

**Oracle® Fusion Middleware**  
Repository Creation Utility User's Guide  
11g Release 1 (11.1.1)  
**E14259-03**

January 2010

Copyright © 2010, Oracle and/or its affiliates. All rights reserved.

Primary Author: Kevin Hwang

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.





---

---

# Contents

<b>Preface</b> .....	ix
Intended Audience.....	
Documentation Accessibility .....	
Related Documents .....	
Conventions .....	
<b>1 Repository Creation Utility Overview</b>	
1.1 What is RCU?.....	1-1
1.1.1 Integrate Components Using Declarative XML .....	
1.1.2 Single Stand-Alone Tool .....	
Launch RCU from the CD .....	
Launch RCU Remotely .....	
1.1.2.3 Launch RCU in Silent Mode (Using the CLI) .....	
Custom Schemas and Tablespaces .....	
1.1.4 Global and Component Level Prerequisites .....	
1.1.5 Grouping Related Schemas Together with Prefixes .....	
Where Can I Get RCU?.....	
<b>2 Running Repository Creation Utility (RCU)</b>	
Using RCU with Java Access Bridge (Windows Only) .....	
Install Java Access Bridge .....	
Configure RCU to Use Java Access Bridge .....	
Creating Schemas.....	
Do all Schemas Have to Reside in the Same Database? .....	
Are Multiple Schemas Supported? .....	
What Happens When a Schema is Created?.....	
Creating Schemas.....	
Dropping Schemas.....	
Dropping Shared Tablespaces .....	
Dropping Schemas and Deleting Datafiles (Windows Only) .....	
2.6 Creating the Portal Demo Schema.....	2-5
2.7 .....	2-5
2.7.1 .....	2-6

2.7.2		2-7
2.7.3		2-7
2.7.4		2-9
2.7.5		2-9
2.7.6	RCU Environment Variables.....	2-10

### 3 Extending RCU to Configure Custom Application Repositories

	RCU JDBC Engine Compliant SQL*Plus Scripts.....	
	Pure JDBC Scripts .....	
	SQL*Plus Scripts .....	
	External Processes.....	
	Java Code Using JavaAction .....	
	RCU Configuration Files.....	
	XML DTDs Defined by RCU.....	
	Component Descriptor Configuration File.....	
	Repository Configuration File .....	
	Master List of Supported Components .....	
	Storage Attributes Configuration File .....	
	Component Repository Configuration File .....	
	Component List Configuration File .....	
	Soft-Prerequisite Support .....	
	Default Tablespaces Configuration File .....	
	RCU Script Writing Guidelines.....	
	Guidelines for RCU JDBC Engine Compliant SQL*Plus Scripts .....	
	Guidelines for Pure JDBC Scripts.....	
	Guidelines for SQL*Plus Scripts.....	3-18
3.3.4	Guidelines for SQL Server-Based Scripts.....	3-18

#### Repository Creation Utility Screens

A.1		A-2
A.2		A-3
A.3		A-4
A.4		A-5
A.5		A-8
A.5.1		A-8
A.5.2		A-9
A.5.3	Specify Custom Schema Names .....	
	Check Schema Prerequisites.....	
	Select Components Screen (for Drop Operation).....	
	Schema Passwords Screen .....	
	Map Tablespaces Screen .....	
	Default Tablespace Mappings.....	
	Changing Default and Temporary Tablespaces.....	
	Viewing and Changing Additional Tablespaces.....	
	Managing Tablespaces and Datafiles.....	
	Adding, Modifying, and Removing Tablespaces .....	

Adding, Modifying, and Removing Datafiles.....	
Summary Screen (for Create Operation) .....	
Summary Screen (for Drop Operation) .....	
Completion Summary Screen (for Create Operation) .....	
Completion Summary Screen (for Drop Operation) .....	

## **B Troubleshooting Repository Creation Utility**

B.1	B-1
B.2	B-2
B.3	B-2

## **Index**





---

---

# Preface

*Oracle Fusion Middleware Repository Creation Utility User's Guide*

## Intended Audience

This guide is intended for users who are installing Oracle Fusion Middleware 11g

```
root      8
```

## Documentation Accessibility

<http://www.oracle.com/accessibility/>

### **Accessibility of Code Examples in Documentation**

otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

### **Accessibility of Links to External Web Sites in Documentation**

organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

### **Deaf/Hard of Hearing Access to Oracle Support Services**

Oracle Support at 1.800.223.1711. An Oracle Support Services engineer will handle technical issues and provide customer support according to the Oracle service request process. Information about TRS is available at

<http://www.fcc.gov/cgb/consumerfacts/trs.html>

<http://www.fcc.gov/cgb/dro/trsphonebk.html>

## Related Documents

manuals:

- *Oracle Fusion Middleware Installation Planning Guide*
- Oracle Fusion Middleware Administrator's Guide*
- Oracle Fusion Middleware High Availability Guide*

## Conventions

<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.

---

---

## Repository Creation Utility Overview

Section 1.1, "What is RCU?"

Section 1.2, "Where Can I Get RCU?"

### 1.1 What is RCU?

#### 1.1.1 Integrate Components Using Declarative XML

#### 1.1.2 Single Stand-Alone Tool

##### 1.1.2.1 Launch RCU from the CD

When RCU is launched from the CD, log files are written to the user's TEMP

### 1.1.2.2 Launch RCU Remotely

### 1.1.2.3 Launch RCU in Silent Mode (Using the CLI)

## 1.1.3 Custom Schemas and Tablespaces

---

---

<b>Note:</b>	ODS
--------------	-----

---

---

## 1.1.4 Global and Component Level Prerequisites

[http://www.oracle.com/technology/software/products/ias/files/fusion\\_requirements.htm](http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm)

## 1.1.5 Grouping Related Schemas Together with Prefixes

Section 2.4.2, "Are Multiple Schemas Supported?".

The mapping between the prefixes and schemas is maintained in `schema_version_registry`

## 1.2 Where Can I Get RCU?

ZIP file on Oracle Technology Network (OTN):

[http://www.oracle.com/technology/software/products/middleware/htdocs/11110\\_fm.html](http://www.oracle.com/technology/software/products/middleware/htdocs/11110_fm.html)

---

bin

---

---

**Note:**

.zip

---

---



---

---

# Running Repository Creation Utility (RCU)

Section 2.5, "Dropping Schemas"

Section 2.6, "Creating the Portal Demo Schema"

Section 2.7, "Using the Repository Creation Utility CLI"

## 2.1 RCU System and Database Requirements

## 2.2 Starting RCU

```
rcuHome\bin
```

```
rcuHome/bin
```

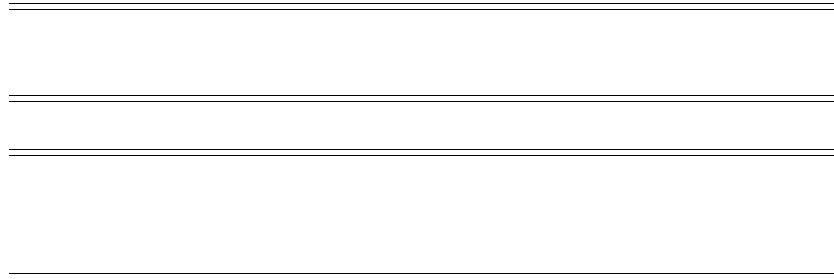
```
./rcu
```

```
rcu.bat
```

You can also download a [file](#) containing RCU from Oracle Technology Network (OTN):

After downloading the [file](#), extract the contents to a directory of your choice, and run RCU from the `RCU_HOME` directory.

`RCU_HOME`



## 2.3 Using RCU with Java Access Bridge (Windows Only)

### 2.3.1 Install Java Access Bridge

1. <http://java.sun.com/javase/technologies/accessibility/accessbridge/>

```
access-bridge.jar    jaccess-1_4.jar
jre\lib\ext
WindowsAccessBridge.dll JavaAccessBridge.dll
JAWTAccessBridge.dll    jre\bin
```

5. `accessibility.properties` `jre\lib`

```
ORACLE_OEM_CLASSPATH
```

**System**

**Advanced**

**New**



6. OK

## 2.4 Creating Schemas

### 2.4.1 Do all Schemas Have to Reside in the Same Database?

### 2.4.2 Are Multiple Schemas Supported?

---

---

The Oracle Internet Directory ( ) component cannot be prepended with a custom prefix; there can only be one repository for this component per database.

---

---

DEV\_MDS  
DEV  
DEV\_MDS2

### 2.4.3 What Happens When a Schema is Created?

- b. ALTER SESSION SET CURRENT\_SCHEMA
- c. Create the schema objects.

Table 2–1 to create schemas.

Click on the screen name to see more detailed information for that screen. Unless otherwise noted, click **Next**

**Table 2–1 How to Create Schemas**

No.	RCU Screen	Instructions and Action Required
1	Welcome Screen	None.
2	Create Repository Screen	Select <b>Create</b>
3	Database Connection Details Screen	Specify the connection details for your database.
4	Select Components Screen (for Create Operation)	Specify a schema prefix and select the components for which you want to create schemas in the database.  You must remember the prefix and schema names for the components you are installing; you will need this information during the configuration phase of Fusion Middleware product installation. Oracle recommends that you write these values down.
5	Schema Passwords Screen	Specify the passwords for your schema owners.  You must remember the passwords you enter on this screen; you will need this information during the configuration phase of Fusion Middleware product installation. Oracle recommends that you write these values down.
6	Map Tablespaces Screen	Configure the desired tablespace mapping for the schemas you want to create.
7	Summary Screen (for Create Operation)	Review the information on this screen, then click <b>Next</b> to begin schema creation.
8	Completion Summary Screen (for Create Operation)	Note the location of the log files, then click <b>Close</b> to dismiss the screen.

