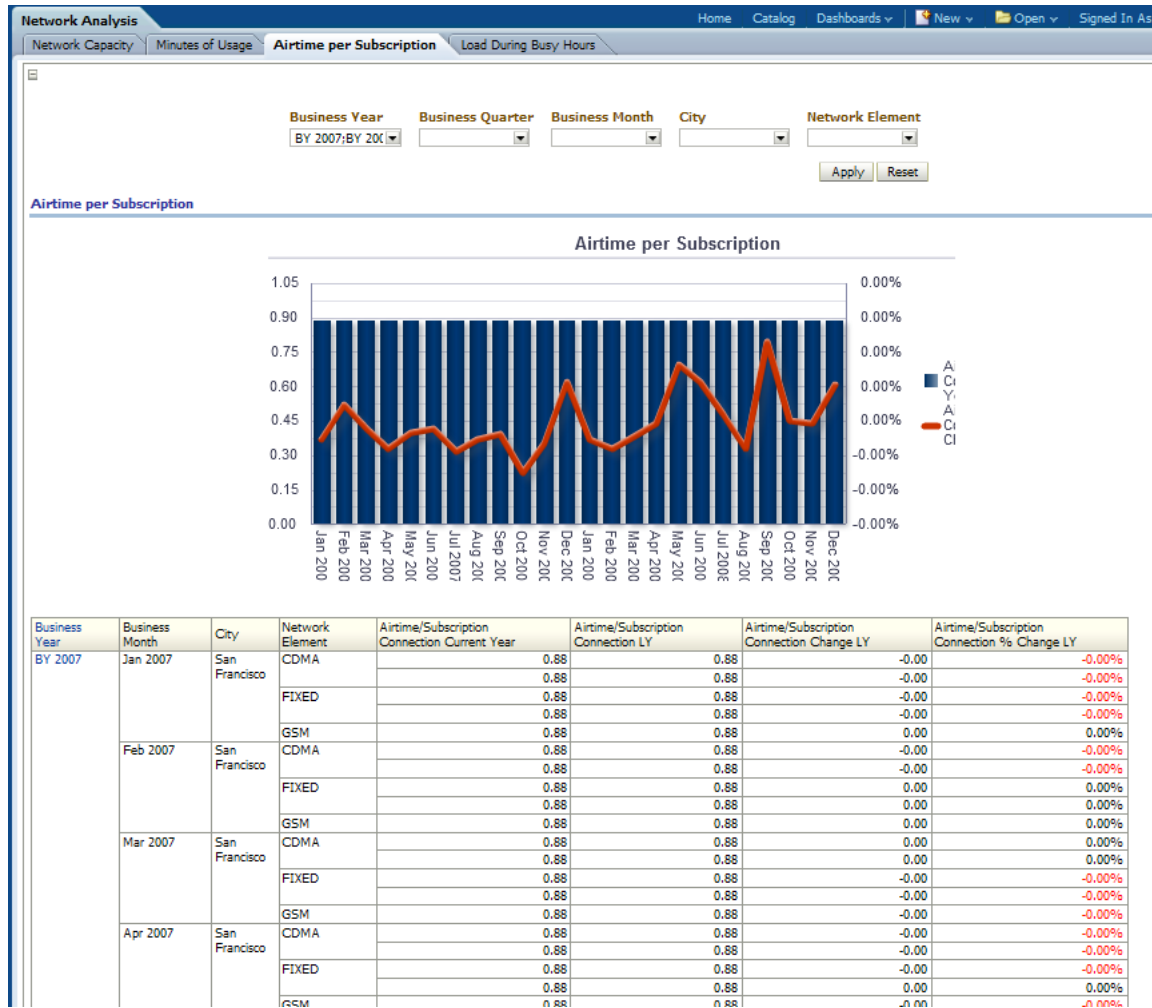
**Airtime per Subscription**

This as shown in Figure 12-42 provides month-level transaction activity information based on airtime per subscription connection measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography
- Peak Off peak Time

**Figure 12–42 Airtime per Subscription Sample Report**



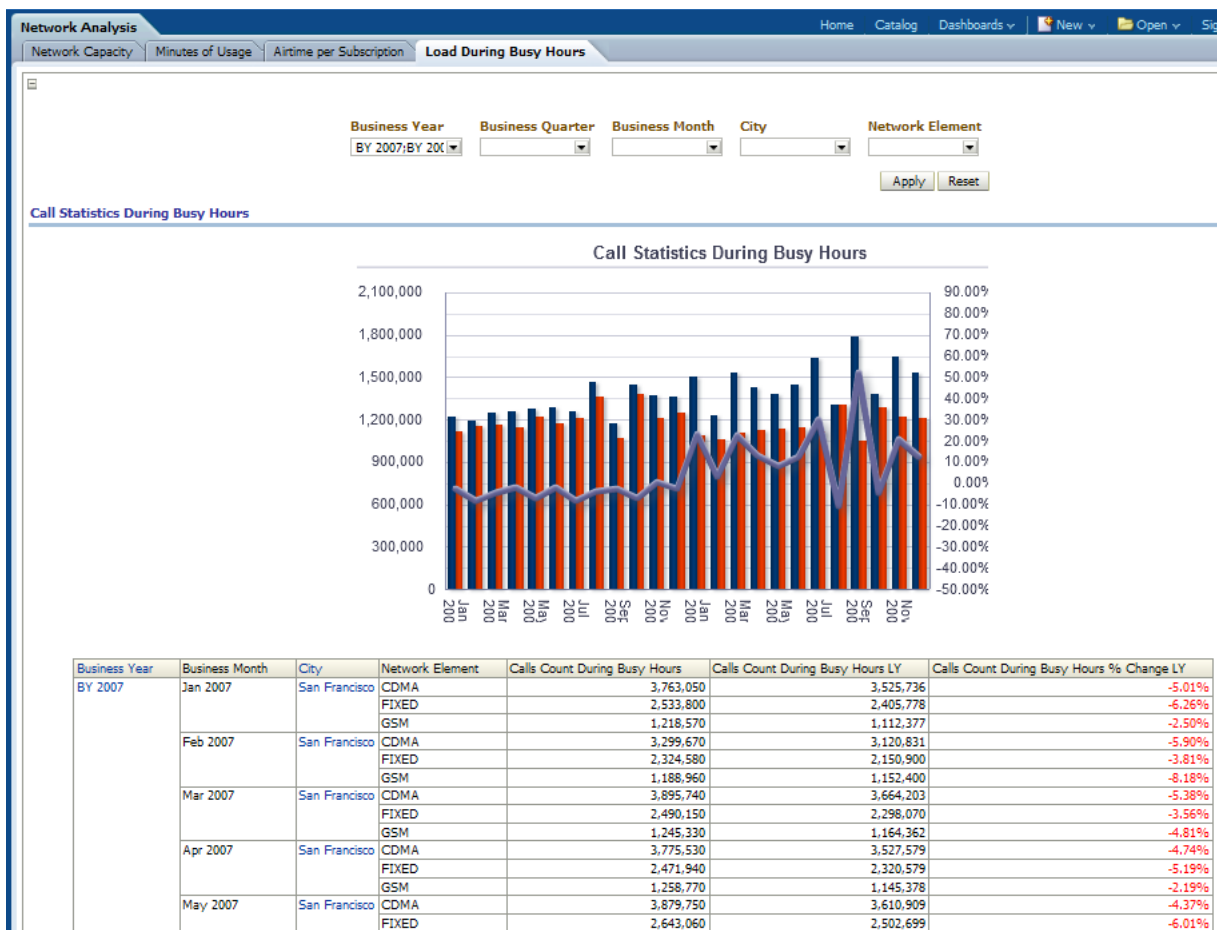
**Load During Busy Hours**

This report, as shown in Figure 12–43 provides month-level transaction activity information based on calls count during busy hours measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography
- Peak Off peak Time

Figure 12-43 Load During Busy Hours Sample Report



## Network Health Analysis

This area includes the reports: [Traffic by Connection](#), [Connections per Site](#), [Dropped Call Rate](#), [Call Failure Rate](#), [Congestion](#), [Connection by Geography](#), and [Connection by Voice Channel](#).

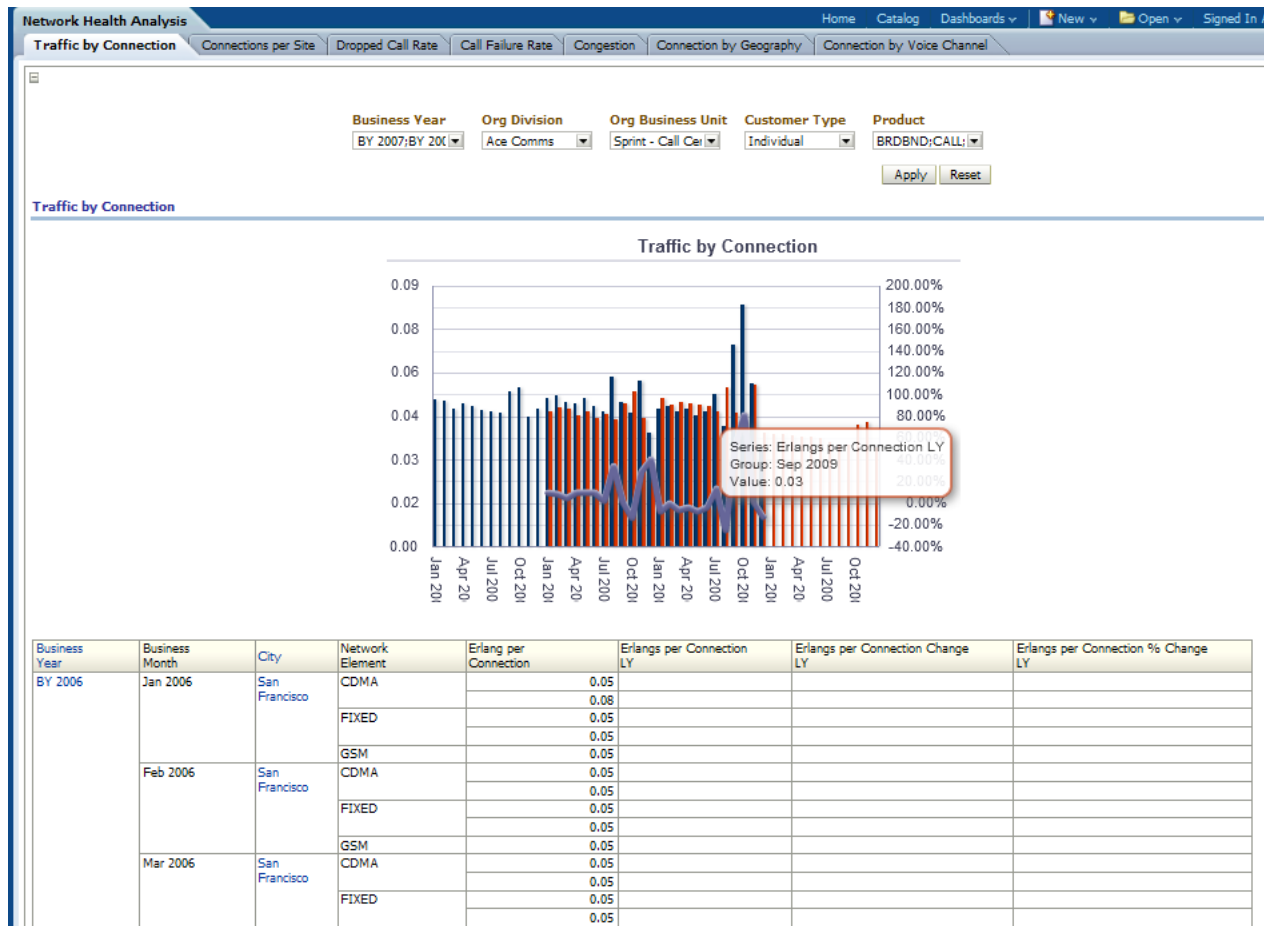
### Traffic by Connection

This report, as shown in [Figure 12-44](#) provides month-level transaction activity information based on traffic by connection measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography
- Peak Off peak Time

**Figure 12–44 Traffic by Connection Sample Report**



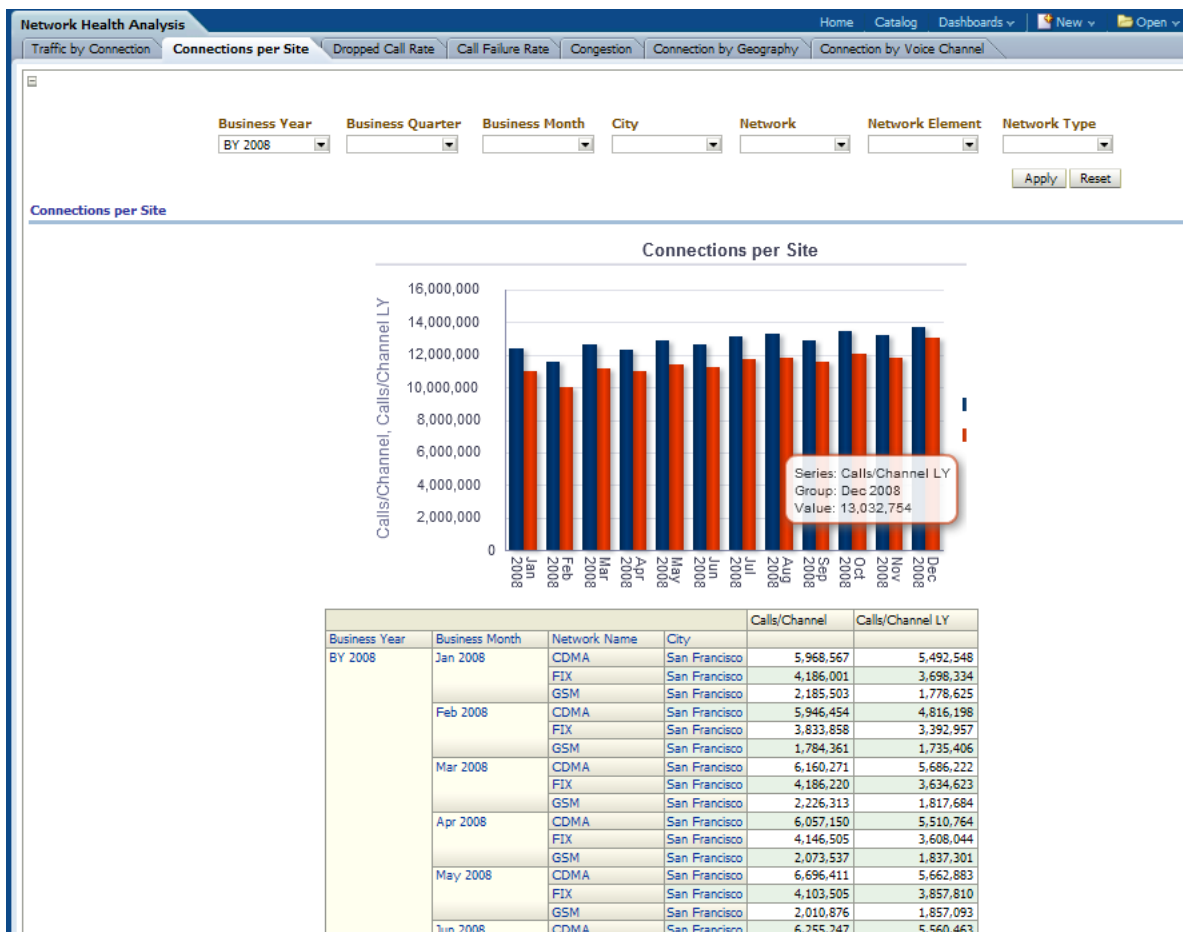
**Connections per Site**

This report, as shown in [Figure 12–45](#) provides month-level transaction activity information based on subscriptions per channel measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography

Figure 12–45 Connections per Site Sample Report



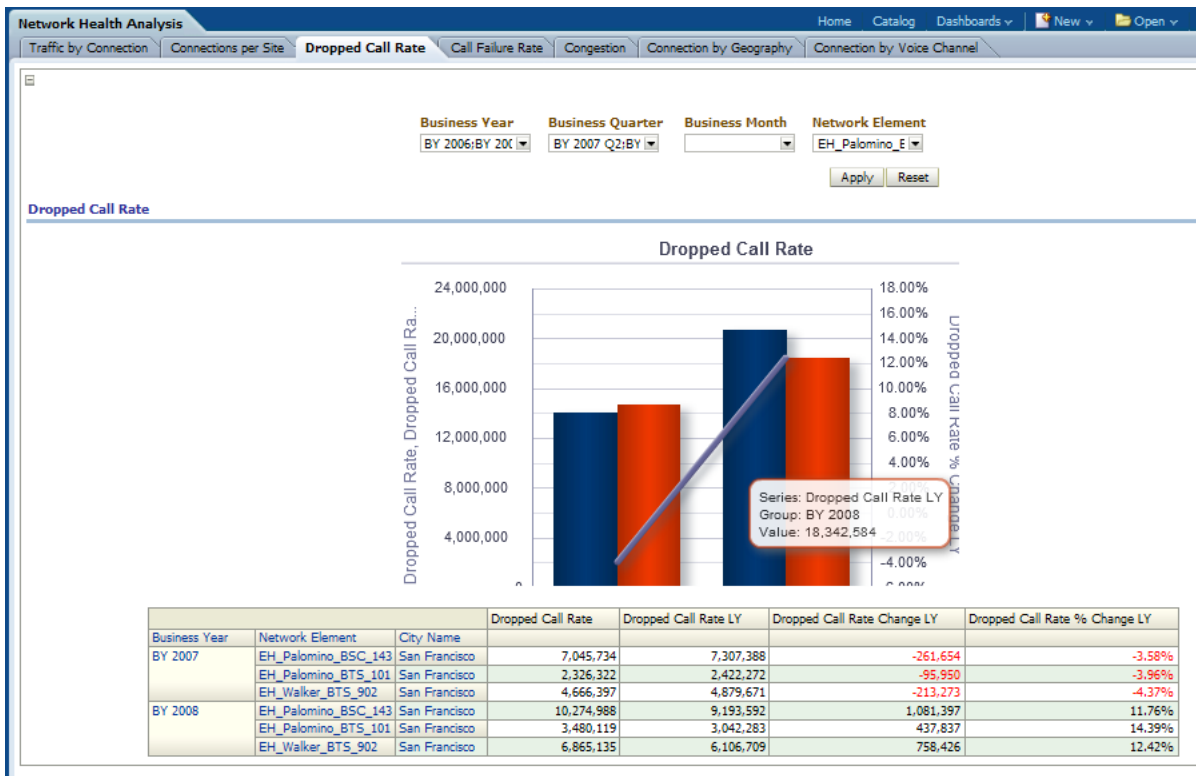
### Dropped Call Rate

This report, as shown in Figure 12–46 provides month-level transaction activity information based on dropped call rate measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography

**Figure 12–46 Dropped Call Rate Sample Report**



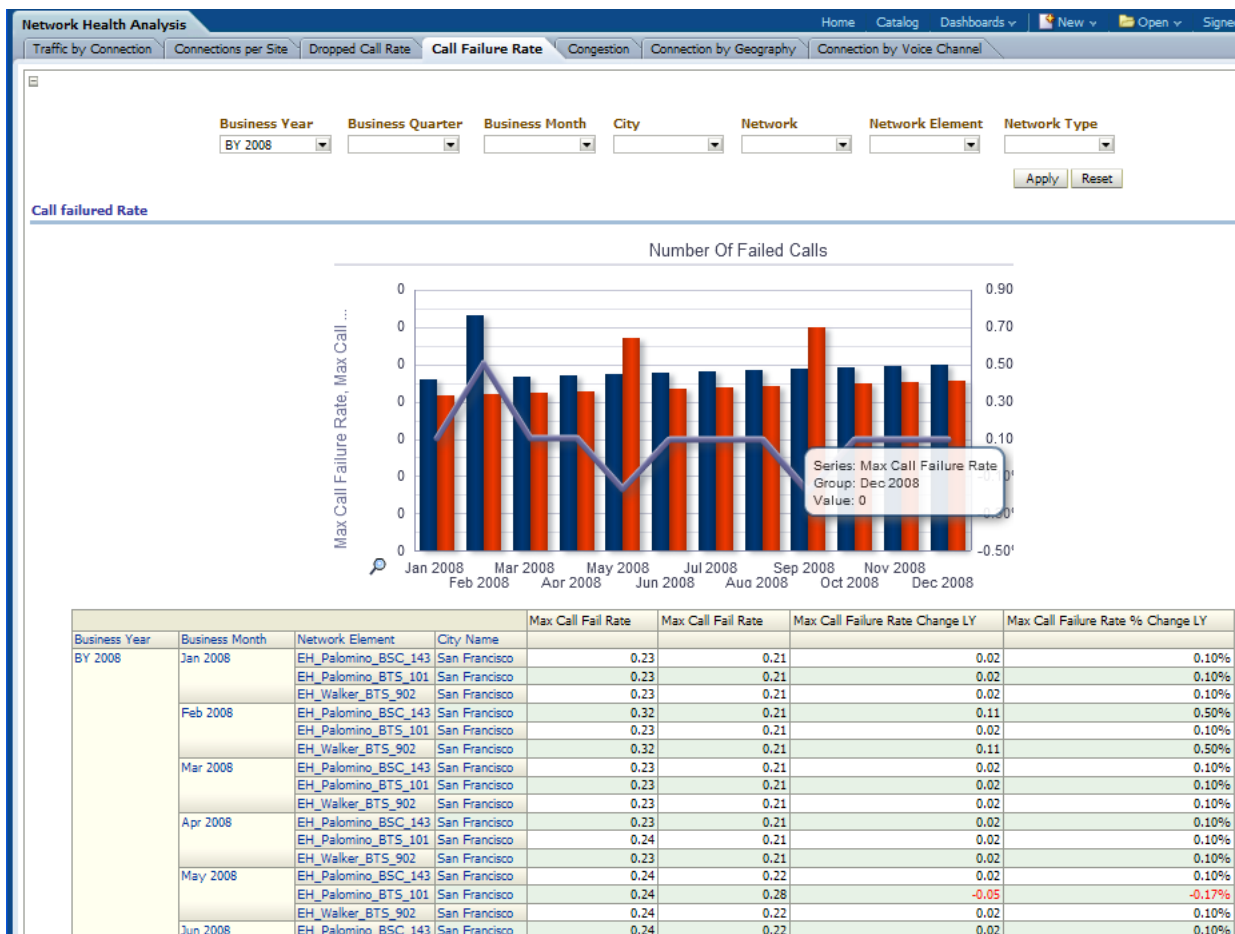
**Call Failure Rate**

This report, as shown in [Figure 12–47](#) provides month-level transaction activity information based on network congestion measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography

Figure 12–47 Call Failure Rate Sample Report



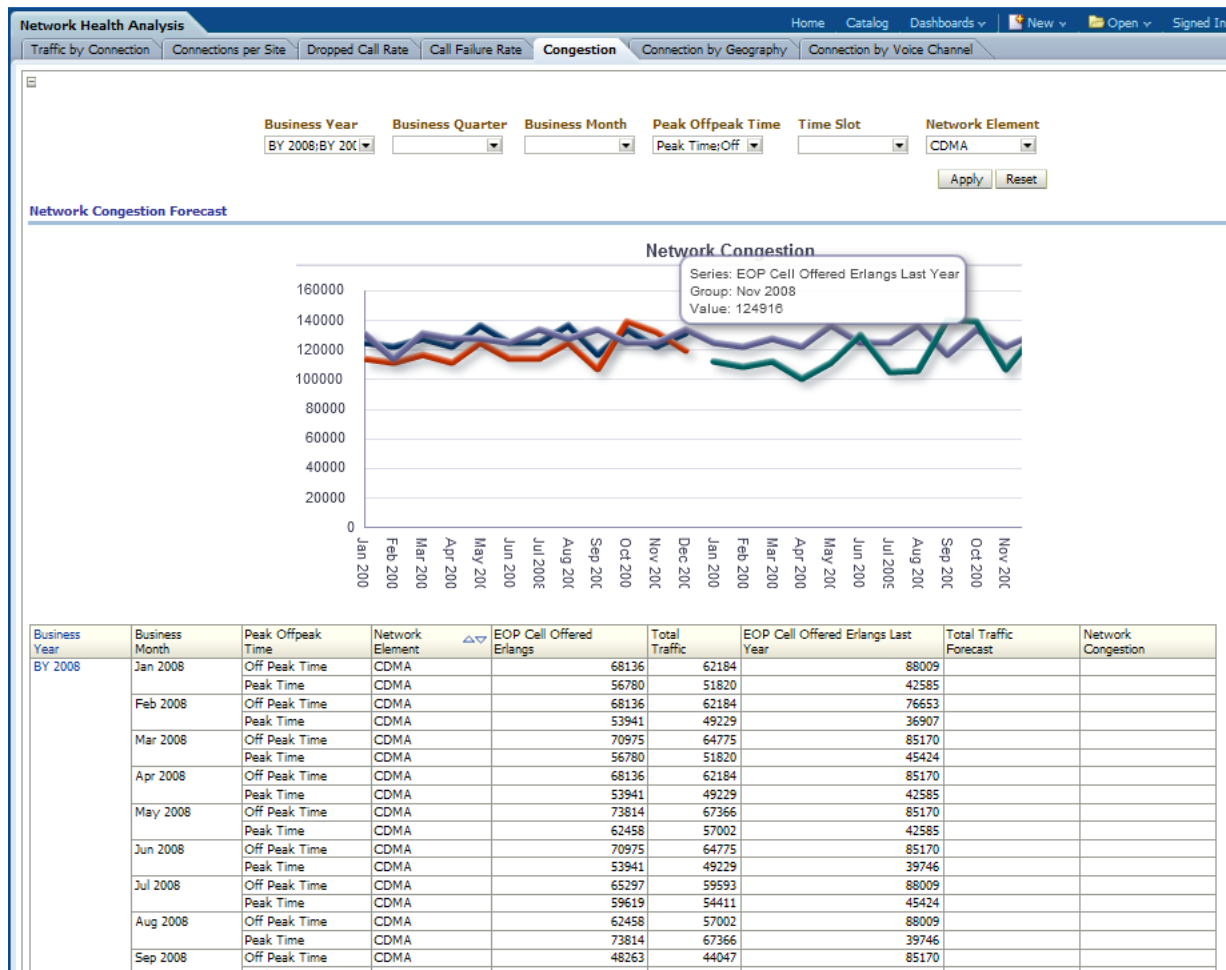
### Congestion

This report, as shown in Figure 12–48 provides month-level transaction activity information based on end of period cell offered erlangs measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography
- Time Slot
- Peak Offpeak Time

Figure 12-48 Congestion Sample Report



**Connection by Geography**

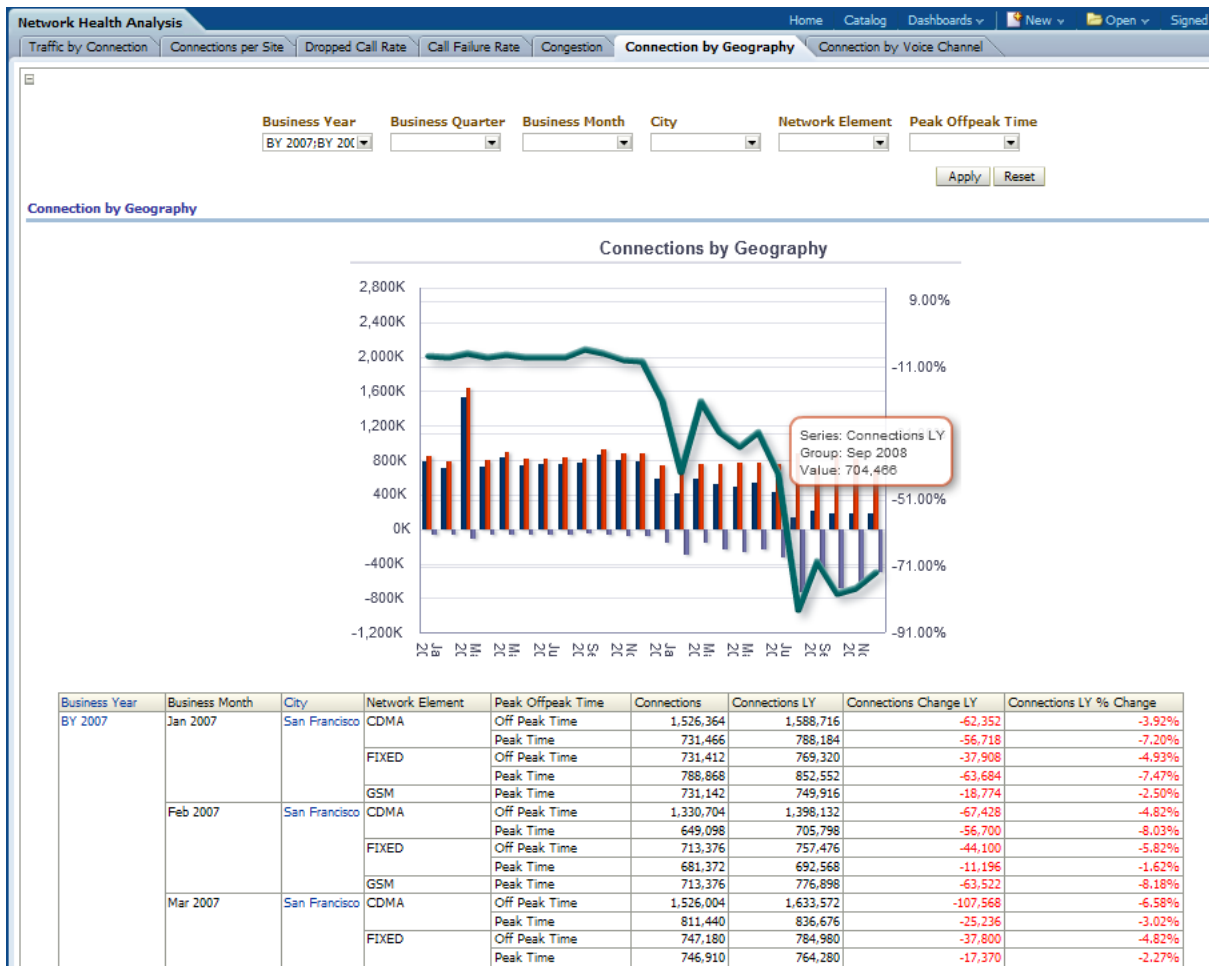
This report, as shown in Figure 12-49 provides month-level transaction activity information based on connections measures, for one or more location.

