OMi Management Pack for Oracle WebLogic

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Operations Manager i for Linux and Windows® operating systems

User Guide

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Chapter 1: Introduction

The OMi Management Pack for Oracle WebLogic (OMi MP for Oracle WebLogic) works with Operations Manager i (OMi) and enables you to monitor primary and advanced areas of your Weblogic Application Server environment and the underlying infrastructure using Business Service Management (BSM). It includes Indicators - Health Indicators (HIs), Event Type Indicators (ETIs), and Correlation Rules that analyze different events that occur in your WebLogic Application Server, and report the health status of the WebLogic Application Server Environment. It also includes out of the box Management Templates for monitoring the availability, health, and performance of WebLogic Application Server. These Management Templates consists of a wide range of Aspects which enable monitoring of primary and advanced server areas, as well as critical infrastructure elements in your WebLogic Application Server environment. The Management Templates can be deployed by administrators for monitoring your WebLogic Application Server.

The Management Templates can also be customized by Subject Matter Experts (SMEs) and developers to suit different monitoring requirements.

OMi MP for Oracle WebLogic provides the following salient features:

- WebLogic Application Server instance based deployment and configuration
- Supports Operations Agent and Agentless monitoring of WebLogic Application Server instances

Chapter 2: Getting Started

The following section provides step-by-step information about deploying out-of-the-box components of OMi MP for Oracle WebLogic for monitoring WebLogic Application Servers and viewing Event, Health, and Performance Perspectives using BSM or OMi systems.

Task 1: Adding Nodes to BSM 9.2x or OMi 10.x Console

> **Note:** If the node already exists in RTSM, you can skip this step and proceed to "Task 3: Deploying WebLogic Discovery Aspect".

Before you begin monitoring, you need to add the nodes to the BSM 9.2x or OMi 10.x console.

1. Open the Monitored Nodes pane:

   On BSM 9.2x, click **Admin > Operations Management > Setup > Monitored Nodes.**

   On OMi 10.x, click **Administration > Setup and Maintenance > Monitored Nodes.**

2. In the Node Views pane, click **Predefined Node Filter > Monitored Nodes**, then click  and select **Computer > Windows** or **Unix**. The Create New Monitored Nodes dialog box appears.
3. Specify the Primary DNS Name, IP Address, Operating System, and Processor Architecture of the node and click **OK**.

Task 2: Enabling the Enrichment Rules

You must enable the following enrichment rules to populate the CI's display label:

- SoftwareElementDisplayLabelForNewHost
- SoftwareElementDisplayLabelForExistingHost
- SoftwareElementDisplayLabelPopulator

To enable the Enrichment Rules, follow these steps:

1. Open the Enrichment manager pane:

   On BSM 9.2x, click **Admin > RTSM Administration > Modeling > Enrichment manager**.

   On OMi 10.x, click **Administration > RTSM Administration > Modeling > Enrichment manager**.
2. In the Enrichment Rules pane, select **SoftwareElementDisplayLabelForNewHost** from the list.
3. Right-click and select **Properties**. The Enrichment Rule Properties window appears.
4. Click **Next**.
5. Select **Rule is Active**.
6. Click **Finish**.
7. In the Enrichment Rules pane, click  to save the changes.
8. Select **SoftwareElementDisplayLabelForExistingHost** and repeat steps 3 to 7.
9. Select **SoftwareElementDisplayLabelPopulator** and repeat steps 3 to 7.

Task 3: Deploying WebLogic Discovery Aspect

The WebLogic Discovery Aspect enables you to discover WebLogic Server instances in your environment. To discover the WebLogic Application Server Configuration Items (CIs) on the added managed nodes, you must deploy the WebLogic Discovery aspect to a Computer CI.

The WebLogic Discovery Aspect deployment discovers the CIs of the following CI types (CITs):

- j2eedomain
- weblogicas

To deploy the WebLogic Discovery Aspect, follow these steps:

1. Open the Management Templates & Aspects pane:

   On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.

   On OMi 10.x, click **Administration > Monitoring > Management Templates & Aspects**.
2. In the Configuration Folders pane:

Click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Aspects**.

3. In the WebLogic Aspects folder, click the **Weblogic Discovery** aspect, and then click  to open the Assign and Deploy Wizard.
4. In the **Configuration Item** tab, click the configuration item to which you want to deploy the Discovery Aspect and then click **Next**.

   The **Required Parameters** tab opens.
5. In the **Required Parameters** tab, you must specify the mandatory parameter **Weblogic Server Home** and dependent parameters.

   > **Note:** For every Weblogic Server Home parameter, you must configure the dependent parameters Weblogic JAVA Home, Weblogic Username, and Weblogic Password.
   >
   > - The credentials given during the deployment of a WebLogic Discovery Aspect must have necessary access to the WebLogic Application Server for the OMi MP for Oracle WebLogic to discover WebLogic Application Server CIs.
   > - WebLogic credentials provided must have Administrator or Monitor group user permissions. To configure a user belonging to Administrators or Monitors group, you must use the WebLogic administration server console.
   > - For more information about creating a user and assigning a user to a group, go to www.oracle.com and see documentation of Oracle WebLogic.

   a. Select the **Weblogic Server Home** parameter in the list, and then click  . The Edit Instance Parameter: Weblogic Server Home dialog box opens.

   b. Specify values for the dependent parameters:

      i. Select the **Weblogic JAVA Home** parameter in the list, and then click  . The Edit Parameter: Weblogic JAVA Home dialog box opens.

      ii. Click **Value**, specify the value, and then click **OK**.

      iii. Select the **Weblogic Username** parameter in the list, and then click  . The Edit Parameter: Weblogic Username dialog box opens.

      iv. Click **Value**, specify the value, and then click **OK**.

      v. Select the **Weblogic Password** parameter in the list, and then click  . The Edit

Parameter: Weblogic Password dialog box opens.

vi. Click **Value**, specify the value, and then click **OK**.

c. Click **Next**.

6. In the **All Parameters** tab on BSM 9.2x or the **Parameter Summary** tab on OMi 10.x, select the parameter and then click  to change the default values. The Edit Parameter dialog box opens. Click **Value**, specify the value, and then click **OK**.

> **Note:** You can override the default values of any parameter. You can specify a value for each parameter at the Aspect level. By default, parameters defined as expert parameters are not shown. To show expert parameters, click  **Show Expert Parameters** .

7. Click **Next**.
8. *(Optional)*. If you do not want to enable the assignment immediately, follow the step:

   On BSM 9.2x, clear the **Enable Assigned Objects** check box.

   On OMi 10.x, clear the **Enable Assignment(s)** check box.

   You can then enable the assignment later using the Assignments & Tuning pane.

9. Click **Finish**.

> **Note:** Single installation of Oracle WebLogic should have same credentials across all the domains.

> **Note:** After the Weblogic Discovery Aspect is deployed, a message stating the `Assignment and deployment jobs created` appears. To check the status of the deployment jobs, go to following location:
>
> On BSM 9.2x, click **Admin > Operations Management > Monitoring > Deployment Jobs**.
>
> On OMi 10.x, click **Administration > Monitoring > Deployment Jobs**.

Task 4: Verifying Discovery

After you deploy the Discovery Aspect, you must verify if the CIs are populated in the View Explorer. To verify the CIs populated, follow these steps:

1. Open the Event Perspective pane:

   On BSM 9.2x, click **Applications > Operations Management > Event Perspective**.

   On OMi 10.x, click **Workspaces > Operations Console > Event Perspective**.

2. In the View Explorer, select **J2EE_Deployment** view from the drop-down list to see the associated CIs.

Task 5: Deploying the WebLogic Management Templates or WebLogic Aspects

This section information about deploying management templates and aspects. For more information about deploying WebLogic Management Templates, go to "Task 5a: Identifying and Deploying WebLogic Management Templates". For more information about deploying WebLogic Aspects, go to "Task 5b: Deploying WebLogic Aspects".

Task 5a: Identifying and Deploying WebLogic Management Templates

Before deploying the WebLogic Management Templates, you must deploy Weblogic Discovery Aspect. For more information, see "Task 3: Deploying WebLogic Discovery Aspect".

Before deploying the WebLogic Management Templates, you must identify the WebLogic Management Template suitable for your environment by following these recommendations:

- If you want to monitor primary components of WebLogic Application Server like server status, JVM, JDBC, EJB, Servlets, and Server logs along with critical Infrastructure components (CPU, Memory, and Disk), you can deploy Essential Weblogic Management Template.
- If you want to monitor the basic components along with the advanced components of WebLogic Application Server like Transactions, Cluster status, Cache usage, Threads, Server Logs and Infrastructure components (CPU, Memory, Disk), you can deploy Extensive Weblogic Management Template.
- If you want to monitor the advanced components of WebLogic Server Applications, along with Oracle database components (Basic Query, Memory), and Infrastructure components, you can deploy Extensive Weblogic and Database Management Template.
- If you want to monitor the primary components of your WebLogic Application Server along with

critical infrastructure areas of CPU, Memory, Disk, including WebLogic Application Server Port and Application URL availability (monitored using Weblogic Agentless Aspect), you can deploy Hybrid Weblogic Management Template.

To deploy the WebLogic Management Templates other than Extensive Weblogic and Database Management Template, follow these steps:

1. Open the Management Templates & Aspects pane:

   On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.

   On OMi 10.x, click **Administration > Monitoring > Management Templates & Aspects**.

2. In the Configuration Folders pane:

   Click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates**.

3. In the WebLogic Management Templates folder, click the Management Template that you want to deploy, and then click  . The Assign and Deploy wizard opens.