## 2.5 Dropping Schemas

**Table 2–2 How to Drop Schemas**

No.	RCU Screen	Instructions and Action Required
		Drop
		Drop
		Close

## 2.5.2 Dropping Schemas and Deleting Datafiles (Windows Only)

## 2.6 Creating the Portal Demo Schema

```
name portal_schema_user_
instdemo.sql

> sqlplus /nolog
SQL> connect sys as sysdba
SQL> @instdemo.sql portal_schema_user_name
portal_schema_user_password
default_tablespace
temporary_table_space
name_of_the_demo_schema_user
password_of_the_demo_schema_user
name_of_the_log_file
database_connection_string

SQL> @instdemo.sql portal portalpassword portal ias_temp portal_demo
portaldemopassword example_app.log (DESCRIPTION=(ADDRESS_
LIST=(ADDRESS=(PROTOCOL=TCP) (HOST=db.example.com) (PORT=1521))) (CONNECT_
DATA=(SERVICE_NAME=orcl)))
```

## 2.7 Using the Repository Creation Utility CLI

■

## 2.7.1 CLI Syntax and Parameters

```
rcu [-silent | -interactive] [-createRepository | -dropRepository] {<options>}
```

-silent

-silent

-interactive

-createRepository

-dropRepository

**Table 2–3 RCU Command Line Interface Options and Descriptions**

Option	Description
-compInfoXMLLocation	ComponentInfo.xml (on UNIX systems) or <i>RCU_HOME</i> \rcu\config
-storageXMLLocation	StorageInfo.xml /rcu/config \rcu\config
-databaseType	Type of database to which you are connecting. Valid options are ORACLE IBMDB2 SQLSERVER
-connectString	<ul style="list-style-type: none"><li>■ Oracle databases: use the format <i>host port sid</i></li><li>Microsoft SQL Server databases: use the format <i>server name or host port database name</i></li></ul>
-dbUser	SYS
-dbRole	SYSDBA SYS
-unicodeSupport	SQLSERVER database type only.





```

[-compInfoXMLLocation <location of ComponentInfo.xml file>
                        <location of Storage.xml file>

                        <database connect string (for example: host:port:service_id)>
-dbUser <database username>
[-dbRole <database role>]
[-unicodeSupport Yes/No (default is Yes. Applicable for SQLSERVER databases
only.)]
[-variables <comma separated variables in the format: variablename=value>
[-schemaPrefix <schema prefix (optional for non-prefixable components)>
                        <component ID>

```

```

                                                    -compInfoXMLLocation
-component
-component

```

```

./rcu -silent -createRepository -databaseType ORACLE -connectString
host1.oracle.com:1521:orcl -dbUser sys -dbRole sysdba -schemaPrefix TEST
-component SOAINFRA -component MDS -component ORASDPM

```

```

rcu [-silent | -interactive] -dropRepository
  [-compInfoXMLLocation                               ]
  [-storageXMLLocation                               ]
  [-databaseType [ORACLE|SQLSERVER]]
  -connectString
  -dbUser
  [-dbRole                               ]
  [-variables                               ]
  [-schemaPrefix                               ]
  -component

                                                    -compInfoXMLLocation
-component

```

```

./rcu -silent -dropRepository -databaseType ORACLE -connectString
host1.oracle.com:1521:orcl -dbUser sys -dbRole sysdba -schemaPrefix TEST
-component WEBCENTER

```

---

## 2.7.6 RCU Environment Variables

**Table 2–5 RCU Environment Variables**

<b>Variable</b>	<b>Default</b>	<b>Description</b>
RCU_LOG_LOCATION	/rcu/log  \rcu\log	
RCU_TIMESTAMP_LOG_DIR	true	<i>logdir.yyyy-dd_hh-mm</i>
		NOTIFICATION TRACE

---



---

---

## Extending RCU to Configure Custom Application Repositories

integrating Legacy/Classic components such as Oracle Portal 10 or Identity Management. Components that have a dependency on SQL\*Plus scripts cannot be loaded with RCU when running from the installed Oracle Home. They can only be used when running RCU from CD.

### 3.1.1 RCU JDBC Engine Compliant SQL\*Plus Scripts

---

### 3.1.2 Pure JDBC Scripts

Connection.prepareStatement() Connection.createStatement()

JDBC Bind variables with '?' convention are supported.

Some disadvantages of this option are:

- No nested scripts, which can mean a larger number of scripts.

- May require a more significant re-work for component teams to re-write the scripts in this format.

- Difficult to maintain as every DDL statement has to be wrapped with in EXECUTE IMMEDIATE.

- Cannot be run using SQL\*Plus in development environment.

- Less useful error support since the whole block would fail in case of any errors.

Below is an example:

```
<Action TYPE="JDBC" PERCENT_PROGRESS="20">
  <ValidIf DBTYPE="ORACLE" />
  <Command TYPE="INLINE">DROP USER %SCHEMA_USER% CASCADE</Command>
</Action>
```

```
<Action TYPE="Java" PERCENT_PROGRESS="100">
  <Command TYPE="METHOD">
    oracle.ias.version.SchemaVersionUtil:utilSetComponentValid
  </Command>

  <Parameters>
    <Parameter TYPE="String">MDS</Parameter>
  </Parameters>
</Action>
```

```
<Action TYPE="SQLPlus" PERCENT_PROGRESS="100">
  <Command TYPE="SCRIPT">%SCRIPT_HOME%/oid/scripts/seedldap.sql</Command>
  <IgnorableErrors>
    <Error Type="ORA-01918">user name does not exist</Error>
```

---

```
    </IgnorableErrors>
  </Action>
```

```
<Action TYPE="JDBCScript" PERCENT_PROGRESS="20">
  <ValidIf DBTYPE="ORACLE" />
  <Command TYPE="SCRIPT">%SCRIPT_HOME%/mds/sql/mds_user.sql</Command>
  <Parameters>
    <Parameter TYPE="CmdLine">%SCHEMA_USER%</Parameter>
    <Parameter TYPE="CmdLine">%SCHEMA_PASSWORD%</Parameter>
    <Parameter TYPE="CmdLine">%DEFAULT_TABLESPACE%</Parameter>
    <Parameter TYPE="CmdLine">%TEMPORARY_TABLESPACE%</Parameter>
  </Parameters>
</Action>
```

```
<Action TYPE="HostCmd">
  <Command TYPE="SCRIPT">%RCU_
HOME%/rcu/integration/cdb/config/bin/configure</Command>
  <Parameters>
    <Parameter TYPE="ProcessInput">%JDBC_CONNECT_STRING%</Parameter>
    <Parameter TYPE="ProcessInput">%DBADMIN_USER%</Parameter>
    <Parameter TYPE="ProcessInput">%DBADMIN_PASSWORD%</Parameter>
    <Parameter TYPE="ProcessInput">%PREFIX_NAME%</Parameter>
    <Parameter TYPE="ProcessInput">%SCHEMA_USER%</Parameter>
    <Parameter TYPE="ProcessInput">%SCHEMA_PASSWORD%</Parameter>
    <Parameter TYPE="ProcessInput">%DEFAULT_TABLESPACE%</Parameter>
    <Parameter TYPE="ProcessInput">%TEMPORARY_TABLESPACE%</Parameter>
  </Parameters>
</Action>
```

```
<Action TYPE="Java">
  <Command TYPE="METHOD">
    oracle.ias.version.SchemaVersionUtil:utilCreateRegistryEntry
  </Command>

  <Parameters>
    <Parameter TYPE="Connection"></Parameter>
    <Parameter TYPE="String">%SCHEMA_USER%</Parameter>
  </Parameters>
</Action>
```

```
<Action TYPE="Java">
```

## 3.2 RCU Configuration Files

### 3.2.1 XML DTDs Defined by RCU

#### 3.2.1.1 Component Descriptor Configuration File

```
<?xml version="1.0" encoding="UTF-8" ?>
<!ENTITY % commonDTD SYSTEM "RCUCommon.dtd">
%commonDTD;
<!ELEMENT ComponentInfo (Display, PrefixSettings, Component*,
PrerequisiteDescriptor*, ExecutionDescriptor?, FatalErrors?, IgnorableErrors?)>
<!ATTLIST ComponentInfo
    VERSION CDATA #REQUIRED
    TYPE CDATA #REQUIRED
    RESOURCE_BUNDLE_PACKAGE CDATA #IMPLIED>
<!ELEMENT PrefixSettings (DetectQuery*)>
<!ATTLIST PrefixSettings
    USE_SCHEMA_PREFIX (TRUE|FALSE) "TRUE"
    USE_TABLESPACE_PREFIX (TRUE|FALSE) "TRUE">
<!ELEMENT Component (ValidIfSet?, ValidIf?, Display, RepositoryConfigFile?,
DetectQuery*, SchemaVersion?, SchemaUser?, AdditionalSchemaUser*, Dependents?,
DatabaseName?, Tablespaces?)>
<!ATTLIST Component
    ID CDATA #REQUIRED
```

---

```

        PROGRESS_UNITS CDATA #IMPLIED
        IS_GROUPING_COMPONENT (TRUE|FALSE) "FALSE"
        DEFAULT_SELECTED (TRUE|FALSE) "FALSE"
        CHILD_OF CDATA #IMPLIED >
<!ELEMENT Display (#PCDATA)>
<!ATTLIST Display
        NLS_ID CDATA #IMPLIED>
<!ELEMENT RepositoryConfigFile (#PCDATA)>
<!ELEMENT DetectQuery (#PCDATA)>
<!ATTLIST DetectQuery
        OPERATION (CREATE|DROP) 'CREATE'
        TYPE (ORACLE|SQLSERVER|IBMDB2) 'ORACLE'>
<!ELEMENT SchemaVersion (#PCDATA)>
<!ELEMENT SchemaUser (#PCDATA)>
<!ATTLIST SchemaUser
        USER_EDITABLE (TRUE|FALSE) "TRUE"
        PREFIXABLE (TRUE|FALSE) "TRUE"
        IS_CREATED (TRUE|FALSE) "TRUE">
<!ELEMENT AdditionalSchemaUser (#PCDATA)>
<!ATTLIST AdditionalSchemaUser
        STARTS_WITH_SCHEMA_USER (TRUE|FALSE) "TRUE" >
<!ELEMENT Dependents (Dependent*)>
<!ELEMENT Dependent (#PCDATA)>
<!ATTLIST Dependent
        COMPONENT_ID CDATA #REQUIRED
        ALT_COMPONENT_ID CDATA #IMPLIED>
<!ELEMENT DatabaseName (#PCDATA)>
<!ELEMENT Tablespaces (Tablespace*)>
<!ATTLIST Tablespace TYPE (DEFAULT_TABLESPACE|TEMPORARY_TABLESPACE|ADDITIONAL_
TABLESPACE1|ADDITIONAL_TABLESPACE2|ADDITIONAL_TABLESPACE3|ADDITIONAL_
TABLESPACE4|ADDITIONAL_TABLESPACE5) "DEFAULT_TABLESPACE">
<!ELEMENT Tablespace (Prompt, TablespaceName)>
<!ELEMENT Prompt (#PCDATA)>
<!ATTLIST Prompt NLS_ID CDATA #IMPLIED>
<!ELEMENT TablespaceName (#PCDATA)>

```

RepositoryConfig.dtd

```

        /rcu/config
        \rcu\config

```

```

<?xml version="1.0" encoding="UTF-8" ?>
<!ENTITY % commonDTD SYSTEM "RCUCommon.dtd">
%commonDTD;
<!ELEMENT RepositoryConfig (PrerequisiteDescriptor*, ExecutionDescriptor,
DeleteDescriptor?)>
<!ATTLIST RepositoryConfig
        COMP_ID CDATA #REQUIRED>
<!ELEMENT DeleteDescriptor (Action*)>