Report dimensions are:

- Business Time
- Network Element
- Geography
- Peak Offpeak Time



Figure 12–49 Connection by Geography Sample Report



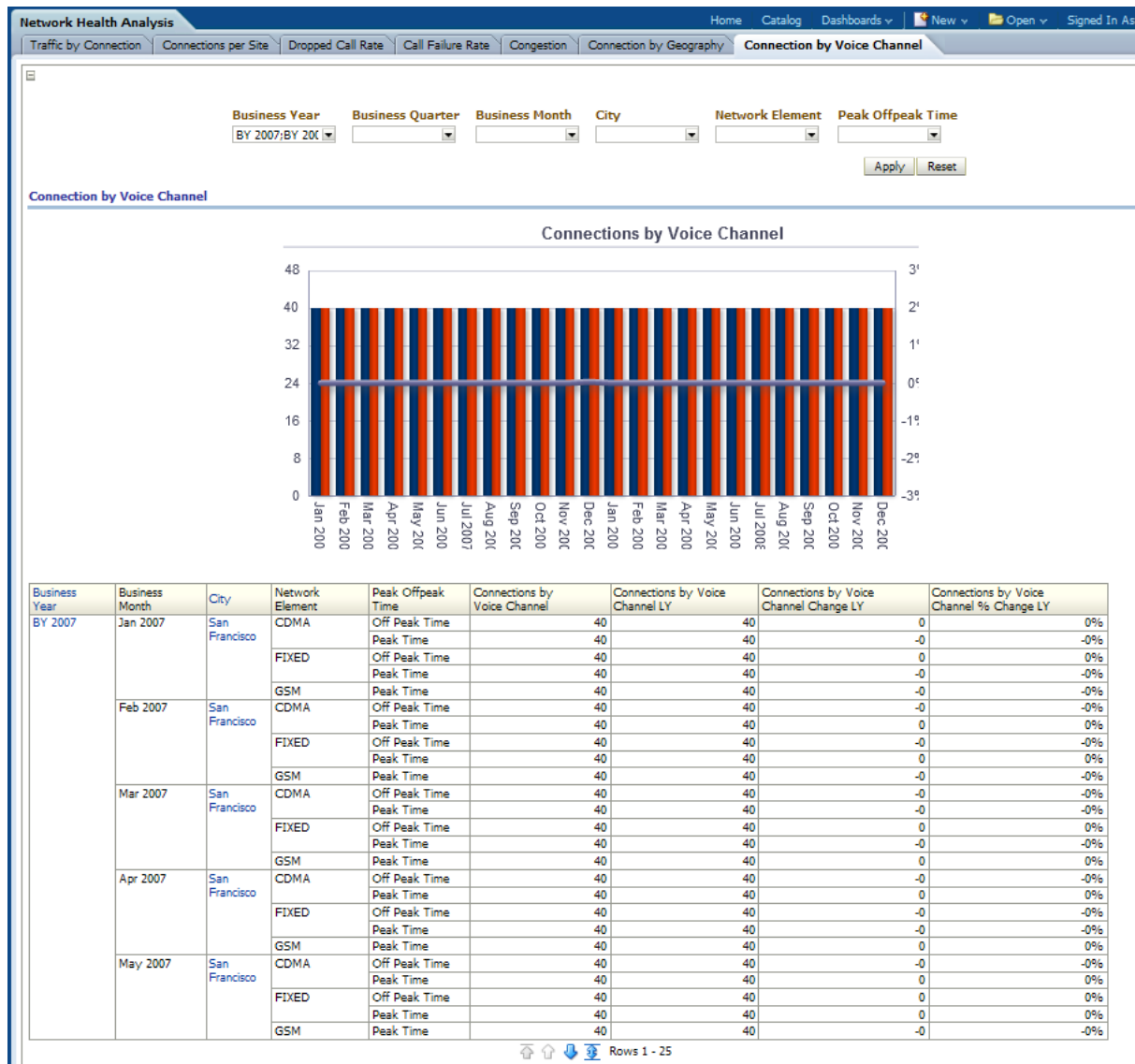
### Connection by Voice Channel

This report, as shown in Figure 12–50 provides month-level transaction activity information based on connections by voice channel measures, for one or more location. This report shows will be used to collect most of the cell parameters.

Report dimensions are:

- Business Time
- Network Element
- Geography
- Peak Offpeak Time

Figure 12–50 Connection by Voice Channel Sample Report



## Network Usage

This area includes the reports: [Number of 911 Calls](#), [Number of Calls by Call Category](#), [Number of Call by Call Service Type](#), and [Number of Calls by Routing Type](#).

### Number of 911 Calls

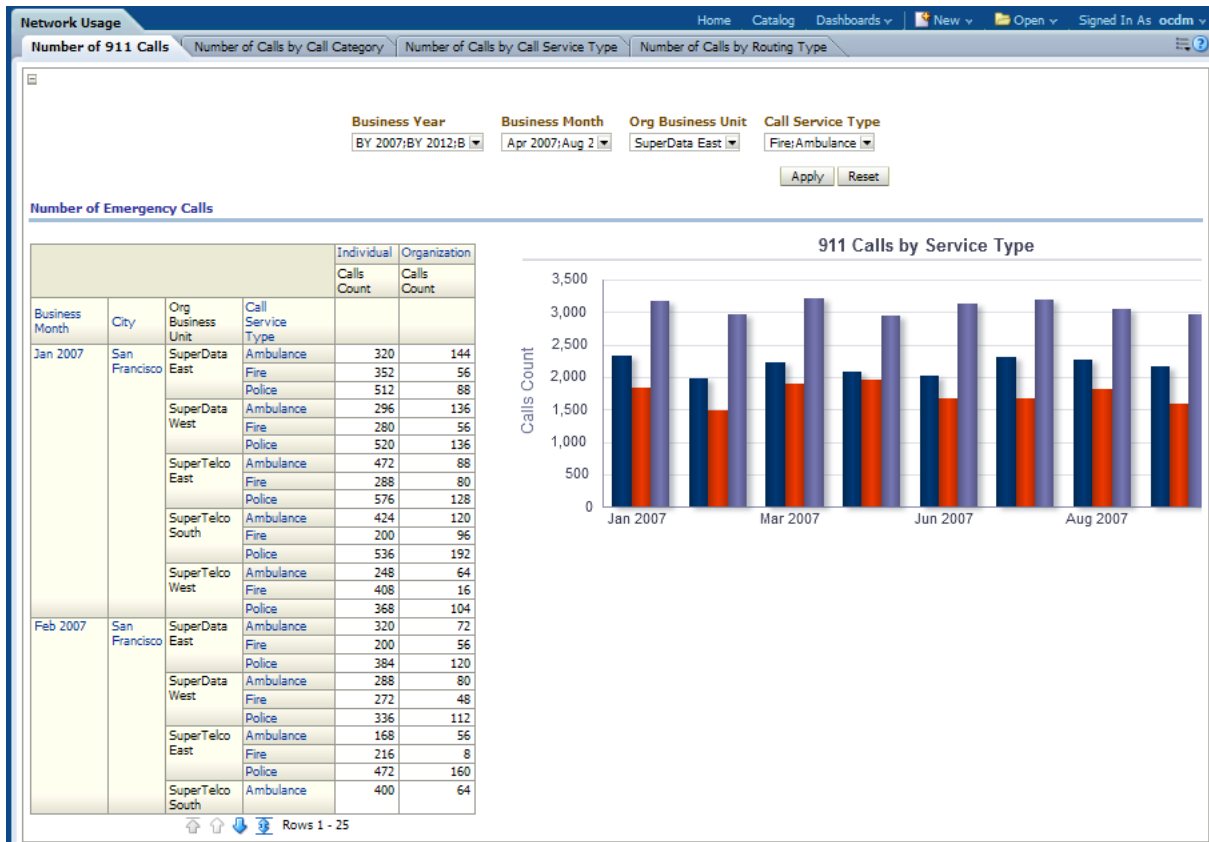
This report, as shown in [Figure 12–51](#) provides the number of 911, emergency, calls.

Report dimensions are:

- Organization
- Business Time
- Customer
- Product
- Call Service Type

- Call Routing Type

**Figure 12–51 Network Number of 911 Calls Sample Report**



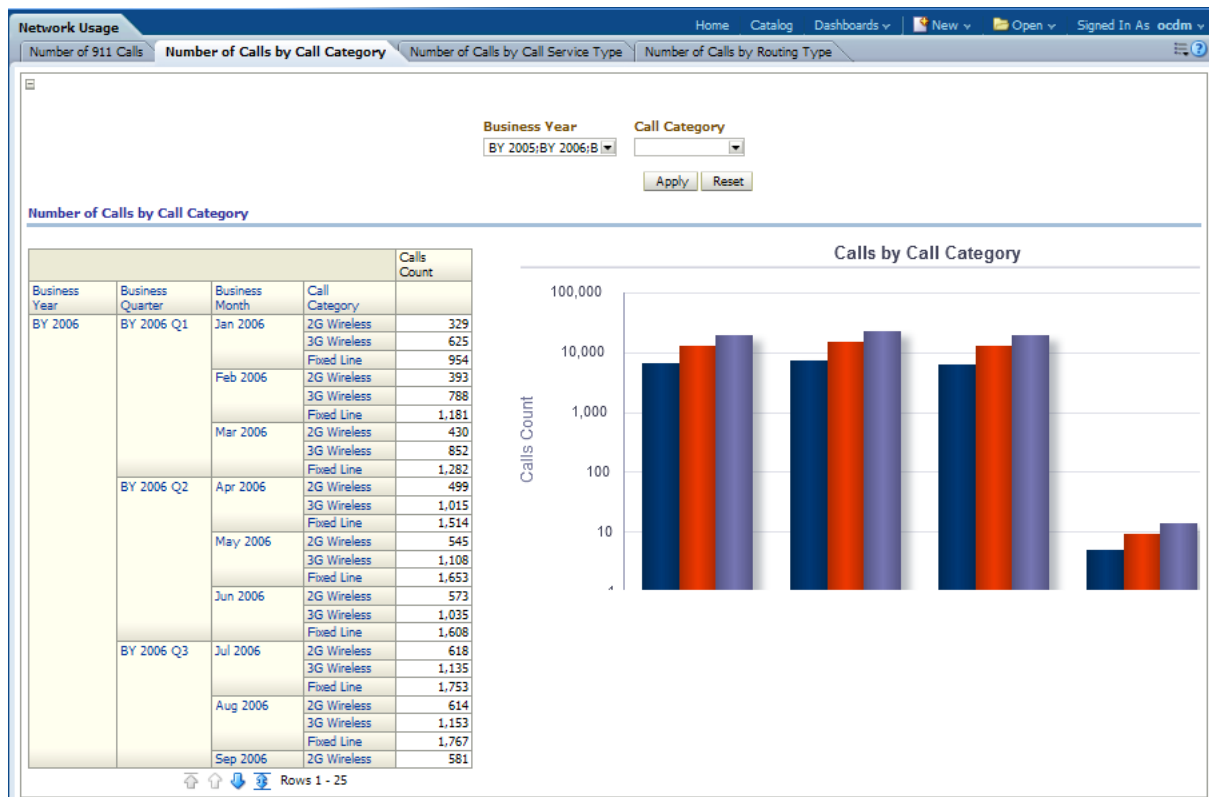
**Number of Calls by Call Category**

This as shown in Figure 12–52 provides year-level transaction activity information based on no of calls measures, for different types of call categories.

Report dimensions are:

- Business Time
- Call Category

**Figure 12–52 Network Number of Calls by Call Category Sample Report**



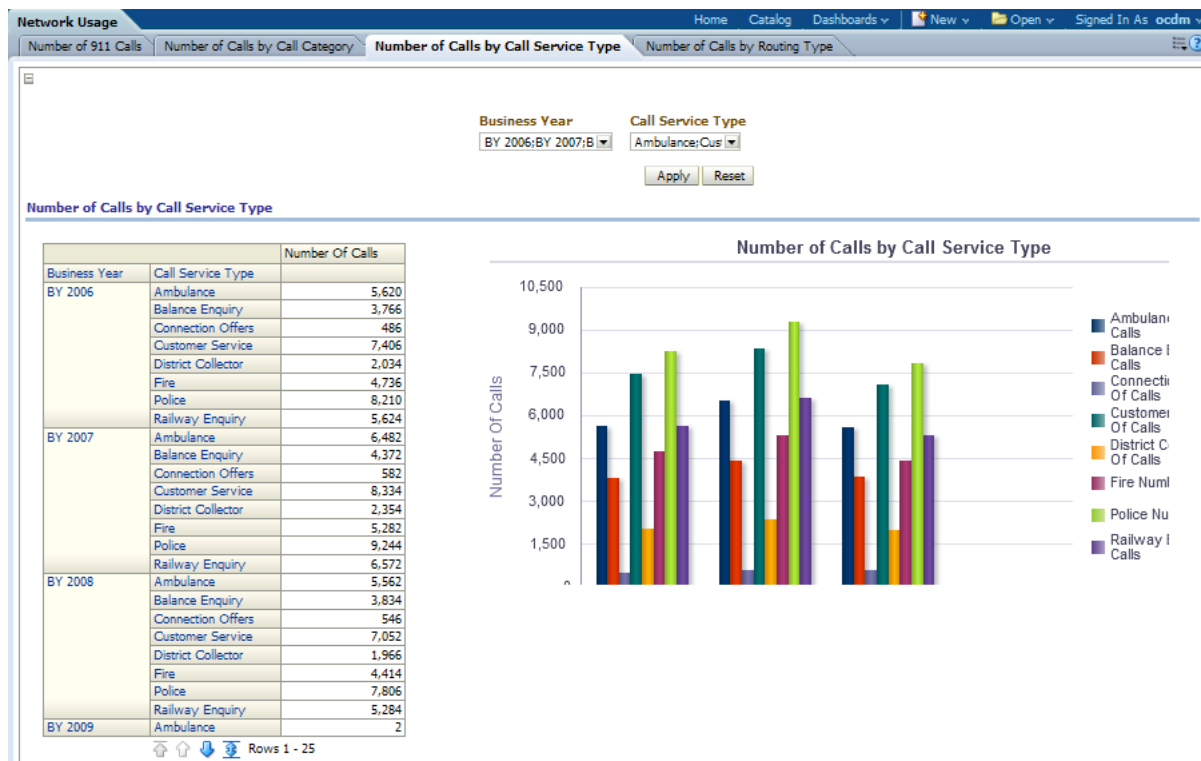
**Number of Call by Call Service Type**

This shown in [Figure 12–53](#) provides year-level transaction activity information based on number of calls measures, for different types of call services.

Report dimensions are:

- Business Time
- Call Category

Figure 12–53 Network Number of Call by Call Service Type Sample Report



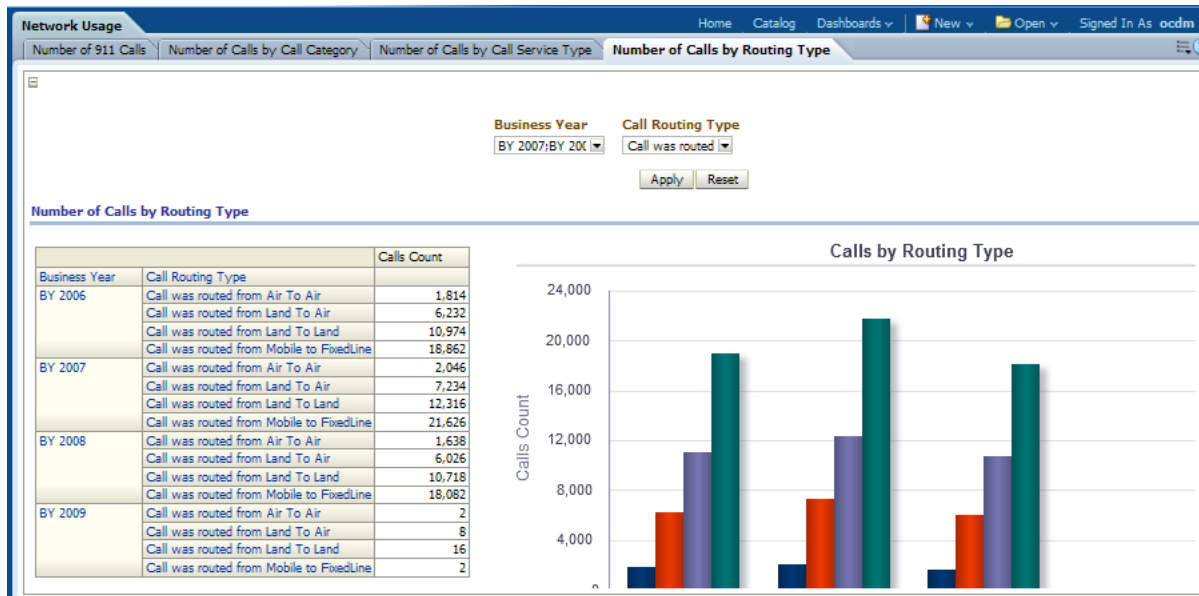
### Number of Calls by Routing Type

This shown in Figure 12–54 provides year-level transaction activity information based on the number of calls measures, for different types of call routing.

Report dimensions are:

- Business Time
- Call Routing Type

**Figure 12–54 Network Number of Calls by Routing Type Sample Report**



## Partner Management Sample Reports

The partner management sample reports include the following areas:

- [Roaming Partner Settlement](#)
- [Churn Outliner by Partner](#)
- [Partner Content Sales](#)
- [External Debt Collection](#)

### Roaming Partner Settlement

This area includes the report [Roaming Partner Settlement Summary](#).

#### Roaming Partner Settlement Summary

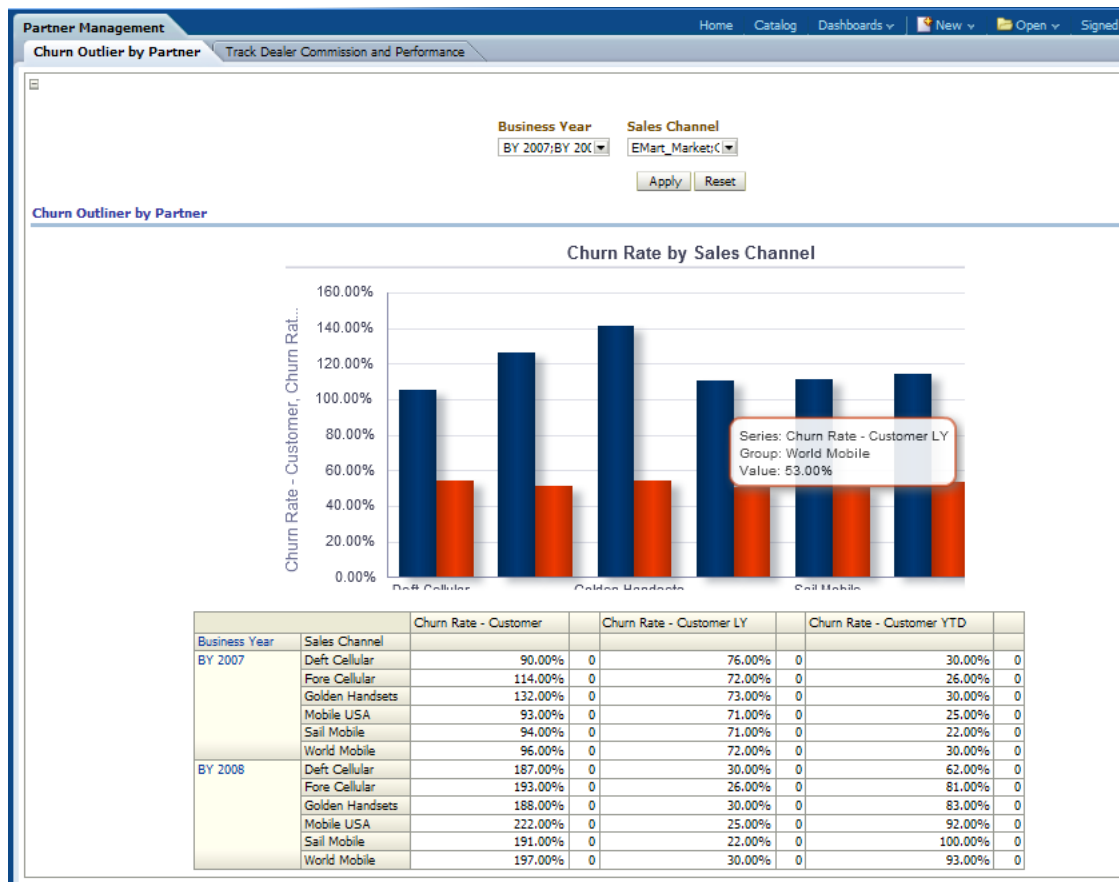
This report, as shown in [Figure 12–55](#) provides month-level transaction activity information based on partner settlement measures, for one or more location. This report shows summary over financial settlement activities happened to partners.

Report dimensions are:

- Business Time
- Geography
- Billing Cycle
- Event Type
- Account
- Party
- Contract



Figure 12–56 Churn Outliner by Partner Sample Report



### Track Dealer Commission and Performance

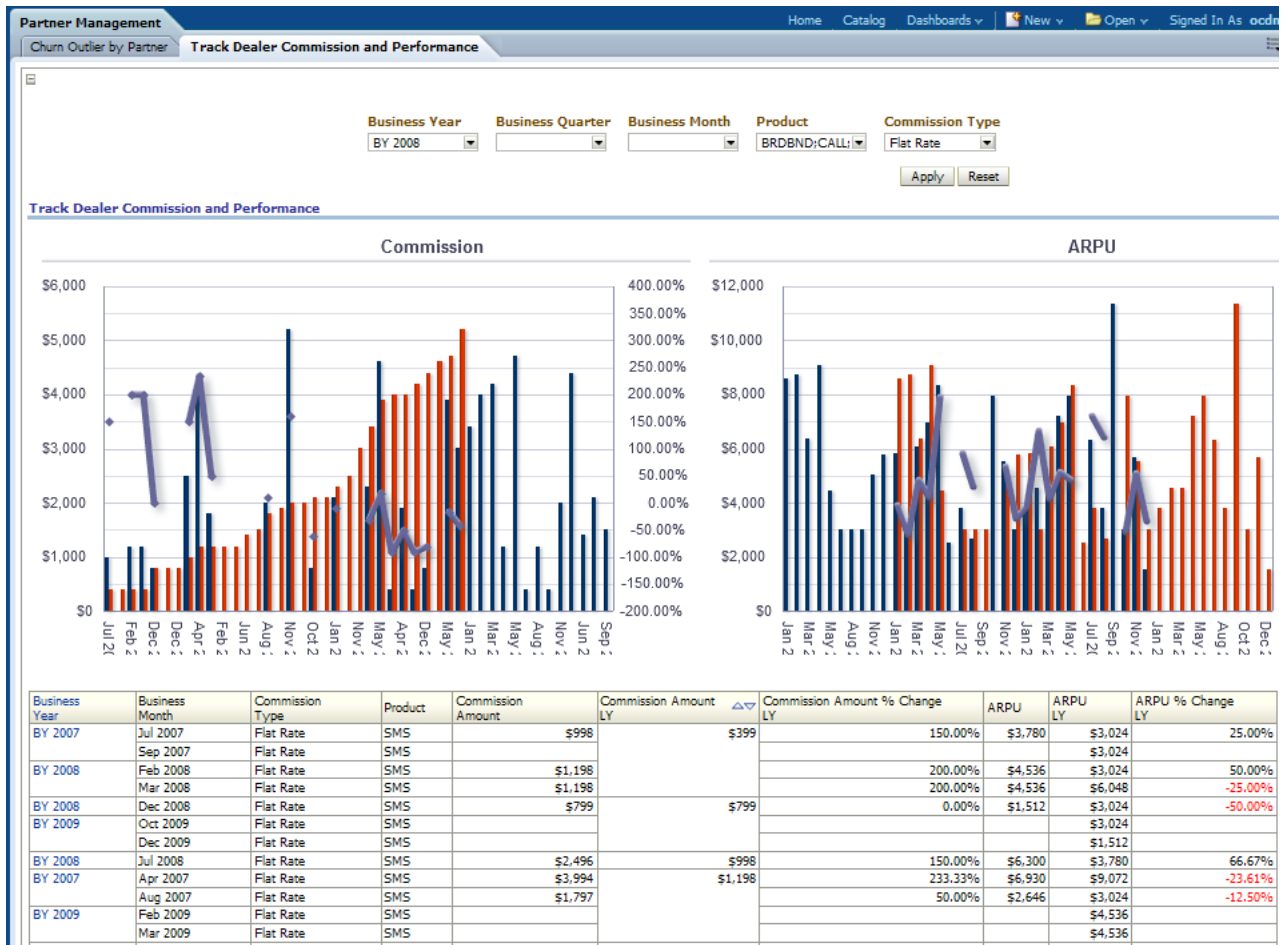
This report, as shown in Figure 12–57 gives the month level Dealer performance and commission generated based on a product.

Report dimensions are:

- Business Time
- Commission Type
- Product



Figure 12–57 Track Dealer Commission and Performance Sample Report



## Partner Content Sales

This area includes the report [Partner Content Sales](#).

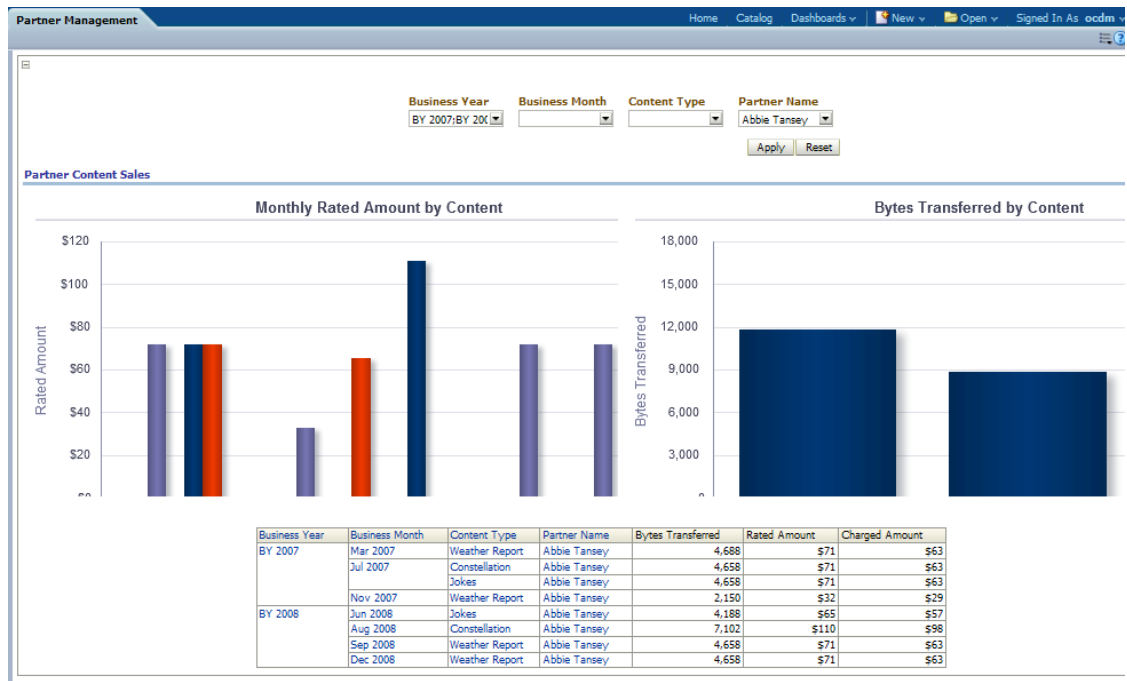
### Partner Content Sales

This report, as shown in [Figure 12–58](#) provides month-level transaction activity information based on data usage measures, for one or more content.

Report dimensions are:

- Business Time
- Content Type

**Figure 12–58 Partner Content Sales Sample Report**



## External Debt Collection

This area includes the report: [Partner Management](#).

### Partner Management

This report, as shown in [Figure 12–59](#) gives month level debt collected for the services usage done by the customers through third part channels like banks and so on.

Report dimensions are:

- Business Time
- Collection Agency
- Organization

Figure 12–59 External Debt Collection Sample Report



## Product Management Sample Reports

The product management sample reports include the following areas:

- Product Management
- Average Profit Per Customer

## Product Management

This area includes the report [Product Performance](#).

### Product Performance

This report, as shown in [Figure 12–60](#) provides year-level transaction activity information based on total bill amount measures, for one or more products.

Report dimensions are:

- Business Time
- Product

**Figure 12–60 Product Performance Sample Report**



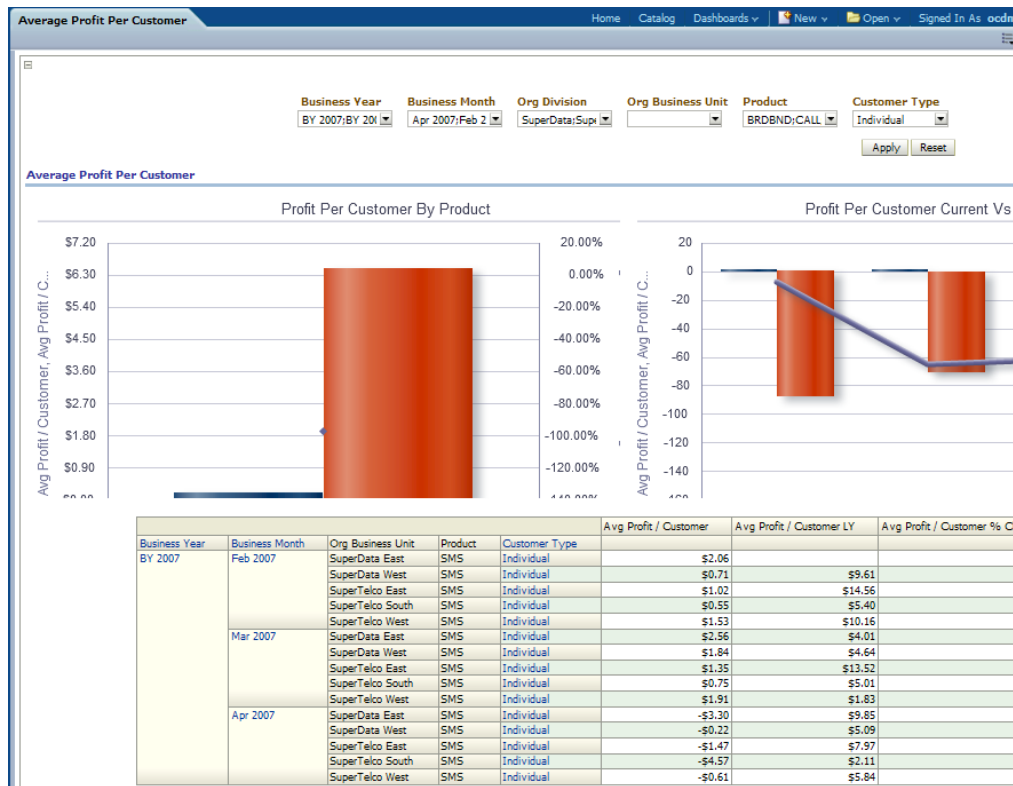
### Average Profit Per Customer

This report, as shown in [Figure 12–61](#) shows average profit per customer.

Report dimensions are:

- Business Time
- Organization
- Product
- Customer

Figure 12–61 Average Profit Per Customer



## Provisioning and Activation Sample Reports

The provisioning and service sample reports show the following areas:

- [Activations and Services](#)
- [Customer Order Analysis](#)

### Activations and Services

This area includes the report [Activation and Service Orders](#).

#### Activation and Service Orders

This report, as shown in [Figure 12–62](#) provides business year and business date-level transaction activity information based on contract ARPU.

Report dimensions are:

- Business Time
- Product

**Figure 12–62 Activation and Service Orders Sample Report**

Business Year	Business Date	Product	Product Name	Number Of Activations	Total Contract ARPU
CY 2006	20060105	ADSL-2M	ADSL-2M		\$4,080.00
		FAX	FAX		\$1,678.40
		Fixed Line Domestic Call	Fixed Line Domestic Call		\$1,678.40
		Fixed Line International Call	Fixed Line International Call		\$629.40
		Fixed Line Local Call	Fixed Line Local Call		\$1,678.40
		Pay TV	PAYTV		\$1,678.40
		Standard GPRS	IDD		\$125.88
		Wireless Internet Card	Wireless Internet Card		\$4,080.00
	20060106	ADSL-12M	ADSL-12M		\$4,080.00
		ADSL-4M	ADSL-4M		\$1,678.40
		ADSL-6M	ADSL-6M		\$1,678.40
		Post-paid Mobile-500\$/year	Post-Paid Internet 500		\$629.40
		Prepaid Mobile-500\$/year	Pre-Paid Internet 500		\$4,080.00
		Product 2b - Email Account, No Fees	Email		\$1,049.00
		RealtimeGSMProvisioning	PSPDMGT2		\$4,080.00
		SMS Standard service. Monthly fee managed by the Standard GSM Telephony. Usage fee described and managed by Integrate	SMS		\$1,678.40
		Wireless Call Local	Wireless Call Local		\$4,080.00
		20060107	FAX	FAX	
	Fixed Line Domestic Call		Fixed Line Domestic Call		\$4,080.00
	Fixed Line Local Call		Fixed Line Local Call		\$2,098.00
	Hand Set and Sim Card		HANDSET		\$419.60
Music Download	Music Download			\$1,678.40	
Prepaid Mobile-1000\$/year	Pre-Paid Internet 1000			\$1,678.40	
Sim Card And Vchr	SIMVCHR			\$629.40	
Standard GPRS	IDD			\$1,678.40	

### Customer Order Analysis

This area includes the report: [Order Volume by Order Status](#), [Order Volume by Order Type](#), [Order Volume by Product](#), [Order Change per Quarter](#), [Order Volume by Product Type](#), and [Fall Out Rate by Product Type](#).