4. In the **Configuration Item** tab, click the WebLogic Application Server CI to which you want to assign the Management Template, and then click **Next**. You can select multiple items by holding down the **CTRL** or **SHIFT** key while selecting them. Click **Next** to accept the CIs.

5. In the **Required Parameters** tab, you must specify the values of **Username** and **Password**. To specify the values of the parameters, you can select the parameter and then click  . The Edit Parameter dialog box opens. Click **Value**, specify the value, and then click **OK**.

   > **Note:** The credentials given during the deployment of a Management Template should have required privileges. For more information see the section *User Privileges* in the *OMi MP for Oracle WebLogic Installation Guide*.

6. Click **Next**.

7. In the **All Parameters** tab on BSM 9.2x or the **Parameter Summary** tab on OMi 10.x, you can change the default values of the parameters. To change them select the parameter and then click  . The Edit Parameter dialog box opens. Click **Value**, specify the value, and then click **OK**.

   > **Note:** In the **All Parameters** tab on BSM 9.2x or the **Parameter Summary** tab on OMi 10.x, you can override the default values of any parameter. You can specify a value fo each parameter at the Management Template level. By default, parameters defined as expert parameters are not shown. To show expert parameters, click **Show Expert Parameters**.

8. Click **Next**.
9. *(Optional).* In the **Configure Options** tab, if you do not want to enable the assignment immediately, follow the step:

   On BSM 9.2x, clear the **Enable Assigned Objects** check box.

   On OMi 10.x, clear the **Enable Assignment(s)** check box.

   You can then enable the assignment later using the Assignments & Tuning pane.
10. Click **Finish**.

Task 5b: Deploying WebLogic Aspects

To deploy the remaining Weblogic Aspects, follow these steps:

1. Open the Management Templates and Aspects pane:

   On BSM 9.2x, click **Admin > Operations Management > Monitoring > Management Templates & Aspects**.

   On OMi 10.x, click **Administration > Monitoring > Management Templates & Aspects**.
2. In the Configuration Folders pane:

   Click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Aspects**.
3. In the Aspects folder, click the WebLogic Aspect that you want to deploy, and then click  . The Assign and Deploy wizard opens.
4. In the **Configuration Item** tab, click the CI to which you want to assign the Weblogic Aspect, and then click **Next**. You can select multiple items by holding down the **CTRL** or **SHIFT** key while selecting them. Click **Next** to accept the CIs and go to **Required Parameters**.

   > **Note:** If you want to deploy Aspects to Node CIs, select **Also show CIs of type Node**.
5. In the **Required Parameters** tab, you must specify the values **Username** and **Password**. To specify the values of the parameters, you can select the parameter and then click  . The Edit Parameter dialog box opens. Click **Value**, specify the value, and then click **OK**.

> **Note:** The credentials given during the deployment of WebLogic Aspects should have required privileges. For more information see the section *User Privileges* in the *OMi MP for Oracle WebLogic Installation Guide*.

6. Click **Next** to go to **All Parameters** tab.
7. In the **All Parameters** tab on BSM 9.2x or the **Parameter Summary** tab on OMi 10.x, you can change the default values of the parameters. To change them select the parameter and then click  . The Edit Parameter dialog box opens. Click **Value**, specify the value, and then click **OK**.

> **Note:** In the **All Parameters** tab on BSM 9.2x or the **Parameter Summary** tab on OMi 10.x, you can override the default values of any parameter. You can specify a value fo each parameter at the Management Template level. By default, parameters defined as expert parameters are not shown. To show expert parameters, click  **Show Expert Parameters**.

8. Click **Next**.
9. *(Optional).* In the **Configure Options** tab, if you do not want to enable the assignment immediately, follow the step:

   On BSM 9.2x, clear the **Enable Assigned Objects** check box.

   On OMi 10.x, clear the **Enable Assignment(s)** check box.

   You can then enable the assignment later using the Assignments & Tuning pane.
10. Click **Finish**.

Checking the Topology Synchronization Settings

> **Note:** It is recommended to check the Topology Synchronization settings if a Node or a CI is monitored by Operations Manager.

1. Open the Infrastructure Settings from Administration:

   On BSM 9.2x, click **Admin > Platform > Setup and Maintenance > Infrastructure Settings**.

   On OMi 10.x, click **Administration > Setup and Maintenance > Infrastructure Settings**.
2. In the Infrastructure Settings pane, click **Applications > Operations Management**.

3. In the Operations Management - HPOM Topology Synchronization Settings, Topology Sync contain the packages that are used for topology synchronization. Make sure you have - **default;nodegroups;operations-agent;HPOprSys;HPOprJEE** along with other Topology Synchronization packages.

Monitoring Oracle WebLogic Environment

After you deploy Management Template and Aspects, you can view the events from the following perspectives:

- Event Perspective
- Health Perspective
- Performance Perspective

Event Perspective

After you deploy the Weblogic Discovery Aspect and Weblogic Management Template(s), you can view the events of the WebLogic Application Server CIs that are monitored by OMi MP for Oracle WebLogic.

To view the Event Perspective of the Oracle WebLogic Application Server CIs, follow these steps:

1. Open the Event Perspective pane:

   On BSM 9.2x, click **Applications > Operations Management > Event Perspective**.

   On OMi 10.x, click **Workspaces > Operations Console > Event Perspective**.

   The View Explorer pane appears.

2. From the drop-down menu, select **Weblogic_Deployment_View**.

   A list of WebLogic Application Servers monitored by OMi MP for Oracle WebLogic appears.

3. Select the WebLogic Application Server CI for which you want to view the Event Perspective. The Event browser pane displays events from the selected WebLogic Application Server CI.

   When you click an event from the Event Browser, the Event Details pane opens where you can view following details:

   - **General** - Displays the detailed information about the selected event such as Severity, Lifecycle State, Priority, Related CI and so on.
   - **Additional Info** - Displays more detailed information about the attributes of the selected event.

- **Source Info** - Displays an overview of the information available about the source of the selected event.
- **Actions** - Displays the list of actions available for a selected event. There are two types of possible actions: User Action and Automatic Action.
- **Annotations** - Displays a list of the annotations attached to the selected event.
- **Custom Attributes** - Displays a list of the attributes that either an administrator or a responsible user manually configured and added to the selected event.
- **Related Events** - Displays an overview of all the events that are related to the event selected in the Event Browser.
- **History** - Displays the history of the selected event.
- **Resolver Hints** - Displays the information used to identify the node and CI associated with an event.
- **Instructions** - Displays instruction information designed to help operators handle the associated event.
- **Forwarding** - Displays the transfer of ownership details if any, for the events.

Health Perspective

After you deploy the Weblogic Discovery Aspect and WebLogic Management Template(s), you can view the events related to the health of the WebLogic Application Server CIs that are monitored by OMi MP for Oracle WebLogic.

To view the Health Perspective of the Oracle WebLogic Application Server CIs, follow these steps:

1. Open the Health Perspective pane:

   On BSM 9.2x, click **Applications > Operations Management > Health Perspective**.

   On OMi 10.x, click **Workspaces > Operations Console > Health Perspective**.

   The View Explorer pane appears.

2. From the drop-down menu, select **Weblogic_Deployment_View**.

   A list of WebLogic Application Servers monitored by OMi MP for Oracle WebLogic appears.

3. Select the WebLogic Application Server CI for which you want to view the Health Perspective. The Event browser pane displays health related events from the selected WebLogic Application Server CI.

   When you click an event from the Event Browser pane, the following panes appear:

- **Health Top View** - Displays the health top view of the selected event.
- **Health Indicators** - Displays the Key Performance Indicators (KPIs) and HIs related to the CI that you select from the Health Top View pane.
- **Actions** - Displays the list of actions available for a selected event.

Performance Perspective

Performance Perspective enables you to populate graphs from existing graph templates. You can also plot customized graphs by selecting the required metrics for a selected CI.

To view the Performance Perspective of Oracle WebLogic Application Server CIs using graphs, follow these steps:

1. Open the Performance Perspective pane:

   On BSM 9.2x, click **Applications > Operations Management > Performance Perspective**.

   On OMi 10.x, click **Workspaces > Operations Console > Performance Perspective**.

   The View Explorer pane appears.
2. From the drop-down menu, select **Weblogic_Deployment_View**. The performance pane appears, which lists the default graphs available for the **Weblogic_Deployment_View**.
3. Click the graph you want to plot from the **Graphs** tab, and then click **Draw Graphs**. The selected graph is plotted on the right pane.

> **Note:** For more information about viewing and managing events, see the *Operations Manager i Concepts Guide*.

Chapter 3: Components

The OMi MP for Oracle WebLogic includes the following components for monitoring WebLogic Application Servers in your environment:

Weblogic Management Templates

The WebLogic Management Templates provide a complete management solution for monitoring the health and performance of Weblogic servers in your environment.

By default, OMi MP for Oracle WebLogic comprises of four sets of Management Templates with predefined set of aspects. You can deploy the out-of-the-box Management Templates or can customize the Management Templates based on your monitoring requirements. You can also create Management Templates using the WebLogic aspects to monitor the WebLogic servers in your environment.

Overview

OMi MP for Weblogic comprises the following Weblogic Management Templates:

"Essential Weblogic Management Template"

"Extensive Weblogic Management Template"

"Extensive Weblogic and Database Management Template"

"Hybrid Weblogic Management Template"

How to Access Management Template

1. Open Management Templates & Aspects pane:

   On BSM , click**Admin > Operations Management > Monitoring > Management Templates & Aspects**

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**

2. Click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates**.

Tasks

How to Deploy Weblogic Management Templates

For more information about deploying WebLogic Management Templates, go to Task 5: Deploying the Weblogic Management Templates or WebLogic Aspects.