```

RCUCommon.dtd

```

        /rcu/config

```

```

        \rcu\config

```

---

```

<?xml version="1.0" encoding="UTF-8" ?>
<!ELEMENT PrerequisiteDescriptor (DBPrerequisiteSet*, DBPrerequisite*)>
<!ATTLIST PrerequisiteDescriptor
    TYPE (CREATE|DROP|REGISTER|DEREGISTER) 'CREATE'>
<!ELEMENT DBPrerequisiteSet (ValidIfSet?, ValidIf?, PrereqSetErrorMsg?,
DBPrerequisite*)>
<!ATTLIST DBPrerequisiteSet
    OPERATOR (OR|AND) "OR"
    SOFT (TRUE|FALSE) "FALSE">
<!ELEMENT DBPrerequisite (ValidIfSet?, ValidIf?, PrereqIdentifier, PrereqValue,
PrereqErrorMsg?)>
<!ATTLIST DBPrerequisite
PREREQ_TYPE
(InitParameter|DBOption|Java|DBComponent|DBVersion|DBObject|CustomSQL|TablespaceFr
eeMB) "CustomSQL"
    DATA_TYPE (STRING|NUMBER) "STRING"
    COMPARE_OPERATOR (EQ|GT|LT|NE|GE|LE|COMPARE_VERSION) "EQ"
    SOFT (TRUE|FALSE) "FALSE">

<!ELEMENT PrereqIdentifier (#PCDATA)>
<!ELEMENT PrereqValue (#PCDATA)>
<!ELEMENT PrereqSetErrorMsg (#PCDATA)>
<!ATTLIST PrereqSetErrorMsg
    NLS_ID CDATA #IMPLIED>
<!ELEMENT PrereqErrorMsg (#PCDATA)>
<!ATTLIST PrereqErrorMsg
    NLS_ID CDATA #IMPLIED>
<!ATTLIST PrereqValue
    UNIT (KB|MB|NoUnit) 'NoUnit'>
<!ELEMENT ExecutionDescriptor (Action*)>
<!ATTLIST ExecutionDescriptor
    TYPE (Load|PreLoad|PostLoad) "Load">
<!ELEMENT Action (ValidIfSet?, ValidIf?, Command, Parameters?, FatalErrors?,
IgnorableErrors?)>
<!ATTLIST Action
    TYPE (JDBCScript|JDBC|SQLPlus|HostCmd|Java) "JDBCScript"
    DB_VERSION CDATA #IMPLIED
    PERCENT_PROGRESS CDATA #IMPLIED
    CONNECT_AS_OWNER (TRUE|FALSE) "FALSE"
    RESET_SESSION (TRUE|FALSE) "FALSE">
<!ELEMENT Command (#PCDATA)>
<!ATTLIST Command
    TYPE (SCRIPT|INLINE|METHOD) "SCRIPT">
<!ELEMENT Parameters (Parameter*)>
<!ELEMENT Parameter (#PCDATA)>
<!ATTLIST Parameter
    TYPE
(BindVar|CmdLine|ProcessInput|EnvVar|Connection|int|String|StringArray|boolean)
"CmdLine">
<!ELEMENT FatalErrors (Error*)>
<!ELEMENT IgnorableErrors (Error*)>
<!ELEMENT Error (#PCDATA)>
<!ATTLIST Error
    Type CDATA #REQUIRED>
<!ELEMENT ValidIfSet (ValidIf*)>
<!ATTLIST ValidIfSet
    DBTYPE CDATA #IMPLIED
    DBVERSION CDATA #IMPLIED
    OSNAME CDATA #IMPLIED
    OPERATOR (OR|AND) "OR">

```

---

```

<!ELEMENT ValidIf (CustomQueryFilter?)>
<!ATTLIST ValidIf
    DBTYPE CDATA #IMPLIED
    DBVERSION CDATA #IMPLIED
    OSNAME CDATA #IMPLIED >
<!ELEMENT CustomQueryFilter (#PCDATA)>
<!ATTLIST CustomQueryFilter
    DATA_TYPE (STRING|NUMBER) "STRING"
    COMPARE_OPERATOR (EQ|GT|LT|NE|GE|LE|COMPARE_VERSION) "EQ"
    VALUE CDATA #REQUIRED >

```

### 3.2.1.4 Storage Attributes Configuration File

```

<!ELEMENT TablespaceAttributes (Type?,DefaultTemp?, BlockSize?, Bigfile?,
AutoSegmentSpaceManagement?, DatafilesList)>
<!ATTLIST TablespaceAttributes
    NAME CDATA #REQUIRED>
<!ELEMENT Type (#PCDATA)>
<!ELEMENT DefaultTemp (#PCDATA)>
<!ELEMENT BlockSize (#PCDATA)>
<!ELEMENT Bigfile (#PCDATA)>
<!ELEMENT AutoSegmentSpaceManagement (#PCDATA)>
<!ELEMENT DatafilesList (DatafileAttributes+)>
<!ELEMENT DatafileAttributes (Size, Reuse?, AutoExtend?, Increment?, Maxsize?)>
<!ATTLIST DatafileAttributes
    ID CDATA #REQUIRED>
<!ELEMENT Size (#PCDATA)>
<!ATTLIST Size
    UNIT (KB|MB|GB) 'MB'>
<!ELEMENT Reuse (#PCDATA)>
<!ELEMENT AutoExtend (#PCDATA)>
<!ELEMENT Increment (#PCDATA)>
<!ATTLIST Increment
    UNIT (KB|MB|GB) 'KB'>
<!ELEMENT Maxsize (#PCDATA)>
<!ATTLIST Maxsize
    UNIT (KB|MB|GB) 'MB'>

```

## 3.2.2 Component Repository Configuration File

*<component>*

```

<component>
HOME
    RCU_HOME
RCU_
component component
component component

```

**Table 3–1 Predefined RCU Parameters**

RCU Parameter	Description
%ORACLE_HOME%	Location of the Oracle Home directory. In this book, the actual location is referred to as <code>ORACLE_HOME</code> ; this is the location where RCU was extracted on your system.
%SCRIPT_HOME%	Location where scripts are located. It may be same as <code>ORACLE_HOME</code> .
%SCHEMA_USER%	Database schema name (owner) entered by the user in RCU.
%SCHEMA_PASSWORD%	
%ADDITIONAL_SCHEMA_USER%	<code>ComponentInfo.xml</code>
%ADDITIONAL_SCHEMA_PASSWORD<n>%	
%DEFAULT_TABLESPACE%	
%TEMPORARY_TABLESPACE%	
%ADDITIONAL_TABLESPACE<n>%	
%DEFAULT_PERMANENT_TABLESPACE%	<code>SYSTEM</code> <span style="float:right">USERS</span>
%DEFAULT_TEMP_TABLESPACE%	<code>SYSTEM</code> <span style="float:right">TEMP</span>
%DATAFILE_LOCATION%	Default location where the tablespace/datafile will be created.
%JDBC_CONNECT_STRING%	JDBC connect string. User-specified prefix for schema and tablespace names. Already-connected <code>java:oracle.jdbc.pool:OracleDataSource</code> object to be passed into <code>JavaAction</code> . Database admin user that is provided on the Database Connection Details Screen. Database admin user password that is provided on the Database Connection Details Screen. Database admin user role that is provided on the Database Connection Details Screen. Database hostname that is provided on the Database Connection Details Screen. Database service name. Database port number that is provided on the Database Connection Details Screen. Directory where RCU is installed. <code>ORACLE_HOME</code> where SQL*Plus is located. Whether or not Unicode characters are supported in Microsoft SQL Server databases. Location of the directory where RCU log files are created. Database name (for SQLServer database).



---

Below is a sample Component Repository Configuration file for MDS ( ), which lists the series of prerequisites and actions:

```
        <PrereqIdentifier>select count(*) from v$session where
            username='%SCHEMA_USER%'</PrereqIdentifier>
    <PrereqValue>0</PrereqValue>
    <PrereqErrorMsg>The schema owner '%SCHEMA_USER%' is connected to the
        database. Please disconnect and try again.</PrereqErrorMsg>
    </DBPrerequisite>
</PrerequisiteDescriptor>

<ExecutionDescriptor>
    <Action TYPE="Java">
        <Command
TYPE="METHOD">oracle.ias.version.SchemaVersionUtil:utilCreateRegistryEntry</Comman
d>
        <Parameters>
            <Parameter TYPE="Connection"></Parameter>
            <Parameter TYPE="String">MDS</Parameter>
            <Parameter TYPE="String">Metadata Services</Parameter>
            <Parameter TYPE="String">%PREFIX_NAME%</Parameter>
            <Parameter TYPE="String">MDS</Parameter>
            <Parameter TYPE="String">MDS</Parameter>
            <Parameter TYPE="String">%SCHEMA_USER%</Parameter>
            <Parameter TYPE="String">11.1.1.1.0</Parameter>
            <Parameter TYPE="String">LOADING</Parameter>
        </Parameters>
    </Action>
<Action TYPE="JDBCScript" PERCENT_PROGRESS="20">
    <ValidIf DBTYPE="ORACLE" />
    <Command TYPE="SCRIPT">%SCRIPT_HOME%/mds/sql/mds_user.sql</Command>
    <Parameters>
        <Parameter TYPE="CmdLine">%SCHEMA_USER%</Parameter>
        <Parameter TYPE="CmdLine">%SCHEMA_PASSWORD%</Parameter>
        <Parameter TYPE="CmdLine">%DEFAULT_TABLESPACE%</Parameter>
        <Parameter TYPE="CmdLine">%TEMPORARY_TABLESPACE%</Parameter>
    </Parameters>
</Action>
```

