



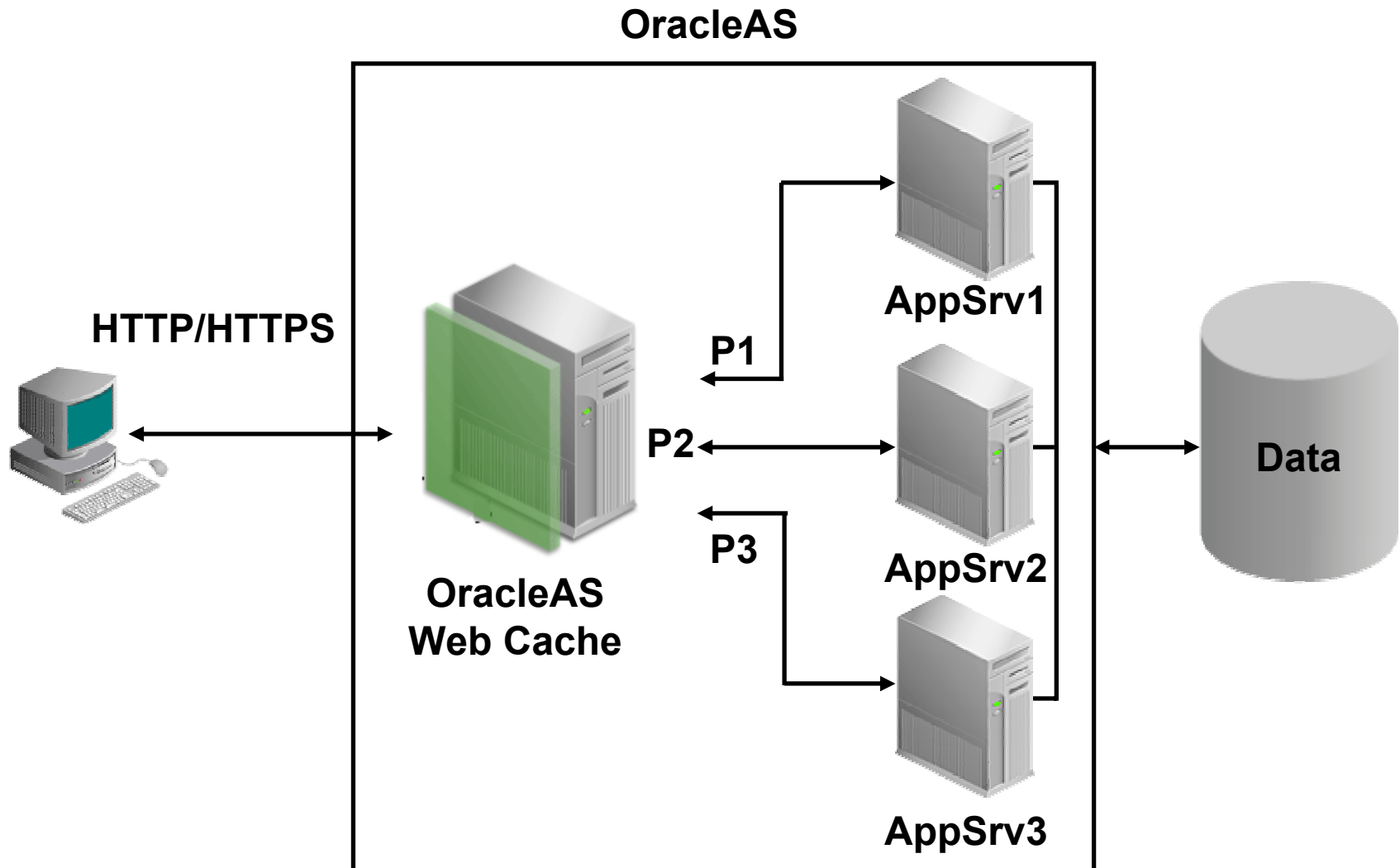
# **Управление и конфигурирование OracleAS Web Cache**

# Цели

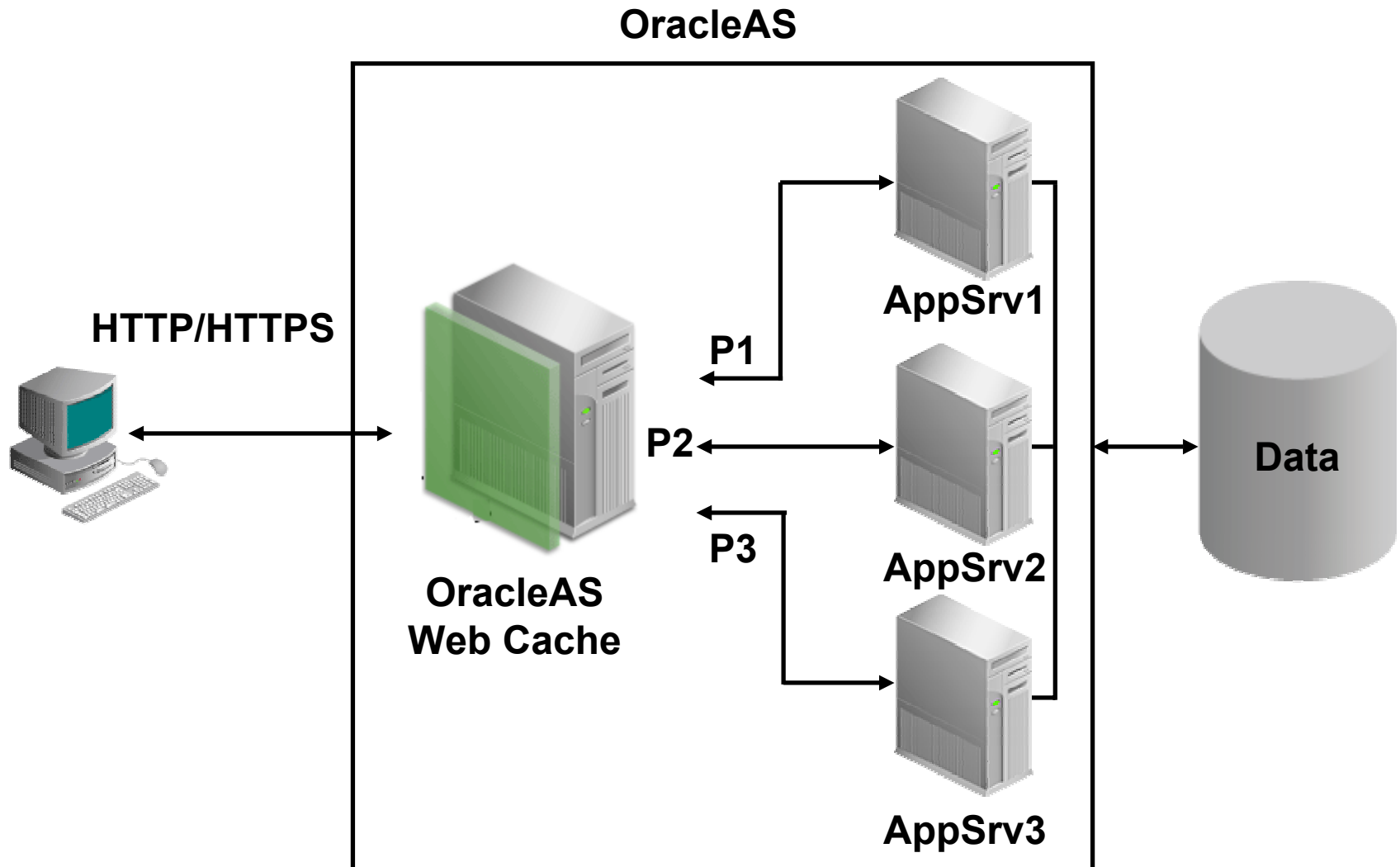
После завершения этого урока вы должны будете уметь следующее:

- Запускать, останавливать и рестартировать OracleAS Web Cache
- Изменять пароли для административных пользователей и порты для listener'ов
- Производить site-to-server мапирование
- Создавать и конфигурировать правила кэширования
- Устанавливать основной invalidation механизм (механизм очистки кэши)
- Устанавливать основные правила для устаревания (expiration)
- Конфигурировать доступ и запись логов
- Получать статистику по производительности

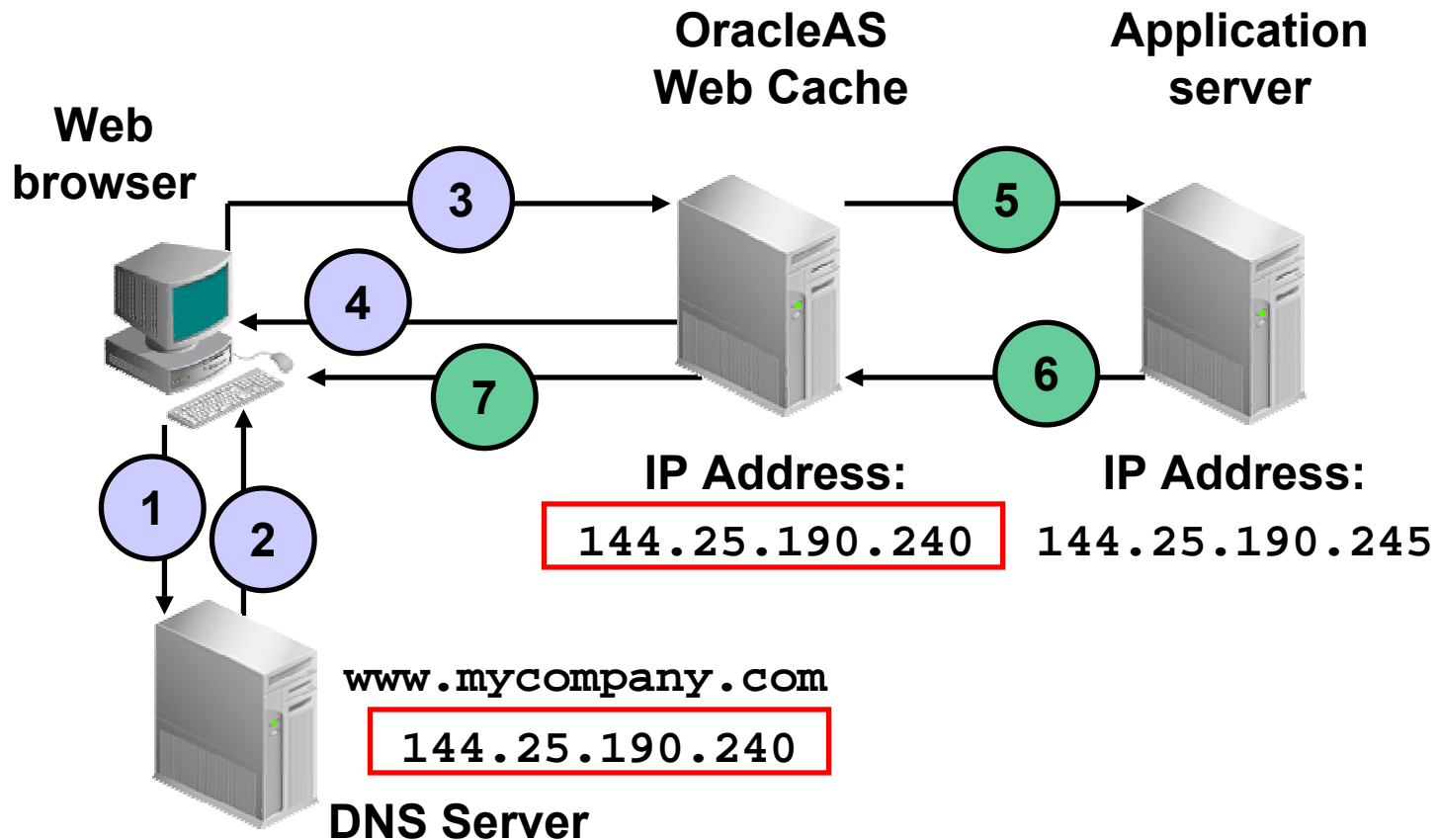
# Что такое OracleAS Web Cache?



