Oracle® Enterprise Manager

Oracle Fusion Middleware Metric Reference Manual

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Oracle Enterprise Manager Oracle Fusion Middleware Metric Reference Manual, 10*g* Release 5 (10.2.0.5.0)

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Preface

This manual is a compilation of the Oracle Fusion Middleware target metrics provided in Oracle Enterprise Manager Grid Control.

Audience

This document is intended for Oracle Enterprise Manager users interested in Oracle Fusion Middleware target metrics.

Documentation Accessibility

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Related Documents

For more information, see the following documents in the Oracle Enterprise Manager 10*g* Release 2 documentation set:

- *Oracle Enterprise Manager Framework, Host, and Services Metric Reference Manual*
- *Oracle Enterprise Manager Oracle Database and Database-Related Metric Reference Manual*
- *Oracle Enterprise Manager Oracle Collaboration Suite Metric Reference Manual*
- *Oracle Enterprise Manager Concepts*
- *Oracle Enterprise Manager Grid Control Quick Installation Guide*
- *Oracle Enterprise Manager Grid Control Installation and Basic Configuration*
- *Oracle Enterprise Manager Configuration for Oracle Collaboration Suite*
- *Oracle Enterprise Manager Advanced Configuration*
- *Oracle Enterprise Manager Policy Reference Manual*
- *Oracle Enterprise Manager Extensibility*
- *Oracle Enterprise Manager Command Line Interface*
- *Oracle Enterprise Manager SNMP Support Reference Guide*
- *Oracle Enterprise Manager Licensing Information*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	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.

How to Use This Manual

The *Oracle Enterprise Manager Oracle Fusion Middleware Metric Reference Manual* (hereafter referred to as the *Oracle Fusion Middleware Metric Reference Manual*) lists all the target metrics that Enterprise Manager monitors for Oracle Fusion Middleware targets. This manual compiles in one place all the target metric help available online, eliminating the need to have the Grid Control Console up and running.

This preface describes:

- Structure of the Oracle Fusion Middleware Metric Reference Manual
- Background Information on Metrics, Thresholds, and Alerts
- Troubleshooting Metrics

Structure of the Oracle Fusion Middleware Metric Reference Manual

This manual contains a chapter for each Oracle Fusion Middleware target for which there are metrics.

The metrics in each chapter are in alphabetical order according to category.

Metric Information

The information for each metric comprises a description, summary of the metric's "vital statistics", data source (if available), and user action. The following list provides greater detail:

- Description

  Explanation following the metric name. This text defines the metric and, when available, provides additional information pertinent to the metric.

- Metric Summary

  Explains in table format the target version, collection frequency, upload frequency, operator, default warning threshold, default critical threshold, consecutive number of occurrences preceding notification, and alert text for the metric. Examples follow.

- Data Source

  How the metric is calculated. In some metrics, data source information is not available.

- User Action

  Suggestions of how to solve the problem causing the alert.

Examples of Metric Summary Tables

This section provides examples of Metric Summary tables you will see in the *Oracle Fusion Middleware Metric Reference Manual*.

When default thresholds are not defined for a metric, only the target version and collection frequency are available.

Target Version	Collection Frequency
All Versions	Every 15 Minutes

The following table shows a metric where the server evaluation frequency is the same as the collection frequency.

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	10000000	12500000	1	Bytes sent by the server are %value%

The following table shows a metric where the server evaluation frequency is different from the collection frequency.

Target Version	Server Evaluation Frequency	Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
10.1.0.x	Every Minute	Every 5 Minutes	After Every Sample	>	Not Defined	Not Defined	2	Generated By Database Server

Definitions of Columns in Metric Summary Tables

As previously mentioned, the Metric Summary table is part of the overall metric information. The following table provides descriptions of columns in the Metric Summary table.

Column Header	Column Definition
Target Version	Version of the target, for example, 9.0.2.x and 10.1.0.x. The x at the end of a version (for example, 9.0.2.x) represents the subsequent patchsets associated with that release.
Evaluation and Collection Frequency	The rate at which the metric is collected and evaluated to determine whether it has crossed its threshold. The evaluation frequency is the same as the collection frequency.
Server Evaluation Frequency	The rate at which the metric is evaluated to determine whether it has crossed its threshold. For server-generated alerts, the evaluation frequency is determined by Oracle Database internals. For example, if the evaluation frequency is 10 minutes, then when the Average File Write Time degrades to the point an alert should trigger, it could be almost 10 minutes before Enterprise Manager receives indication of the alert. This column is present in the Metric Collection Summary table only for Oracle Database 10*g* metrics.
Collection Frequency	The rate at which the Management Agent collects data. The collection frequency for a metric comes from the Enterprise Manager default collection file for that target type.

Column Header	Column Definition
Upload Frequency	The rate at which the Management Agent moves data to the Management Repository. For example, upload every n^{th} collection. The upload frequency for a metric comes from the Enterprise Manager default collection file for that target type. This column is present in the Metric Collection Summary table only when the Upload Frequency is different from the Collection Frequency.
Comparison Operator	The comparison method Enterprise Manager uses to evaluate the metric value against the threshold values.
Default Warning Threshold	Value that indicates whether a warning alert should be initiated. If the evaluation of the warning threshold value returns a result of TRUE for the specified number of consecutive occurrences defined for the metric, an alert triggers at the warning severity level.
Default Critical Threshold	Value that indicates whether a critical alert should be initiated. If the evaluation of the critical threshold value returns a result of TRUE for the specified number of consecutive occurrences defined for the metric, an alert triggers at the critical severity level.
Consecutive Number of Occurrences Preceding Notification	Consecutive number of times a metric's value reaches either the warning threshold or critical threshold before a notification is sent.
Alert Text	Message indicating why the alert was generated. Words that display between percent signs (%) denote variables. For example, `Disk Utilization for %keyValue% is %value%%` could translate to `Disk Utilization for d0 is 80%`.

Abbreviations and Acronyms

To reduce the page count in this document, the following abbreviations and acronyms are used:

Abbreviation/Acronym	Name
Agent	Oracle Management Agent
Database	Oracle Database
HTTP	HyperText Transfer Protocol
LDAP	Lightweight Directory Access Protocol
OC4J	Oracle Application Server Containers for J2EE
OMS	Oracle Management Service
Repository	Oracle Management Repository

Background Information on Metrics, Thresholds, and Alerts

A metric is a unit of measurement used to determine the health of a target. It is through the use of metrics and associated thresholds that Enterprise Manager sends out alerts notifying you of problems with the target.

Thresholds are boundary values against which monitored metric values are compared. For example, for each disk device associated with the Disk Utilization (%) metric, you can define a different warning and critical threshold. Some of the thresholds are predefined by Oracle, others are not.

Once a threshold is reached, an alert is generated. An alert is an indicator signifying that a particular condition has been encountered and is triggered when one of the following conditions is true:

- A threshold is reached.

- An alert has been cleared.
- The availability of a monitored service changes. For example, the availability of an application server changes from up to down.
- A specific condition occurs. For example, an alert is triggered whenever an error message is written to a database alert log file.

Alerts are detected through a polling-based mechanism by checking for the monitored condition from a separate process at regular, predefined intervals.

> **See Also:** See the *Oracle Enterprise Manager Concepts* manual and the Enterprise Manager online help for additional information about metrics, thresholds, and alerts

Editing

Out of the box, Enterprise Manager comes with thresholds for critical metrics. Warning and critical thresholds are used to generate an alert, letting you know of impending problems so that you can address them in a timely manner.

To better suit the monitoring needs of your organization, you can edit the thresholds provided by Enterprise Manager and define new thresholds. When defining thresholds, the key is to choose acceptable values to avoid unnecessary alerts, while still being notified of issues in a timely manner.

You can establish thresholds that will provide pertinent information in a timely manner by defining metric baselines that reflect how your system runs for a normal period of time.

The metrics listed on the Edit Thresholds page are either default metrics provided by Oracle or metrics whose thresholds you can change.

Specifying Multiple Thresholds

The Specifying Multiple Thresholds functionality allows you to define various subsets of data that can have different thresholds. By specifying multiple thresholds, you can refine the data used to trigger alerts, which are one of the key benefits of using Enterprise Manager.

The key in specifying multiple thresholds is to determine how the comparison relates to the metric threshold as a whole. What benefit will be realized by defining a more stringent or lax threshold for that particular device, mount point, and so on?

For example, using the Average Disk I/O Service Time metric, you can define warning and critical thresholds to be applied to all disks (sd0 and sd1), or you can define different warning and critical thresholds for a specific disk (sd0). This allows you to adjust the thresholds for sd0 to be more stringent or lax for that particular disk.

Accessing Metrics Using the Grid Control Console

To access metrics in the Grid Control Console, use the All Metrics page associated with a particular target by doing the following:

1. From the Grid Control Console, choose the target.
2. On the target's home page, click All Metrics in the Related Links section.
3. On the All Metrics page, choose the metric of interest and click Help. The help for that metric displays.

Troubleshooting Metrics

In the unlikely situation that a metric does not report a correct value, you need to determine if the problem is related to the:

- Metric providing the wrong values or failing with an error, or
- If the problem is *after* the Management Agent in the execution flow of the metric, that is, the metric value is correct but, for some reason, the data is not reaching the Oracle Management Service.

To aid you in this determination, Oracle provides the Metric Browser; a troubleshooting tool that can be used with Enterprise Manager to see the raw data being collected by the Management Agent.

Accessing the Metric Browser

When enabled, the Metric Browser can be accessed using a web browser, for example, Netscape, Firefox, and Internet Explorer, using a URL of the form:

```
http|https://<agent_hostname>:<agent_port>/emd/browser/main
```

for example

```
http://myServer.myDomain:3872/emd/browser/main
```

> **Note:** You can determine the protocol (http or https), the host name, and the Management Agent port that should be used from the output of the following command (run on the Management Agent host):
>
> ```
> <agent_home>/bin/emctl status agent
> ```

The Management Agent URL, listed in the output to that command, needs only to have *browser* placed between *emd* and *main*.

By default, the Metric Browser is disabled. When the Metric Browser is disabled, you receive the following error:

```
HTTP Error 403 - Forbidden if the metric browser has not been
enabled.
```

How to Enable the Metric Browser and the Management Agent Browser for the Oracle Management Agent

Follow these steps to enable the Metric Browser.

1. The Metric Browser is enabled by setting the enableMetricBrowser property in the Management Agent's emd.properties file. The location of that file depends on the type of Management Agent you are working with:
   - For the Grid Control (central|standalone) Management Agent, the file is:

     ```
     <AGENT_HOME>/sysman/config/emd.properties
     ```

   - For a clustered (RAC) Management Agent install, the file is:

     ```
     <AGENT_HOME>/<hostname>/sysman/config/emd.properties
     ```

   - For the Database Control Management Agent, the file is:

     ```
     <DATABASE_HOME>/<hostname>_
     <SID>/sysman/config/emd.properties
     ```

   - For Application Server Control Management Agent, the file is:

```
<AS_HOME>/sysman/config/emd.properties
```

2. Make a backup copy of the emd.properties file.
3. Edit the file and locate the line that reads:

```
#To enable the metric browser, uncomment the following line
#This is a reloadable parameter
#
#enableMetricBrowser=true
```

4. Uncomment the line: #enableMetricBrowser=true, so that it reads:

```
enableMetricBrowser=true
```

5. Reload the Management Agent Configuration using the command:

```
<AGENT_HOME>/bin/emctl reload agent
```

6. After reloading the Management Agent, the Metric Browser will be enabled and therefore accessible using a browser.

Running the Metric Collection Outside the Management Agent

Running the metric collection outside the Management Agent is specific to each metric and requires a firsthand knowledge of each specific metric. Each metric has its own method of collecting its data and some metrics cannot be run *standalone* because they are calculated from other metrics.

An example of running the metric collection outside the Management Agent is the command line.

1

ADF Business Components for Java

Oracle Enterprise Manager can be used to manage ADF Business Components for Java. You can use the All Metrics page for an ADF Business Components for Java target to view the metrics that have been collected for that target by the Oracle Management Agent.

1.1 ADF BC Runtime Parameters

This category provides information about ADF BC runtime parameters. The following table lists the metrics.

Table 1–1 ADF BC Runtime Parameters

Metric
Parameter Name
Value

1.2 ADFBC System

This category provides information about the ADFBC system. The following table lists the metrics.

Table 1–2 ADFBC System Metrics

Metric
Free JVM Memory (MB)
Status
Total JVM Memory (MB)

1.3 Application Module Pool Info

This category provides information about Application Module pool information. The following table lists the metrics.

Table 1–3 Application Module Pool Info Metrics

Metric
Parameter Name
Value

1.4 AppModule Instances

This category provides information about Application Module instances. The following table lists the metrics.

Table 1–4 AppModule Instances Metrics

Metric
AM Instance Index
AM Available
AM Create Time
Application Module Name
Application Module Pool Name
Nested AppModule Number
ViewLinks Number
ViewObjects Number

1.5 Java Runtime Parameters

This category provides information about Java Runtime parameters. The following table lists the metrics.

Table 1–5 Java Runtime Parameters

Metric
Parameter Name
Value

1.6 Pid

This category provides information about the Pid. The following table lists the metric.

Table 1–6 Pid Metrics

Metric
Pid

1.7 Response

This category provides information about Response. The following table lists the metrics.

Table 1–7 Response Metrics

Metric
Elapsed Time (See Section 1.7.1, "Elapsed Time"
Status (See Section 1.7.2, "Status"

1.7.1 Elapsed Time

Elapsed time.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 10 Minutes

1.7.2 Status

Status

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 1–8 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	=	Not Defined	0	1	The ADFBC home instance is down

1.8 Session Info

This category provides information about Session information. The following table lists the metrics.

Table 1–9 Session Info Metrics

Metric
Parameter Name
Value

1.9 User Data in Application Module Pool

This category provides information about the User Data in the application module pool. The following table lists the metrics and their associated descriptions.

Table 1–10 User Data in Application Module Pool Metrics

Metric
Parameter Name
Value

1.10 ViewObjects Attributes

This category provides information about the View Objects attributes. The following table lists the metrics.

Table 1–11 ViewObjects Attributes

Metric
AM Instance Index
ViewObject Attribute Index
ViewObject Attribute Java Type
ViewObject Attribute Name
ViewObject Attribute Precision
ViewObject Attribute Scale
ViewObject Attribute Type
ViewObject Column Name
ViewObject Name
Application Module Name
Application Module Pool Name

1.11 ViewObjects Contents

This category provides information about the View Objects contents. The following table lists the metrics.

Table 1–12 ViewObjects Contents

Metric
AM Instance Index
ViewObject Forward Only
ViewObject Is Executable
ViewObject Name
ViewObject Order Clause
ViewObject Range Size (Rows)
ViewObject ReadOnly
ViewObject SQL Clause
ViewObject Where Clause
Application Module Name
Application Module Pool Name
Fetched Rows
Max Fetch Size (Rows)

2

Apache HTTP Server Metrics

Oracle Enterprise Manager can be used to manage Apache HTTP Server. You can use the All Metrics page for an Apache HTTP Server target to view the metrics that have been collected for that target by Oracle Management Agent.

2.1 APM Mining Performance Details Metrics

This metric category includes metrics that provide APM mining performance details.

Default Collection Interval — Real Time

Table 2–1 APM Mining Performance Details Metrics

Metric	Description
Average CPU Utilization (%)	Shows the percentage of CPU time over total time consumed by the End-user Performance Mining Engine, during the last run.
CPU Usage Time	Shows the total amount of time consumed by the CPU (in seconds) during the last End-user Performance Analysis run.
End Log Time	Shows the time in the access_log file at which the End-user Performance Mining Engine stopped processing.
Number of Beacon Request Lines	Shows the number of log lines with beacon transaction requests (these lines are ignored by the End-user Performance Mining Engine and are not reported in the End-User Performance Monitoring analysis).
Output - Completed Pages	Shows the number of completed pages for which End-User Performance Monitoring data was reported.
Output - Incompleted Pages	Shows the number of partially loaded pages reported by the End-user Performance Mining Engine.
Number of Invalid Log Lines	Shows the number of lines that are not recognized by the End-user Performance Mining Engine.
Number of Log Lines Processed	Shows the number of access_log lines processed by the End-user Performance Mining Engine.
Output - Total Page Requests	Shows the total number of component requests reported for all pages.
Start Log Time	Shows the time in the access_log file at which the End-user Performance Mining Engine started processing.
Start Run Time	Shows the time at which the End-user Performance Mining Engine started running.
EUM Gif Requests - Total	Shows the total number of EUM Gif requests in the access_log that signal the completion of a page load.

Table 2–1 (Cont.) APM Mining Performance Details Metrics

Metric	Description
EUM Gif Requests - No Expected Output	Shows the number of EUM Gif requests for which output is not reported. These include component pages that are parts of a single page load, where only the main page is reported.
EUM Gif Requests - Browser Cached Pages	Shows the number of EUM Gif requests for pages that are cached, and hence no End-User Performance Monitoring information is available.
EUM Gif Requests - Other/Unaccounted	Shows the number of EUM Gif requests for which output is not reported for other reasons.
Total Run Time (sec)	Shows the total amount of time taken by the End-user Performance Mining Engine.

2.2 Response Metrics

Contains metrics that provide basic information about the Apache HTTP Server.

Default Collection Interval — Every minute

Table 2–2 Response Metrics

Metric	Description
Status	Shows whether the Apache HTTP Server is up or down.

3

B2B Instance

Oracle Enterprise Manager can be used to manage Oracle B2B Server. You can use the All Metrics page for an Oracle B2B Server target to view the metrics that have been collected for that target by the Oracle Management Agent.

3.1 B2BServerResponse

This category contains the response metrics for Oracle B2B Server.

UpDown Status Metric

This metric shows whether the B2B Server is up or down. If the value is 1, B2B Server is up. If the value is 0, it is down. This metric is intended for informational purposes only.

3.2 Instance Response

This category contains the response metrics for Oracle B2B Instances.

UpDown Status Metric

This metric shows whether a B2B instance is up or down. If the value is 1, the instance is up. If the value is 0, it is down. This metric is intended for informational purposes only.

3.3 OC4JResponse

This category contains the response metrics for OC4J.

UpDown Status Metric

This metric shows whether the OC4J is up or down. If the value is 1, OC4J is up. If the value is 0, it is down. This metric is intended for informational purposes only.

3.4 Resource Usage

This category contains the resource usage metrics for Oracle B2B. The following table lists the metrics and their associated descriptions. The metrics in this category are intended for informational purposes only.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 3–1 Resource Usage Metrics

Metric	Description
CPU Usage	History of the CPU usage by the B2B instance.
Memory Usage	History of the memory usage by the B2B instance

3.5 Response

This category contains the response metrics for a B2B Instance. The following table lists the metrics and their associated descriptions. The metrics in this category are intended for informational purposes only.

Note: For all target versions, the collection frequency for each metric is every 1 minute.

Table 3–2 Response Metrics

Metric	Description
B2B Server Status	Shows whether Oracle B2B Server is up or down. If the value is 1, Oracle B2B Server is up. If the value is 0, it is down.
Instance Status	See Section 3.5.1, "Instance Status"
OC4J Status	Shows whether Oracle OC4J is up or down. If the value is 1, Oracle OC4J is up. If the value is 0, it is down.

3.5.1 Instance Status

This metric shows whether an Oracle B2B instance is up or down. If the value is 1, the Oracle B2B instance is up. If the value is 0, it is down.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 3–3 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every Minute	After Every Sample	<	Not Defined	1	1	Not Defined

4

B2B Server

Oracle Enterprise Manager can be used to manage Oracle B2B Server. You can use the All Metrics page for an Oracle B2B Server target to view the metrics that have been collected for that target by the Oracle Management Agent.

4.1 Response

This category contains the response metrics for Oracle B2B Server Engine.

4.1.1 UpDown Status

This metric is intended for informational purposes only.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 4–1 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every Minute	After Every Sample	<	Not Defined	1	1	Not Defined

5

BPA DMS

Oracle Enterprise Manager can be used to manage Oracle BPEL Process Analytics. You can use the All Metrics page for an Oracle BPEL Process Analytics target to view the metrics that have been collected for that target by the Oracle Management Agent.

5.1 EngineResponse

This category contains the UpDown Status metric for the Oracle BPEL Process Analytics engine.

UpDown Status Metric

This metric shows whether the BPA Engine is up or down. If the value is 1, the BPA Engine is up. If the value is 0, it is down. This metric is intended for informational purposes only.

5.2 Instance Response

This category contains the response metrics for an Oracle BPEL Process Analytics instance.

UpDown Status Metric

This metric shows whether an Oracle BPEL Process Analytics instance is up or down. If the value is 1, Oracle BPEL Process Manager is up. If the value is 0, it is down. This metric is intended for informational purposes only.

5.3 MonitorResponse

This category contains the response metrics for BPA.

UpDown Status Metric

This metric shows whether Oracle BPEL Process Analytics Monitor is up or down. If the value is 1, Oracle BPEL Process Analytics Monitor is up. If the value is 0, it is down. This metric is intended for informational purposes only.

5.4 OC4JResponse

This category contains the response metrics for OC4J.

UpDown Status Metric

This metric shows whether Oracle BPEL Process Analytics OC4J is up or down. If the value is 1, Oracle BPEL Process Analytics OC4J is up. If the value is 0, it is down. This metric is intended for informational purposes only.

5.5 Resource Usage

This category contains the resource usage metrics for Oracle BPEL Process Analytics. The following table lists the metrics and their associated descriptions. These metrics are intended for informational purposes only.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 5–1 Resource Usage Metrics

Metric	Description
CPU Usage	History of the CPU usage by Oracle BPEL Process Analytics
Memory Usage	History of the memory usage by Oracle BPEL Process Analytics

5.6 Response

This category contains the response metrics for Oracle BPEL Process Analytics. These metrics are intended for informational purposes only.

Note: For all target versions, the collection frequency for each metric is every 1 minute.

Table 5–2 Response Metrics

Metric	Description
Engine Status	shows whether Oracle BPEL Process Analytics Engine is up or down. If the value is 1, Oracle BPEL Process Analytics Engine is up. If the value is 0, it is down
Instance Status	See Section 5.6.1, "Instance Status"
Monitor Status	Shows whether the Monitor is up or down. If the value is 1, the Monitor is up. If the value is 0, it is down
OC4J Status	Shows whether OC4J is up or down. If the value is 1, OC4J is up. If the value is 0, it is down

5.6.1 Instance Status

This metric shows whether Oracle BPEL Process Analytics is up or down. If the value is 1, Oracle BPEL Process Analytics is up. If the value is 0, it is down.

5.6.1.1 Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 5–3 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every Minute	After Every Sample	<	Not Defined	1	1	Not Defined

6

Discoverer

Oracle Business Intelligence Discoverer is a business intelligence tool for analyzing data and is a key component of Oracle Application Server. Discoverer provides an integrated business intelligence solution comprising a set of intuitive ad-hoc query, reporting, analysis, and Web-publishing tools. These tools enable non-technical users to gain immediate access to information from data marts, data warehouses, and online transaction processing systems. Oracle Business Intelligence Discoverer integrates seamlessly with OracleAS Portal, enabling rapid deployment of Discoverer workbooks and worksheets to Web portals.

6.1 Discoverer Components

This metric displays the total CPU and memory consumption for all current sessions created by each Discoverer component (i.e. Discoverer Plus, Discoverer Viewer or Discoverer Portlet Provider).

Note that the total CPU and memory consumption displayed here is only for the sessions and does not include the CPU and memory consumption of the servlets for these components. This metric also displays the total number of sessions created by the component.

> **Note:** For all target versions, the collection frequency for each metric is every 5 minutes.

The following table lists the metrics and their descriptions.

Table 6–1 Discoverer Components Metrics

Metric	Description
CPU Usage (%)	The total CPU usage for the sessions created by the each Discoverer UI component. The total CPU usage does not include the CPU usage for the servlets of these components. For CPU usage of servlets check the Discoverer application page under the OC4J_BI_Forms home page
Memory Usage (MB)	The total memory usage for the sessions spawned by the given UI component. The total memory usage does not include the memory usage for the servlets of these components. For memory usage of servlets check the Discoverer application page under the OC4J_BI_Forms home page.
Number of Sessions	The total number of Discoverer sessions created by the given component

6.2 Discoverer Plus Sessions

This metric displays information about all the Discoverer sessions created by Discoverer Plus. The information included for each session is the session ID, the OS Process ID, the memory usage of the session, the CPU usage for the session, the database and EUL to which the session is connected and if SSO is turned on, the SSO user using the session.

The following table lists the metrics and their descriptions.

Table 6–2 Discoverer Plus Sessions Metrics

Metric	Description
Component Type	The Discoverer UI component that started the particular session (i.e. Discoverer Plus, Discoverer Viewer or Discoverer Portlet Provider).
CPU Usage (%)	Percentage CPU usage for this session
DBUser@DB - EUL	Database user, database name and EUL for this session
Memory Usage (MB)	Amount of memory used in megabytes for this session
OS Process ID	Operating system process ID for this session
SSO USer	Name of the single sign-on user for this session

6.3 Discoverer Portlet Provider Sessions

This metric displays information about all the Discoverer sessions created by Discoverer Portlet Provider. The information included for each session is the session ID, the OS Process ID, the memory usage of the session, the CPU usage for the session, the database and EUL to which the session is connected and if SSO is turned on, the SSO user using the session.

The following table lists the metrics and their descriptions.

Table 6–3 Discoverer Portlet Provider Sessions Metrics

Metric	Description
Component Type	The Discoverer UI component that started the particular session (i.e. Discoverer Plus, Discoverer Viewer or Discoverer Portlet Provider).
CPU Usage (%)	Percentage CPU usage for this session
DBUser@DB - EUL	Database user, database name and EUL for this session
Memory Usage (MB)	Amount of memory used in megabytes for this session
OS Process ID	Operating system process ID for this session
SSO USer	If SSO (i.e. single sign-on) is enabled for Discoverer, this column identifies the SSO user that is using the current session. The SSO user is generally only meaningful for Discoverer Plus and Discoverer Viewer components, where SSO users are using the sessions interactively. For the Discoverer Portlet Provider, the SSO user may not be meaningful, since Discoverer Portlet Provider runs queries in the background, and a query could run as a given SSO user even when that SSO user is not currently logged in.

