Oracle® Enterprise Manager

Oracle Application Server Metric Reference Manual

10*g* Release 2 (10.2)

B25987-01

January 2006

ORACLE®

Oracle Enterprise Manager Oracle Application Server Metric Reference Manual 10*g* Release 2 (10.2)

B25987-01

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Preface

This manual is a compilation of the Oracle Application Server target metrics provided in Oracle Enterprise Manager.

Audience

This document is intended for Oracle Enterprise Manager users interested in Oracle Application Server 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 Third-Party 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 Application Server Metric Reference Manual* (hereafter referred to as the *Oracle Application Server Metric Reference Manual*) lists all the target metrics that Enterprise Manager monitors for Oracle Application Server 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 Application Server Metric Reference Manual
- Background Information on Metrics, Thresholds, and Alerts

Structure of the Oracle Application Server Metric Reference Manual

This manual contains a chapter for each Oracle Application Server 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 Application Server 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.

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

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 the Oracle Management Agent.

2.1 Response

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

2.1.1 Status

Shows whether the Apache HTTP 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 2–1 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 60 Samples	=	Not Defined	0	1	The Apache Server instance is 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

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 the Oracle Management Agent.

11.1 All Instances Metrics

This metric category provides metrics for all the OC4J instances of an application 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 11–1 OC4J All Instances Metrics

Metric	Description
Active Sessions	Number of HTTP sessions used by all the OC4J instances of this application server.
Request Processing Time (seconds)	See Section 11.1.1, "Request Processing Time (seconds)"
Requests Per Second	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

11.1.1 Request Processing Time (seconds)

This metric 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.

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 11–2 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	>	Not Defined	Not Defined	2	The average processing time for a servlet or JSP is %value% seconds

11.2 Application Metrics

This metric category provides metrics for the application.

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 11–3 OC4J Application Metrics

Metric	Description
Active EJB Methods	See Section 11.2.1, "Active EJB Methods"
Active Requests	See Section 11.2.2, "Active Requests"
Active Sessions	See Section 11.2.3, "Active Sessions"
EJB Method Execution Rate (per second)	Rate at which EJB methods are currently being executed by this application
EJB Method Execution Time (seconds)	See Section 11.2.4, "EJB Method Execution Time (seconds)"
Request Processing Time (seconds)	See Section 11.2.5, "Request Processing Time (seconds)"
Requests Per Second	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.

11.2.1 Active EJB Methods

This metric shows the number of EJB methods that are currently being executed by this application.

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 11–4 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	>	Not Defined	Not Defined	2	The number of active EJB methods for application %name% is %value%

Multiple Thresholds

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

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

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

11.2.2 Active Requests

This metric shows the number of servlets and JSPs currently being executed by this application.

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 11–5 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	Not Defined	2	The number of active servlets and JSPs for application %name% is %value%

Multiple Thresholds

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

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

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

11.2.3 Active Sessions

This metric shows the number of active HTTP sessions used by the application.

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 11–6 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	Not Defined	2	The number of active sessions for application %name% is %value%

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "Application 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 "Application Name" object, use the Edit Thresholds page.

11.2.4 EJB Method Execution Time (seconds)

This metric 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.

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 11–7 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	The average execution time for an EJB method for application %name% is %value% seconds

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "Application 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 "Application Name" object, use the Edit Thresholds page.

11.2.5 Request Processing Time (seconds)

This metric 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.

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 11–8 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	The average processing time for a servlet or JSP for application %name% is %value% seconds

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "Application 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 "Application Name" object, use the Edit Thresholds page.

11.3 Datasource Metrics

This metric category provides metrics for datasources.

The following table lists the metrics and their associated descriptions.

Table 11–9 OC4J Datasource Metrics

Metric	Description
Active JDBC Connections	Number of JDBC connections currently open for this datasource.
Available Cached Connections	Number of unused connections in the cache for this datasource
Connection Cache Hit Rate (%)	Percentage of time the datasource was able to get a connection from the cache (as opposed to having to create a new one)
Statement Cache Hit Rate (%)	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 EJB Method Metrics

This metric category provides metrics for EJB Methods.

The following table lists the metrics and their associated descriptions.

Table 11–10 OC4J EJB Method Metrics

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

11.5 EJB Metrics

This metric category provides metrics for EJBs.

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 11–11 OC4j EJB Metrics

Metric	Description
Active Methods	See Section 11.5.1, "Active Methods"
Method Execution Time (seconds)	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.
Method Execution Time (seconds)	See Section 11.5.2, "Method Execution Time (seconds)"
Type of EJB	Type of the EJB (i.e. Entity type or Session type).

11.5.1 Active Methods

This metric shows the number of EJB methods that are currently being executed for this EJB.

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 11–12 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	Not Defined	2	The number of active EJB methods for EJB %name%, EJB module %oc4j_ejb_module%, application %oc4j_ear% is %value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "EJB Name", "EJB Module Name", and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "EJB Name", "EJB Module Name", and "Application 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 "EJB Name", "EJB Module Name", and "Application Name" objects, use the Edit Thresholds page.

11.5.2 Method Execution Time (seconds)

This metric 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.

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 11–13 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	Not Defined	2	The average execution time for an EJB method for EJB %name%, EJB module %oc4j_ejb_module%, application %oc4j_ear% is %value% seconds

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "EJB Name", "EJB Module Name", and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "EJB Name", "EJB Module Name", and "Application 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 "EJB Name", "EJB Module Name", and "Application Name" objects, use the Edit Thresholds page.

11.6 OC4J EJB Module Metrics

This metric category provides metrics for EJB modules.

The following table lists the metrics and their associated descriptions.

Table 11–14 OC4j EJB Module Metrics

Metric	Description
Active Methods	See Section 11.6.1, "Active Methods"
Method Execution Rate	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. For all target versions, the collection frequency for this metric is every 5 minutes.
Method Execution Time (seconds)	See Section 11.6.2, "Method Execution Time (seconds)"

11.6.1 Active Methods

This metric shows the number of EJB methods that are currently being executed by this EJB module.

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 11–15 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	The number of active EJB methods for EJB module %name%, application %oc4j_ear% is %value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "EJB Module Name" and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "EJB Module Name" and "Application 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 "EJB Module Name" and "Application Name" objects, use the Edit Thresholds page.

11.6.2 Method Execution Time (seconds)

This metric 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.

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 11–16 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	The average execution time for an EJB method for EJB module %name%, application %oc4j_ear% is %value% seconds

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "EJB Module Name" and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "EJB Module Name" and "Application 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 "EJB Module Name" and "Application Name" objects, use the Edit Thresholds page.

11.7 Instance Metrics

This metric category provides metrics for the OC4J instance.

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 11–17 OC4J Instance Metrics

Metric	Description
Active EJB Methods	See Section 11.7.1, "Active EJB Methods"
Active Requests	See Section 11.7.2, "Active Requests"
Active Sessions	See Section 11.7.3, "Active Sessions"
Active Transactions	Section 11.7.4, "Active Transactions"
EJB Method Execution Rate (per second)	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.
EJB Method Execution Time (seconds)	See Section 11.7.5, "EJB Method Execution Time (seconds)"
Heap Usage (MB)	Section 11.7.6, "Heap Usage (MB)"
Open JDBC Connections	Section 11.7.7, "Open JDBC Connections"
Request Processing Time (seconds)	Section 11.7.8, "Request Processing Time (seconds)"
Requests Per Second	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.
Start Time (ms since Epoch)	Time when the OC4J instance was started. It is represented in milliseconds since the UNIX epoch (i.e. January 1, 1970)

11.7.1 Active EJB Methods

This metric shows the number of EJB methods that are currently being executed by this OC4J instance.