How to Automatically Assign WebLogic Management Templates and Weblogic Aspects

To automatically assign WebLogic Management Templates or WebLogic Aspects, you must specify the required privileges.

1. Go to the Auto-Assignment screenOn OMi, **(Administration > Monitoring > Assignments & Tuning)** and on BSM, **(Monitoring > Assignments & Tuning)**. The screen consists of the Auto-Assignment pane at the top, and a parameter list at the bottom.
2. From Browse Views,select the WebLogic view containing the CIs for which you want to create an automatic assignment.
3. Click  **New Assignment** in the toolbar of the Auto-Assignment pane and select the appropriate option. The Create Auto-Assignment wizard is shown.
4. In *Select Configuration Object*, click the Weblogic management template or aspect that you want to automatically assign to all CIs with a CI type appearing in the selected view.

   > **Note:** The list shows only the management templates that have a root CI type that appears in

> the view that you selected or, in case an aspect is auto-assigned, compatible aspects.

The latest version of the management template or aspect that you want to assign is selected by default. If required, select a different version in column **Version**.

Click **Next** to go to **Required Parameters**.

5. This step lists all mandatory parameters in the management template that do not yet have a value. As they are mandatory, however, all listed parameters must be given a value before the management template can be deployed.

   If all required values are specified, you can choose one of the following actions:

   - Click **Finish** to assign the configuration object to the selected CI and close the wizard or dialog.
   - Click **Next** to go to **Parameter Summary** tab on OMi and**All Parameters** tab on BSM, where you can override the default value of any parameter, including those that are not required.

     > **Note:** To access step Configure Options, click **Next** in this step, and **Next** again in **Parameter Summary** tab on OMi and**All Parameters** tab on BSM.

   To change a parameter, double-click it, or select it in the list and click **Edit**.

   - For standard parameters, the Edit Parameter dialog opens.

     Click **Value**, specify the value, and then click **OK**.

   - For instance parameters, the Edit Instance Parameter dialog opens.

     Add instance values, and then for each instance value, specify dependent parameter values. After you specify the instances and dependent parameter values, click **OK**.

6. *Optional*. In **All Parameters** tab, specify a value for each parameter that needs to be monitored against a different value than the default value.

   To change a parameter, double-click it, or select it in the list and click **Edit**.

   - For standard parameters, the Edit Parameter dialog opens.

     Click **Value**, specify the value, and then click **OK**.

How to Deploy an Assignment Report for a WebLogic Management Template

1. Select the Management Template you want to create the report.
2. Click **Generate Assignment Report** in the Management Templates & Aspects pane. The pre

configured *Assignment Report* is displayed.

You can display additional types of reports from the **Assignments & Tuning** screen.

Essential Weblogic Management Template

The Essential Weblogic Management Template monitors the primary components of your Weblogic server along with critical infrastructure areas of CPU, Memory, and Disk.

How to Access Essential Weblogic Management Template

1. Open Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects**

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**

2. In the Configuration Folder pane, click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates > Essential Weblogic Management Template**.

User Interface Reference

Management Template - General

Provides an overview of the attributes of the Management Template.

UI Element	Description
Name	Essential Weblogic Management Template.
Description	The description of the Management Template.
ID	A unique identifier for GUI version of the Management Template.
Version ID	A unique identifier for this version of the Management Template.
Version	The current version of the Management Template. In this instance, the version of the Management Template is 1.0.
Change Log	The text that describes what is new or modified in this version of the Management Template.

Management Template - Topology View

Provides an overview of the CI type you want to assign to the Management Template.

UI Element	Description
Topology View	**J2EE_Deployment** is the topology view for Essential WebLogic Management Template. It contains the CI types that you want to manage using the Management Template.
CI Type	The type of CIs managed by Essential WebLogic Management Template. This is the type of CI to which the Management Template can be assigned. The Essential WebLogic Management Template contains WebLogic Application Server CI Types.

Management Template - Aspects

The Essential WebLogic Management Template consists of the following Aspects:

Weblogic Base

Weblogic EJB Performance

Weblogic JDBC Connection Pool Status

Weblogic JVM Heap Memory

Weblogic Server Status

Weblogic Servlet Performance

The Essential WebLogic Management Template consists of the following Infrastructure Aspects to monitor Infrastructure elements:

Resource Bottleneck Diagnosis

The Resource Bottleneck Diagnosis Aspect identifies congestion and bottleneck conditions for system resources like the CPU, memory, network, and disk. CPU bottleneck monitoring is based on global CPU utilization and load average (Run Queue Length). Memory bottleneck monitoring is based on memory utilization, free memory available, and memory swap out rate. File system monitoring is based on space utilization level for busiest file system on the node. Network monitoring is based on Packet collision rate, packet error rate, and outbound queue length.

System Fault Analysis

The System Fault Analysis Aspect monitors the kernel log file, boot log file, and event log file for critical error conditions and instructions.

System Infrastructure Discovery

The System Infrastructure Discovery Aspect discovers and gathers information regarding the system

resources, operating system, and applications on a managed node.

Extensive Weblogic Management Template

The Extensive Weblogic Management Template monitors advanced components of your WebLogic server along with basic components of Infrastructure and Oracle Database.

How to Access Extensive Weblogic Management Template

1. Open Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects**

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**

2. In the Configuration Folder pane, click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates >Extensive Weblogic Management Template**.

User Interface Reference

Management Template - General

Provides an overview of the attributes of the Management Template.

UI Element	Description
Name	Extensive Weblogic Management Template.
Description	The description of the Management Template.
ID	A unique identifier for GUI version of the Management Template.
Version ID	A unique identifier for this version of the Management Template.
Version	The current version of the Management Template. In this instance, the version of the Management Template is 1.0.
Change Log	The text that describes what is new or modified in this version of the Management Template.

Management Template - Topology View

Provides an overview of the CI type you want to assign to the Management Template.

UI Element	Description
Topology View	**J2EE_Deployment** is the topology view for Extensive WebLogic Management Template. It contains the CI types that you want to manage using the Management Template.
CI Type	The type of CIs managed by Extensive WebLogic Management Template. This is the type of CI to which the Management Template can be assigned. The Extensive WebLogic Management Template contains WebLogic Application Server CI Types.

Management Template - Aspects

The Extensive WebLogic Management Template consists of the following Aspects:

Weblogic Authentication

Weblogic Base

Weblogic Cache Usage

Weblogic Cluster Status

Weblogic EJB Performance

Weblogic JCA Statistics

Weblogic JDBC Connection Pool Status

Weblogic JMS Performance

Weblogic JVM Heap Memory

Weblogic Server Status

Weblogic Servlet Performance

Weblogic Thread Status

Weblogic Transactions

Weblogic Web Application Status

Weblogic Authentication

Monitors WebLogic Server Login attempts and failures.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ InvalidLoginAttemptsCount	ServerSessions:High / ServerSessions:Normal	Number of invalid logon	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			attempts.	

The Extensive WebLogic Management Template consists of the following Infrastructure Aspects to monitor Infrastructure elements:

Bandwidth Utilization and Network IOPS

The Bandwidth Utilization and Network IOPS Aspect monitors IO operations, and performance of the systems in the network. It monitors the network I/O operations and performance based on the bandwidth used, outbound queue length and average bytes transferred per second.

CPU Performance

The CPU Performance Aspect monitors the overall CPU performance like the CPU utilization percentage and spike in CPU usage. Individual CPU performance monitoring is based on total CPU utilization, CPU utilization in user mode, CPU utilization in system mode and interrupt rate.

Memory and Swap Utilization

The Memory and Swap Utilization Aspect monitors memory performance of the system. Memory performance monitoring is based on Memory utilization (in percentage), Swap space utilization (in percentage), Free memory available (in MBs) and Free swap space available (in MBs).

Remote Disk Space Utilization

The Remote Disk Space Utilization Aspect monitors space utilization of remote disk.

Resource Bottleneck Diagnosis

The Resource Bottleneck Diagnosis Aspect identifies congestion and bottleneck conditions for system resources like the CPU, memory, network, and disk. CPU bottleneck monitoring is based on global CPU utilization and load average (Run Queue Length). Memory bottleneck monitoring is based on memory utilization, free memory available, and memory swap out rate. File system monitoring is based on space utilization level for busiest file system on the node. Network monitoring is based on Packet collision rate, packet error rate, and outbound queue length.

Space Availability and Disk IOPS

The Space Availability and Disk IOPS Aspect monitors the disk IO operations and space utilization of the system.

System Fault Analysis

The System Fault Analysis Aspect monitors the kernel log file, boot log file, and event log file for critical error conditions and instructions.

System Infrastructure Discovery

The System Infrastructure Discovery Aspect discovers and gathers information regarding the system resources, operating system, and applications on a managed node.

Extensive Weblogic and Database Management Template

The Extensive Weblogic and Database Management Template monitors components of your WebLogic server along with basic components of Infrastructure and Oracle Database.

How to Access Extensive Weblogic and Database Management Template

1. Open Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects**

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**

2. In the Configuration Folder pane, click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates > Extensive Weblogic and Database Management Template**.

User Interface Reference

Management Template - General

Provides an overview of the attributes of the Management Template.

UI Element	Description
Name	Extensive WebLogic and Database Management Template
Description	The description of the Management Template.
ID	A unique identifier for GUI version of the Management Template.
Version ID	A unique identifier for this version of the Management Template.
Version	The current version of the Management Template. In this instance, the version of the Management Template is 1.0.