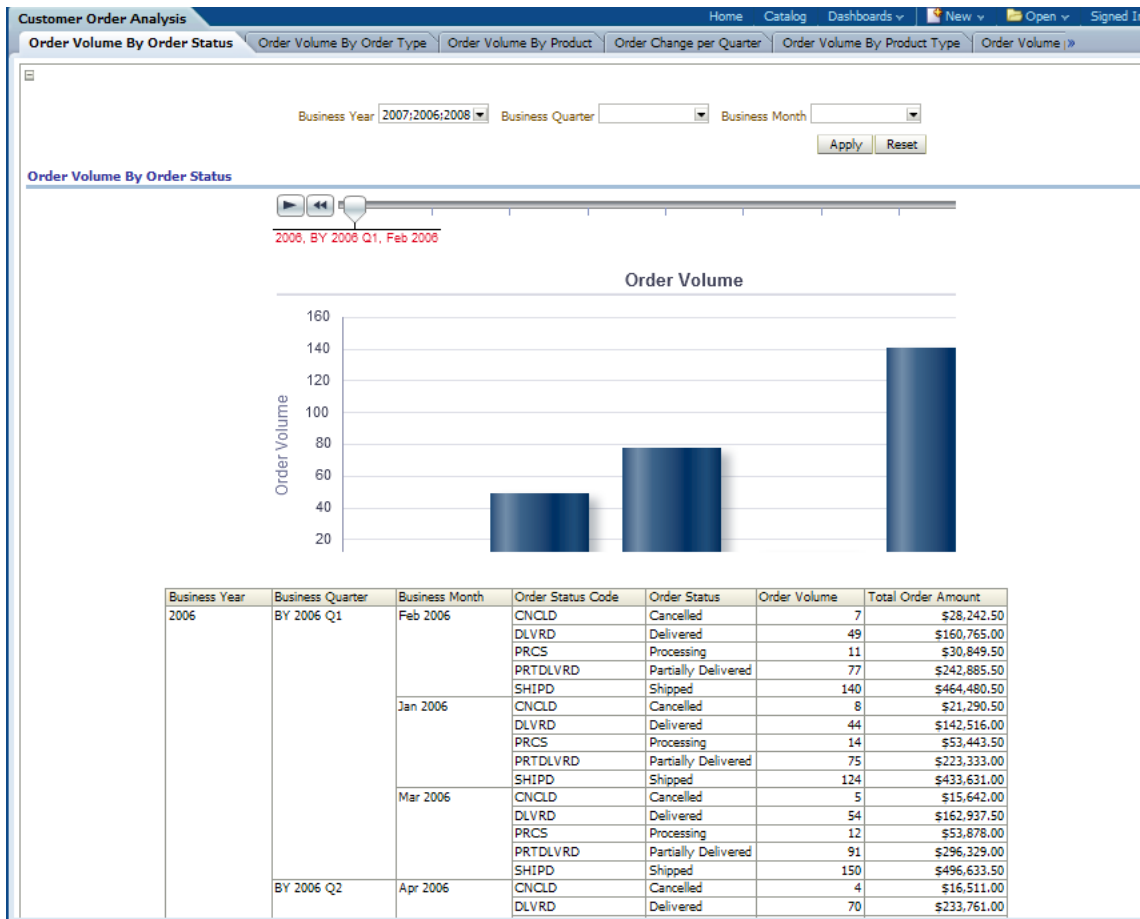
#### Order Volume by Order Status

This as shown in [Figure 12–63](#), provides business year, business quarter, and business month-level information based on order volume by order status.

Report dimensions are:

- Business Time

Figure 12–63 Order Volume by Order Status



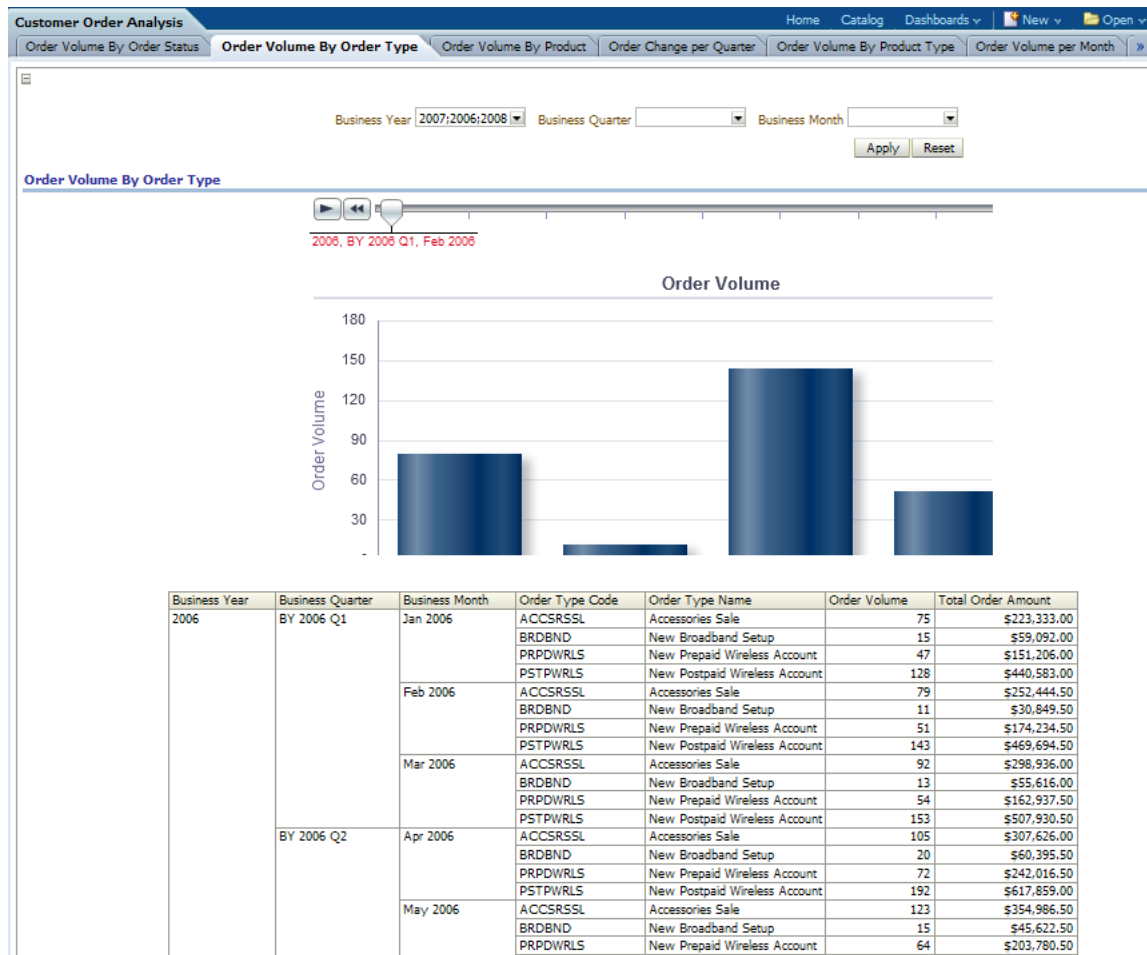
### Order Volume by Order Type

This report, as shown in Figure 12–64 provides business year, business quarter, and business month-level information based on order volume by order type.

Report dimensions are:

- Business Time

**Figure 12–64 Order Volume by Order Type Sample Report**



**Order Volume by Product**

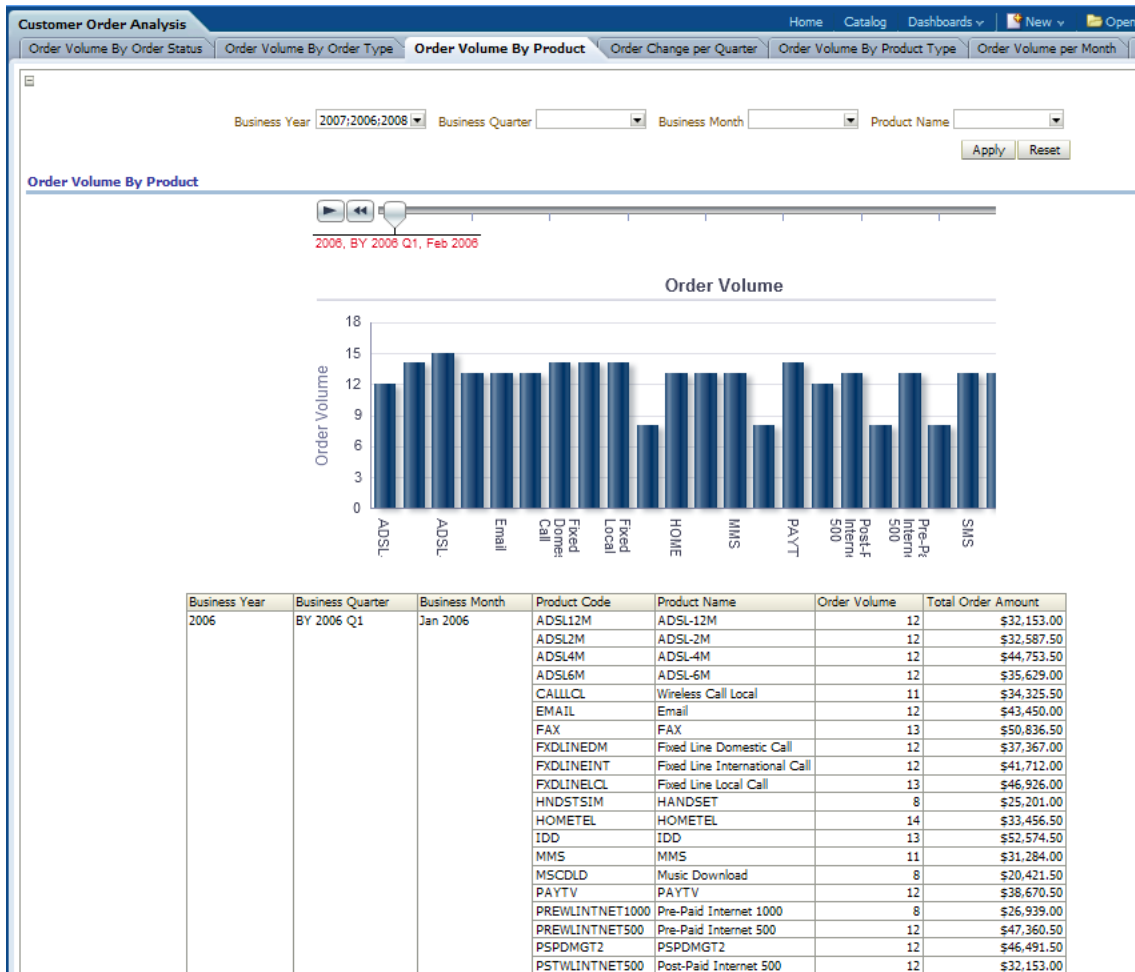
This report, as shown in Figure 12–65 business year, business quarter, and business month-level information based on order volume by product.

Report dimensions are:

- Business Time
- Product



Figure 12–65 Order Volume by Product Sample Report



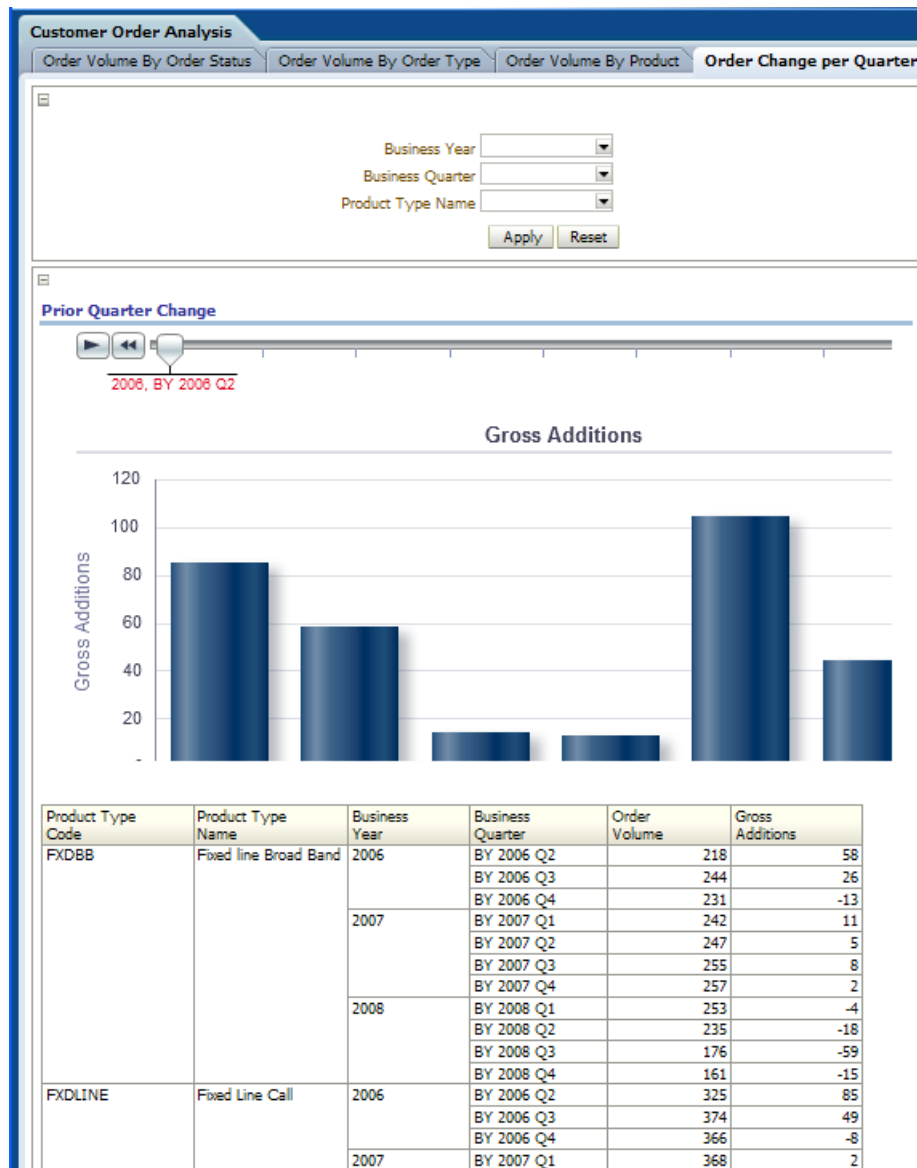
**Order Change per Quarter**

This report, as shown in Figure 12–66 and Figure 12–67 provides business year, business quarter-level information based on order volume change per quarter.

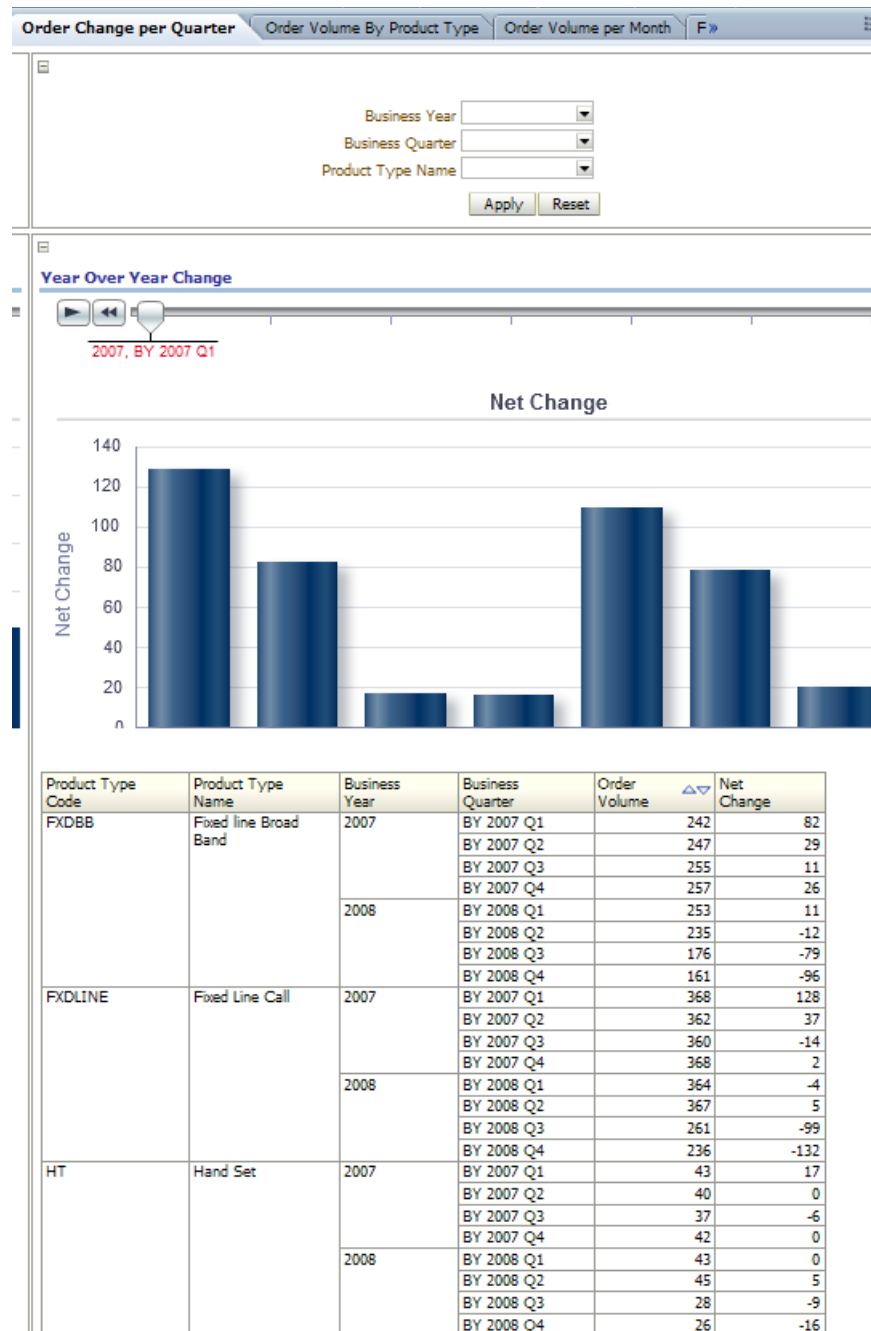
Report dimensions are:

- Business Time
- Product Type

**Figure 12-66 Prior Quarter Change Sample Report (part one of report)**



**Figure 12–67 Year Over Year Change Sample Report (part 2 of report)**



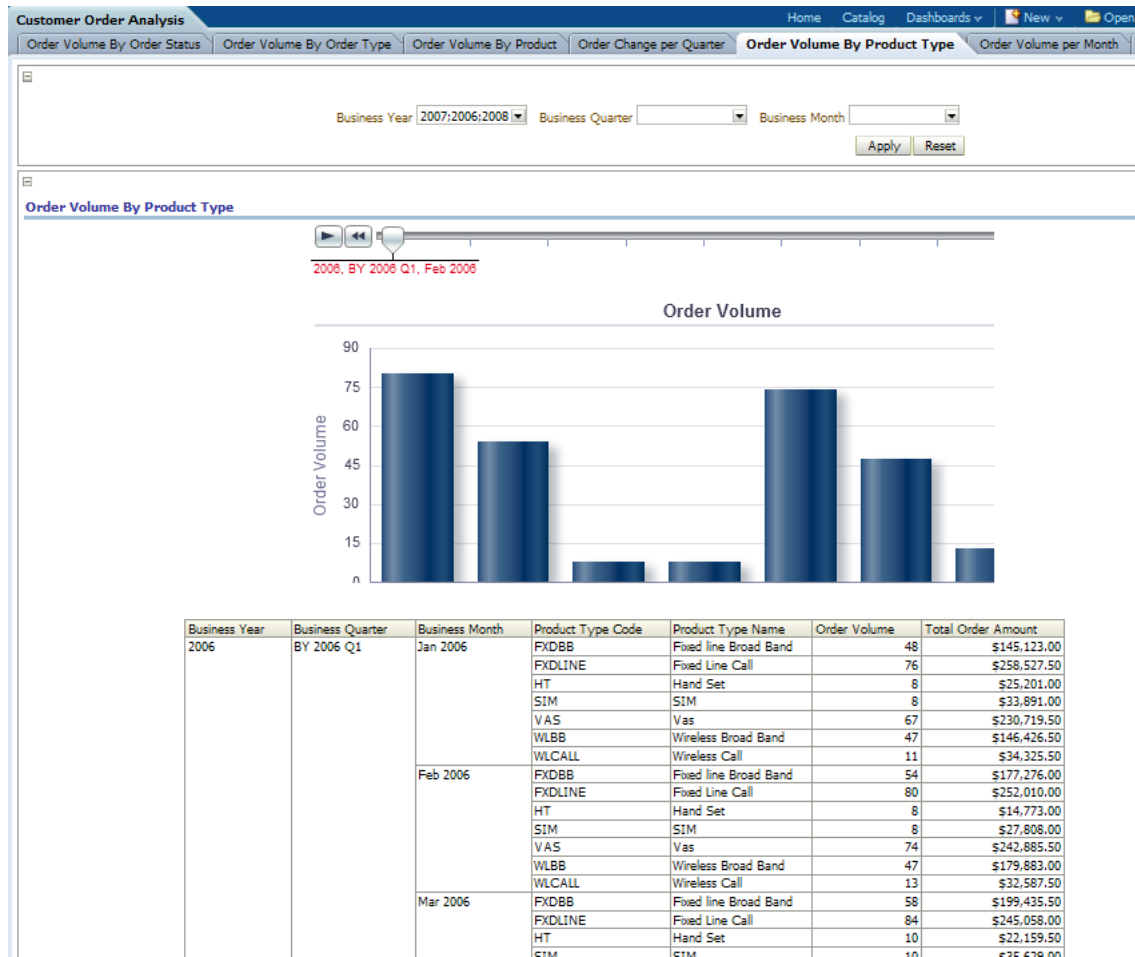
**Order Volume by Product Type**

This report, as shown in [Figure 12–68](#) provides business year, business quarter, and business month-level information based on order volume by product type.

Report dimensions are:

- Business Time

**Figure 12–68 Order Volume by Product Type Sample Report**



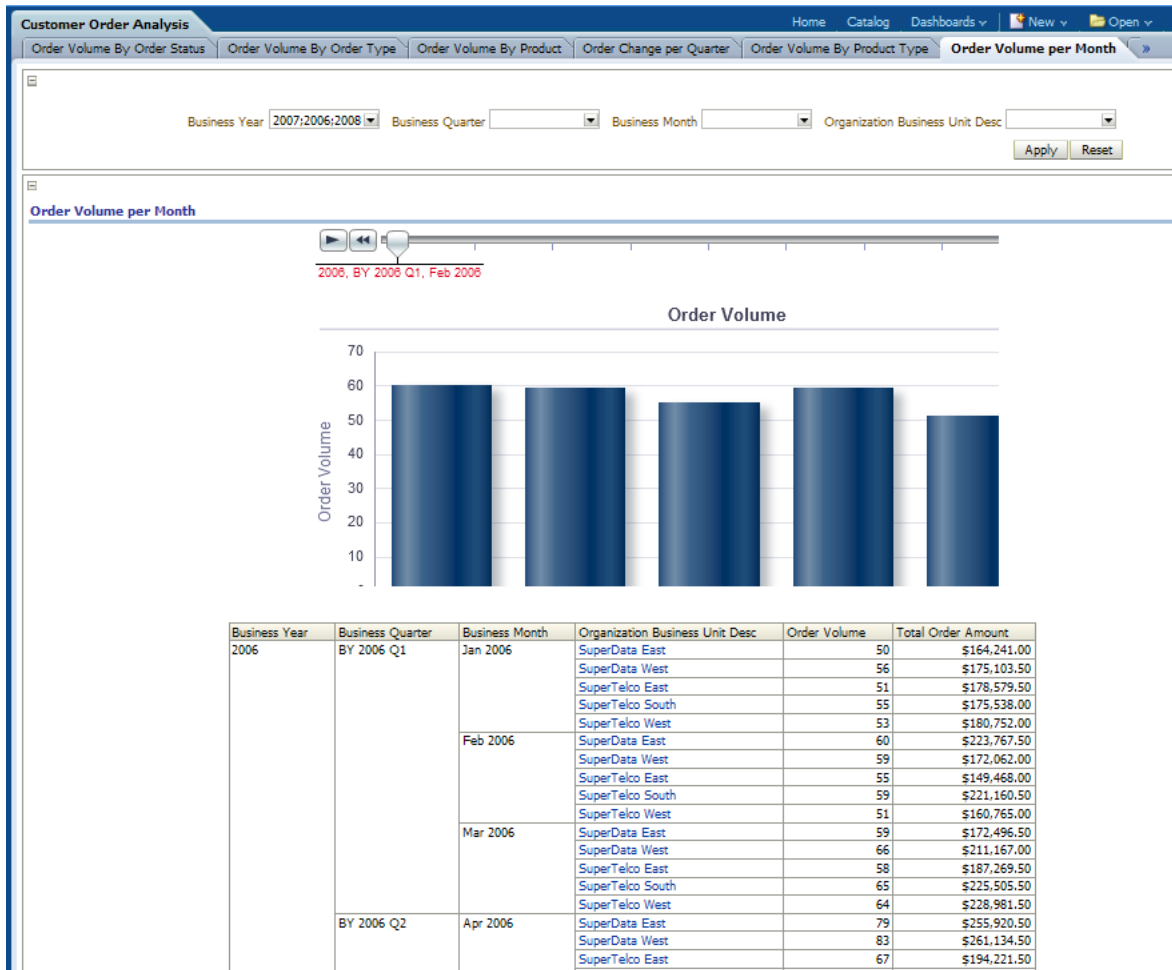
**Order Volume per Month**

This report, as shown in Figure 12–69 provides business year, business quarter, and business month-level information based on order volume per month.

Report dimensions are:

- Business Time
- Organization Unit

Figure 12–69 Order Volume per Month Sample Report



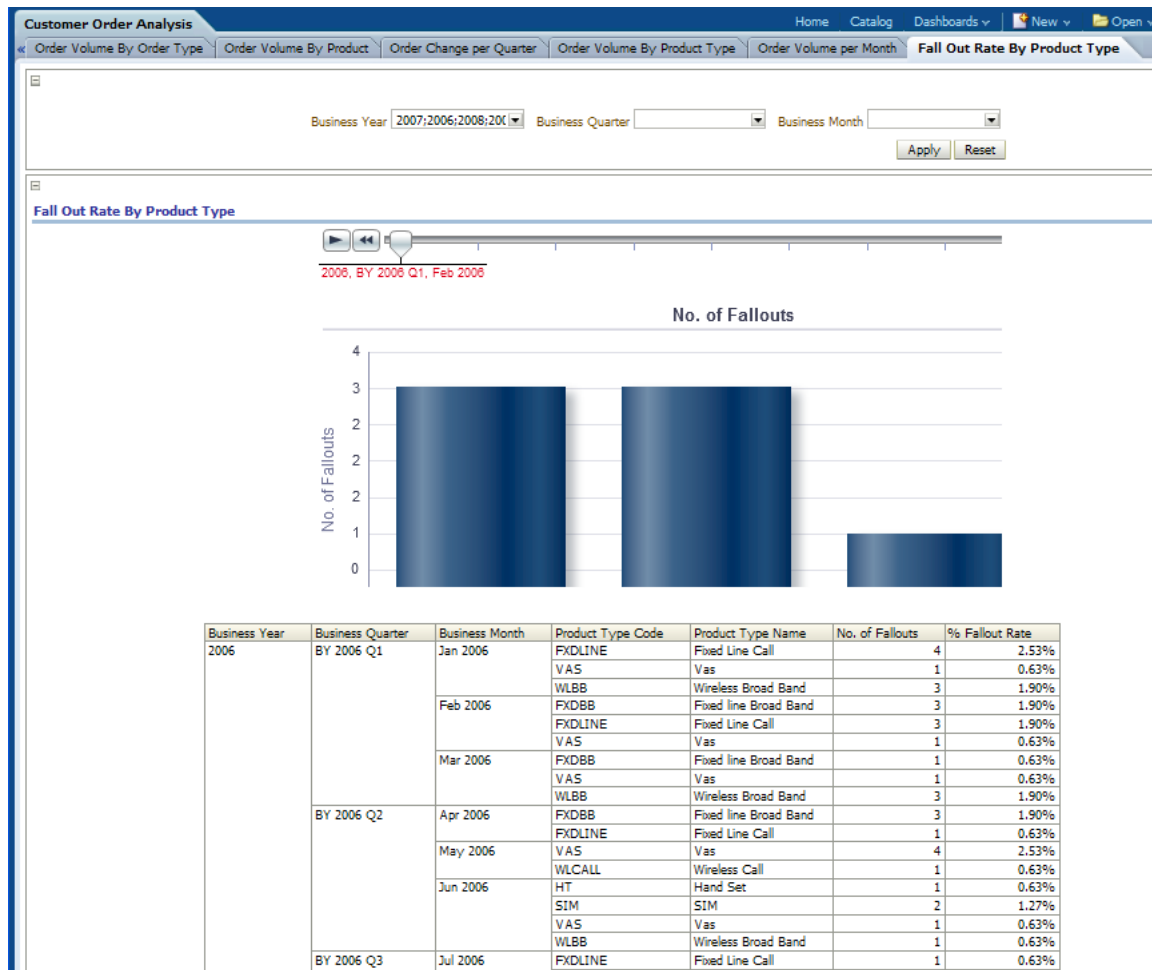
### Fall Out Rate by Product Type

This report, as shown in [Figure 12–70](#) provides business year, business quarter, and business month-level information based on fall out rate by product type.

Report dimensions are:

- Business Time

**Figure 12–70 Fall Out Rate by Product Type Sample Report**



## Revenue Sample Reports

The revenue sample reports show the following areas:

- [Revenue Analysis and Forecast](#)
- [Revenue Assurance](#)
- [Sales Analysis](#)
- [Debt Collection](#)
- [Refund and Adjustment](#)
- [Customer Contracts](#)

## Revenue Analysis and Forecast

This area includes the reports: [Monthly Revenue](#), [Revenue Forecast](#), [Average Revenue per User \(ARPU\)](#), and [Average Revenue per Business Unit](#).

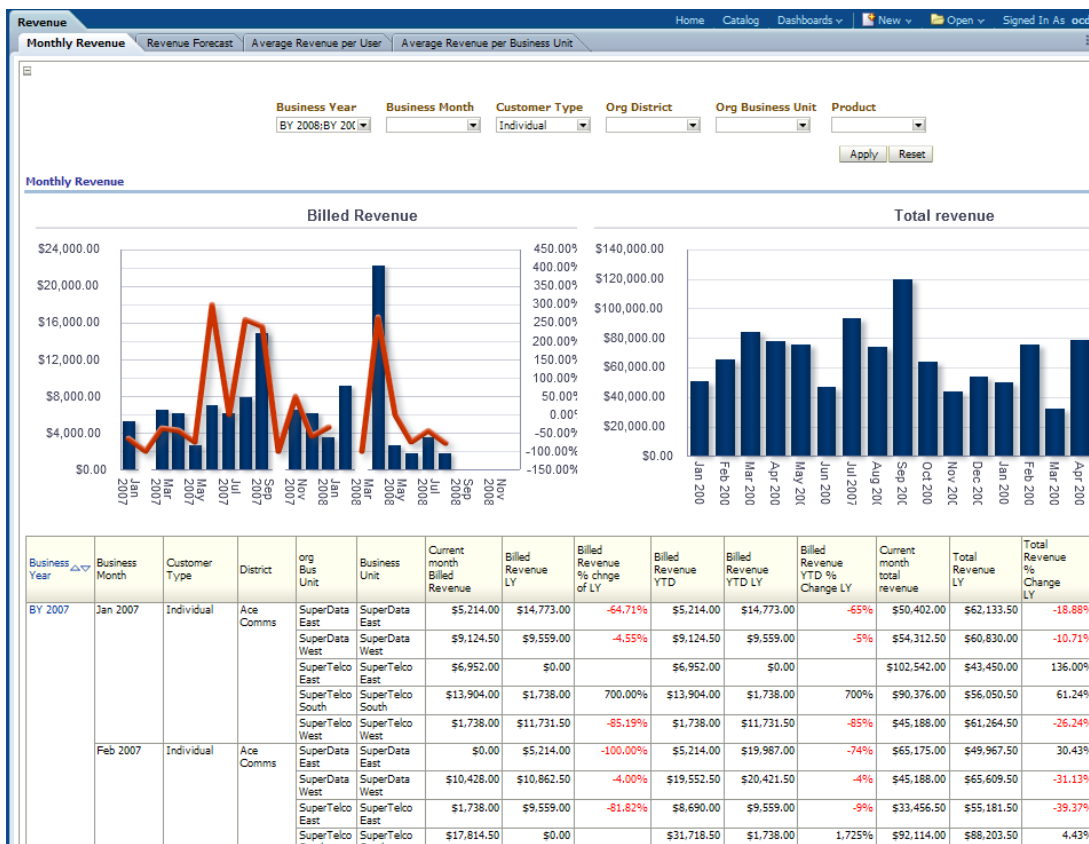
### Monthly Revenue

This report, as shown in [Figure 12-71](#) provides month-level transaction activity information based on revenue measures, for one or more organizations and products and for one or more locations.