6.4 Discoverer Sessions

This metric displays information about all the Discoverer Server sessions currently running on server machine. It includes the following information: the session ID, the OS Process ID, the Discoverer UI Component (i.e. Discoverer Plus, Discoverer Viewer

or Discoverer Portlet Provider) that created the session, the memory usage of the session, the CPU usage for the session, the database and EUL to which the session is connected and if single sign-on (SSO) is turned on, the SSO user using the session.

The following table lists the metrics and their descriptions.I

Table 6–4 Discoverer Sessions Metrics

Metric	Description
Component Type	The Discoverer UI component that started the particular session (i.e. Discoverer Plus, Discoverer Viewer or Discoverer Portlet Provider)
CPU Usage (%)	Percentage of CPU used for all Discoverer sessions
DBUser@DB - EUL	Database user, the database and the EUL that the session is connected to. The format is databaseuser@database - EUL
Memory Usage (MB)	Amount of memory used (in megabytes) for all Discoverer sessions
OS Process ID	Operating system process ID for the given session
Private Memory Usage (MB)	Private memory usage in megabytes
Shared Memory Usage (MB)	Shared memory usage in megabytes
SSO User	If SSO (i.e. single sign-on) is enabled for Discoverer, this column identifies the SSO user that is using the current SSO user. The SSO user is generally only meaningful for Discoverer Plus and Discoverer Viewer components, where SSO users are using the sessions interactively. For the Discoverer Portlet Provider, the SSO user may not be meaningful, since Discoverer Portlet Provider runs queries in the background, and a query could run as a given SSO user even when that SSO user is not currently logged in.

6.5 Discoverer Viewer Sessions

This metric displays information about all the Discoverer sessions created by Discoverer Viewer. The information included for each session is the session ID, the OS Process ID, the memory usage of the session, the CPU usage for the session, the database and EUL to which the session is connected and if SSO is turned on, the SSO user using the session.

The following table lists the metrics and their descriptions.

Table 6–5 Discoverer Viewer Sessions Metrics

Metric	Description
Component Type	The Discoverer UI component that started the particular session (i.e. Discoverer Plus, Discoverer Viewer or Discoverer Portlet Provider)
CPU Usage (%)	Percentage of CPU usage for this session
DBUser@DB - EUL	Database user, the database name and EUL for this session
Memory Usage (MB)	Amount of memory used in megabytes for this sessions
OS Process ID	Operating system process ID for this session

Table 6–5 (Cont.) Discoverer Viewer Sessions Metrics

Metric	Description
SSO User	If SSO (i.e. single sign-on) is enabled for Discoverer, this column identifies the SSO user that is using the current session. The SSO user is generally only meaningful for Discoverer Plus and Discoverer Viewer components, where SSO users are using the sessions interactively. For the Discoverer Portlet Provider, the SSO user may not be meaningful, since Discoverer Portlet Provider runs queries in the background, and a query could run as a given SSO user even when that SSO user is not currently logged in.

6.6 Response

This metric is derived directly from the OPMN tree. It reports the Up/Down Status of the Discoverer Preferences Server.

6.6.1 UpDown Status

This metric displays information that identifies whether the Discoverer Preference, is up or down

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 6–6 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	=	Not Defined	0	1	The Discoverer instance is down

6.7 Total Discoverer CPU Usage

This metric displays the total CPU percentage used by all Discoverer sessions running on the machine at a given time. The total CPU usage does not include the CPU usage of the servlets for Discoverer Plus, Viewer or Portlet Provider. For the CPU usage of these servlets, please navigate to the Discoverer application page from the OC4J_BI_Forms home page in the EM standalone console.

6.7.1 Total Discoverer CPU Usage (%)

The total CPU percentage used by all Discoverer sessions running on the machine at a given time. The total CPU usage does not include the CPU usage of the servlets for Discoverer Plus, Viewer or Portlet Provider. For the CPU usage of these servlets, please navigate to the Discoverer application page from the OC4J_BI_Forms home page in the EM standalone console.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding

Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 6–7 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	CPU Usage is %value%%

6.8 Total Discoverer Memory Usage

This metric displays the total memory used by all Discoverer sessions running on the machine at a given time. The total memory usage does not include the memory usage of the servlets for Discoverer Plus, Viewer or Portlet Provider. For the memory usage of these servlets, please navigate to the Discoverer application page from the OC4J_BI_Forms home page in the EM standalone console.

6.8.1 Total Discoverer Memory Usage (MB)

The total memory usage for all Discoverer sessions as explained in the description of the metric.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 6–8 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	Memory Usage is %value% MB

6.9 Total Number Of Discoverer Plus Sessions

This metric displays the total number of Discoverer sessions on the machine created by Discoverer Plus at any given time.

6.9.1 Total Number Of Discoverer Plus Sessions

The total number of Discoverer sessions on the machine created by Discoverer Plus at any given time.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

6.10 Total Number Of Discoverer Portlet Provider Sessions

This metric displays the total number of Discoverer sessions on the machine created by Discoverer Portlet Provider at any given time.

6.10.1 Total Number Of Discoverer Portlet Provider Sessions

The total number of Discoverer sessions on the machine created by Discoverer Portlet Provider at any given time.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

6.11 Total Number Of Discoverer Sessions

This metric displays the total number of Discoverer sessions running on the machine at a given time.

6.11.1 Total Number Of Discoverer Sessions

The total number of Discoverer sessions running on the machine at a given time.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

6.12 Total Number Of Discoverer Viewer Sessions

This metric displays the total number of Discoverer sessions on the machine created by Discoverer Viewer at any given time.

6.12.1 Total Number Of Discoverer Viewer Sessions

The total number of Discoverer Sessions on the machine created by Discoverer Viewer at any given time.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

7

Interconnect Adapter DMS Metrics

You can use Oracle Enterprise Manager to manage and monitor Oracle Application Server Integration InterConnect.

7.1 ICAdapter Metrics

Contains performance metrics for InterConnect Adapters.

The following table lists the metrics and their descriptions.

Table 7–1 ICAdapter Metrics

Metric	Description
Inbound Throughput	Number of inbound messages that are processed successfully per second
Instance Name Of Adapter	Name of the adapter instance
Number of Inbound Error Messages	Number of messages that are not processed successfully by inbound adapters
Number of Inbound Processed Messages	Number of messages processed by inbound adapters. This metric includes successfully processed messages as well as the messages that are not processed successfully.
Number of Inbound Recovered Messages	Number of messages that have been recovered and processed successfully by inbound adapters
Number of Outbound Error Messages	Number of messages that are not processed successfully by outbound adapters
Number of Outbound Processed Messages	Total number of messages processed by outbound adapters. This metric includes successfully processed messages as well as the messages that are not processed successfully
Number of Outbound Recovered Messages	Number of messages that have been recovered and processed successfully by outbound adapters
Outbound Throughput	Number of outbound messages that are processed successfully per second
Partition Name Of Adapter	Name of the message-based partition to which the adapter is assigned

8

Internet File System

Internet File System is the base target type for *Oracle Content Management SDK (Oracle CM SDK)*. An Oracle CM SDK target is comprised of all the local Oracle CM SDK processes for one domain. There are two kinds of processes:

- Domain Controller: Provides runtime management for the entire domain.
- Node: Runs protocol servers, agents, or servlets.

You can use Oracle Enterprise Manager to monitor and manage these processes.

8.1 Application URL Timing

The *Application URL Timing* category provides responsiveness information for the URL of the primary Web application running on the local host. It reports the availability and the response time of the URL.

8.1.1 Application URL Response Time (seconds)

This metric provides the response time of a URL. In particular, it returns the total elapsed time (in seconds) that it took to download the contents of that URL. The URL's contents include both the base page source and any frames or images in the page.

By default, this metric has a critical threshold of 3.0 and a warning threshold of 2.0. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

The average response time for the web application is %value% seconds

8.1.2 Application URL Status

This metric returns the availability of a URL:

- 0 - The URL is not available.
- 1 - The URL is available.

By default, this metric has a critical threshold of 0 and a warning threshold of NotDefined. A critical alert is generated when the metric value equals the critical threshold value 1 time. A warning alert is generated when the metric value equals the warning threshold value 1 time. Do not change the threshold value for this metric.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

The web application is down

8.2 Document Statistics

The *Document Statistics* category provides basic document statistics for documents in the target's repository. It reports the total document count, the total document content size, and the average document content size. The following table lists the metrics and associated descriptions.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 8–1 Document Statistics Metrics

Metric	Description
Average Document Size (bytes)	Average content size of the documents in the target Oracle CM SDK repository
Total Number of Documents	Total number of documents in the target Oracle CM SDK repository
Total Size of Documents (bytes)	Total content size of the documents in the target Oracle CM SDK repository

8.3 Documents By MIME Type

The *Documents By MIME Type* category provides document statistics grouped by MIME type, for documents in the target's repository. It reports the number of documents and the total content size for each MIME type.

8.3.1 Documents

This metric reports the total number of documents for a given MIME type.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each MIME Type object.

If warning or critical threshold values are currently set for any MIME Type object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each MIME Type object, use the Edit Thresholds page.

8.3.2 Size of Documents (bytes)

This metric reports the total content size of all the documents belonging to a given MIME type.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each MIME Type object.

If warning or critical threshold values are currently set for any MIME Type object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each MIME Type object, use the Edit Thresholds page.

8.4 Load Balanced Application URL Timing

The *Load Balanced Application URL Timing* category provides responsiveness information for the load balanced URL of the primary Web application of the Oracle CM SDK domain. It reports the availability and the response time of the load balanced URL.

8.4.1 Load Balanced Application URL Response Time (seconds)

This metric provides the response time of a URL. In particular, it returns the total elapsed time (in seconds) that it took to download the contents of that URL. The URL's contents include both the base page source and any frames or images in the page.

By default, this metric has a critical threshold of 3.0 and a warning threshold of 2.0. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

The average response time for the load balanced web application is %value% seconds

8.4.2 Load Balanced Application URL Status

This metric returns the availability of a URL:

- 0 - The URL is not available.
- 1 - The URL is available.

By default, this metric has a critical threshold of 0 and a warning threshold of NotDefined. A critical alert is generated when the metric value equals the critical threshold value 1 time. A warning alert is generated when the metric value equals the warning threshold value 1 time. Do not change the threshold value for this metric.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

The load balancer or the web application is down

8.5 Node Statistics

The *Node Statistics* category provides basic statistics on all the Nodes of the target Oracle CM SDK domain. It reports the hostname and IP address, session count, Java VM thread count, the Java VM total/free/used memory for each Node.

8.5.1 Host Name and IP

This metric reports the hostname and the IP address of a given Oracle CM SDK Node process.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each Node Name object.

If warning or critical threshold values are currently set for any Node Name object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each Node Name object, use the Edit Thresholds page.

8.5.2 JVM Free Memory (%)

This metric reports the percentage of the Java VM free memory over the total memory of a given Oracle CM SDK Node process.

By default, this metric has a critical threshold of 10.0 and a warning threshold of 15.0. A critical alert is generated when the metric value falls short of the critical threshold value 5 times. A warning alert is generated when the metric value falls short of the warning threshold value 5 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

The Java VM free memory is low in %NodeName% on %HostNameIP%

8.5.3 JVM Free Memory (MB)

This metric reports the Java VM free memory (in MB) of a given Oracle CM SDK Node process.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each Node Name object.

If warning or critical threshold values are currently set for any Node Name object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each Node Name object, use the Edit Thresholds page.

8.5.4 JVM Threads

This metric reports the Java VM thread count of a given Oracle CM SDK Node process.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each Node Name object.

If warning or critical threshold values are currently set for any Node Name object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each Node Name object, use the Edit Thresholds page.

8.5.5 JVM Total Memory (MB)

This metric reports the Java VM total memory (in MB) of a given Oracle CM SDK Node process.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each Node Name object.

If warning or critical threshold values are currently set for any Node Name object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each Node Name object, use the Edit Thresholds page.

8.5.6 JVM Used Memory (MB)

This metric reports the Java VM used memory (in MB) of a given Oracle CM SDK Node process.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each Node Name object.

If warning or critical threshold values are currently set for any Node Name object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each Node Name object, use the Edit Thresholds page.

8.5.7 Sessions

This metric reports the session count of a given Oracle CM SDK Node process.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each Node Name object.

If warning or critical threshold values are currently set for any Node Name object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each Node Name object, use the Edit Thresholds page.

8.6 Response

The *Response* category provides the overall status, the Node process status, and the Domain Controller process status for the Oracle CM SDK target.

8.6.1 Domain Controller Status

This metric defines the status of the Domain Controller process as a number. The possible values are:

- 0 (Down) - The Domain Controller process is down or unconnectable.
- 1 (Up) - The Domain Controller process is up.

By default, this metric has a critical threshold of 0 and a warning threshold of NotDefined. A critical alert is generated when the metric value equals the critical threshold value 1 time. A warning alert is generated when the metric value equals the warning threshold value 1 time. Do not change the threshold value for this metric.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

The domain controller is not started

8.6.2 Node Status

This metric defines the statuses of the local Node processes as a number. The possible values are:

- 0 (Down) - One or more of the local Node processes are down.
- 0.5 (Unknown) - The statuses of the local Node processes are unknown, most likely due to the Domain Controller being down or unconnectable.
- 1 (Up) - All of the local Node processes are up.

By default, this metric has a critical threshold of 0 and a warning threshold of 0.5. A critical alert is generated when the metric value equals the critical threshold value 1 time. A warning alert is generated when the metric value equals the warning threshold value 1 time. Do not change the threshold values for this metric.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

%NodeStatusMessage%

8.6.3 Node Status Message

This metric provides the detailed status message about the local Node processes. For example, it displays the Node names for all the local Node processes that are down.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

8.6.4 Status

This metric defines the overall status of the Oracle CM SDK local processes as a number. The possible values are:

- 0 (Down) - All of the local processes are down.
- 0.5 (Unknown) - The status of the local processes is unknown, most likely due to the Domain Controller being down or unconnectable.
- 1 (Up) - One or more of the local processes are up.

By default, this metric has a critical threshold of 0 and a warning threshold of 0.5. A critical alert is generated when the metric value equals the critical threshold value 1 time. A warning alert is generated when the metric value equals the warning threshold value 1 time. Do not change the threshold values for this metric.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

%target% is either down or status unknown

8.7 Sessions By Server (Domain)

The *Sessions By Server (Domain)* category provides basic session information for the target Oracle CM SDK domain. It reports the session count grouped by Oracle CM SDK Server type.

8.7.1 Sessions By Server

This metric reports the session count for a given Oracle CM SDK Server type in the domain.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each Server Type object.

If warning or critical threshold values are currently set for any Server Type object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each Server Type object, use the Edit Thresholds page.

8.8 Sessions By Server (Node)

The *Sessions By Server (Node)* category provides basic session information for each Oracle CM SDK Node in the target domain. For each Node, it reports the hostname, IP address, and session count grouped by Oracle CM SDK Server type.

8.8.1 Host Name and IP

This metric reports the hostname and the IP for a given Oracle CM SDK Node process.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each unique combination of Node Name and Server Type objects.

If warning or critical threshold values are currently set for any unique combination of Node Name and Server Type objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of Node Name and Server Type objects, use the Edit Thresholds page.

8.8.2 Sessions By Server

This metric reports the session count for a given Oracle CM SDK Node process and a given Oracle CM SDK Server type.

Multiple Thresholds

For this metric, you can set different warning and critical threshold values for each unique combination of Node Name and Server Type objects.

If warning or critical threshold values are currently set for any unique combination of Node Name and Server Type objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of Node Name and Server Type objects, use the Edit Thresholds page.

8.9 Users

The *Users* category provides basic statistics for all Oracle CM SDK in the target's repository, including users with limited quota and users with unlimited quota. The following table lists the metrics and associated descriptions.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 8–2 Users Metrics

Metric	Description
All Users	Total number of users in Oracle CM SDK
Average Consumed Quota By All Users (bytes)	Average amount of quota consumed by all Oracle CM SDK users
Average Consumed Quota By Limited Users (bytes)	Average amount of quota consumed by Oracle CM SDK users with limited quota
Average Consumed Quota By Unlimited Users (bytes)	Average amount of quota consumed by Oracle CM SDK users with unlimited quota
Consumed Quota By All Users (bytes)	Total amount of quota consumed by all Oracle CM SDK users
Consumed Quota By Limited Users (bytes)	Total amount of quota consumed by Oracle CM SDK users with limited quota
Consumed Quota By Unlimited Users (bytes)	Total amount of quota consumed by Oracle CM SDK users with unlimited quota
Users With Limited Quota	Total number of Oracle CM SDK users with limited quota
Users With Unlimited Quota	Total number of Oracle CM SDK users unlimited quota

8.10 Users (With Limited Quota)

The *Users (With Limited Quota)* category provides basic statistics for Oracle CM SDK users with limited quota. The following table lists the metrics and associated descriptions.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 8–3 Users (With Limited Quota) Metrics

Metric	Description
Average Allocated Quota (bytes)	Average amount of quota allocated to Oracle CM SDK users with limited quota
Average Consumed Quota (bytes)	Average quota consumed by Oracle CM SDK users with limited quota
Consumed (%)	Percentage of the overall consumed quota over the overall allocated quota for Oracle CM SDK users with limited quota
Total Allocated Quota (bytes)	Total amount of quota allocated to Oracle CM SDK users with limited quota
Total Consumed Quota (bytes)	Total amount of quota consumed by Oracle CM SDK users with limited quota
Users (With Limited Quota)	Total amount of quota consumed by Oracle CM SDK users with limited quota

9

JServ

These metrics provide information about the health of the JServ target.

9.1 Response

This metric provides the status of JServ, that is, whether it is up or down.

Status Metric

Displays the present condition of JServ. There are three possible conditions:

- Unknown: Enterprise Manager cannot communicate with JServ
- Up: JServ is running
- Down: JServ is not running

By default, this metric has a critical threshold of 0. A critical alert is generated when the metric value equals the critical threshold value 1 time. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 5 minutes.

When an alert is generated, the alert text is:

The JServ instance is down

10

Mobile Collaboration

Oracle Enterprise Manager can be used to manage Mobile Collaboration. You can use the All Metrics page for a Mobile Collaboration target to view the metrics that have been collected for that target by the Oracle Management Agent.

10.1 Active User Sessions Across Instances

This category contains the Active Sessions metric for Mobile Collaboration.

Active Sessions Metric

For all target versions, the collection frequency is once every 5 minutes.

10.2 Average Connection Duration for the Interval

This category contains the Average Connection Duration metric for Mobile Collaboration.

Average Connection Duration (seconds) Metric

For all target versions, the collection frequency is once every 5 minutes.

10.3 Average Response Time for the Interval

This category contains the Average Response Time metric for Mobile Collaboration.

Average Response Time (seconds) Metric

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 10–1 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	>	200	500	4	Wireless device request response time has exceeded %threshold%

10.4 Notification Server Instance Snapshot for the Last 5 Mins

This category contains the notification server instance metrics for Mobile Collaboration.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

The following table lists the metrics and their associated descriptions.

Table 10–2 Notification Server Instance Snapshot Metrics

Metric	Description
Total Error Count	Total error count
Total Number of Notifications Processed	Total number of notifications processed
Total Number of Notifications Sent	Total number of notifications sent

10.5 Pimap Site Snapshot

This category contains the Pimap Site Snapshot metrics for Mobile Collaboration.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

The following table lists the metrics and their associated descriptions.

Table 10–3 Pimap Site Snapshot Metrics

Metric	Description
Devices Served	Devices served
Notifications Sent	Notifications sent
Number of Connections	Number of connections

10.6 Response

This category contains the UpDown Status metric for Mobile Collaboration.

UpDown Status Metric

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 10–4 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	=	Not Defined	0	1	Mobile Collaboration status is down

10.7 Services Requested

This category contains the Applications Invoked metric for Mobile Collaboration.

Applications Invoked Metric

For all target versions, the collection frequency is once every 5 minutes.

11

OC4J Metrics

Enterprise Manager can be used to manage Oracle Application Server Containers for J2EE (OC4J). You can use the All Metrics page for an OC4J target to view the metrics that have been collected for that target by Oracle Management Agent.

11.1 OC4J All Instances Metrics

This metric category provides metrics for all the OC4J instances of an application server.

Default Collection Interval — Every 5 minutes

Table 11–1 OC4J All Instances ***Metrics***

Metric	Description
OC4J Instances - Active Sessions	Shows the number of HTTP sessions used by all the OC4J instances of this application server.
OC4J Instances - Request Processing Time (seconds)	Shows the average amount of time it consumed to execute servlets and JSPs for all the OC4J instances of this application server, during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
OC4J Instances - Requests Per Second	Shows the rate at which servlets and JSPs are being invoked for all the OC4J instances of this application server, during a recent interval. The interval is the period of time specified as the collection frequency for this metric.

11.2 OC4J Application Metrics

This metric category provides metrics for the application.

Default Collection Interval — Every 5 minutes

Table 11–2 OC4J Application Metrics

Metric	Description
Application - Active Requests	Shows the number of servlets and JSPs currently being executed by this application.
Application - Active Sessions	Shows the number of active HTTP sessions used by the application.
Application - EJB Method Execution Rate (per second)	Shows the rate at which EJB methods are currently being executed by this application.
Application - EJB Method Execution Time (seconds)	Shows the time consumed to execute EJB methods for this application during a recent interval. The interval is the period of time specified as the collection frequency for this metric.

Table 11–2 (Cont.) OC4J Application Metrics

Metric	Description
Application - Request Processing Time (seconds)	Shows the average time consumed to execute servlets and JSPs from this application during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
Application - Requests Per Second	Shows the rate at which servlets and JSPs are being invoked for this application during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
Application - Active EJB Methods	Shows the number of EJB methods that are currently being executed by this application.

11.3 OC4J Datasource Metrics

This metric category provides metrics for datasources.

Table 11–3 OC4J Datasource Metrics

Metric	Description
Datasource - Active JDBC Connections	Shows the shows the number of JDBC connections currently open for this datasource.
Datasource - Available Cached Connections	Shows the number of unused connections in the cache for this datasource.
Datasource - Connection Cache Hit Rate (%)	Shows the percentage of time the datasource was able to get a connection from the cache (as opposed to having to create a new one).
Datasource - Statement Cache Hit Rate (%)	Shows the percentage of time the datasource was able to get a statement from the cache (as opposed to having to create a new one) during the last 5 minutes.

11.4 OC4J EJB Method Metrics

This metric category provides metrics for EJB Methods.

Table 11–4 OC4J EJB Method Metrics

Metric	Description
EJB Method - Active Methods	Shows the number of times this method is being executed right now.
EJB Method - Client Processing Time (seconds)	Shows the average time an invocation of this method spent in client code during the last 5 minutes.
EJB Method - Method Execution Rate (per second)	Shows the number of times per second this method has been executed during the last 5 minutes.
EJB Method - Overhead Time (seconds)	Shows the average time an invocation of this method spent in wrapper code during the last 5 minutes.

11.5 OC4J EJB Metrics

This metric category provides metrics for EJBs.

Default Collection Interval — Every 5 minutes

Table 11–5 OC4J EJB Metrics

Metric	Description
EJB - Active Methods	Shows the number of EJB methods that are currently being executed for this EJB.

Table 11–5 (Cont.) OC4J EJB Metrics

Metric	Description
EJB - Method Execution Rate (per second)	Shows the rate at which the EJB methods are currently being executed for this EJB during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
EJB - Method Execution Time (seconds)	Shows the time consumed to execute EJB methods for this EJB during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
Type of EJB	Shows the type of the EJB (i.e. Entity type or Session type).

11.6 OC4J EJB Module Metrics

This metric category provides metrics for EJB modules.

Default Collection Interval — Every 5 minutes

Table 11–6 OC4J EJB Module Metrics

Metric	Description
EJB Module - Active Methods	Shows the number of EJB methods that are currently being executed by this EJB module.
EJB Module - Method Execution Rate (per second)	Shows the rate at which the EJB methods are currently being executed for this EJB module during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
EJB Module - Method Execution Time (seconds)	Shows the time consumed to execute EJB methods for this EJB module during a recent interval. The interval is the period of time specified as the collection frequency for this metric.

11.7 OC4J Instance Metrics

This metric category provides metrics for the OC4J instance.

Default Collection Interval — Every 5 minutes

Table 11–7 OC4J Instance Metrics

Metric	Description
OC4J Instance - Active Transactions	Shows the number of transactions that are currently open for this OC4J instance.
OC4J Instance - Active EJB Methods	Shows the number of EJB methods that are currently being executed by this OC4J instance.
OC4J Instance - Active Requests	Shows the number of servlets and JSPs currently being executed by this OC4J instance.
OC4J Instance - Active Sessions	Shows the number of active HTTP sessions used by the OC4J instance.
OC4J Instance - EJB Method Execution Rate (per second)	Shows the rate at which the EJB methods are currently being executed by this OC4J instance during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
OC4J Instance - EJB Method Execution Time (seconds)	Shows the time consumed to execute EJB methods for this OC4J instance during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
OC4J Instance - Heap Usage (MB)	Shows the amount of heap space used by the OC4J instance.

Table 11–7 (Cont.) OC4J Instance Metrics

Metric	Description
OC4J Instance - Open JDBC Connections	Shows the number of JDBC connections open by applications that are part of the OC4J instance.
OC4J Instance - Request Processing Time (seconds)	Shows the average time consumed to execute servlets and JSPs for this OC4J instance during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
OC4J Instance - Requests Per Second	Shows the rate at which servlets and JSPs are being invoked for this OC4J instance during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
OC4J Instance - Start Time (ms since Epoch)	Shows the time when the OC4J instance was started. It is represented in milliseconds since the Unix epoch (i.e. January 1, 1970).

11.8 OC4J JSP Metrics

This metric category provides metrics for JSPs.

Default Collection Interval — Every 5 minutes

Table 11–8 OC4J JSP Metrics

Metric	Description
Is multi-threaded?	Shows whether or not this JSP is multi-threaded. The value of this metric is either TRUE or FALSE.
JSP - Active Instances (STM only)	Shows the shows the number of active instances of this JSP. STM means Single Threaded Model. This metric is only for single threaded JSPs, and not for multi-threaded JSPs.
JSP - Active Requests	Shows the number of clients that are currently executing this JSP.
JSP - Available Instances (STM only)	Shows the number of available instances to execute this JSP. STM means Single Threaded Model. This metric is only for single threaded JSPs, and not for multi-threaded JSPs.
JSP - Client Processing Time (seconds)	Shows the total time spent executing the client code for this JSP since this OC4J instance was started.
JSP - Requests Per Second	Shows the rate at which this JSP has been invoked by clients during a recent interval. The interval is the period of time specified as the collection frequency for this metric.