UI Element	Description
Change Log	The text that describes what is new or modified in this version of the Management Template.

Management Template - Topology View

Provides an overview of the CI type you want to assign to the Management Template.

UI Element	Description
Topology View	**J2EE_Database_Deployment** is the topology view for Extensive WebLogic and Database Management Template. It contains the CI types that you want to manage using the Management Template.
CI Type	The type of CIs managed by Extensive WebLogic and Database Management Template. This is the type of CI to which the Management Template can be assigned. The Extensive WebLogic and Database Management Template contains WebLogic Application Server CI Types.

Management Template - Aspects

The Extensive WebLogic and Database Management Template consists of the following Aspects:

Weblogic Authentication

Weblogic Base

Weblogic Cache Usage

Weblogic Cluster Status

Weblogic EJB Performance

Weblogic JCA Statistics

Weblogic JDBC Connection Pool Status

Weblogic JMS Performance

Weblogic JVM Heap Memory

Weblogic Server Status

Weblogic Servlet Performance

Weblogic Thread Status

Weblogic Transactions

Weblogic Web Application Status

The Extensive WebLogic and Database Management Template consists of the following Infrastructure Aspects to monitor Infrastructure elements:

Bandwidth Utilization and Network IOPS

The Bandwidth Utilization and Network IOPS Aspect monitors IO operations, and performance of the systems in the network. It monitors the network I/O operations and performance based on the bandwidth used, outbound queue length and average bytes transferred per second.

CPU Performance

The CPU Performance Aspect monitors the overall CPU performance like the CPU utilization percentage and spike in CPU usage. Individual CPU performance monitoring is based on total CPU utilization, CPU utilization in user mode, CPU utilization in system mode and interrupt rate.

Memory and Swap Utilization

The Memory and Swap Utilization Aspect monitors memory performance of the system. Memory performance monitoring is based on Memory utilization (in percentage), Swap space utilization (in percentage), Free memory available (in MBs) and Free swap space available (in MBs).

Remote Disk Space Utilization

The Remote Disk Space Utilization Aspect monitors space utilization of remote disk.

Resource Bottleneck Diagnosis

The Resource Bottleneck Diagnosis Aspect identifies congestion and bottleneck conditions for system resources like the CPU, memory, network, and disk. CPU bottleneck monitoring is based on global CPU utilization and load average (Run Queue Length). Memory bottleneck monitoring is based on memory utilization, free memory available, and memory swap out rate. File system monitoring is based on space utilization level for busiest file system on the node. Network monitoring is based on Packet collision rate, packet error rate, and outbound queue length.

Space Availability and Disk IOPS

The Space Availability and Disk IOPS Aspect monitors the disk IO operations and space utilization of the system.

System Fault Analysis

The System Fault Analysis Aspect monitors the kernel log file, boot log file, and event log file for critical error conditions and instructions.

System Infrastructure Discovery

The System Infrastructure Discovery Aspect discovers and gathers information regarding the system resources, operating system, and applications on a managed node.

The Extensive WebLogic and Database Management Template consists of the following Oracle Aspects to monitor Oracle components:

Basic Oracle Locks and Latches

This aspect monitors the consumption of Oracle locks (in percentage) and also checks the usage of the counters - session wait lock count and latch count. This is a basic type of aspect.

Basic Oracle Memory Performance

This aspect monitors the Oracle memory units - BufferCache, Shared Pool, and Library Cache. This is a Basic type of aspect.

Basic Oracle Query Performance

This aspect monitors the performance of Oracle queries by checking the Oracle metrics - Elapsed time and CPU time. This is a basic type of aspect.

Basic Oracle Segment Space

This aspect monitors the units of database storage - segments and extents. This is a basic type of aspect.

Oracle Archive Health

This aspect monitors the Oracle device space, archive frequency rate, and redo logs that are not archived.

Oracle Database Availability

This aspect monitors the Oracle database connection status, processes, and logons.

Oracle Discovery

This aspect discovers the Oracle, RAC, and ASM instances.

Oracle IO Performance

This aspect monitors the physical and logical read rate of Oracle instances.

Oracle Tablespace Health

The Oracle Tablespace aspect monitors the Oracle Table space status, free space, datafile status,freespace, and segments.

Oracle Transactions

This aspect monitors the Oracle transactions percentage, commit rate, and open cursor. This is an advanced version of Basic Oracle Transactions aspect.

Hybrid Weblogic Management Template

The Hybrid Weblogic Management Template monitors the primary components of your WebLogic server along with critical infrastructure areas of CPU, Memory, Disk, and also includes Agentless WebLogic Aspect to monitor WebLogic Application Server Port and Application URL availability.

How to Access Hybrid Weblogic Management Template

1. Open Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects**

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**

2. In the Configuration Folder pane, click **Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates > Hybrid Weblogic Management Template**.

User Interface Reference

Management Template - General

Provides an overview of the attributes of the Management Template.

UI Element	Description
Name	Hybrid Weblogic Management Template
Description	The description of the Management Template.
ID	A unique identifier for GUI version of the Management Template.
Version ID	A unique identifier for this version of the Management Template.
Version	The current version of the Management Template. In this instance, the version of the Management Template is 1.0.
Change Log	The text that describes what is new or modified in this version of the Management Template.

Management Template - Topology View

Provides an overview of the CI type you want to assign to the Management Template.

UI Element	Description
Topology View	**J2EE_Deployment** is the topology view for Hybrid WebLogic Management Template. It contains the CI types that you want to manage using the Management Template.
CI Type	The type of CIs managed by Hybrid WebLogic Management Template. This is the type of CI to which the Management Template can be assigned. The Hybrid WebLogic Management Template contains WebLogic Application Server CI Types.

Management Template - Aspects

The Hybrid WebLogic Management Template consists of the following Aspects:

Weblogic Availability (Agentless)

Weblogic Base

Weblogic EJB Performance

Weblogic JDBC Connection Pool Status

Weblogic JVM Heap Memory

Weblogic Server Status

Weblogic Servlet Performance

The Hybrid WebLogic Management Template consists of the following Infrastructure Aspects to monitor Infrastructure elements:

Resource Bottleneck Diagnosis

The Resource Bottleneck Diagnosis Aspect identifies congestion and bottleneck conditions for system resources like the CPU, memory, network, and disk. CPU bottleneck monitoring is based on global CPU utilization and load average (Run Queue Length). Memory bottleneck monitoring is based on memory utilization, free memory available, and memory swap out rate. Filesystem monitoring is based on space utilization level for busiest file system on the node. Network monitoring is based on Packet collision rate, packet error rate, and outbound queue length.

System Fault Analysis

The System Fault Analysis Aspect monitors the kernel log file, boot log file, and event log file for critical error conditions and instructions.

System Infrastructure Discovery

The System Infrastructure Discovery Aspect discovers and gathers information regarding the system resources, operating system, and applications on a managed node.

WebLogic Aspects

WebLogic Aspects are used to monitor different basic and advanced components of the WebLogic Application Servers in your environment.

Tasks

How to Deploy WebLogic Aspects

Fore more information about deploying WebLogic Aspects, go to Task 5: Deploying the Weblogic Management Templates or WebLogic Aspects.

How to Create WebLogic Aspects

To create WebLogic Aspects, follow these steps:

1. Open the Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects > Configuration Folders > Application Server Management > Oracle WebLogic Management > Aspects**

   On OMi, click**Administration > Monitoring > Management Templates & Aspects > Configuration Folders > Application Server Management > Oracle WebLogic Management > Aspects**

2. In the Configuration Folders pane, click the configuration folder in which you want to create the new aspect. If you need to create a new configuration folder, click  .

3. In the Management Templates & Aspects pane, click  , and then click  . The Create Aspect wizard opens.

4. In the General page, type a unique **Name** for the new aspect. Click **Next**.

5. Each aspect enables you to manage one feature or characteristic of one or more types of configuration item. In the CI Types page, select one or more **Available CI Type(s)** to which this aspect can be assigned, and then click  to add them to the list of assigned CITs. (Press **CTRL** to several CITs.)

   Click **Next**.

6. In the Instrumentation page, click to add instrumentation to the aspect. The Add Instrumentation dialog box opens, which enables you to select the instrumentation that you want to add. Click **Next**.
7. *Optional*. In the Aspects page, click , and then click the **Add Existing Aspect**. The Add Existing Aspect dialog box opens, which enables you to select an existing aspect that you want to nest within this aspect. Click an aspect, and then click **OK**. Click **Next**.
8. If suitable Aspects do not exist, click , and then click **Add New Aspect** to create them from here.
9. In the Policy Templates page, click . The Add Policy Template to Aspect dialog box opens. Select the policy templates that you want to add, and then click **OK**. (Press **CTRL** to select several policy templates.)
10. If suitable policy templates do not exist, click , and then click **Add New Policy Template** to create them from here.
11. In the Policy Templates page, select the Version of the policy templates that you want to add.

    > **Note:** Each modification to a policy template is stored in the database as a separate version. Aspects contain specific versions of policy templates. If a new version of a policy template becomes available later, you have to update the aspect to include the latest version, if that is what you want.

12. *Optional*. In the Policy Templates page, click the policy template to which you want to add a deployment condition, click , and then click **Edit Deployment Condition**. The Edit Deployment Condition dialog box opens, which enables you to specify deployment conditions for the selected policy template. Set the condition and then click **OK**. Click **Next**.
13. In the Parameters page, you see a list of all the parameters from the policy templates that you added to this aspect.