Report dimensions are:

- Business Time
- Customer Type
- Product
- Geography
- Organization

**Figure 12-71 Monthly Revenue Sample Report**



### Revenue Forecast

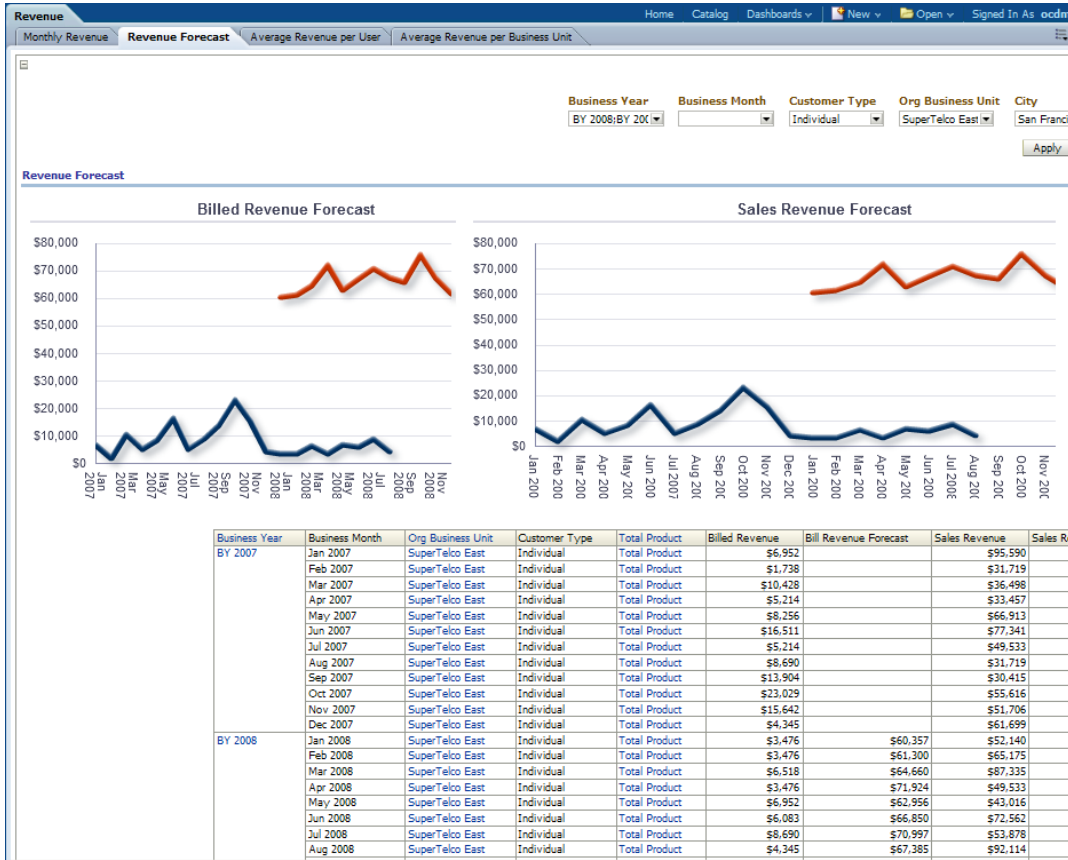
This report, as shown in [Figure 12-72](#) provides month-level transaction activity information based on revenue measures, for one or more locations.

Report dimensions are:

- Business Time
- Customer Type
- Product
- Geography

- Organization

**Figure 12–72 Revenue Forecast Sample Report**



**Average Revenue per User (ARPU)**

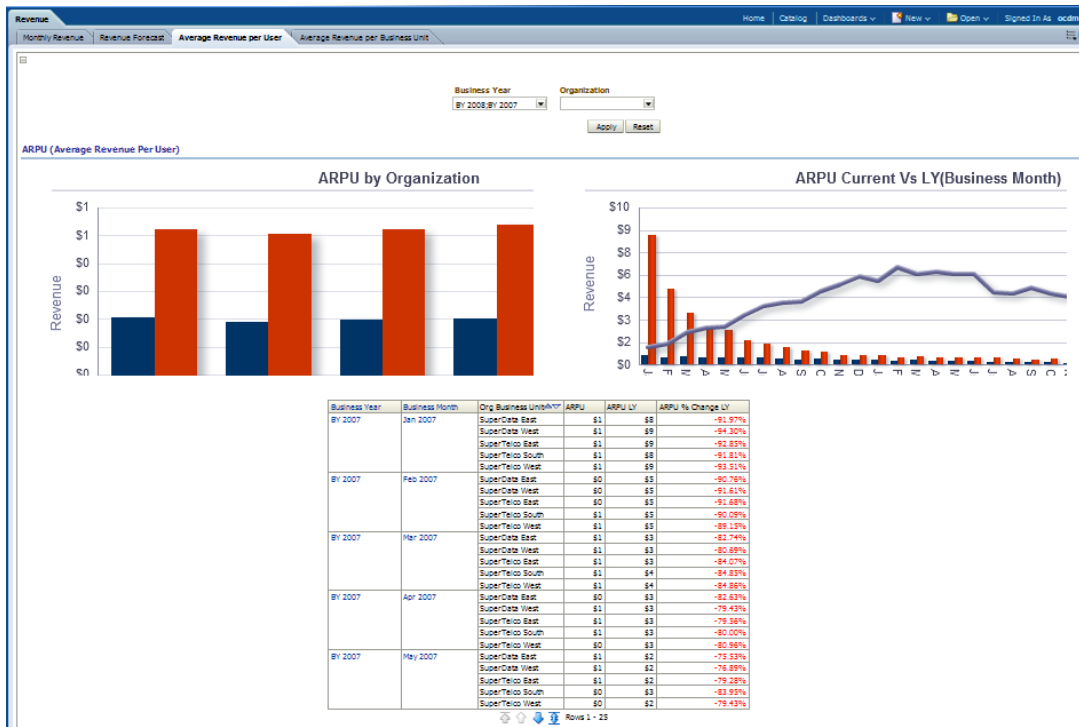
This report, as shown in Figure 12–73 provides month-level transaction activity information based on ARPU measures, for one or more stores and this is a calculation often used to determine the overall value of an application. This report used to generate revenue for a particular customer by comparing someone’s account to the overall average.

Report dimensions are:

- Business Time
- Organization



Figure 12-73 Revenue Average Revenue per User (ARPU) Sample Report



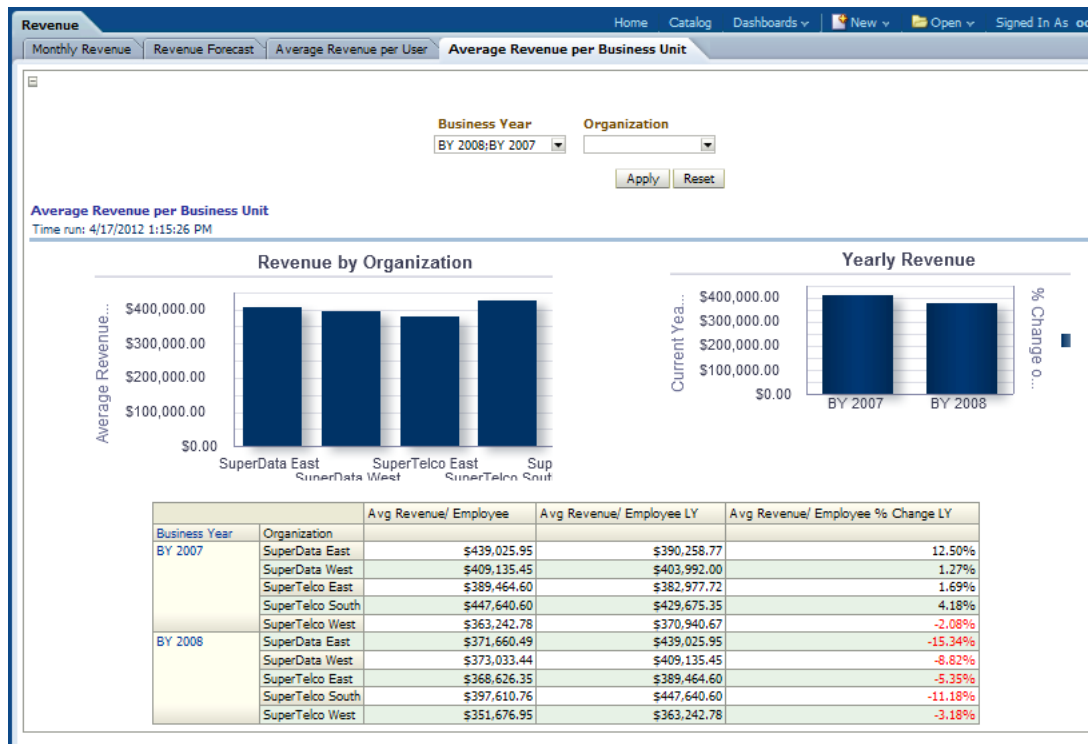
### Average Revenue per Business Unit

This report, as shown in Figure 12-74 shows the average revenue per Business Unit. The average revenue is calculated as total revenue of that organization divided by the number of employees.

Report dimensions are:

- Business Time
- Organization

Figure 12-74 Revenue Average Revenue For Business Unit



## Revenue Assurance

This area includes the reports: CDR Revenue Compared to Billed Revenue, Percent of Non Billed Revenue, Billable xDRs suspended or errored / the Total xDRs, Invoice Collected and Uncollected, Abnormally High Usage, Minutes of Usage by Call Type, and Revenue Assurance.

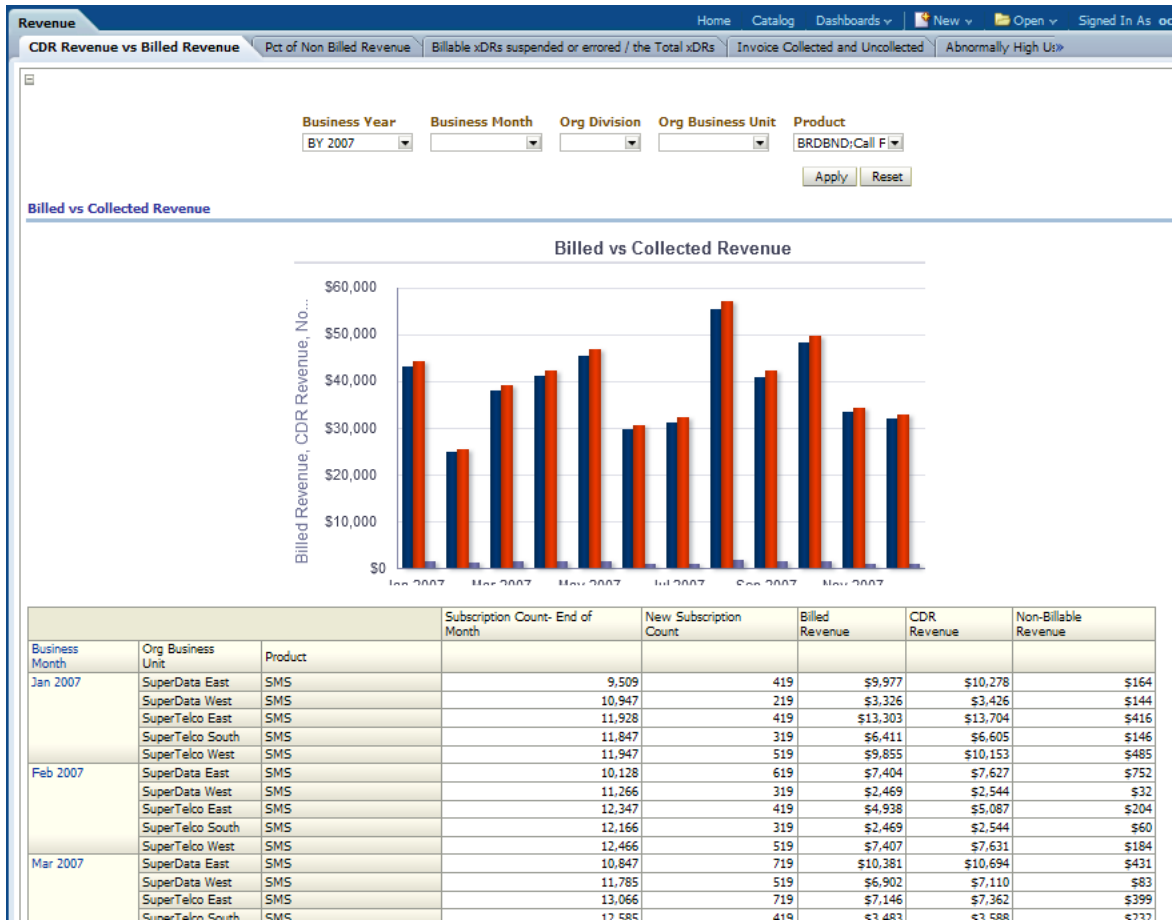
### CDR Revenue Compared to Billed Revenue

This report, as shown in Figure 12-75 analyzes revenue according to the Network Event CDR, side by side with billed revenue for a product.

Report dimensions are:

- Business Time
- Organization
- Product

Figure 12–75 CDR Revenue Compared to Billed Revenue Sample Report



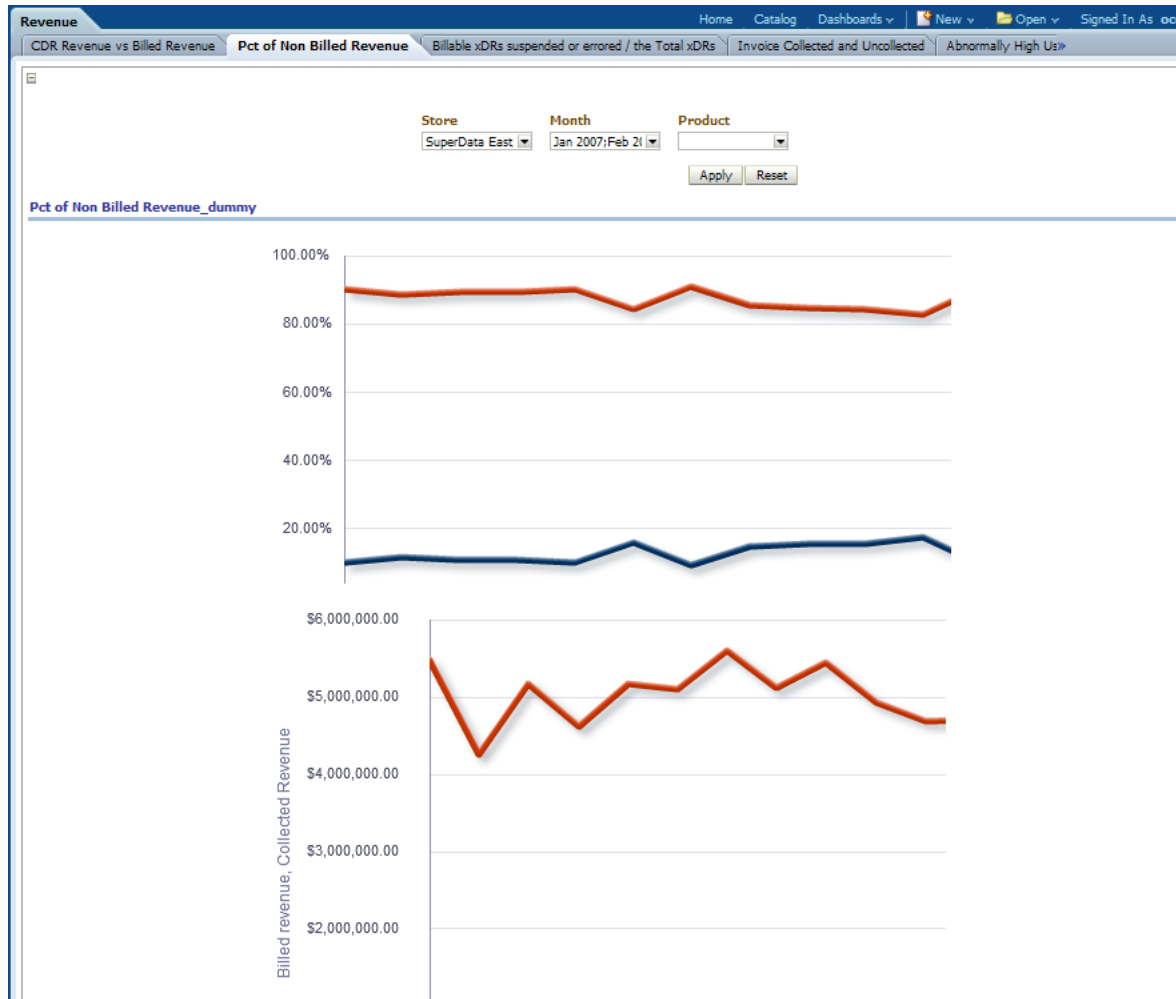
**Percent of Non Billed Revenue**

This report, as shown in Figure 12–76 analyzes the percent of Non billed Revenue for a product.

Report dimensions are:

- Business Time
- Store
- Product

**Figure 12–76 Percent of Non Billed Revenue Sample Report**



**Billable xDRs suspended or errored / the Total xDRs**

This report, as shown in [Figure 12–77](#) shows analyzes suspended or errored billable xDRs. Those CDRs cannot be billed successfully and cause revenue leakage compared with the total xDRs.

Report dimensions are:

- Business Time
- Geography

Figure 12–77 Billable xDRs Suspended or Errored Compared to Total xDRs Sample Report

Business Year	Business Month Desc	Business Week Day Desc	Call Duration	Missed Billable Amount	Total Billable Amount	% Billable Amount
CY 2006	Jan 2006	SUNDAY	43,994	\$14.01	\$1,415.25	0.08%
		MONDAY	23,808	\$7.60	\$767.75	0.73%
		TUESDAY	36,083	\$11.48	\$1,161.80	0.47%
		WEDNESDAY	20,342	\$6.56	\$656.75	0.73%
		THURSDAY	21,801	\$6.96	\$703.00	0.73%
		FRIDAY	26,368	\$8.46	\$851.00	0.73%
		SATURDAY	18,161	\$5.87	\$588.30	0.08%
	Feb 2006	SUNDAY	27,143	\$8.67	\$875.05	0.22%
		MONDAY	27,280	\$8.74	\$880.60	0.47%
		TUESDAY	36,342	\$11.57	\$1,171.05	0.22%
		WEDNESDAY	16,649	\$5.47	\$542.05	0.22%
		THURSDAY	24,566	\$8.02	\$797.35	0.22%
		FRIDAY	43,343	\$13.74	\$1,393.05	0.73%
		SATURDAY	47,158	\$14.96	\$1,517.00	0.73%
	Mar 2006	SUNDAY	28,226	\$9.02	\$910.20	0.08%
		MONDAY	44,402	\$14.16	\$1,431.90	0.73%
		TUESDAY	34,360	\$10.95	\$1,106.30	0.22%
		WEDNESDAY	51,547	\$16.40	\$1,659.45	0.73%
		THURSDAY	29,236	\$9.39	\$943.50	0.00%
		FRIDAY	53,115	\$16.85	\$1,709.40	0.73%
		SATURDAY	39,608	\$12.60	\$1,274.65	0.73%
	Apr 2006	SUNDAY	62,724	\$19.93	\$2,018.35	0.22%
		MONDAY	20,060	\$6.59	\$653.05	0.22%
		TUESDAY	41,796	\$13.31	\$1,346.80	0.73%
		WEDNESDAY	28,411	\$9.11	\$917.60	0.08%

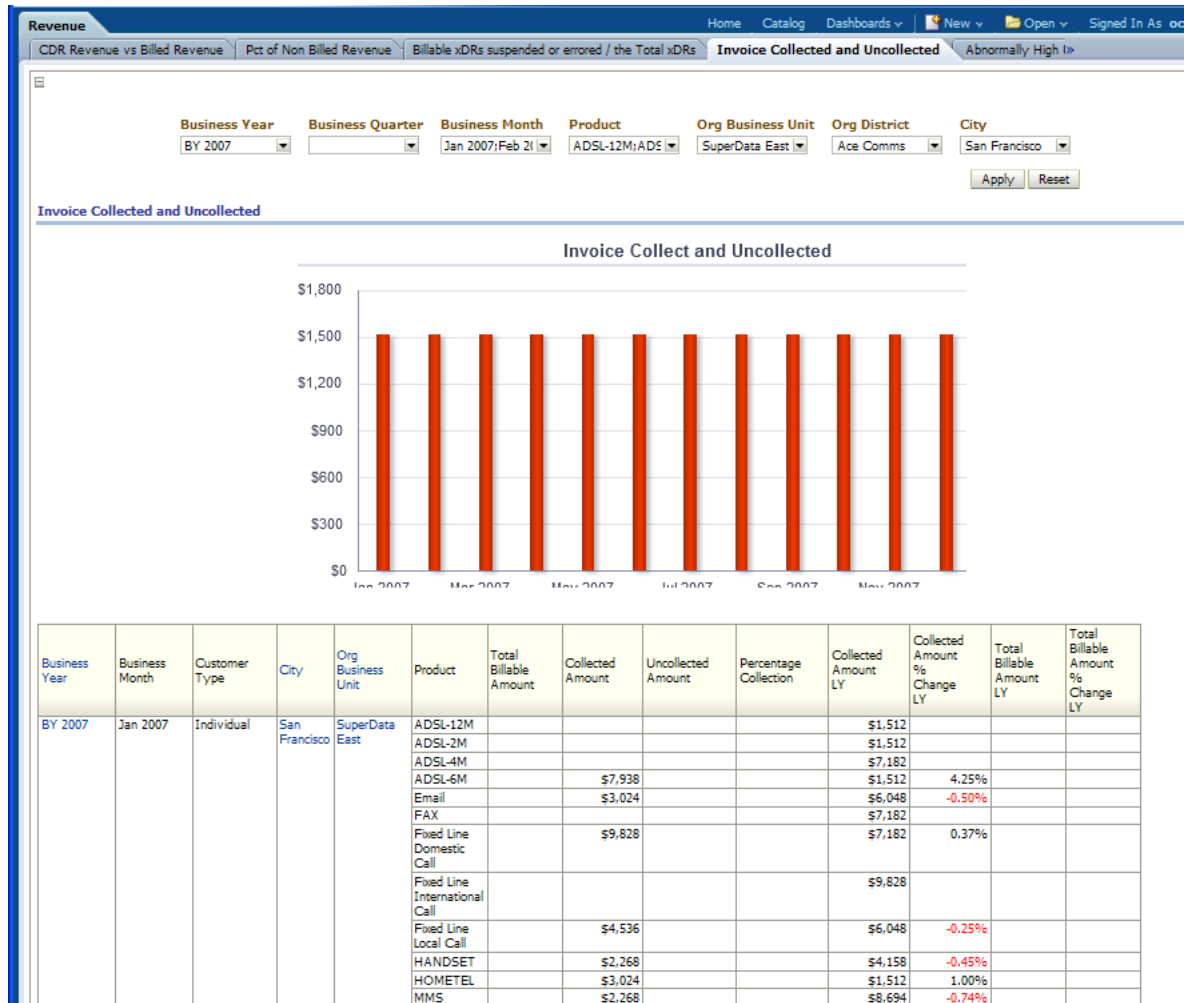
### Invoice Collected and Uncollected

This report, as shown in Figure 12–78 analyzes the collected invoice amount and the uncollected amount for each Month. This is also a way to monitor the revenue leakage.

Report dimensions are:

- Business Time
- Organization
- Customer Type
- Geography
- Product

**Figure 12–78 Invoice Collected and Uncollected Sample Report**



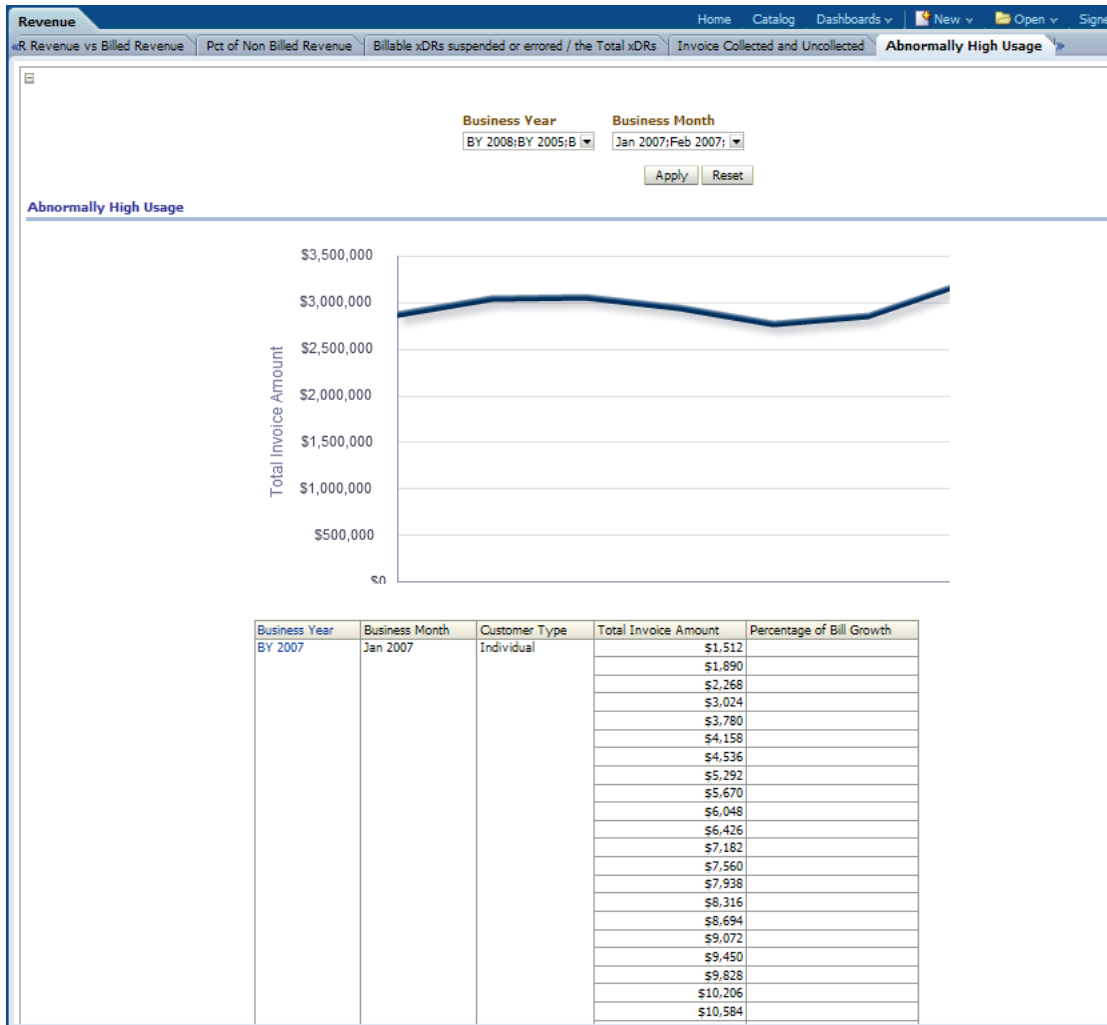
**Abnormally High Usage**

This report, as shown in Figure 12–80 shows Abnormally High Usage; users who have exceeded their previous bills.

Report dimensions are:

- Business Time
- Customer Type

**Figure 12–79 Abnormally High Usage Sample Report**



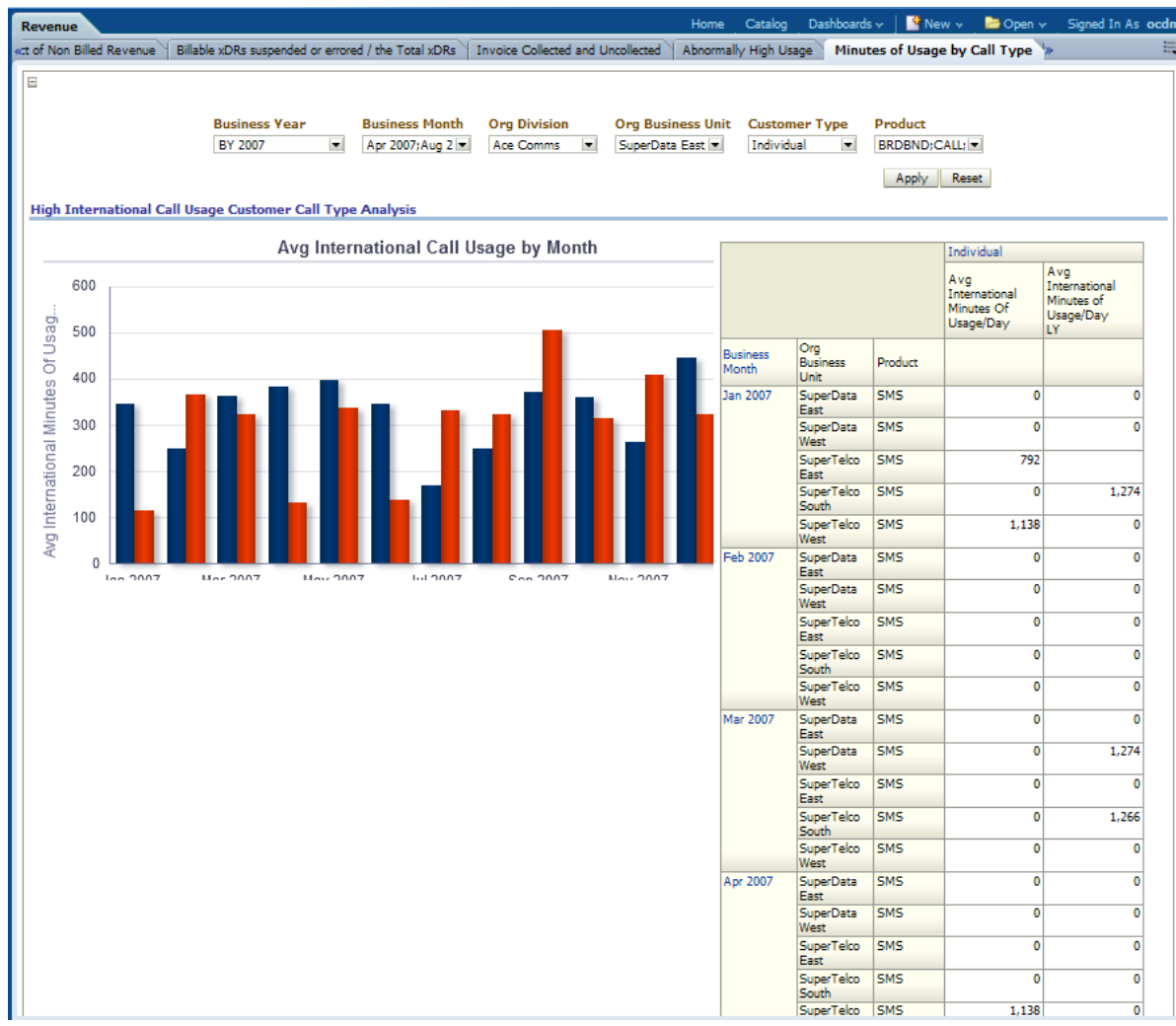
**Minutes of Usage by Call Type**

This report, as shown in [Figure 12–80](#) describes minutes of usage per customer. The customers are grouped by their usage pattern, for example, High Local Usage customer are those customers use Local, short distance, calls more than domestic and international calls.

Report dimensions are:

- Business Time
- Network Element

**Figure 12–80 Minutes of Usage Sample by Call Type Sample Report**



**Revenue Assurance**

This report, as shown in [Figure 12–81](#) determines how to best to assure that all of the revenue is earned. This is done by analyzing the revenue related information such as Remaining contract SUM, Retention count, and so on.