---

```

        </Parameters>
    </Action>
    <Action TYPE="JDBCScript" PERCENT_PROGRESS="20">
        <ValidIf DBTYPE="SQLSERVER" />
        <Command TYPE="SCRIPT">%SCRIPT_
HOME%/mds/MSSQL/cremduser-rcu.sql</Command>
        <Parameters>
            <Parameter TYPE="CmdLine">%DATABASE_NAME%</Parameter>
            <Parameter TYPE="CmdLine">%SCHEMA_USER%</Parameter>
            <Parameter TYPE="CmdLine">%SCHEMA_PASSWORD%</Parameter>
        </Parameters>
    </Action>
    <Action TYPE="JDBCScript" PERCENT_PROGRESS="20">
    <ValidIf DBTYPE="SQLSERVER" />
        <Command TYPE="SCRIPT">%SCRIPT_
HOME%/mds/MSSQL/cremduser-rcu.sql</Command>
        <Parameters>
            <Parameter TYPE="CmdLine">%DATABASE_NAME%</Parameter>
            <Parameter TYPE="CmdLine">%SCHEMA_USER%</Parameter>
            <Parameter TYPE="CmdLine">%SCHEMA_PASSWORD%</Parameter>
        </Parameters>
    </Action>
    <Action TYPE="JDBCScript" PERCENT_PROGRESS="20">
    <ValidIf DBTYPE="ORACLE" />
        <Command TYPE="SCRIPT">%SCRIPT_HOME%/mds/sql/cremds-rcu.sql</Command>
        <Parameters>
            <Parameter TYPE="CmdLine">%SCHEMA_USER%</Parameter>
        </Parameters>
    </Action>
    <Action TYPE="JDBCScript" PERCENT_PROGRESS="20" CONNECT_AS_OWNER="TRUE">
    <ValidIf DBTYPE="SQLSERVER" />
        <Command TYPE="SCRIPT">%SCRIPT_HOME%/mds/MSSQL/cremds-rcu.sql</Command>
        <Parameters>
            <Parameter TYPE="CmdLine">%DATABASE_NAME%</Parameter>
            <Parameter TYPE="CmdLine">%MDS_VARCHAR%</Parameter>
        </Parameters>
    </Action>
    <Action TYPE="Java">
        <Command
TYPE="METHOD">oracle.ias.version.SchemaVersionUtil:utilSetComponentValid</Command>
        <Parameters>
            <Parameter TYPE="String">MDS</Parameter>
        </Parameters>
    </Action>
</ExecutionDescriptor>
<DeleteDescriptor>
    <Action TYPE="JDBC" PERCENT_PROGRESS="20">
    <ValidIf DBTYPE="ORACLE" />
        <Command TYPE="INLINE">DROP USER %SCHEMA_USER% CASCADE</Command>
    </Action>
    <Action TYPE="JDBCScript" PERCENT_PROGRESS="20">
    <ValidIf DBTYPE="SQLSERVER" />
        <Command TYPE="SCRIPT">%SCRIPT_
HOME%/mds/MSSQL/dropmduser-rcu.sql</Command>
        <Parameters>
            <Parameter TYPE="CmdLine">%DATABASE_NAME%</Parameter>
            <Parameter TYPE="CmdLine">%SCHEMA_USER%</Parameter>
        </Parameters>
    </Action>
    <Action TYPE="Java">

```

```

        <Command
TYPE="METHOD">oracle.ias.version.SchemaVersionUtil:utilDropRegistryEntry</Command>
        <Parameters>
            <Parameter TYPE="Connection"></Parameter>
            <Parameter TYPE="String">MDS</Parameter>
            <Parameter TYPE="String">%PREFIX_NAME%</Parameter>
            <Parameter TYPE="String">MDS</Parameter>
        </Parameters>
    </Action>
</DeleteDescriptor>
</RepositoryConfig>

```

The Component List configuration file (ComponentInfo.xml) lists all the components, their respective configuration files and their default user and tablespace mappings. This file also lists the high-level pre-requisite checks and high level actions (like creating schema\_version\_registry table) to be done globally for all the components. Also, a list of global Ignorable or Fatal errors can be specified.

This file can be found in the `/rcu/config` (on UNIX operating systems) or `\rcu\config` (on Windows operating systems) directory.

Below is a sample ComponentInfo.xml file:

```

<?xml version="1.0" encoding="UTF-8" ?>
<!-- DOCTYPE ComponentInfo SYSTEM "dtds/ComponentInfo.dtd" -->
<!DOCTYPE ComponentInfo SYSTEM "ComponentInfo.dtd" [
<!ENTITY portlet SYSTEM "../integration/portlet/portlet_ComponentInfo.xml">
<!ENTITY mds SYSTEM "../integration/mds/mds_ComponentInfo.xml">
<!ENTITY oid SYSTEM "../integration/oid/oid_ComponentInfo.xml">
<!ENTITY soainfra SYSTEM "../integration/soainfra/soainfra_ComponentInfo.xml">
<!ENTITY bam SYSTEM "../integration/bam/bam_ComponentInfo.xml">
<!ENTITY webcenter SYSTEM "../integration/webcenter/webcenter_ComponentInfo.xml">
<!ENTITY jive SYSTEM "../integration/jive/jive_ComponentInfo.xml">
<!ENTITY wiki SYSTEM "../integration/wiki/wiki_ComponentInfo.xml">
<!ENTITY iau SYSTEM "../integration/iau/iau_ComponentInfo.xml">
<!ENTITY discoverer SYSTEM "../integration/dc/discoverer_ComponentInfo.xml">
<!ENTITY sdpm SYSTEM "../integration/sdpm/sdpm_ComponentInfo.xml">
<!ENTITY portal SYSTEM "../integration/portal/portal_ComponentInfo.xml">
<!ENTITY contentserver SYSTEM "../integration/contentserver/contentserver_
ComponentInfo.xml">
<!ENTITY oif SYSTEM "../integration/oif/oif_ComponentInfo.xml">
<!ENTITY ess SYSTEM "../integration/ess/ess_ComponentInfo.xml">
<!ENTITY commspresence SYSTEM "../integration/commspresence/commspresence_
ComponentInfo.xml">
<!ENTITY commssds SYSTEM "../integration/commssds/commssds_ComponentInfo.xml">
<!ENTITY commsls SYSTEM "../integration/commsls/commsls_ComponentInfo.xml">
]>
<ComponentInfo VERSION="11.0.0.0" TYPE="AS_REPOSITORY" RESOURCE_BUNDLE_
PACKAGE="oracle.sysman.rcu.as.ASBundle">
    <Display NLS_ID="ASREP_ID">Oracle AS Repository Components</Display>
    <PrefixSettings USE_SCHEMA_PREFIX="TRUE" USE_TABLESPACE_PREFIX="TRUE">
        <DetectQuery>
            Select distinct mrc_name from schema_version_registry
        </DetectQuery>
    </PrefixSettings>

    <!-- AS Common GROUP START -->
<Component ID="AS_COMMON" IS_GROUPING_COMPONENT="TRUE">

```

---

```
        <Display NLS_ID="AS_COMMON_ID">AS Common Schemas</Display>
    </Component>
&mds;
&iau;
&ess;
<!-- AS Common GROUP END -->

<!-- OID GROUP START -->
<Component ID="IDM" IS_GROUPING_COMPONENT="TRUE">
    <ValidIf DBTYPE="ORACLE" />
    <Display NLS_ID="IDM_ID">Identity Management</Display>
</Component>
&oid;
&oif;

<!-- OID GROUP END -->

<!-- OWLCS START -->
    <Component ID="OWLCS" IS_GROUPING_COMPONENT="TRUE">
        <Display NLS_ID="OWLCS_ID">WebLogic Communication Services</Display>
    </Component>
&commspresence;
&commsds;
&commsls;
<!-- OWLCS END -->

<!-- SOA INFRA GROUP START -->
    <Component ID="SOA" IS_GROUPING_COMPONENT="TRUE">
        <Display NLS_ID="SOA_ID">SOA Infrastructure</Display>
    </Component>
&soainfra;
&bam;
&sdpm;
<!-- SOA INFRA GROUP END -->

<!-- WEBCENTER_SUITE START -->
    <Component ID="WEBCENTER_SUITE" IS_GROUPING_COMPONENT="TRUE">
        <Display NLS_ID="WEBCENTER_SUITE_ID">Webcenter Suite</Display>
    </Component>
&webcenter;
&portlet;
&contentserver;
&jive;
&wiki;
<!-- WEBCENTER_SUITE END -->

<!-- PORTAL_BI START -->
    <Component ID="PORTAL_BI" IS_GROUPING_COMPONENT="TRUE">
        <ValidIf DBTYPE="ORACLE" />
        <Display NLS_ID="PORTAL_BI_ID">Portal and BI</Display>
    </Component>

&portal;
&discoverer;
<!-- PORTAL_BI END -->
```

---

```

<PrerequisiteDescriptor>
  <DBPrerequisiteSet OPERATOR="OR">
    <ValidIf DBTYPE="ORACLE" />
    <DBPrerequisite PREREQ_TYPE="InitParameter" DATA_TYPE="NUMBER" COMPARE_
OPERATOR="GE">
      <PrereqIdentifier>SHARED_POOL_SIZE</PrereqIdentifier>
      <PrereqValue UNIT="KB">147456</PrereqValue>
    </DBPrerequisite>
    <DBPrerequisite PREREQ_TYPE="InitParameter" DATA_TYPE="NUMBER" COMPARE_
OPERATOR="GE">
      <PrereqIdentifier>SGA_MAX_SIZE</PrereqIdentifier>
      <PrereqValue UNIT="KB">147456</PrereqValue>
    </DBPrerequisite>
  </DBPrerequisiteSet>

  <DBPrerequisite PREREQ_TYPE="CustomSQL" DATA_TYPE="STRING" COMPARE_
OPERATOR="EQ" SOFT="TRUE">
    <PrereqIdentifier>select value from nls_database_parameters
where parameter = 'NLS_CHARACTERSET'</PrereqIdentifier>
    <PrereqValue>AL32UTF8</PrereqValue>
    <PrereqErrorMsg>
      The database you are connecting is with
non-AL32UTF8 character set. Oracle strongly recommends using AL32UTF8 as the
database character set.
    </PrereqErrorMsg>
  </DBPrerequisite>

  <DBPrerequisite PREREQ_TYPE="InitParameter" DATA_TYPE="NUMBER" COMPARE_
OPERATOR="GE">
    <ValidIf DBTYPE="ORACLE" />
    <PrereqIdentifier>DB_BLOCK_SIZE</PrereqIdentifier>
    <PrereqValue UNIT="KB">8</PrereqValue>
  </DBPrerequisite>

  <!--DBPrerequisite PREREQ_TYPE="CustomSQL" DATA_TYPE="STRING" COMPARE_
OPERATOR="NE">
    <ValidIf DBTYPE="ORACLE" >
    <CustomQueryFilter DATA_TYPE="NUMBER" COMPARE_OPERATOR="EQ" VALUE="0">
      select 1 from dual where exists (select column_name from dba_tab_
columns where table_name(+) like 'V_$INSTANCE' and column_name(+) = 'EDITION')
union select 0 from dual where not exists (select column_name from dba_tab_columns
where table_name(+) like 'V_$INSTANCE' and column_name(+) = 'EDITION')
    </CustomQueryFilter>
    </ValidIf>
    <PrereqIdentifier>version</PrereqIdentifier>
    <PrereqValue>11.1.0.6.0</PrereqValue>
    <PrereqErrorMsg>
      The database you are connecting is 11.1.0.6.0
version. 11.1.0.6.0 is not a supported version. The database version should be
11.1.0.7.0 or greater.
    </PrereqErrorMsg>
  </DBPrerequisite-->
  <DBPrerequisite PREREQ_TYPE="DBVersion" DATA_TYPE="STRING" COMPARE_
OPERATOR="GE">
    <ValidIf DBTYPE="ORACLE" >
    <CustomQueryFilter DATA_TYPE="NUMBER" COMPARE_OPERATOR="EQ" VALUE="0">
      select 1 from dual where exists (select column_name from dba_tab_
columns where table_name(+) like 'V_$INSTANCE' and column_name(+) = 'EDITION')
union select 0 from dual where not exists (select column_name from dba_tab_columns