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 11–18 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The number of active EJB methods is %value%

11.7.2 Active Requests

This metric shows the number of servlets and JSPs currently being executed by this OC4J instance.

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 11–19 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The number of active servlets and JSPs is %value%

11.7.3 Active Sessions

This metric shows the number of active HTTP sessions used by the OC4J instance.

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 11–20 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The number of active sessions is %value%

11.7.4 Active Transactions

This metric shows the number of transactions that are currently open for this OC4J instance.

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 11–21 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The number of active transactions is %value%

11.7.5 EJB Method Execution Time (seconds)

This metric 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.

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 11–22 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The average execution time for an EJB method is %value% seconds

11.7.6 Heap Usage (MB)

This metric shows the amount of heap space used by the OC4J instance.

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 11–23 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	Heap Usage is %value%MB

11.7.7 Open JDBC Connections

This metric shows the number of JDBC connections open by applications that are part of the OC4J instance.

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 11–24 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The number of active JDBC connections is %value%

11.7.8 Request Processing Time (seconds)

This metric 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.

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 11–25 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The average processing time for a servlet or JSP is %value% seconds

11.8 JSP Metrics

This metric category provides metrics for JSPs.

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 11–26 OC4J JSP Metrics

Metric	Description
Is multi-threaded?	Indicates whether or not this JSP is multi-threaded. The value of this metric is either TRUE or FALSE
Active Instances (STM only)	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.
Active Requests	See Section 11.8.1, "Active Requests"
Available Instances (STM only)	Number of available instances to execute this JSP
Client Processing Time (seconds)	See Section 11.8.2, "Client Processing Time (seconds)"
Requests Per Second	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

11.8.1 Active Requests

This metric shows the number of clients that are currently executing this JSP.

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 11–27 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The number of active %name% JSPs for web module %oc4j_web_module%, application %oc4j_ear% is %value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "JSP Name", "Web Module Name", and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "JSP Name", "Web Module Name", and "Application 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 "JSP Name", "Web Module Name", and "Application Name" objects, use the Edit Thresholds page.

11.8.2 Client Processing Time (seconds)

This metric shows the total time spent executing the client code for this JSP since this OC4J instance was started.

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 11–28 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
All Versions	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The average processing time for JSP %name%, web module %oc4j_web_module%, application %oc4j_ear% is %value% seconds

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "JSP Name", "Web Module Name", and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "JSP Name", "Web Module Name", and "Application 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 "JSP Name", "Web Module Name", and "Application Name" objects, use the Edit Thresholds page.

11.9 JVM Metrics

This metric category provides metrics for OC4J JVMs.

> **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 11–29 OC4J JVM Metrics

Metric	Description
Island Name	Name of the island that the JVM is using
Active EJB Methods	See Section 11.9.1, "Active EJB Methods"
Active Requests	See Section 11.9.2, "Active Requests"
Active Threads	See Section 11.9.3, "Active Threads"
CPU Usage (%)	See Section 11.9.4, "CPU Usage (%)"
Heap Usage (MB)	See Section 11.9.5, "Heap Usage (MB)"
Memory Usage (MB)	See Section 11.9.6, "Memory Usage (MB)"
Start Time (ms since Epoch)	Time when the JVM was started

11.9.1 Active EJB Methods

This metric shows the number of EJB methods currently being executed in the JVM.

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 11–30 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The number of active EJB methods is %value% for process %pid.value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "PID" object.

If warning or critical threshold values are currently set for any "PID" 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 "PID" object, use the Edit Thresholds page.

11.9.2 Active Requests

This metric shows the number of servlet/JSP requests currently being processed in the JVM.

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 11–31 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 12 Samples	>	Not Defined	Not Defined	2	The number of active servlets and JSPs is %value% for process %pid.value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "PID" object.

If warning or critical threshold values are currently set for any "PID" 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 "PID" object, use the Edit Thresholds page.

11.9.3 Active Threads

This metric shows the number of threads currently executing in the JVM.

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 11–32 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	There are %value% active threads for process %pid.value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "PID" object.

If warning or critical threshold values are currently set for any "PID" 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 "PID" object, use the Edit Thresholds page.

11.9.4 CPU Usage (%)

This metric shows the percentage of CPU time used by the JVM.

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 11–33 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%% for process %pid.value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "PID" object.

If warning or critical threshold values are currently set for any "PID" 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 "PID" object, use the Edit Thresholds page.

11.9.5 Heap Usage (MB)

This metric shows the amount of heap space used by the JVM.

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 11–34 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	Heap Usage is %value% MB for process %pid.value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "PID" object.

If warning or critical threshold values are currently set for any "PID" 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 "PID" object, use the Edit Thresholds page.

11.9.6 Memory Usage (MB)

This metric shows the amount of physical memory used by the JVM.

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 11–35 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
All Versions	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	Memory Utilization is %value% MB for process %pid.value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "PID" object.

If warning or critical threshold values are currently set for any "PID" 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 "PID" object, use the Edit Thresholds page.

11.10 Servlet Metrics

This metric category provides metrics for servlets.

The following table lists the metrics and their associated descriptions.

Table 11–36 OC4J Servlet Metrics

Metric	Description
Active Requests	See Section 11.10.1, "Active Requests"
Client Processing Time	See Section 11.10.2, "Client Processing Time (seconds)"
Requests Per SEcond	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. For all target versions, the collection frequency for this metric is every 5 minutes.

11.10.1 Active Requests

This metric shows the number of clients that are currently executing this servlet.

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 11–37 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	The number of active %name% servlets for web module %oc4j_web_module%, application %oc4j_ear% is %value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Servlet Name", "Web Module Name", and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "Servlet Name", "Web Module Name", and "Application 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 "Servlet Name", "Web Module Name", and "Application Name" objects, use the Edit Thresholds page.

11.10.2 Client Processing Time (seconds)

This metric 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.

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 11–38 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	The average processing time for servlet %name%, web module %oc4j_web_module%, application %oc4j_ear% is %value% seconds

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Servlet Name", "Web Module Name", and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "Servlet Name", "Web Module Name", and "Application 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 "Servlet Name", "Web Module Name", and "Application Name" objects, use the Edit Thresholds page.

11.11 Web Module Metrics

This metric category provides metrics for the OC4J web modules.

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 11–39 OC4J Web Module Metrics

Metric	Description
Active Requests	See Section 11.11.1, "Active Requests"
Active Sessions	Section 11.11.2, "Active Sessions"
Class Load Time (seconds)	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.
Client Time (seconds)	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.

Table 11–39 (Cont.) OC4J Web Module Metrics

Metric	Description
Request Processing Time (seconds)	See Section 11.11.3, "Request Processing Time (seconds)"
Requests Per Second	Number of servlets and JSPs processed by this web module since this OC4J instance was started

11.11.1 Active Requests

This metric shows the number of servlets and JSPs currently being executed by this web module.

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 11–40 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	The number of active servlets and JSPs for web module %name%, application %oc4j_ear% is %value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Web Module Name" and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "Web Module Name" and "Application 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 "Web Module Name" and "Application Name" objects, use the Edit Thresholds page.

11.11.2 Active Sessions

This metric shows the number of active HTTP sessions used by this web module.

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 11–41 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	The number of active sessions for web module %name%, application %oc4j_ ear% is %value%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Web Module Name" and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "Web Module Name" and "Application 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 "Web Module Name" and "Application Name" objects, use the Edit Thresholds page.