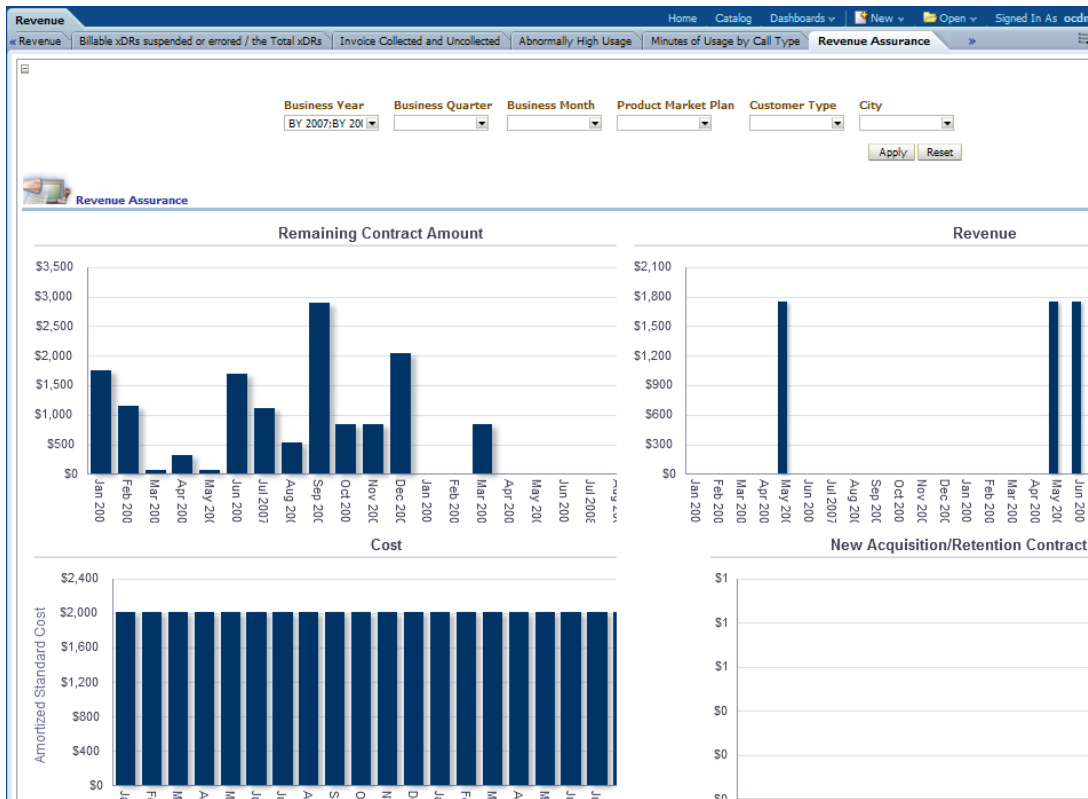
The remaining contract Sum indicates how much revenue can be expected in next six months or one year for a given product or organization business unit.

Report dimensions are:

- Business Time
- Organization
- Product Market Plan
- Geography



Figure 12–81 Revenue Assurance Sample Report



## Sales Analysis

This area includes the reports: [Sales](#), [Gross Sales](#), and [Net Sales](#).

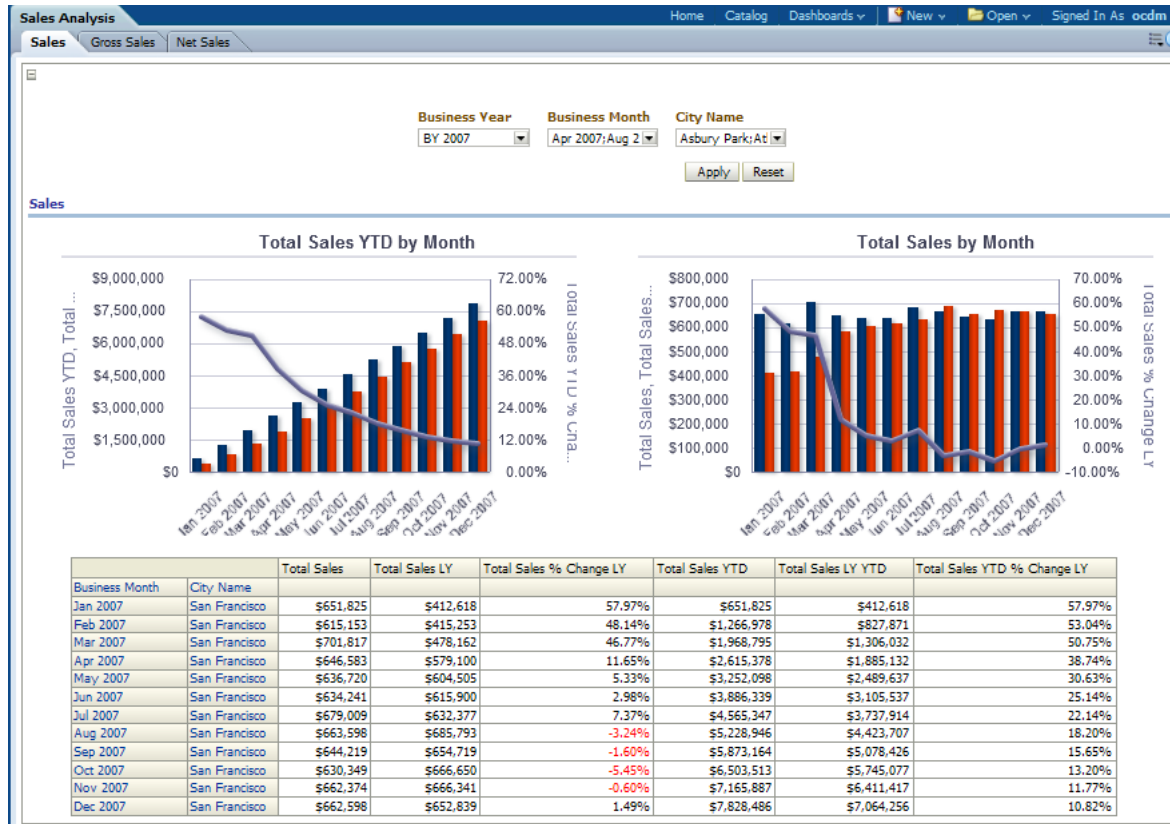
### Sales

This report, as shown in [Figure 12–82](#) provides month-level sales summary, for one or more locations.

Report dimensions are:

- Business Time
- Product
- Geography

Figure 12–82 Sales Sample Report



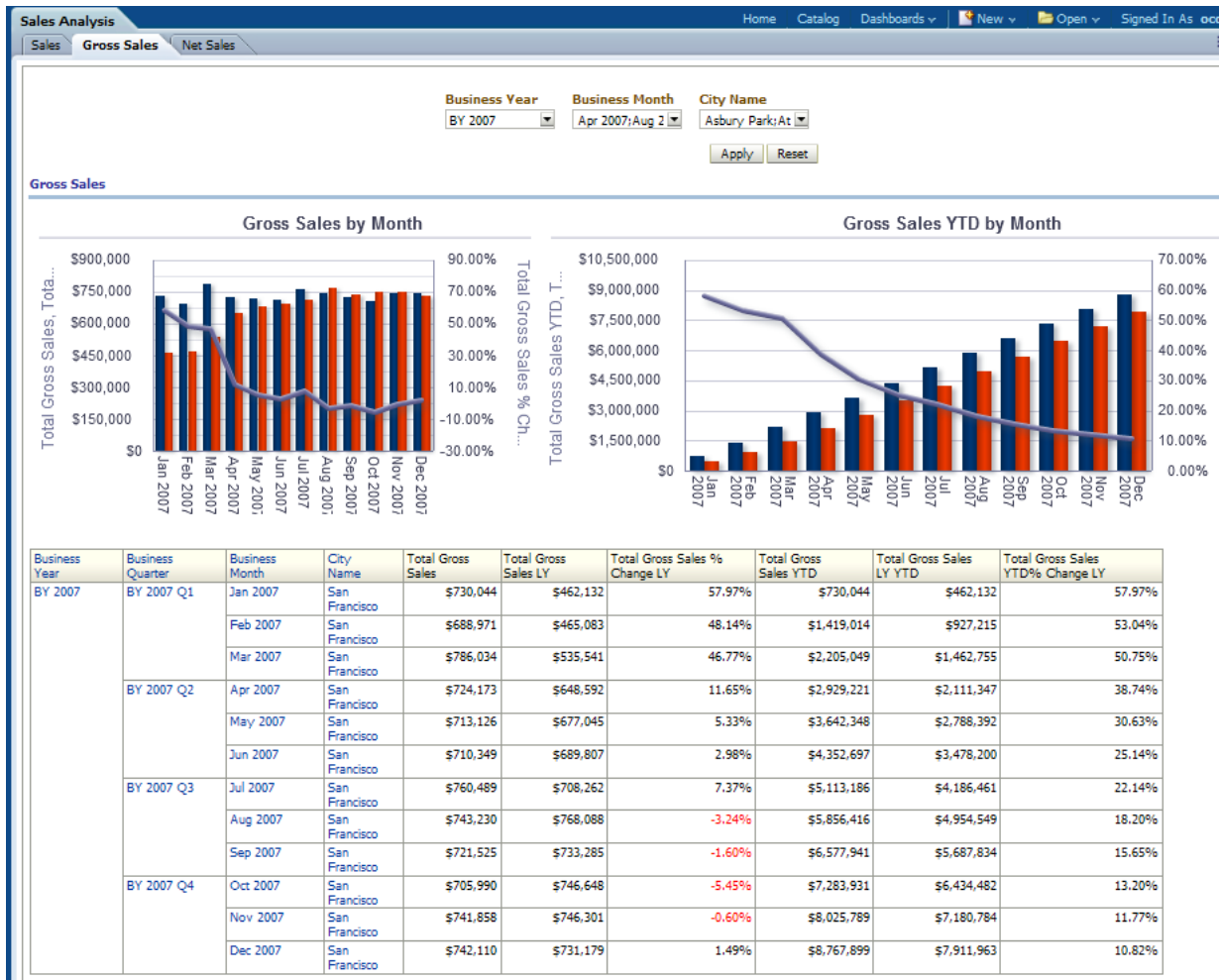
**Gross Sales**

This report, as shown in Figure 12–83 provides month-level sales summary information, for one or more locations.

Report dimensions are:

- Business Time
- Product
- Geography

Figure 12–83 Gross Sales Sample Report



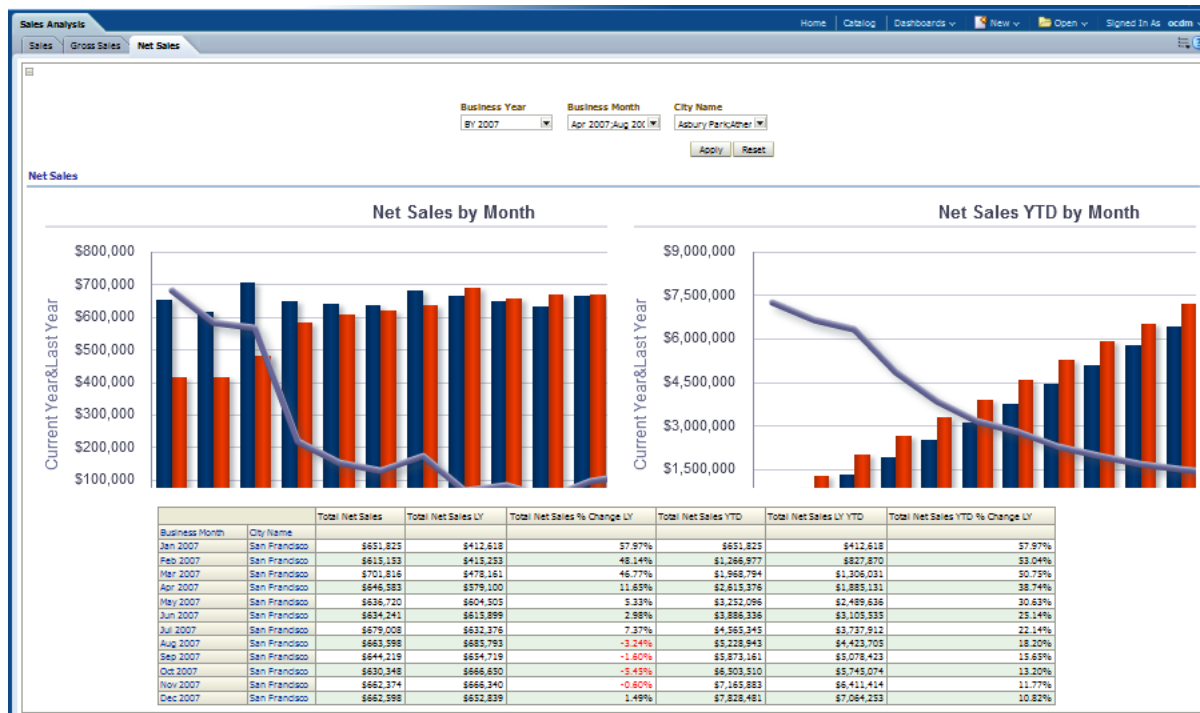
**Net Sales**

This report, as shown in Figure 12–84 provides month-level net sales summary, for one or more locations. The exact definitions of net sales can be refined by the service operator, while the default definition is the sales amount deducted by the cost of handset, human resources, and so on.

Report dimensions are:

- Business Time
- Product
- Geography

Figure 12–84 Net Sales Sample Report



## Debt Collection

This area includes the reports: [Debt Collection](#), [Debt Aging](#), [Percentage of the Recovered Revenue Value](#), [External Debt Collection](#).

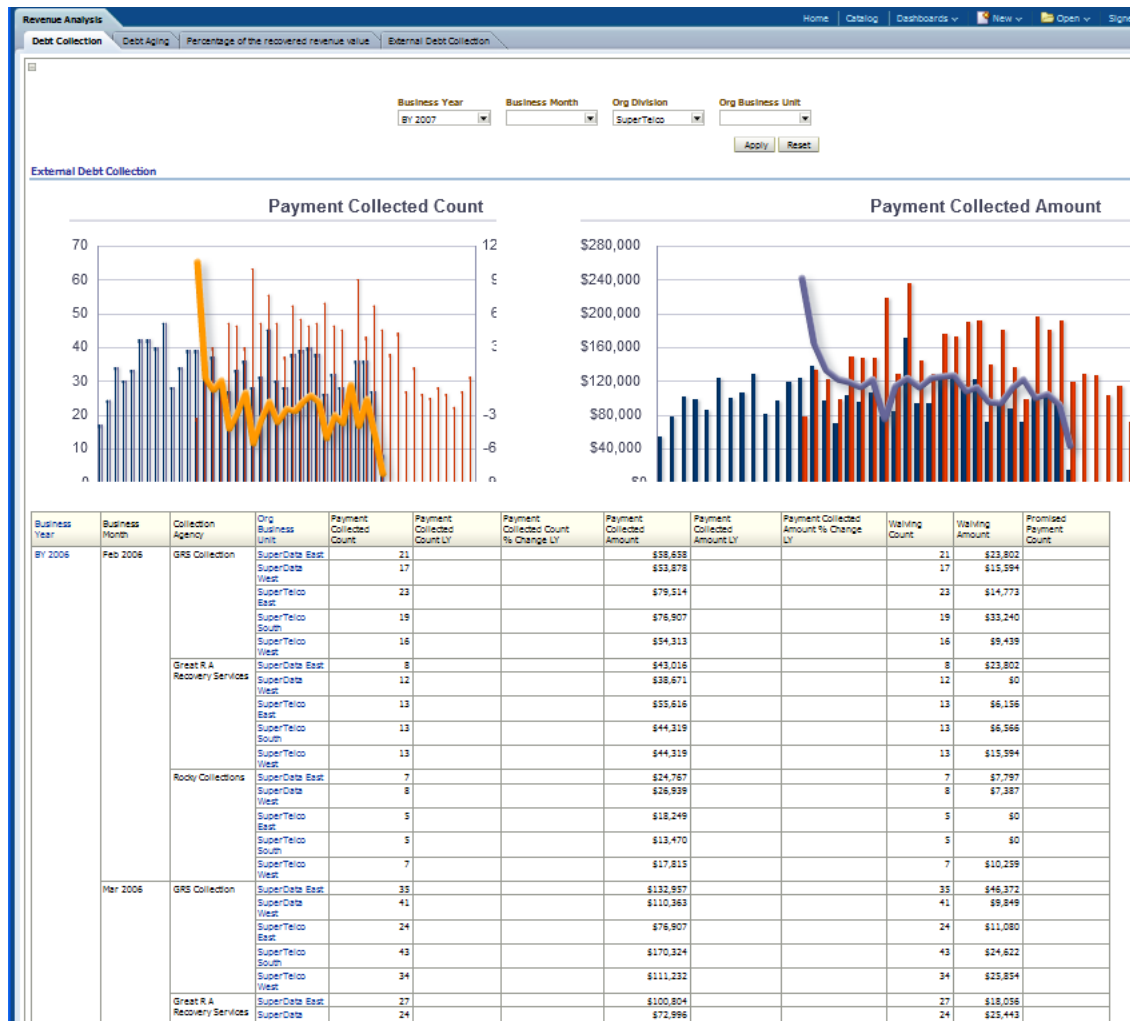
### Debt Collection

This report, as shown in [Figure 12–85](#) provides month-level collected revenue and the collection count for one or more organization business unit. Only those customer payments collected by internal or external collection agents are deemed as collected revenue.

Report dimensions are:

- Business Time
- Organization

Figure 12–85 Debt Collection Sample Report



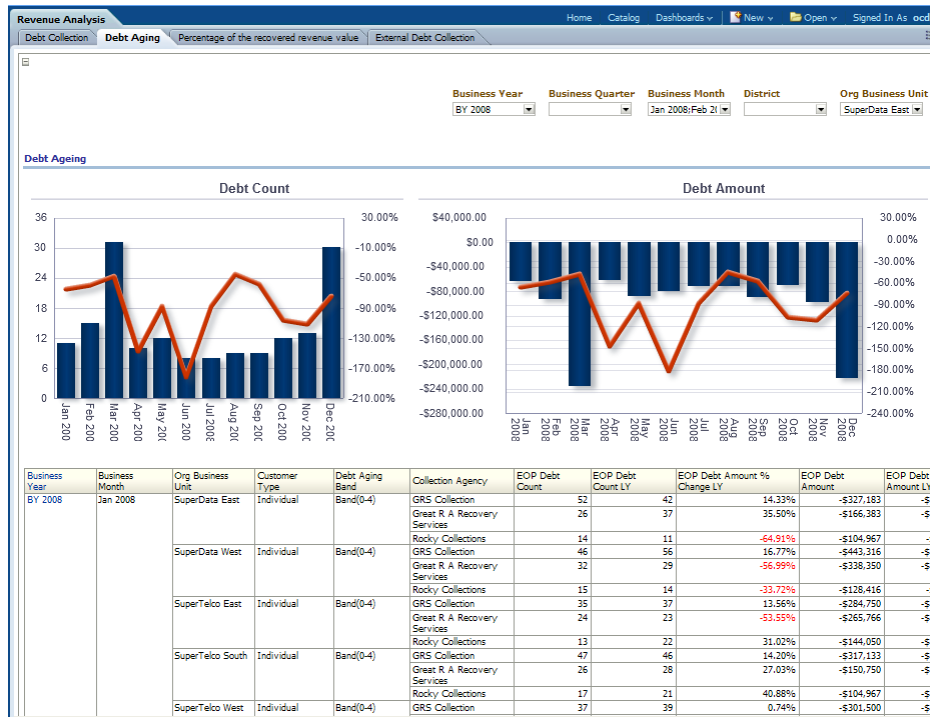
### Debt Aging

This report, as shown in Figure 12–86 generates debt aging details for the customers currently in debt.

Report dimensions are:

- Business Time
- Organization
- Debt Aging Band
- Customer Type
- Collection Agency

Figure 12–86 Debt Aging Sample Report



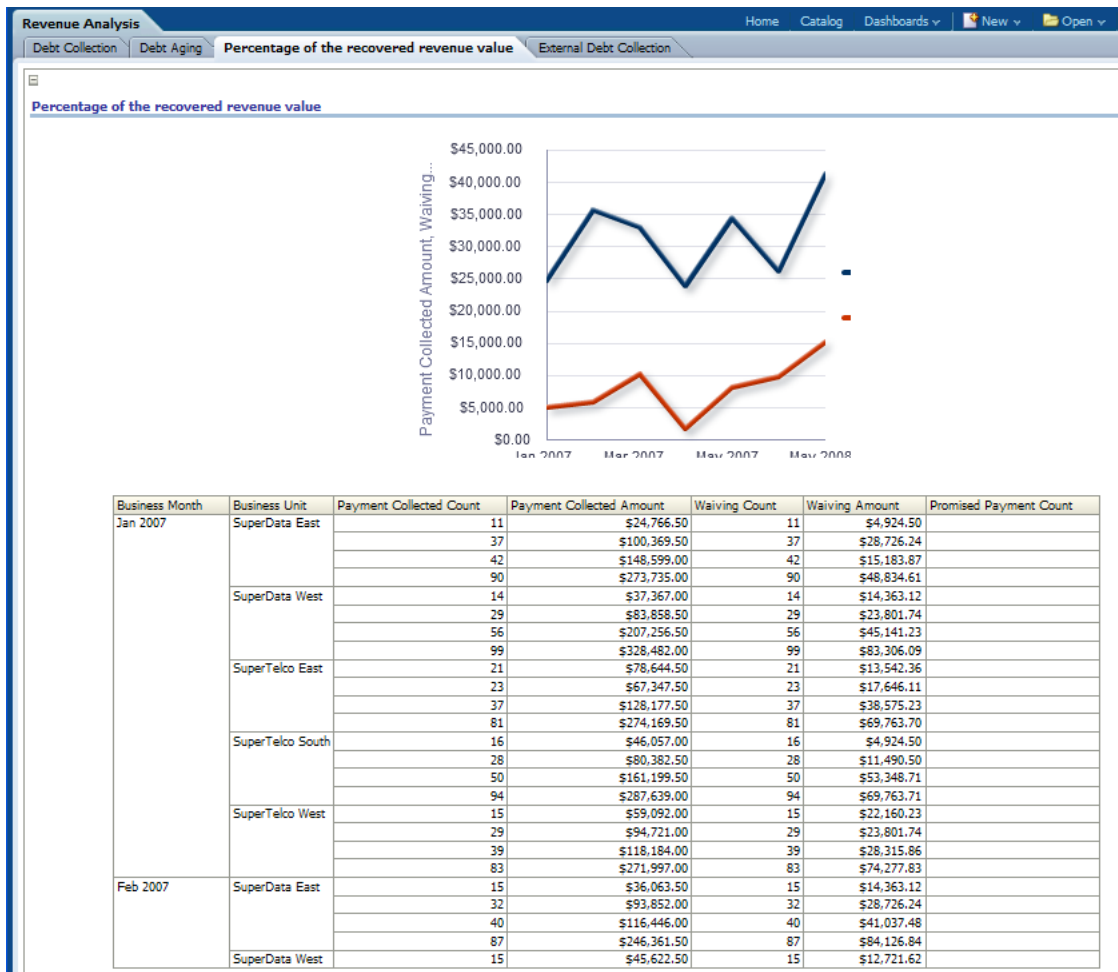
**Percentage of the Recovered Revenue Value**

This report, as shown in Figure 12–87 analyzes percentage of the recovered revenue value. After a certain period, if customer still cannot pay the bill, the collection begins. This report can analyze, for all collection amounts, how much is recovered and how much is abandoned.

Report dimensions are:

- Business Time
- Organization
- Collection Agency

Figure 12–87 Percentage of the Recovered Revenue Value Sample Report



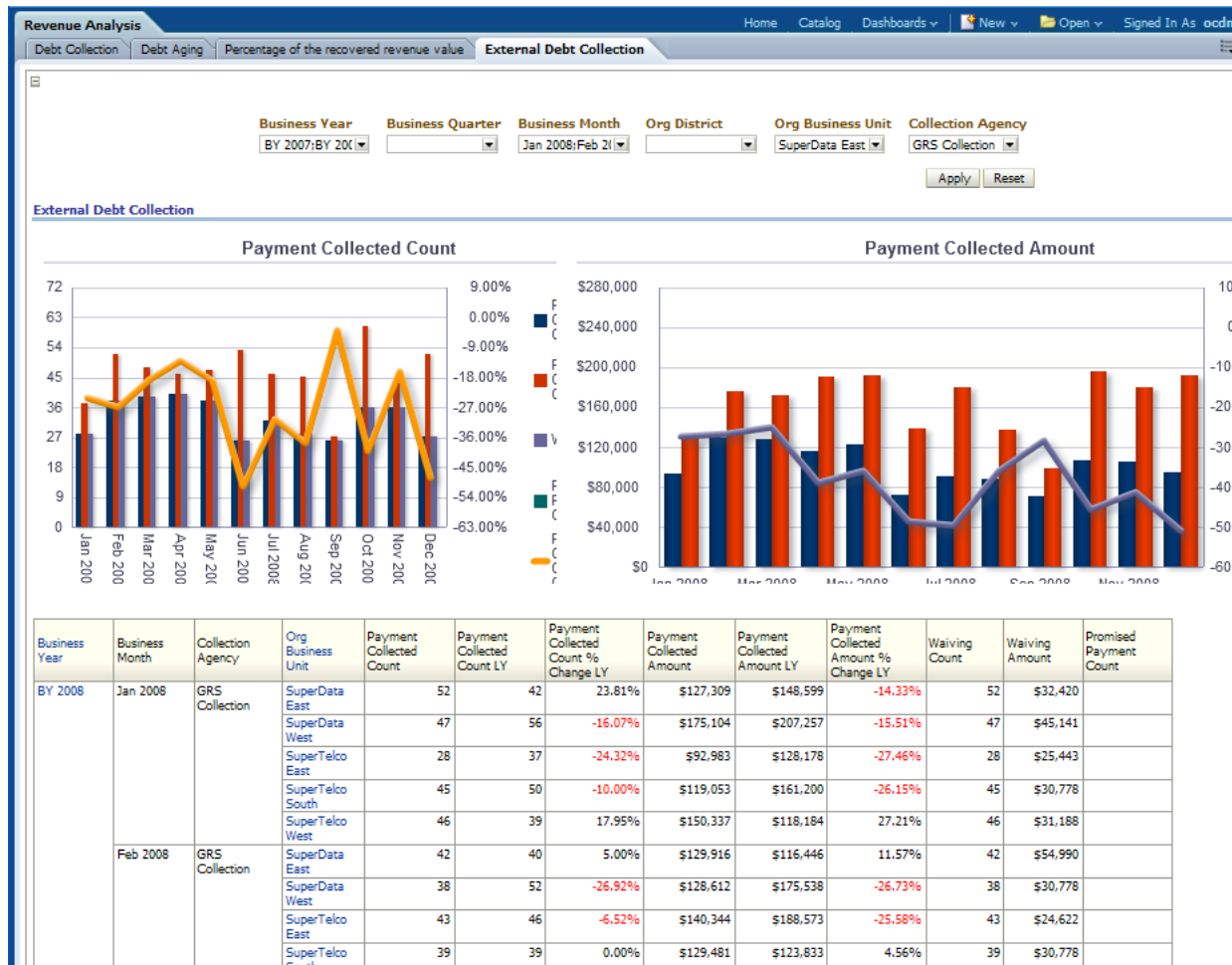
**External Debt Collection**

This report, as shown in Figure 12–88 shows collection agency wise Debit collected amount, waiving amount.

Report dimensions are:

- Business Time
- Organization
- Collection Agency

Figure 12-88 External Debt Collection Sample Report



## Refund and Adjustment

This area includes the reports: [Refund to Customer](#) and [Invoice Adjustment](#).

### Refund to Customer

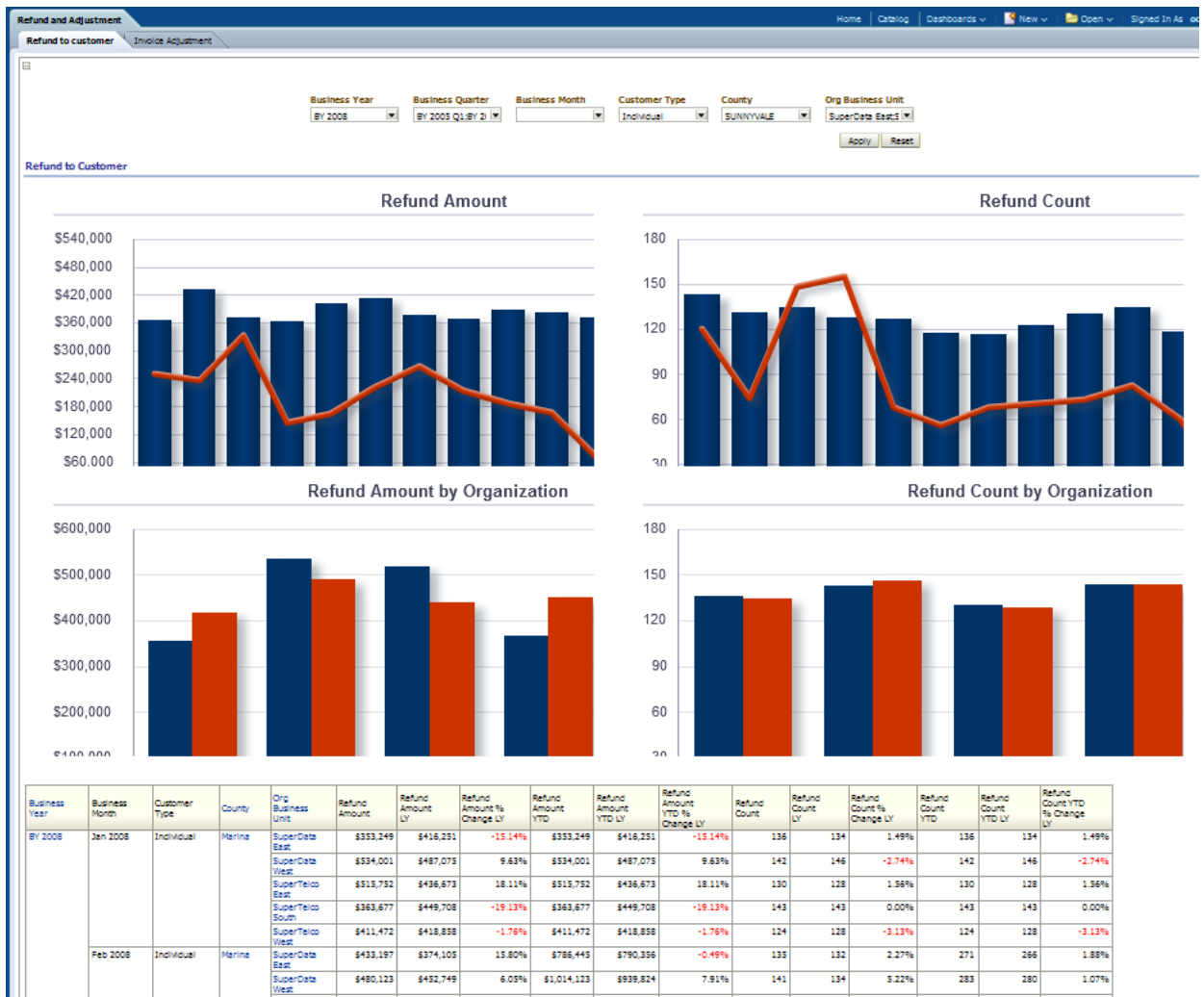
This report, as shown in [Figure 12-89](#) provides summary information about all the refunds made to the customer. for one or more locations.

Report dimensions are:

- Business Time
- Customer Type
- Geography
- Organization



Figure 12–89 Refund to Customer Sample Report



### Invoice Adjustment

This report, as shown in Figure 12–89 describe adjustment value and count for each product.

Report dimensions are:

- Business Time
- Product

**Figure 12–90 Invoice Adjustment Sample Report**

Product Desc	Invoice Adjustment Reason Desc	Adjustment Value	Invoice Adjustment Count
ADSL-12M	Customer complain	\$330,950.36	18
	Particular Promotion Event	\$1,382,756.16	24
	Service Downgrade	\$2,434,561.96	24
	Wrong billing	\$4,674,841.32	67
ADSL-2M	Customer complain	\$427,421.72	21
	Particular Promotion Event	\$1,315,762.16	24
	Service Downgrade	\$2,615,445.76	24
	Wrong billing	\$4,142,908.96	63
ADSL-4M	Customer complain	\$486,376.44	21
	Particular Promotion Event	\$1,086,642.68	24
	Service Downgrade	\$2,360,868.56	24
	Wrong billing	\$4,373,368.32	65
ADSL-6M	Customer complain	\$494,415.72	20
	Particular Promotion Event	\$1,221,970.56	23
	Service Downgrade	\$2,419,823.28	24
	Wrong billing	\$4,508,696.20	65
FAX	Customer complain	\$360,427.72	20
	Particular Promotion Event	\$1,520,763.80	24
	Service Downgrade	\$2,359,528.68	24
	Wrong billing	\$4,274,217.20	68
Fixed Line Domestic Call	Customer complain	\$420,722.32	21
	Particular Promotion Event	\$1,548,901.28	24
	Service Downgrade	\$2,338,090.60	24
	Wrong billing	\$3,916,469.24	67
Fixed Line International Call	Customer complain	\$363,107.48	19

## Customer Contracts

This area includes the reports: [Customer Sum of Future Plans](#), [Monthly Future Plan Drop-Out](#), and [Monthly Contract Sum Loss](#).