    To combine parameters:

    a. Press **CTRL** and click the parameters that you want to combine.
    b. Click . The Edit/Combine Parameters dialog box opens.
    c. Type a **Name** for the combined parameters.
    d. *Optional*. Specify a **Description**, **DefaultValue**, and whether the combined parameter is **ReadOnly**, an **ExpertSetting**, or **Hidden**.

Read Only prevents changes to the parameter value when the aspect is assigned to a CI. Hidden also prevents changes, but additionally makes the parameter invisible. You can choose whether to show expert settings when you make an assignment.

e. You can set either a specific default value, or you can click **From CI Attribute** and then browse for a CI attribute. When you specify a CI attribute, Operations Management sets the parameter value automatically during deployment of the policy templates, using the actual value of this attribute from the CI. You can also set conditional parameter values here.

f. Click **OK**.

You can also edit the parameters without combining them, to override the defaults in the policy template. Click one parameter, and then click . The Edit/Combine Parameters dialog box opens.

14. In the Create Aspect wizard, click **Finish** to save the aspect and close the wizard. The new aspect appears in the Management Templates & Aspects pane.

Weblogic Aspects

Each Weblogic Aspect comprises of policy templates, instrumentation, and parameters for monitoring the health and performance of the Weblogic Application Servers.

User Interface Reference

General	Provides an overview of the general attributes of the WebLogic Aspects.
CI Type	The type of configuration items that the Aspect can be assigned to. This is the type of CI to which the Aspect can be assigned. The WebLogic Aspects contain the Computer, Node, Cluster, CI types.
Instrumentation	Provides a single package which contains the binaries for discovery, collection, and data logging.
Aspects	Provides an overview of any Aspects that the WebLogic Aspect contains. The WebLogic Base aspect is part of all the other Aspects.
Policy Templates	Provides an overview of the policy templates that the WebLogic Aspect contain. You can expand each item in the list to see more details about the policy template.

The OMi MP for Oracle WebLogic comprises of the following WebLogic Aspects:

Weblogic Authentication

Monitors WebLogic Server Login attempts and failures.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ InvalidLoginAttemptsCount	ServerSessions:High / ServerSessions:Normal	Number of invalid logon attempts.	Measurement Threshold

Weblogic Availability (Agentless)

Monitors WebLogic Application Server Port and Application URL Availability using Agentless Monitoring Capabilities.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_Application_Server_Port_ Availability (:Weblogic_Application_ Server_Availability)	NA	Monitors the availability of WebLogic Application Server Port.	SiteScope
J2EE Server	Weblogic_Application_URL_ Availability (:Weblogic_Application_ Server_Availability)	NA	Monitors the Availability of WebLogic Application URL.	SiteScope

Weblogic Base

Base Aspect for Monitoring WebLogic Server contains configuration, message, scheduler, and logger policies.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ LogTemplate	NA	Monitors the Weblogic Application Server Logfiles.	LogFile Entry
J2EE Server	Weblogic_Medium	NA	Runs the Weblogic collector/analyzer every MEDIUM schedule.	Scheduled Task
J2EE Server	Weblogic_MPLog	NA	Monitors the Weblogic Perl, Discovery and Collector Log files.	LogFile Entry
J2EE Server	Weblogic_Messages	NA	WebLogic Message Interceptor.	Open Message Interface
J2EE Server	Weblogic_ CollectionConfiguration	NA	Monitors Weblogic Collection Configuration.	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_VeryHigh	NA	Runs the Weblogic collector/analyzer every VERYHIGH schedule.	Scheduled Task
J2EE Server	Weblogic_High	NA	Runs the Weblogic collector/analyzer every HIGH schedule.	Scheduled Task

Weblogic Cache Usage

Monitors WebLogic Server XML Cache usage.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ PendingRequestCount	ThreadRequestsPending:High / ThreadRequestsPending:Normal	Number of pending requests.	Measurement Threshold
J2EE Server	Weblogic_ DeferredRequestsCount	DeferredThreadRequests:High / DeferredThreadRequests:Normal	Number of deferred requests.	Measurement Threshold
J2EE Server	Weblogic_ XMLCacheDiskSize	NA	Number of cached entries on disk which contain external references in an XML parser.	ConfigFile
J2EE Server	Weblogic_ RequestMaxWaitTime	ThreadRequestServiceTime:High / ThreadRequestServiceTime:Normal	Maximum time a request has to wait for a thread.	Measurement Threshold
J2EE Server	Weblogic_ XMLCacheMemorySize	NA	Number of cached entries in memory which contain external references	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
			in an XML parser.	
J2EE Server	Weblogic_ StandbyThreadCount	ThreadPoolAvailability:Low / ThreadPoolAvailability:Normal	Number of threads in the standby pool.	Measurement Threshold
J2EE Server	Weblogic_ PendingRequestPercentage	ThreadRequestsPending:High / ThreadRequestsPending:Normal, ThreadRequestsPending:High / ThreadRequestsPending:Normal	Percentage of pending requests.	Measurement Threshold
J2EE Server	Weblogic_ RequestWaitTimeforThread	ThreadRequestWaitTime:High / ThreadRequestWaitTime:Normal	Request wait time for a thread.	Measurement Threshold

Weblogic Cluster Status

Monitors WebLogic Server Cluster Environment.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ ClusterInMessageFailureRate	ClusterOutgoingMessageFailureRate: High / ClusterOutgoingMessageFailureRate: Normal	Number of multicast messages to cluster that were re-sent per minute.	Measurement Threshold
J2EE Server	Weblogic_ ClusterOutMessageFailRate	ClusterIncomingMessageFailureRate: High / ClusterIncomingMessageFailureRate: Normal	Number of multicast messages from cluster lost by server per minute.	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ ClusterHealthStatus	ClusterHealth:Poor / ClusterHealth:Normal	Health of the cluster.	Measurement Threshold

Weblogic Discovery

Discovers WebLogic Server Instances.

CI Type	Policy Template	Indicator	Description	Policy Type
host_ node	Weblogic_ MPLog	NA	Monitors the Weblogic Perl, Discovery, and Collector Log files.	LogFile Entry
host_ node	Weblogic_ Messages	NA	WebLogic Message Interceptor.	Open Message Interface
host_ node	Weblogic_ Configuration	NA	Config policy for the Weblogic Discovery aspect that consumes the mandatory & optional input configuration.	ConfigFile
host_ node	Weblogic_ Discovery	NA	Weblogic Discovery Policy discovers Weblogic Server Domains, Clusters, Application Servers along with deployed applications, jdbc data sources.	Service Auto-Discovery

Weblogic EJB Performance

Monitors WebLogic Server EJB transactions, pool status.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_EJBPoolWaitCount	EJBFreePoolWaitRate:High / EJBFreePoolWaitRate:Normal	Number of times no EJB beans were available from the free pool (drill down) per minute.	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ EJBTransactionRollBackRate	EJBTransactionRollbackRate:High / EJBTransactionRollbackRate:Normal	EJB Transaction Rollback Rate.	Measurement Threshold
J2EE Server	Weblogic_ EJBMissedCountRate	EJBMissedCountRate:High / EJBMissedCountRate:Normal	Number of times a failed attempt was made to get an instance from the free pool per minute.	Measurement Threshold
J2EE Server	Weblogic_ EJBCacheHitPercentage	EJBPerformance:Low / EJBPerformance:Normal	Percentage of EJBs in the cache in use.	Measurement Threshold
J2EE Server	Weblogic_EJBTimeoutCount	EJBTimeoutRate:High / EJBTimeoutRate:Normal	Number of times a client timed out waiting for an EJB bean per minute.	Measurement Threshold
J2EE Server	Weblogic_ NumberEJBTransactionRollBackRate	EJBTransactionRollbackRate:High / EJBTransactionRollbackRate:Normal	Number of EJB transactions rolled back per second.	Measurement Threshold
J2EE Serv	Weblogic_ EJBDestroyedTotalCount	EJB:Warning / EJB:Normal	Total number of	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
er			times a bean instance from the pool was destroyed due to a non-application Exception being thrown from it.	
J2EE Server	Weblogic_EJBTransactionsCount	EJBPerformance:Low / EJBPerformance:Normal	Number of EJB transactions per second.	Measurement Threshold
J2EE Server	Weblogic_EJBTimeoutRate	EJBTimeoutRate:High / EJBTimeoutRate:Normal	Number of times a client timed out waiting for an EJB bean (drill down) per minute.	Measurement Threshold
J2EE Server	Weblogic_EJBTransactionThroughputRate	EJBTransactionThroughputRate:High / EJBTransactionThroughputRate:Normal	EJB Transaction Throughput Rate.	Measurement Threshold
J2EE Server	Weblogic_EJBBeanUnavailableCount	EJB:Warning / EJB:Normal	Number of times no EJB beans were available from the	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			free pool per minute.	
J2EE Server	Weblogic_ SumOfEJBMissedCountRate	EJBTimeoutRate:High / EJBTimeoutRate:Normal	Number of times a failed attempt was made to get an instance from the free pool.	Measurement Threshold