```

---

```

where table_name(+) like 'V_$INSTANCE' and column_name(+) = 'EDITION')
    </CustomQueryFilter>
</ValidIf>
<PrereqIdentifier>version</PrereqIdentifier>
<PrereqValue>10.2.0.4.0</PrereqValue>
    <PrereqErrorMsg>
        The database you are connecting is not a supported
version. The database version should be either 10.2.0.4.0 or 11.1.0.7.0 or
greater.
    </PrereqErrorMsg>
</DBPrerequisite>
<DBPrerequisite PREREQ_TYPE="CustomSQL" DATA_TYPE="STRING" COMPARE_OPERATOR="EQ">
    <ValidIf DBTYPE="ORACLE" />
    <PrereqIdentifier>select GRANTED_ROLE from DBA_ROLE_PRIVS
where((GRANTED_ROLE='DBA' and GRANTEE=(select user from dual) and lower(SYS_
CONTEXT ('USERENV', 'SESSION_USER'))='sys') OR (GRANTED_ROLE='DBA' and
GRANTEE=(select user from dual)))</PrereqIdentifier>
    <PrereqValue>DBA</PrereqValue>
    <PrereqErrorMsg>
        User should have sysdba or dba privileges.
    </PrereqErrorMsg>
</DBPrerequisite>
CU_HOME/rcu/config (on UNIX)

<ExecutionDescriptor TYPE="PreLoad">
    <Action TYPE="Java" PERCENT_PROGRESS="60">
    <ValidIf DBTYPE="ORACLE">
        <CustomQueryFilter DATA_TYPE="NUMBER" COMPARE_OPERATOR="EQ"
VALUE="1">
            select count(*) from dba_views where VIEW_NAME = 'APP_REGISTRY'
and not exists (select view_name from dba_views where VIEW_NAME= 'SCHEMA_VERSION_
REGISTRY')
        </CustomQueryFilter>
    </ValidIf>
    <Command
TYPE="METHOD">oracle.ias.version.SchemaVersionUtil:utilCreateRegistryAndCopyData</
Command>
        <Parameters>
            <Parameter TYPE="Connection"></Parameter>
        </Parameters>
    </Action>
    <Action TYPE="Java" PERCENT_PROGRESS="60">
    <ValidIf DBTYPE="ORACLE">
        <CustomQueryFilter DATA_TYPE="NUMBER" COMPARE_OPERATOR="EQ"
VALUE="0">
            select count(*) from dba_views where VIEW_NAME= 'SCHEMA_VERSION_
REGISTRY'
        </CustomQueryFilter>
    </ValidIf>
    <Command
TYPE="METHOD">oracle.ias.version.SchemaVersionUtil:utilCreateRegistryTable</Comman
d>
        <Parameters>
            <Parameter TYPE="Connection"></Parameter>
        </Parameters>
    </Action>
    <Action TYPE="Java" PERCENT_PROGRESS="60">
    <ValidIf DBTYPE="SQLSERVER">
        <CustomQueryFilter DATA_TYPE="NUMBER" COMPARE_OPERATOR="EQ" VALUE="0">
            select count(*) from INFORMATION_SCHEMA.TABLES where TABLE_

```

---

```

NAME='SCHEMA_VERSION_REGISTRY'
    </CustomQueryFilter>
    </ValidIf>
    <Command
TYPE="METHOD">oracle.ias.version.SchemaVersionUtil:utilCreateRegistryTable</Comman
d>
    <Parameters>
        <Parameter TYPE="Connection"></Parameter>
    </Parameters>
    </Action>
</ExecutionDescriptor>
<FatalErrors>
    <Error Type="ORA-17439">Invalid SQL type</Error>
    <Error Type="ORA-01435">user does not exist</Error>
    <Error Type="ORA-01435">user does not exist</Error>
    <Error Type="ORA-00955">name is already used by an existing object</Error>
    <Error Type="ORA-01031">name is already used by an existing
object</Error>
</FatalErrors>

<IgnorableErrors>
    <Error Type="ORA-02289">sequence does not exist</Error>
    <Error Type="ORA-00904">invalid identifier</Error>
    <Error Type="ORA-01920">user name conflicts with another user or role
name</Error>
    <Error Type="ORA-01418">specified index does not exist</Error>
    <Error Type="ORA-00942">table or view does not exist</Error>
    <Error Type="ORA-06512">Not found</Error>
    <Error Type="ORA-01403">no data found</Error>
    <Error Type="ORA-04043">does not exist</Error>
    <Error Type="ORA-04080">Trigger does not exist</Error>
    <Error Type="ORA-00959">Tablespace does not exist</Error>
    <Error Type="ORA-24035">AQ agent not subscriber</Error>
    <Error Type="ORA-24185">Transformation not found</Error>
    <Error Type="ORA-24042">Does not exist</Error>
    <Error Type="ORA-24088">Does not exist</Error>
</IgnorableErrors>
</ComponentInfo>

    ComponentInfo.xml                <DBPrerequisiteSet>
<DBPrerequisite>
    SOFT                TRUE

    <DBPrerequisiteSet>                <DBPrerequisite>
        <DBPrerequisiteSet>

                                <DBPrerequisite>

<DBPrerequisiteSet>
...
    <DBPrerequisite PREREQ_TYPE="CustomSQL" DATA_TYPE="STRING" COMPARE_
OPERATOR="EQ" SOFT="TRUE">
        <PrereqIdentifier>select value from nls_database_parameters where parameter
= 'NLS_CHARACTERSET'</PrereqIdentifier>
        <PrereqValue>AL32UTF8</PrereqValue>
        <PrereqErrorMsg>
            The database you are connecting is with non-AL32UTF8 character set.

```

---

```

    Oracle strongly recommends using AL32UTF8 as the database character
    set.
  </PrereqErrorMsg>
</DBPrerequisite>
...
<DBPrerequisiteSet>

```

#### Storage.xml

```

/rcu/config                                     \rcu\config

/rcu/integration                               /           _Storage.xml
Storage.xml                                   \rcu\integration \           _

```

#### soainfra\_Storage.xml

```

<?xml version="1.0" encoding="UTF-8"?>
  <!-- SOAINFRA -->
<TablespaceAttributes NAME="SOAINFRA" >
  <DatafilesList>
    <DatafileAttributes ID="%DATAFILE_LOCATION%/soainfra.dbf">
      <Size UNIT="MB">200</Size>
      <Reuse>True</Reuse>
      <AutoExtend>True</AutoExtend>
      <Increment UNIT="MB">50</Increment>
      <Maxsize UNIT="GB">2</Maxsize>
    </DatafileAttributes>
  </DatafilesList>
</TablespaceAttributes>

<!-- End Of SOAINFRA -->

```

Do not use CONNECT; instead, use "ALTER SESSION SET CURRENT\_SCHEMA = <SCHEMA\_OWNER>" after creating the schema user.

The set of ignorable and fatal ORA errors (if any) should be listed in the RCU XML component configuration file.

Avoid any "shutdown" or "startup" that would bounce the database instance.

SCHEMA\_VERSION\_REGISTRY should be updated before and after loading schema. This can be done using JavaAction as shown in Section 3.1.5, "Java Code



---

Using JavaAction" or with in the component scripts using SCHEMA\_VERSION PL/SQL package.

Block comments that contain line comments (/\* -- comment \*/) are not supported.

Below are some guidelines for writing RCU JDBC Engine SQL\*Plus scripts:

All statements must be terminated with appropriate terminating chars. CREATE PACKAGE, TYPE needs to be terminated with ";" with "/" on the next line. All other statements (Create TABLE, VIEW, etc.) need to be terminated by ";" or "/" (only one of them, not both).

EXECUTE calls should be replaced with "BEGIN/END blocks".

DEFINE statements should be in one line, no comments in the same line and no ";" at the end.

SET, SHOW, SPOOL, WHENEVER, BREAK, EXIT statements are simply ignored.

HOST command is not supported yet.

VARIABLE and COL(UMN) are not supported.

Dynamically calling another SQL Script within a PL/SQL block using the following technique is not supported:

The workaround is to have a separate Action with "ValidIf" tag to specify the condition.

Below are some guidelines for writing Pure JDBC scripts for RCU:

Should not contain any SQL\*Plus directives (like SET, WHENEVER, etc.).

All DEFINES should be changed to PL/SQL variable declarations.

All SQL statements should be wrapped in EXECUTE IMMEDIATE.

PL/SQL style comments are allowed, But SQL\*Plus style (REM) comments are not allowed.

DROP statements preceding CREATE statements do not work. DROP should only be done after checking for the existence of the object. Ideally, all DROP statements should put into different PL/SQL script and RCU can call this script before calling a CREATE script, if that is desired.

---

Contents of the script file should be a valid PL/SQL block, which can be called within

Below are some guidelines for writing SQL\*Plus scripts for RCU:

Should not have any "exit" statements or "WHENEVER ERROR EXIT" directives. This would cause RCU SQL\*Plus session to exit unexpectedly and may impact other component scripts to be executed later.

Scripts should not have any spool commands. RCU would generate a spool log for each component.

Below are some guidelines for writing SQL Server-based scripts for RCU:

Support is a subset of what is supported in t-sql scripts that can be executed by

"ValidIf" tags should be added around all database-specific Actions and Prerequisites. For example:

RCU supports recursive variable definitions such as:

There should be a "go" statement to end blocks of statements. All statements preceding the "go" statement will be executed as a single statement over JDBC.

The JDBC connection is created in the auto-commit "on" mode.

Currently, begin transaction and commit transaction statements are not supported.

Variables passed to scripts via the XML file will be passed as follows:

```
Script.sql -v v1=value1 v2=value2
```

This is only for scripts called using the XML files. If a script calls another script, you can use any other variable name.

---

---

# **Repository Creation Utility Screens**



This is the first screen that appears when RCU is started.