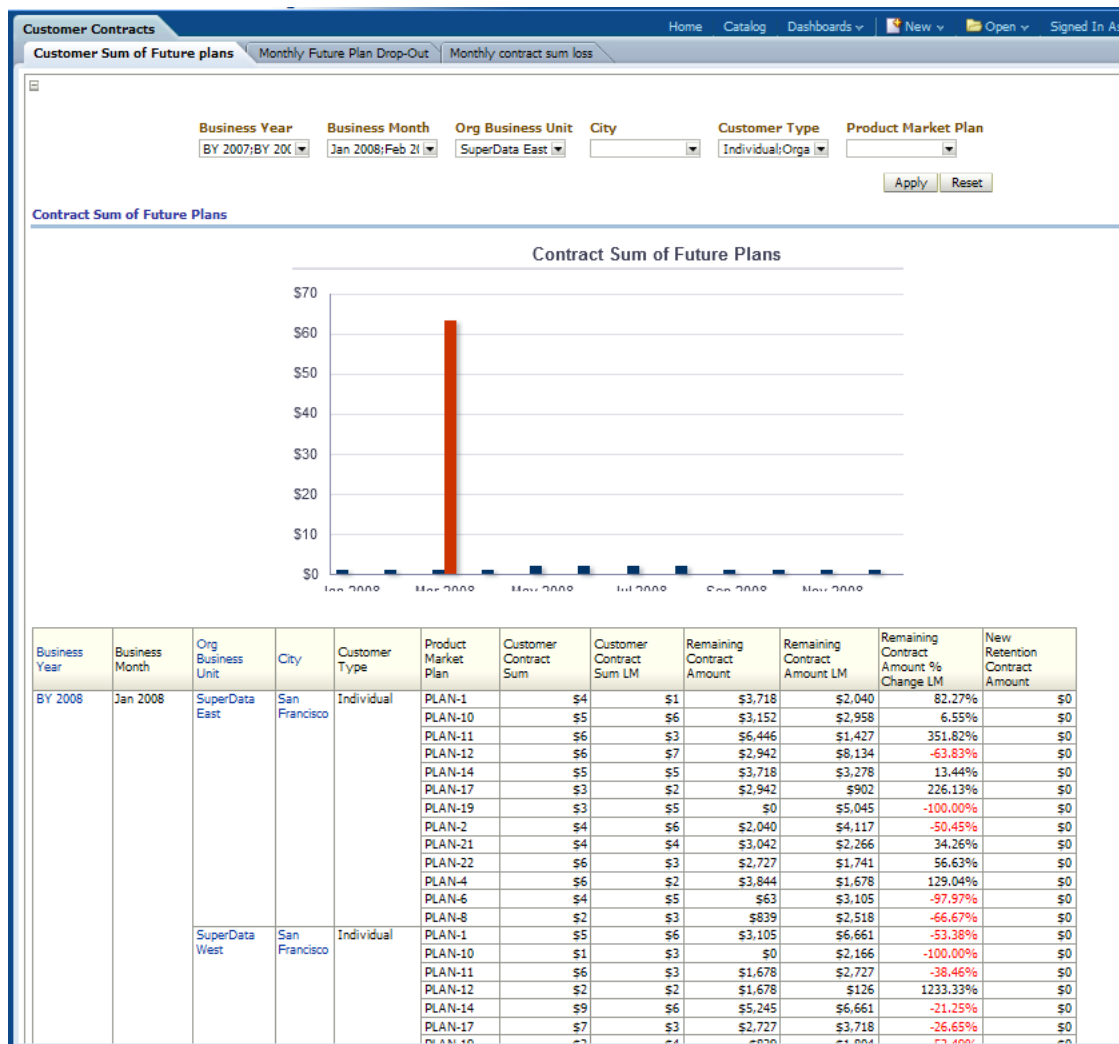
### Customer Sum of Future Plans

This report, as shown in [Figure 12–91](#) analyzes year and month level contract sum of future plans for the customer type based on LM, % Change LM. The future plan are those contracts customer already signed but not started yet. For example, if today is Feb 20th 2011, and customer may sign a contract starting at Apr 1st 2011 for one year. This is called a Future plan.

Report dimensions are:

- Business Time
- Organization
- Product
- Geography
- Customer

Figure 12-91 Customer Sum of Future Plans Sample Report



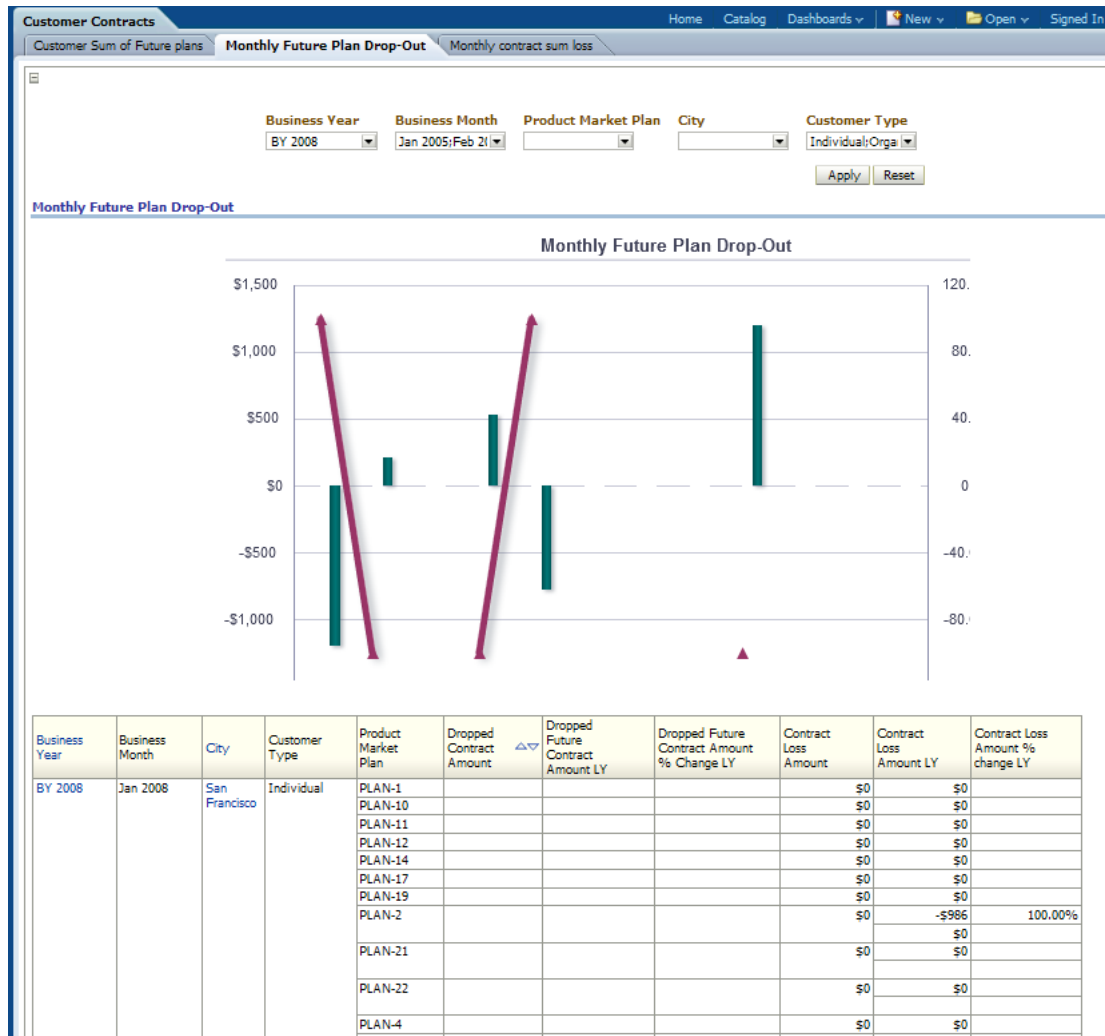
**Monthly Future Plan Drop-Out**

This report, as shown in Figure 12-92 describes product market plan wise dropped contract amount and contract loss amount.

Report dimensions are:

- Business Time
- Customer Type
- Product
- Customer

**Figure 12–92 Monthly Future Plan Drop-Out Sample Report**



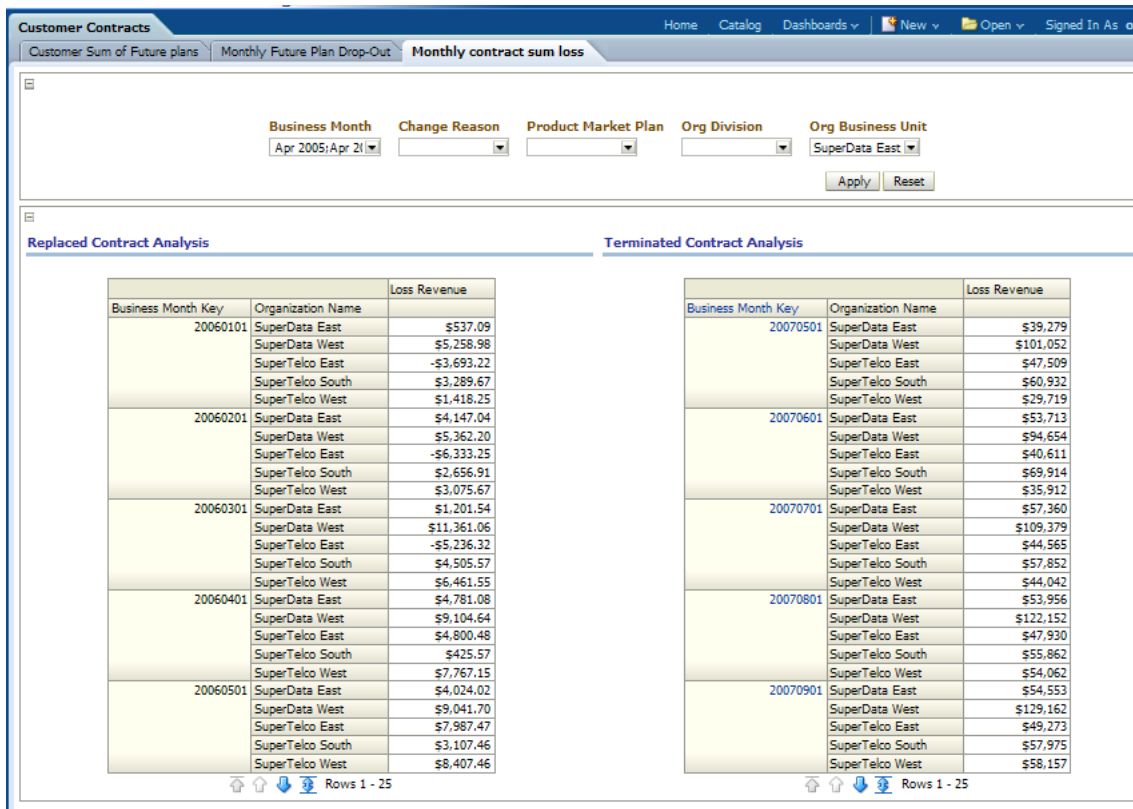
**Monthly Contract Sum Loss**

This report, as shown in [Figure 12–93](#) shows month level replaced contract analysis and terminated contract analysis. If a customer downgrades their subscription, for example, using a new USD 186 package to replace original USD286 package, this is deemed as a contract loss in "replaced contract analysis".

Report dimensions are:

- Business Time
- Organization
- Product
- Customer

Figure 12-93 Monthly Contract Sum Loss Sample Report





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## Oracle Communications Data Model NCC Application Adapter

This chapter describes the Oracle Communications Network Charging and Control Adapter for Oracle Communications Data Model (NCC Adapter).

This chapter includes the following sections:

- [Oracle Communication Prepaid Charging and Network Charging and Control Overview](#)
- [Network Charging and Control Application Adapter Architecture Overview](#)
- [NCC Adapter to Oracle Communications Data Model ETL Table Mapping](#)

For more information on Oracle Communications Network Charging and Control Adapter for Oracle Communications Data Model *Oracle Communications Data Model Implementation and Operations Guide*.

### Oracle Communication Prepaid Charging and Network Charging and Control Overview

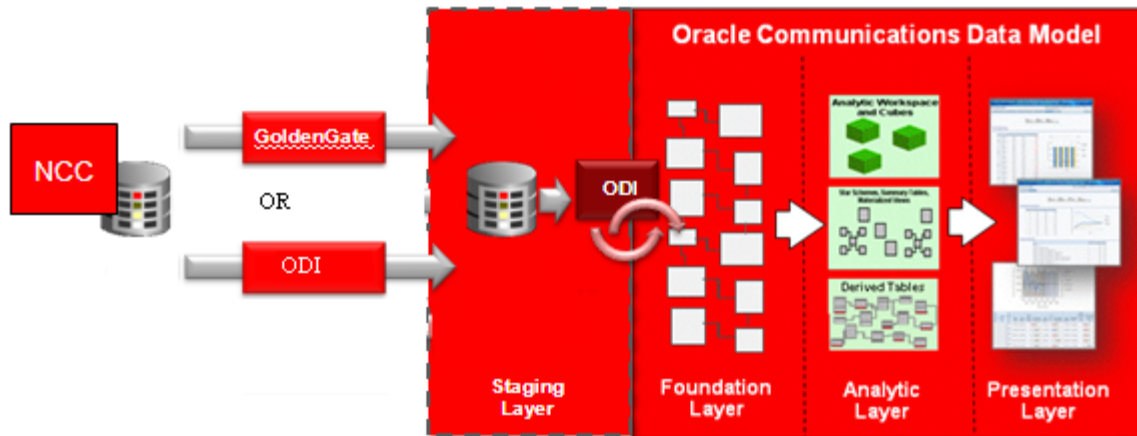
Oracle Communications Prepaid Charging provides critical prepaid capabilities within the overall Oracle Communications Network Charging and Control strategy. Complementary options to Oracle Prepaid Charging include Oracle Communications Messaging Manager and Oracle Communications Number Services Manager.

As the telecommunications market rapidly migrates from a voice-centric to a data-centric, multimedia business environment, Communication Service Providers (CSPs) need reliable real-time charging capabilities for an increasingly diverse set of services. Oracle Communications Prepaid Charging is designed to help operators (MNOs, MVNEs & MVNOs) generate revenue, grow market share, and sustain competitive advantage by providing an agile platform to launch and charge for a full range of innovative service offerings to subscribers. Built to accommodate all content types and network protocols, Oracle Communications Prepaid Charging helps operators to rapidly and cost effectively create new streams of value-added services revenue.

### Network Charging and Control Application Adapter Architecture Overview

[Figure 13-1](#) shows the Oracle Communications Data Model NCC Adapter Architecture.

Figure 13–1 Overview of NCC-OCDM Adapter Architecture



The NCC Adapter with Oracle Communications Data Model includes the following components:

- Source System (NCC)
- Oracle GoldenGate: To use real-time feed to staging
- Oracle Data Integrator: to load from the source system (NCC) to staging (if you decide not to use real-time feed with Oracle GoldenGate, the use a pull version with Oracle Data Integrator ).
- Oracle Communications Data Model

## NCC Adapter to Oracle Communications Data Model ETL Table Mapping

Table 13–1 lists the mapping overview for NCC Adapter source tables to Oracle Communications Data Model target tables.

Table 13–1 NCC Adapter to Oracle Communications Data Model Mapping

ID	Source Table	Target Table
1	BE_BALANCE	DWB_ACCT_BAL_HIST
2	CCS_BALANCE_TYPE	DWL_ACCT_BAL_TYP
3	BE_BUCKET	DWB_ACCT_BAL_BUCKET
4	BE_WALLET	DWR_ACCT
5 & 6	CCS_ACCT, CCS_ACCT_ACCT_REFERENCES	DWR_ACCT
7	CCS_ACCT_REFERENCE	DWR_CUST
8	CCS_ACCT_TYPE	DWL_ACCT_TYP
9	CCS_BALANCE_UNIT	DWL_UOM
10	CCS_WALLET_TYPE	DWL_ACCT_TYP
11	CCS_VOUCHER_REFERENCE	DWR_PRPD_VCHR_INSTNC
12	CCS_VOUCHER_BATCH	DWR_PRPD_VCHR_BTCH
13	CCS_MB_RECHARGE	DWR_PRPD_VCHR_RCHR_OPTN
14	CCS_RECHARGE_TYPE	DWR_PROD



**Table 13–1 (Cont.) NCC Adapter to Oracle Communications Data Model Mapping**

<b>ID</b>	<b>Source Table</b>	<b>Target Table</b>
15	CCS_VOUCHER_TYPE	DWR_PROD
16	CDR (VOUCHER_RECHARGE)	DWB_ACCT_RCHRG
17	CDR (VOICE_CALL)	DWB_WRLS_CALL_EVT
18	CDR (FREEFORM_RECHARGE)	DWB_ACCT_RCHRG
19	CDR (SMS)	DWB_SMS_EVT
20	CDR (PREPAID_DATA)	DWB_DATA_SRVC_EVT



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# Oracle Communications Data Model BRM Application Adapter

This chapter describes the Oracle Communications Billing and Revenue Management Adapter for Oracle Communications Data Model (BRM Adapter).

This chapter includes the following sections:

- [BRM Adapter for Oracle Communications Data Model](#)
- [BRM Adapter Architecture Overview](#)
- [BRM Adapter to Oracle Communications Data Model Table Mapping](#)

For more information on the BRM Adapter for Oracle Communications Data Model, see *Oracle Communications Data Model Implementation and Operations Guide*.

## BRM Adapter for Oracle Communications Data Model

The BRM Adapter loads data from an Oracle Communications Billing and Revenue Management source system into Oracle Communications Data Model. You can load data in both an initial and an incremental manner. The data from Oracle Communications Billing and Revenue Management populates the Oracle Communications Data Model derived and aggregate tables, reports, and mining models.

## BRM Adapter Architecture Overview

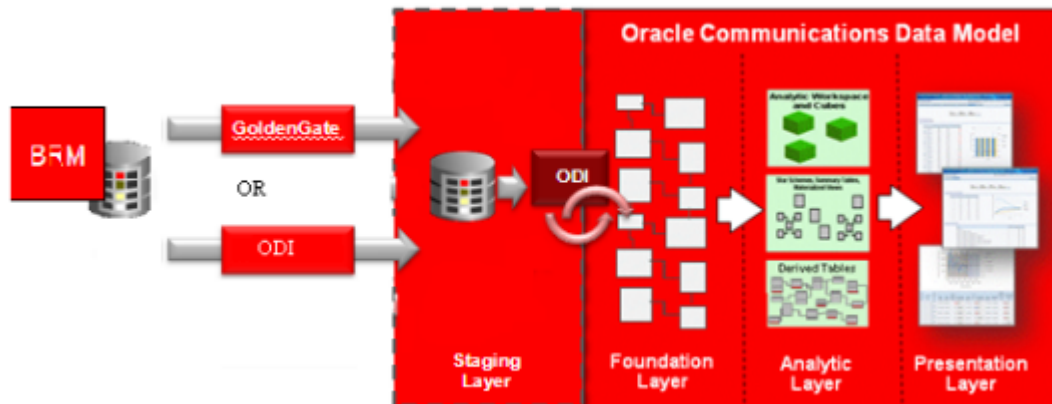
BRM Adapter for Oracle Communications Data Model is designed to use the Extract Load and Transform (EL-T) principle. The adapter uses both Oracle GoldenGate and Oracle Data Integrator (ODI). Oracle GoldenGate is used when the user want to provide real-time feed to the staging area, and ODI is used for batch loading (to the staging area) and for transformation in the staging to the Oracle Communications Data Model foundation layer. The BRM Adapter for Oracle Communications Data Model enables the staging layer to be used as an operational data store for near real-time reporting.

Oracle GoldenGate is an option, if you do not require or do not want true real-time feeds, they can you can use the standard bulk load with ODI-only (default). Using ODI Knowledge Module (KM) for Oracle GoldenGate enables a single User Interface (UI) to be used to configure Oracle GoldenGate and ODI on its own.

Oracle Data Integrator is combined with Oracle GoldenGate. This provides a cross-platform data replication and changed data capture for Oracle Communications Billing and Revenue Management with Oracle Communications Data Model.

Figure 14–1 shows the BRM Adapter for Oracle Communications Data Model architecture.

Figure 14–1 BRM Adapter Architecture



## BRM Adapter to Oracle Communications Data Model Table Mapping

Table 14–1 lists the mapping overview for BRM Adapter source tables to Oracle Communications Data Model target tables.

Table 14–1 BRM Adapter Source to Target Table Mapping

ID	Source Table	Target Table
1 & 2	CONFIG_T, CONFIG_BUSINESS_TYPE_T	DWL_CUST_TYP
1 & 3	CONFIG_T, CONFIG_BEID_BALANCES_T	DWL_ACCT_BAL_TYP
1 & 4	CONFIG_T, CONFIG_CUR_CONV_RATES_T	DWB_CRNCY_EXCHNG_RATE
5	IFW_USAGETYPE	Not yet used but needed to distinguish various usage types
6	IFW_TIMEZONE	DWL_PK_OFPK_TIME
7	IFW_CURRENCY	DWL_CRNCY
8	DD_OBJECTS_T	DWR_SRVC_SPEC
9	PRODUCT_T	DWR_PROD, DWR_SRVC_SPEC_PROD_RLTN
10	DISCOUNT_T	DWR_PROD, DWR_SRVC_SPEC_PROD_RLTN
11	RATE_PLAN_T	DWR_PROD_RTNG_PLN
12	DEAL_T	DWR_PROD
13	DEAL_PRODUCTS_T	DWR_PROD_PKG_ASGN
14	PLAN_T	DWR_PROD_MKT_PLN
15	PLAN_SERVICES_T	DWR_PROD_MKT_PLN_ASGN
16	SERVICE_T	DWR_SRVC, DWR_CUST_FCNG_SRVC, DWB_SRVC_STAT_HIST
16 & 17	SERVICE_T, SERVICE_TELCO_GSM_T	DWR_CUST_FCNG_SRVC
16 & 18	SERVICE_T, SERVICE_TELCO_GPRS_T	DWR_CUST_FCNG_SRVC

**Table 14–1 (Cont.) BRM Adapter Source to Target Table Mapping**

<b>ID</b>	<b>Source Table</b>	<b>Target Table</b>
16 & 19	SERVICE_T, SERVICE_EMAIL_T	DWR_CUST_FCNG_SRVC
20	SERVICE_TELCO_FEATURES_T	DWR_SRVC_CHTRSTC
21 & 22	ACCOUNT_T & ACCOUNT_NAMEINFO_T	DWR_GEO_CNTRY, DWR_GEO_STATE, DWR_GEO_CITY, DWR_POSTCD, DWR_ADDR_LOC DWR_PRTY, DWR_PRTY_CNCT_INFO, DWR_CUST, DWR_ACCT, DWR_ACCT_PREF_INVC_DLVRV
23	BILLINFO_T	DWR_PRTY, DWR_CUST, DWR_ACCT, DWL_PYMT_MTHD_TYP
24	BAL_GRP_T	DWR_ACCT_BAL_GRP
25	PURCHASED_PRODUCT_T	DWR_SBRP, DWR_SBRP_PRICE_CHRG
26	PURCHASED_DISCOUNT_T	DWR_SBRP, DWR_SBRP_PRICE_CHRG
27	BILL_T	DWB_INVC
28	INVOICE_T	DWB_EVT_INVC_DLVRV
29	ITEM_T	DWB_INVC_ITEM
30 & 31	PAYINFO_T, PAYINFO_INV_T	DWR_GEO_CNTRY, DWR_GEO_STATE, DWR_GEO_CITY, DWR_POSTCD, DWR_ADDR_LOC, DWR_PRTY, DWR_ACCT_PREF_PYMT_MTHD
30 & 32	PAYINFO_T, PAYINFO_DD_T	DWR_PRTY, DWR_ACCT_PREF_PYMT_MTHD
30 & 33	PAYINFO_T, PAYINFO_CC_T	DWR_PRTY, DWR_ACCT_PREF_PYMT_MTHD
34	EVENT_T	used in all "NETWORK Event" type of mapping
35	EVENT_BAL_IMPACTS_T	used in all "NETWORK Event" type of mapping + DWB_NTWK_EVT_ACCT_BAL_IMPC (any events)
36	EVENT_SESSION_TLCS_T	used in all Prepaid/session "NETWORK Event" type of mapping
37	EVENT_SESS_TLCS_SVC_CODES_T	used in all Prepaid/session "NETWORK Event" type of mapping
38	EVENT_SESSION_TLCO_GSM_T	DWB_WRLS_CALL_EVT (Prepaid)
39	EVENT_SESSION_TELCO_GPRS_T	DWB_GPRS_USG_EVT (Prepaid)
40	EVENT_BROADBAND_USAGE_T	DWB_BRDBND_USG_EVT
41	EVENT_SESSION_DIALUP_T	DWB_DATA_SRVC_EVT
42	EVENT_DLAY_SESS_TLCS_T	used in all Postpaid/session "NETWORK Event" type of mapping
43	EVENT_DLAY_SESS_TLCS_SVC_CDS_T	used in all Postpaid/session "NETWORK Event" type of mapping
44	EVENT_DLYD_SESSION_TLCO_GPRS_T	DWB_GPRS_USG_EVT (Postpaid)
45	EVENT_DLYD_SESSION_TLCO_GSM_T	DWB_WRLS_CALL_EVT (Postpaid)
46	EVENT_ACTIVITY_TLCS_T	used in all Prepaid Activity "NETWORK Event" type of mapping
47	EVENT_ACTV_TLCS_SVC_CODES_T	used in all Prepaid Activity "NETWORK Event" type of mapping
48	EVENT_DLAY_ACTV_TLCS_SVC_CDS_T	
49	EVENT_DLAY_ACTV_TLCS_T	

**Table 14–1 (Cont.) BRM Adapter Source to Target Table Mapping**

<b>ID</b>	<b>Source Table</b>	<b>Target Table</b>
50	EVENT_TAX_JURISDICTIONS_T	
51	EVENT_RUM_MAP_T	
52	EVENT_BILLING_PAYMENT_T	DWB_ACCT_RCHRG
53	EVENT_BILLING_PAYMENT_DD_T	DWB_ACCT_RCHRG
54	EVENT_BILLING_PAYMENT_CASH_T	DWB_ACCT_RCHRG
55	EVENT_BILLING_PAYMENT_CC_T	DWB_ACCT_RCHRG
56	EVENT_BILLING_PAYMENT_CHECK_T	DWB_ACCT_RCHRG
57	EVENT_BILLING_PAYMENT_FAILED_T	DWB_ACCT_RCHRG
58	EVENT_BILLING_PAYMENT_PAYORD_T	DWB_ACCT_RCHRG
59	EVENT_BILLING_PAYMENT_POST_T	DWB_ACCT_RCHRG
60	EVENT_BILLING_PAYMENT_WTRAN_T	DWB_ACCT_RCHRG
61	NOTE_T	DWB_EVT_PRTY_INTRACN

# Part IV

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## Appendices

Part III contains the following Appendixes:

- [Appendix A, "Control Tables"](#)
- [Appendix B, "Oracle Communications Data Model Business Use Case"](#)





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## Control Tables

Some tables are defined in the `ocdm_sys` schema and use a `DWC_` prefix, but are not part of Oracle Communications Data Model. You use the `DWC_` control tables when processing the model. For example when loading data or when monitoring errors.

This appendix includes the following sections:

- [Intra-ETL Load Parameters Control Table](#)
- [Intra-ETL OLAP Mapping Control Table](#)
- [Intra-ETL Monitoring Process Control Tables](#)

### Intra-ETL Load Parameters Control Table

Use the `ocdm_execute_wf.sh` program to manually execute the Intra-ETL. Before you run the Intra-ETL, for an incremental load, you must update the Oracle Communications Data Model Relational ETL parameters in `DWC_ETL_PARAMETER` table so that this information can be used when loading the relational data. This program prompts for several environment parameter values. And reads ETL parameters from `DWC_ETL_PARAMETER` table, as shown in [Table A-1](#), and `DWC_OLAP_ETL_PARAMETER` table, as shown in [Table A-2](#).

The `PKG_DWD_*_MAP` loads data from Oracle Communications Data Model base tables into the Oracle Communications Data Model derived tables. These packages read relational ETL parameters from the `DWC_ETL_PARAMETER` table.

You update the parameters in `DWC_ETL_PARAMETER` control table in the `ocdm_sys` schema so that this information can be used when loading the derived and aggregate tables and views.

[Table A-1](#) describes the valid values for the `DWC_ETL_PARAMETER` table.

**Table A-1** *DWC\_ETL\_PARAMETER Table*

Column	Description
<code>Process_name</code>	OCDM-INTRA-ETL
<code>from_date_etl</code>	The start date of ETL period.
<code>to_date_etl</code>	The end date of ETL period.
<code>load_dt</code>	The date when this record are populated.
<code>last_updt_dt</code>	The date when this record are last updated
<code>last_updt_by</code>	The user who last updated this record

## Intra-ETL OLAP Mapping Control Table

The OLAP MAP mapping that loads OLAP cube data invokes the analytic workspace build function from the PKG\_OCDM\_OLAP\_ETL\_AW\_LOAD package. This package loads data from Oracle Communications Data Model aggregate materialized views into the Oracle Communications Data Model analytical workspace and calculates the forecast data. The PKG\_OCDM\_OLAP\_ETL\_AW\_LOAD reads OLAP ETL parameters from the DWC\_OLAP\_ETL\_PARAMETER table.

You update the Oracle Communications Data Model OLAP ETL parameters in DWC\_OLAP\_ETL\_PARAMETER control table in the ocdm\_sys schema so that this information can be used when loading the OLAP cube data.

Table A-2 describes the valid values for the DWC\_OLAP\_ETL\_PARAMETER table. For more information on the values to specify when performing an initial load of OLAP cube data or when refreshing the OLAP cubes after an initial load, see *Oracle Communications Data Model Implementation and Operations Guide*.

**Table A-2 ETL Parameters in the DWC\_OLAP\_ETL\_PARAMETER Table**

Column Name	Description
PROCESS_NAME	OCDM_OLAP_ETL
BUILD_METHOD	Cube build/refresh method specified by one of the following values: <ul style="list-style-type: none"> <li>■ C specifies a complete refresh which clears all dimension values before loading.</li> <li>■ ? specifies a fast refresh if possible; otherwise, a complete refresh. (Default)</li> <li>■ P specifies recomputation of rows in a cube materialized view that are affected by changed partitions in the detail tables.</li> <li>■ S specifies a fast solve of a compressed cube. A fast solve reloads all the detail data and re-aggregates only the changed values.</li> </ul>
CUBENAME	Specifies the cubes you want to build: ALL builds all of the cubes in the Oracle Communications Data Model analytic workspace. <i>cubename</i> [[   <i>cubename</i> ]...] specifies one or more cubes, as specified with <i>cubename</i> , to build.
MAXJOBQUEUES	A decimal value that specifies the number of parallel processes to allocate to this job. (Default value is 4.)  The number of parallel processes actually allocated by a build is controlled by the smallest of these factors: <ul style="list-style-type: none"> <li>■ Number of cubes in the build and the number of partitions in each cube.</li> <li>■ Setting of the MAXJOBQUEUES argument.</li> <li>■ Setting of the JOB_QUEUE_PROCESSES database initialization parameter.</li> </ul>
CALC_FCST	Whether or not to calculate forecast cubes: <ul style="list-style-type: none"> <li>■ Y specifies calculate forecast cubes.</li> <li>■ N specifies do not calculate forecast cubes.</li> </ul>
NO_FCST_YRS	A decimal value that specifies how many years forecast data you want to calculate. (This parameter takes effect only if you set CALC_FCST to 'Y')
FCST_MTHD	AUTO which invokes the Geneva forecasting expert system which tests all of possible forecasting methods and options for these methods and chooses and uses the method that best fits the data.
FCST_ST_YR	A value specified as <i>yyyy</i> which is the "start business year" of a historical period. Forecast program will calculate the forecast data based on the historical data in this period.