# Архитектура OracleAS Web Cache



# Как OracleAS Web Cache работает?




# Концепция OracleAS Web Cache

- **Входная точка начальной загрузки для OAS 10g**
- **Периодическая очистка на базе правил и гарантии производительности**
  - Устаревание кэшируемых ресурсов (определяемое правилами)
  - Обнуление (определяемое событиями)
- **Разделение кэшируемых ресурсов на популярные и практически не используемые**
- **Кэширование динамически генерируемого контента**
- **Использование Edge Side Include (ESI)**
  - Частичное кэширование страниц
  - Агрегирование контента для кэширования

# Администрирование OracleAS Web Cache


- **Запуск и останов OracleAS Web Cache**
- **Аннулирование (invalidating) кэшируемых страниц**
- **Сбор логов о регистрируемых событиях (event logs)**
- **Сбор и оценка логов с данными о доступе (access logs)**
- **Мониторирование статистики Web Cache**

# Домашняя страница OracleAS Web Cache


**ORACLE** Enterprise Manager 10g   
Application Server Control [Logs](#) [Preferences](#) [Help](#)

[Farm](#) > [Application Server: bi.edcdr6p1.us.oracle.com](#) > [Web Cache](#)

## Web Cache

Page Refreshed **Nov 18, 2003 1:51:33 PM** 

### General



Status	<b>Up</b>	<input type="button" value="Stop"/>	<input type="button" value="Restart"/>
Up Since	<b>Nov 17, 2003 11:49:47 AM</b>		
CPU Usage (%)	<b>0.05</b>		
Memory Usage (MB)	<b>29.80</b>		
Cache Size Limit (MB)	<b>500.00</b>		
Cache Size (MB)	<b>37.14</b>		
Cached Documents	<b>25</b>		

### Activity

Requests Per Second	<b>0.00</b>
Data Served (MB/second)	<b>0.00</b>
Errors Per Second	<b>0.00</b>
Open Connections	<b>1</b>
Active Sessions	<b>1</b>
Origin Server Backlog	<b>0</b>

### Performance

[Activity](#)   [Origin Servers](#)   [Popular Requests](#)

### Administration

[Web Cache Administration](#)



# OracleAS Web Cache Manager

Oracle Application Server

Web Cache

[Home](#) [Content Frame](#)

Apply Changes

Cancel Changes

Web Cache running with current configuration.

## Operations

- ◆ [Cache Operations](#)
- ◆ [Basic Content Invalidation](#)
- ◆ [Advanced Content Invalidation](#)
- ◆ [On-Demand Log File Rollover](#)

## Monitoring

- ◆ [Web Cache Statistics](#)
- ◆ [Health Monitor](#)
- ◆ [Origin Server Statistics](#)
- ◆ [Popular Requests](#)
- ◆ [End-User Performance Analysis](#)

## Properties

- ◆ [Security](#)
- ◆ [Process Identity](#)
- ◆ [Auto-Restart](#)
- ◆ [Network Timeouts](#)
- ◆ [Resource Limits](#)
- ◆ [Clustering](#)

## Logging and Diagnostics

- ◆ [Event Logs](#)
- ◆ [Access Logs](#)
- ◆ [End-User Performance Monitoring](#)
- ◆ [Diagnostics](#)

## Ports

- ◆ [Listen Ports](#)
- ◆ [Operations Ports](#)

## Origin Servers, Sites, and Load Balancing

- ◆ [Origin Servers](#)
- ◆ [Site Definitions](#)
- ◆ [Site-to-Server Mapping](#)
- ◆ [Error Pages](#)
- ◆ [Session Binding](#)
- ◆ [Origin Server Wallet](#)

## Rules for Caching, Personalization, and Compression

- ◆ [Caching, Personalization, and Compression Rules](#)
- ◆ [Expiration Policy Definitions](#)
- ◆ [Session Definitions](#)
- ◆ [Cookie Definitions](#)

## Rule Association

- ◆ [Compression Policy Association](#)
- ◆ [Expiration Policy Association](#)
- ◆ [Session Caching Policy Association](#)
- ◆ [Cookie Association](#)
- ◆ [Header Association](#)
- ◆ [Session-Encoded URL Association](#)
- ◆ [HTTP Error Caching Association](#)
- ◆ [ESI Propagation Policy Association](#)

# Использование `opmnctl` для запуска и останова OracleAS Web Cache

- Вы можете использовать утилиту `opmnctl` для запуска, останова и рестартирования процессов OracleAS Web Cache.

```
$ opmnctl startproc ias-component=WebCache
```

```
$ opmnctl stopproc ias-component=WebCache
```

```
$ opmnctl restartproc ias-component=WebCache
```

- В stand-alone Web Cache инсталляции Вы можете использовать `webcachectl`:

```
$ webcachectl start
```

# Использование Application Server Control для запуска и останова Web Cache


Farm > Application Server: bi.edcdr6p1.us.oracle.com

## Application Server: bi.edcdr6p1.us.oracle.com

Home [J2EE Applications](#) [Ports](#) [Infrastructure](#)


Page Refreshed Nov 18, 2003 1:51:19 PM

### General




**Status** Up  
**Host** [edcdr6p1.us.oracle.com](#)  
**Installation Type** Business Intelligence and Forms  
**Oracle Home** /home/oracle/bi  
**Farm** [infra.us.oracle.com](#)

### CPU Usage



- Application Server (7%)
- Idle (64%)
- Other (29%)

### Memory Usage



- Application Server (100% 1,004MB)
- Free (0% 0MB)
- Other (0% 0MB)

### System Components

Select All | Select None

Select	Name	Status	Start Time	CPU Usage (%)	Memory Usage (MB)
<input type="checkbox"/>	Discoverer	↑	Nov 17, 2003 11:49:47 AM	0.00	14.49
<input type="checkbox"/>	Forms	↑	Nov 17, 2003 11:50:10 AM	0.00	0.00
<input type="checkbox"/>	home	↑	Nov 17, 2003 11:49:52 AM	0.63	44.84
<input type="checkbox"/>	HTTP Server	↑	Nov 17, 2003 11:39:54 AM	6.57	4,178.77
<input type="checkbox"/>	OC4J BI_Forms	↑	Nov 17, 2003 11:50:09 AM	0.00	80.63
<input type="checkbox"/>	OC4J Portal	↑	Nov 17, 2003 11:49:52 AM	0.07	106.35
<input type="checkbox"/>	Portal:portal	↑	N/A	N/A	N/A
<input type="checkbox"/>	Reports Server: rep_edcdr6p1	↑	N/A	N/A	N/A
<input type="checkbox"/>	Web Cache	↑	Nov 17, 2003 11:49:47 AM	0.03	29.80

# Изменение пароля администратора

The screenshot displays the Oracle Application Server Web Cache administration console. The main window shows the 'Security' page with the following content:

- Operations**
  - Cache Operations
  - Basic Content Invalidation
  - Advanced Content Invalidation
  - On-Demand Log File Rollover
- Monitoring**
  - Web Cache Statistics
  - Health Monitor
  - Origin Server Statistics
  - Popular Requests
  - End-User Performance Analysis
- Properties**
  - Security** (highlighted with a red box and circled with '1')
  - Process Identity
  - Auto-Restart
  - Network Timeouts

The 'Security' page includes instructions: 'Use this page to change the administration and invalidation passwords. You can also use this page to specify the trusted hosts and users. The following options are available for administration users: headers, and cluster security.' Below this, the 'Administration User: admin' is listed, and a 'Change Administration Password...' button is highlighted with a red box and circled with '2'. The 'Invalidation User: invalidation' is also listed, with a 'Change Invalidation Password...' button below it.