Click **Skip This Page Next Time**



**Create**  
**Drop**



**Create**  
**Drop**

**Repository Creation Utility - Step 2 of 7 : Database Connection Details**

**Database Connection Details**

ORACLE FUSION MIDDLEWARE 11g

[Welcome](#)  
[Create Repository](#)  
**Database Connection Details**  
[Select Components](#)  
[Schema Passwords](#)  
[Map Tablespaces](#)  
[Summary](#)  
[Completion Summary](#)

**Database Type:** Oracle Database  
**Host Name:** host1.us.oracle.com  
For RAC database, specify VIP name or one of the Node name as Host name.  
**Port:** 1521  
**Service Name:** orcl  
**Username:** sys  
User with DBA or SYSDBA privileges. Example: sys  
**Password:** ●●●●●●●●  
**Role:** SYSDBA  
One or more components may require SYSDBA role for the operation to succeed.

**Messages:**

parameter in the database's initialization parameter file. If the initialization parameter file does not contain the parameter, then the service name is the same as the global database name, which is specified in the and parameters.

For Oracle RAC databases, specify the service name of one of the nodes in this field. For example:

Username

Enter the user name for your database. The default user name is `SYS`

`SYS`

---

---

Oracle SOA Infrastructure schemas are created with Unicode support (database tables created with `NVARCHAR`) only, regardless of the option selected in this field.

---

---

Enter the host name, IP address, or complete server name in `host\server` format of the server where your database is running.

Port

Enter the port number for your database.

Database Name

Specify the name of your database.

Username

Enter the user name for your database. The user must have `SYSDBA` or `DBA` privileges.



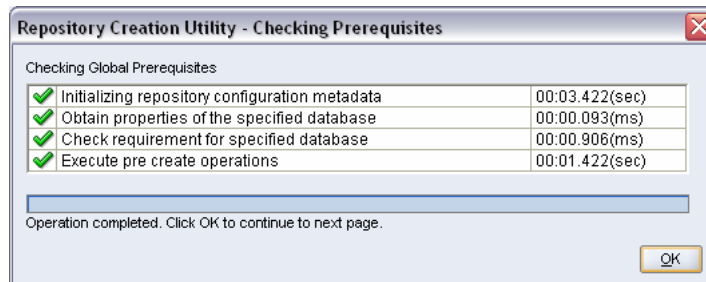
---

## Password


Enter the password for your database user.

Click  when you are finished entering the connection credentials for your database.

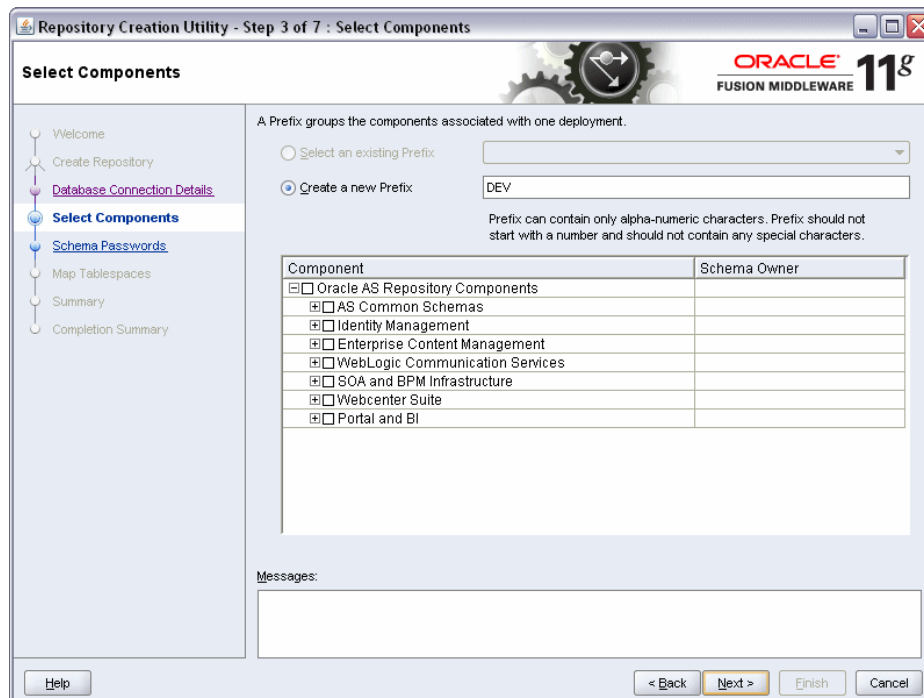
The following screen appears, indicating the progress of the installer establishing the connection with the specified database.



If an error occurs while the connection is being established, the error message(s) appear in the Messages field on the Database Connection Details screen.

Click  to dismiss this screen.

Below is the Select Components screen if you selected on the Create Repository Screen.



The following topics are covered in this section:

Section A.5.1, "Create Prefixes"

Section A.5.2, "Select Components and Dependencies"

Section A.5.3, "Specify Custom Schema Names"

Section A.5.4, "Check Schema Prerequisites"

---

---

You must remember the prefix and schema names for the components you are installing; you will need this information during the configuration phase of Fusion Middleware product installation. Oracle recommends that you write these values down.

---

---

Prefixes are used to create logical groupings of schemas in a database. For example, if you want to create two versions of the schema in the database, you can use different prefixes to uniquely identify each one (for example, and ).

---

---

The Oracle Internet Directory ( ) component cannot be prepended with a custom prefix; there can only be one repository for this component per database.

---

---

---

If you want to create a new prefix for your schemas, select **Create a New Prefix**

character in length and cannot exceed 12 alphanumeric characters (0-9, a-z, or A-Z) in length. Prefixes should not start with a number. No whitespace or special characters are allowed.

The default new prefix is `ns1`. If `ns1` already exists as a prefix, then `ns2` is used; if `ns2` exists, then `ns3` is the default, and so on.

Use existing prefixes to add additional components to an existing repository in the database. To use an existing prefix, select **Select an Existing Prefix**

**SOA Infrastructure**  
**Metadata Services**  
**SOA**  
**Infrastructure**  
**Metadata Services**

If a component has a plus sign (+) next to its name, then there are sub components available. Click on the plus sign (+) to expand the category to view all sub components. If you want to select a component with all its subcomponents, click on the top-most box with the plus sign (+).

### A.5.3 Specify Custom Schema Names

---

---

---

---

### A.5.4 Check Schema Prerequisites

**Repository Creation Utility - Checking Prerequisites**

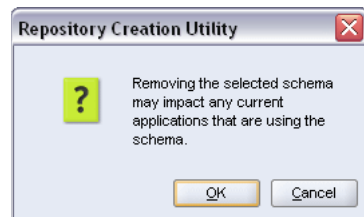
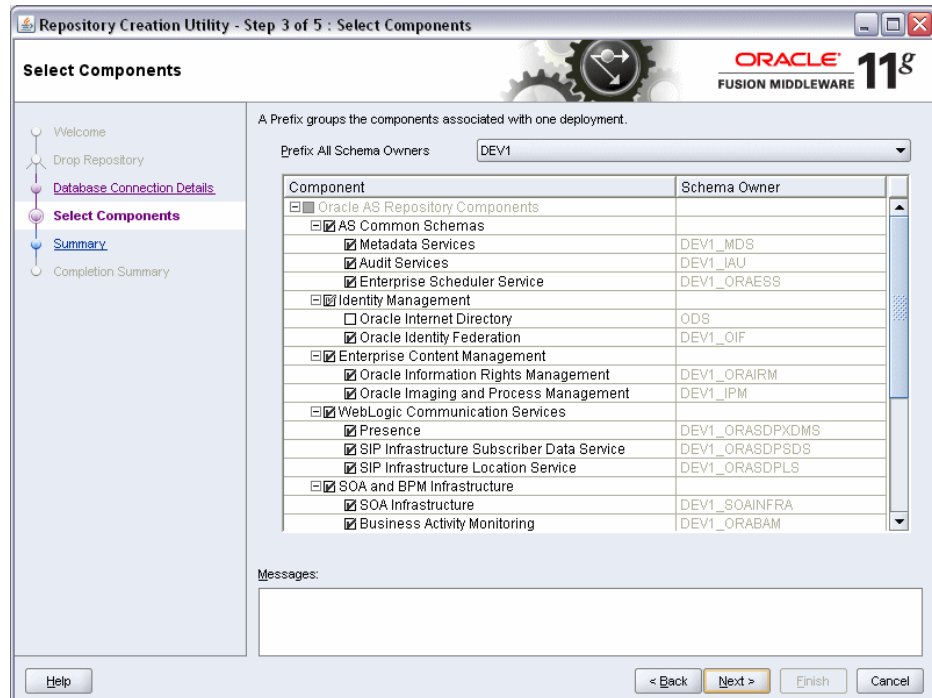
Checking Component Prerequisites

✓ Metadata Services	00:00.093(ms)
✓ Audit Services	00:00.094(ms)
✓ Enterprise Scheduler Service	00:00.094(ms)
✓ Oracle Identity Federation	00:00.110(ms)
✓ Oracle Information Rights Management	00:00.109(ms)
✓ Oracle Imaging and Process Management	00:00.094(ms)
✓ Presence	00:00.093(ms)
✓ SIP Infrastructure Subscriber Data Service	00:00.094(ms)
✓ SIP Infrastructure Location Service	00:00.094(ms)
✓ SOA Infrastructure	00:00.094(ms)
✓ Business Activity Monitoring	00:00.094(ms)
✓ User Messaging Service	00:00.094(ms)
✓ WebCenter Spaces	00:00.093(ms)
✓ Portlet Producers	00:00.094(ms)
✓ Oracle Content Server 10g	00:00.110(ms)
✓ Discussions	00:00.110(ms)
✓ Discussions Crawler	00:00.109(ms)
✓ Wiki and Blogs	00:00.109(ms)
✓ Portal	00:00.406(ms)
✓ Discoverer	00:00.109(ms)

Operation completed. Click OK to continue to next page.

OK

## A.6 Select Components Screen (for Drop Operation)



**Repository Creation Utility - Checking Prerequisites**

Checking Component Prerequisites

✓ Metadata Services	00:00.093(ms)
✓ Audit Services	00:00.094(ms)
✓ Enterprise Scheduler Service	00:00.094(ms)
✓ Oracle Identity Federation	00:00.110(ms)
✓ Oracle Information Rights Management	00:00.109(ms)
✓ Oracle Imaging and Process Management	00:00.094(ms)
✓ Presence	00:00.093(ms)
✓ SIP Infrastructure Subscriber Data Service	00:00.094(ms)
✓ SIP Infrastructure Location Service	00:00.094(ms)
✓ SOA Infrastructure	00:00.094(ms)
✓ Business Activity Monitoring	00:00.094(ms)
✓ User Messaging Service	00:00.094(ms)
✓ WebCenter Spaces	00:00.093(ms)
✓ Portlet Producers	00:00.094(ms)
✓ Oracle Content Server 10g	00:00.110(ms)
✓ Discussions	00:00.110(ms)
✓ Discussions Crawler	00:00.109(ms)
✓ Wiki and Blogs	00:00.109(ms)
✓ Portal	00:00.406(ms)
✓ Discoverer	00:00.109(ms)

Operation completed. Click OK to continue to next page.