**Table A-2 (Cont.) ETL Parameters in the DWC\_OLAP\_ETL\_PARAMETER Table**

Column Name	Description
FCST_END_YR	A value specified as <i>yyyy</i> which is the "end business year" of a historical period. Forecast program will calculate the forecast data based on the historical data in this period.
OTHER1	Reserved for future use. (Default value is NULL.)
OTHER2	Reserved for future use. (Default value is NULL.)

## Intra-ETL Monitoring Process Control Tables

The two control table in the `ocdm_sys` schema, `DWC_INTRA_ETL_PROCESS` and `DWC_INTRA_ETL_ACTIVITY`, monitor the execution of the Intra-ETL process.

[Table A-3](#) contains column name information for `DWC_INTRA_ETL_PROCESS`.

[Table A-4](#) contains column name information for `DWC_INTRA_ETL_ACTIVITY`.

**Table A-3 DWC\_INTRA\_ETL\_PROCESS Columns**

Columns Name	Data Type	Not Null	Remarks
PROCESS_KEY	NUMBER(30)	Yes	Primary Key, System Generated Unique Identifier
PROCESS_START_TIME	DATE	Yes	ETL Process Start Date and Time
PROCESS_END_TIME	DATE		ETL Process End Date and Time
PROCESS_STATUS	VARCHAR2(30)	Yes	Current status of the process
FROM_DATE_ETL	DATE		Start Date (ETL) - From Date of the ETL date range
TO_DATE_ETL	DATE		End Date (ETL) - To Date of the ETL date range
LOAD_DT	DATE		Record Load Date - Audit Field
LAST_UPDT_DT	NUMBER(30)		Last Update Date and Time - Audit Field
LAST_UPDT_BY	VARCHAR(30)		Last Update By - Audit Field

**Table A-4 DWC\_INTRA\_ETL\_ACTIVITY Columns**

Columns Name	Data Type	Not Null	Remarks
ACTIVITY_KEY	NUMBER(30)	Yes	Primary Key, System Generated Unique Identifier
PROCESS_KEY	NUMBER(30)	Yes	Process Key. FK to <code>DWC_INTRA_ETL_PROCESS</code> table
ACTIVITY_NAME	VARCHAR2(50)	Yes	Activity Name or Intra ETL Program Name

**Table A-4 (Cont.) DWC\_INTRA\_ETL\_ACTIVITY Columns**

<b>Columns Name</b>	<b>Data Type</b>	<b>Not Null</b>	<b>Remarks</b>
ACTIVITY_DESC	VARCHAR2(500)	Activity description	
ACTIVITY_START_TIME	DATE	Yes	Intra ETL Program Start Date and Time
ACTIVITY_END_TIME	DATE	Intra ETL Program End Date and Time	
ACTIVITY_STATUS	VARCHAR2(30)	Yes	Current status of the process
ERROR_DTL	VARCHAR2(2000)	Error details if any	
LOAD_DT	DATE	Record Load Date - Audit Field	
LAST_UPDT_DT	NUMBER(30)	Last Update Date and Time - Audit Field	
LAST_PDT_BY	VARCHAR(30)	Last Update By - Audit Field	

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## Oracle Communications Data Model Business Use Case

This appendix provides an overview and examples of Oracle Communications Data Model business use case scenarios.

This appendix includes the following sections:

- [Sample Use Case: Introduction](#)
- [Sample Use Case 1: Setting Up the Business Unit Organization](#)
- [Sample Use Case 2: Acquiring a New Customer \(with Family Plan\)](#)
- [Sample Use Case 3: Service Implementation](#)
- [Sample Use Case 4: Storing Customer Call Data](#)
- [Sample Use Case 5: Customer Billing](#)
- [Sample Use Case 6: Changing Plan and Billing Address](#)
- [Sample Use Case 7: Targeted Promotion for Video-on-Demand Services](#)
- [Sample Use Case 9: Retention of Terminating Contract](#)
- [Sample Use Case 10: Dealer and Employee Sales Commission](#)
- [Sample Use Case 11: Handling a Network Fault](#)
- [Sample Use Case 12: Implementing a Business Area](#)

### Sample Use Case: Introduction

The sample business use case for Oracle Communications Data Model includes the following:

- A Multi-play telecom Carrier, including:
  - SuperTelcoGroup
  - SuperTelcoCommunications
  - SuperData

The SuperTelco Communications organization comprises two business units:

- Mobile
- Broadband: The broadband unit, named SuperData, is an acquired company; this organization has a different hierarchy. The broadband unit includes both video and broadband data services.

Their Product Offering includes (among others):

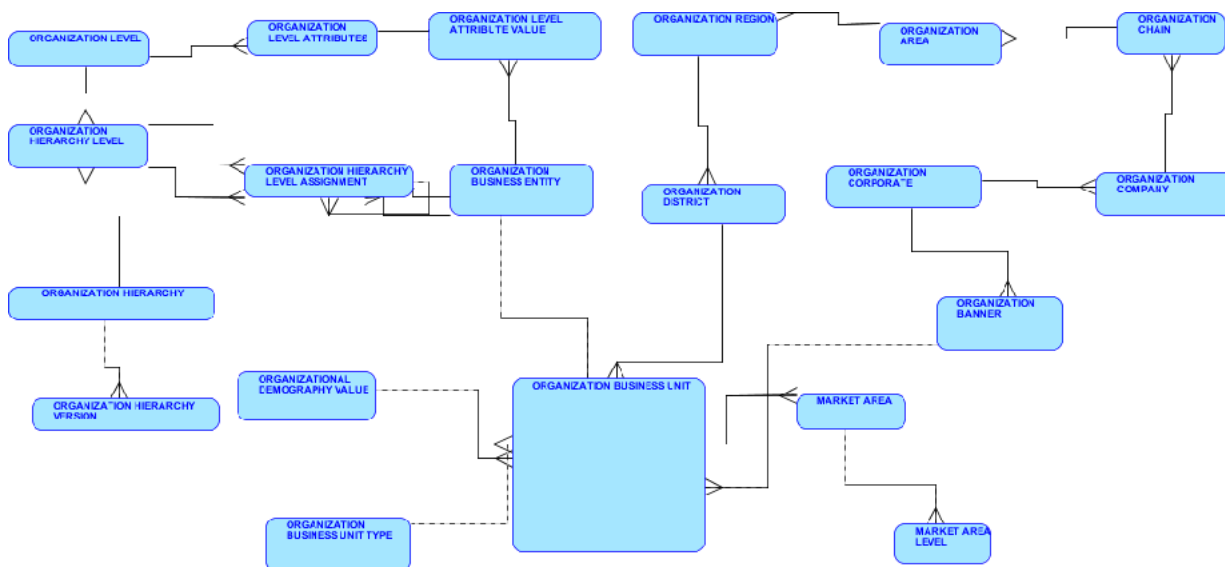
- Broadband Services for B2C and B2B
- Video on Demand
- Mobile (for example 3G) services

Their prospects and then customers will be Tom Daniels and his family (Mary Daniels and their children) and some companies.

## Sample Use Case 1: Setting Up the Business Unit Organization

In this business use case, we describe how to build up the organization SuperTelco as a [PARTY](#) in the data model. In particular, the two main business units (Mobile with SuperTelco and Broadband with SuperData) will be modeled into Oracle Communications Data Model corresponding Subject Area, shown in [Figure B-2](#).

**Figure B-1 Organization Business Units in Sample Use Case**



Oracle Communications Data Model should capture the following administrative functions for the Mobile and Broadband business units:

- HQ, HQ Mobile/HQ Broadband, Customer Care, Sales Marketing
- Related geographic information (for state, county, City, Dealers/Shops and Web Service)
- The people involved, in particular all employees (who is a manager from whom in which organization)

To work with the sample use case you build up the organization SuperTelco as a [PARTY](#) in the Oracle Communications Data Model:

1. There are two ways to store the information for an [ORGANIZATION BUSINESS UNIT](#):
  - Using a standard pre-defined hierarchy
  - Using a flexible hierarchy

2. As shown in [Figure B-2](#), the business unit follows a simple hierarchy stored in the corresponding tables:
  - **ORGANIZATION BUSINESS UNIT**: this is the smallest "independent" unit of an organization which can contain several sales channels and/or customer contact possibilities, such as call centers (stored in **CALL CENTER**), a web site (stored in "Service Web Site"), and shops (in **RETAIL STORE**). The business unit is of a specified type, as detailed in the **ORGANIZATION BUSINESS UNIT TYPE**. All the information relative to this business unit, such as the business address or the company registry number is stored in the **ORGANIZATION BUSINESS UNIT**. It is a sub-type of **PARTY**.
  - This business unit is geographically (and somehow "administratively") situated in a district, region, and area. The geographic entity is stored as specified in the entities: **ORGANIZATION DISTRICT**, **ORGANIZATION REGION**, and **ORGANIZATION AREA**.
  - To understand the notion of "organizational chain" above the organization area, consider for example that the SuperTelco stores are located inside a given supermarket chain. SuperTelco may have a part of the organization related to this chain of supermarket, which would then be stored in the **ORGANIZATION CHAIN** table.
  - The **ORGANIZATION CHAIN** belongs to a company; in this example, the company SuperTelco is stored in the **ORGANIZATION COMPANY** table, itself member of a group whose information is stored in **ORGANIZATION CORPORATE**.
  - When you use a "banner" for a given sales channel, store the banner in the **ORGANIZATION BANNER** table, linking the business unit to the corporate level.
3. As shown in [Figure B-1](#), the business unit could also be part of a proper and changeable hierarchy (or hierarchies) that would then be stored in the corresponding tables of the so-called "flexible" Organization hierarchy:
  - A Business Unit is an **ORGANIZATION BUSINESS ENTITY**: This entity is a reference that allows a flexible definition for the hierarchy level and the attributes you choose per level (see next line).
  - The **ORGANIZATION LEVEL** defines the levels of the flexible hierarchy (whose level attributes and possible values as stored in the entities **ORGANIZATION LEVEL ATTRIBUTES** and **ORGANIZATION LEVEL ATTRIBUTE VALUE**).
  - The hierarchy between levels is defined in **ORGANIZATION HIERARCHY LEVEL**, which belongs to a given **ORGANIZATION HIERARCHY**. Thus, for a given organization several hierarchies can be defined (administrative, geographic, and so on).
  - A hierarchy has a version, defined in **ORGANIZATION HIERARCHY VERSION**. This allows you to change the hierarchy, depending on the historical development of the organization.
  - A Business entity is assigned to a given level through the **ORGANIZATION HIERARCHY LEVEL ASSIGNMENT** table.

Of these two choices: simple hierarchy and flexible hierarchy, the SuperTelco sample use case uses the flexible hierarchy. This is the preferred hierarchy for this sample because the historic growth of SuperTelco specifies that the hierarchy changes over time. To deal with the geographical organization of the SuperTelco stores dispatched in the country however, the standard hierarchy could be used. Such a hierarchy would

support a detailed analysis of the local and geographical differences for the impact of a national marketing campaign.

## Sample Use Case 2: Acquiring a New Customer (with Family Plan)

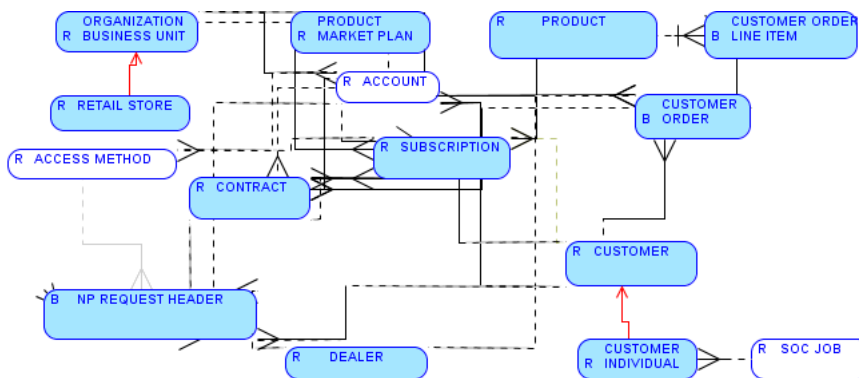
For the sample use case, let us assume that a father (Tom Daniels) goes to a SuperTelco dealer and asks for a Family Plan offering with the following features:

- One main mobile phone postpaid (his)
- One secondary mobile phone postpaid (wife)
- Two additional mobile phones prepaid (children)
- One Friends and Family option that allows calls between these users to be free of charge

The father is moving his service from a competitor and wants to keep his current mobile number (number portability required). This example provides details on the information stored in the various contract, account, customer, and party entities. The actions covered in this area include the following, as shown in [Figure B-2](#).

- Party Interaction (Customer - Dealer)
- Contract setup (Customer, Account, Billing, and others)
- Subscription
- Product Association
- Phone number and equipment associations

**Figure B-2 Customer Acquisition: Family Plan Model**



New Customer with Family Plan Data:

1. The **ORGANIZATION BUSINESS UNIT** information was previously setup, as described in [Sample Use Case 1: Setting Up the Business Unit Organization](#).
2. The newly acquired customer information is stored in the CRM and/or the billing system. This information will feed Oracle Communications Data Model using a custom ETL. One record in **CUSTOMER** is inserted with a name, in this case "Tom Daniels", of type "individual". Usually customers are not required to provide additional user information when purchasing multiple numbers. If this information is provided, you can save the information with the **PARTY** entity (and you should use the **PARTY ASSIGNMENT** table to describe their relationship to "Tom Daniel" - assuming this information is available in the data source).



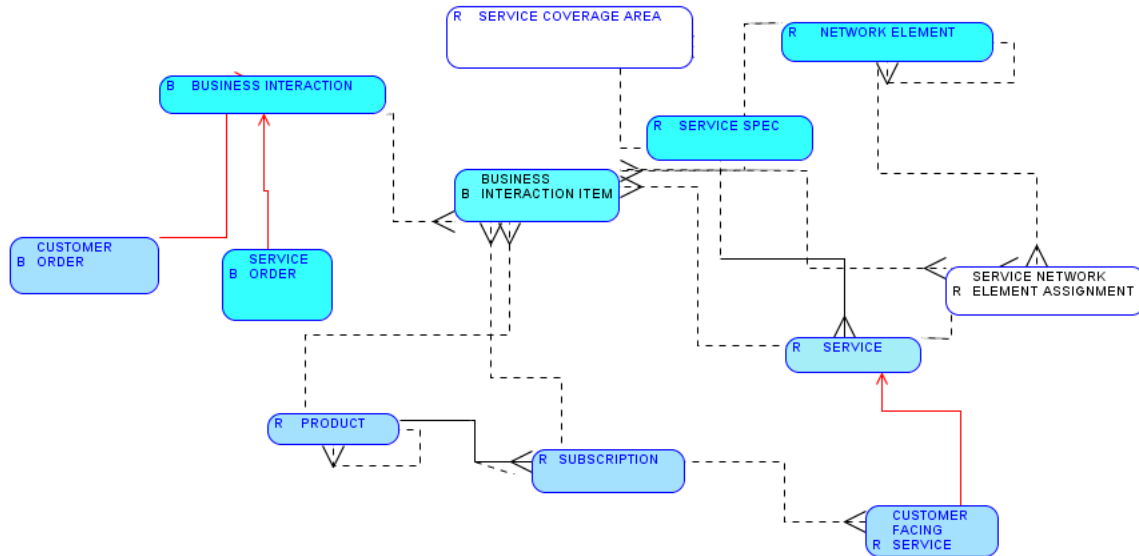
3. Save the related information about a customer, such as profession, age, education, and other information in the related **CUSTOMER** tables, the referential lookup tables, such as **SOC JOB** ("Standard Occupational Classification" system for the work activity of the individual customer). Note that you save confidential information such as the date of birth in a special table called **CUSTOMER RESTRICTED INFO** that can be individually hidden/encrypted in the database.
4. A contract between Tom Daniels and SuperTelco is set up in the **CONTRACT** table. The customer has a contract with the Service Provider which defines the accounts (normally with a unique login or a unique identifier). For example this sample contract is based on a special package "PKG\_Mobile\_300". The product packages available to any type of consumers (individual - B2C or businesses - B2B) are saved in the **PRODUCT MARKET PLAN** entity.
5. One customer account is inserted into the **ACCOUNT** entity, with the customer key pointing to the new customer instance. The account is the financial vision of the customer. There is normally only one account per customer (whatever the number of subscriptions they buy) but multiple accounts per customer is allowed (typically to either reproduce the billing vision or in some specific cases).
6. The customer, Tom Daniels, has selected four different handsets (stored in the **EQUIPMENT** table; this is not visible on the diagram shown in [Figure B-2](#)).
7. Four Mobile phone numbers are saved into the table **ACCESS METHOD** and the associated handset. Each phone number uses the current date for the effective date and also has the account ID pointing to the account (as the account ID was set up).
8. A customer order, stored in the **CUSTOMER ORDER** entity, is generated with all the items that the customer ordered including mobile numbers, product packages, and so on (including the number portability request).
9. A number portability request is triggered by the order and a number portability event is stored in the **NP REQUEST HEADER** table. Due to the number portability request, the customer order may be processed with some delay; the old network provider must respond positively to SuperTelco's number portability request. In this case, either only Tom Daniels's IMSI or all IMSIs related to Tom Daniels will be activated after the contract date ("today"). Please note that for this case, an additional, custom ETL(s) to the mediation or provisioning system may be necessary.
10. Four subscriptions are inserted into the **SUBSCRIPTION** table. A subscription is considered a "non-network event" as opposed to a call, which is a "network event". Each subscription associates one product, one customer, one account, and one **ACCESS METHOD** (mobile number).
11. The customer order could be loaded into Oracle Communications Data Model through the Extract-Transform-Load scripts (ETL) at each change of status or only once it is completed and fulfilled in the BSS/OSS systems.
12. A fulfilled (closed) customer order automatically impacts the data mining tables related to the customer segmentation, market share, and the revenue OLAP cubes: For example, due to the number portability request, the competitor loses one customer and SuperTelco wins one customer in the given segment.
13. In the pure prepaid case, no bill is created. However, the purchase of a voucher for any type of prepaid services is taken in account in Oracle Communications Data Model: PayTV, Music downloads, Prepaid card with handset, and so on. The original prepaid allowance or the recharge will be recorded and an account is created, similarly to the postpaid case.

## Sample Use Case 3: Service Implementation

After Tom purchased the family plan, made the payment, and the customer order was generated, the provisioning engine takes over.

The service implementation is stored with Oracle Communications Data Model as shown in [Figure B-3](#).

**Figure B-3 Service Implementation**



For the service implementation, the provisioning engine does the following:

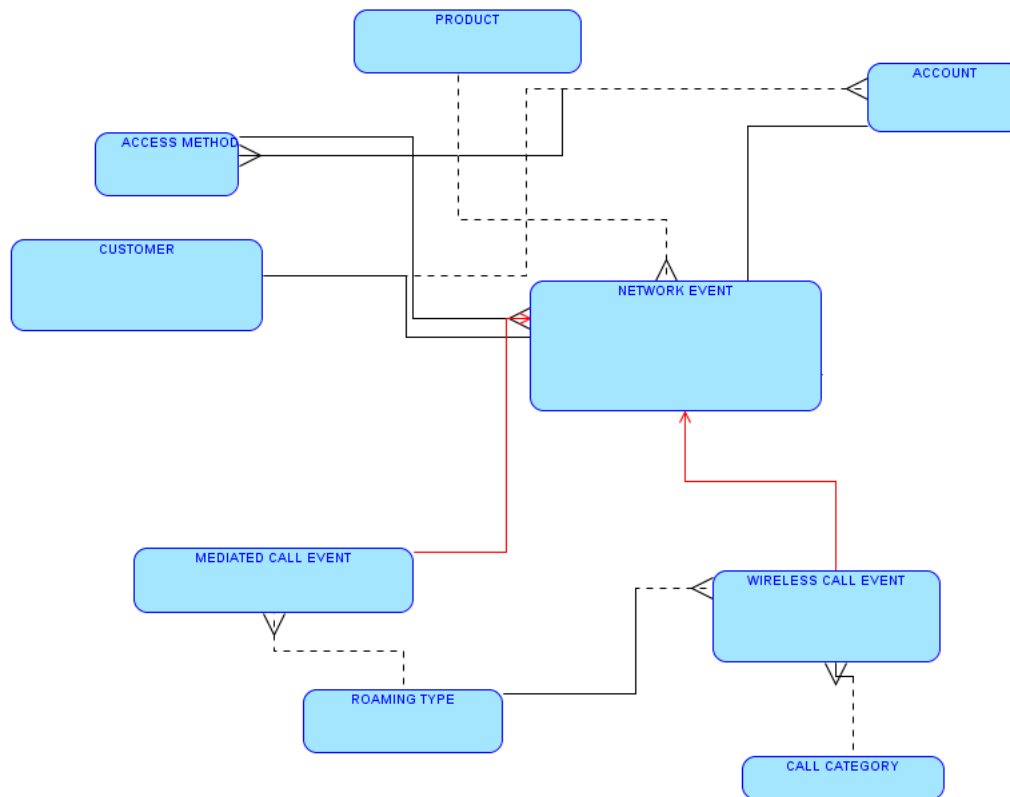
1. Each "customer Order" is disassembled into multiple "Service Order", each of which is used by the provisioning engine to orchestrate the whole system. Each "Service Order" is normally corresponding to a specific "Network Element" or a group of "Network Element". For example, one customer order of Prepaid GSM phone can be fulfilled by multiple "Service Order", including account setup of in the billing and CRM systems, in Intelligent Network system, and so on.
2. Once the "Service Order" is executed, some new services may be generated. The service may be "customer facing service", which is an internal presentation of "Subscription". The business user sees each product realization on each customer as a "subscription" to track the business usage, while the technical user (from the network) sees a customer activation (and usage) on a "network element" (including logical "network element" like phone numbers) as a "Resource Facing Service". These notions are those defined by the TeleManagement Forum.
3. In case any "Network Element" failed, technical support can easily track which customers or accounts may be affected by following relationships from "network element" to "Service" and then to "Subscription".
4. As subtype of the Business Interaction, the `CUSTOMER FIELD SERVICE ACTIVITY` table (not visible on the diagram) would store any direct interaction on customer's or network's site for this order.

## Sample Use Case 4: Storing Customer Call Data

After Tom Daniels has got his phone, and after the phones for his wife and children are activated, Tom Daniels regularly calls his family and friends. Tom Daniels uses the phone primarily to make voice calls and to send SMS messages; he rarely uses the data or MMS services.

The customer call information is stored with Oracle Communications Data Model as shown in [Figure B-4](#).

**Figure B-4** *Customer Calls Model*



The call data can be saved in Oracle Communications Data Model:

1. The **CUSTOMER**, **PRODUCT**, and **ACCESS METHOD** are set up, as described in [Sample Use Case 2: Acquiring a New Customer \(with Family Plan\)](#).
2. Each time the customer makes a call, this generates a Call Detail Record (CDR) in the network, at the switch level (raw CDRs) which then will be collected by the mediation (Mediated CDRs) and forwarded to the rating and/or billing engine (Rated CDRs). This last CDR - in the wireless case - is saved into the **WIRELESS CALL EVENT** table in Oracle Communications Data Model (this is a sub-entity of the **NETWORK EVENT** table). A **NETWORK EVENT** is an abstract entity which defines the minimal common definition of any network events (calls and service usage of any type).
3. The **CALL CATEGORY** tracks the type of a call, such as a data or a voice call.
4. The **ROAMING TYPE** tracks whether the call roams from another operator or to another operator.

5. The `MEDIATED_CALL_EVENT` table stores the CDRs from the mediation system (before entering the billing engine).
6. The `NETWORK_EVENT` table stores the call details such as the call date and time and the call duration.

Note: Depending on where the source Call Detail Record (CDR) is taken, the CDR may contain a charge for the following:

- In case of Roaming, the (base) charge is set by the other operator (raw or mediated CDRs level), while the carrier itself usually adds a surcharge (fixed percentage or fixed price per minute - normally higher than the roaming charge).
- In case of Value Added Service, the charge is set by the vendor (raw or mediated CDRs)
- In case the CDR source is the billing system, after rating has taken place (rated CDRs). This is also true for CDRs from the IN Platform which is doing the rating (typically for Prepaid).

Depending on the type of analysis, it is usually recommended for revenue assurance to check at least both mediated (before the billing system) and rated or billed CDRs (from the billing). The raw CDRs, direct input from the network, are usually more complex to deal with (binary type of data, a potential factor 100 in number of CDRs and additional signaling information) but are very interesting from a network operation and revenue assurance point of view.

## Sample Use Case 5: Customer Billing

At the end of each bill cycle period (usually a specific day of the month for a given bill cycle), SuperTelco runs the billing process over the calling records for the customer and generates an invoice. In our example, Tom Daniels receives an invoice of \$100 for all the phone numbers (Postpaid only normally, but one could think that he could also have agreed to pay by default every month some Recharges for his children "Prepaid" phones). Tom Daniels has to pay SuperTelco within a month or the service could be suspended.

Oracle Communications Data Model stores the customer billing, invoice, and payment information as shown in [Figure B-5](#).



9. When Tom Daniels pays the invoice, for example using a bank transfer, the payment is stored in **ACCOUNT PAYMENT** and assigned to the corresponding open invoice. The **ACCOUNT PAYMENT** is stored into the **INVOICE PAYMENT ASSIGNMENT**.
10. The difference between the **INVOICE** amount and the payment adds to the debt (the debt is not shown in [Figure B-5](#)).

Note: for the revenue assurance sub-area and its corresponding reports, it is important to store the itemized bill in Oracle Communications Data Model. The usage items (detailed call list) can then be compared, one by one, with the rated CDRs and using this method you can find the difference between rated and billed CDRs.

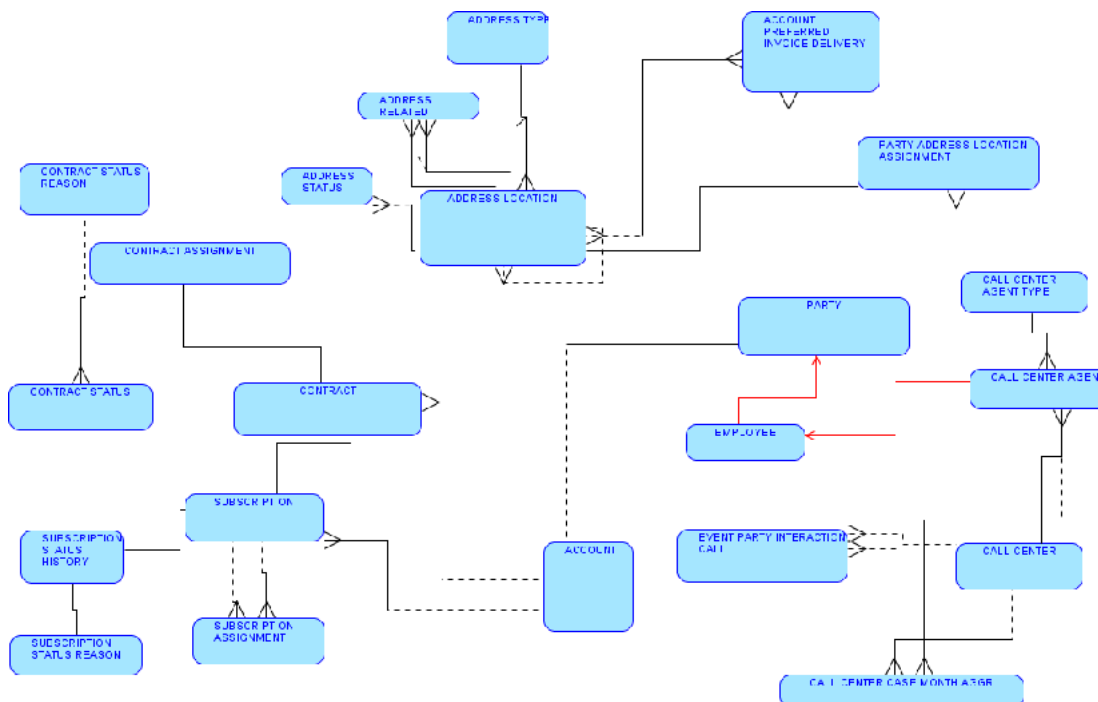
The section, "Sample Use Case 8: Targeted Promotion for Video-on-Demand Services" shows a campaign set-up with the prospect choice. For this campaign, a measure of the campaign success could be obtained by analyzing the number of subscribers who contacted the call center and requested a product change based on the promotion, as a factor of time, in hours or days, between sending the promotion and customer call-back.

## Sample Use Case 6: Changing Plan and Billing Address

SuperTelco launches a campaign to promote a package with converged broadband and mobile services. Tom Daniels sees the promotion message, delivered through an SMS campaign, and decides to take advantage of the promotion. He calls the call center and asks to change his product package to obtain the new converged family plan that includes broadband services. Later, using the SuperTelco Web Self-Service Interface he changes his billing address.

SuperTelco uses Oracle Communications Data Model to store this customer interaction as shown in [Figure B-6](#) and as outlined in the corresponding steps.

**Figure B-6 Changing Plan and Billing Address Data Model**



1. The section, "[Sample Use Case 1: Setting Up the Business Unit Organization](#)" covers information about the call center.

The call center agent, stored in `CALL_CENTER_AGENT`, as well as the team and department, in `CALL_CENTER` table, are uniquely identified in Oracle Communications Data Model. The call center agent may be an employee (stored then in `EMPLOYEE`) of SuperTelco or an employee of a partner company that runs the call center for SuperTelco. For this example the `CALL_CENTER_AGENT` is a subtype of `EMPLOYEE`. All `INTERACTION_CHANNELS` need to be configured, such as the `CALL_CENTER` and any Web or Online business system, or a counter (in a shop), to make sure that one can trace the interaction with the customer at any time.

2. The details for interaction information for the call center are stored as a "non network event". Depending on the method Tom Daniels uses to contact the call center, the corresponding code from `INTERACTION_TYPE` is stored with the event:
  - Using `EVENT_PARTY_INTERACTION_CALL`. This information is aggregated in the `CALL_CENTER_CALL_MONTH_AGGR` for further analysis.
  - Using `PARTY_INTERACTION_THREAD` to store the reason for the customer call. A thread groups all interactions having to do with the same list of requests, inquiries and issues the customer deals with. This information is aggregated in the `CALL_CENTER_CASE_MONTH_AGGR` for further analysis.
3. When the customer confirms the contract change, the product change process occurs in the CRM and billing system. This process triggers two `SUBSCRIPTION` events for the `ACCOUNT` (when the converged product is a complete package which cannot be split). Oracle Communications Data Model stores the following events:
  - The first event is a cancellation for the existing `SUBSCRIPTION` ("PKG\_Mobile\_300"). The `effective_to_date` attribute changes to the current date.
  - The second event for the `SUBSCRIPTION` is a new product subscription for the converged package (as described in "[Sample Use Case 1: Setting Up the Business Unit Organization](#)").
  - The third event involves creating the link between the two subscriptions and uses the table `SUBSCRIPTION_ASSIGNMENT` to store their relationship.

If, as part of the commercial process for this offering defined by the Service Provider the `CONTRACT` requires changes, then do the following:

- Close the old contract with a "cancellation reason" specified (find the cancellation reason in the lookup table `CONTRACT_STATUS_REASON`).
- Create a new contract with the corresponding `CONTRACT_TERM_VALUE` supplied.
- If the `CONTRACT` does not need to be replaced and the new product uses the same contract, then change the product assignment for the existing contract in the table `CONTRACT_PRODUCT_ASSIGNMENT` with a specific assignment code.

Note that a product change impacts several other tables on the next automatic data movement (and their corresponding reports):

- The `CANNIBALIZATION_DETAIL_MONTH_AGGR` table which captures the individual record related to the tariff and package change. This table fills the Cross and Up-sell mining model.

- The `CHURN_PREDICT_SOURCE_DERIVED` "Churn Predict Source". The contract or product has changed and this change impacts the likelihood to churn.
- Customer Lifetime Value associated table is also updated. The contract or product has changed and this change impacts the likelihood to churn.
- The Revenue Forecast OLAP cube also changes for this customer.

The details for the product charge information are stored in the various `PRODUCT` sub-entities, including: `PRODUCT_RATING_PLAN` and `PRODUCT_RATING_PLAN_DETAIL`.