An overlaid dialog box titled 'Change Administration Password - Mozilla (Build ID: 20020910)' contains the following text:

**Change Administration Password**

If you change the administrator password, then you must restart the admin server process with the `webcachectl restart` command rather than with the Restart option in the Operations page (Administration > Operations).

Old Password:

New Password:

Confirm New Password:

The dialog box also features a 'Help' link and a circled '3' next to the instructions.

At the top right of the main window, there are 'Apply Changes' and 'Cancel Changes' buttons, and a status message: 'Web Cache running with current configuration.'

# Конфигурирование портов для обслуживания запросов

The screenshot displays the OracleAS Web Cache Manager interface in a Mozilla browser window. The main page shows the 'Listen Ports' configuration for the cache named 'edcdr6p1.us.oracle.com-WebCache'. The 'Listen Ports' section is highlighted in the left-hand navigation pane. The configuration window is open, showing the following details:

- Cache Name:** edcdr6p1.us.oracle.com-WebCa
- IP Address:** ANY
- Port Number:** 7890
- Protocol:** HTTP
- Require Client-Side Certificate:**
- Wallet:** [Empty field]

The 'Listen Ports' section in the main interface includes a note: 'Use this page to configure the port... Note: Changing listen ports may e...'. Below the note, it states: 'Component Dependencies: Che Oracle9:AS components. Parame ports are not in conflict. In particul reconfiguration.'

# Объявление оригинальных Web-серверов для последующего их мапирования

The image shows the Oracle Application Server Web Cache configuration interface. On the left, the 'Origin Servers, Sites, and Load Balancing' menu is expanded, with 'Origin Servers' highlighted by a red box and a blue circle containing the number '1'. Below this, the 'Add...' button in the 'Application Web Servers' table is also highlighted with a red box and a blue circle containing the number '2'. On the right, the 'Add Application Web Server' dialog box is open, displaying instructions and configuration fields for adding a new origin server.

**Oracle Application Server Web Cache**  
Home Content Frame

**Origin Servers, Sites, and Load Balancing**

- ◆ Listen Ports
- ◆ Operations Ports
- ◆ **Origin Servers**
- ◆ Site Definitions
- ◆ Site-to-Server Mapping
- ◆ Error Pages
- ◆ Session Binding
- ◆ Origin Server Wallet

**Rules for Caching, Personalization, and Compression**

- ◆ Caching, Personalization, and Compression Rules
- ◆ Expiration Policy Definitions
- ◆ Session Definitions
- ◆ Cookie Definitions

**Origin Server**

Use this page to configure the settings. These settings are used for the origin server and site-to-server mapping.

Component Dependencies: This page also requires the configuration of the server's configuration.

**Application Web Servers**

Select	Host
<input type="checkbox"/>	EDCDR6P1.us
<input type="checkbox"/>	EDCDR6P1.us

**Add...** Edit Selected...

**Add Application Web Server - Mozilla** (Build ID: 2002050110)

In order for Oracle9iAS Web Cache to forward requests to an application Web server, you must map a Web site to the server in the Site-to-Server Mapping page (**Origin Servers, Sites and Load Balancing > Site-to-Server Mapping**).

Hostname:

Port:

Routing:  ENABLE  DISABLE

Capacity:

Failover Threshold:

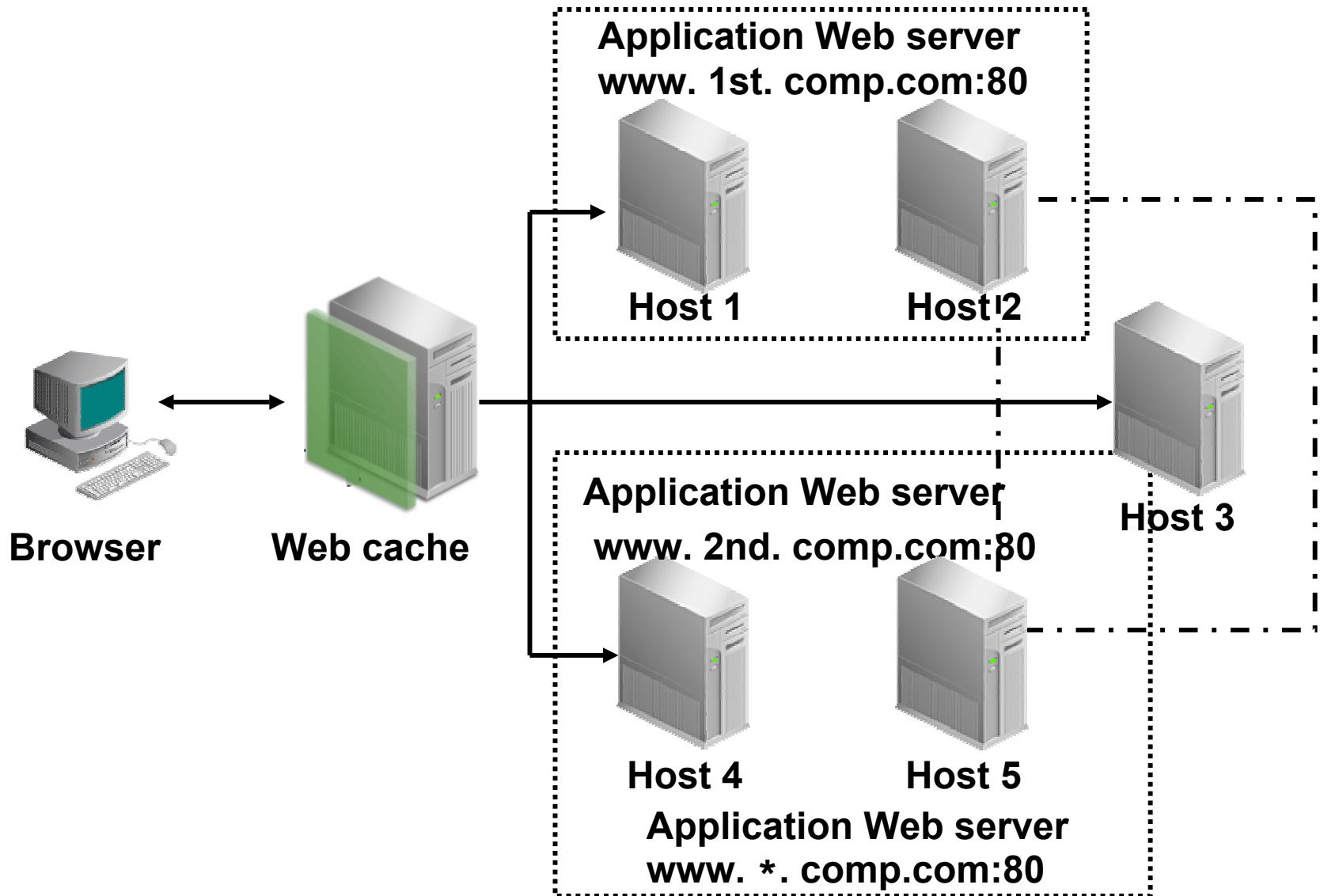
Ping URL:

Ping Interval (seconds):

Protocol:

Submit Cancel

# Установка Site Definitions



# Конфигурирование Site Definitions

Oracle Application Server  
**Web Cache**  
Home Content Frame

Apply Changes Cancel Changes  
Web Cache running with current configuration.

**Logging and Diagnostics**

- Event Logs
- Access Logs
- End-User Performance Monitoring
- Diagnostics

**Ports**

- Listen Ports
- Operations Ports

**Origin Servers, Sites, and Load Balancing**

- Origin Servers
- Site Definitions**
- Site-to-Server Mapping
- Error Pages
- Session Binding
- Origin Server Wallet

**Rules for Caching, Personalization, and Compression**

- Caching, Personalization, and Compression Rules
- Expiration Policy Definitions

**Site Definitions**

Use this page to configure Site definitions enable different sites. Request origin servers through enable the mapping example, site www.com company.com:80. By www.company.com: either company.com definitions also affected

**Note:** When a site definition automatically removed

**Add Site**

Host Name: (hostname.domain) edcdr6p1.us.oracle.com (Example: www.company.com)  
Port Number: 7890 (Examples: 80 for HTTP; 443 for HTTPS)  
HTTPS Only Prefix:  
Client-Side Certificate:  Required  Not Required  
Default Site:  Yes  No  
Create Alias from Site Name with/without www:  Yes  No

Submit Cancel

Select	Host Name	Port	HTTPS Only Prefix	Client-Side Certificate	Default
<input type="radio"/>	edcdr6p1.us.oracle.com	7778		Not Required	Yes

Add Site... Delete Site Add Alias... Edit Alias...



# Конфигурирование Site to Server мапирования

The screenshot shows the Oracle Application Server Web Cache configuration page. The left sidebar contains a navigation menu with categories: Properties, Logging and Diagnostics, Ports, Origin Servers, Sites, and Load Balancing, and Rules for Caching, Personalization, and Compression. The 'Site-to-Server Mapping' option is highlighted with a red box and a circled '1'. The main content area is titled 'Edit/Add Site-to-Server Mapping' and includes instructions, a table of mappings, and configuration options.

**Site-to-Server Mapping**

Use this page to map requests from the Origin Servers page. Mapping:

**Note:** Prior to creating mapping, Site Definitions and Origin Server mapping for that site is not out of sync.

Select	Priority	Host Name
<input checked="" type="radio"/>	1	edcdr6p1
<input type="radio"/>	2	*
<input type="radio"/>	3	*

Buttons: Edit Selected, Delete, Move

**Edit/Add Site-to-Server Mapping**

**Specify Site Name**  
Select one of the following options to specify a Site Name

**Enter Site Name**  
Host Name:  (Example: wwwr.company.com; \*.company.com, \*)  
Port Number:  (Examples: 80 for HTTP; 443 for HTTPS; \* for all ports)

**Select from Site Definitions**  
Host Name : Port Number :

**Select either application Web servers or proxy servers to which this Site is mapped**

**Select Application Web Servers**  
 edcdr6p1.us.oracle.com:7779 HTTP

**Select Proxy Servers**  
No Proxy Server is configured

Exclude:

Submit Cancel

# Правила кэширования: Обзор

- **Правила кэширования определяют когда надо и не надо кэшировать информацию, а также определяют какую информацию кэшировать:**
  - **Static documents**
  - **Multiple-version URLs**
  - **Personalized pages**
  - **Pages that support session tracking**
  - **HTTP error messages**
  - **URLs that match with regular expressions**
  - **URL trees that contain a document or a subtree**
- **Кэширование базируется на правилах приоритета (Верхние правила имеют более высокий приоритет).**
- **Правила также разделяют механизм кэширования для статического и динамического контента.**

# Предопределенные правила кэширования

**For All Sites:**

Select	Priority	Selectors			Cache/Don't Cache	Compression	Detailed Settings
		URL Expression	HTTP Method(s)	POST Body Expression			
<input type="radio"/>	9	\.pdf\$	GET, GET with query string		Cache	Off	<a href="#">details</a>
<input type="radio"/>	10	\.html?\$	GET, GET with query string		Cache	On for all browsers	<a href="#">details</a>
<input type="radio"/>	11	\.(gif jpe?g)\$	GET, GET with query string		Cache	Off	<a href="#">details</a>
<input type="radio"/>	12	\.(bmp png)\$	GET, GET with query string		Cache	On for non-Netscape browsers	<a href="#">details</a>
<input type="radio"/>	13	\.js\$	GET, GET with query string		Cache	Off	<a href="#">details</a>

Edit...

Delete...

Insert Above ...

Insert Below...

Move Up

Move Down

# Правила для кэширования, персонализация и компрессия

Колонка Priority определяет порядок в котором процессируются правила кэширования:

**For All Sites:**

Select	Priority	Selectors			Cache/Don't Cache	Compression	Detailed Settings
		URL Expression	HTTP Method(s)	POST Body Expression			
<input type="radio"/>	9	\.pdf\$	GET, GET with query string		Cache	Off	<a href="#">details</a>
<input type="radio"/>	10	\.html?\$	GET, GET with query string		Cache	On for all browsers	<a href="#">details</a>
<input type="radio"/>	11	\.(gif jpe?g)\$	GET, GET with query string		Cache	Off	<a href="#">details</a>
<input type="radio"/>	12	\.(bmp png)\$	GET, GET with query		Cache	On for non-Netscape	<a href="#">details</a>

# Создание правил кэширования

**Create Cacheability Rule**

URL Expression:

Method:  GET  GET with query string  POST (WARNING!)