OK

## A.7 Schema Passwords Screen

**Schema Passwords**

Please enter the passwords for the main and additional (auxiliary) schema users. Password can contain alphabets, numbers and the following special characters: \$, #, \_, . Password should not start with a number or a special character.

Use same passwords for all schemas

Password:

Confirm Password:

Use main schema passwords for auxiliary schemas

Specify different passwords for all schemas

Component	Schema Owner	Schema Password	Confirm Password
Metadata Services	DEV_MDS		
Audit Services	DEV_IAU		
Auxiliary Schema	DEV_IAU_Append		
Auxiliary Schema	DEV_IAU_Viewer		
Enterprise Scheduler Servi...	DEV_ORAESS		
Oracle Internet Directory	ODS		
Auxiliary Schema	ODSSM		
Oracle Identity Federation	DEV_OIF		
Oracle Information Rights ...	DEV_ORAIRM		

Messages:

Help    < Back    Next >    Finish    Cancel

**Use same password for all schemas**

**Use main schema passwords for auxiliary schemas**

**Specify different passwords for all schemas**

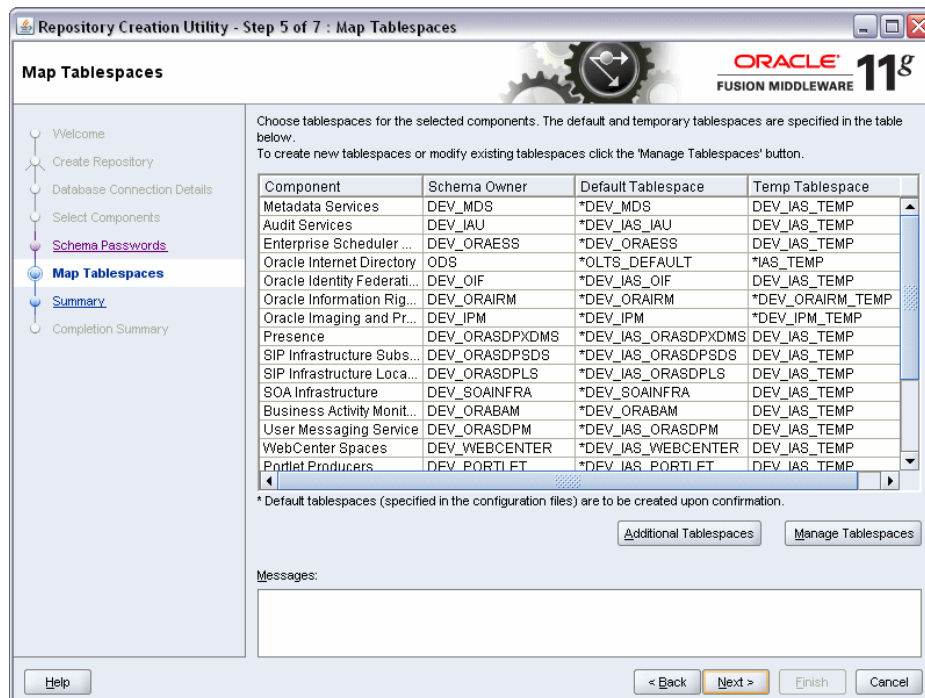
---

---

---

---

## A.8 Map Tablespaces Screen







---

---

Component	Schema Owner	Default tablespace	Temp Tablespace
-----------	--------------	--------------------	-----------------

---

**WebCenter Suite Schemas**

---

---

---

---

---

---

---

---

**Portal and Business Intelligence Schemas**

---

---

---

---

---

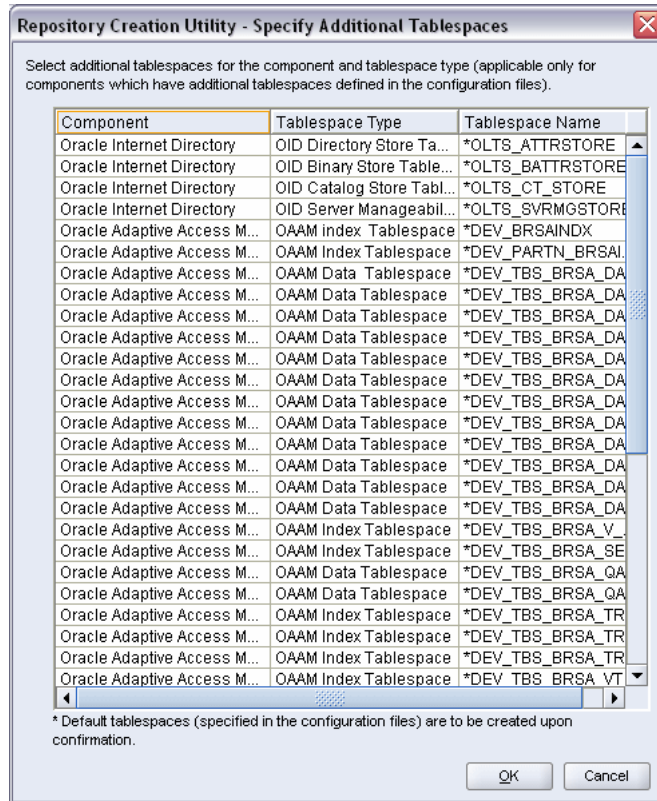
**Note:**

---

---

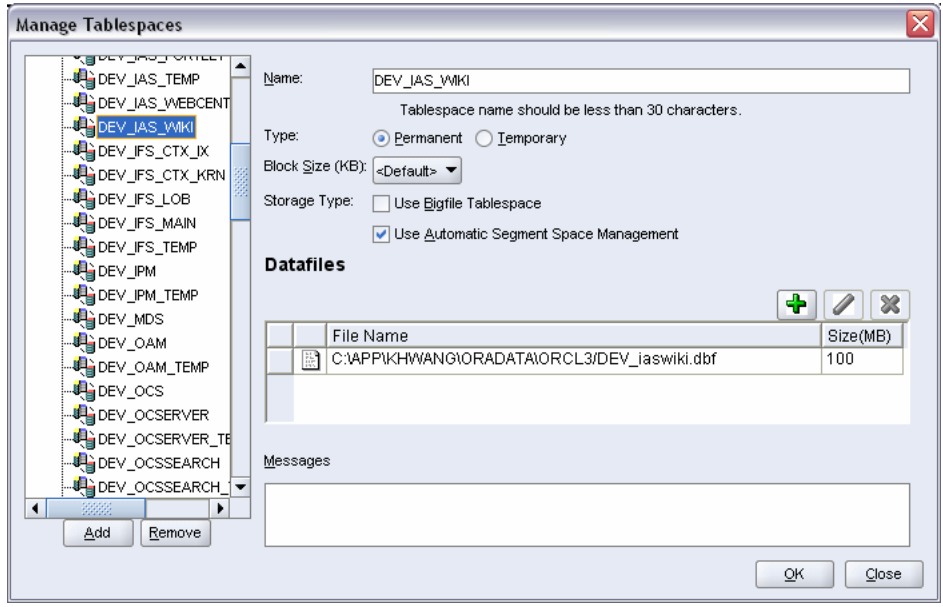
**Additional Tablespaces**

**Additional Tablespaces**



OK

## Manage Tablespaces



#### A.8.4.1 Adding, Modifying, and Removing Tablespaces

Use Bigfile Tablespace

Use Automatic Segment Space Management

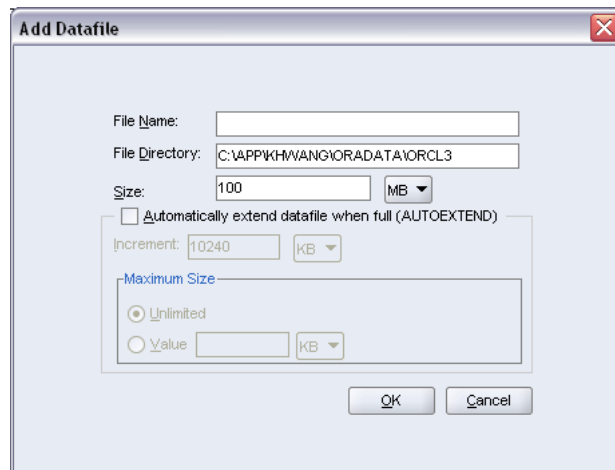
Add

---

Remove

## A.8.4.2 Adding, Modifying, and Removing Datafiles

### A.8.4.2.1 Adding a Datafile



**Add Datafile**

File Name:

File Directory: C:\APP\KH\WANG\ORADATA\ORCL3

Size:  MB

Automatically extend datafile when full (AUTOEXTEND)

Increment:  KB

Maximum Size

Unlimited

Value  KB

OK Cancel

**Automatically extend datafile when full (AUTOEXTEND)**

---

### A.8.4.2.2 Modifying a Datafile



**Edit Datafile** ✖

File Name:

File Directory:

Size:  MB

Automatically extend datafile when full (AUTOEXTEND)

Increment:  MB

Maximum Size

Unlimited

Value  KB

### A.8.4.2.3 Deleting a Datafile



## A.9 Summary Screen (for Create Operation)

Repository Creation Utility - Step 6 of 7 : Summary

**Summary**

ORACLE 11g  
FUSION MIDDLEWARE

[Welcome](#)  
[Create Repository](#)  
[Database Connection Details](#)  
[Select Components](#)  
[Schema Passwords](#)  
[Map Tablespaces](#)  
**Summary**  
[Completion Summary](#)

Database details:  
 Host Name: khwang-pc2.us.oracle.com  
 Port: 1521  
 Service Name: ORCL3.US.ORACLE.COM  
 Connected As: sys  
 Operation: Create

Prefix for (prefixable) Schema Owners: DEV  
 Prefix for (non-prefixable) Schema Owners: DEFAULT\_PREFIX

Component	Schema Owner	Tablespace Type	Tablespace Name
Metadata Services	DEV_MDS	Default	DEV_MDS
		Temp	DEV_IAS_TEMP
		Additional	None
Audit Services	DEV_IAU	Default	DEV_IAS_IAU
		Temp	DEV_IAS_TEMP
		Additional	None
Enterprise Scheduler Servi...	DEV_ORAESS	Default	DEV_ORAESS
		Temp	DEV_IAS_TEMP
		Additional	None
Oracle Internet Directory	ODS	Default	OLTS_DEFAULT
		Temp	IAS_TEMP
		Additional	OLTS_ATTRSTORE
		Additional	OLTS_BATTRSTORE
Oracle Identity Federation	DEV_OIF	Additional	OLTS_CT_STORE
		Additional	OLTS_SVRMGSTORE
		Default	DEV_IAS_OIF
		Temp	DEV_IAS_TEMP