11.9 OC4J JVM Metrics

This metrics category provides metrics for OC4J JVMs.

Default Collection Interval — Every 5 minutes

Table 11–9 OC4J JVM Metrics

Metric	Description
JVM - CPU Usage (%)	Shows the percentage of CPU time used by the JVM.
JVM - Active EJB Methods	Shows the number of EJB methods currently being executed in the JVM.
JVM - Heap Usage (MB)	Shows the amount of heap space used by the JVM.
JVM - Memory Usage (MB)	Shows the amount of physical memory used by the JVM.
JVM - Active Requests	Shows the number of servlet/JSP requests currently being processed in the JVM.

Table 11–9 (Cont.) OC4J JVM Metrics

Metric	Description
JVM - Start Time (ms since Epoch)	Shows the time when the JVM was started.
JVM - Active Threads	Shows the number of threads currently executing in the JVM.
PID	Shows the process ID of the JVM.

11.10 OC4J Servlet Metrics

This metric category provide metrics for servlets.

Default Collection Interval — Every 5 minutes

Table 11–10 OC4J Servlet Metrics

Metric	Description
Servlet - Active Requests	Shows the number of clients that are currently executing this servlet.
Servlet - Client Processing Time (seconds)	Shows the average time consumed to execute the client code for this servlet during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
Servlet - Requests Per Second	Shows the rate at which the servlet has been invoked by clients during a recent interval. The interval is the period of time specified as the collection frequency for this metric.

11.11 OC4J Web Module Metrics

This metric category provides metrics for the OC4J web modules.

Default Collection Interval — Every 5 minutes

Table 11–11 OC4J Web Module Metrics

Metric	Description
Web Module - Active Requests	Shows the number of servlets and JSPs currently being executed by this web module.
Web Module - Active Sessions	Shows the number of active HTTP sessions used by this web module.
Web Module - Class Load Time (seconds)	Shows the average time consumed to load the classes for this web module during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Web Module - Client Time (seconds)	Shows the average time spent executing client code for this web module during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Web Module - Request Processing Time (seconds)	Shows the average time consumed to execute servlets and JSPs for this web module during a recent interval. The interval is the period of time specified as the collection frequency for this metric.
Web Module - Requests Per Second	Shows the number of servlets and JSPs processed by this web module since this OC4J instance was started.

11.12 Resource Usage Metrics

This metric category provides metrics for the OC4J instance resource usage.

Default Collection Interval — Every 5 minutes

Table 11–12 Resource Usage Metrics

Metric	Description
CPU Usage (%)	Shows the percentage of CPU time used by the OC4J instance.
CPU Idle Time (%)	Shows the percentage of CPU idle time.
Other CPU Usage (%)	Shows the percentage of CPU owned and used by the host processes other than the OC4J instance. If you are having problems with CPU usage on the OC4J host computer, this metric can help you determine whether or not the OC4J instance is causing the problem.
Memory Usage (MB)	Shows the amount of physical memory used by the OC4J instance.
Free Memory (MB)	Shows the amount of free physical memory on the system.
Other Memory Usage (MB)	Shows the physical memory used (in MB) by processes and applications other than the OC4J instance. If you are having problems with physical memory usage on the OC4J host computer, this metric can help you determine whether or not the OC4J instance is causing the problem.
Memory Usage (%)	Shows the percentage of physical memory used by the OC4J instance.

11.13 Response Metrics

This metric category provides response metrics for OC4J.

Default Collection Interval — Every minute

Table 11–13 Response Metrics

Metric	Description
UpDown Status	Shows whether the OC4J server is up or down. If the value is 1, OC4J is up. If the value is 0, it is down.

11.14 OC4J JMS Metrics

This metric category provides information about the OC4J JMS.

Default Collection Interval — Every 5 minutes

Table 11–14 OC4J JMS Metrics

Metric	Description
JMS - Active Connections	Shows the total number of active OracleAS JMS connections.
JMS - Messages Waiting for Read	Shows the total number of messages waiting to be read.
JMS - Messages Dequeued Rate	Shows the rate at which JMS messages are being dequeued. This includes all the messages received, regardless of whether the receipt has been acknowledged or committed, rolled back, or is still pending.
JMS - Messages Enqueued Rate	Shows the rate at which JMS messages are being enqueued. This includes all the messages sent, regardless of whether the delivery has been committed, rolled back, or is still pending.
JMS - Messages Paged In Rate	Shows the rate at which the messages are paged in. If a JMS persistent message's body has been "paged out," then in order for the message to be consumed it must be read from the disk (i.e. "paged in").
JMS - Messages Paged Out Rate	Shows the rate at which message bodies are being paged out.

Table 11–14 (Cont.) OC4J JMS Metrics

Metric	Description
JMS - Messages Committed Since Startup	Shows the total number of JMS message enqueues and dequeues that have been committed. This does not include the non-transactional sends or receives. Note that if a message was sent and committed, and later received and committed, that adds a total of 2 to this count.
JMS - Messages Discarded Since Startup	Shows the total number of messages discarded since startup.
JMS - Messages Expired Since Startup	Shows the number of messages that expired since startup.
JMS - Messages Recovered Since Startup	Shows the total number of messages recovered since startup.
JMS - Messages Rolledback Since Startup	Shows the number of JMS message enqueues and dequeues that have been rolled back since startup. This does not include the non-transactional sends or receives. Note that if a message is repeatedly received and rolled back, this count is incremented once for each time it was rolled back
JMS - Messages Waiting For Commit	Shows the total number of messages waiting to be committed.
JMS - Start Time	Shows the time since epoch when the JMS subsytem was started.

11.15 OC4J WebServices Metrics

This metric category provides information about the OC4J WebServices.

Default Collection Interval — Every 5 minutes

Table 11–15 OC4J WebServices Metrics

Metric	Description
WebService - Faults Since Startup	Shows the total number of faults encountered since the WebService was last started.
WebService - Active Requests	Shows the number of active WebService requests.
WebService - Requests Since Startup	Shows the total number of requests processed since the WebService was last started.
WebService - Requests Per Second	Shows the number of requests per second in the last interval.
WebService - Request Processing Time	Shows the time (in milliseconds) taken to process a request in the last collection interval.
WebService - Start Time	Shows the time when the WebService was last started.
WebService - Error Rate	Shows the number of errors per number of completed requests.

12

Oracle Application Server Metrics

Oracle Enterprise Manager gathers performance metrics that provide high-level information about the status, performance, and availability of your Oracle Application Server.

12.1 Application Response Metrics

This category of metrics uses the Application URL to measure the responsiveness and availability of the application server instance

Default Collection Interval — Every 5 minutes

Table 12–1 Application Response Metrics

Metric	Description
Application URL Response Time (seconds)	The Application URL Response Time is measured by automatically and continuously attempting to access the Application URL. The response time includes the time it takes to access the URL and for the application server to render and display the Application URL content. Note that this metric is used primarily by Grid Control to measure the responsiveness of the application server instance. The Application URL is shown in the General section of the Application Server Home page in the Grid Control Console, and it is used to generate the Application URL Response chart on that page. By the default, the Application URL consists of the application server host name and default listener port for Oracle HTTP Server component. For example: http://hostname.domain:7778 If you are using the Grid Control Console, you can modify the Application URL by modifying the properties of the Application Server target. For more information, see Modifying Target Properties in the Grid Control online help. Alternatively, you can change the Application URL by clicking Change Application URL on the Application Server Home page in the Grid Control Console.

Table 12–1 (Cont.) Application Response Metrics

Metric	Description
Application URL Status	This metric indicates whether or not the Application URL, which is used to define the responsiveness of the Application Server, can be accessed successfully. For example, if the Application URL returns an error, the Application URL Status metric will be down. Note that this metric is used primarily by Grid Control to measure the responsiveness of the application server instance. The Application URL is shown in the General section of the Application Server Home page in the Grid Control Console, and it is used to generate the Application URL Response chart on that page. A value of one (1) indicates that Oracle Management Agent can access the Application URL; a value of zero (0) indicates that the Application URL cannot be accessed successfully. For more information, see Application URL Response Time (seconds).

12.2 OPMN Process Information Metrics

The OPMN Process Information Metrics provide you with a snapshot of how the primary components of your application server--as well as specific components of Oracle Enterprise Manager--are performing. The list provided here will vary, depending upon the application server components you have installed and configured for this instance of Oracle Application Server.

Enterprise Manager components that you can monitor by reviewing the OPMN Process Information Metrics include Oracle Management Agent (agent), Oracle Application Server Control process (console), and Oracle Management Agent watchdog process (watchdog).

For more information about the Management Agent watchdog process, see Oracle Enterprise Manager Advanced Configuration.

Default Collection Interval — Every 5 minutes

Table 12–2 OPMN Process Information Metrics

Metric	Description
Component CPU Usage (%)	Shows the percentage of host CPU used by the selected application server component.
Component Memory Usage (%)	Shows the percentage of host memory used by the selected application server component.
Component Memory Usage (MB)	Shows the memory usage in megabytes for the selected component.
Component Start Time (ms since epoch)	This metric is for internal use only.
Component Up Time (ms)	This metric is for internal use only.

Table 12–2 (Cont.) OPMN Process Information Metrics

Metric	Description
Component Up/down Status	Shows whether the component is up or down. A value of one (1) indicates that the component is up and running; a value of zero (0) indicates that the component is down. If you are using Grid Control, see About Availability in the online help for more information about how Enterprise Manager determines the availability of Oracle Application Server or Enterprise Manager component.
Free Memory (%)	Shows you the percentage of memory that is free on the application server host. The amount of free memory available can help you determine whether or not the system is ready to handle a heavier load.
Free Memory (MB)	Shows you the amount of memory (in megabytes) that are free on the application server host. The amount of free memory available can help you determine whether or not the system is ready to handle a heavier load.
Idle CPU Time (%)	Shows the percentage of time that the CPU was idle and the system did not have an outstanding disk I/O request.
Total Memory (MB)	Shows you the total physical memory available on the application server host computer.

12.3 Resource Usage Metrics

This category of metrics provides you with information about the CPU and Memory being used by the application server.

Default Collection Interval — Every 5 minutes

Table 12–3 Resource Usage Metrics

Metric	Description
CPU Idle Time (%)	shows the percentage of system CPU time that is idle. The amount of idle CPU time can help you determine whether or not the system is ready to handle a heavier load.
CPU Usage (%)	Shows the percentage of the host CPU being used by the application server and all its configured and enabled components.
Free Memory (%)	Shows you the percentage of memory that is free on the application server host. The amount of free memory available can help you determine whether or not the system is ready to handle a heavier load.
Free Memory (MB)	Shows you the amount of memory (in megabytes) that are free on the application server host. The amount of free memory available can help you determine whether or not the system is ready to handle a heavier load.
Memory Usage (%)	Shows you the percentage of host memory being used by the application server and its configured and enabled components.
Memory Usage (MB)	Shows you the amount of memory (in megabytes) being used by the application server and its configured and enabled components.
Other CPU Usage (%)	Shows the amount of CPU owned and used by host processes, other than the application server and its configured and enabled components. If you are having problems with CPU usage on the application server host computer, this metric can help you determine whether or not the application server is causing the problem.
Other Memory Usage (%)	Shows the percentage of host memory in use by other processes or applications, other than the application server and its configured and enabled components. If you are having problems with memory usage on the application server host computer, this metric can help you determine whether or not the application server is causing the problem.

Table 12–3 (Cont.) Resource Usage Metrics

Metric	Description
Other Memory Usage (MB)	Shows the amount of memory (in megabytes) currently in use by other processes or applications, other than the application server and its configured and enabled components. If you are having problems with memory usage on the application server host computer, this metric can help you determine whether or not the application server is causing the problem.
Total Memory (MB)	Shows you the total physical memory available on the application server host computer.

12.4 Response Metrics

This category contains the UpDown Status metric, which indicates whether the Application Server is up or down.

Default Collection Interval — Every 5 minutes

Table 12–4 Response Metrics

Metric	Description
UpDown Status	Shows whether or not all the enabled Application Server components are up and running. For example, if one OC4J instance is down, the UpDown Status will be down even if the other application server components are up and running. The status of the Application Server appears in the General section of the Application Server home page in the Grid Control Console.

13

Oracle BI Analytics Server Metrics

Oracle BI Analytics Server, also known as Oracle BI Server, is a highly scalable, highly efficient query and calculation server designed to optimize concurrency with highly efficient query processing. It provides query parsing, logical request generation, query rewrite and caching optimizations, equivalence processing, code generation, parallel execution and other facilities to optimize query processing and analysis.

You can use the All Metrics page of this target to view the metrics that have been collected for this target by Oracle Management Agent.

13.1 DataCache Metrics

This category provides data cache performance metrics for Oracle BI Analytics Server.

Default Collection Interval — Every 5 minutes

Table 13–1 DataCache Metrics

Metric	Description
Data Cache Hit Ratio as %	Shows the percentage of data cache hits during the sampling period.
Data Cache Hits/sec	Shows the number of times a query was satisfied from data cache per second during the sampling period
Data Cache Misses/sec	Shows the number of times an unqualified/qualified query was not satisfied from data cache per second during the sampling period.
Data Cache Qualified Queries Misses/sec	Shows the number of times a qualified query was not satisfied from data cache per second during the sampling period
Data Cache Unqualified Queries Misses/sec	Shows the number of times an unqualified query was not satisfied from data cache per second during the sampling period.

13.2 DBConnectionPool Metrics

This category provides DB connection pool performance metrics for Oracle BI Analytics Server.

Default Collection Interval — Every 5 minutes

Table 13–2 DBConnectionPool Metrics

Metric	Description
Current Busy Connection Count	Shows the current number of connections assigned to process a query or processing a query in the DB Connection pool.
Current Connection Count	Shows the current number of open connections in the thread pool.

13.3 General Metrics

This category provides general performance metrics for Oracle BI Analytics Server.

Default Collection Interval — Every 5 minutes

Table 13–3 General Metrics

Metric	Description
Active Execute Requests	Shows the number of execute requests active within Oracle BI Server at the end of the sampling interval.
Active Execute Requests Since Last Collection	Shows the number of execute requests active within Oracle BI Server at the end of the sampling interval since Last Collection.
Active Fetch Requests	Shows the number of fetch requests active within Oracle BI Server at the end of the sampling interval.
Active Fetch Requests Since Last Collection	Shows the number of fetch requests active within Oracle BI Server at the end of the sampling interval since Last Collection.
Active Logins	Shows the number of active logins within Oracle BI Server at the end of the sampling interval.
Active Logins Since Last Collection	Shows the number of active logins within Oracle BI Server at the end of the sampling interval since Last Collection.
Active Prepare Requests	Shows the number of query prepare requests active within Oracle BI at the end of the sampling interval.
Active Prepare Requests Since Last Collection	Shows the number of query prepare requests active within Oracle BI at the end of the sampling interval since Last Collection.
Avg. query elapsed time	Shows the elapsed time (in seconds) for the average query that completed, including both successful and fail queries, during the sampling interval.
New Execute Requests	Shows the number of new execute requests received by Oracle BI Server during the sampling interval.
New Execute Requests Since Last Collection	Shows the number of new execute requests received by Oracle BI Server during the sampling interval since Last Collection.
New Fetch Requests	Shows the number of new fetch requests received by Oracle BI Server during the sampling interval.
New Fetch Requests Since Last Collection	Shows the number of new fetch requests received by Oracle BI Server during the sampling interval since Last Collection.
New Prepare Requests	Shows the number of new query prepare requests received by Oracle BI during the sampling interval.
New Prepare Requests Since Last Collection	Shows the number of new query prepare requests received by Oracle BI during the sampling interval since Last Collection.
Queries/sec	Shows the number of queries completed per second by Oracle BI Server during the sampling interval.
Sessions Since Last Collection	Shows the number of sessions connecting clients to Oracle BI Server at the end of the sampling interval since Last Collection.
Total sessions	Shows the number of sessions connecting clients to Oracle BI Server at the end of the sampling interval.

13.4 GenericCache Metrics

This category provides generic cache performance metrics for Oracle BI Analytics Server.

Default Collection Interval — Every 5 minutes

Table 13–4 GenericCache Metrics

Metric	Description
Generic Cache Avg. Hits/sec	Shows the average number of hits per second for the specified cache object during the sampling period.
Generic Cache Avg. Misses/sec	Shows the average number of misses per second for the specified cache object during the sampling period.
Generic Cache Requests Since Last Collection	Shows the total number of requests during the sampling period against the specified cache object since Last Collection.
Generic Cache Total Requests	Shows the total number of requests during the sampling period against the specified cache object.
Generic Cache Utilization Ratio (%)	Shows the percentage of specified cache object in use.

13.5 PhysicalDB Metrics

This category provides physical DB performance metrics for Oracle BI Analytics Server.

Default Collection Interval — Every 5 minutes

Table 13–5 PhysicalDB Metrics

Metric	Description
Avg. query request response time	Shows the average time (in seconds) a physical query waits for responses to its back-end database requests during the sampling interval.
Failed Queries/sec	Shows the number of queries that failed per second in the back-end physical database during the sampling interval.
Queries/sec	Shows the number of queries completed per second by back-end physical database during the sampling interval.
Rows/sec	Shows the number of rows retrieved per second from back-end physical database (both completed and failed queries) during the sampling interval.

13.6 Resources Metrics

This category provides resource usage metrics for Oracle BI Analytics Server.

Default Collection Interval — Every 5 minutes

Table 13–6 Resources Metrics

Metric	Description
CPU (%)	Shows the CPU usage (in percentage) of Oracle BI Analytics Server.
Memory (KB)	Shows the memory usage (in KB) for Oracle BI Analytics Server.

13.7 Response Metrics

This category provides status metrics for Oracle BI Analytics Server.

Default Collection Interval — Every minute

Table 13–7 Response Metrics

Metric	Description
Status	shows the current status of Oracle BI Analytics Server. The status can be Agent Unreachable, Under Blackout, Metric Collection Error, Up, Down, Partially Up, Agent Down, or Status Pending.

13.8 Failed Dashboards in Last 24 Hours Metrics

This category provides details about the dashboards that failed in the last 24 hours.

Default Collection Interval — Real-time only

Table 13–8 Failed Dashboards in Last 24 Hours Metrics

Metric	Description
End Time	Shows the time when the server finished servicing a logical request for the dashboard.
Error Code	Shows the error code that was displayed for the failed dashboard. The error codes can be 0 (Successfully completed), 1 (Time out), 2 (Row limits exceeded), or 3 (Some other reason).
Error Message	Shows the error message that was displayed for the failed dashboard.
Repository	Shows the name of the repository the dashboard was trying to access before it failed.
Start Time	Shows the time when the server received a logical request for the dashboard.
Subject Area	Shows the name of the subject area.

13.9 Top Dashboards in last 7 Days Metrics

This category provides details about the top dashboard requests that were made during a given interval.

Default Collection Interval — Real time only

Table 13–9 Top Dashboards in last 7 Days Metrics

Metric	Description
Total Compile Time	Shows the total time taken for converting all the logical queries to physical queries.
Total Database Time	Shows the total time taken by the database to service all the physical requests made for the dashboard.
Total Failed Requests	Shows the total number of logical requests failed for the dashboard.
Total Requests	Shows the total number of logical requests that were made for the dashboard.
Total Time	Shows the total time taken by all the logical requests made for the dashboard.

13.10 Top Users in last 7 Days Metrics

This category provides details about the dashboard requests made by different users during a given interval.

Default Collection Interval — Real time only

Table 13–10 Top Users in Last 7 Days Metrics

Metric	Description
Total Compile Time	Shows the total time taken for converting all the logical queries to physical queries.
Total Database Time	Shows the total time taken by the database to service all the physical requests made by the user.
Total Failed Requests	Shows the total number of logical requests failed for the user.
Total Requests	Shows the total number of logical requests that were made by the user.
Total Time	Shows the total time taken by all the logical requests made by the user.

14

Oracle BI Cluster Controller Metrics

Oracle BI Cluster Controller is a process that manages Oracle BI Analytics Server clusters. You can use the All Metrics page of this target to view the metrics that have been collected for this target by Oracle Management Agent.

14.1 Resources Metrics

This category provides resource usage metrics for Oracle BI Cluster Controller.

Default Collection Interval — Every 5 minutes

Table 14–1 Resources Metrics

Metric	Description
CPU (%)	Shows the CPU usage (in percentage) of Oracle BI Cluster Controller.
Memory (KB)	Shows the memory usage (in KB) of Oracle BI Cluster Controller.

14.2 Response Metrics

This category provides status metrics for Oracle BI Cluster Controller.

Default Collection Interval — Every 5 minutes

Table 14–2 Response Metrics

Metric	Description
Status	Shows the status of Oracle BI Cluster Controller. The status can be Agent Unreachable, Under Blackout, Metric Collection Error, Up, Down, Partially Up, Agent Down, or Status Pending.

15

Oracle BI DAC Server Metrics

Data warehouse Application Console (DAC) is used to create and schedule ETL taskflows for Informatica server. It manages data warehouse processes including scheduling, loading of the ETL, and configuring the subject areas to be loaded.

You can use the All Metrics page of this target to view the metrics that have been collected for this target by Oracle Management Agent.

15.1 ETL Performance Metrics

This category provides metrics related to the ETL performance.

Default Collection Interval — Every 15 minutes

Table 15–1 ETL Performance Metrics

Metric	Description
Completed tasks	Shows the completed ETL tasks in the DAC repository. The status is 'Completed'.
Failed tasks	Shows the total number of failed ETL tasks in the DAC repository. The status for failed tasks is 'Failed'.
Queued tasks	Shows the queued up ETL tasks in the DAC repository. The status is 'Queued'.
Runnable tasks	Shows the runnable ETL tasks in the DAC repository. The status is 'Runnable'.
Running tasks	Shows the currently running ETL tasks in the DAC repository. The status is 'Running'.
Total tasks	Shows the total number of ETL tasks in DAC repository.

15.2 ETL Runs Metrics

This category provides metrics related to the ETL definition runs.

Table 15–2 ETL Runs Metrics

Metric	Description
Completed Steps	Shows the number of steps in the ETL run that completed successfully.
ETL Definition	Shows the name of the ETL definition.
Failed Steps	Shows the number of steps that failed in the ETL run.
Running Steps	Shows the number of steps currently running in the ETL run. The status is 'Running'.
Status	Shows the status of the ETL definition run.
Total Steps	Shows the total number of steps in the ETL definition.

Table 15–2 (Cont.) ETL Runs Metrics

Metric	Description
End Time	Shows the time when the ETL process actually ended or failed.
Start Time	Shows the time when the ETL process started.

15.3 Failed ETL Runs Metrics

This category provides metrics about the failed ETL runs.

Table 15–3 Failed ETL Runs Metrics

Metric	Description
Completed Steps	Shows the number of steps that were completed successfully in the ETL run.
ETL Definition	Shows the name of the ETL definition that failed.
Failed Steps	Shows the number of steps that failed in the ETL run.
Running Steps	Shows the number of steps in the ETL run that are in 'Running' state.
Status	Shows the status of the ETL run that failed. The status can be failed or stopped.
Total Steps	Shows the total number of steps in the ETL definition.
End Time	Shows the time when the ETL process actually ended or failed.
Start Time	Shows the time when the failed ETL process actually started.

15.4 Response Metrics

This category provides status metrics for Oracle BI DAC Server.

Default Collection Interval — Every 50 minutes

Table 15–4 Response Metrics

Metric	Description
Status	Shows the current status of the DAC server. The status can be Agent Unreachable, Under Blackout, Metric Collection Error, Up, Down, Partially Up, Agent Down, or Status Pending.

15.5 ETL Run Log Metrics

This category provides details about the ETL run.

Table 15–5 ETL Run Log Metrics

Metric	Description
ETL Log	Shows a log for the ETL run.

16

Oracle BI Presentation Server Metrics

Oracle BI Presentation Server is a layer between Oracle BI Analytics Server and Web server. Presentation Server maintains a web catalog that has information for different users. It helps Web catalog administrator to grant permissions for all users and perform other configurations.

You can use the All Metrics page of this target to view the metrics that have been collected for this target by Oracle Management Agent.

16.1 ChartEngine Metrics

This category provides chart engine metrics for Oracle BI Presentation Server.

Default Collection Interval — Every 5 minutes

Table 16–1 ChartEngine Metrics

Metric	Description
Charts Queued	Shows the current number of charts waiting in queue for processing.
Charts Running	Shows the number of charts that are currently being processed. This does not include charts waiting in queue for processing.

16.2 ChartThreadPool Metrics

This category provides chart thread pool metrics for Oracle BI Presentation Server.

Default Collection Interval — Every 5 minutes

Table 16–2 ChartThreadPool Metrics

Metric	Description
Jobs Queued	Shows the number of jobs currently waiting in the queue to get processed by this thread pool.
Jobs Running	Shows the maximum number of jobs being concurrently processed by this thread pool.

16.3 QueryThreadPool Metrics

This category provides query thread pool metrics for Oracle BI Presentation Server.

Default Collection Interval — Every 5 minutes

Table 16–3 QueryThreadPool Metrics

Metric	Description
Jobs Queued	Shows the number of jobs currently waiting in the queue to get processed by this thread pool.
Jobs Running	Shows the number of jobs currently being processed by this thread pool.

16.4 RequestProcessor Metrics

This category provides request processor metrics for Oracle BI Presentation Server.

Default Collection Interval — Every 5 minutes

Table 16–4 RequestProcessor Metrics

Metric	Description
Bad Requests	Shows the total number of bad requests for Oracle BI Presentation Server.
Completed Requests	Shows the total number of requests completed for Oracle BI Presentation Server.
Completed Requests/sec	Shows the rate at which new requests are processed.
Current Requests	Shows the current number of requests being processed.
Failed Requests	Shows the total number of failed requests for Oracle BI Presentation Server.
Long Requests	Shows the total number of long running requests for Oracle BI Presentation Server.