11.11.3 Request Processing Time (seconds)

This metric 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.

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 11–42 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	The average processing time for a servlet or JSP for web module %name%, application %oc4j_ ear% is %value% seconds

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each unique combination of "Web Module Name" and "Application Name" objects.

If warning or critical threshold values are currently set for any unique combination of "Web Module Name" and "Application 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 "Web Module Name" and "Application Name" objects, use the Edit Thresholds page.

11.12 Resource Usage

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

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 11–43 OC4J Resource Usage Metrics

Metric	Description
CPU Idle Time (%)	Percentage of CPU idle time
CPU Usage (%)	See Section 11.12.1, "CPU Usage (%)"
Free Memory (%)	Percentage of physical memory available. For target versions 9.0.2.x and 9.0.3.x, the collection frequency is every 5 minutes.
Free Memory (MB)	Amount of free physical memory on the system
Memory Usage (%)	Percentage of physical memory used by the OC4J instance. For target versions 9.0.2.x and 9.0.3.x, the collection frequency is every 5 minutes.
Memory Usage (MB)	Amount of physical memory used by the OC4J instance
Other CPU Usage (%)	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.
Other Memory Usage (%)	Percentage of host memory used 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. For target versions 9.0.2.x and 9.0.3.x, the collection frequency is every 5 minutes.
Other Memory Usage (MB)	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.
Total Memory (MB)	Total amount of physical memory available.For target versions 9.0.2.x and 9.0.3.x, the collection frequency is every 5 minutes.

11.12.1 CPU Usage (%)

This metric shows the percentage of CPU time used by the OC4J instance.

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 11–44 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%%

11.12.2 Memory Usage (%)

This metric shows the percentage of physical memory used by the OC4J instance.

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 11–45 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%%

11.13 Response

This metric category provides response metrics for OC4J.

11.13.1 UpDown Status

This metric 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.

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 11–46 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 60 Samples	=	Not Defined	0	1	The OC4J instance is down

12

OraBPEL

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

12.1 Active

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

The following table lists the metrics and their associated descriptions. These metrics are intended for informational purposes only.

Table 12–1 Active Metrics

Metric	Description
Activity Execution Requests	Number of active activity execution requests for the BPEL domain
BPEL Domain	Name of the BPEL domain
BPEL Domain Management Requests	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	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	Number of active messages related to callback resolution and completion for the BPEL domain
Host	Host machine on which Oracle BPEL Process Manager is running
New Instance Requests	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	OC4j process
Transaction Coordination Requests	Number of active messages that control the business transaction protocol (BTP) transactions for the BPEL domain

12.2 Adapter Framework Metrics

This category shows the performance metrics of the adapter framework. The following table lists the metrics and their associated descriptions. These metrics are intended for informational purposes only.

Table 12–2 Adapter Framework Metrics

Metric	Description
Average Elapsed Time (msecs)	Average time in milliseconds taken by the adapter to process an event.
Elapsed Time	Total time in milliseconds taken by the adapter to process all the events.
Host	Host machine on which Oracle BPEL Process Manager's adapter framework is running.
Maximum Elapsed Time (msecs)	Maximum time in milliseconds taken by the adapter to process an event.
Minimum Elapsed Time (msecs)	Minimum time in milliseconds taken by the adapter to process an event.
Name	Name of the adapter
Number of Events Erred Out	Number of events that have erred out
Process	OC4J process
Total Count	Total number of messages processed by the adapter

12.3 BPEL Domain Statistics

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

The following table lists the metrics and their associated descriptions. These metrics are intended for informational purposes only.

Table 12–3 BPEL Domain Statistics

Metric	Description
Asynchronous Process Latency Time (msecs)	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.
Average Synchronous Process Latency (msecs)	Shows the average latency for synchronous BPEL processes in this BPEL domain
BPEL Domain	Name of the BPEL domain
Completed Asynchronous Process Latency (operations per second)	Number of completed instances of asynchronous BPEL processes in this BPEL domain
Completed Synchronous Process Latency (operations per second)	Number of completed instances of synchronous BPEL processes in this BPEL domain.
Host	Host machine on which Oracle BPEL Process Manager is running
Maximum Asynchronous Process Latency Time (msecs)	Maximum latency time among all the asynchronous BPEL processes in this BPEL domain
Maximum Synchronous Process Latency Time (msecs)	Shows the maximum latency time among all the synchronous BPEL processes in this BPEL domain.
Minimum Asynchronous Process Latency Time (msecs)	Shows the minimum latency time among all the asynchronous BPEL processes in this BPEL domain.
Minimum Synchronous Process Latency Time (msecs)	Shows the minimum latency time among all the synchronous BPEL processes in this BPEL domain.

Table 12–3 (Cont.) BPEL Domain Statistics

Metric	Description
Number of Active Processes	Number of currently active processes in this BPEL domain
Number of Closed Instances	Total number of closed instances of BPEL processes in this BPEL domain
Number of Open Instances	Total number of open instances of BPEL processes in this BPEL domain
Process	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.

12.4 Response

This category contains the response metrics for Oracle BPEL Process Manager.

12.4.1 UpDown Status

This metric shows whether Oracle BPEL Process Manager is up or down. If the value is 1, Oracle BPEL Process Manager 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 12–4 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 Sample	<	Not Defined	1	1	Not Defined

User Action

If the Oracle BPEL Process Manager is down, restart it using the Home page for the J2EE container (OC4J_BPEL) in which Oracle BPEL Process Manager is deployed.

12.5 Scheduled

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

The following table lists the metrics and their associated descriptions. These metrics are intended for informational purposes only.

Table 12–5 Scheduled Metrics

Metric	Description
Activity Execution Requests	Number of scheduled activity execution requests for the BPEL domain
BPEL Domain	Name of the BPEL domain

Table 12–5 (Cont.) Scheduled Metrics

Metric	Description
BPEL Domain Management Requests	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	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	Number of scheduled messages related to callback resolution and completion for the BPEL domain
Host	Host machine on which Oracle BPEL Process Manager is running
New Instance Requests	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	OC4J Process
Transaction Allocation Activity	Number of scheduled messages that control the business transaction protocol (BTP) transactions for the BPEL domain.

12.6 Thread Allocation Activity

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

The following table lists the metrics and their associated descriptions. These metrics are intended for informational purposes only.

Table 12–6 Thread Allocation Activity

Metric	Description
Active Threads	Number of currently active threads for this domain
Average JMS Thread Allocation Overhead (msecs)	Average time in milliseconds spent allocating threads to process JMS messages for a BPEL domain.
Average Lifetime of Allocated Threads (msecs)	Average lifetime in milliseconds of the allocated threads for a BPEL domain.
Average Number of Message Processes Per Thread	Average number of messages processed per thread for a BPEL domain.
BPEL Domain	Name of the BPEL domain
Highest Number of Active Threads	Highest number of active threads this domain has had so far
Host	Host machine on which Oracle BPEL Process Manager is running
Load Factor (Number of Scheduled Messages/Number of Working Messages	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	OC4J process
Total Number of Threads Allocated Over Time	Total number of threads allocated over time for this domain

13

Oracle Application Server

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

13.1 Application Response

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

13.1.1 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 the 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. Alternatively, you can change the Application URL by clicking **Change Application URL** on the Application Server Home page in the Grid Control 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 13–1 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	>	Not Defined	Not Defined	2	The average response time for the application URL is %value% seconds

User Action

If you are using Grid Control, and the response time of the Availability URL exceeds the threshold, investigate other related performance metrics, such as the application server Resource Usage metrics, to review the load on the host computer. Also, check for alerts that may have been generated by specific application server components, such as the HTTP Server instance, OC4J instances, or the host computer.