Help < Back Next > Create Cancel

Repository Creation Utility - Create

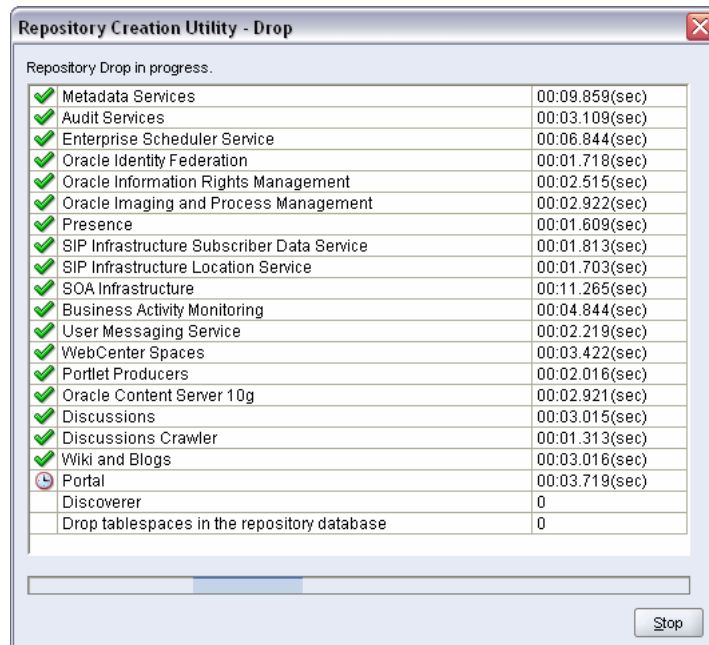
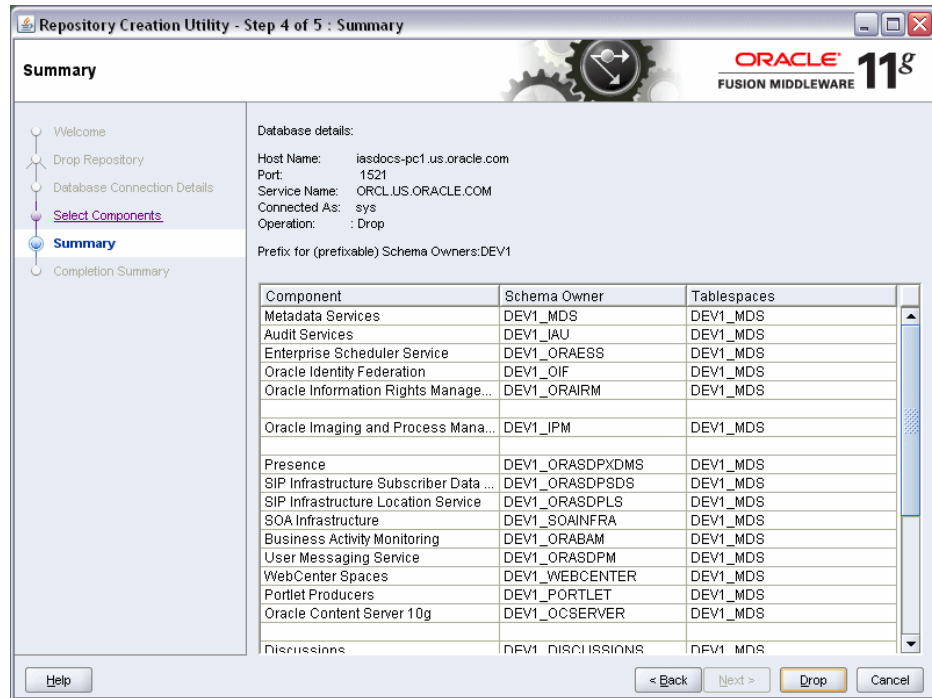
Repository Create in progress.

✓ Metadata Services	00:01.828(sec)
✓ Audit Services	00:04.719(sec)
✓ Enterprise Scheduler Service	00:05.032(sec)
✓ Oracle Identity Federation	00:00.407(ms)
✓ Oracle Information Rights Management	00:01.516(sec)
✓ Oracle Imaging and Process Management	00:01.297(sec)
✓ Portlet Producers	00:01.016(sec)
✓ Oracle Content Server 10g	00:02.313(sec)
✓ Discussions	00:01.813(sec)
✓ Wiki and Blogs	00:01.516(sec)
✓ Discoverer	00:03.859(sec)
✓ User Messaging Service	00:00.906(ms)
✓ WebCenter Spaces	00:04.031(sec)
✓ Discussions Crawler	00:00.610(ms)
⌚ Portal	06:26.578(min)
SOA Infrastructure	0
Business Activity Monitoring	0
Presence	0
SIP Infrastructure Subscriber Data Service	0
SIP Infrastructure Location Service	0
Execute post create operations	0

Stop



## A.10 Summary Screen (for Drop Operation)



## A.11 Completion Summary Screen (for Create Operation)

**Completion Summary**

Database details:

Host Name: iasdocs-pc1.us.oracle.com  
 Port: 1521  
 Service Name: ORCL.US.ORACLE.COM  
 Connected As: sys  
 Operation: Create  
 RCU Logfile: C:\rcuHome\rcu\log\logdir.2010-01-08\_12-39\rcu.log  
 Component Log Directory: C:\rcuHome\rcu\log\logdir.2010-01-08\_12-39  
 Execution Time: 20 minutes 36 seconds

Prefix for (prefixable) Schema Owners:DEV  
 Prefix for (non-prefixable) Schema Owners:DEFAULT\_PREFIX

Component	Status	Logfile	Time
Metadata Services	Success	mds.log	00:04.047(sec)
Audit Services	Success	iau.log	00:06.562(sec)
Enterprise Scheduler Service	Success	oraess.log	00:11.110(sec)
Oracle Internet Directory	Success	oid.log	01:05.562(min)
Oracle Identity Federation	Success	oif.log	00:00.984(ms)
Oracle Information Rights Management	Success	irm.log	00:01.656(sec)
Oracle Imaging and Process Managem...	Success	ipm.log	00:01.594(sec)
Presence	Success	orasdpdms.log	00:00.812(ms)
SIP Infrastructure Subscriber Data Service	Success	orasdpds.log	00:00.469(ms)
SIP Infrastructure Location Service	Success	orasdpls.log	00:00.297(ms)
SOA Infrastructure	Success	soainfra.log	00:14.968(sec)
Business Activity Monitoring	Success	bam.log	00:11.188(sec)
User Messaging Service	Success	orasdpm.log	00:00.984(ms)
WebCenter Spaces	Success	webcenter.log	00:04.641(sec)
Portlet Producers	Success	portlet.log	00:01.781(sec)

Buttons: Help, < Back, Next >, Create, Close

*RCU\_HOME*                      *date\_timestamp*

*RCU\_HOME\rcu\log\logdir.date\_timestamp*

Repository Creation Utility - Step 5 of 5 : Completion Summary

**Completion Summary**

ORACLE FUSION MIDDLEWARE 11g

Welcome  
 Drop Repository  
 Database Connection Details  
 Select Components  
 Summary  
**Completion Summary**

Database details:

Host Name: iasdocs-pc1.us.oracle.com  
 Port: 1521  
 Service Name: ORCL.US.ORACLE.COM  
 Connected As: sys  
 Operation: Drop  
 RCU Logfile: C:\rcuHome\rcu\log\logdir.2010-01-08\_14-55\rcu.log  
 Component Log Directory: C:\rcuHome\rcu\log\logdir.2010-01-08\_14-55  
 Execution Time: 7 minutes 16 seconds

Prefix for (prefixable) Schema Owners:DEV1

Component	Status	Logfile	Time
Metadata Services	Success	mds.log	00:09.781(sec)
Audit Services	Success	iau.log	00:03.031(sec)
Enterprise Scheduler Service	Success	oraess.log	00:06.813(sec)
Oracle Identity Federation	Success	oif.log	00:01.687(sec)
Oracle Information Rights Management	Success	irm.log	00:02.515(sec)
Oracle Imaging and Process Managem...	Success	ipm.log	00:02.860(sec)
Presence	Success	orasdpdxms.log	00:01.562(sec)
SIP Infrastructure Subscriber Data Service	Success	orasdpds.log	00:01.719(sec)
SIP Infrastructure Location Service	Success	orasdppls.log	00:01.625(sec)
SOA Infrastructure	Success	soainfra.log	00:11.171(sec)
Business Activity Monitoring	Success	bam.log	00:04.797(sec)
User Messaging Service	Success	orasdpms.log	00:02.141(sec)
WebCenter Spaces	Success	webcenter.log	00:03.406(sec)
Portlet Producers	Success	portlet.log	00:01.985(sec)
Oracle Content Server 10g	Success	contentserver.log	00:02.906(sec)
Discussions	Success	discussions.log	00:02.937(sec)

Help < Back Next > Drop Close

`RCU_HOME/rcu/log/logdir.date_timestamp`

`RCU_HOME\rcu\log\logdir.date_timestamp`



---

---

## Troubleshooting Repository Creation Utility

*Oracle Fusion Middleware Release Notes*

- 1.
- 2.
- 3.



---

---

# Index

## A

---

adding tablespaces, [A-18](#)  
A-19

## C

---

## D

---

## E

---

## I

---

instdemo.sql script, [2-5](#)

integrating component scripts, [3-1](#)  
integrating components using declarative XML, [1-1](#)

## J

---

## L

---

## M

---

## O

---

## P

---

## R

---

- starting in silent mode (no GUI), 1-2
- supported platforms for 11 R1 (11.1.1), 2-2
- tablespace mappings, A-15
- troubleshooting, B-1
- using in silent mode, 2-5
- using the CLI, 2-5
- using with Java Access Bridge, 2-2
- where to obtain, 1-2

Repository Creation Utility (RCU), ix

RepositoryConfig.dtd file, 3-5

root access, ix

## **S**

---

- customizing, A-9
- schema passwords, A-13
- schema prefix, 2-3, 2-4
- schema\_version\_segistry
  - mapping schemas and prefixes, 1-2
- schemas, 1-1
- setting soft-prerequisite, 3-15
- soft-prerequisite, 3-15
- specifying schema passwords, A-13
- SQL\*Plus Scripts, 3-1
- starting RCU from the CD, 1-1
- starting RCU in silent mode (no GUI), 1-2
- Storage.dtd file, 3-7
- Storage.xml file, 3-16
- system requirements, 2-1

## **T**

---