16.5 Resources Metrics

This category provides resource usage metrics for Oracle BI Presentation Server.

Default Collection Interval — Every 5 minutes

Table 16–5 Resources Metrics

Metric	Description
CPU (%)	Shows the CPU usage (in percentage) of Oracle BI Presentation Server.
Memory (KB)	Shows the memory usage (in KB) for Oracle BI Presentation Server.

16.6 Response Metrics

This category provides status metrics for Oracle BI Presentation Server.

Default Collection Interval — Every 5 minutes

Table 16–6 Response Metrics

Metric	Description
Status	Shows the current status of Oracle BI Presentation Server. The status can be Agent Unreachable, Under Blackout, Metric Collection Error, Up, Down, Partially Up, Agent Down, or Status Pending.

16.7 Sessions Metrics

This category provides sessions-related metrics for Oracle BI Presentation Server.

Default Collection Interval — Every 5 minutes

Table 16–7 Sessions Metrics

Metric	Description
Active Sessions	Shows the number of sessions that are considered active in Oracle BI Presentation Server.
Current Sessions	Shows the number of current sessions in Oracle BI Presentation Server.

17

Oracle BI Scheduler Metrics

Oracle BI Scheduler is an extensible application and server that manages and schedules jobs. Oracle BI Scheduler supports two kinds of jobs, mainly scripted jobs and unscripted jobs (called iBots).

You can use the All Metrics page of this target to view the metrics that have been collected for this target by Oracle Management Agent.

17.1 Failed Jobs Metrics

This category provides metrics related to the failed jobs.

Table 17–1 Failed Jobs Metrics

Metric	Description
EndTime	Shows the end time of the failed job.
ErrorMsg	Shows the error message that was displayed for the failed job.
JobId	Shows the Job-Id of the job that failed.
JobName	Shows the name of the job that failed.
StartTime	Shows the start time of the failed job.

17.2 Job Metrics

This category provides metrics related to the jobs.

Default Collection Interval — Every 15 minutes

Table 17–2 Jobs Metrics

Metric	Description
Failed jobs	Shows the jobs that failed in last 24 hours.
Total jobs	Shows the total jobs scheduled in last 24 hours.

17.3 Response Metrics

This category provides status metrics for Oracle BI Scheduler.

Default Collection Interval — Every 50 minutes

Table 17–3 Response Metrics

Metric	Description
Status	Shows the current status of Oracle BI Scheduler. The status can be Agent Unreachable, Under Blackout, Metric Collection Error, Up, Down, Partially Up, Agent Down, or Status Pending.

17.4 Scheduled Jobs Metrics

This category provides metrics related to the scheduled jobs.

Table 17–4 Scheduled Jobs Metrics

Metric	Description
JobName	Shows the name of the scheduled job.
NextRunTime	Shows the time when the job is scheduled for next run.
ScriptType	Shows type of script that was run as part of the job.
UserId	Shows the ID of the user who scheduled the job.

18

Oracle BPEL Process Manager Metrics

Oracle BPEL Process Manager is a comprehensive and easy-to-use infrastructure for creating, deploying and managing BPEL business processes.

18.1 Active Metrics

This category of metrics shows various active thread requests for this BPEL domain.

Table 18–1 Active Metrics

Metric	Description
Activity Execution Requests	Shows the number of active activity execution requests for the BPEL domain.
BPEL Domain	Shows the name of the BPEL domain.
BPEL Domain Management Requests	Shows the number of active BPEL process management requests for the BPEL domain. These are messages that affect individual processes (for example: set default process, stale, undeploy, update revision).
BPEL Process Management Requests	Shows the number of active BPEL process management requests for the BPEL domain. These are messages that affect individual processes (for example, set default process, stale, undeploy, update revision).
Callback Requests	Shows the number of active messages related to callback resolution and completion for the BPEL domain.
Host	Shows the host machine on which Oracle BPEL Process Manager is running.
New Instance Requests	Shows the number of active requests for creating new instances of BPEL processes for the BPEL domain. When an input payload is received, a new instance message is dispatched to initiate the instance.
Process	Shows the OC4J process.
Transaction Coordination Requests	Shows the number of active messages that control the business transaction protocol (BTP) transactions for the BPEL domain.

18.2 AdapterFramework Metrics

This category shows the performance metrics of the adapter framework.

Table 18–2 AdapterFramework Metrics

Metric	Description
Average Elapsed Time(ms)	Shows the average time in milliseconds taken by the adapter to process an event.
Elapsed Time	Shows the total time in milliseconds taken by the adapter to process all the events.
Host	Shows the host machine on which Oracle BPEL Process Manager's adapter framework is running.

Table 18–2 (Cont.) AdapterFramework Metrics

Metric	Description
Max Elapsed Time(ms)	Shows the maximum time in milliseconds taken by the adapter to process an event.
Min Elapsed Time(ms)	Shows the minimum time in milliseconds taken by the adapter to process an event.
Name	Shows the name of adapter framework.
Number of events erred out	Shows the number of events that have erred out.
Process	Shows the OC4J process.
Total Count	Shows the total number of messages processed by the adapter.
Average Elapsed Time Since Last Collection	Shows the average time (in milliseconds) taken by the adapter to process an event in the last collection interval.
Events Since Last Collection	Shows the number of events in the last collection interval.
Events Erred Out Since Last Collection	Shows the number of events that have erred out in last collection interval.

18.3 BPEL Domain Statistics Metrics

This category shows performance statistics for the processes in a BPEL domain.

Table 18–3 BPEL Domain Statistics Metrics

Metric	Description
Asynchronous Process Latency Time (msecs)	Shows the total latency time of the instances of all the asynchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of an asynchronous process.
Average Asynchronous Process Latency (msecs)	Shows the average latency for asynchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of an asynchronous process.
Average Synchronous Process Latency (msecs)	Shows the average latency for synchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of a synchronous process.
BPEL Domain	Shows the name of the BPEL domain.
Completed Asynchronous Process Latency (ops)	Shows the number of completed instances of asynchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of an asynchronous process.
Completed Synchronous Process Latency (ops)	Shows the number of completed instances of synchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of a synchronous process.
Host	Shows the host machine on which Oracle BPEL Process Manager is running.
Maximum Asynchronous Process Latency Time (msecs)	Shows the maximum latency time among all the asynchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of an asynchronous process.
Maximum Synchronous Process Latency Time (msecs)	Shows the maximum latency time among all the synchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of a synchronous process.
Minimum Asynchronous Process Latency Time (msecs)	Shows the minimum latency time among all the asynchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of an asynchronous process.
Minimum Synchronous Process Latency Time (msecs)	Shows the minimum latency time among all the synchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of a synchronous process.

Table 18–3 (Cont.) BPEL Domain Statistics Metrics

Metric	Description
Number of Active Processes	Shows the total number of currently active processes in this BPEL domain.
Number of Closed Instances	Shows the total number of closed instances of BPEL processes in this BPEL domain.
Number of Open Instances	Shows the total number of open instances of BPEL processes in this BPEL domain.
Process	Shows the OC4J process.
Synchronous Process Latency Time (msecs)	Shows the total latency time of the instances of all the synchronous BPEL processes in this BPEL domain. Latency is defined as the completion time of an instance of a synchronous process.
Total Number of Closed Instances	Shows the total number of closed instances of BPEL processes in this BPEL domain.
Total Number of Open Instances	Shows the total number of open instances of BPEL processes in this BPEL domain.

18.4 BPEL Process Manager Domain Metrics

This metric category shows all domain related information available in Oracle BPEL Process Manager.A BPEL domain allows a developer or administrator to partition a single instance of Oracle BPEL Process Manager into multiple virtual BPEL sections.

Table 18–4 BPEL Process Manager Domain Metrics

Metric	Description
BPEL Active Processes	Shows the total number of active processes in the domain.
BPEL Closed Instances	Shows the number of instances closed per collection interval.
BPEL Domain State	Shows the current state of the domain.The state can be one of these: FAILED,INITIALIZED,INITIALIZING or UNINITIALIZING.
BPEL Open Instances	Shows the number of instances opened per collection interval.
BPEL Total Closed Instances	Shows the total number of closed instances in the domain.
BPEL Total Open Instances	Shows the total number of open instances in the domain.

18.5 BPEL Process Manager Error Instances Metrics

This category provides information about error instances.

Table 18–5 BPEL Process Manager Error Instances Metrics

Metric	Description
BPEL Instance Creation Date	Shows the creation date and time of the error instance.
BPEL Instance Modification Date	Shows the modification date and time of the error instance.

Table 18–5 (Cont.) BPEL Process Manager Error Instances Metrics

Metric	Description
BPEL Instance State	Shows the current state of the instance. The state can be one of the following: STATE_CLOSED_FAULTED STATE_CLOSED_ABORTED STATE_CLOSED_STALE.
BPEL Instance Status	Shows the step where the BPEL instance failed.

18.6 BPEL Process Manager Partner Link Metrics

This metric category shows the metrics related to partner links. Partner links are links to web services that are invoked by the BPEL process, and also act as links to clients that invoke the BPEL process.

Table 18–6 BPEL Process Manager Partner Link Metrics

Metric	Description
BPEL Partner Link Port and Operation	Shows the collection of "invoke" and "receive" activities, and their port and operation details of the partner links. A Port Type represents the definition of the web service itself. It is a list of operations with "inputs" and "outputs".
BPEL WSDL Location	Shows the location of the WSDL file associated with a particular partner link.

18.7 BPEL Process Manager Process Metrics

This Metric Category provides process-level metrics for each process in the domain of Oracle BPEL Process Manager. Process is a description of tasks and outcomes associated with a business activity.

Table 18–7 BPEL Process Manager Process Metrics

Metric	Description
BPEL Process Revision Tag	Shows the revision tag of the process to which this instance belongs. Each process deployed to the process domain contains a revision tag to distinguish between different versions of the same process.
BPEL Closed Instances	Shows the number of closed instances per collection interval.
BPEL Open Instances	Shows the number of open instances per collection interval.
BPEL Process Deploy Time Stamp	Shows the timestamp when the process was deployed.
BPEL Process Life Cycle	Shows the current stage of the process life cycle in the domain. The stage can be ACTIVE or RETIRED. If the process life cycle is retired, then you cannot create a new instance.
BPEL Process State	Shows the current state of the process in the domain. The state can be ON or OFF. If the process state is OFF, then you cannot access the existing instances or create new ones.
BPEL Total Closed Instances	Shows the total number of closed instances for the process.A closed instance is an instance that has completed processing, either successfully or due to an error.
BPEL Total Open Instances	Shows the total number of open instances for the process.An open instance is an instance that is currently being processed.

Table 18–7 (Cont.) BPEL Process Manager Process Metrics

Metric	Description
Error Instances Since Last Collection	Shows the number of error instances since last collection (usually 75 minutes). To calculate the error count, the instances in the following state are queried: STATE_CLOSED_FAULTED STATE_CLOSED_ABORTED STATE_CLOSED_STALE.

18.8 BPEL Process Manager Server Metrics

This category shows metrics related to Oracle BPEL Process Manager Server.

Table 18–8 BPEL Process Manager Server Metrics

Metric	Description
BPEL Server Home	Shows the absolute path of Oracle BPEL Process Manager's Home Directory, where the software is installed.
BPEL Server Version	Shows the current installed version of Oracle BPEL Process Manager.

18.9 Response Metrics

This metric Category shows the status of Oracle BPEL Process Manager target.

Table 18–9 Response Metrics

Metric	Description
UpDown Status	Shows the status of the BPEL Process Manager. The status can be UP or DOWN. If the value is 1, then the target is up.

18.10 Scheduled Metrics

This category shows metrics related to various scheduled thread requests for this BPEL domain.

Table 18–10 Scheduled Metrics

Metric	Description
Activity Execution Requests	Shows the number of scheduled activity execution requests for the BPEL domain.
BPEL Domain	Shows the name of the BPEL domain.
BPEL Domain Management Requests	Shows the number of scheduled BPEL domain management requests for the BPEL domain. These are messages that affect the domain and are mostly domain administration messages.
BPEL Process Management Requests	Shows the number of scheduled BPEL process management requests for the BPEL domain. These are messages that affect individual processes (for example: set default process, stale, undeploy, update revision).
Callback Requests	Shows the number of scheduled messages related to callback resolution and completion for the BPEL domain.
Host	Shows the host machine on which Oracle BPEL Process Manager is running.

Table 18–10 (Cont.) Scheduled Metrics

Metric	Description
New Instance Requests	Shows the number of scheduled requests for creating new instances of BPEL processes for the BPEL domain. When an input payload is received, a new instance message is dispatched to initiate the instance.
Process	Shows the OC4J process.
Transaction Coordination Requests	Shows the number of scheduled messages that control the business transaction protocol (BTP) transactions for the BPEL domain.

18.11 Thread Allocation Activity Metrics

This category shows metrics related to the thread activity on Oracle BPEL Server for a BPEL domain.

Table 18–11 Thread Allocation Activity Metrics

Metric	Description
Active Threads	Shows the number of currently active threads for this domain.
Average JMS thread allocation overhead (ms)	Shows the average time in milliseconds spent allocating threads to process JMS messages for a BPEL domain.
Avg lifetime of allocated threads (ms)	Shows the average lifetime in milliseconds of the allocated threads for a BPEL domain.
Avg number of messages processes per thread	Shows the average number of messages processed per thread for a BPEL domain.
BPEL Domain	Shows the name of the BPEL domain.
Highest number of active threads	Shows the highest number of active threads this domain has had so far.
Host	Shows the host machine on which Oracle BPEL Process Manager is running.
Load factor (# scheduled messages/ # working messages)	Shows the load on Oracle BPEL Server for processing messages in this domain. This shows the load on Oracle BPEL Server in terms of the number of messages scheduled for execution and the number of messages currently being executed.
Process	Shows the OC4J process.
Total number of threads allocated over time	Shows the total number of threads allocated over time for this domain.

19

Oracle Forms

There are various metrics which can be used to monitor Oracle Forms Services.

19.1 Jvm Controllers

The JVM Controllers category provides information about all the JVM controllers. The following table lists the metrics and their descriptions.

Table 19–1 Jvm Controllers Metrics

Metric	Description
Classpath	Classpath of this JVM Controller
CPU	This metric is calculated from the total amount of CPU utilized by this Forms JVM controller
Forms Sessions	Number of Forms sessions this JVM Controller is handling
JVM Options	JVM options this JVM controller was started with
JVMs	Number of JVMs this JVM controller is handling
Logfile	Location of the logfile for this JVM controller
Logging	Specified whether the Logging is turned on or off for this JVM controller
Max Processes	maximum number of Forms Runtimes Processes this JVM controller can service before creating a child JVM
Private Memory	This metric is calculated from the total amount of private memory used by this Forms JVM controller
Start Time	Start time of this JVM controller

19.2 Jvm Load

The JVM Load category provides information about the present Load generated by the Forms JVM processes. The following table lists the metrics and their descriptions.

Table 19–2 Jvm Load Metrics

Metric	Description
Total CPU (%)	This metric is calculated from the total amount of CPU being used by all the Forms JVM processes. By default, the thresholds for this metric is not defined. The value for the thresholds can be edited as required.
Total Memory	This metric is calculated from the total amount of private and shared memory being used by all the Forms JVM processes.

Table 19–2 (Cont.) Jvm Load Metrics

Metric	Description
Total Private Memory	This metric is calculated from the total amount of private memory being used by all the Forms JVM processes.
Total Shared Memory	This metric is calculated from the total amount of shared memory being used by all the Forms JVM processes.

19.3 Load

The Load category provides information about the present Load generated by Forms processes.

19.3.1 Total CPU (%)

This metric is calculated from the total amount of CPU being used by all the Forms processes. By default, the thresholds for this metric are not defined The value for the thresholds can be edited as required.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 19–3 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every Minute	After Every 12 Samples	>	Not Defined	Not Defined	1	CPU Utilization is %value%%

Data Source

The value of this metric is calculated using operating system specific commands.

19.3.2 Total Memory (%)

This metric is calculated from the total amount of private and shared memory being used by all the Forms processes.

By default, this metric has a critical threshold of 90 and a warning threshold of 80. A critical alert is generated when the metric value exceeds the critical threshold value 1 time. A warning alert is generated when the metric value exceeds the warning threshold value 1 time. The value for the thresholds can be edited as required.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 19–4 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every Minute	After Every 12 Samples	>	80	90	1	Memory Utilization is %value%%

Data Source

The value of this metric is calculated using operating system specific commands.

19.3.3 Total number of users

This metric reports the total number of Forms sessions being monitored by Enterprise Manager.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every Minute

Data Source

This value of this metric is based on the number of Forms processes executing on the host. The current value of this metric can also be seen under Response and Load on the Forms Overview Page.

19.4 Response

The Response category provides information about the responsiveness of the Forms Servlet.

19.4.1 ResponseTime(ms)

This metric displays the response time in milliseconds for the Oracle Forms Servlet.

By default, this metric has a critical threshold of 1000 and a warning threshold of 500. A critical alert is generated when the metric value exceeds the critical threshold value 1 time. A warning alert is generated when the metric value exceeds the warning threshold value 1 time. The value for the thresholds can be edited as required.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 19–5 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every Minute	After Every 12 Samples	>	500	1000	1	The Forms Listener response time is unacceptable.

Data Source

The value of this metric is obtained by measuring the response to the Servlet URL shown on the Forms Overview Page.

19.4.2 Status

By default, this metric has a critical threshold of 0 indicating that the Forms Servlet is unreachable. A critical alert is generated when the metric value equals the critical threshold value once. It is advisable that this threshold be left at the default value.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 19–6 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every Minute	After Every 12 Samples	=	Not Defined	0	1	The Forms instance is not accessible.

Data Source

The value of this metric is obtained by measuring the availability of the Servlet URL shown on the Forms Overview Page. The current value of this metric can also be seen under Response and Load on the Forms Overview Page.

User Action

Check whether the OC4J_BI_Forms oc4j instance has been started and if so that the application forms90app.ear has been deployed successfully.

19.5 Sessions

The following table lists the metrics.

Table 19–7 Sessions Metrics

Metric
Connect Time
IP
Session CPU (%)

Table 19–7 (Cont.) Sessions Metrics

Metric
Session Memory (%)
User Name

20

Oracle HTTP Server Metrics

Oracle Enterprise Manager can be used to manage Oracle HTTP Server. You can use the All Metrics page for an HTTP Server target to view the metrics that have been collected for that target by Oracle Management Agent.

20.1 APM Mining Performance Details Metrics

This metric category includes metrics that provide APM mining performance details.

Default Collection Frequency — Real-time

Table 20–1 APM Mining Performance Details Metrics

Metric	Description
Average CPU Utilization (%)	Shows the percentage of CPU time over total time consumed by the End-user Performance Mining Engine, during the last run.
CPU Usage Time	Shows the total amount of time consumed by the CPU (in seconds) during the last End-user Performance Analysis run.
End Log Time	Shows the time in the access_log file at which the End-user Performance Mining Engine stopped processing.
Number of Beacon Request Lines	Shows the number of log lines with beacon transaction requests (these lines are ignored by the End-user Performance Mining Engine and are not reported in the End-User Performance Monitoring analysis).
Output - Completed Pages	Shows the number of completed pages for which End-User Performance Monitoring data was reported.
Output - Incompleted Pages	Shows the number of partially loaded pages reported by the End-user Performance Mining Engine.
Number of Invalid Log Lines	Shows the number of lines that are not recognized by the End-user Performance Mining Engine.
Number of Log Lines Processed	Shows the number of access_log lines processed by the End-user Performance Mining Engine.
Output - Total Page Requests	Shows the total number of component requests reported for all pages.
Start Log Time	Shows the time in the access_log file at which the End-user Performance Mining Engine started processing.
Start Run Time	Shows the time at which the End-user Performance Mining Engine started running.
EUM Gif Requests - Total	Shows the total number of EUM Gif requests in the access_log that signal the completion of a page load.

Table 20–1 (Cont.) APM Mining Performance Details Metrics

Metric	Description
EUM Gif Requests - No Expected Output	Shows the number of EUM Gif requests for which output is not reported. These include component pages that are parts of a single page load, where only the main page is reported.
EUM Gif Requests - Browser Cached Pages	Shows the number of EUM Gif requests for pages that are cached, and hence no End-User Performance Monitoring information is available.
EUM Gif Requests - Other/Unaccounted	Shows the number of EUM Gif requests for which output is not reported for other reasons.
Total Run Time (sec)	Shows the total amount of time taken by the End-user Performance Mining Engine.

20.2 modplsql_Cache Metrics

This metric category provides status information for Session Cache and Content Cache.

The Session Cache is Portal Application specific- OracleAS Portal uses session cookies to maintain session details for each OracleAS Portal user. The session cookie is encrypted and contains important information, including: the database username, the lightweight username, and the Globalization Support characteristics of the session. In order for mod_plsql to execute a OracleAS Portal request, it needs to get hold of the database username from the session cookie. To avoid performing an expensive decrypt operation with each user request, mod_plsql decrypts the session cookie once and maintains the relevant details in a OracleAS Portal session cache that is stored on the local file system.

The Content Cache is used by any mod_plsql application which has specified its content to be cacheable.

Default Collection Interval — Every 5 minutes

Table 20–2 modplsql_Cache Metrics

Metric	Description
cacheStatus.value	Shows the status of each cache. Either Up or Down.
hits.count, ops	Shows the number of requests that resulted in a cache hit.
hits.percentage	Shows the percentage of requests that resulted in a cache hit.
modplsql	
Name	
newMisses.count, ops	Shows the number of requests that resulted in a cache miss, where the requested content was not in the cache at all.
newMisses.percentage	Shows the percentage of requests that resulted in a cache miss, where the requested content was not in the cache at all.
requests.count	Shows the number of requests each cache has serviced since startup.
staleMisses.count, ops	Shows the number of requests that resulted in a cache miss, where the requested content was in the cache but was stale.
staleMisses.percentage	Shows the percentage of requests that resulted in a cache miss, where the requested content was in the cache but was stale.

20.3 modplsql_HTTPResponseCodes Metrics

This metric category provides information about the count or percentage of various types of response codes since the Application Server was last restarted.

Default Collection Interval — Every 5 minutes

Table 20–3

Metric	Description
HTTP 200s	Shows the Count of successful mod_plsql requests returning a 200 HTTP response code.
HTTP 200s percentage	Shows the percentage of successful mod_plsql requests returning a 200 HTTP response code.
HTTP 300s Resolved	Shows the count of successful mod_plsql requests returning a 300 HTTP response code.
HTTP 300s resolved percentage	Shows the percentage of successful mod_plsql requests returning a 300 HTTP response code.
HTTP 400s	Shows the count of unsuccessful mod_plsql requests returning a 400 HTTP response code.
HTTP 400s percentage	Shows the percentage of unsuccessful mod_plsql requests returning a 400 HTTP response code.
HTTP 500s	Shows the count of unsuccessful mod_plsql requests returning a 500 HTTP response code.
HTTP 500s percentage	Shows the percentage of unsuccessful mod_plsql requests returning a 500 HTTP response code.
Total HTTP responses	Shows the count of mod_plsql requests.

20.4 modplsql_RequestGroupingSQLErrorList Metrics

This metric category provides information about the predefined groupings of SQL errors.

Default Collection Interval — Every 5 minutes

Table 20–4 modplsql_RequestGroupingSQLErrorList Metrics

Metric	Description
errorCount.count	Shows the shows the number of errors that have occurred within the group.
lastErrorDate.value	Shows the date of the last request to cause the SQL error in the associated group.
lastErrorRequest.value	Shows the last request to cause a SQL error in the associated group.
lastErrorText.value	Shows the SQL error text for the last error in the associated group.
Name	Shows the grouping name for which the SQL errors are grouped.

20.5 modplsql_RequestLast10SQLErrorList Metrics

This category of metrics provides information about the last 10 SQL errors that have occurred while executing requests.

Default Collection Interval — Every 5 minutes

Table 20–5 modplsql_RequestLast10SQLErrorList Metrics

Metric	Description
errorDate.value	Shows the date when the request caused the SQL error.
errorRequest.value	Shows information about the request causing the SQL error.
errorText.value	Shows information about the SQL error text.
Name	Shows the name of the group for which the grouping of last 10 SQL errors is done.

20.6 mod_oc4j Destination Metrics

The metrics in this category provide details about the successful and failed requests routed by mod_oc4j to a particular OC4J Instance. The metrics table shows details such as the OC4J instances to which the requests were routed, the total number of successful and failed requests routed by mod_oc4j to a particular OC4J instance.

Default Collection Interval — Every 30 minutes

Table 20–6 mod_oc4j Destination Metrics

Metric	Description
Failover.count, ops	Shows the total number of failovers for this destination.
Percentage of Requests that Were Failures	Shows the percentage of the total number of requests routed by mod_oc4j to this particular OC4J instance that were failed requests.
Percentage of Requests that Were Session Requests	Shows the percentage of total number of requests routed by mod_oc4j to this particular OC4J instance that were session requests, during the last collection interval.
Requests Per Second Routed to Destination	Shows the number of requests routed per second by mod_oc4j to this particular OC4J instance.
Total Failed Requests to Destination	Shows the total number of failed requests routed by mod_oc4j to this particular OC4J instance.
Total Successful Requests to Destination	Shows the total number of successful requests routed by mod_oc4j to this particular OC4J instance.

20.7 mod_oc4j General Metrics

This metric category displays charts that show the count of requests to OC4J instances, and the percentage of requests that failed and resulted in internal errors.

Default Collection Interval — Every 5 minutes

Table 20–7 mod_oc4j General Metrics

Metric	Description
Percentage of Requests Resulted in Internal Errors	Shows the percentage of total number of requests routed for all the Mount Points that resulted in internal errors.
Percentage of Requests that Were Failures	Shows the percentage of total number of requests routed for all the mount points that were failed requests.
Percentage of Requests that Were Session Requests	Shows the percentage of total number of requests routed for all the mount points that were session requests, during the last collection interval.
Requests Per Second Routed to OC4J Instances	Shows the total number of requests routed per second for all the mount points.

20.8 mod_oc4j MountPt Metrics

The metrics in this category provide details about the successful and failed requests routed by mod_oc4j for a particular mount point. The metrics table shows details such as the OC4J instances to which the requests were routed and the path for the OC4J Mount directive in the mod_oc4j.conf file.