13.1.2 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 the Oracle Management Agent can access the Application URL; a value of zero (0) indicates that the Application URL cannot be accessed successfully.

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

If the Application URL Status is down, first verify that the Application URL is a valid URL that can be used to measure the availability and responsiveness of the application server instance. If it is a valid URL, especially one that was available previously, the down status indicates that the Oracle HTTP Server for the instance is now unavailable and unable to render the Application URL.

13.2 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 the Oracle Management Agent (agent), the Oracle Application Server Control process (console), and the Oracle Management Agent watchdog process (watchdog).

13.2.1 Component CPU Usage (%)

This metric represents the percentage of host CPU used by the selected application server component.

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 13–2 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
9.0.4.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	CPU Utilization of %name% is %value%%

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "Component 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 "Component Name" object, use the Edit Thresholds page.

User Action

You can use this metric to determine which components are using the most CPU on your system. If one or more components are consuming a large amount of CPU, consider changing the component configuration settings to reduce the amount of CPU consumption.

13.2.2 Component Memory Usage (%)

This metric represents the percentage of host memory used by the selected application server component.

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 13–3 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
9.0.4.x	Every 5 Minutes	After Every 12 Samples	>	80	90	2	Memory Utilization of %name% is %value%%%

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "Component 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 "Component Name" object, use the Edit Thresholds page.

User Action

You can use this metric to determine which components are using the most memory on your system. If one or more components are consuming a large amount of memory, consider changing the component configuration settings to reduce the amount of memory consumption.

13.2.3 Component Memory Usage (MB)

This metric represents the memory usage in megabytes for the selected component.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

User Action

You can use this metric to determine which components are using the most memory on your system. If one or more components are consuming a large amount of memory, consider changing the component configuration settings to reduce the amount of memory consumption.

13.2.4 Component Start Time (ms since epoch)

This metric is for internal use only.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

13.2.5 Component Up Time (ms)

This metric is for internal use only.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

13.2.6 Component Up/down Status

This metric indicates 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 the "About Availability" topic in the online help for more information about how Enterprise Manager determines the availability of an Oracle Application Server or Enterprise Manager component,

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

13.2.7 Free Memory (%)

This metric 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.

Note: You can view the value of this metric for each of the application server components. However, the value of this metric applies to the memory for the host where the application server is running. As a result, the value is the same for all the components that are running on the host.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

User Action

If the percentage of Free Memory is low, compare this metric value to Component Memory Usage (%), which shows the percentage of memory used by each of the application server components. You can then identify which components are using the most memory on the system.

To troubleshoot memory issues, check the list of top processes to determine which system processes are using the most memory. This value is also available on the Host home page. To obtain more detailed hardware information about the host computer, see one of the following help topics:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.2.8 Free Memory (MB)

This metric 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.

Note: You can view the value of this metric for each of the application server components. However, the value of this metric applies to the memory for the host where the application server is running. As a result, the value is the same for all the components that are running on the host.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

User Action

Compare to "Component Memory Usage (MB)", which shows the amount of memory being used by the various components on the host. This can help you identify which components are using the most memory.

In addition, check the list of top processes to determine which system processes are using the most memory. This value is also available on the Host home page. To obtain more detailed hardware information about the host computer, see one of the following topics in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.2.9 Idle CPU Time (%)

This metric represents the percentage of time that the CPU was idle and the system did not have an outstanding disk I/O request.

Note: You can view the value of this metric for each of the application server components. However, the value of this metric applies to the memory for the host where the application server is running. As a result, the value is the same for all the components that are running on the host.

You can also review the CPU Idle time for the host target. For more information, navigate to the Host home page and click the appropriate link to view all the metrics for the host target.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

User Action

If the amount of idle CPU is low, review the Component CPU Usage (%) metric to identify which application server components are consuming the most CPU.

In addition, check the Other CPU Usage (%) metric to determine if other processes, besides those of the application server, are using large amounts of CPU.

13.2.10 Total Memory (MB)

This metric shows you the total physical memory available on the application server host computer.

Note: You can view the value of this metric for each of the application server components. However, the value of this metric applies to the memory for the host where the application server is running. As a result, the value is the same for all the components that are running on the host.

This value is also available on the Host home page. To obtain more detailed hardware information about the host computer, see one of the following help topics:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x	Every 5 Minutes

13.3 Resource Usage

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

13.3.1 CPU Idle Time (%)

This metric 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.

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

If the amount of idle CPU is low, review the Component CPU Usage (%) metric to identify which application server components are consuming the most CPU.

In addition, check the Other CPU Usage (%) metric to determine if other processes, besides those of the application server, are using large amounts of CPU.

13.3.2 CPU Usage (%)

Use this metric to determine the percentage of the host CPU being used by the application server and all its configured and enabled components.

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 13–4 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	>	70	75	2	CPU Utilization is %value%%

User Action

If you are using Grid Control and the CPU Usage for the application server exceeds the alert threshold, check the individual application server components to see if a particular component is consuming excessive amounts of CPU. For more information, see 'Viewing the Performance of Your Application Server' topic in the Grid Control online help. Also, check for alerts that may have been generated by specific application server components, such as the HTTP Server instance, OC4J instances, or the host computer.

Navigate to the host home page and review the top processes to see if you can identify which processes are consuming the most CPU. For more information, see the following topics in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.3 Free Memory (%)

This metric 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.

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

Compare to Component Memory Usage (%) to determine which application server components are using the most memory. Unlike the Free Memory (%) Metric, you can set thresholds for the Component Memory Usage (%) and Memory Usage (%) metrics and be alerted when they exceed the threshold.

To troubleshoot memory issues, you can also check the list of top processes to determine which system processes are using the most memory. To obtain more detailed hardware information about the host computer, see one of the following in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.4 Free Memory (MB)

This metric 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.

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

If the free memory on the application server host is too low, review the Component Memory Usage (%) metrics to determine which application server components are using the most memory. Unlike the Free Memory (MB) metric, you can set thresholds for the Component Memory Usage (%) and Memory Usage (%) metrics and be alerted when they exceed the threshold.

To troubleshoot memory issues, check the list of top processes to determine which system processes are using the most memory. To obtain more detailed hardware information about the host computer, see one of the following in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.5 Memory Usage (%)

This metric shows you the percentage of host memory being used by the application server and its configured and enabled components.

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 13–5 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	>	80	90	2	Memory Utilization is %value%%

User Action

To troubleshoot memory issues, check the memory usage of individual application server components and then check the list of top processes to determine which system processes are using the most memory. To obtain more detailed hardware information about the host computer, see one of the following in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.6 Memory Usage (MB)

This metric shows you the amount of memory (in megabytes) being used by the application server and its configured and enabled components.

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

Compare this metric with Memory Usage (%), which measures the percentage of host memory being used by the application server. Unlike the Memory Usage (MB) metric, you can set a threshold for the Memory Usage (%) metric and be alerted when it exceeds its threshold.

To troubleshoot memory issues, check the memory usage of individual application server components and then check the list of top processes to determine which system processes are using the most memory. To obtain more detailed hardware information about the host computer, see one of the following in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.7 Other CPU Usage (%)

This metric 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.

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

Navigate to the host home page and review the top processes to see if you can identify which processes are consuming the most CPU. To obtain more detailed hardware information about the host computer, see one of the following in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.8 Other Memory Usage (%)

This metric 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.