Note: the Oracle Communications Data Model does not rate, from the monetary perspective, any kind of event (no "shadow billing" as such), although one could customize Oracle Communications Data Model for this purpose.

The customer table, using the entity `CUSTOMER` and the attribute Billing Address Location Code, stores the customer's billing address. This attribute links to the actual address entity `ADDRESS_LOCATION`. The billing address is one type with a value from the `ADDRESS_TYPE` for the new address. For example, when Tom Daniels changes the billing address, using the SuperTelco Web Self-Service Interface, the change is captured by the ETLs (from the CRM or from the web interface) and is stored in Oracle Communications Data Model as a the non-network event (from the source Web Interface, the Web based customer self-care system, typically where you login to obtain your offer).

When Tom Daniels has given the new address, the two addresses are linked with the `ADDRESS_RELATED` entity. With more than one address, changes are required in the `ADDRESS_RELATED` and `CUSTOMER` entities:

- The current billing address in `ADDRESS_RELATED` has the value "Old Billing Address" as reason.
- The new billing address reason is assigned: if this is a new home address the new address exists in Oracle Communications Data Model and becomes the new billing address.
- The `ADDRESS_STATUS` of new address is set to "Active" while the `ADDRESS_STATUS` for the old address becomes "Inactive".
- In the `CUSTOMER` table, the new billing address location is overwritten and the billing address effective date is updated to the correct date.
- The change of address may impact the customer profiling mining model.

Additionally, the `PARTY_STATUS_HISTORY` could be updated (depending on what information the Service Provider requires).

## Sample Use Case 7: Targeted Promotion for Video-on-Demand Services

SuperTelco analyzes the current customer base to identify the customers who are most likely to purchase the Video-On-Demand service. The Marketing department would also like to increase the number of customers in the loyalty program (this can help limit churn). Using the Data Mining tool for target promotion, the business analyst in the SuperTelco Marketing generates a list of customers that are likely to be interested in this service and that are not currently members of a loyalty program ("supervised" mining).

A sample of the target list of customers is selected to test the promotion. Customer Tom Daniels is among the target list of customers. SuperTelco sends the target



customers an email. In order to collect customer feedback, SuperTelco decides that the test promotion customers must contact the call center to get the Video-On-Demand service and one free DVD.

Tom Daniels decides to buy the service and calls the [CALL CENTER](#) to get the new promotion, including:

- A month of Video-On-Demand service for ten dollars.
- Five films per month free and one free DVD.
- During the call he is offered the option to be added to the loyalty program with 500 Loyalty bonus points.

The section, "[Sample Use Case 6: Changing Plan and Billing Address](#)" covers the impact of a product change.

The business analyst prepares the campaign, selects the prospects, and measures the campaign success as follow:

1. The marketing manager determines the number of customers that are members of the loyalty program. Membership in the loyalty program seems to be a factor in reducing churn and increasing SuperTelco's knowledge of a customer's preferences. To increase the number of customers in the loyalty program the marketing manager decides to contact existing customers to proposing a new offering, the Video-On-Demand product, and bind the offering to the loyalty program membership. The loyalty program membership is proposed whether the customer takes advantages of the Video-On-Demand promotion or not. Thus, the promotion includes two promotions:
  - a. Service Offering: Video-On-Demand
  - b. Loyalty Program Membership
2. The product setting for Video-On-Demand is specified in the [PRODUCT](#) and [PRODUCT MARKET PLAN](#) tables. The purpose and summary information for each promotion is specified in the [PROMOTION](#) table. Some [PROMOTIONS](#) may serve a single strategic purpose (the [CAMPAIGN](#) tracks the promotion purpose).
3. The business analyst for this campaign has the following requirements:
  - a. Prospects for Video-On-Demand should have an active broadband service.
  - b. Prospects for the loyalty program should not yet be a member of the loyalty program.
  - c. Prospects should only be individuals.
  - d. Prospects should not be in a campaign or have recently, within the last three months, been contacted for a promotional offering.
  - e. Prospect revenue should be at least in the middle range.
  - f. Prospect payment should be on-time, debt aging at zero or near zero, and the prospect should have had no service suspension for bad payments.
  - g. Before proposing the promotion on a large scale the business analyst should select a list of two hundred sample customers to test the campaign.
4. Because of the information received the business analyst uses the "supervised" method for targeted promotion data mining, using the specified criteria to find the prospect list.
5. The business analyst determines that there are two possibilities to generate the prospect list contacts:

- The operator can buy a [CONTACT LIST](#) from an external marketing data provider. The [SOURCE SYSTEM](#) contains possible sources for this type of data. The marketing department can also design criteria based on which customers to select from a [CONTACT LIST](#). The customer information may not be in the operator's customer database yet. In this case the customer information is recorded in [PARTY](#) and [PARTY CONTACT LIST PARTICIPATION](#) that associate the [PARTY](#) and a [CONTACT LIST](#). The [PROMOTION CONTACT LIST UTILIZATION](#) records which promotion utilizes which [CONTACT LIST](#).
- The operator can run data mining, provided with Oracle Communications Data Model including the "Targeted Product Promotion", or "Customer Segmentation". This corresponds to a Mining result table whose name is "DWD\_CUST\_PROD\_AFFLTN". The output from the mining model [CUSTOMER SEGMENTATION MODEL](#) is specified in the entity [CUSTOMER SEGMENT](#).

For more information, see [Chapter 10, "Oracle Communications Data Model Data Mining Models"](#) and ["Model 4: Cross-Sell Opportunity"](#).

For the sample use case the customer Tom Daniels is part of the two hundred customer test sample. He is tagged as a prospect for this campaign and will appear in the table [PROSPECT](#). Tom Daniels can be a prospect of only one campaign at a time. This is strictly necessary to correctly measure the campaign response. Note that because Tom Daniels is an individual, the table [PROSPECT INDIVIDUAL](#) is filled; in addition, some data may be collected during the promotion customer interaction.

Following Tom Daniels's interaction with the [CALL CENTER](#), as specified in the [PARTY INTERACTION THREAD](#), the tables [INITIATIVE RESULT TYPE](#), [PARTY PROMOTION RESPONSE](#), and [PROSPECT](#), field `Prospect Result Code`, are updated:

1. Tom Daniels bought the service as specified in the promotion and the video chosen by Tom Daniels is recorded for further analysis (for billing and because the interest is saved information on "Tom Daniels's interest" and on most successful "Videos" type and name).
2. Tom Daniels accepts membership in the loyalty program, stored in the [LOYALTY PROGRAM](#) entity, thus increasing the number of loyalty program members and the knowledge of Tom Daniels's interests.

Each response from a targeted customer is recorded in [PARTY PROMOTION RESPONSE](#). A positive response is stored as part of the mining result to the campaign, thus providing a better score to individual customers in a similar segment as Tom Daniels. The scoring table is reused to calculate the likelihood of a positive answer to the campaign when the campaign is broadened beyond the test to other customers.

Note: A customer email triggered this initiative and the initiative was completed by the call center. Thus, Tom Daniels's [CALL CENTER](#) call was triggered by the email so the medium of this targeted promotion is email while the sales channel is the [CALL CENTER](#).

As a consequence of the new loyalty program membership and the associated 500 bonus points, a "non-network" event of type Loyalty is created and stored in the [EVENT LOYALTY PROGRAM](#) table. Tom Daniels also appears in the [LOYALTY PROGRAM](#) table ([LOYALTY PROGRAM MO AGGR](#)) coming from the previously defined [CALL CENTER](#) in the [LOYALTY PROGRAM CHANNEL](#) entity. The [PARTY STATUS HISTORY](#) is changed and some fields of [CUSTOMER](#) are updated (for example, `Initiative Number` and `Customer Balance`).

## Sample Use Case 9: Retention of Terminating Contract

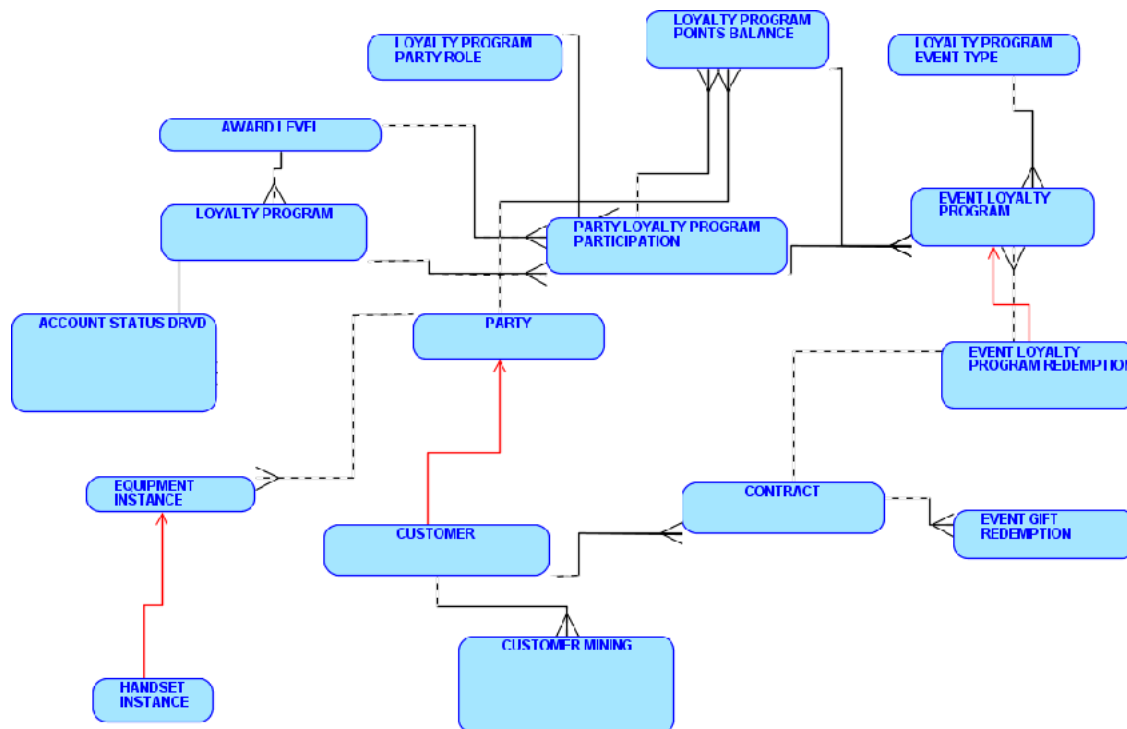
After a period as a customer, Tom Daniels's contract and plan ends. Before the contract ends SuperTelco notices that he is likely to churn, according to the socio-demographic data, the subscriptions he has, the usage and revenue pattern (based on comparisons with the customer segment).

The call center proposes that this customer continue with a new offering:

- Family Broadband
- Video-On-Demand and Phone
- The new generation phone as equipment
- A special 12% Discount for 12 months (12 month sign up)

SuperTelco uses Oracle Communications Data Model to store this customer interaction as shown in [Figure B-7](#) and as outlined in the corresponding steps.

**Figure B-7 Retention of Terminating Contract Model**



The terminating contract and call center retention involves the following steps:

1. Tom Daniels's churn likelihood increases as the end of the contract approaches. Because he is an important customer, belonging to the loyalty program, the churn likelihood should be lower than in other segments (according to [AWARD LEVEL](#) when Tom Daniels participates in the loyalty program by [PARTY LOYALTY PROGRAM PARTICIPATION](#)).
2. The operator may run Oracle Communications Data Model mining model to identify the highest probability churners. The result from mining model is saved in [CUSTOMER MINING](#) table. For more information, see "[Model 1: Churn Prediction](#)", and "[Model 3: Customer Churn Factor](#)".
3. There are usually two possible actions when a contract is due to terminate:

- Do nothing: In this case the contract renews itself automatically when it is not actively canceled (assume that the customer will not churn). This is typically the case for a "sleeping" customer" that does not take the latest cheaper offering.
  - Actively contact the customer: In this case, contact the customer before the customer is sent an end contract term letter (do this if it appears that the probability of customer churn is high and this customer is worth the investment). This action is particularly true for short-term churn-conditions. For example, when a communication is indicated up to one month before the end of the contract where the customer may get an offer from a competitor. If the contract ended automatically an action of the Service Provider is required for a renewal.
4. Assuming that Tom Daniels is contacted, SuperTelco needs to know what to propose. Choices for this contact include the following:
- Renew the contract with no changes: this is possible but usually after several years this option is not attractive, due to competition.
  - Proposing a new offering.
  - Renewing the contract with new hardware and a discount if the customer engages for more than twelve months.

For the sample use case with Tom Daniels, contract renewal with new hardware might be a good offering when the handsets for all the family members are old, over two years old, as specified in the information from [HANDSET INSTANCE](#) (subtype of [EQUIPMENT INSTANCE](#)). By offering a contract renewal with new hardware, you could allow the customer to use-up some loyalty points he has earned (by selecting different equipment). Additionally, binding the customer to twelve more months according to his ARPU Band could be worth a 12% discount.

Note that when you offer a new handset, this could provide new capabilities. For example, applications to download that could generate additional revenue for SuperTelco. This expectation can be reinforced due to the age of the children.

5. From the process perspective this use case is similar to the targeted promotion as described in "[Sample Use Case 7: Targeted Promotion for Video-on-Demand Services](#)" with similar entities and similar changes. After the customer accepts the new offer, a new [CONTRACT](#) is setup. In addition to the new [CONTRACT](#), Tom Daniels is granted a gift. In this example, the new contract offer includes a new handset or a one month data service free pass. How the customer decides to pick up the gift is tracked in [EVENT GIFT REDEMPTION](#).
6. Additionally to the party interaction, a non network event is stored in the table [EVENT LOYALTY PROGRAM REDEMPTION](#) to contain the free handset information. The free handset comes out of the association with the [GIVE AWAY TYPE](#) table assigned from the corresponding market plan (in [PRODUCT MARKET PLAN ASSIGNMENT](#) table). The handset itself is in the [ITEM](#) table.
7. In addition, to provide information on the kind of handsets Tom Daniels could afford, use the table [REDEMPTION MO AGGR](#).
8. Note that if Tom Daniels was not a member of a loyalty program a similar offer could be available; the interaction for this handset offering would be stored into the [EVENT GIFT REDEMPTION](#) table.



1. The information for the customer and account setup is described in "[Sample Use Case 2: Acquiring a New Customer \(with Family Plan\)](#)".
2. At implementation time or when the dealer first appeared, the dealer is entered as a `DEALER`, for example John Dealer, a sub-type of the `PARTY` table. A `DEALER` includes the associated entities:
  - a. An address (stored in `ADDRESS LOCATION` and related to `DEALER`).
  - b. A `SALES CHANNEL` and a channel to identify the dealer. The `SALES CHANNEL` is an abstracted umbrella that unifies both an external `DEALER` and the internal sales agents as an `EMPLOYEE`. The `JOB ROLE` for each employee is in `EMPLOYEE JOB ROLE ASSIGNMENT`. For example, the job role for a Sales Employee should be "Sales Agent".
  - c. An organization structure or a relationship to individuals (`ORGANIZATION BUSINESS UNIT`).
  - d. A discount group in the `DISCOUNT GROUP` entity within the `DEALER DISCOUNT GROUP ASSIGNMENT` table. All the discounts the provider allows for a dealer are defined in `DEALER DISCOUNT GROUP ASSIGNMENT` (as a group). This entity feeds the dealer cost and customer cost table.
3. As an employee in sales, John Dealer is associated with a sales commission plan code from the `SALES COMMISSION PLAN` table (using `JOB ROLE`). The details of the plan `SALES COMMISSION PLAN DETAIL` or the type of commission `COMMISSION TYPE` are stored in associated entities so that the full commissions and rewards for the item, equipment, services, and product market plan sold are set-up. The `EMPLOYEE JOB ROLE ASSIGNMENT`.
4. The Party interaction between John Dealer and Tom Daniels generates a new `CUSTOMER ORDER`. The customer order is generated in the BOSS/OSS system and loaded into Oracle Communications Data Model. For each customer order the `SALES COMMISSION DETAIL` is loaded to track how much commission should be granted to the `DEALER` in this sales transaction. Once the `CUSTOMER ORDER` is fulfilled in the provisioning system, a contract is settled with four activations, four handsets (`ITEMs`) and probably five products (one per mobile and the shared Friends and Family offering (even if there is only one contract). This has the following consequences in Oracle Communications Data Model:
  - a. John Dealer generated revenue increases and the number of customer and subscriptions: the revenue is compared to the quota the dealer had at the beginning of the month on each of these items, revenue, number of customers, and subscriptions, for the calculation of the dealer's commission and potential bonus and for the final dealer report.
  - b. John Dealer "costs" increase correspondingly, as he wins a percentage of the generated revenue.
  - c. The number of handsets available at John's shop is reduced by four (two Postpaid and two Prepaid). The out-of-stock forecast mining model is automatically fed and correspondingly updated.
  - d. The commission associated with the handsets through the commission indicator attribute ("Commission Ind") will trigger the calculation of an extra commission for the items sold, aggregated on the monthly basis (using `COMMISSION DAY DRVD` and `SALES MONTH AGGR`).
5. Assuming SuperTelco rewards on the effective revenue generated by the customer, depending on the ARPU band of the account associated with the customer, the special bonus for John Dealer is updated with Tom Daniel's profile and added as a

supplementary cost for the dealer and for the customer. Note that often at this stage a fraud detection mechanism is applied to limit dealer or customer fraud.

6. As Tom Daniels changes the package to the convergent offering, due to a campaign, SuperTelco does not reward John Dealer. The campaign cost may be increased by the cost of creating and sending the SMS, in general, and by the cost of the call center agent interaction. The customer cost could also only be increased by the cost of the call center agent interaction (assuming the SMS sent to Tom Daniels is not considered). Note that the fact that Tom Daniels changes his package will probably impact the Band ARPU that could also change the bonus for John Dealer.
7. As Tom Daniels's contract comes to an end SuperTelco may decide to reward only the call center as a successful clawback action rather than granting further John Dealer with a bonus for the loyalty of the customer, as the later was not involved at all in the action. The customer cost for Tom Daniels would still increase. The employee and call center cost would also correspondingly increase (here, probably only the employee cost, as the call center cost must be considered to be the sum of the labor, employee, costs and other costs). For example the rent for the building or of the call center service is typically associated with the location of the call center only. Note that its total margin, due to the revenue generation through the contract renewal, is increasing even if the relative margin will probably decrease over the month.
8. At each end of month when the sales agent commissions are paid by payroll, the information in [SALES COMMISSION PAYROLL](#) is populated.
9. Sometimes certain dealers may commit fraud when bringing in new customers. For example, a dealer may have friends sign contracts to win a gift but then terminate the contract. The new customers brought in by the fraudulent dealer may be identified by [SUBSCRIPTION STATISTIC DRVD](#). In this derived table some statistical functions are applied to find a high churn rate by a possibly cheating [DEALER](#), compared to all other dealers.

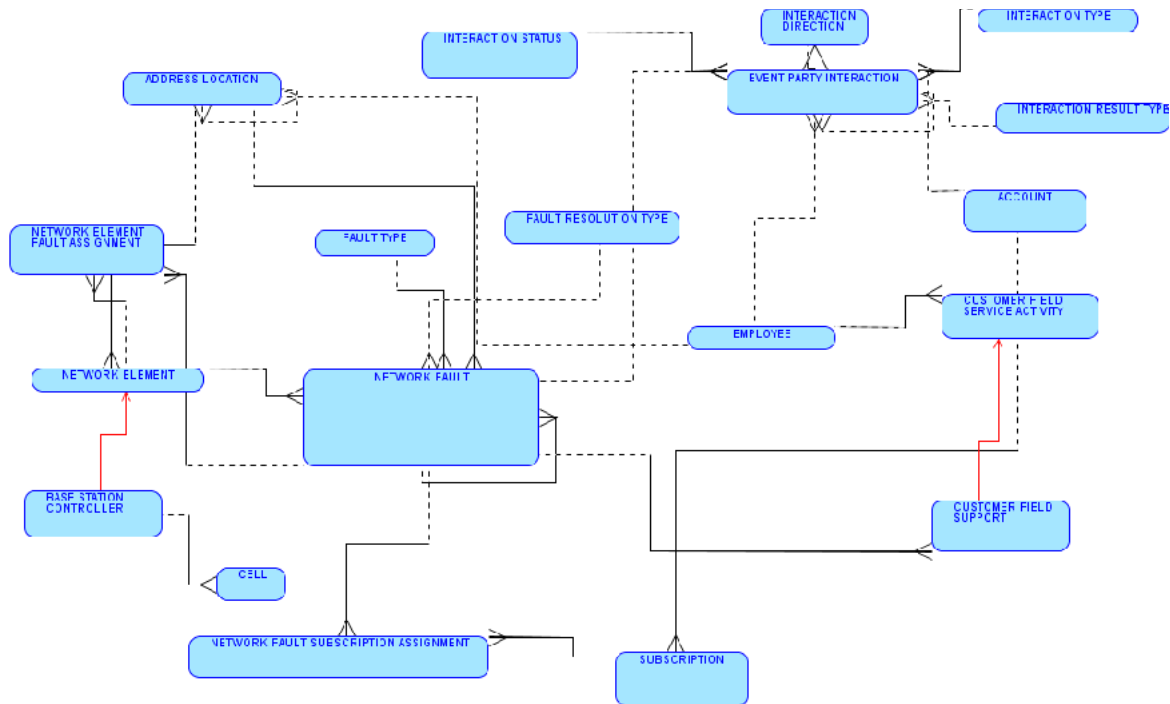
## Sample Use Case 11: Handling a Network Fault

The Network Monitoring System detects a failure at a switch. SuperTelco wants to understand how many customers are affected by the incident. The Network Monitoring System queries the Network Inventory to get the resource ID of the faulty element. The Network Monitoring System then generates a "network failure" event and Oracle Communications Data Model captures this event.

SuperTelco uses Oracle Communications Data Model to handle a network fault, as shown in [Figure B-9](#) and as outlined in the corresponding steps.

SuperTelco includes the full network structure as specified in Oracle Communications Data Model and both the network operating and the network inventory applications provide information to Oracle Communications Data Model once a day.

Figure B–9 Handling a Network Fault Model



Consider the case and steps required to handle a network fault:

The first questions for the manager after identifying the issue are:

1. One evening at 8pm a network cell suffers a power outage after being hit by lightning, and the network cell goes out and does not restart. The real-time network monitoring system alerts SuperTelco maintenance central. This allows SuperTelco to quickly identify where the failure is (site, location, default configuration before the break-down) and SuperTelco sends a team to look at the issue. Assume that this outage is a cell which is difficult to reach, despite being in a high density population area; thus it takes four hours to the maintenance team to repair and restart the network cell.
2. While the network is down, SuperTelco customers call the call center from fixed lines to complain. Some customers threaten to quit the service if the problem persists.
3. Up to this stage, Oracle Communications Data Model does not play a role. One could assume that Oracle Communications Data Model gets this summary information events, status, and so on, daily (at 2am the following morning). Note if the ETLs for the network controlling applications are configured such that Oracle Communications Data Model is updated in near real-time, for example hourly, then Oracle Communications Data Model may know about the event sooner.
4. The SuperTelco manager gets the network fault information in real-time from the network applications team.
  - Where is the cell located?
  - Whose qualified team is in charge now?
  - Which services are impacted?
  - Which customers may be impacted?



- What is the average revenue impact if nothing is done?
- 5. Network applications should be able to answer directly where the cell is located and the team in charge. Note that Oracle Communications Data Model could also identify this information if the ID of the cell that broke down is supplied (even if Oracle Communications Data Model does not yet know that it broke down). A simple adhoc query on the `NETWORK_ELEMENT` table, and its sub-tables, could answer the question:
 

"Where is my network element ID xxx?"

To answer the question:

"Who is in charge according to the maintenance plan?"

Oracle Communications Data Model can supply this information with a customization of the model (this information is not available out-of-the-box). If the network fault happens to multiple `NETWORK_ELEMENT`s, all the faulted network elements are tracked in `NETWORK_ELEMENT_FAULT_ASSIGNMENT`.
- 6. Each occurrence of a network failure is recorded in `NETWORK_FAULT`. When a network fault happens at customer site, technical support activities to solve the problem are saved in the `CUSTOMER_FIELD_SUPPORT` when loaded into Oracle Communications Data Model. The `CUSTOMER_FIELD_SUPPORT` entity is a subtype of `CUSTOMER_FIELD_SERVICE_ACTIVITY`.
- 7. Once the network fault is resolved the resolution type of the network fault is loaded according to `FAULT_RESOLUTION_TYPE`.
- 8. The list of services impacted is related to the list of elements which were out. In the sample use case, with a lightning strike, consider the full wireless traffic is down in the area near the antenna. Because this area is a high density area, one could expect that other antennae may partly cover the geographic coverage. In a GSM network, geographic areas are divided into different `CELLS` which are served by the corresponding `BASE_STATION_CONTROLLER`. The `BASE_STATION_CONTROLLER` is a subtype of `NETWORK_ELEMENT`. A simple report showing the affected areas and services also lists the services associated with the cell.
- 9. You can obtain a list of impacted customers through the `NETWORK_FAULT_SUBSCRIPTION_ASSIGNMENT`, which links the network fault to the `SUBSCRIPTION` table. The later contains the Circuit Component Code attribute that allows you to use the table `CIRCUIT_COMPONENT` to get the `NETWORK_TOUCHPOINT` concerned, the `CELL_SITE` being a sub-table of `NETWORK_TOUCHPOINT`. Consequently, a simple query on all subscriptions whose circuit component is tied to the cell ID that failed provides a list all the customer information associated with the given cell.
- 10. Similarly, the exact list of products impacted, per customer, can easily be provided (related to the service that is down and the subscriptions concerned).
- 11. With a list of products impacted, the manager can check how many calls normally run Friday evening between 8pm and 12pm, and get the average revenue generated at that time for those customers. This provides the average revenue loss within the four hours of time-off. The manager may send an email to the call center with the list of potential customers, to warn the call center that within the next three to four hours, those customers may be complaining about a loss of coverage.
- 12. When a customer calls the call center, an interaction event is created in `EVENT_PARTY_INTERACTION`, with an interaction type of `Complain`.

13. With the email and the customer list, a call center manager can warn the call center employees, and possibly ask for a additional personnel to manage the potential increase of complaint calls. Not that it is important to identify all the customer calls to the call center, associated with the failed cell that may be related to the network issue. This identification can be done either upfront in real-time by the call center agent or on a later with analysis from Oracle Communications Data Model. Note: the call center manager may have then an explanation ready for the next monthly meeting when he shows the customer satisfaction report.
14. For the most valuable customers that complain and threaten to churn, the customer care manager may decide to run a compensation program. For example, by providing ten free SMS or ten minutes for free next month for private customers and provide a 10% discount for business customers at risk of churning.
15. Later, if these procedures were not carried out, an increase in churn for the following month may be quickly related to the network issue: the default reports might show an alert due to an unusual increase in churn in a specific area (using the outlier function of the database associated to the alert functionality of Oracle Business Intelligence Suite Enterprise Edition).
16. With Oracle Communications Data Model, there are therefore several ways to come to the same conclusion, in our case:
  - The network cell ID (near real-time).
  - The abnormally limited geographic distribution of origin of some complaints (most probably the next two days).
  - The abnormally increase of churn in a limited region (a month later).

## Sample Use Case 12: Implementing a Business Area

The CFO requests that the SuperTelco IT manager (Susan) has to implement all the billing related reports of Oracle Communications Data Model

For simplification, assume that:

- The CFO wants to get the value as quickly as possible, so that Susan is not supposed to customize anything unless strictly necessary.
- SuperTelco uses Oracle Business Intelligence Suite Enterprise Edition as the reporting tool.
- Oracle Communications Data Model is installed but all tables are completely empty.

Despite the fact that some DWHs exist, on customers and products, Susan goes forward as for a "greenfield" implementation. But she will reuse part of the work that was done before, either directly from the DWH tables, used as a source to Oracle Communications Data Model or using the ETLs to directly feed Oracle Communications Data Model tables.

In a second phase, the CFO requests a special report to take the customers that are diplomats and hence do not pay any VAT. A special customer code must be created and the CFO wants a report only for these specially coded customers. Thus, Susan decides she needs to enhance the customer table with a column `Tax Rate Amount` and introduce a new Customer Type: `Diplomat`. These changes should be done in parallel in the CRM, in the Customer DWH, and in the billing system.

To implement these steps, the IT manager, Susan, does the following:

1. The project follows a typical DWH project plan with one important exception: because Oracle Communications Data Model is a "DWH-out-of-the-box", with an optimized design and an automatic data movement, intra-ETL provided, the main challenges for Susan are:
  - a. Limiting the Scope of the project to quickly deliver value to the CFO:
    - Identifying the reports associated with the chosen business area.
    - Identifying the OLAP cubes and Mining needed or wanted by the business.
    - Identifying the input tables required to fulfill the expectations.
    - Identifying from the source systems the data needed to fill the tables.
  - b. Analysis:
    - Identifying the gaps between the organization needs and Oracle Communications Data Model out-of-the-box delivery. In Susan's case, one could assume these are reduced to a minimum. If it has not been a "greenfield" implementation, the gap analysis between the existing reports and underlying DWH structure with Oracle Communications Data Model should also be run.
    - Identifying and writing down the difference in semantics between the various terms (normally, this should be quickly done after training with Oracle Communications Data Model). Mapping the source systems (in this case, only the billing and maybe the Product and Customer DWH) to Target Data Element.
  - c. Design and Development:
    - ETL (Billing to Oracle Communications Data Model and other DWH to Oracle Communications Data Model).
    - Logical Data Model and Reports Design Enhancement
  - d. Training and Testing:
    - Scenarii creation and run
    - Acceptance Testing with some (trained) power-users
  - e. Deployment:
    - Initial / history data load
    - Incremental load
  - f. Maintenance:
2. Within a given business area, Susan will find the reports available out-of-the-box (directly looking at the reports themselves or in the associated documentation) and discuss those the CFO wants to see absolutely.
3. Once with the list of reports to feed, Susan checks the documentation to find out the entities from which these reports are filled and the programs used. She first turns to the Oracle Metadata dashboard (visible in Oracle Business Intelligence Suite Enterprise Edition): for each report, she finds all the tables that need to be filled (Dashboard Report-Entities) and gets also access to the Intra-ETLs that access these tables (Dashboard Entities-Programs).
4. Going down to the entity description, she can decide which attributes (columns) per table she needs to fill and compare those with the data she can get out of its different sources. Note that Susan will be able to find which KPIs is associated to which column in the Excel file OCDM\_KPI\_Aggr\_spec.xls:

- a. **NETWORK EVENT** as rated event from the billing system.
  - b. **INVOICE** details from the billing system.
  - c. Customer data either from the billing or the CRM system, or from its own Customer DWH.
  - d. Product and product rating data from either the billing system or its Product DWH.
5. Finally, it is Susan's decision to determine the source and then create the ETLs that load the corresponding information. In this case, she has two possibilities, the choice between the two being rather an architecture/process decision:
    - a. She uses the Product and Customer DWHs as the base for true and up-to-date customer and product information (product and customer "hubs" principle). If she used the standard DWH principles, those are probably in 3NF format, thus easing the mapping process to Oracle Communications Data Model base tables for customers, products and services.
    - b. She uses the ETLs that were feeding the Product and Customer DWHs and adapt them to feed Oracle Communications Data Model directly.
  6. Important for Susan is that, as soon as some data are available in Oracle Communications Data Model, it will be automatically pushed to reporting level, in the OLAP cubes and to the various mining models (following the plan agreed at implementation time). She can therefore cross-check the data at each Oracle Communications Data Model level (reference, base, derived, aggregation,...) and compare them with previous reports she has. The difference in definitions (what is a subscriber, a customer, an offering, a service,...?) must have been run upfront to be able to compare the data and clarify any differences appearing.
  7. On the second phase, adding a new type costs nothing but adding one line in the corresponding lookup table (**CUSTOMER TYPE**). The ETLs should be able to reference correctly the new customer type.
  8. For the tax customization, Susan will check in the Oracle Metadata dashboard the list of all intra-ETLs and programs hit by a customization of the customer table: in principle, there are a lot impacted. However, with a new attribute, most of them won't need any changes; only those that need to aggregate the result of any facts according to this new column must be extended.
  9. With this information, Susan will access and adapt the code of each intra-ETL she needs to. She will then adapt Oracle Business Intelligence Suite Enterprise Edition repository and the sample reports to present the new dimension.

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