Default Collection Interval — Every 30 minutes

Table 20–8 mod_oc4j MountPt Metrics

Metric	Description
Failover.count, ops	Shows the total number of failovers for this mount point.
OC4J Instance Name(s)	Shows the OC4J Instance(s) to which the requests were routed.
Percentage of Requests that Were Failures	Shows the percentage of total number of requests routed by mod_oc4j for this particular mount point that were failed requests.
Percentage of Requests that Were Session Requests	Shows the percentage of total number of requests for this particular mount point routed by mod_oc4j that were session requests, during the last collection interval.
Requests Per Second Routed to this Mount Point	Shows the number of requests routed per second by mod_oc4j for this particular mount point.
Total Failed Requests to Mount Point	Shows the total number of failed requests routed by mod_oc4j for this particular Mount Point.
Total Successful Requests to Mount Point	Shows the total number of successful requests routed by mod_oc4j for this particular Mount Point.

20.9 mod_oc4j Request Failure Causes Metrics

This metric category provides graph data for Internal server errors. These errors could have several causes, including: mod_oc4j's inability to initialize internal data structures, unavailability of the Java Virtual Machine (JVM), network errors, and configuration errors.

Default Collection Interval — Every 5 minutes

Table 20–9 mod_oc4j Request Failure Causes Metrics

Metric	Description
Host	
iasInstance	
IncorrectReqInit.count, ops	
Internal Errors Per Second	Shows the rate at which an internal error occurred while routing requests.
modoc4j	
Name	
Oc4jUnavailable.count, ops	
Process	
timeStamp.ts, milliseconds	
uid	
UnableToHandleReq.count, ops	

20.10 OHS General Metrics

This metric category includes metrics that provide general information about Oracle HTTP Server.

Default Collection Interval — Every 5 minutes

Table 20–10 OHS General Metrics

Metric	Description
Start Time (ms since Epoch)	Shows the start time of the HTTP Server. It is represented in milliseconds since the Unix epoch. The Unix epoch is January 1, 1970.

20.11 OHS Module Metrics

Contains metrics about Oracle HTTP Server (OHS) modules.

Default Collection Interval — Every 5 minutes

Table 20–11 OHS Module Metrics

Metric	Description
Active Requests for a Module	Shows the number of requests currently being processed by this module's handler.
Request Handling Throughput, for a Module (requests per second)	Shows the number of requests handled per second by this module during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Request Handling Time, for a Module (seconds)	Shows the average time (in seconds) it took the module to handle a request during the last interval. The interval is the period of time specified as the collection frequency for this metric.

20.12 OHS Process Metrics

This metric category contains metrics about DMS processes.

Default Collection Interval — Every 5 minutes

Table 20–12 OHS Process Metrics

Metric	Description
Heap Usage (MB)	Shows the Displays (in MB) the total amount of heap space used since the server was started.

20.13 OHS Server Metrics

The metrics in this metric category display information about Oracle HTTP Server.

Default Collection Interval — Every 5 minutes

Table 20–13 OHS Server Metrics

Metric	Description
Active HTTP Connections	Shows the number of open HTTP connections.
Active HTTP Requests	Shows the number of requests currently being serviced.
Busy Processes	The number of child servers that are busy.

Table 20–13 (Cont.) OHS Server Metrics

Metric	Description
Connection Duration (seconds)	Shows the average time (in seconds) a connection was open during the last interval. The interval is the period of time specified as the collection frequency for this metric. A connection remains open until all of the requests that it is handling have been completed.
Error Rate (%)	Shows the percentage of requests that encountered errors during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Idle Processes	Shows the number of child servers that are ready.
Percentage of Busy Processes	Shows the percentage of Oracle HTTP Server child processes that are currently servicing requests.
Request Processing Time (seconds)	Shows the average time it took to process a request during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Request Throughput (requests per second)	Shows the number of requests per second serviced during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Response Data Processed (KB per response)	Shows the average size of a response (in KB) during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Response Data Throughput (KB per second)	Shows the amount of response data (in KB/seconds) processed by Oracle HTTP Server during the last interval. The interval is the period of time specified as the collection frequency for this metric.

20.14 OHS Virtual Host

The metrics in this metric category provide virtual host information.

Default Collection Interval — Every 5 minutes

Table 20–14 OHS Virtual Metrics

Metric	Description
Active Requests for a Virtual Host	Shows the Total number of active requests currently being processed by the virtual host.
Request Processing Time for a Virtual Host (seconds)	Shows the average amount of time it took the virtual host to process one request during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Request Throughput for a Virtual Host (requests per second)	Shows the number of requests per second serviced by the virtual host during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Response Data Processed for a Virtual Host (KB per response)	Shows the average size of a response (in KB) during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Response Data Throughput for a Virtual Host (KB per second)	Shows the amount of response data (in KB/second) processed by the virtual host during the last interval. The interval is the period of time specified as the collection frequency for this metric.
Virtual Host Type	Shows the type of virtual host, either IP_DEFAULT, NAME_DEFAULT, IP_BASED, or NAME_BASED.

20.15 Resource Usage Metrics

The metrics in this metric category provide information about CPU and memory usage.

Default Collection Interval — Every 5 minutes

Table 20–15 Resource Usage Metrics

Metric	Description
CPU Idle Time (%)	Shows the displays the percentage of system CPU time that is idle.
CPU Usage (%)	Shows the percentage of the CPU usage by Oracle HTTP Server.
Free Memory (%)	Shows the percentage of free physical memory for the system.
Free Memory (MB)	Shows the amount of free physical memory (in MB) for the system.
Memory Usage (%)	Shows the percentage of the physical memory used by Oracle HTTP Server.
Memory Usage (MB)	Shows the amount of physical memory (in MB) being used by Oracle HTTP Server.
Other CPU Usage (%)	Shows the percentage of the CPU owned and used by host processes other than Oracle HTTP Server. If you are having problems with CPU usage on the HTTP Server host computer, this metric can help you determine whether or not HTTP Server is causing the problem.
Other Memory Usage (%)	Shows the percentage of host memory in use by processes and applications other than Oracle HTTP Server. If you are having problems with memory usage on the HTTP Server host computer, this metric can help you determine whether or not the HTTP Server is causing the problem.
Other Memory Usage (MB)	Shows the physical memory usage (in MB) by processes and applications other than Oracle HTTP Server. If you are having problems with memory usage on the HTTP Server host computer, this metric can help you determine whether or not HTTP Server is causing the problem.
Start Time (ms since Epoch)	Shows the start time of the HTTP Server. It is represented in milliseconds since the Unix epoch. The Unix epoch is January 1, 1970.
Total Memory (MB)	Shows the amount of physical memory (in MB) for the system.

20.16 Response Metrics

Contains metrics that provide basic information about the HTTP Server.

Default Collection Interval — Every minute

Table 20–16 Response Metrics

Metric	Description
UpDown Status	Shows whether the HTTP Server is up or down.

21

Oracle Internet Directory Server

Oracle Enterprise Manager can be used to manage Oracle Internet Directory server. You can also use Enterprise Manager to view the metrics collected by Oracle Internet Directory LDAP server, replication server and directory integration server.

21.1 (Critical Event) Super User Failed Logins

This metric provides information about failed super user logins that occurred in Oracle Internet Directory servers.

21.1.1 Failed LDAP Super User Login

The number of successful super user logins that occurred in Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–1 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	=	15	20	1	Superuser Login failed %value% times

21.2 (Critical Event) Super User Successful Logins

This metric provides information about successful super user logins that occurred in Oracle Internet Directory servers.

21.2.1 Successful LDAP Super User Login

The number of successful super user logins that occurred in Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–2 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	=	40	50	1	Superuser Login Success are %value%

21.3 (Critical Events) System Resource Events (3113 Errors)

Provides information about ORA-3113 errors that occurred in Oracle Internet Directory servers.

21.3.1 Number of 3113 Error Occurrences

The number of ORA-3113 errors that occurred in Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–3 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	=	Not Defined	1	1	Ora3113 Error!

21.4 (Critical Events) System Resource Events (3114 Errors)

Provides information about ORA-3114 errors that occurred in Oracle Internet Directory servers.

21.4.1 Number of 3114 Error Occurrences

The number of ORA-3114 errors that occurred in Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–4 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	=	Not Defined	1	1	Ora3114 Error!

21.5 (Historical Critical Events) Security Events

This metric provides information about security events that occurred in Oracle Internet Directory servers. The following table lists the metrics and descriptions.

Table 21–5 Security Events (Historical Critical Events)

Metric	Description
Event Name	Name of the event that occurred
Event Result	Result – that is either success or failure – of the event that occurred
Event Time	Date and time stamp in (UTC) of the event occurrence
Instance Number	Instance number of the Oracle Internet Directory server instance for which this metric is collected
Process ID	Process identifier for the Oracle Internet Directory server instance for which this metric is collected
User DN	Identity of the user who logged into Oracle Internet Directory server and performed the operation that triggered the event

21.6 (Historical Critical Events) System Resource Events

Provides information about critical system resource events that occurred in Oracle Internet Directory servers.

Table 21–6 System Resource Events (Historical Critical Events)

Metric	Description
Event Name	Name of the event that occurred
Instance Number	Instance number of the Oracle Internet Directory server for which this metric is collected
Last Event Time	Date and time stamp (in UTC) of the event occurrence
Number of Event Occurrences	Number of times the event occurred
Process ID	Process identifier for the Oracle Internet Directory server instance for which this metric is collected

21.7 (Historical Resource Statistics) LDAP Server and System Memory

Provides information about system memory and Oracle Internet Directory server memory.

Table 21–7 LDAP Server and System Memory (Historical Resource Statistics)

Metric	Description
Date and Time Stamp	Date and time stamp (in UTC) of the metric collection

Table 21–7 (Cont.) LDAP Server and System Memory (Historical Resource Statistics)

Metric	Description
Instance Number	Instance number of the Oracle Internet Directory server instance for which this metric is collected
LDAP Server's Average Memory Growth (%)	Percent of memory growth of the Oracle Internet Directory server instance at the end of the metric collection period
System's Total Free Physical Memory (KB)	In kilobytes, free physical system memory at the end of metric collection period

21.8 (Historical Resource Statistics) LDAP Server's Data Base Usage

This metric provides information about database usage by Oracle Internet Directory servers.

Table 21–8 LDAP Server's Data Base Usage (Historical Resource Statistics)

Metric	Description
Active Data Base Sessions	Number of active database sessions of the Oracle Internet Directory server instance at the end of the metric collection period
Date and Time Stamp	Date and time stamp (in UTC) of the metric collection
Instance Number	Instance number of the Oracle Internet Directory server instance for which this metric is collected
Open Data Base Sessions	Number of open database sessions of the Oracle Internet Directory server instance at the end of the metric collection period

21.9 (Resource Statistics) LDAP Server Memory Growth

Provides information about Oracle Internet Directory server memory growth.

21.9.1 Average Memory Growth (%)

Average Oracle Internet Directory server memory growth.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–9 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	OID Average Memory Growth over %value%

21.10 (Resource Statistics) LDAP Server's Active Data Base Connections

Shows the number of active database connections for the Oracle Internet Directory server.

21.10.1 Active Data Base Sessions

The number of active database connections for the Oracle Internet Directory server.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–10 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Active DB Connections over %value%

21.11 (Resource Statistics) LDAP Server's Open Data Base Connections

Shows the number of open database connections for the Oracle Internet Directory server.

21.11.1 Open Data Base Sessions

The number of open database connections for the Oracle Internet Directory server.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–11 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Open DB Connections over %value%

21.12 Configuration Sets of LDAP Server

Provides information about configuration sets of Oracle Internet Directory servers. The configuration parameters for directory instances are stored in a directory entry called a configuration set entry, or config set. A configuration set entry holds the configuration parameters for a specific instance of the directory server.

Table 21–12 Configuration Sets of LDAP Server Metrics

Metric	Description
Max Concurrent DB Conn	Maximum number of concurrent database connections for the Oracle Internet Directory server
Non-SSL Port Number	Oracle Internet Directory server's port in non-SSL mode. The default value of the port is 389
Number of Server Process	Number of server processes to start for the Oracle Internet Directory instance
SSL Authentication Type	SSL authentication type. To configure Oracle Internet Directory with no authentication, one-way authentication, or two-way authentication, set this value to 1, 32, or 64, respectively. The default value is 1 (no authentication).
SSL Enabled	Flag for enabling or disabling SSL in Oracle Internet Directory. To configure the directory with non-SSL, SSL, or both non-SSL and SSL modes, set the flag value to 0, 1, or 2 respectively. The default value is 0 (non-SSL).
SSL Port Number	Default port for Oracle Internet Directory in SSL mode. The default value is 636.
SSL Version	SSL version. The default value is 3.
SSL Wallet URL	location of the Oracle wallet. This must be set for both client and server. For example this parameter could be set as file:/home/my_dir/my_wallet for UNIX, and as file:C:\my_dir\my_wallet for Windows.

21.13 Directory Integration Profiles

Provides basic status information about various Directory Integration Platform profiles configured in the system.

Table 21–13 Directory Integration Profiles Metrics

Metric	Description
Execution Errors	Last error that was encountered (if any) during the execution of the integration profile
Execution Status	Current execution status of the integration profile
Last Applied Change Number	Last change number in Oracle Internet Directory that was successfully synchronized and propagated to the other end
Last Execution Time	Time when the profile was last executed by the Directory Integration Platform server
Schedule (secs)	Scheduling interval of the integration profiles. The Directory Integration Platform server executes the profiles using this scheduling interval.
State	State of the integration profile (ENABLED / DISABLED)
Type	Type of the integration profile (synchronization or provisioning)

21.14 Directory Integration Server

Provides information about various Directory Integration Platform instances running against this Oracle Internet Directory instance.

Table 21–14 Directory Integration Server Metrics

Metric	Description
Directory Integration Server Host	Machine on which this Directory Integration Platform server is running
Downtime Count	Number of times the Directory Integration Platform server went down unexpectedly
LDAP Server	Oracle Internet Directory server against which this Directory Integration Platform server is running
Start Time	Time when this Directory Integration Platform server started

21.15 Historical LDAP Entry Cache Hit Ratio

Provides information about performance of the entry cache in Oracle Internet Directory servers.

Table 21–15 Historical LDAP Entry Cache Hit Ratio Metrics

Metric	Description
Data and Time Stamp	Date and time stamp (in UTC) of the metric collection
Instance Number	Instance number of the Oracle Internet Directory server instance for which this metric is collected
Process ID	Process identifier of the Oracle Internet Directory server instance for which this metric is collected
Server Entry Cache Hit Ratio	Percentage the entry cache hit ratio in Oracle Internet Directory server at the end of the metric collection period

21.16 Historical LDAP Load and Response

This metric provides information about the total number of LDAP operations in progress and the average LDAP operation response time in Oracle Internet Directory servers.

Table 21–16 Historical LDAP Load and Response Metrics

Metric	Description
Data and Time Stamp	Date and time stamp (in UTC) of the metric collection
Instance Number	Instance number of the Oracle Internet Directory server instance for which this metric is collected
Server Average Response Time (in Milliseconds)	Average response time in (milliseconds) for the Oracle Internet Directory server to perform an LDAP operation during the metric collection period
Server Load	Number of LDAP operations in progress in the Oracle Internet Directory server at the end of the metric collection period

21.17 Historical LDAP Logon Session Statistics

This metric provides information about login sessions established with Oracle Internet Directory servers.

Table 21–17 Historical LDAP Logon Session Statistics Metrics

Metric	Description
Data and Time Stamp	Date and time stamp (in UTC) of the metric collection
Instance Number	Instance number of the Oracle Internet Directory server instance for which this metric is collected
Total LDAP Logon Sessions	Number of LDAP sessions established with the Oracle Internet Directory server at the end of the metric collection period

21.18 Historical LDAP Operations Profile

This metric provides information about LDAP operations completed by Oracle Internet Directory servers.

Table 21–18 Historical LDAP Operations Profile Metrics

Metric	Description
Completed Add Operations	Total number of LDAP add operations completed by the Oracle Internet Directory server instance during the metrics collection period
Completed Compare Operations	Total number of LDAP compare operations completed by the Oracle Internet Directory server instance during metric collection
Completed Delete Operations	Total number of LDAP delete operations completed by the Oracle Internet Directory server instance during metric collection
Completed Login Operations	Total number of LDAP bind operations completed by the Oracle Internet Directory server instance during metric collection
Completed Modify Operations	Total number of LDAP modify operations completed by the Oracle Internet Directory server instance during metric collection
Completed Search Operations	Total number of LDAP search operations completed by the Oracle Internet Directory server instance during metric collection
Date and Time Stamp	Date and time stamp (in UTC) of the metric collection
Instance Number	Instance number of the Oracle Internet Directory server instance for which this metric is collected

21.19 LDAP Entry Cache Hit Ratio

Provides information about performance of the entry cache in Oracle Internet Directory servers.

21.19.1 Server Entry Cache Hit Ratio

Shows in percentage the entry cache hit ratio in Oracle Internet Directory server at the end of the metric collection period.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–19 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	<	Not Defined	Not Defined	1	Server Entry Cache Hit less than %value%

21.20 LDAP Load

This metric provides information about the total number of LDAP operations in progress.

21.20.1 Server Load

The total number of LDAP operations in progress.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–20 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Server Load over %value%

21.21 LDAP Operations Profile

This metric provides information about LDAP operations completed by Oracle Internet Directory servers.

21.21.1 Completed Add Operations

Shows the total number of LDAP add operations completed by the Oracle Internet Directory server instance during the metric collection period.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–21 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Add large than %value%

21.21.2 Completed Compare Operations

Shows the total number of LDAP compare operations completed by the Oracle Internet Directory server instance during the metric collection period.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–22 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Compare large than %value%

21.21.3 Completed Delete Operations

Shows the total number of LDAP delete operations completed by the Oracle Internet Directory server instance during the metric collection period.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–23 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Delete large than %value%

21.21.4 Completed Login Operations

This metric provides information about Oracle Internet Directory server login sessions.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding

Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–24 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Bind large than %value%

21.21.5 Completed Modify Operations

Shows the total number of LDAP modify operations completed by the Oracle Internet Directory server instance during the metric collection period.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–25 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Modify large than %value%

21.21.6 Completed Search Operations

Shows the total number of LDAP search operations completed by the Oracle Internet Directory server instance during the metric collection period.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–26 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP Search large than %value%

21.22 LDAP Response

This metric provides information about the average LDAP operation response time in Oracle Internet Directory servers.

21.22.1 Server Response

The average LDAP operation response time in Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–27 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	=	Not Defined	Not Defined	1	LDAP Server Response are %value%

21.23 LDAP Server Resource Usage

Provides information about system resources used by Oracle Internet Directory servers.

21.23.1 Total CPU Usage (%)

Provides information about the percentage of CPU used by Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
9.0.4.x	Every 15 Minutes

21.23.2 Total Memory Usage (in KB)

Provides information about total virtual memory used by Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–28 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
9.0.4.x	Every 15 Minutes	After Every Sample	>	Not Defined	Not Defined	1	Total Memory Usage %value%

21.24 LDAP Server Total User Sessions

Provides information about total LDAP user sessions currently established with Oracle Internet Directory servers.

21.24.1 Total Users Sessions

Shows the total number of user sessions currently established with an Oracle Internet Directory server.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–29 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	LDAP User Sessions over %value%

21.25 Logon Session Statistics

This metric provides information about login sessions established with Oracle Internet Directory servers.

21.25.1 Total Logon Sessions

Total login sessions established with Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–30 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	Total Logon Sessions over %value%

21.26 Response

For Oracle internal use only.

21.26.1 Status

Shows whether any Oracle Internet Directory LDAP server is up or not.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–31 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	=	Not Defined	0	1	The Internet Directory is down

21.26.2 Total Number

Shows the total number of Oracle Internet Directory servers that are up and running.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
9.0.2.x and 9.0.3.x	Every 5 Minutes

21.27 Running Instances of LDAP Replication Server

Provides information about running instances of the directory replication server.

Table 21–32 Running Instances of LDAP Replication Server Metrics

Metric	Description
Config Set	Configuration set associated with the running instance of the directory replication server
Downtime Count	Number of times the instance went down and was restarted by the Oracle Internet Directory monitor daemon
Oracle Directory Server	Number of times the Oracle Internet Directory instance went down and was restarted by the Oracle Internet Directory monitor daemon
Start Time	Time when the instance of the directory replication server was first started

21.28 Running Instances of LDAP Server

Provides information about running instances of Oracle Internet Directory servers.

Table 21–33 Running Instances of LDAP Server Metrics

Metric	Description
Config Set Number	Configuration set associated with the running Oracle Internet Directory instance
Downtime Count	Number of times the instance has gone down and has been restarted by the Oracle Internet Directory monitor daemon
Port Number	Host name of a running Oracle Internet Directory instance

Table 21–33 (Cont.) Running Instances of LDAP Server Metrics

Metric	Description
Start Time	Port number of a running Oracle Internet Directory instance
Up Since	Time when the Oracle Internet Directory instance was first started

21.29 Stopped Instances of LDAP Server

Provides information about Oracle Internet Directory instances that were started earlier and are stopped now.

Table 21–34 Stopped Instances of LDAP Server Metrics

Metric	Description
Config Set Number	Configuration set associated with the stopped instance
Host Name	Host name of the stopped instance

21.30 Total Memory Usage

Provides information about total virtual memory use by Oracle Internet Directory servers.

21.30.1 Total Memory Size (in KB)

Shows total virtual memory use by Oracle Internet Directory servers.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 21–35 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
9.0.2.x and 9.0.3.x	Every 10 Minutes	After Every Sample	>	Not Defined	Not Defined	1	Memory Usage over %value% KB

22

Oracle WebLogic Managed Server Metrics

Oracle WebLogic Managed Server is one of the non-Oracle application servers that is monitored using Oracle Enterprise Manager Grid Control.

This chapter provides descriptions for all Oracle WebLogic Managed Server metric categories, and tables list and describe associated metrics for each category.

22.1 Active Applications Metrics

This category of metrics provides information about the active applications. The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–1 Active Applications Metrics

Metric	Description
Active Invocations	Number of active invocations
Active Sessions	Number of active sessions of the application
Average Response Time	Average execution time of the application. The average response time of an application is calculated by dividing the number of active requests generated between two consecutive time intervals (that is, the time when the agent collects the data from the server), by the time taken for processing these requests.
Current Client Processing Time	Amount of time taken to execute the servlet during the last interval
Total Time	Time taken to execute all invocations of the servlet from the time of its creation

22.2 All Work Managers Metrics

This category of metrics provides information about all the Work Managers. The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–2 All Work Managers Metrics

Metric	Description
Active Requests	Number of active requests for all Work Managers
Number of Work Managers	Number of Work Managers
Pending Request Current Count	Number of waiting requests in the queue across all Work Managers
Requests Per Second	Average requests per second for all work managers

Table 22–2 (Cont.) All Work Managers Metrics

Metric	Description
Serviced Request Total Count	Number of requests that have been processed for across all Work Managers
Stuck Thread Count	Number of threads that are considered stuck on the basis of any stuck thread constraints

22.3 Data Source

This category of metrics provides information about the data source. The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–3 Data Source Metrics

Metric	Description
Active Connections Current Count	Number of active JDBC connections
JNDI Name	JNDI Name for the data source in the JNDI server.
Pool Name	Name of the JDBC connection pool whose instance is used by the data source

22.4 Deployment Task Metrics

This category of metrics provides information about deployment tasks. The following table lists the metrics and associated descriptions.

Default Collection Interval — Real-time only

Table 22–4 Deployment Task Metrics

Metric	Description
Application Name	Name of the application that is to be deployed
Begin Time	Time when the deployment was started
End Time	Time when the deployment was completed
Parent	Name of the parent.
Running	Number of deployments that are in the running state
Status	Status of the deployment task

22.5 Domain Metrics

The details provided by this category of metrics can be used to monitor an Oracle WebLogic Server Domain. A domain can contain zero or more clusters. The following table lists the metrics and associated descriptions.

Default Collection Interval — Real-time only

Table 22–5 Domain Metrics

Metric	Description
Activation Time	Time at which the domain became active
Current Cluster Deployment Target	Name of the current cluster target for a deployment

22.6 EJB Cache Metrics

This category of metrics provides information about the EJB cache. The following table lists the metrics and associated descriptions.

Default Collection Interval — Real-time only

Table 22–6 EJB Cache Metrics

Metric	Description
Activation Count	Name of the current cluster target for a deployment
Cache Access Count	Number of times the cache has been accessed
Cache Hit Count	Number of times the cache has been hit
Cache Miss Count	Total number of times an attempt to access a bean from the cache failed. This information is useful for determining the effectiveness of the EJB cache.
Cached Beans Current Count	Total number of EJB instances currently in the cache
Passivation Count	Total number of EJBs that have been passivated

22.7 EJB Component Config Metrics

This category of metrics is a top-level interface for configuration information that Server maintains for EJB module. The following table lists the metrics and associated descriptions.

Default Collection Interval — Real-time only

Table 22–7 EJB Component Config Metrics

Metric	Description
Caching Disabled	A private property that disables caching in proxies
Keep Generated	Should be true if you want EJBC to keep its generated source files, and false if you want EJBC to delete them after compiling
Persistence Enabled	Sets the persistenceEnabled attribute of the ConfigurationMBean object
URI	Returns a URI pointing to the application component, usually on the Administration Server

22.8 EJB Component Runtime Metric

This category of metrics is a top level interface for all runtime information collected for an EJB module. The following table lists the metrics and associated descriptions.

Default Collection Interval — Real-time only

Table 22–8 EJB Component Runtime Metric

Metric	Description
Deployment State	Indicates the current deployment state of the EJB module

22.9 EJB Pool Metrics

This category of metrics contains accessory methods for all free pool runtime information for an EJB. The following table lists the metrics and associated descriptions.