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

Navigate to the host home page and review the top processes to see if you can identify which processes are consuming the most memory. To obtain more detailed hardware information about the host computer, see one of the following in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.9 Other Memory Usage (MB)

This metric 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.

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

Navigate to the host home page and review the top processes to see if you can identify which processes are consuming the most memory. To obtain more detailed hardware information about the host computer, see one of the following in the online help:

- If you are using Grid Control, see the "Viewing Host Target Overview Information" topic.
- If you are using Application Server Control, see the "Obtaining Information about the Host Computer" topic.

13.3.10 Total Memory (MB)

This metric shows you the total physical memory available on the application server host computer.

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

13.4 Response

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

13.4.1 UpDown Status

This metric indicates 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.

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 13–6 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 application server instance is down

User Action

If the UpDown Status is down, verify whether the entire application server is down or a subset of the application server components is down. In other words, if one OC4J instance is down, the UpDown status will appear as down, even if the rest of the other application server components are up and running.

If the application server instance is down, you can restart the application server from the Application Server Control Console.

If you are using Grid Control, you can access the Application Server Control Console from the Grid Control Console by clicking **Administer** on the Application Server home page in the Grid Control Console.

To investigate why the server is down, check for alerts in the Grid Control Console that may have been generated by the application server or by specific server components, such as the HTTP Server instance, OC4J instances, or the host computer.

If you have shut down a particular application server component to save memory, consider disabling the component so its UpDown Status will not affect the overall status of the application server.

14

Oracle Forms

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

14.1 Jvm Controllers

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

Table 14–1 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

14.2 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 14–2 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 14–2 (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.

14.3 Load

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

14.3.1 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 14–3 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.

14.3.2 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 14–4 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.

14.3.3 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.

14.4 Response

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

14.4.1 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 14–5 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.

14.4.2 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 14–6 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.

14.5 Sessions

The following table lists the metrics.

Table 14–7 Sessions Metrics

Metric
Connect Time
IP
Session CPU (%)

Table 14–7 (Cont.) Sessions Metrics

Metric
Session Memory (%)
User Name

15

Oracle HTTP Server

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 the Oracle Management Agent.

15.1 Host Metrics

Metrics for the host on which the HTTP Server is running.

15.1.1 Name

This is the host name.

15.2 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.

The following table lists the metrics and their descriptions.

> **Note:** For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 30 minutes.

Table 15–1 mod_oc4j Destination Metrics

Metric	Description
Failover.count, ops	Total number of failovers for this destination
Percentage of Requests that Were Failures	See Section 15.2.1, "Percentage of Requests that Were Failures"
Percentage of Requests that Were Session Requests	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	Number of requests routed per second by mod_oc4j to this particular OC4J instance
Total Failed Requests to Destination	Total number of failed requests routed by mod_oc4j to this particular OC4J instance
Total Successful Requests to Destination	Total number of successful requests routed by mod_oc4j to this particular OC4J instance

15.2.1 Percentage of Requests that Were Failures

The percentage of the total number of requests routed by mod_oc4j to this particular OC4J instance that were failed 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 15–2 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
9.0.4.x and 10.1.2.x	Every 30 Minutes	After Every Sample	>	1	1.5	2	The percentage of requests that resulted in failures is %value%%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "OC4J Instance Name(s)" object.

If warning or critical threshold values are currently set for any "OC4J Instance Name(s)" 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 "OC4J Instance Name(s)" object, use the Edit Thresholds page.

15.3 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.

The following table lists the metrics and their descriptions.

Note: For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

Table 15–3 mod_oc4j General Metrics

Metric	Description
Percentage of Request Resulted in Internal Errors	See Section 15.3.1, "Percentage of Requests Resulted in Internal Errors"
Percentage of Requests that Were Failures	Section 15.3.2, "Percentage of Requests that Were Failures"
Percentage of Requests that Were Session Requests	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	Total number of requests routed per second for all the mount points

15.3.1 Percentage of Requests Resulted in Internal Errors

The percentage of total number of requests routed for all the Mount Points that resulted in internal errors.

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 15–4 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
9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	1	1.5	2	The percentage of requests that resulted in internal errors is %value%%%

15.3.2 Percentage of Requests that Were Failures

The percentage of total number of requests routed for all the mount points that were failed 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 15–5 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
9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	1	1.5	2	The percentage of requests that resulted in failures is %value%%%

15.4 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.

The following table lists the metrics and their descriptions.

Note: For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 30 minutes.

Table 15–6 mod_oc4j MountPt Metrics

Metric	Description
Failover.count, ops	Total number of failovers for this mount point
OC4J Instance Name(s)	OC4J Instance(s) to which the requests were routed
Percentage of Requests that Were Failures	Section 15.4.1, "Percentage of Requests that Were Failures"
Percentage of Requests that Were Session Requests	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	Number of requests routed per second by mod_oc4j for this particular mount point
Total Failed Requests to Mount Point	Total number of failed requests routed by mod_oc4j for this particular Mount Point
Total Successful Requests to Mount Point	Total number of successful requests routed by mod_oc4j for this particular Mount Point

15.4.1 Percentage of Requests that Were Failures

The percentage of total number of requests routed by mod_oc4j for this particular mount point that were failed 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 15–7 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
9.0.4.x and 10.1.2.x	Every 30 Minutes	After Every Sample	>	1	1.5	2	The percentage of requests that resulted in failures is %value%%

Multiple Thresholds

For this metric you can set different warning and critical threshold values for each "Mount Point" object.

If warning or critical threshold values are currently set for any "Mount Point" 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 "Mount Point" object, use the Edit Thresholds page.

15.5 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.

The following table lists the metrics.

> **Note:** For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

Table 15–8 ,mod_oc4j Request Failure Causes Metrics

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

15.6 modplsql_Cache Metrics

Status information for the 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.

The following table lists the metric, description, and user action where available.

> **Note:** For target versions 9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

Table 15–9 modplsql_Cache Metrics

Metric	Description	User Action
cacheStatus.value	Indicates the status of each cache. Either Up or Down.	Typically this value will be Up. If down verify whether caching is enabled in the mod_plsql cache configuration. If enabled and down verify that the directory in the cache configuration exists and has the correct read/write permissions for the user running this OracleAS.
hits.count, ops	Number of requests that resulted in a cache hit	Actions based on this are dependent on the application, the number of distinct users and cacheability of content.
hits.percentage	Percentage of requests that resulted in a cache hit	Actions based on this are dependent on the application, the number of distinct users and cacheability of content.
modplsql	modplsql	Not Applicable
Name	Name	Not Applicable
newMisses.count, opt	Number of requests that resulted in a cache miss, where the requested content was not in the cache at all.	Actions based on this are dependent on the application, the number of distinct users and cacheability of content.
newMisses.percentage	Percentage of requests that resulted in a cache miss, where the requested content was not in the cache at all.	Actions based on this are dependent on the application, the number of distinct users and cacheability of content.
requests.count	Number of requests each cache has serviced since startup	The volume of requests here will be dependent on the usage of the site and volume of calls to cacheable mod_plsql content and number of distinct user sessions. High or low values here need to be correlated to the usage of the application, the number of distinct users and cacheability of content
staleMisses.count, ops	Number of requests that resulted in a cache miss, where the requested content was in the cache but was stale.	Actions based on this are dependent on the application and number of distinct users and cacheability of content.
staleMisses.percentage	Percentage of requests that resulted in a cache miss, where the requested content was in the cache but was stale	Actions based on this are dependent on the application and number of distinct users and cacheability of content

15.7 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.

The following table lists the metric, description, and user action where available.