Weblogic JCA Statistics

Monitors WebLogic Server JCA Status.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ JCAConnectionsUtilizationPct	ConnectionsInUse:High / ConnectionsInUse:Normal, ConnectionsInUse:High / ConnectionsInUse:Normal	Percentage utilization of available JCA connections in connection pool.	Measurement Threshold
J2EE Server	Weblogic_ ConnectionsDestroyedByErrorTotalCount	ConnectionsInUse:High / ConnectionsInUse:Normal	Returns the number of connections that were destroyed because an error	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			event was received.	
J2EE Server	Weblogic_ WaitSecondsHighCount	TransactionTime:High / TransactionTime:Normal	Returns the highest number of seconds that an application waited for a connection from this instance of the connection pool since the connection pool was instantiated.	Measurement Threshold
J2EE Server	Weblogic_ ConnectionsRejectedTotalCount	ConnectionsInUse:High / ConnectionsInUse:Normal	Returns the total number of rejected requests for a Connector connection in this Connector Pool since the pool is instantiat	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			ed.	
J2EE Server	Weblogic_ NumWaitersCurrentCount	ConnectionsInUse:Major / ConnectionsInUse:Normal	Returns the number of waiters on the connection.	Measurement Threshold
J2EE Server	Weblogic_ RequestsWaitingForConnection	JDBCConnectionPoolWaitCount:High / JDBCConnectionPoolWaitCount:Normal	Number of clients waiting for a connection from connection pools.	Measurement Threshold

Weblogic JDBC Connection Pool Status

Monitors WebLogic Server JDBC connection availability and connection pools.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ FailuresToReconnectCount	DataSourceConnectionPoolAvailability:Low / DataSourceConnectionPoolAvailability:Normal	The number of times that the data source attempted to refresh a database connection and failed.	Measurement Threshold
J2EE Ser	Weblogic_ SumJDBCConnectionLeakRate	NA	Number of	ConfigFile

CI Type	Policy Template	Indicator	Description	Policy Type
ver			unclosed JDBC connections and JDBC connections that have exceeded their maximum idle times in the connection pool per minute.	
J2EE Server	Weblogic_ JDBCConnectionPoolThroughputRate	NA	Number of clients serviced by connection pool per second.	ConfigFile
J2EE Server	Weblogic_ ConnectionDelayTime	DataSourceConnectionPoolAvailability:Low / DataSourceConnectionPoolAvailability:Normal	JDBC connection pool connection delay, in milliseconds.	Measurement Threshold
J2EE Server	Weblogic_ JDBCConnectionLeakRate	DataSourceLeakedConnectionsRate:High / DataSourceLeakedConnectionsRate:Normal	Rate of leaked connections for the JDBC connection pool.	Measurement Threshold
J2EE	Weblogic_ JDBCConnectionPoolUtilizat	DataSourceConnectionPoolUtilization:High /	Percenta	Measurement

CI Type	Policy Template	Indicator	Description	Policy Type
Server	ion	DataSourceConnectionPoolUtilization:Normal, DataSourceConnectionPoolUtilization:High / DataSourceConnectionPoolUtilization:Normal	ge utilization of available JDBC connections in connection pool.	Threshold

Weblogic JMS Performance

Monitors WebLogic Server JMS utilization and Performance.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ JMSMessagesThresholdTime	JMS:Warning / JMS:Normal	Percentage of time the server threshold condition was satisfied, based on the number of messages.	Measurement Threshold
J2EE Server	Weblogic_ JMSBytesThresholdTimePercentage	JMS:Warning / JMS:Normal	Percentage of time server threshold condition was satisfied based on total bytes.	Measurement Threshold
J2EE Server	Weblogic_ JMSUtilizationByMessagesPercentage	JMSServerUtilization:High / JMSServerUtilization:Normal,	Percentage of the JMS	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
		JMSServerUtilization:High / JMSServerUtilization:Normal	server queue utilization based on the number of messages.	
J2EE Server	Weblogic_ JMSUtilizationByBytesPercentage	JMSServerUtilization:High / JMSServerUtilization:Normal, JMSServerUtilization:High / JMSServerUtilization:Normal	Percentage of the JMS server filled, based on total bytes.	Measurement Threshold
J2EE Server	Weblogic_ JMSServerThruMessageRate	NA	Number of messages passed through the JMS server per second.	ConfigFile
J2EE Server	Weblogic_ JMSServerThruByteRate	NA	Number of bytes passed through the JMS server per second.	ConfigFile

Weblogic JVM Heap Memory

Monitors WebLogic Server JVM Parameters.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ GarbageCollectionTime	TotalGarbageCollectionTime:High / TotalGarbageCollectionTime:Normal	Total Garbage Collection Time.	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ GarbageCollectionCount	TotalGarbageCollectionCount:High / TotalGarbageCollectionCount:Normal	Total Garbage Collection Count.	Measurement Threshold
J2EE Server	Weblogic_ ProcessorsAverageLoad	AllProcessorsAverageLoad:High / AllProcessorsAverageLoad:Normal	All Processors Average Load.	Measurement Threshold
J2EE Server	Weblogic_ GarbageCollectionThread	TotalNumberOfThreads:High / TotalNumberOfThreads:Normal	Total Garbage Collection Threads.	Measurement Threshold
J2EE Server	Weblogic_ JVMHeapFreeMemory	NA	JVM Heap Free Memory in kilobytes.	ConfigFile
J2EE Server	Weblogic_ JVMHeapUsage	JVMMemoryUtilization:High / JVMMemoryUtilization:Normal, JVMMemoryUtilization:High / JVMMemoryUtilization:Normal	Percentage of heap space used in the JVM.	Measurement Threshold

Weblogic Server Status

Monitors WebLogic Server availability and Performance.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ ServerStatus	ServerStatus:Unavailable / ServerStatus:Available, ServerStatus:Unavailable / ServerStatus:Available	Monitors status of a server.	Measurement Threshold

Weblogic Servlet Performance

Monitors WebLogic Server Servlet sessions of web applications.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ ExecuteQThreadsInUse	ThreadPoolUtilization:High / ThreadPoolUtilization:Normal, ThreadPoolUtilization:High /	Percentage of threads	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
		ThreadPoolUtilization:Normal, ThreadPoolUtilization:High / ThreadPoolUtilization:Normal	in use for a server execute queue. For Weblogic Server version 9.x and 10.x, there is only one execute queue.	
J2EE Server	Weblogic_SocketTrafficRate	NA	Number of socket connections opened per second.	ConfigFile
J2EE Server	Weblogic_ ServletAverageExecutionTime	ServletPerformance:Low / ServletPerformance:Normal	Average execution time for a servlet in milliseconds.	Measurement Threshold
J2EE Server	Weblogic_ ServletRequestRate	ServletRequests:High / ServletRequests:Normal	Number of requests for a servlet per second.	Measurement Threshold
J2EE Server	Weblogic_ ExecuteQMetricMonitors	ExecuteQueueWaitCount:High / ExecuteQueueWaitCount:Normal	The metric monitors an execute queue and its associated thread pool for each server. This metric particularly monitors the number of client requests	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			waiting to be serviced.	
J2EE Server	Weblogic_ ExecutionQueueThroughputRate	NA	Number of requests serviced by an execute queue per second.	ConfigFile

Weblogic Thread Status

Monitors WebLogic Server Thread Status.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ ThreadPoolOverloadCondition	ThreadPoolUtilization:High / ThreadPoolUtilization:Normal	Indicates an Overload Condition on General Thread pool.	Measurement Threshold
J2EE Server	Weblogic_ RequestWaitTimeforThread	ThreadRequestWaitTime:High / ThreadRequestWaitTime:Normal	Request wait time for a thread.	Measurement Threshold

Weblogic Transactions

Monitors WebLogic Server Transactions activities.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ TransactionSystemErrorRollbackPercentage	TransactionSystemErrors:High / TransactionSystemErrors:Normal	Percentage of transactions rolled back due to system	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
			error.	
J2EE Server	Weblogic_TransactionRollbackPercentage	TransactionsRolledBack:High / TransactionsRolledBack:Normal	Percentage of transactions rolled back, based on the total.	Measurement Threshold
J2EE Server	Weblogic_TransactionAppErrorRollbackPercentage	TransactionApplicationErrors:High / TransactionApplicationErrors:Normal	Percentage of transactions rolled back due to an application error.	Measurement Threshold
J2EE Server	Weblogic_TransactionAverageTime	TranscationTime:High / TranscationTime:Normal	Average commit time for transactions.	Measurement Threshold
J2EE Server	Weblogic_TransactionCapacityUtilizationPct	TransactionCapacityUtilization:High / TransactionCapacityUtilization:Normal, TransactionCapacityUtilization:High / TransactionCapacityUtilization:Normal	Percentage utilization of transaction capacity.	Measurement Threshold
J2EE Server	Weblogic_TransactionHeuristicsTotalCount	JTA:Warning / JTA:Normal	Percentage of transactions returning a heuristic decision.	Measurement Threshold
J2EE	Weblogic_TransactionTimeErrorRollbackPercentage	TransactionTimeoutErrors:High /	Percentage of	Measurement Threshold

CI Type	Policy Template	Indicator	Description	Policy Type
Server		TransactionTimeoutErrors:Normal	transactions rolled back due to a timeout error.	
J2EE Server	Weblogic_ TranactionThroughputRate	NA	Number of transactions processed per second.	ConfigFile
J2EE Server	Weblogic_ TransactionResErrorRollbackPercentage	TransactionResourceErrors:High / TransactionResourceErrors:Normal	Percentage of transactions rolled back due to resource error.	Measurement Threshold

Weblogic Web Application Status

Monitors WebLogic Server deployed Web Applications availability.

CI Type	Policy Template	Indicator	Description	Policy Type
J2EE Server	Weblogic_ WebApplicationSessionsCount	HTTPSessions:High / HTTPSessions:Normal	Number of open sessions for a Web application.	Measurement Threshold
J2EE Server	Weblogic_ WebApplicationHitRate	NA	Number of open sessions for a web application per second.	ConfigFile

Parameters

Parameters are variables that are an integral component of WebLogic Management Templates, Aspects, and Policy Templates. Each parameter corresponds to a variable. Parameters contain default values that are used for monitoring different components of WebLogic Application Server. You can also modify the values of the variables to suit your monitoring requirements.