Default Collection Interval — Real-time only

Table 22–9 EJB Pool Metrics

Metric	Description
Access Total Count	Total number of times an attempt was made to get a bean instance from the free pool
Beans In Use Count	Total number of bean instances currently in use from the free pool
Beans In Use Current Count	Number of bean instances currently being used from the free pool
Destroyed Total Count	Number of times a bean from the free pool was destroyed as non-application exceptions were thrown from it
Idle Beans Count	Total number of available bean instances in the free pool
Miss Total Count	Number of times a failed attempt was made to get an instance from the free pool
Pooled Beans Current Count	Number of bean instances in the free pool that are currently available
Waiter Current Count	Number of threads currently waiting for an available bean instance from the pool
Waiter Total Count	Total number of threads currently waiting for an available bean instance from the free pool

22.10 EJB Transaction Metrics

This category of metrics provides runtime information about all EJB transactions. The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–10 EJB Transaction Metrics

Metric	Description
EJB Active Transactions	Number of active transactions commited
EJB Active Transactions Rolled Back	Number of transactions rolled Back during the last collection interval
EJB Active Transactions Timed Out	Number of transactions timed out during the last collection interval
EJB Transactions Committed Per Second	Number of EJB transactions committed per second
EJB Transactions Committed Total Count	Total number of transactions that were committed
EJB Transactions Rolled Back Per Second	Number of EJB Transactions Rolled Back Per Second during last collection interval
EJB Transactions RolledBack Total Count	Total number of transactions that were rolled back
EJB Transactions Timed Out Per Second	Number of EJB Transactions Timed Out Per Second during last collection interval
EJB Transactions TimedOut Total Count	Total number of transactions that were timed out
Parent	Name of the parent

22.11 EJB Transaction Rollup Metrics

The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–11 EJB Transaction Rollup Metrics

Metric	Description
EJB Transaction rollback rate per second	Rollback rate per second
EJB Transaction thru rate per second	Through rate per second
EJB Transaction timeout rate per second	Timeout rate per second

22.12 Execute Queue Metrics

The details provided by this category of metrics can be used to configure an execute queue and its associated thread pool. The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–12 Execute Queue Metrics

Metric	Description
Active Requests	Total number of active requests in the queue
Pending Request Current Count	Total number of waiting requests in the queue
Pending Request Oldest Time	Time for the longest waiting request
Requests Per Second	Total number of requests per second
Thread Utilization	Thread utilization percentage of the execute queue
Parent	Immediate parent for this MBean

22.13 Execute Queue Rollup Metrics

The details provided by this category of metrics can be used to configure an execute queue and its associated thread pool. The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–13 Execute Queue Rollup Metrics Metrics

Metric	Description
Active Requests	Number of requests served during last interval
No of Execute Queues	Number of execute queues
Pending Request Current Count	Total number of requests not yet completed, and currently in pending state
Requests Per Second	Rate of requests occuring per second
Serviced Request Total Count	Total number of serviced request

22.14 J2EE Application Metrics

This category of metrics provides runtime information about the application. The following table lists the metrics and associated descriptions.

Default Collection Interval — Real-time only

Table 22–14 J2EE Application Metrics

Metric	Description
ApplicationName	Indicates the name of the application

22.15 J2EE Server Wide Metrics

This category of metrics provides information about the J2EE server. The following table lists the metrics and associated descriptions.

Default Collection Interval — Every 15 minutes

Table 22–15 J2EE Server Wide Metrics

Metric	Description
Active Sessions	Number of active sessions
Active Invocations	Number of active invocations
Current Client Processing Time	Amount of time executing the servlet during the last interval
J2EE Server - Invocations Per Sec	Total number of invocations per second

22.16 JDBC ConnectionPool Config Metrics

This category of metrics provides runtime, configuration information about the JDBC connection pool.

Default Collection Interval — Real-Time Only

Table 22–16 JDBC ConnectionPool Config Metrics

Metric	Description
Capacity Increment	Capacity increment, if any, of the pool.
Driver Name	Name of the driver which is used to connect to the pool and get an instance
Initial Capacity	Initial capacity of the pool
Maximum Capacity	Maximum capacity of the pool (for holding connections
Shrink Period Minutes	Time needed for shrinking
Shrinking Enabled	Indicates if the the pool can shrink to increase the size

22.17 JDBC ConnectionPool Metrics

This category of metrics provides runtime information about the JDBC connection pool.

Default Collection Interval — Every 15 minutes

Table 22–17 JDBC ConnectionPool Metrics Metrics

Metric	Description
Active Connections Current Count	Number of active JDBC connections
Current Capacity	Current capacity of the pool (for holding connections)
Maximum Capacity	Maximum capacity of the pool (for holding connections
State	Current state of the pool

22.18 JDBC Rollup - Active JDBC Connections Metrics

This category of metrics provides information about the active JDBC connections.

Default Collection Interval — Every 15 minutes

Table 22–18 JDBC Rollup - Active JDBC Connections Metrics

Metric	Description
Active Connections	Number of active connections.

22.19 JDBCTx DataSource Config Metrics

This category of metrics provides information about the JDBCTx data source configuration.

Default Collection Interval — Real-time only

Table 22–19 JDBC ConnectionPool Config Metrics

Metric	Description
Enable TwoPhase Commit	Enables the TwoPhase commit
JNDI Name	Name of JNDI
Pool Name	Name of the pool.
Row Prefetch Enabled	Indicates whether row prefetch has been enabled or not
Row Prefetch Size	Indicates the size of the row prefetch
Stream Chunk Size	Indicates the size of the stream chunk
Parent	Name of the parent.

22.20 JMS ConnectionFactory Config Metrics

This category of metrics provides information that helps you to configure the JMS ConnectionFactory.

Default Collection Interval — Real-time only

Table 22–20 JDBC ConnectionPool Config Metrics

Metric	Description
Acknowledge Policy	Acknowledge policy

Table 22–20 (Cont.) JDBC ConnectionPool Config Metrics

Metric	Description
JNDI Name	Name of the JNDI
Messages Maximum	Maximum size of messages
Send Timeout	Send timeout value
Transaction Timeout	Transaction timeout

22.21 JMS Consumer Metrics

This category of metrics provides information that helps you to monitor a JMS consumer.

Default Collection Interval — Real-time only

Table 22–21 JMS Consumer Metrics

Metric	Description
Active	Indicates if the consumer is active
Bytes Pending Count	Number of bytes pending (uncommitted and and unacknowledged) by this consumer
Bytes Received Count	Number of bytes received by this consumer, since the last reset
Destination Name	Destination for this consumer
Messages Pending Count	Number of messages pending (uncommitted and unacknowledged) by this consumer
Messages Received Count	Number of messages received by this consumer, since the last reset

22.22 JMS Destination Metrics

This category of metrics provides information that can be used to monitor an Oracle WebLogic JMS destination (topic or queue.).

Default Collection Interval — Real-time only

Table 22–22 JMS Destination Metrics

Metric	Description
Bytes Current Count	Current number of bytes stored in the destination. It does not include the pending bytes
Bytes Received Count	Number of bytes received in this destination, since the last reset
Consumers Current Count	Current number of consumers accessing this destination
Consumers Total Count	Total number of consumers accessing this destination, since the last reset
Messages Current Count	Current number of messages in the destination. It does not include the pending messages
Messages Pending Count	Number of pending messages in the destination (over and above the current number of messages.)
Messages Received Count	Number of messages received in this destination, since the last reset

Table 22–22 (Cont.) JMS Destination Metrics

Metric	Description
Destination Type	Returns weblogic.management.configuration.JMSConstants.DESTINATION_TYPE_QUEUE ,The destinationType value

22.23 JMS Metrics

This category of metrics can be used to monitor an Oracle WebLogic JMS service.

Default Collection Interval — Real-time only

Table 22–23 JMS Metrics

Metric	Description
Connections Current Count	Current number of connections to the Oracle WebLogic Server
Connections Total Count	Total number of connections made to the Oracle WebLogic Managed Server, since it was last reset
JMS Servers Current Count	Number of JMS servers that are currently deployed on this server
JMS Servers Total Count	Total number of JMS servers that were deployed on the server, since it was started

22.24 JMS Queue Config Metrics

This category of metrics represents a JMS queue (point-to-point) destination for a JMS server.

Default Collection Interval — Real-time only

Table 22–24 JMS Queue Config Metrics

Metric	Description
Bytes Maximum	Maximum bytes quota (total amount of bytes) that can be stored at this destination
Bytes Paging Enabled	Specifies whether bytes paging is enabled on the destination for temporarily swapping message bodies
JNDI Name	Used to look up the destination within the JNDI namespace
Maximum Message Size	Maximum size of a message that will be accepted from producers on this destination
Messages Maximum	Maximum size of a message that will be accepted from producers on this destination
Messages Paging Enabled	Specifies whether messages paging is enabled on the destination for temporarily swapping message bodies
Store Enabled	Specifies whether the destination supports persistent messaging by using the JMS store specified by the JMS server

22.25 JMS Server Metrics

This category of metrics provides details that can be used to monitor an Oracle WebLogic JMS server.

Default Collection Interval — Real-time only

Table 22–25 JMS Server Metrics

Metric	Description
Bytes Current Count	Number of bytes currently stored on this JMS server. It does not include the pending bytes
Bytes Received Count	Number of bytes received on this JMS server, since the last reset
Destinations CurrentCount	Current number of destinations for this JMS server
Destinations Total Count	Total number of destinations instantiated on this JMS server, since the last reset
Messages Current Count	Current number of messages stored on this JMS server. It does not include the pending messages
Messages Pending Count	Current number of pending messages (unacknowledged or uncommitted) stored on this JMS server
Messages Received Count	Number of messages received on this destination, since the last reset

22.26 JMS Topic Config Metrics

This category of metrics provides provides information JMS Topic Configuration.

Default Collection Interval — Real-time only

Table 22–26 JMS Topic Config Metrics

Metric	Description
Bytes Maximum	Maximum bytes allowed.
JNDI Name	Name of the JNDI
Maximum Message Size	Maximum size of the message
Messages Maximum	Maximum size of messages
Multicast Port	Multicast port number

22.27 JRockit VM Runtime Metrics

This category of metrics exposes runtime data about the JRockit Virtual Machine that is running on Oracle WebLogic Managed Server.

Default Collection Interval — Every 15 minutes

Table 22–27 JRockit VM Runtime Metrics

Metric	Description
All Processors Average Load	Average load of all processors in the host computer
CPU Usage(%)	Load that the Virutal Machine is placing on all processors in the host computer
NumberOfProcessors	Number of processors on the Virtual Machine's host computer
NumberOfDaemonThreads	Number of daemon Java threads currently running in the Virtual Machine

Table 22–27 (Cont.) JRockit VM Runtime Metrics

Metric	Description
Total Heap	Amount of memory (in bytes) currently allocated to the Virtual Machine's Java heap
TotalNumberOfThreads	Amount of memory (in bytes) currently allocated to the Virtual Machine's Java heap
Uptime	Number of milliseconds that the Virtual Machine had been running
UsedHeap	Amount of Java heap memory (in bytes) that is currently being used by the Virtual Machine
UsedPhysicalMemory	Amount of physical memory (in bytes) that is currently being used on the host computer
JRockit VM Name	Name of the JRockit VM.

22.28 JTA Metrics

The details provided by this category of metrics can be used for accessing the transaction runtime characteristics within an Oracle WebLogic Managed Server.

Default Collection Interval — Every 15 minutes

Table 22–28 JTA Metrics

Metric	Description
Active Transactions Total Count	Total number of active transactions on the server
Transaction Abandoned Total Count	Total number of transactions that were abandoned
Transaction Committed Total Count	Total number of transactions that were committed
Transaction Total Count	Total number of transactions. This includes all committed, rolled back, and heuristic transactions.

22.29 JVM Metrics

This category of metrics provides information about the JVM within which the current server instance is running.

Default Collection Interval — Real-time only

Table 22–29 JVM Metrics

Metric	Description
Heap Free Current	Current amount of free memory (bytes) in the JVM heap
Heap Size Current	Current size (bytes) of the JVM heap
Java Vendor	Vendor of the JVM
Java Version	Java version of the JVM
OS Name	Operating system on which the JVM is running
OS Version	Version of the operating system on which the JVM is running

22.30 Response

This category of metrics provides basic information about the Oracle WebLogic Managed Server.

Default Collection Interval — Every one minute

Table 22–30 Response

Metric	Description
Status	This metric indicates whether the Oracle WebLogic Managed Server is up or down. If the value is 1, the server is up. If the value is 0, it is down.

22.31 SSL Config Metrics

The details provided by this category of metrics helps you to configure SSL.

Default Collection Interval — Real-time only

Table 22–31 SSL Config Metrics

Metric	Description
Enabled	Indicates if the SSL port in the SSLMBean is enabled
Export Key Lifespan	Number of times the server can use an exportable key between a domestic server and an exportable client, before generating a new key
Key Encrypted	This metric is no longer used as of WLS 7.0. This metric indicates if the private key for the server has been encrypted.
Listen Port	Helps you to set the TCP/IP port at which the server listens for SSL connections
Listen Port Enabled	Enables the use of the SSL protocol on a particular Oracle WebLogic Managed Server
Two Way SSL Enabled	Sets the twoWaySSLEnabled attribute of the SSLMBean object

22.32 Server LifeCycle Task Metrics

This category of metrics provides information about the server lifecycle tasks.

Default Collection Interval — Real-time only

Table 22–32 Server LifeCycle Task Metrics

Metric	Description
Begin Time	Start time of the task
Description	Describes the tasks
End Time	End time of the task
Running	Current state of the task
Status	Status of the task

22.33 Server Metrics

This category of metrics provides runtime information about a server instance.

Default Collection Interval — Every 15 minutes

Table 22–33 Server Metrics

Metric	Description
Activation Time	Indicates whether the Oracle WebLogic Managed Server is up or down. If the value is 1, the server is up. If the value is 0, it is down.
Listen Address	Port where the server is listening
Listen Port	Port on which this server is listening
State	Current state of the server

22.34 Server Security Metrics

This category of metrics provides security-related information for Oracle WebLogic Managed Servers.

Default Collection Interval — Real-time only

Table 22–34 Servlet Security Metrics

Metric	Description
Invalid Login Attempts Total Count	Total number of invalid login attempts
Locked Users Current Count	Total number of users who are currently locked
Login Attempts While Locked Total Count	Number of invalid login attempts on the server
Unlocked Users Total Count	Number of times unlocked users have logged onto the server
User Lockout Total Count	Total number of user lockouts on the server

22.35 Servlet Metrics

This category of metrics provides information about the servlets.

Default Collection Interval — Every 15 minutes

Table 22–35 Servlet Metrics

Metric	Description
Servlet Current Client Processing Time	Amount of time executing the servlet during the last interval
Servlet Execution Time Average	Average time all invocations of the servlet have executed since created
Servlet Execution Time Total	Total time all invocations of the servlet have executed since created
Servlet Path	Path of the servlet
Servlet Reload Total Count	Total number of times the servlet has been reloaded

22.36 Servlet Rollup Metrics

This category provides information about servlet rollup metrics.

Default Collection Interval — Every 15 minutes

Table 22–36 Servlet Rollup Metrics

Metric	Description
Active Invocations	Servlet invocations that are active and are currently in the web container
Average Execution Time	Average time taken by a servlet to respond
Current Client Processing Time	Time taken to execute the servlet during the last interval
Invocation Total Count	Total number of invocations for this servlet
Invocations Per Second	Number of invocations of the servlet per second
Total Execution Time	Total execution time for a request

22.37 Web Application Component Metrics

This category of metrics describes a servlet component - servlet context.

Default Collection Interval — Real-time only

Table 22–37 Web Application Component Metrics

Metric	Description
Component Name	Name of the servlet component
Open Sessions Current Count	Total number of open sessions
Sessions Opened Total Count	Total number of sessions opened in this server

22.38 WebAppComponent Config Metrics

This category of metrics provides methods for configuring a J2EE-web application that is deployed on this server.

Default Collection Interval — Real-time only

Table 22–38 WebAppComponent Config Metrics

Metric	Description
Session Cache Size	Number of sessions in memory at a time
Session Cookie Name	Sets the sessionCookieName attribute of the WebAppComponentMBean object
Session Cookies Enabled	Sets the sessionCookiesEnabled attribute of the WebAppComponentMBean object
Session Invalidation Interval Secs	Time interval between sweeps for invalid sessions
Session Timeout Secs	Sets the sessionTimeoutSecs attribute of the WebAppComponentMBean object
Session Tracking Enabled	Enables session tracking

Table 22–38 (Cont.) WebAppComponent Config Metrics

Metric	Description
URI	URI pointing to the apps component, usually on the Administration Server

22.39 WebServer Config Metrics

The details provided by this category of metrics represents the configuration of virtual web server within an Oracle WebLogic Managed Server.

Default Collection Interval — Real-time only

Table 22–39 WebServer Config Metrics

Metric	Description
Authorization Cookie Enabled	Enables use of additional secure AuthCookie to make access to https pages with security constraints
Events Enabled	Gets the eventsEnabled attribute of the WebServerMBean object
KeepAlive Enabled	Gets the keepAliveEnabled attribute of the WebServerMBean object
KeepAlive Secs	Number of seconds to maintain HTTP keep-alive before timing out the request
WAP Enabled	Enables WAP

22.40 WebService Metrics

This category of metrics describes the state of a single WebService.

Default Collection Interval — Real-time Only

Table 22–40 WebService Metrics

Metric	Description
HomePage Hit Count	Number of times the WebService's home page has been visited, since its deployment
HomePage URL	URL from which the home page for this webservice can be retrieved
Malformed Request Count	Number of times that this service has received a malformed or invalid request
Service Name	Name of the configuration
WSDL Hit Count	Number of times that this service's WSDL has been retrieved
WSDLUrl	URL from which the WSDL for this WebService can be retrieved

22.41 Work Manager Metrics

This category of metrics describes the metrics for a Work Manager.

Default Collection Interval — Every 15 Minutes

Table 22–41 WebService Metrics

Metric	Description
Active Request	Number of active requests for a Work Manager
Application Name	Name of the application this Work Manager is associated with
Pending Request Current Count	Number of waiting requests in the queue
Request Per Second	Requests per second

23

Oracle Wireless

Oracle Enterprise Manager can be used to manage OracleAS Wireless Server. You can also use Enterprise Manager to view Oracle Wireless Server metrics that have been collected by the Oracle Management Agent.

23.1 Active User Sessions Across Instances

This category contains the Active Sessions metric for OracleAS Wireless Server.

Active Sessions Metric

For all target versions, the collection frequency is once every 5 minutes.

23.2 Average Connection Duration for the Interval

This category contains the Average Connection Duration metric for OracleAS Wireless Server.

Average Connection Duration (seconds) Metric

For all target versions, the collection frequency is once every 5 minutes.

23.3 Average Response Time for the Interval

This category contains the Average Response Time metric for OracleAS Wireless Server.

Average Response Time (seconds) Metric

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 23–1 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	>	200	500	4	Wireless device request response time has exceeded %threshold%

23.4 Notification Server Instance Snapshot for the Last 5 Mins

This category contains the notification server instance metrics for OracleAS Wireless Server.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

The following table lists the metrics and their associated descriptions.

Table 23–2 Notification Server Instance Snapshot Metrics

Metric	Description
Total Error Count	Total error count
Total Number of Notifications Processed	Total number of notifications processed
Total Number of Notifications Sent	Total number of notifications sent

23.5 Pimap Site Snapshot

This category contains the Pimap Site Snapshot metrics for OracleAS Wireless Server.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

The following table lists the metrics and their associated descriptions.

Table 23–3 Pimap Site Snapshot Metrics

Metric	Description
Devices Served	Devices served
Notifications Sent	Notifications sent
Number of Connections	Number of connections

23.6 Response

This category contains the UpDown Status metric for OracleAS Wireless Server.

UpDown Status Metric

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 23–4 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	=	Not Defined	0	1	OracleAS Wireless Server status is down

23.7 Services Requested

This category contains the Applications Invoked metric for OracleAS Wireless Server.

Applications Invoked Metric

For all target versions, the collection frequency is once every 5 minutes.

24

Oracle Workflow

Oracle Workflow delivers a complete workflow management system that supports business process based integration. Its technology enables modeling, automation, and continuous improvement of business processes, routing information of any type according to user-defined business rules.

The Oracle Workflow metrics provide information about the Oracle Database in which Oracle Workflow resides.

24.1 Response

This metric category contains the metrics that represent the responsiveness of the Oracle Database in which Oracle Workflow resides, with respect to a client.

24.1.1 State

This metric represents the state of the database.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

User Action

Take the appropriate action specific to your site.

24.1.2 Status

This metric checks whether a new connection can be established to a database.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 24–1 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	=	Not Defined	0	1	Failed to connect to database: %oraerr%.

User Action

Check the status of the listener to make sure it is running on the node where the event was triggered.

24.1.3 User Logon Time (msec)

This metric represents the amount of time the agent takes to make a connection to the database, measured in milliseconds.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

25

Portal

You can use Oracle Enterprise Manager to monitor and manage OracleAS Portal.

25.1 Database Instance

The Database Instance metric provides information about the Oracle Database where the OracleAS Portal schema is running. The following table lists the metrics, descriptions, and data sources.

> **Note:** For all target versions, the collection frequency for each metric is every 5 minutes.

Table 25–1 Database Instance Metrics

Metric	Description	Data Source
Instance Name	Name of the Oracle Database where the OracleAS Portal schema is running	Instance name in v$instance table
Start Time	Time the Oracle Database was last started	Startup_time in v$instance table
Version	Version of the Oracle Database being used	Version in v$instance table

25.2 Database Portlet Metrics

The Database Portlet metric allows you to analyze the performance of individual database portlets. For more information about database portlets, refer to the Oracle Portal Developer Kit (PDK) page located at http://www.oracle.com/technology/products/ias/portal/pdk.html on the Oracle Technology Network (OTN).

Additional documentation is also available from the Oracle Portal documentation page on OTN located at http://www.oracle.com/technology/products/ias/portal/documentation.html.

The following table lists the metrics and their descriptions.

> **Note:** For all target versions, the collection frequency for each metric is every 15 minutes.

Note: For each metric you can set different warning and critical threshold values for each unique combination of "Portlet Name", "Portlet ID", and "Provider Name" objects.

If warning or critical threshold values are currently set for any object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for an object, use the Edit Thresholds page.

Table 25–2 Database Portlet Metrics

Metric	Description
Cache Hits	Number of times database portlet content has been serviced by the cache
Count of HTTP 200 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 200.
Count of HTTP 400 Response codes	Number of incomplete requests, that is, HTTP Response and Error Code: 400.
Count of HTTP 500 Response codes	Number of unsuccessful server errors, that is, HTTP Response and Error Code: 500. Error Code: 500 typically means something is wrong with the server, check that the server hosting the database portlet is accessible.
Count of requests which timed out	Number of requests to this database portlet that timed out.
Count of Resolved HTTP 300 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 300. **Note:** A portlet that is initially redirected with a 300 response code, may get logged as a 200 response code if it successfully returns content.
Count of Unresolved HTTP 300 Response codes	Number of unresolved redirects, that is, HTTP Response and Error Code: 300. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code.
Database Portlet Average Time (msec)	Average time (msec) to request this database portlet.
Database Portlet Maximum Time (msec)	Maximum time (msec) to request this database portlet.
Database Portlet Minimum Time (msec)	Minimum time (ms) to request this database portlet.
Last Response Code	HTTP response code of the last database portlet serviced by the provider. If this response code is not in the 200 or 300 range, there may be an issue with this provider not providing content to the portal.
Requests	Number of requests made to this database portlet.

25.3 Database Providers Metrics

The Database Providers metric allows you to analyze the performance of database providers. For more information about Database Providers, refer to the Oracle Portal

Developer Kit (PDK) page located at http://www.oracle.com/technology/products/ias/portal/pdk.html on the Oracle Technology Network (OTN).

Additional documentation is also available from the Oracle Portal documentation page on OTN located at http://www.oracle.com/technology/products/ias/portal/documentation.html. The following table lists the metrics and their descriptions.

Note: For all target versions, the collection frequency for each metric is every 15 minutes.

Note: For each metric you can set different warning and critical threshold values for each "Provider Name" object.

If warning or critical threshold values are currently set for any "Provider Name" object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each "Provider Name" object, use the Edit Thresholds page.

Table 25–3 Database Providers Metrics

Metric	Description
Cache Hits	Number of times the database providers content has been serviced by the cache.
Count of HTTP 200 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 200.
Count of HTTP 400 Response codes	Number of incomplete requests, that is, HTTP Response and Error Code: 400.
Count of HTTP 500 Response codes	Number of unsuccessful server errors, that is, HTTP Response and Error Code: 500.
Count of requests which timed out	Number of requests that timed out
Count of Resolved HTTP 300 Response codes	Number of successful resolved requests, that is, HTTP Response and Error Code: 300. **Note:** A portlet that is initially redirected with a 300 response code, may get logged as a 200 response code if it successfully returns content.
Count of Unresolved HTTP 300 Response codes	Number of unresolved redirects, that is, HTTP Response and Error Code: 300. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code.
Database Provider Portlets Average Time (msec)	Average time (in ms) to request database portlets. **Note:** There are no multiple thresholds associated with this metric.
Database Provider Portlets Maximum Time (msec)	See Section 25.3.1, "Database Provider Portlets Maximum Time (msec)"

Table 25–3 (Cont.) Database Providers Metrics

Metric	Description
Database Provider Portlets Minimum Time (msec)	Minimum time (in ms) to request database portlets
Database Provider Status	Section 25.3.2, "Database Provider Status"
Offline	Indicates whether the database provider is currently offline
Percentage of Database Provider HTTP 500 Response codes	Section 25.3.3, "Percentage of Database Provider HTTP 500 Response codes"
Requests	Number of requests made to this database portlet
Slowest Average Portlet Time (msec)	Section 25.3.4, "Slowest Average Portlet Time (msec)"

25.3.1 Database Provider Portlets Maximum Time (msec)

The maximum time (in ms) to request database portlets.

By default, this metric has a critical threshold of 10000 and a warning threshold of 6000. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–4 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	>	6000	10000	1	The maximum portlet response timing for this provider is unacceptable.

25.3.2 Database Provider Status

Indicates whether a specific database provider has a problem.

By default, this metric has a critical threshold of DOWN. A critical alert is generated when the metric value equals the critical threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The last response code from the a portlet serviced by this provider is down.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–5 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	=	Not Defined	DOWN	1	The last response code from the a portlet serviced by this provider is down.

User Action

If the status is 'down', it indicates that at least one of the portlets serviced by this provider's last HTTP response code was unsuccessful. Investigate the provider to determine what is causing the fault.