Note: For target versions 9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

Table 15–10 modplsql_HTTPResponseCodesMetrics

Metric	Description	User Action
HTTP 200s	Count of successful mod_plsql requests returning a 200 HTTP response code	The value indicates successful responses. Customers should not take any action based on the value for this metric.
HTTP 200s percentage	Percentage of successful mod_plsql requests returning a 200 HTTP response code.	The value indicates the percentage of successful responses. Customers should not take any action based on the value for the metric.
HTTP 300s Resolved	Count of successful mod_plsql requests returning a 300 HTTP response code.	The value indicates successful responses. Customers should not take any action based on the value for this metric.
HTTP 300s resolved percentage	Percentage of successful mod_plsql requests returning a 300 HTTP response code.	The value indicates the percentage of successful responses. Customers should not take any action based on the value for the metric.
HTTP 400s	Count of unsuccessful mod_plsql requests returning a 400 HTTP response code.	If there is a high volume of failures, the Apache error logs should be examined to determine which requests are failing. For example, a DAD could be misconfigured, or the Database housing a specific mod_plsql DAD could be unavailable.
HTTP 400s percentage	See Section 15.7.1, "HTTP 400s percentage"	See Section 15.7.1, "HTTP 400s percentage"
HTTP 500s	Count of unsuccessful mod_plsql requests returning a 500 HTTP response code.	If there is a high volume of failures, the Apache error logs should be examined to determine which requests are failing. For example, a DAD could be misconfigured, or the Database housing a specific mod_plsql DAD could be unavailable.
HTTP 500s percentage	See Section 15.7.2, "HTTP 500s percentage"	Section 15.7.2, "HTTP 500s percentage"
Total HTTP responses	Count of mod_plsql requests	Customers should not take any action based on the value of this metric.

15.7.1 HTTP 400s percentage

Percentage of unsuccessful mod_plsql requests returning a 400 HTTP response code.

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 15–11 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	HTTP 400 response codes are %value% %

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "Full 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 "Full Name" object, use the Edit Thresholds page.

User Action

If there is a high percentage of failures, the Apache error logs should be examined to determine which requests are failing. For example, a DAD could be misconfigured, or the Database housing a specific mod_plsql DAD could be unavailable.

15.7.2 HTTP 500s percentage

Percentage of unsuccessful mod_plsql requests returning a 500 HTTP response code.

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 15–12 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	HTTP 500 response codes are %value% %

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "Full 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 "Full Name" object, use the Edit Thresholds page.

User Action

If there is a high percentage of failures, the Apache error logs should be examined to determine which requests are failing. For example, a DAD could be misconfigured, or the Database housing a specific mod_plsql DAD could be unavailable.

15.8 modplsql_RequestGroupingSQLErrorList Metrics

The following table lists the metrics.

Note: For target versions 9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

Table 15–13 modplsql_RequestGroupingSQLErrorList Metrics

Metric
errorCount.count
lastErrorDate.value
LastErrorRequest.value
LastErrorText.value
Name

15.9 modplsql_RequestLast10SQLErrorList Metrics

This category of metrics provides information about PL/SQL exception stacks.

Note: For target versions9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

Table 15–14 modplsql_RequestLast10SQLErrorList Metrics

Metric
errorDate.value
errorRequest.value
errorText.value
Name

15.10 OHS Child Process Metrics

This metric category contains metrics about Oracle HTTP Server child processes. The following table lists the metrics and their descriptions.

Table 15–15 OHS Child Process Metrics

Metric	Description
Process ID	PID of the process servicing a request

Table 15–15 (Cont.) OHS Child Process Metrics

Metric	Description
Processing Time (msecs)	Time spent processing the request
Processing Time (usecs)	Time spent processing the request
Slot ID	Position of the process in Oracle HTTP Server's internal data structures
Status	The state of processing. Can be: ■ keepalive: The server is servicing a keepalive (persistent HTTP) request. ■ dead: The server is down. ■ starting: The server is spawning. ■ ready: The server is ready and waiting for a connection. ■ reading: The server is reading data from a client (browser). ■ writing: The server is writing data to a client (browser). ■ logging: The server is writing to a log file. ■ dns_wait: The server is performing a DNS lookup. ■ finishing: The server is performing a graceful restart (without dropping all pending connects).
url.value	URL being processed

15.11 OHS General Metrics

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

Note: For target versions 9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

15.11.1 Start Time (ms since Epoch)

This metric contains the start time of the HTTP Server. It is represented in milliseconds since the Unix epoch.

The UNIX epoch is January 1, 1970.

15.12 OHS Module Metrics

Contains metrics about Oracle HTTP Server (OHS) modules. 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 15–16 OHS Module Metrics

Metric	Description
Active Requests for a Module	The number of requests currently being processed by this module's handler

Table 15–16 (Cont.) OHS Module Metrics

Metric	Description
Request Handling Throughput, for a Module (requests per second)	This rate metric tells you 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. This metric helps you determine the frequency of requests currently being served by the module. If the request handling throughput is very low, either there is no activity on the Web server for the module, or there is something else going on that is preventing the module from processing requests.
Request Handling Time, for a Module (seconds)	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.

15.13 OHS Process Metrics

This metric category contains metrics about DMS processes.

15.13.1 Heap Usage (MB)

Displays (in MB) the total amount of heap space used since the server was started.

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 15–17 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	Heap Usage is %value%MB

15.14 OHS Response Code Metrics

This metric category includes metrics about the count of Oracle HTTP Server response codes since the Application Server was last restarted. The following table lists the metrics.

Note: For target versions 9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 15 minutes.

Table 15–18 OHS Response Code Metrics

Metric
HTTP 4xx errors

Table 15–18 (Cont.) OHS Response Code Metrics

Metric
HTTP 5xx errors

15.15 OHS Server Metrics

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

Note: For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 30 minutes.

15.15.1 Active HTTP Connections

This metric shows the number of open HTTP connections.

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 15–19 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 5 Minutes	After Every 12 Samples	>	7500	8000	2	The number of active connections is %value%

15.15.2 Active HTTP Requests

The number of requests currently being serviced.

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 15–20 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 5 Minutes	After Every 12 Samples	>	7500	8000	2	The number of active requests is %value%

15.15.3 Busy Processes

The number of child servers that are busy.

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; 9.0.4.x and 10.1.2.x	Every 5 Minutes

15.15.4 Connection Duration (seconds)

This metric 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.

Metric Summary

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

Target Version	Collection Frequency
All Versions	Every 5 Minutes

15.15.5 Error Rate (%)

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.

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 15–21 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	1	1.5	2	The percentage of requests that resulted in errors is %value%%%

User Action

Use the Enterprise Manager Application Server Control Console to examine the errors in this HTTP Server's error log file. For information about viewing HTTP Server error logs in the Enterprise Manager Application Server Control, see the "About the HTTP Server Log Files" topic in the Enterprise Manager Application Server Control help system.

15.15.6 Idle Processes

The number of child servers that are ready.

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; 9.0.4.x and 10.1.2.x	Every 5 Minutes

15.15.7 Percentage of Busy Processes

Shows the percentage of Oracle HTTP Server child processes that are currently servicing 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 15–22 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	85	90	2	The percentage of processes that are busy handling requests is %value%%

User Action

To tune the percentage of Oracle HTTP Server child processes that are currently servicing requests, you can change the values for the MaxClients, MinSpareServers, and MaxSpareServers directives.