POST Body Expression:

(This field is required only when you selected POST method above)

Cache  Don't Cache

ESI Output Permission:  No  YES

Comment:

Compression:  No  Yes

- Compress for all browsers (WARNING!)
- Compress for non-Netscape browsers only

Buttons: Submit, Cancel

Cache	Compression	Settings
Cache	Off	<a href="#">details</a>
Cache	On for all browsers	<a href="#">details</a>
Cache	Off	<a href="#">details</a>
Cache	On for non-Netscape browsers	<a href="#">details</a>
Cache	Off	<a href="#">details</a>

Buttons: Move Up, Move Down

Buttons: Create Site Specific Rule, Create Global Rule

# Редактирование правил кэширования

**Compression**

- Compress for all browsers **(WARNING!)**
- Compress for non-Netscape browsers only

**Expiration Rule**

Expire: 300 seconds in cache. After: remove immediately.

**Multiple Documents with the Same Selector by Cookies**

- None
- Apply the following:
  - oracle-disco-account: cache w/o cookie

**Multiple Documents with the Same Selector by Other Headers**

- Accept  Accept-Charset  Accept-Encoding
- Accept-Language  User-Agent

**Session/Personalized Attribute Related Caching Rules**

- None
- Apply the following:

**Simple Personalization**

- No
- Yes

**HTTP Error Caching**

Error codes to cache:

Buttons: Submit, Cancel

Cache	Compression	Settings
Cache	Off	<a href="#">details</a>
Cache	On for all browsers	<a href="#">details</a>
Cache	Off	<a href="#">details</a>
Cache	On for non-Netscape browsers	<a href="#">details</a>
Cache	Off	<a href="#">details</a>

Buttons: Apply Changes, Cancel Changes, Up, Move Down

# Expiration правила для неиспользуемых кэшируемых объектов

- Когда кэшируемый объект существует с Вашей точки необходимое заданное ему время, Вы можете задать expiration правило для этого объекта.
- Существует три опции для задания expiration rules:
  - Время после ввода объекта в кэш
  - Время после создания объекта в кэши
  - Specified as per HTTP Expires header в access log
- Устаревшие объекты могут процессироваться двумя путями:
  - Обновляться немедленно
  - Обновляться по запросу и не позже, чем заданное время для их устаревания

# Определение Expiration правил

## Expire:

- After cache entry
- After document creation
- Based on the HTTP header

## Remove documents:

- Immediately
- Based on
  - Stale versus fresh

Create Expiration Rule - Microsoft Internet Explorer

[Help](#)

### Create Expiration Rule

---

This new rule currently does not apply to any selector. After creating this rule (click Submit when you are done), you can add selector(s) to be associated with this rule.

**Expire:**

[ ] seconds after cache entry

[ ] seconds after document creation

as per HTTP *Expires* header

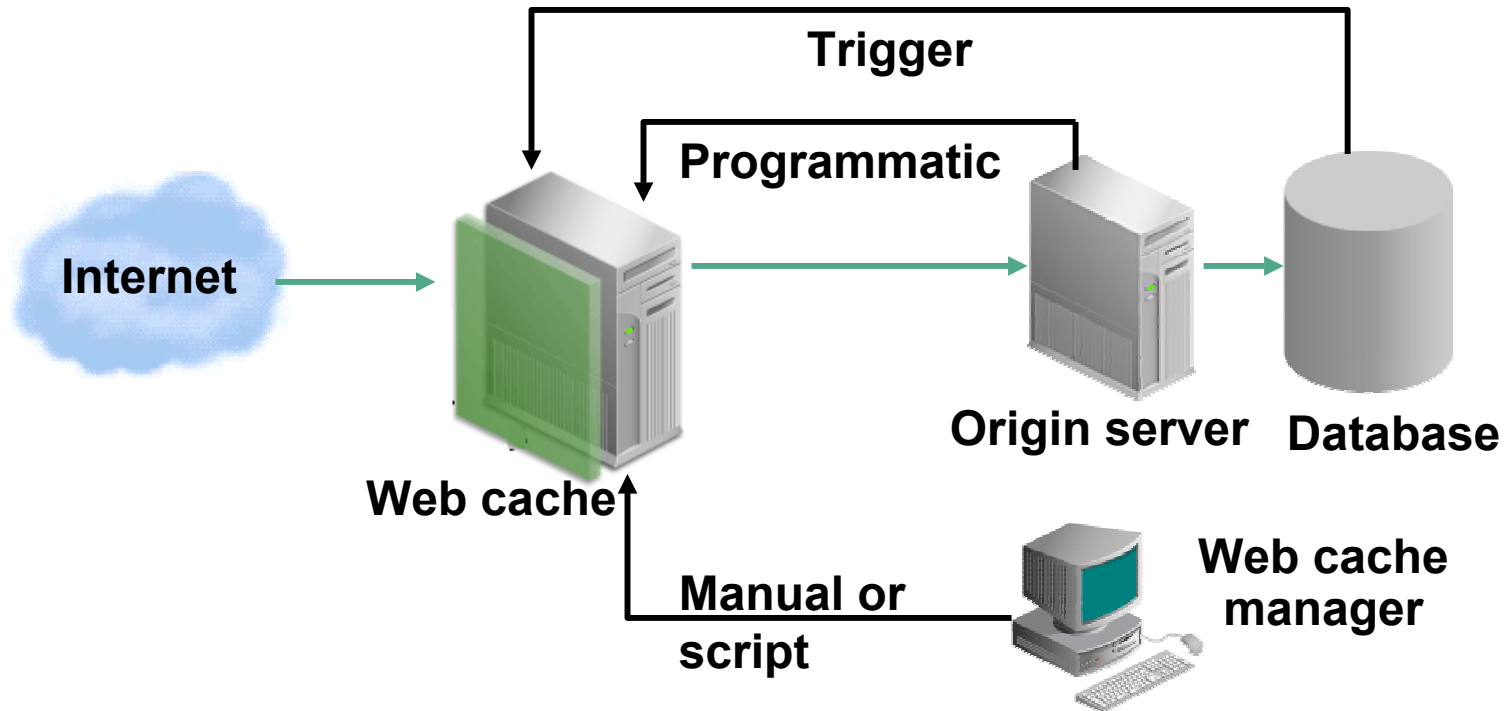
**After Expiration:**

Remove immediately

Refresh on demand as application web server capacity permits  
AND no later than: [ ] seconds after expiration.



# Сообщения об очистке



```
POST /x-oracle-cache-invalidate HTTP/1.0
X-Oracle-Cache-Invalidate-URL-Prefix: /catalog
X-Oracle-Cache-Invalidate-Level: 0
```

# Удаление объектов из кэши по URL

Oracle Application Server  
**Web Cache**  
Home [Content Frame](#)

Apply Changes Cancel Changes  
Web Cache running with current configuration.