25.3.3 Percentage of Database Provider HTTP 500 Response codes

The percentage of Database Provider requests that returned HTTP 500 response codes, that is, unsuccessful server errors.

By default, this metric has a critical threshold of 15 and a warning threshold of 10. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The percentage of portlet requests returning unsuccessful is unacceptable for this provider.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–6 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	>	10	15	1	The percentage of portlet requests returning unsuccessful is unacceptable for this provider.

25.3.4 Slowest Average Portlet Time (msec)

The average performance of a specific provider's slowest portlet (in ms).

By default, this metric has a critical threshold of 4500 and a warning threshold of 4000. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The slowest average portlet response timing for this provider is unacceptable.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–7 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	>	4000	4500	1	The slowest average portlet response timing for this provider is unacceptable.

25.4 General Page Engine Metrics

The General Page Engine metric allows you to analyze the performance of your portal's Parallel Page Engine. The following table lists the metrics and their descriptions.

> **Note:** For all target versions, the collection frequency for each metric is every 10 minutes.

Table 25–8 General Page Engine Metrics

Metric	Description
Average Queue Length	Average number of requests in the Parallel Page Engine internal portal content request queue, since middle tier startup
Average Time in Page Engine Queue (msec)	Average time (in ms) content requests have spent in the Parallel Page Engines internal request queue.
Cache Hits	Number of requests for fully cached pages that resulted in content being returned from the cache since middle tier startup.
Percentage of Requests that were serviced by the cache	Percentage of requests for cacheable, fully assembled pages that resulted in a cache hit.
Percentage of Requests Timing Out in the Page Engine Queue	See Section 25.4.1, "Percentage of Requests Timing Out in the Page Engine Queue"

Table 25–8 (Cont.) General Page Engine Metrics

Metric	Description
Requests for cache enabled pages	Number of requests for ached enabled pages since middle tier startup
Requests to the Cache	Number of requests for cacheable, full assembled pages since middle tier startup
Total Page Requests	Total number of requests for OracleAS Portal pages since middle tier startup

25.4.1 Percentage of Requests Timing Out in the Page Engine Queue

The percentage of OracleAS Portal content requests that have timed out in the Parallel Page Engine's internal request queue.

By default, this metric has a critical threshold of 15 and a warning threshold of 10. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The percentage of requests that have timed out in the internal request queue is unacceptable.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–9 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every 12 Samples	>	10	15	1	The percentage of requests that have timed out in the internal request queue is unacceptable.

25.5 Page Engine Response Code Metrics

The Page Engine Response Code metrics provide HTTP response code information. The following table lists the metrics and their descriptions.

Note: For all target versions, the collection frequency for each metric is every 10 minutes.

Table 25–10 Page Engine Response Code Metrics

Metric	Description
Percentage of http 200 responses	Percentage of portlets returning a 200 HTTP Response code - Successful Request.
Percentage of http 300 Resolved responses	Percentage of portlets returning a 300 HTTP Response code that were resolved. Of those portlets that returned an HTTP Response Code of 300, how many were redirected resolved.
Percentage of http 300 Unresolved responses	Percentage of portlets returning a 300 HTTP Response code that were unresolved. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code
Percentage of http 400 responses	Percentage of portlets returning a 400 HTTP Response code - Unsuccessful Request Incomplete.
Percentage of http 500 responses	Percentage of portlets returning a 500 HTTP Response code - Unsuccessful Server Errors.
Timeouts	Number of timeouts registered by the Parallel Page Engine.
Total http 200 responses	Number of successful requests to portlets, that is, HTTP Response and Error Code: 200.
Total http 300 Resolved responses	Number of successful resolved requests to portlets, that is, HTTP Response and Error Code: 300. **Note:** A portlet that is initially redirected with a 300 response code, may get logged as a 200 response code if it successfully returns content.
Total http 300 Unresolved responses	Number of unresolved redirects from portlet requests, that is, HTTP Response and Error Code: 300. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code.
Total http 400 responses	Number of incomplete requests to portlets, that is, HTTP Response and Error Code: 400.
Total http 500 responses	Number of unsuccessful server errors, that is, HTTP Response and Error Code: 500.
Total requests	Total number of portlets requested by the Parallel Page Engine.
Unresolved Redirects	Number of Unresolved Redirects registered by the Parallel Page Engine.

25.6 Portal Homepage Metric

The response of a request to the OracleAS Portal default home page.

25.6.1 Homepage Download (msec)

The time (in ms) to download the OracleAS Portal home page.

By default, this metric has a critical threshold of 3000 and a warning threshold of 2000. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The Portal Instance homepage performance is unacceptable.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–11 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	2000	3000	1	The Portal Instance homepage performance is unacceptable.

25.6.2 Status

Indicates whether or not the OracleAS Portal home page has been called successfully. The status value '1' indicates success.

By default, this metric has a critical threshold of 0. A critical alert is generated when the metric value equals the critical threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The Portal instance is not accessible.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–12 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	=	Not Defined	0	1	The Portal instance is not accessible.

25.7 Portal Metadata Repository Version Metric

The Portal Metadata Repository Version Metric indicates the version of OracleAS Portal that is currently running.

25.7.1 Portal Metadata Repository Version

The version of OracleAS Portal that is currently running. For all target versions, the collection frequency for this metric is every 10 minutes.

25.8 Response Metric

The response of *two* requests to test the status of OracleAS Portal.

25.8.1 Status

Indicates whether or not OracleAS Portal is functioning.

The status is based on the success of *two* URL calls, one to a test package via mod_plsql and the other to the Parallel Page Engine (PPE):

- mod_plsql ping to: `<protocol>://<host>:<port>/pls/<DAD>/htp.p?cbuf=Test`
- PPE ping to: `<protocol>://<host>:<port>/portal/page`

By default, this metric has a critical threshold of 0. A critical alert is generated when the metric value equals the critical threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The Portal instance is not accessible.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–13 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	=	Not Defined	0	1	The Portal instance is not accessible.

25.9 Syndication Server Status Metric

The Syndication Server Status Metric provides status information for the Syndication Server.

25.9.1 Syndication Server Status

If the status value is '1', the Syndication Server is available.

By default, a critical or warning threshold value (or both) is set for this metric column. Alerts are generated when threshold values are reached. You can edit these threshold values, if required.

25.10 Top Level Monitoring Status Metric

The Top Level Monitoring Status Metric indicates whether or not the services required by OracleAS Portal to monitor the portal instance are up and running.

25.10.1 Top Level Monitoring Status

Indicates whether or not the services required by OracleAS Portal to adequately monitor the portal instance are running. The status value '1' indicates the services are running OK.

The test involves an HTTP ping check on the monitoring witness servlet. This also tests the DMS servlet and therefore, the ability to obtain OracleAS Portal DMS based metrics, such as the Provider, Portlet and Parallel Page Engine metrics.

By default, a critical or warning threshold value (or both) is set for this metric column. Alerts are generated when threshold values are reached. You can edit these threshold values, if required.

For all target versions, the collection frequency for this metric is every 10 minutes.

25.11 Ultra Search Status Metric

The Ultra Search Status Metric provides status information for Oracle Ultra Search.

25.11.1 Ultra Search Status

If the status value is '1', users can login to the Ultra Search administration tool via SSO in an Oracle Internet Directory (OID) enabled database tier environment.

By default, this metric has a critical threshold of 0. A critical alert is generated when the metric value equals the critical threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

Ultra Search is not accessible.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–14 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 10 Minutes	After Every 12 Samples	=	Not Defined	0	1	Ultra Search is not accessible.

25.12 Web Portlet Metrics

The Web Portlet Metric allows you to analyze the performance of individual Web provider portlets. For more information about Web providers, refer to the Oracle

Portal Developer Kit (PDK) page located at http://www.oracle.com/technology/products/ias/portal/pdk.html on the Oracle Technology Network (OTN).

Additional documentation is also available from the Oracle Portal documentation page on OTN located at http://www.oracle.com/technology/products/ias/portal/documentation.html.

The following table lists the metrics and their descriptions.

Note: For all target versions, the collection frequency for each metric is every 15 minutes.

Note: For each metric you can set different warning and critical threshold values for each unique combination of "Portlet Name", "Portlet ID", and "Provider Name" objects.

If warning or critical threshold values are currently set for any object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for an object, use the Edit Thresholds page.

Table 25–15 Web Portlet Metrics

Metric	Description
Cache Hits	Number of times the portlet's content has been serviced by the cache
Count of HTTP 200 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 200.
Count of HTTP 400 Response codes	Number of incomplete requests, that is, HTTP Response and Error Code: 400.
Count of HTTP 500 Response codes	Number of unsuccessful server errors, that is, HTTP Response and Error Code: 500.
Count of requests which timed out	Number of requests that timed out
Count of Resolved HTTP 300 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 300. **Note:** A portlet that is initially redirected with a 300 response code, may get logged as a 200 response code if it successfully returns content.
Count of Unresolved HTTP 300 Response codes	Number of unresolved redirects, that is, HTTP Response and Error Code: 300. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code.

Table 25–15 (Cont.) Web Portlet Metrics

Metric	Description
Last Response Code	The HTTP response code of the last portlet serviced by the provider. If this response code is **not** in the 200 or 300 range, this provider may not be providing content to OracleAS Portal. Administrators can use the Portal Developer Kit (PDK) Java test page to check that the machine hosting the provider is accessible and the specific Provider on that machine is working.
Requests	Number of requests made to this Web portlet
Web Portlet Average Time (msec)	Average time (in ms) to request this Web portlet
Web Portlet Maximum Time (msec)	Maximum time (in ms) to request this Web portlet
Web Portlet Minimum Time (msec)	Minimum time (in msec) to request this Web portlet

25.13 Web Providers Metrics

The Web Providers metric allows you to analyze the performance of Web providers.

For more information about Web providers, refer to the Oracle Portal Developer Kit (PDK) page located at http://www.oracle.com/technology/products/ias/portal/pdk.html on the Oracle Technology Network (OTN).

Additional documentation is also available from the Oracle Portal documentation page on OTN located at http://www.oracle.com/technology/products/ias/portal/documentation.html.

Note: For all target versions, the collection frequency for each metric is every 15 minutes.

Note: For each metric you can set different warning and critical threshold values for each "Provider Name" object.

If warning or critical threshold values are currently set for any "Provider Name" object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each "Provider Name" object, use the Edit Thresholds page.

Table 25–16 Web Providers Metrics

Metric	Description
Cache Hits	Number of times the Provider's content has been serviced by the cache.
Count of HTTP 200 Response codes	Number of successful requests to portlets, that is, HTTP Response and Error Code: 200.

Table 25–16 (Cont.) Web Providers Metrics

Metric	Description
Count of HTTP 400 Response codes	Number of portlets returning a 400 HTTP Response code - Unsuccessful Request Incomplete.
Count of HTTP 500 Response codes	Number of unsuccessful server errors, that is, HTTP Response and Error Code: 500.
Count of requests which timed out	Number of requests that timed out
Count of Resolved HTTP 300 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 300. **Note:** A portlet that is initially redirected with a 300 response code, may get logged as a 200 response code if it successfully returns content.
Count of Unresolved HTTP 300 Response codes	Number of unresolved redirects, that is, HTTP Response and Error Code: 300. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code.
Offline	Indicates if a Web provider is currently offline
Percentage of Web Provider HTTP 500 Response codes	See Section 25.13.1, "Percentage of Web Provider HTTP 500 Response codes"
Requests	Number of requests serviced by this Web provider
Slowest Average Portlet Time (msec)	See Section 25.13.2, "Slowest Average Portlet Time (msec)"
Web Provider Portlets Average Time (msec)	Average time (in ms) to request Web provider portlets
Web Provider Portlets Maximum Time (msec)	See Section 25.13.3, "Web Provider Portlets Maximum Time (msec)"
Web Provider Portlets Minimum Time (msec)	Minimum time (in ms) to request Web provider portlets
Web Provider Status	See Section 25.13.4, "Web Provider Status"

25.13.1 Percentage of Web Provider HTTP 500 Response codes

The percentage of Web Provider requests that returned HTTP 500 response codes, that is, unsuccessful server errors.

By default, this metric has a critical threshold of 15 and a warning threshold of 10. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The percentage of portlet requests returning unsuccessful is unacceptable for this provider.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding

Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–17 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	>	10	15	1	The percentage of portlet requests returning unsuccessful is unacceptable for this provider.

25.13.2 Slowest Average Portlet Time (msec)

The average performance of a specific provider's slowest portlet (in ms).

By default, this metric has a critical threshold of 4500 and a warning threshold of 4000. A critical alert is generated when the metric value exceeds the critical threshold value 1 time. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

When an alert is generated, the alert text is:

The last response code from the a portlet serviced by this provider is down.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–18 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	>	4000	4500	1	The slowest average portlet response timing for this provider is unacceptable.

25.13.3 Web Provider Portlets Maximum Time (msec)

The maximum time (in ms) to request Web provider portlets.

By default, this metric has a critical threshold of 10000 and a warning threshold of 6000. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding

Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–19 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	>	6000	10000	1	The maximum portlet response timing for this provider is unacceptable.

25.13.4 Web Provider Status

Indicates whether a specific Web provider has a problem.

By default, this metric has a critical threshold of 'down'. A critical alert is generated when the metric value equals the critical threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The last response code from the a portlet serviced by this provider is down.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–20 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 15 Minutes	After Every 12 Samples	=	Not Defined	DOWN	1	The last response code from the a portlet serviced by this provider is down.

User Action

If the status is 'down', it indicates that at least one of the portlets serviced by this provider's last HTTP response code was unsuccessful. Investigate the provider to determine what is causing the fault.

25.14 WSRP Portlet Metrics

The WSRP Portlet Metric allows you to analyze the performance of individual WSRP provider portlets. For more information about WSRP providers, refer to the Oracle Portal Developer Kit (PDK) page located at `http://www.oracle.com/technology/products/ias/portal/pdk.html` on the Oracle Technology Network (OTN).

Additional documentation is also available from the Oracle Portal documentation page on OTN located at http://www.oracle.com/technology/products/ias/portal/documentation.html.

Note: For target version 10.1.2.5, the collection frequency for each metric is every 15 minutes.

Note: For each metric you can set different warning and critical threshold values for each unique combination of "Portlet Name", "Portlet ID", and "Provider Name" objects.

If warning or critical threshold values are currently set for any object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for an object, use the Edit Thresholds page.

Table 25–21 WSRP Portlet Metrics

Metric	Description
Cache Hits	Number of times the portlet's content has been serviced by the cache.
Count of HTTP 200 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 200.
Count of HTTP 400 Response codes	Number of incomplete requests, that is, HTTP Response and Error Code: 400
Count of HTTP 500 Response codes	Number of unsuccessful server errors, that is, HTTP Response and Error Code: 500.
Count of requests which timed out	Number of requests that timed out
Count of Resolved HTTP 300 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 300. A portlet that is initially redirected with a 300 response code, may get logged as a 200 response code if it successfully returns content.
Count of Unresolved HTTP 300 Response codes	Number of unresolved redirects, that is, HTTP Response and Error Code: 300. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code.
Last Response Code	HTTP response code of the last portlet serviced by the provider. If this response code is **not** in the 200 or 300 range, this provider may not be providing content to OracleAS Portal. Administrators can use the Portal Developer Kit (PDK) Java test page to check that the machine hosting the provider is accessible and the specific Provider on that machine is working.
Requests	Number of requests serviced by this WSRP portlet

Table 25–21 (Cont.) WSRP Portlet Metrics

Metric	Description
Slowest Average Portlet Time (msec)	See Section 25.14.1, "Slowest Average Portlet Time (msec)"
WSRP Portlet Average Time (msec)	Average time (in ms) to request this WSRP portlet
WSRP Portlet Maximum Time (msec)	Maximum time (in ms) to request this WSRP portlet
WSRP Portlet Minimum Time (msec)	Minimum time (in ms) to request WSRP portlet

25.14.1 Slowest Average Portlet Time (msec)

The average performance of a specific provider's slowest portlet (in ms).

By default, this metric has a critical threshold of 4500 and a warning threshold of 4000. A critical alert is generated when the metric value exceeds the critical threshold value 1 time. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

When an alert is generated, the alert text is:

The last response code from the a portlet serviced by this provider is down.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–22 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
10.1.2.5	Every 15 Minutes	After Every 12 Samples	>	4000	4500	1	The slowest average portlet response timing for this provider is unacceptable.

25.15 WSRP Providers Metrics

The WSRP Providers metric allows you to analyze the performance of WSRP providers. For more information about WSRP providers, refer to the Oracle Portal Developer Kit (PDK) page located at `http://www.oracle.com/technology/products/ias/portal/pdk.html` on the Oracle Technology Network (OTN).

Additional documentation is also available from the Oracle Portal documentation page on OTN located at `http://www.oracle.com/technology/products/ias/portal/documentation.html`.

Note: For target version 10.1.2.5, the collection frequency for each metric is every 15 minutes.

Note: For each metric you can set different warning and critical threshold values for each "Provider Name" object.

If warning or critical threshold values are currently set for any "Provider Name" object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each "Provider Name" object, use the Edit Thresholds page.

Table 25–23 WSRP Providers Metrics

Metric	Description
Cache Hits	Number of times the Provider's content has been serviced by the cache
Count of HTTP 200 Response codes	Number of successful requests to portlets, that is, HTTP Response and Error Code: 200
Count of HTTP 400 Response codes	Percentage of portlets returning a 400 HTTP Response code - Unsuccessful Request Incomplete
Count of HTTP 500 Response codes	Number of unsuccessful server errors, that is, HTTP Response and Error Code: 500
Count of requests which timed out	Number of requests that timed out
Count of Resolved HTTP 300 Response codes	Number of successful requests, that is, HTTP Response and Error Code: 300. **Note:** A portlet that is initially redirected with a 300 response code, may get logged as a 200 response code if it successfully returns content.
Count of Unresolved HTTP 300 Response codes	Number of unresolved redirects, that is, HTTP Response and Error Code: 300. Of those portlets that returned an HTTP Response Code of 300, this indicates how many redirected requests remain unresolved. For example, an unresolved request gets redirected to another address, that returns an unresolved error code.
Offline	Indicates if a WSRP provider is currently offline
Percentage of WSRP PRovider HTTP 500 Response codes	See Section 25.15.1, "Percentage of WSRP Provider HTTP 500 Response codes"
Requests	Number of requests serviced by this WSRP provider
WSRP Provider Portlets Average Time (msec)	Average time (in ms) to request WSRP provider portlets
WSRP Provider Portlets Maximum Time (msec)	See Section 25.15.2, "WSRP Provider Portlets Maximum Time (msec)"
WSRP Provider Portlets Minimum Time (msec)	Minimum time (in ms) to request WSRP provider portlets
WSRP Provider Status	See Section 25.15.3, "WSRP Provider Status"

25.15.1 Percentage of WSRP Provider HTTP 500 Response codes

The percentage of WSRP Provider requests that returned HTTP 500 response codes, that is, unsuccessful server errors.

By default, this metric has a critical threshold of 15 and a warning threshold of 10. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value 1. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The percentage of portlet requests returning unsuccessful is unacceptable for this provider.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–24 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
10.1.2.5	Every 15 Minutes	After Every 12 Samples	>	10	15	1	The percentage of portlet requests returning unsuccessful is unacceptable for this provider.

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Slowest Average Portlet Time (msec)" and "Provider Name" objects.

If warning or critical threshold values are currently set for any unique combination of "Slowest Average Portlet Time (msec)" and "Provider Name" objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of "Slowest Average Portlet Time (msec)" and "Provider Name" objects, use the Edit Thresholds page.

25.15.2 WSRP Provider Portlets Maximum Time (msec)

The maximum time (in ms) to request WSRP provider portlets.

By default, this metric has a critical threshold of 10000 and a warning threshold of 6000. A critical alert is generated when the metric value exceeds the critical threshold value. A warning alert is generated when the metric value exceeds the warning threshold value. You can edit the value for a threshold as required.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–25 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
10.1.2.5	Every 15 Minutes	After Every 12 Samples	>	6000	10000	1	The maximum portlet response timing for this provider is unacceptable.

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "Provider Name" object.

If warning or critical threshold values are currently set for any "Provider Name" object, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each "Provider Name" object, use the Edit Thresholds page.

25.15.3 WSRP Provider Status

Indicates whether a specific WSRP provider has a problem.

By default, this metric has a critical threshold of 'down'. A critical alert is generated when the metric value equals the critical threshold value. You can edit the value for a threshold as required.

By default, Oracle Enterprise Manager tests the value of this metric every 10 minutes.

When an alert is generated, the alert text is:

The last response code from the a portlet serviced by this provider is down.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 25–26 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
10.1.2.5	Every 15 Minutes	After Every 12 Samples	=	Not Defined	DOWN	1	The last response code from the a portlet serviced by this provider is down.

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Slowest Average Portlet Time (msec)" and "Provider Name" objects.

If warning or critical threshold values are currently set for any unique combination of "Slowest Average Portlet Time (msec)" and "Provider Name" objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of "Slowest Average Portlet Time (msec)" and "Provider Name" objects, use the Edit Thresholds page.

User Action

If the status is "down", it indicates that at least one of the portlets serviced by this provider's last HTTP response code was unsuccessful. Investigate the provider to determine what is causing the fault.

26

Reports Server

You can use Oracle Enterprise Manager to monitor and manage Oracle Reports Server.

26.1 Cluster Information

Provides information about the cluster under which various Reports Servers might be running. The following table lists the metrics and their descriptions.

Table 26–1 Cluster Information Metrics

Metric	Description
Current Jobs	Total number of currently running jobs in the Reports Server Cluster Job Queue
Failed Jobs	Total number of jobs for the listed Reports Server cluster that were stopped before completion. This includes cancelled jobs as well as those terminated with error.
Finished Jobs	Total number of finished jobs currently in the Reports Server cluster
Response Time (ms)	Average number of milliseconds it takes for the listed Reports Server cluster to process a request from the client
Scheduled Jobs	Total number of scheduled jobs currently in the listed Reports Server Cluster Job Queue
Server Name	Lists the names of each of the other Reports Servers that are members of the same cluster that the selected Reports Server belongs to. Click the server's name to hyperlink to the OEM home page for that server.

26.2 Current Jobs

Provides information about the currently running jobs in the Reports Server. The following table lists the metrics and their descriptions.

Table 26–2 Current Jobs Metrics

Metric	Description
Id	Unique job identifier assigned to this job by the Reports Server. This number is strictly under the server's control and cannot be reset by a user.
Job Name	If you specified a job name in the command line you used to run this job, that name is listed here. Otherwise, it is the name of the job provided for the "report=" or "module=" parameter of the job request.
Output Format	Output format (desformat) specified for this job at runtime
Output Type	Destination type (destype) specified for this job at runtime

Table 26–2 (Cont.) Current Jobs Metrics

Metric	Description
Owner	User ID under which this job is running
Queued At	Date and time this job request was placed in the Job Queue
Started At	Date and time this job started running
Status	Status of the current job

26.3 Engine Information

Provides detailed information about engines currently running on the selected Reports Server and supplies the means of managing them. The following table lists the metrics and their descriptions.

Table 26–3 Engine Information Metrics

Metric	Description
Engine ID	Type of engines available for processing jobs on the selected Reports Server
Engines	Total number of this type of engine that is currently running on the selected Reports Server
Idle Time (seconds)	Time (in seconds) that the engine has remained idle since the last job ran
Job Running Time (ms)	Time (in milliseconds) taken to execute the job till now
Jobs Run	Number of jobs that the engine has run till now
Life Remaining (jobs)	Number of jobs that the selected engine can run before which it will be shut down
Name	Lists the name of the various engines available for processing jobs on the selected Reports Server
NLS	NLS value with which the engine is started. If the NLS language for the engine has not been specified in the server configuration file then the value defaults to the Reports Server's NLS
Process ID	Operating System PID of the engine process
Running	Number of engines currently running (active) in the Reports Server processing requests
Running Job ID	ID of the job that is running on this engine. "n/a" indicates that the engine is not running any jobs
Status	Engine’s status
Total Idle Time (minutes)	Total time that the selected engine has remained idle between running jobs
Total Running Time (seconds)	Total time taken by the engine to run all the jobs

26.4 Failed Jobs

Provides the total number of jobs currently in the selected Reports Server's Job Queue that were stopped before completion. This includes cancelled jobs as well as those terminated with error. When this number is higher than 0, it links to the Failed Jobs Queue, where you can get detail on why a job failed, view the job's trace file, and resubmit the job.

Table 26–4 Failed Jobs Metrics

Metric	Description
Finished At	Date and time this job was cancelled or terminated with error
Id	Unique job identifier assigned to this job by the Reports Server. This number is strictly under the server's control and cannot be reset by a user. When the job includes the generation of a trace file, the value under Id is linked to the trace file for this job. Click Id to view this report's associated trace file
Job Name	If you specified a job name in the command line you used to run this report, that name is listed here. Otherwise, it is the name of the job provided for the "report=" or "module=" parameter of the report request.
Output Format	Destination format (desformat) specified for this report at runtime
Output Type	Destination type (destype) specified for this job at runtime
Owner	User ID under which this job was run.
Queued At	Date and time this job request was placed in the Job Queue
Started At	Date and time this job started running
Status	Status of the job. Status will either indicate that the job was cancelled by the user or provide some information on why the job was terminated with error.

26.5 Finished Jobs

Provides a detailed look at all successfully completed jobs in the Job Queue on the selected Reports Server.

Table 26–5 Failed Jobs Metrics

Metric	Description
Finished At	Date and time this job completed
Id	Unique job identifier assigned to this report by the Reports Server. This number is strictly under the server's control and cannot be reset by a user. When the job includes the generation of a trace file, the value under Id is linked to the trace file for this job. Click Id to view this report's associated trace file
Job Name	If you specified a job name in the command line you used to run this report, that name is listed here. Otherwise, it is the name of the job provided for the "report=" or "module=" parameter of the job request. Job Name is linked to the output of this job. Click Job Name to see a Web version of this job's output (fetched from the Reports Server cache).
Output Format	Destination format (desformat) specified for this job at runtime
Output Type	Destination type (destype) specified for this job at runtime
Owner	User ID under which this job was run.
Queued At	Date and time this job request was placed in the Job Queue
Started At	Date and time this job started running
Status	Finished status of the job. In the Finished Job Queue, Status is always Finished Successfully

26.6 Response

Provides the average number of milliseconds it takes for the selected Reports Server to process a request from the client.