You can change the value of the MaxClients directive by modifying the value of the **Maximum Requests Processed Simultaneously** field on the HTTP Server Server Properties page in the Enterprise Manager Application Server Control Console. See the "Modifying Server Properties" topic in the Enterprise Manager Application Server Control help system for more information about accessing the HTTP Server Server Properties page in the Enterprise Manager Application Server Control Console. Click **Help** on the HTTP Server Server Properties page for more information about using that page.

The MinSpareServers and MaxSpareServers directives can be modified on the Advanced Server Properties page in the Enterprise Manager Application Server Control Console. See the "Editing the Server Configuration Files" topic in the Enterprise Manager Application Server Control help system for more information about accessing the HTTP Server Advanced Server Properties page in the Enterprise Manager Application Server Control Console. Click **Help** on the HTTP Server Advanced Server Properties page for more information about using that page to edit the directives in the httpd.conf file.

For more information about the MaxClients, MinSpareServers, and MaxSpareServers directives, go to the Apache HTTP Server Documentation section of the http://www.apache.org Web site, then navigate to the Directives information.

15.15.8 Request Processing Time (seconds)

This metric 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.

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 15–23 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 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The average processing time for a request is %value% seconds

15.15.9 Request Throughput (requests per second)

This rate metric tells you 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.

This metric tells you how much of a load this HTTP Server is handling.

Metric Summary

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

Target Version	Collection Frequency
All Versions	Every 5 Minutes

15.15.10 Response Data Processed (KB per response)

This metric tells you 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.

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 15–24 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The average size of a request is %value%KB

15.15.11 Response Data Throughput (KB per second)

This metric tells you 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.

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; 9.0.4.x and 10.1.2.x	Every 5 Minutes

User Action

This metric can help you identify changes in the volume of information being served by the HTTP Server over time.

15.16 OHS Virtual Host Metrics

The metrics in this metric category provide virtual host information.

Note: For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 30 minutes.

15.16.1 Active Requests for a Virtual Host

Total number of active requests currently being processed by the virtual host.

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 15–25 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	7500	8000	2	The number of active requests for virtual host %name% is %value%

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "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 "Name" object, use the Edit Thresholds page.

15.16.2 Request Processing Time for a Virtual Host (seconds)

This metric 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.

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 15–26 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The average processing time for a request for virtual host %name% is %value% seconds

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "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 "Name" object, use the Edit Thresholds page.

15.16.3 Request Throughput for a Virtual Host (requests per second)

This rate metric tells you 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.

This metric tells you how much of a load this virtual host is handling.

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; 9.0.4.x and 10.1.2.x	Every 5 Minutes

15.16.4 Response Data Processed for a Virtual Host (KB per response)

This metric tells you 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.

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 15–27 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	The average size of a request for virtual host %name% is %value%KB

Multiple Thresholds

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

If warning or critical threshold values are currently set for any "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 "Name" object, use the Edit Thresholds page.

15.16.5 Response Data Throughput for a Virtual Host (KB per second)

This metric tells you 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.

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; 9.0.4.x and 10.1.2.x	Every 5 Minutes

User Action

This metric can help you identify changes in the volume of information being served by the virtual host over time.

15.16.6 Virtual Host Type

The type of virtual host, either IP_DEFAULT, NAME_DEFAULT, IP_BASED, or NAME_BASED.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x and 10.1.2.x	Every 5 Minutes

15.17 Process Metrics

Metrics for processes. The following table lists the metrics and their descriptions.

Table 15–28 Process Metrics

Metric	Description
Host	Name of the host on which the process is running
Name	Process name

15.18 Resource Usage

The metrics in this metric category provide information about CPU and memory usage. The following table lists the metrics and their descriptions.

Note: For target versions 9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minutes.

Table 15–29 Resource Usage Metrics

Metric	Description
CPU Idle Time (%)	Displays the percentage of system CPU time that is idle
CPU Usage (%)	See Section 15.18.1, "CPU Usage (%)"
Free Memory (%)	Shows the percentage of free physical memory for the system
Free Memory (MB)	Shows the amount of free physical memory (ion MB) for the system
Memory Usage (%)	See Section 15.18.2, "Memory Usage (%)"
Memory Usage (MB)	Shows the amount of physical memory (in MB) being used by Oracle HTTP Server
Other CPU Usage (%)	See Section 15.18.3, "Other CPU Usage (%)"

Table 15–29 (Cont.) Resource Usage Metrics

Metric	Description
Other Memory Usage (%)	See Section 15.18.4, "Other Memory Usage (%)"
Other Memory Usage (MB)	See Section 15.18.5, "Other Memory Usage (MB)"
Start Time (ms since Epoch)	Start time of the HTTP Server. It is represented in milliseconds since the UNIX epoch. For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 5 minute The UNIX epoch is January 1, 1970.
Total Memory (MB)	Amount of physical memory (in MB) for the system

15.18.1 CPU Usage (%)

Shows the percentage of the CPU usage by Oracle HTTP 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 15–30 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	Not Defined	Not Defined	2	CPU Utilization is %value%%%

15.18.2 Memory Usage (%)

Shows the percentage of the physical memory used by Oracle HTTP 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 15–31 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
9.0.2.x and 9.0.3.x; 9.0.4.x and 10.1.2.x	Every 5 Minutes	After Every 12 Samples	>	80	90	2	Memory Utilization is %value%%%

15.18.3 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.

User Action

Navigate to the host Home page in the Application Server Control and review the top processes to see if you can identify which processes are consuming the most CPU. Or, navigate to the host Performance page in the Grid Control and view the processes that are consuming the most CPU.

15.18.4 Other Memory Usage (%)

This metric 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.

User Action

Navigate to the host Home page in the Application Server Control and review the top processes to see if you can identify which processes are consuming the most memory. Or, navigate to the host Performance page in the Grid Control and view the processes that are consuming the most memory.

15.18.5 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.

User Action

Navigate to the host Home page in the Application Server Control and review the top processes to see if you can identify which processes are consuming the most memory. Or, navigate to the host Performance page in the Grid Control and view the processes that are consuming the most memory.

15.18.6 Start Time (ms since Epoch)

This metric contains the start time of the HTTP Server. It is represented in milliseconds since the Unix epoch.

The Unix epoch is January 1, 1970.

Metric Summary

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

Target Version	Collection Frequency
9.0.4.x and 10.1.2.x	Every 5 Minutes

15.19 Response

Contains metrics that provide basic information about the HTTP Server.

Note: For target versions 9.0.4.x and 10.1.2.x, the collection frequency for each metric is every 30 minutes.

15.19.1 UpDown Status

Shows whether the HTTP 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 15–32 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 60 Samples	=	Not Defined	0	1	The HTTP Server instance is down

User Action

If the HTTP Server is down, start it using the Home page for the HTTP Server in the Enterprise Manager Application Server Control.

16

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.

16.1 (Critical Event) Super User Failed Logins

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

16.1.1 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 16–1 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

16.2 (Critical Event) Super User Successful Logins

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

16.2.1 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 16–2 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%

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

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

16.3.1 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 16–3 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!

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

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

16.4.1 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 16–4 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!

16.5 (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 16–5 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

16.6 (Historical Critical Events) System Resource Events

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

Table 16–6 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

16.7 (Historical Resource Statistics) LDAP Server and System Memory

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

Table 16–7 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 16–7 (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

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

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

Table 16–8 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

16.9 (Resource Statistics) LDAP Server Memory Growth

Provides information about Oracle Internet Directory server memory growth.

16.9.1 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 16–9 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%

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

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

16.10.1 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 16–10 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%

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

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

16.11.1 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 16–11 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%

16.12 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 16–12 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.