**Operations**

- Cache Operations
- Basic Content Invalidation
- Advanced Content Invalidation**
- On-Demand Log File Rollover

**Monitoring**

- Web Cache Statistics
- Health Monitor
- Origin Server Statistics
- Popular Requests
- End-User Performance Analysis

**Properties**

- Security
- Process Identity
- Auto-Restart
- Network Timeouts
- Resource Limits
- Clustering

**Logging and Diagnostics**

- Event Logs
- Access Logs

**Basic Content Invalidation** [Help](#)

Use this page to remove objects from the cache based on a URL.

For Cache: edcdr6p1.us.oracle.com-WebCache

**Search Criteria**

- Remove all cached documents
- Enter exact URL for removal:

**Action**

- Preview list of documents that match invalidation criteria  
**Document Range:** From  To
- Remove immediately
- Remove documents no later than:  seconds after submission

Submit

# Правила для многоверсионных документов, включающих Cookies

**Cookie Name**      **Value**

ec-400-id-acctcat=CUSTOMER

ec-400-id-acctcat=WALKIN

Unit Price

Same URL

**Customer**

**Oracle Employee**

Product	Unit Price	# of Units	Buy
Oracle Internet Developer Suite Rel 1.0 CD Pack for MS Windows NT	\$ 39.95		Buy
Oracle Database 8i Release 2 (8.1.6) CD Pack v5 for AIX-Based Systems	\$ 39.95		Buy
Oracle Database 8i Release 2 (8.1.6) CD Pack v5 for Compaq Tru64 UNIX	\$ 39.95		Buy
Oracle Database 8i Release 2 (8.1.6) CD Pack v5 for HP 9000 Series HP-UX	\$ 39.95		Buy
Oracle Database 8i Release 2 (8.1.6) CD Pack v6 for Linux Intel	\$ 39.95		Buy
Oracle Database 8i Release 2 (8.1.6) CD Pack v4 for MS Windows NT	\$ 39.95		Buy
Oracle Database 8i Release 2 (8.1.6) CD Pack v6 for Sun SPARC Solaris	\$ 39.95		Buy
Oracle Database 8i (8.1.5) CD Pack v7 for AIX-Based Systems	\$ 39.95		Buy
Oracle Database 8i (8.1.5) CD Pack v7 for Compaq Tru64 UNIX	\$ 39.95		Buy
Oracle Database 8i (8.1.5) CD Pack v6 for HP 9000 Series HP-UX	\$ 39.95		Buy
Oracle Database 8i (8.1.5) CD Pack v5 for Linux Intel	\$ 39.95		Buy
Oracle Database 8i (8.1.5) CD Pack v9 for MS Windows NT	\$ 39.95		Buy

Product	Unit Price	# of Units	Buy
Oracle Internet Developer Suite Rel 1.0 CD Pack for MS Windows NT	\$ 0.00		Buy
Oracle Database 8i Release 2 (8.1.6) CD Pack v5 for AIX-Based Systems	\$ 0.00		Buy
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Oracle Database 8i (8.1.5) CD Pack v7 for AIX-Based Systems	\$ 0.00		Buy
Oracle Database 8i (8.1.5) CD Pack v7 for Compaq Tru64 UNIX	\$ 0.00		Buy
Oracle Database 8i (8.1.5) CD Pack v6 for HP 9000 Series HP-UX	\$ 0.00		Buy
Oracle Database 8i (8.1.5) CD Pack v5 for Linux Intel	\$ 0.00		Buy
Oracle Database 8i (8.1.5) CD Pack v9 for MS Windows NT	\$ 0.00		Buy

# Гарантия производительности и обеспечения подключений

**Web Cache** использует патентно-закрепленную логическую схему для обеспечения необходимой производительности, позволяющую обеспечивать следующее:

- **Одновременное аннулирование большого числа объектов в кэши не оказывает влияния на время отклика для клиентов кэши**
- **Нагрузка на OHS и RDBMS амортизована**
- **Эвристическая схема базируется на следующих основных принципах:**
  - **Величина очереди запросов в систему**
  - **Популярность документа**
  - **Валидность документа**
  - **Возраст документа после его предыдущего обновления в кэши**

# Кэширование динамических и не динамических страниц

## Кэширование динамических страниц:

- **Cookies** или включенные в запрос **URL** дают возможность **OracleAS Web Cache** распознавать правила кэширования для страниц с:
  - Многоверсионными версиями одного и того же документа
  - Персонализированными атрибутами
  - Сессионной информацией

## Кэширование страниц со смешанным контентом:

- **OracleAS Web Cache** динамически агрегирует обслуживание для страниц с динамическим и не динамическим содержанием, используя **ESI** тэги.

# Объявление дополнительных портов для запросов

The screenshot displays the Oracle Application Server Web Cache configuration page. The main page title is "Oracle Application Server Web Cache" with a "Home Content Frame" link. The left sidebar contains a navigation menu with categories: "End-User Performance Monitoring", "Diagnostics", "Ports" (with "Listen Ports" highlighted in a red box), "Origin Servers, Sites, and Load Balancing", "Rules for Caching, Personalization, and Compression", and "Caching, Personalization, and Compression Rules".

The main content area shows "Listen Ports" configuration. It includes a "Listen Ports" title, a description "Use this page to configure browser requests.", a note "Note: Changing list page.", and a "Component Dependencies" section. Below this is a table of configured ports:

Cache Name	Protocol	Port	IP Address	Wallet
edcdr6p1.us.oracle.com-WebCache	ANY	7778	HTTP	N/A

At the bottom of the table, there are buttons: "Add..." (highlighted in a red box), "Edit Selected...", and "Delete Selected".

An "Edit/Add Listen Port" dialog box is open in the foreground. It has a title bar "Edit/Add Listen Port - Netscape" and a "Help" link. The dialog contains the following fields and controls:

- "For Cache:" dropdown menu with "edcdr6p1.us.oracle.com-WebCache" selected.
- "IP Address:" text input field with "edcdr6p1.us.oracle.com".
- "Port Number:" text input field with "8890".
- "Protocol:" dropdown menu with "HTTP" selected.
- "Require Client-Side Certificate:" checkbox (unchecked).
- "Wallet:" text input field.
- "Submit" and "Cancel" buttons.


At the top right of the main page, there are "Apply Changes" and "Cancel Changes" buttons. Below the page title, it says "Web Cache running with current configuration."