26.6.1 Server Status

Indicates whether the server is up or down.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 26–6 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	=	Not Defined	0	1	Not Defined

26.6.2 Server Type

For all target versions, the collection frequency for this metric is every 5 minutes.

26.7 Scheduled Jobs

Provides a detailed look at all jobs scheduled to run on the selected Reports Server and supplies the means of cancelling a scheduled job. The following table lists the metrics and their descriptions.

Table 26–7 Scheduled Jobs Metrics

Metric	Description
Id	Unique job identifier assigned to this job by the Reports Server. This number is strictly under the server's control and cannot be reset by a user.
Job Name	If you specified a job name in the command line you used to run this report, that name is listed here. Otherwise, it is the name of the job provided for the "report=" or "module=" parameter of the job request.
Last Run At	Time the current job was processed
Next Run At	Time when the current job will run again
Output Format	Output format (desformat) specified for this job a runtime
Output Type	Destination type (destype) specified for this job at runtime
Owner	User ID under which this job is running
Repeat Interval	Frequency at which the current job is scheduled to run. For example, daily, monthly, and so on. This setting only appears on the Reports Server Scheduled Job Queue page.

26.8 Server Information

Provides information about the Reports Server, number of engines, and other parameters related to the Reports Server. This information looks at the entire life cycle of the Reports Server for all the requests handled by the Reports Server, while the Server Performance Data metrics measure the performance of the Reports Server on a real time basis where the metrics generated are based on the requests handled by the Reports Server in last 5 minutes.

The following table lists the metrics and their descriptions.

Table 26–8 Server Information Metrics

Metric	Description
Active Engines	Number of engines currently running on the selected Reports Server.
Average Elapsed Time (ms)	Time the current job has been running in the Reports Server and has not yet finished. This metric will be non-zero when a currently running job has been running longer than the default Elapsed Time Limit (currently at 3 minutes). The Elapsed Time Limit can be modified by configuring the Reports Server target from Oracle Enterprise Manager (Central Console)
Average Response Time (ms)	Average number of milliseconds it takes for the selected Reports Server to process a request from the client.
Cluster Name	If the selected Reports Server is a member of a server cluster, the cluster name is listed here.
Current Jobs	Total number of currently running jobs in the Job Queue.
Failed Jobs	Total number of jobs currently in the Job Queue that were stopped before completion. This includes cancelled jobs as well as those terminated with error.
Failed Ratio (%)	Indicates the health of the Reports Server. This is ratio of failed jobs to past jobs (failed jobs / (finished jobs + failed jobs)).
Finished Jobs	Total number of jobs that have finished running successfully. When this number is higher than 0, it links to the Finished Jobs Queue, where you can get more detail on the finished job, view the job's trace file, view the job result from cache, and resubmit the job.
Maximum Queue Size	Value you have entered for the maximum queue size under the queue element in your Reports Server configuration file (*server_name*.conf). The queue element specifies the maximum number of jobs that can be held in the Reports server's past job queue. If the maximum is reached, the oldest job(s) are automatically purged to make room for the newest (first in/first out, or FIFO).
Scheduled Jobs	Total number of jobs currently in the Scheduled Jobs Queue. When this number is greater than 0, it links to the Scheduled Jobs Queue, where you can view details and cancel the scheduled job.
Start Time (ms since epoch)	Date and time the selected Reports Server was last started.
Trace File Name	Reports Server trace file name.
Trace Mode	Trace mode specified in the Reports Server configuration file for the trace log file, either Replace (the default) or Append. Trace Replace replaces the existing text in the trace log file with new information. Trace Append appends new information to the end of existing trace log file.
Trace Option	If you have entered an Oracle Trace option in your Reports Server configuration file, *server_name*.conf this field lists the option(s) entered.

Table 26–8 (Cont.) Server Information Metrics

Metric	Description
Transferred Jobs	In a clustered server environment, provides the total number of jobs transferred between the selected Reports Server and other cluster members. For example, if the selected Reports Server receives a request for a job that was run earlier on another cluster member, the request is transferred to the cluster member that provided the earlier result and the result is delivered to the client from the cluster member's cache. Such a transaction would be counted as one transfer within the cluster.
Version	Current version of the Reports Server

26.9 Server Performance Data

Provides metrics for the jobs processed/requested for the last 5 minutes. Server Performance Data metrics are similar to Server Information metrics; the Server Information metrics are examined to generate metrics numbers for the jobs processed/requested for the last 5 minutes.

The following table lists the metrics and their descriptions.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 26–9 Server Performance Data Metrics

Metric	Description
Active Engines	Number of engines currently running on the selected Reports Server
Average Elapsed Time to date (ms)	Provides the averaged elapsed time for all jobs that have run in the Reports Server in the last 5 minutes. This metric will be non-zero when any running job runs longer than the default Elapsed Time Limit (currently at 3 minutes). The Elapsed Time Limit can be modified by configuring the Reports Server target from Oracle Enterprise Manager (Central Console)
Average Response Time (ms)	See Section 26.9.1, "Average Response Time (ms)"
Cluster Name	If the selected Reports Server is a member of a server cluster, the cluster name is listed here
Current Job Load	Number of jobs (failed, successful, and currently running) in the Reports Server for a period of time (5 minutes)
Current Jobs	Total number of currently running jobs in the Job Queue
Failed Jobs	Total number of jobs currently in the Job Queue that were stopped before completion. This includes cancelled jobs as well as those terminated with error.
Failed Ratio (%)	See Section 26.9.2, "Failed Ratio (%)"
Job Load	Number of failed and successful jobs processed by the Reports Server in the last 5 minutes
Maximum Queue Size	Provides the value you have entered for the maximum queue size under the queue element in your Reports Server configuration file (*server_name*.conf). The queue element specifies the maximum number of jobs that can be held in the Reports server's past job queue. If the maximum is reached, the oldest job(s) are automatically purged to make room for the newest (first in/first out, or FIFO)

Table 26–9 (Cont.) Server Performance Data Metrics

Metric	Description
Scheduled Jobs	Total number of jobs currently in the Scheduled Jobs Queue. When this number is greater than 0, it links to the Scheduled Jobs Queue, where you can view details and cancel the scheduled job.
Start Time (ms since epoch)	Date and time the selected Reports Server was last started
Successful Jobs	Number of successful jobs processed by the Reports Server in the last 5 minutes
Trace File Name	Reports Server trace file name
Trace Mode	Indicates the trace mode specified in the Reports Server configuration file for the trace log file, either Replace (the default) or Append. Trace Replace replaces the existing text in the trace log file with new information. Trace Append appends new information to the end of existing trace log file.
Trace Option	If you have entered an Oracle Trace option in your Reports Server configuration file, *server_name*.conf, this field lists the option(s) entered.
Transferred Jobs	In a clustered server environment, provides the total number of jobs transferred between the selected Reports Server and other cluster members. For example, if the selected Reports Server receives a request for a job that was run earlier on another cluster member, the request is transferred to the cluster member that provided the earlier result and the result is delivered to the client from the cluster member's cache. Such a transaction would be counted as one transfer within the cluster.
Version	Current version of the Reports Server

26.9.1 Average Response Time (ms)

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 26–10 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	>	5000	15000	1	Not Defined

26.9.2 Failed Ratio (%)

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 26–11 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every Sample	>	25	33	1	Not Defined

27

Single Sign-On Server

You can use the Single Sign-On Server metrics to monitor load and user activity on the OracleAS Single Sign-On Server. Statistics are for the previous 24 hours.

27.1 Login Server Metrics For The Last 24 Hours

These Login Server metrics provide information about login activity on the OracleAS Single Sign-On Server over the last 24 hours. The following table lists the metrics and their descriptions.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 27–1 Login Server MEtrics For The Last 24 Hours

Metric	Description
Number of Login Attempts	Total number of login attempts over the last 24 hours
Number of Successful Login Attempts	Total number of successful login attempts over the last 24 hours
Number of Unsuccessful Login Attempts	Total number of unsuccessful login attempts over the last 24 hours
Percentage of Successful Logins	Percentage of successful login attempts over the last 24 hours
Percentage of Unsuccessful Logins	Percentage of unsuccessful login attempts over the last 24 hours

27.2 Login Server Metrics For The Last Hour

These metrics provide information about login activity on the OracleAS Single Sign-On Server over the last hour. The following table lists the metrics and their descriptions.

Note: For all target versions, the collection frequency for each metric is every 60 minutes.

Table 27–2 Login Server MEtrics For The Last 24 Hours

Metric	Description
Number of Login Attempts	Total number of login attempts over the last hour
Number of Successful Login Attempts	Total number of successful login attempts over the last hour
Number of Unsuccessful Login Attempts	Total number of unsuccessful login attempts over the last hours
Percentage of Successful Logins	Percentage of successful login attempts over the last hour
Percentage of Unsuccessful Logins	Percentage of unsuccessful login attempts over the last hour

27.3 Most Failed Login Users Metrics

The Most Failed Login Users Metrics provide detailed information about each failed login attempt, including the time when the failure happened and the IP address of the machine where the user attempted to login.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 27–3 Most Failed Login Users Metrics

Metric	Description
Frequency	Number of times a user has failed to login during the previous 24 hours
Subscriber ID	Subscriber ID of the user trying to log in
Subscriber Name	Subscriber name of the user trying to log in

27.4 SSO Database Instance Metric

The Database Instance metric provides information about the Oracle Database that the OracleAS Single Sign-On Server schema is running on. The following table lists the metrics, descriptions, and data source.

Note: For all target versions, the collection frequency for each metric is every 5 minutes.

Table 27–4 SSO Database Instance Metrics

Metric	Description	Data Source
Instance Name	Name of the Oracle Database where the OracleAS Portal schema is running.	instance_name in the v$instance table
Start Time	Time at which the Oracle Database was last started	startup_time from the v$instance table
Version	Version of the Oracle Database being used	version from the v$instance table

27.5 SSO Status Metric

The SSO Status metrics allow you to monitor the status of the OracleAS Single Sign-On Server.

27.5.1 Status

Indicates whether the Single Sign-On Server is accessible.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 27–5 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	=	Not Defined	0	1	The SSO instance is not accessible.

Data Source

This status test involves pinging a package on the Single Sign-On Server schema using mod_plsql.

User Action

If this status test fails, it indicates that there is an issue with one or more of the components that the Single Sign-On Server depends on. For example, the Single Sign-On Server Database Access Descriptor (DAD) may have an incorrect password, the Oracle HTTP Server may be down, or the Oracle Database the schema is running on may be unaccessible.

28

Web Cache

You can use Oracle Enterprise Manager to view the overall status of OracleAS Web Cache. You can also use Enterprise Manager to view OracleAS Web Cache performance metrics that have been collected by the Oracle Agent.

28.1 Cache Performance

This metric serves as a container for the Cache Performance metrics.

28.1.1 Allocated Cache Memory (%)

The percentage of the maximum cache size that is allocated to cached objects. The maximum cache size is configured in the Resource Limits and Timeouts page of (**Web Cache Home** page > **Administration** tab > **Web Cache**> **Resource Limits** link).

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–1 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	90	99	2	The cache is using %value%% of its allocated memory

By default, this metric has a critical threshold of 99 and a warning threshold of 90. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

The cache is using %value%% of its allocated memory

User Action

When the cache size reaches 90 percent, the cache will start forced garbage collection.

28.1.2 Cacheable Misses (% of requests)

The percentage of requests for content which is cacheable but was not available in the cache.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

Check caching rules configuration from the Rules page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Rules**).

28.1.3 Cached Documents Count

The number of objects stored in the cache, plus the number of objects in transit through the cache. The number includes objects that have expired or have been invalidated but which have not been deleted from the cache. For a cache cluster member, this number represents owned content.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.1.4 Compression Savings (%)

The number of bytes that are saved due to in-cache compression as a percentage of the total number of bytes, before compression, in the objects served.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.1.5 Data Served (MB/second)

The average number of megabytes served by the cache per second during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the number of hits is low, then perform the following:

1. Review the caching rules configuration in the Rules page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Rules**).
2. In the Popular Requests page (**Web Cache Home** page > **Performance** tab > **All Sites** section > **Popular Requests** link), select Not Cached from the **View** list to view the most frequent misses, and then click **Go** to see the results.
3. In the results table, view the **Reason** column for the most frequent URL requests that were not cached.

28.1.6 Errors (% of requests)

The percentage of requests that resulted in the cache serving error pages.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

Refer to the specific error being served.

28.1.7 Hit Rate Per Second

The average number of requests served by cache content per second during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the number of hits is low, then perform the following:

1. Review the caching rules configuration in the Rules page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Rules**).
2. In the Popular Requests page (**Web Cache Home** page > **Performance** tab > **All Sites** section > **Popular Requests** link), select Not Cached from the **View** list to view the most frequent misses, and then click **Go** to see the results.
3. In the results table, view the **Reason** column for the most frequent URL requests that were not cached.

28.1.8 Hits (% of requests)

The percentage of requests resolved by cache content. This percentage should be high, except when objects are being invalidated.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–2 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	<	30	20	3	%value%% of requests were cache hits

By default, this metric has a critical threshold of 20 and a warning threshold of 30. A critical alert is generated when the metric value falls short of the critical threshold value 3 times. A warning alert is generated when the metric value falls short of the warning threshold value 3 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

%value%% of requests were cache hits

User Action

If the number of hits is low, then perform the following:

1. Review the caching rules configuration in the Rules page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Rules**).
2. In the Popular Requests page (**Web Cache Home** page > **Performance** tab > **All Sites** section > **Popular Requests** link), select Not Cached from the **View** list to view the most frequent misses, and then click **Go** to see the results.
3. In the results table, view the **Reason** column for the most frequent URL requests that were not cached.

28.1.9 Invalidated Objects Per Second

The average number of objects invalidated from the cache per second during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

The ratio of invalidated objects to invalidation requests can help you determine invalidation performance. You can determine this ratio in the Invalidations page of Grid Control. To navigate to the Invalidations page:

1. From the **Web Cache Home** page, click the **Performance** tab.
2. In the **Related Links** section of the **Performance** tab, click **Invalidations**.

Note that if invalidation is frequent, then performance may degrade.

28.1.10 Invalidation Requests Per Second

The average number of invalidation requests processed by the cache per second during the current time period.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–3 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	100	120	2	The cache encountered %value% invalidation requests per second

By default, this metric has a critical threshold of 120 and a warning threshold of 100. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

The cache encountered %value% invalidation requests per second

User Action

The ratio of invalidated objects to invalidation requests can help you determine invalidation performance. You can determine this ratio in the Invalidations page of Grid Control. To navigate to the Invalidations page:

1. From the **Web Cache Home** page, click the **Performance** tab.
2. In the **Related Links** section of the **Performance** tab, click **Invalidations**.

Note that if invalidation is frequent, then performance may degrade.

28.1.11 Misses Per Second

The average number of requests per second for cacheable and non-cacheable content that were not served by the cache during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the number of misses is high, then perform the following:

1. Review the caching rules configuration in the Rules page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Rules**).
2. In the Popular Requests page (**Web Cache Home** page > **Performance** tab > **All Sites** section > **Popular Requests** link), select Not Cached from the **View** list to view the most frequent misses, and then click **Go** to see the results.
3. In the results table, view the **Reason** column for the most frequent URL requests that were not cached.

28.1.12 Network Errors Per Second

The number of error pages that the cache has served per second due to a network error while connecting, sending, or receiving response from origin servers for cache-miss requests.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–4 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	.5	1	2	The cache encountered %value% network errors per second

By default, this metric has a critical threshold of 1 and a warning threshold of .5. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

The cache encountered %value% network errors per second

User Action

If the number of network errors is consistently high, then consider improving the network connection between the cache and origin server.

28.1.13 Noncacheable Misses (% of requests)

The percentage of requests for non-cacheable content that was not served by the cache.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the number of hits is low, then perform the following:

1. Review the caching rules configuration in the Rules page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Rules**).
2. In the Popular Requests page (**Web Cache Home** page > **Performance** tab > **All Sites** section > **Popular Requests** link), select Not Cached from the **View** list to view the most frequent misses, and then click **Go** to see the results.
3. In the results table, view the **Reason** column for the most frequent URL requests that were not cached.

28.1.14 Open Connections

The number of incoming open connections to the OracleAS Web Cache server and outgoing open connections to the origin servers.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the number is close to the origin server connection limit, then set a larger capacity for the origin server from the Origin Servers page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Origin Servers**).

28.1.15 Partial Page Errors Per Second

The number of error pages that the cache has served per second due to an HTML fragment retrieval problem for a page that supports partial page caching. This number includes errors returned when an uncaught exception occurs in the cache during ESI parsing or when the default ESI fragment is served. A default ESI fragment is served when OracleAS Web Cache is unable to fetch the `src` specified in the `<esi:include>` tag.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–5 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	.5	1	2	The cache encountered %value% partial page errors per second

By default, this metric has a critical threshold of 1 and a warning threshold of .5. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

The cache encountered %value% partial page errors per second

User Action

If the number of partial-page errors is consistently high, then improve the origin server side code that generates the ESI pages to catch exceptions.

28.1.16 Refreshes (% of requests)

The percentage of requests that resulted in the cache refreshing content from the origin servers.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.1.17 Requests Per Second

The average number of requests served by the cache per second during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.1.18 Site Busy Errors Per Second

The number of error pages that the cache has served per second when origin server capacity has been reached.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–6 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	.5	1	2	The cache encountered %value% site busy errors per second

By default, this metric has a critical threshold of 1 and a warning threshold of .5. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

The cache encountered %value% site busy errors per second

User Action

If the number of site-busy errors is consistently high, then increase the capacity of the origin servers from the Origin Servers page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Origin Servers**).

28.1.19 Size of Cached Documents (MB)

The size, in megabytes, of the objects currently stored in the cache. For a cache cluster member, this number is an aggregate of the owned and on-demand objects.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.1.20 Stale Hits (% of requests)

The percentage of requests resolved by expired or invalidated content in the cache.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–7 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	70	80	2	%value%% of hits were stale cache hits

By default, this metric has a critical threshold of 80 and a warning threshold of 70. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

%value%% of hits were stale cache hits

User Action

If the percentage of stale hits is high, then ensure that expired or invalidated pages are updated from the origin server in a timely fashion. Check the network capacity between the OracleAS Web Cache computer and the origin server.

28.1.21 Total Errors Per Second

The total number of error pages that the cache has served per second during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.1.22 Up Since

The time at which the cache was started or restarted.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.2 ESI Errors

These metric columns provide information about Edge Side Includes (ESI).

28.2.1 ESI Exceptions Not Caught Per Second

The number of error pages that the cache has served per second due to exceptions during Edge Side Includes (ESI) parsing or processing. These error pages are typically the result of ESI syntax errors.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
10.1.2.x	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the number of exception errors is consistently high, then improve the origin server side code that generates the ESI pages to catch exceptions.

28.2.2 Times Default ESI Fragment Served Per Second

The number of default Edge Side Include (ESI) fragments that the cache has served per second. A default ESI fragment is served when OracleAS Web Cache is unable to fetch the `src` specified in an `<esi:include>` tag and the `alt` attribute, `onerror` attribute, or the `try |attempt |except` block are either not present or fail.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
10.1.2.x	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the number of default ESI fragments is consistently high, then review the ESI code.

28.3 Resource Usage

These metric columns provide information about CPU and memory usage.

28.3.1 CPU Idle Time (%)

The percentage of system CPU time that is idle.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the load is high, then consider upgrading the cache computer.

28.3.2 Free Memory (%)

The amount of free physical memory, in megabytes, for the system.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
9.0.2.x and 9.0.3.x	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the load is high, then consider upgrading the cache computer.

28.3.3 Free Memory (MB)

The amount of free physical memory, in megabytes, for the system.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the load is high, then consider upgrading the cache computer.

28.3.4 Other CPU Usage (%)

The percentage of the CPU usage by applications other than OracleAS Web Cache.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If CPU usage is high, then consider upgrading the cache computer.

28.3.5 Other Memory Usage (%)

The percentage of physical memory used by applications other than OracleAS Web Cache.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
9.0.2.x and 9.0.3.x	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the load is high, then consider upgrading the cache computer.

28.3.6 Other Memory Usage (MB)

The physical memory usage, in megabytes, by applications other than OracleAS Web Cache.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the load is high, then consider upgrading the cache computer.

28.3.7 Total Memory (MB)

The amount of physical memory, in megabytes, for the system.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
9.0.2.x and 9.0.3.x	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the load is high, then consider upgrading the cache computer.

28.3.8 Web Cache CPU Usage (%)

The percentage of the CPU that is being used for OracleAS Web Cache. As traffic increases, CPU utilization increases.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding

Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–8 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	CPU Utilization is %value%%%

By default, this metric has a critical threshold of NotDefined and a warning threshold of NotDefined. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

CPU Utilization is %value%%%

User Action

If the load is high, then consider upgrading the cache computer.

28.3.9 Web Cache Memory Usage (%)

The percentage of the physical memory used by OracleAS Web Cache.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–9 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
All Versions	Every 5 Minutes	After Every 12 Samples	>	80	90	2	Memory Utilization is %value%%%

By default, this metric has a critical threshold of 90 and a warning threshold of 80. A critical alert is generated when the metric value exceeds the critical threshold value 2 times. A warning alert is generated when the metric value exceeds the warning threshold value 2 times. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

Memory Utilization is %value%%%

User Action

If the load is high, then consider upgrading the cache computer.

28.3.10 Web Cache Memory Usage (MB)

The amount of physical memory, in megabytes, that is being used by OracleAS Web Cache.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

By default, Enterprise Manager tests the value of this metric every 24 hours.

User Action

If the load is high, then consider upgrading the cache computer.

28.4 Response

This category indicates whether the OracleAS Web Cache instance is up and running or down and unavailable.

28.4.1 Status

This metric indicates whether the OracleAS Web Cache instance is up and running or down and unavailable.

Metric Summary

The following table shows how often the metric's value is collected and compared against the default thresholds. The 'Consecutive Number of Occurrences Preceding Notification' column indicates the consecutive number of times the comparison against thresholds should hold TRUE before an alert is generated.

Table 28–10 Metric Summary Table

Target Version	Evaluation and Collection Frequency	Upload Frequency	Operator	Default Warning Threshold	Default Critical Threshold	Consecutive Number of Occurrences Preceding Notification	Alert Text
10.1.2.x	Every Minute	After Every 60 Samples	=	Not Defined	0	1	The OracleAS Web Cache instance is down

By default, this metric has a critical threshold of 0. A critical alert is generated when the metric value equals the critical threshold value 1 time. You can edit the value for a threshold as required.

By default, Enterprise Manager tests the value of this metric every 24 hours.

When an alert is generated, the alert text is:

The Oracle Web Cache instance is down

28.5 Server Performance

The columns in this metric provide information about the performance of origin server.

28.5.1 Active Requests

The current number of open connections that the cache has open to the origin server per second.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Origin Server Name" and "Port" objects.

If warning or critical threshold values are currently set for any unique combination of "Origin Server Name" and "Port" objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of "Origin Server Name" and "Port" objects, use the Edit Thresholds page. See the Editing Thresholds topic in the Enterprise Manager online help for information on accessing the Edit Thresholds page.

User Action

If the number is close to the connection limit, then set a larger capacity for the origin server from the Origin Servers page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Origin Servers**).

28.5.2 Origin Server Name

The host name of the origin server.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.5.3 Port

The port at which the origin server listens for the requests from OracleAS Web Cache

User Action

No user action necessary. This metric is intended for informational purposes only.

28.5.4 Processing Time (seconds)

The average number of seconds used to process a request during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Origin Server Name" and "Port" objects.

If warning or critical threshold values are currently set for any unique combination of "Origin Server Name" and "Port" objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of "Origin Server Name" and "Port" objects, use the Edit Thresholds page. See the Editing Thresholds topic in the Enterprise Manager online help for information on accessing the Edit Thresholds page.

User Action

If the number is low, then improve the connection between the cache and origin server, or upgrade the origin server computer.

28.5.5 Proxy Server

Specifies whether or not the origin server is a proxy server. YES specifies that the origin server is a proxy server. NO specifies that the origin server is an application Web sever.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Origin Server Name" and "Port" objects.

If warning or critical threshold values are currently set for any unique combination of "Origin Server Name" and "Port" objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of "Origin Server Name" and "Port" objects, use the Edit Thresholds page. See the Editing Thresholds topic in the Enterprise Manager online help for information on accessing the Edit Thresholds page.

User Action

No user action necessary. This metric is intended for informational purposes only.

28.5.6 Requests Per Second

The average number of requests served per second during the current time period.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Origin Server Name" and "Port" objects.

If warning or critical threshold values are currently set for any unique combination of "Origin Server Name" and "Port" objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of "Origin Server Name" and "Port" objects, use the Edit Thresholds page. See the Editing Thresholds topic in the Enterprise Manager online help for information on accessing the Edit Thresholds page.

User Action

If this number is high, then increase the capacity of this origin server from the Origin Servers page (**Web Cache Home** page > **Administration** tab > **Properties** > **Application** > **Origin Servers**), or load balance the requests among cache cluster members.

28.5.7 Status

The current status of the origin server. An up status specifies that the last communication with the origin server was successful. A down status specifies that the origin server is down. If this is the last origin server in a single or multiple server configuration, OracleAS Web Cache continues to forward requests to the origin server. If this is not the last server, then no new requests will be sent to origin server. However, OracleAS Web Cache will poll the inactive origin server until it is back online.

Metric Summary

The following table shows how often the metric's value is collected.

Target Version	Collection Frequency
All Versions	Every 5 Minutes

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Origin Server Name" and "Port" objects.

If warning or critical threshold values are currently set for any unique combination of "Origin Server Name" and "Port" objects, those thresholds can be viewed on the Metric Detail page for this metric.

To specify or change warning or critical threshold values for each unique combination of "Origin Server Name" and "Port" objects, use the Edit Thresholds page. See the Editing Thresholds topic in the Enterprise Manager online help for information on accessing the Edit Thresholds page.

User Action

No user action necessary. This metric is intended for informational purposes only.