16.13 Directory Integration Profiles

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

Table 16–13 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)

16.14 Directory Integration Server

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

Table 16–14 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

16.15 Historical LDAP Entry Cache Hit Ratio

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

Table 16–15 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

16.16 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 16–16 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

16.17 Historical LDAP Logon Session Statistics

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

Table 16–17 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

16.18 Historical LDAP Operations Profile

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

Table 16–18 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

16.19 LDAP Entry Cache Hit Ratio

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

16.19.1 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 16–19 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%

16.20 LDAP Load

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

16.20.1 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 16–20 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%

16.21 LDAP Operations Profile

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

16.21.1 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 16–21 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%

16.21.2 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 16–22 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%

16.21.3 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 16–23 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%

16.21.4 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 16–24 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%

16.21.5 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 16–25 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%

16.21.6 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 16–26 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%

16.22 LDAP Response

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

16.22.1 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 16–27 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%

16.23 LDAP Server Resource Usage

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

16.23.1 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

16.23.2 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 16–28 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%

16.24 LDAP Server Total User Sessions

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

16.24.1 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 16–29 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%

16.25 Logon Session Statistics

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

16.25.1 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 16–30 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%

16.26 Response

For Oracle internal use only.

16.26.1 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 16–31 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

16.26.2 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

16.27 Running Instances of LDAP Replication Server

Provides information about running instances of the directory replication server.

Table 16–32 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

16.28 Running Instances of LDAP Server

Provides information about running instances of Oracle Internet Directory servers.

Table 16–33 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 16–33 (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

16.29 Stopped Instances of LDAP Server

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

Table 16–34 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

16.30 Total Memory Usage

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

16.30.1 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 16–35 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

17

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.

17.1 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.

17.2 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.

17.3 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 17–1 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%

17.4 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 17–2 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

17.5 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 17–3 Pimap Site Snapshot Metrics

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

17.6 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 17–4 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

17.7 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.

18

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.

18.1 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.

18.1.1 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.

18.1.2 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 18–1 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.

18.1.3 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

19

Portal

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

19.1 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 19–1 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

19.2 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 19–2 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.

19.3 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 19–3 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 19.3.1, "Database Provider Portlets Maximum Time (msec)"

Table 19–3 (Cont.) Database Providers Metrics

Metric	Description
Database Provider Portlets Minimum Time (msec)	Minimum time (in ms) to request database portlets
Database Provider Status	Section 19.3.2, "Database Provider Status"
Offline	Indicates whether the database provider is currently offline
Percentage of Database Provider HTTP 500 Response codes	Section 19.3.3, "Percentage of Database Provider HTTP 500 Response codes"
Requests	Number of requests made to this database portlet
Slowest Average Portlet Time (msec)	Section 19.3.4, "Slowest Average Portlet Time (msec)"

19.3.1 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 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 15 Minutes	After Every 12 Samples	>	6000	10000	1	The maximum portlet response timing for this provider is unacceptable.

19.3.2 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 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 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.

19.3.3 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 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 15 Minutes	After Every 12 Samples	>	10	15	1	The percentage of portlet requests returning unsuccessful is unacceptable for this provider.

19.3.4 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 19–7 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.

19.4 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 19–8 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 19.4.1, "Percentage of Requests Timing Out in the Page Engine Queue"

Table 19–8 (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

19.4.1 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 19–9 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.

19.5 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 19–10 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.

19.6 Portal Homepage Metric

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

19.6.1 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 19–11 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.

19.6.2 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 19–12 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.

19.7 Portal Metadata Repository Version Metric

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

19.7.1 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.

19.8 Response Metric

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

19.8.1 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 19–13 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.

19.9 Syndication Server Status Metric

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

19.9.1 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.

19.10 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.

19.10.1 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.

19.11 Ultra Search Status Metric

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

19.11.1 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 19–14 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.

19.12 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 19–15 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 19–15 (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

19.13 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 19–16 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 19–16 (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 19.13.1, "Percentage of Web Provider HTTP 500 Response codes"
Requests	Number of requests serviced by this Web provider
Slowest Average Portlet Time (msec)	See Section 19.13.2, "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 19.13.3, "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 19.13.4, "Web Provider Status"

19.13.1 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 19–17 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.

19.13.2 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 19–18 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.

19.13.3 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 19–19 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.

19.13.4 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 19–20 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.

19.14 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 19–21 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 19–21 (Cont.) WSRP Portlet Metrics

Metric	Description
Slowest Average Portlet Time (msec)	See Section 19.14.1, "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

19.14.1 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 19–22 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.

19.15 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 19–23 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 19.15.1, "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 19.15.2, "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 19.15.3, "WSRP Provider Status"

19.15.1 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 19–24 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.

19.15.2 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 19–25 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.

19.15.3 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 19–26 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.

20

Reports Server

You can use Oracle Enterprise Manager to monitor and manage Oracle Reports Server.

20.1 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 20–1 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.

20.2 Current Jobs

Provides information about the currently running jobs in the Reports Server. The following table lists the metrics and their descriptions.

Table 20–2 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 20–2 (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

20.3 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 20–3 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

20.4 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 20–4 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.

20.5 Finished Jobs

Provides a detailed look at all successfully completed jobs in the Job Queue on the selected Reports Server.

Table 20–5 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

20.6 Response

Provides the average number of milliseconds it takes for the selected Reports Server to process a request from the client.

20.6.1 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 20–6 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

20.6.2 Server Type

For all target versions, the collection frequency for this metric is every 5 minutes.

20.7 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 20–7 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.

20.8 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 20–8 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 20–8 (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

20.9 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 20–9 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 20.9.1, "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 20.9.2, "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 20–9 (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

20.9.1 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 20–10 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

20.9.2 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 20–11 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

21

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.

21.1 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 21–1 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

21.2 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 21–2 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

21.3 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 21–3 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

21.4 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 21–4 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

21.5 SSO Status Metric

The SSO Status metrics allow you to monitor the status of the OracleAS Single Sign-On Server.

21.5.1 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 21–5 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.

22

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.

22.1 Cache Performance

This metric serves as a container for the Cache Performance metrics.

22.1.1 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 22–1 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.

22.1.2 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**).

22.1.3 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.

22.1.4 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.

22.1.5 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.

22.1.6 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.

22.1.7 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.

22.1.8 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 22–2 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.

22.1.9 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.

22.1.10 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 22–3 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.

22.1.11 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.

22.1.12 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 22–4 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.

22.1.13 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.

22.1.14 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**).

22.1.15 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 22–5 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.

22.1.16 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.

22.1.17 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.

22.1.18 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 22–6 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**).

22.1.19 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.

22.1.20 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 22–7 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.

22.1.21 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.

22.1.22 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.

22.2 ESI Errors

These metric columns provide information about Edge Side Includes (ESI).

22.2.1 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.

22.2.2 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.

22.3 Resource Usage

These metric columns provide information about CPU and memory usage.

22.3.1 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.

22.3.2 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.

22.3.3 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.

22.3.4 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.

22.3.5 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.

22.3.6 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.

22.3.7 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.

22.3.8 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 22–8 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.

22.3.9 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 22–9 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.

22.3.10 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.

22.4 Response

This category indicates whether the OracleAS Web Cache instance is up and running or down and unavailable.

22.4.1 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 22–10 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

22.5 Server Performance

The columns in this metric provide information about the performance of origin server.

22.5.1 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**).

22.5.2 Origin Server Name

The host name of the origin server.

User Action

No user action necessary. This metric is intended for informational purposes only.

22.5.3 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.

22.5.4 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.

22.5.5 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.

22.5.6 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.

22.5.7 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.