# Изменение управляющих портов

## Operations Ports

Use this page to view or modify listening ports for administration, invalidation, and statistics monitoring requests. Changes to Operations Ports properties of a cache requires the use of OPMM to restart the cache administration process. (Use the webcachel command line utility for standalone installations.)

**Component Dependencies:** Changing a port number or IP address for Web Cache may affect other Oracle9iAS components. Parameters in other components may need to be updated to ensure that component ports are not in conflict.

Cache Name	Administration					Invalidation					Statistics			
	IP Address	Port	Protocol	Client-Side Certificate	Wallet	IP Address	Port	Protocol	Client-Side Certificate	Wallet	IP Address	Port	Protocol	C
 edcdr6p1.us.oracle.com-WebCache	ANY	4000	HTTP	N/A	N/A	ANY	4001	HTTP	N/A	N/A	ANY	4002	HTTP	N

Edit Selected...

# Фиксирование событий в логах и информации о доступе

- **OracleAS Web Cache события и ошибки сохраняются в логах событий (event log).**
- **Логи доступа включают информацию (access logs) о HTTP запросах, посланных к OracleAS Web Cache.**
- **Вы можете конфигурировать содержимое для access log файлов путем определения полей для каждого зарегистрированного через HTTP запрос события**



# Конфигурирование Access лог- файла

The screenshot displays the Oracle Web Cache Administration console. On the left is a sidebar with a green background containing navigation links under categories like 'Properties', 'Logging and Diagnostics', 'Ports', and 'Origin Servers, Sites, and Load Balancing'. The main content area is titled 'Access Logs' and contains instructions to configure access log settings. Below this is the 'Cache-Specific Access Log Configuration' section, which includes a table for 'Site-Specific Access Logs' and an 'Edit Selected...' button. A modal dialog window titled 'Edit Cache-Specific Access Log Configuration' is open, showing settings for the cache 'edcdr6p1.us.oracle.com-WebCache'. The settings include a directory path, enabled status, buffering status, and a flush interval.

**Access Logs**

Use this page to configure access log settings.

**Cache-Specific Access Log Configuration**

Cache Name: edcdr6p1.us.oracle.com

**Site-Specific Access Logs**

Site Name	File
Default Log File	ac...

**Edit Cache-Specific Access Log Configuration**

For Cache: edcdr6p1.us.oracle.com-WebCache

Directory: /home/oracle/bi/webcache/logs/

Enabled:  Yes  No

Buffering:  Enabled  Disabled

Flush Interval: 10

Indicates a dynamic attribute that does not require a server restart if changed.

# Конфигурирование Event лог- файла

The screenshot displays the Oracle Web Cache Administration Console interface. On the left is a navigation menu with sections: Properties (Security, Process Identity, Auto-Restart, Network Timeouts, Resource Limits, Clustering), Logging and Diagnostics (Event Logs, Access Logs, End-User Performance Monitoring, Diagnostics), Ports (Listen Ports, Operations Ports), and Origin Servers, Sites, and Load Balancing. The main content area is titled "Event Logs" and includes a "Help" link. Below the title is the instruction: "Use this page to configure event log settings." The "Cache-Specific Event Log Configuration" section shows a table with one entry for "edcdr6p1.us.oracle.com" and an "Edit Selected..." button. Below this is the "Global Event Log Configuration" section, which includes a table with columns "File Name" and "Time Stamp". The table contains one row with "event\_log" and "LOCAL". An "Edit..." button is located below the table. An inset window titled "Edit Cache-Specific Event Log Configuration - Netscape" is open, showing the configuration for the selected cache. It includes a "Help" link and the following settings: Directory: /home/oracle/bi/webcache/logs/, Buffering:  Enabled  Disabled, Flush Interval: 10, and Verbosity: NOTIFICATION. At the bottom of the inset are "Submit" and "Cancel" buttons, and a note: "Indicates a dynamic attribute that does not require a server restart if changed."

**Event Logs** [Help](#)

Use this page to configure event log settings.

**Cache-Specific Event Log Configuration**

Cache Name
edcdr6p1.us.oracle.com

[Edit Selected...](#)

**Global Event Log Configuration**

File Name	Time Stamp
event_log	LOCAL

[Edit...](#)

**Edit Cache-Specific Event Log Configuration** [Help](#)

For Cache: edcdr6p1.us.oracle.com-WebCache

Directory:

Buffering:  Enabled  Disabled

Flush Interval:

Verbosity:

[Submit](#) [Cancel](#) Indicates a dynamic attribute that does not require a server restart if changed.

# Конфигурирование частоты переписывания лог- файлов

- **Почасовое, по дням, по неделям**
- **Задание переписывания в специфическое время суток**
- **Возможность переписывания в ручную без останова или перезапуска Oracle Web Cache.**

# Переписывание лог- файлов в ручную

**Operations**

- [Cache Operations](#)
- [Basic Content Invalidation](#)
- [Advanced Content Invalidation](#)
- [On-Demand Log File Rollover](#)

**Monitoring**

- [Web Cache Statistics](#)
- [Health Monitor](#)
- [Origin Server Statistics](#)
- [Popular Requests](#)
- [End-User Performance Analysis](#)

**Properties**

- [Security](#)
- [Process Identity](#)
- [Auto-Restart](#)
- [Network Timeouts](#)
- [Resource Limits](#)
- [Clustering](#)

**Logging and Diagnostics**

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## On-Demand Log File Rollover

Use this page to roll over selected log files immediately.

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**Event Logs**

Cache Name	
<input checked="" type="checkbox"/>	edcdr6p1.us.oracle.com-WebCache

**Access Logs**

Site Name	File Name
<input checked="" type="checkbox"/> <i>Default Access Log</i>	access_log

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# Статистика для Web Cache

- Последний timestamp генерации документа - page generation time
- Oracle Web Cache Start Timestamp
- Время работы после запуска - Web Cache Uptime
- Число документов в кэши
- Cache Size (in bytes)
- Общее число bytes, записанных в Web Cache
- Текущее число открытых коннекций

# Заключение

**В этом уроке Вы должны были познакомиться со следующим:**

- **Процедуры запуска, останова и перезапуска OracleAS Web Cache**
- **Изменение паролей для административных пользователей и добавление listener ports**
- **Осуществление site-to-server мапирования**
- **Создание и конфигурирование правил кэширования**
- **Механизм инвалидации кэширования**
- **Установка правил обновления кэши**
- **Конфигурирование access и events логов**
- **Получение основной статистики по производительности**

# Информация для контактов по техническим вопросам:

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