OMi MP for Oracle WebLogic Parameters

Parameter	Parameter Type	Description	Default Values
Weblogic Server Home	Mandatory	WebLogic Server Home.	
Weblogic JAVA Home	Mandatory	WebLogic JAVA Home.	
Weblogic Username	Mandatory	WebLogic Username with necessary privileges to collect management data.	
Weblogic Password	Mandatory	Password for WebLogic Server Username.	
Weblogic KeyStore Path	Dependent	WebLogic KeyStore Path.	
Weblogic Passphrase Password	Dependent	WebLogic Passphrase.	
Weblogic Protocol for JMX Collection (t3/t3s)	Dependent	WebLogic Protocol for JMX Collection (t3/t3s).	
Weblogic Domains XML File Path Location	Dependent	WebLogic Domains XML File Path Location.	
Weblogic Application Server Port Number	Dependent	WebLogic Application Server Port Number.	
Application instance	Mandatory	Weblogic Server Application instance for	CI Name

		which data needs to be fetched.	
Frequency of Weblogic MP Log Template	Expert	Frequency for monitoring Weblogic_ MPLog files with defined patterns (in seconds).	30 Seconds
Frequency of Weblogic Log Template	Expert	Frequency for monitoring Weblogic Log Template with defined patterns (in seconds).	30 Seconds
Frequency of VeryHigh Scheduler	Expert	Frequency for the scheduler which is expected to run on very short interval (in minutes).	5 Minutes
Frequency of High Scheduler	Expert	Frequency for the scheduler which is expected to run on short interval (in minutes).	15 Minutes
Frequency of Medium Scheduler	Expert	Frequency for the scheduler which is expected to run on medium interval (in hours).	1 Hour

Tuning Parameters

You can edit the parameters of the WebLogic Management Templates and Aspects that are already deployed to the WebLogic Application Server CIs.

1. Open the Assignments & Tuning pane:

   On BSM, click**Admin > Operations Management > Monitoring > Assignments & Tuning**

   On OMi, click**Administration > Monitoring > Assignments & Tuning**

2. In the **Browse Views** tab, select the J2EE_Deployment view that contains the WebLogic Application Server CI for which you want to tune parameters. Alternatively, you can use the **Search** tab to find a CI.
3. In the list of WebLogic Application Server CIs, click a CI. The Assignments pane shows details of existing assignments for the CI.
4. Click the assignment for which you want to tune parameters. The Details of Assignment pane shows the current parameter values.
5. In the Details of Assignment pane, change the parameters:
   a. *Optional*. By default, the list shows only mandatory parameters. To see all parameters, click  .

b. Select a parameter in the list, and then click  .

i. For standard parameters, the Edit Parameter dialog box opens.

Click **Value**, specify the value, and then click **OK.**

ii. For instance parameters, the Edit Instance Parameter dialog box opens.

Change the instance values if necessary, and then for each instance value, change dependent parameter values. After you change the instances and dependent parameter values, click **OK**.

6. In the Details of Assignment pane, click **Save Changes**. Operations Management deploys the new parameter values to the relevant Operations Agent.

Run-time Service Model (RTSM) Views

A View enables you to build and visualize a subset of the overall RTSM model. The Views for OMi MP for Oracle WebLogic enables you to visualize the topology of WebLogic Server environment that you want to monitor. The Views for OMi MP for Oracle WebLogic can be used to view and manage the Event Perspective and Health Perspective of the WebLogic Application Server CIs discovered using WebLogic Discovery Aspect. You can also use Views for assigning and tuning the OMi MP for Oracle WebLogic in the WebLogic Application Server environment.

How to Access RTSM Views

1. Open the Modeling Studio pane:

   On BSM, click**Admin > RTSM Administration > Modeling > Modeling Studio**

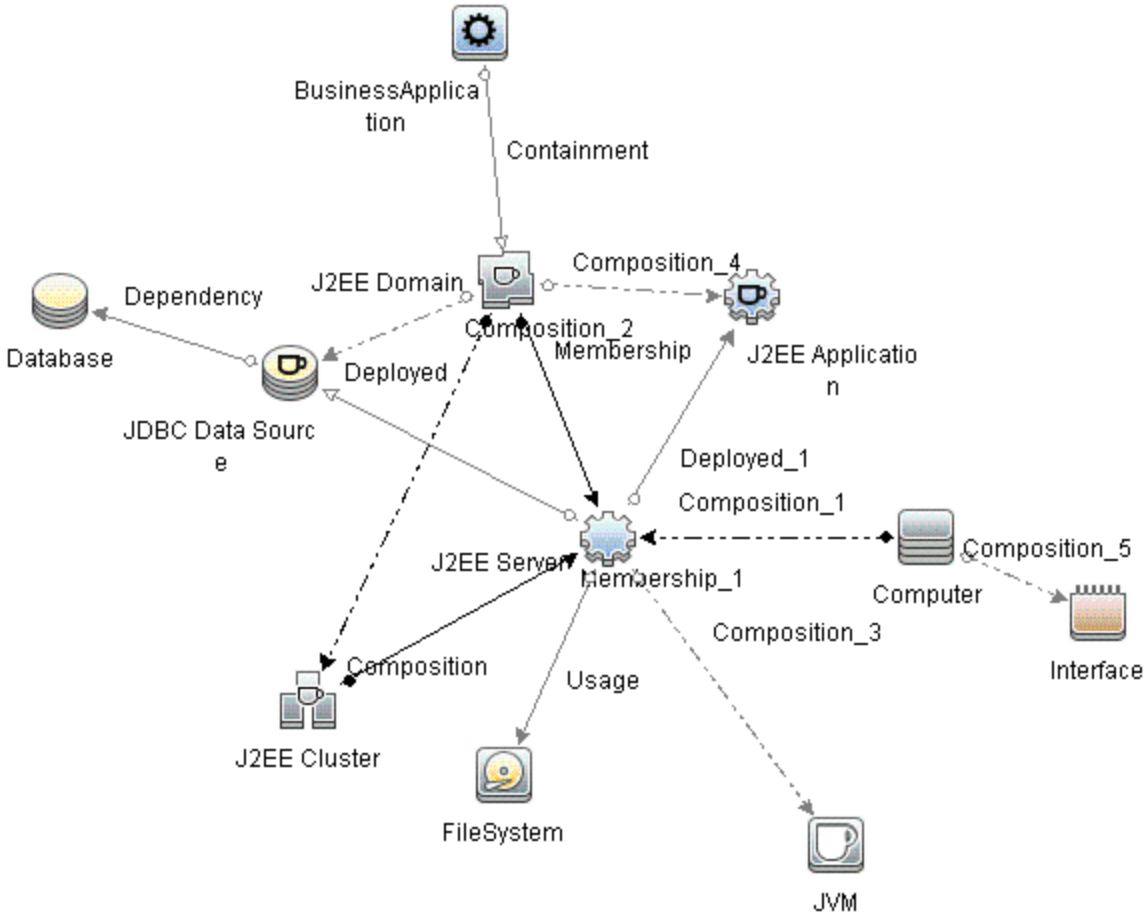
   On OMi, click**Administration > RTSM Administration > Modeling > Modeling Studio**

2. Click **Resource Type** as Views.
3. Click **Operations Management > J2EE Application Server**.

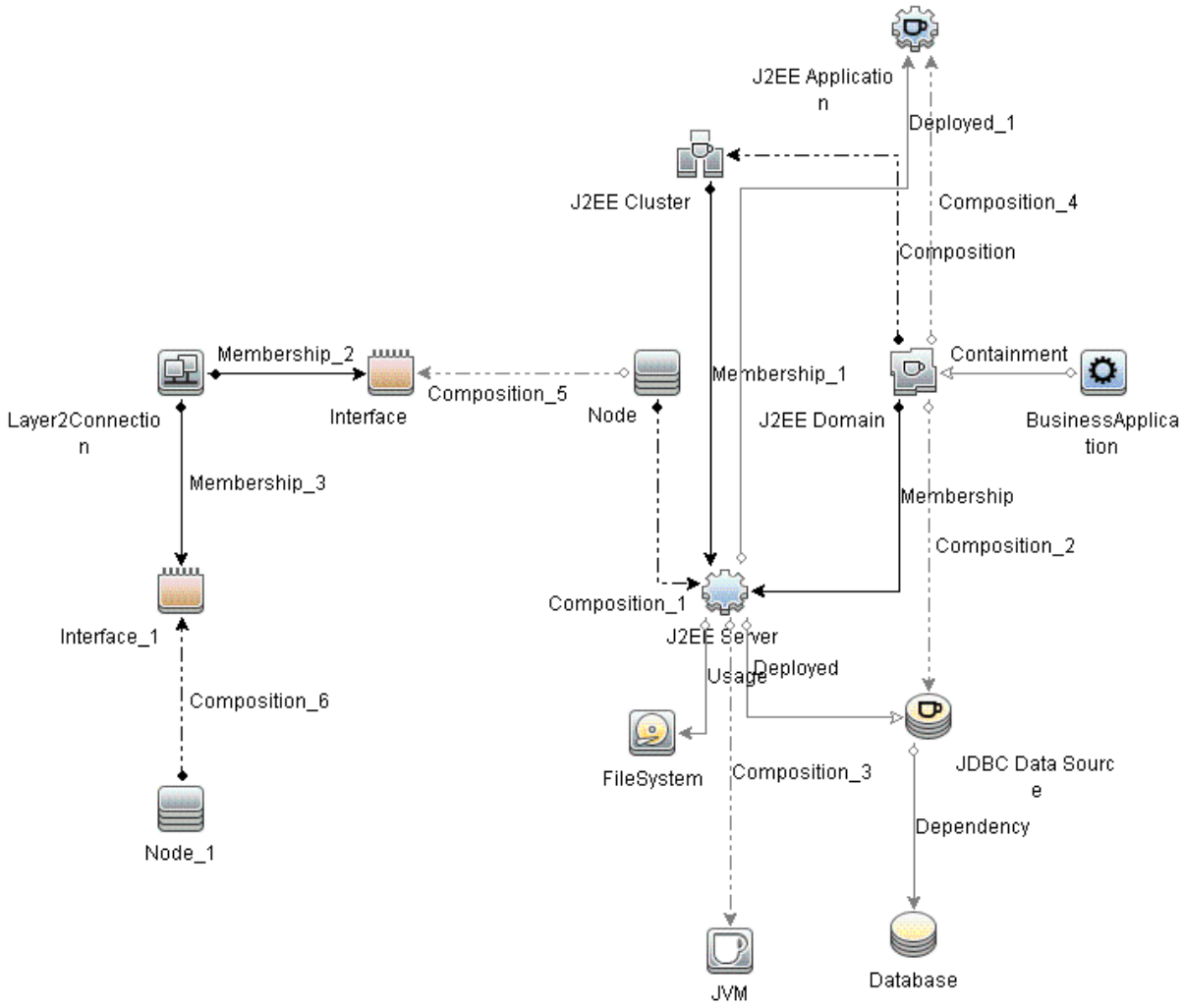
By default, OMi MP for Oracle WebLogic contains the following Views:

- **J2EE_Deployment:** This view refers to the J2EE Cluster, J2EE Domain, JDBC Data Source, J2EE Application, Database, and Computer CI types. The J2EE_Deployment view enables you to visualize the Event and Health perspectives of the WebLogic Application Server CIs that you monitor. You can use the J2EE_Deployment view for visualizing events that are specific to the monitored WebLogic Application Servers. You can also use the J2EE_Deployment view for assigning and tuning the OMi MP for Oracle WebLogic deployment in the WebLogic

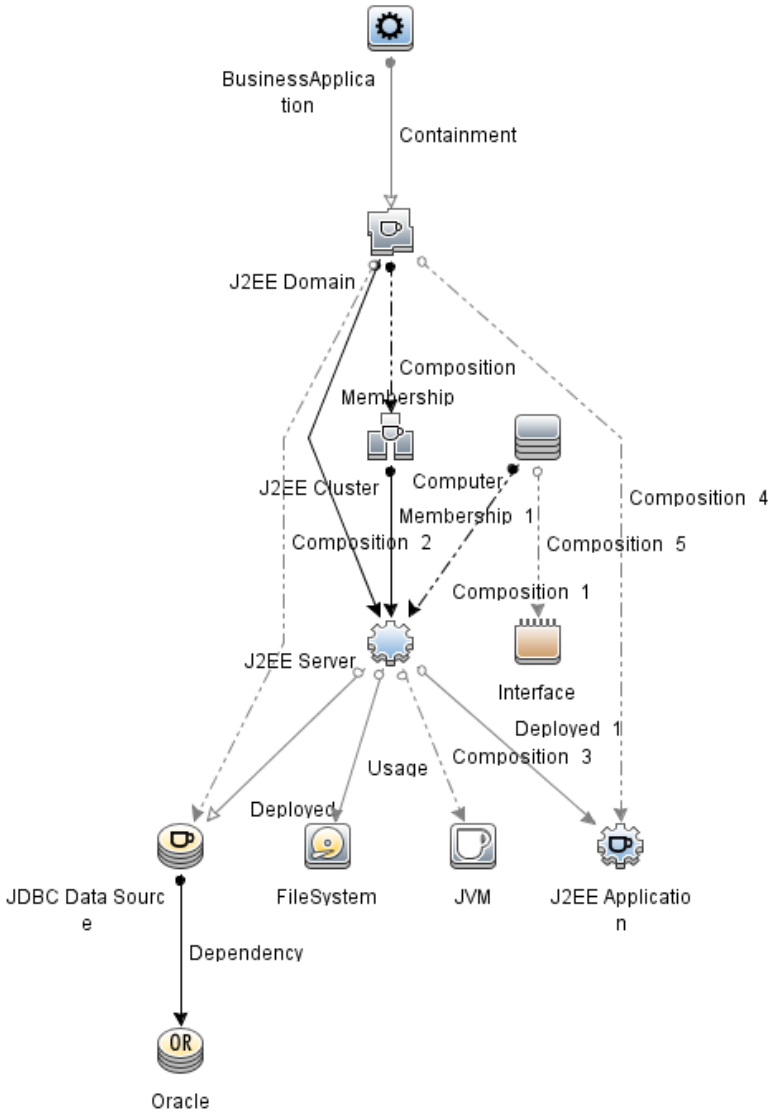
Application Server environment. The following image shows the relationship among the CI Types.



- **J2EE_Network_Deployment_View:** This view refers to the J2EE Cluster, J2EE Domain, J2EE Server, JDBC Data Source, J2EE Application, Database, and File System CI types. The J2EE_ Network_Deployment_View enables you to visualize the components of an associated network along with the monitored WebLogic Application Server CIs in your environment. The following image shows the relationship among the CI Types.



- **J2EE_Database_Deployment:** This view refers to the J2EE Cluster, J2EE Domain, JDBC Data Source, J2EE Server, J2EE Application, Database, Oracle CIs, File System and Computer CI Types. The following image shows the relationship among the CI Types. The J2EE_Database_ Deployment view enables you to visualize the Event and Health perspectives of the WebLogic Application Server CIs and Oracle database that you monitor.



> **Note:** This View is created when you deploy Extensive Weblogic and Database Management Template.

Event Type Indicators (ETIs)

ETIs categorizes events based on the type of occurrence. The OMi MP for Oracle WebLogic includes the following ETIs to monitor WebLogic Application Server related events:

How to Access ETIs

Open Indicators pane:

On BSM, click**Admin > Operations Management > Monitoring > Indicators**

On OMi, click**Administration > Service Health > CI Status Calculation > Health-and Event Type Indicators**

The OMi MP for Oracle WebLogic includes the following ETIs to monitor WebLogic Application server related events:

CI Type	ETI	Description	Value
J2EE Server	Active Sockets Count	Number of HTTP socket connections opened to the server.	High, Normal
	Execute Queue Wait Count	The number of client requests waiting to be serviced by the execute queue.	High, Normal
	Threads Request Pending	Requests that are pending because they are waiting for an available thread.	High, Normal
	Server Sessions	Number of sessions opened to this server.	High, Normal
JVM	Total Garbage Collection Count	Number of times garbage collector has run.	High, Normal
	Total Garbage Collection Time	Total time taken for garbage collection.	High, Normal
	Total Number of Threads	Total number of threads used for garbage collection.	High, Normal
J2EE Application	Servlet Requests	Number of incoming requests to the servlet.	High, Normal
	HTTP Sessions	Number of open servlet sessions.	High, Normal
	EJB Concurrent Lives	The average number of bean objects in the pool.	High, Normal
JDBC	Datasource Connection Waiters	The average number of threads waiting for a connection from the connection pool.	High, Normal

Health Indicators (HIs)

HIs analyze the events that occur in WebLogic Application Servers and report the health of the WebLogic Application Server CIs.

How to Access ETIs

Open Indicators pane:

On BSM, click**Admin > Operations Management > Monitoring > Indicators**

On OMi, click**Administration > Service Health > CI Status Calculation > Health-and Event Type Indicators**

The OMi MP for Oracle WebLogic includes the following Health Indicators (HIs) to monitor WebLogic Application Server related events:

CI Type	HI	Description	Value
J2EE Server	Active Sockets Count	Number of HTTP socket connections opened to the server.	High, Normal
J2EE Server	Application Server Load	Load on the application server.	High, Normal
J2EE Server	Deferred Thread Requests	The number of requests that were denied a thread for execution because of the max-threads-constraint.	High, Normal
J2EE Server	HTTP Request Average Service Time	Average time required to service an HTTP request.	High, Normal
J2EE Server	HTTP Request Total Service Time	Total time required to service HTTP requests.	High, Normal
J2EE Server	HTTP Server Active Connections	Number of connections currently open.	High, Normal
J2EE Server	HTTP Server Active Request	Child servers currently in the request processing phase.	High, Normal
J2EE Server	HTTP Server Connection Time	Total time spent servicing HTTP connections.	High, Normal
J2EE Server	JMS Active Connection Count	Number of active JMS connections.	High, Normal
J2EE	JMS Server	JMS Server queue utilization.	High,

CI Type	HI	Description	Value
Server	Utilization		Normal
J2EE Server	Oracle Web Cache Average Latency Current Interval	Average latency for 10 second intervals to process requests for Oracle Web Cache.	High, Normal
J2EE Server	Oracle Web Cache Latency Since Start	Average number of seconds to process requests for Oracle Web Cache since the application Web server started.	High, Normal
J2EE Server	Server Sessions	Number of sessions opened to this server.	High, Normal
J2EE Server	Server Status	Shows the server status in terms of availability.	Unavailable, Available
J2EE Server	Servlets Loaded	Number of servlets currently loaded for a web application (cumulative value per server).	High, Normal
J2EE Server	Thread Hung Rate	Rate at which the threads are declared hung.	High, Normal
J2EE Server	Thread Pool Availability	The availability of the threads in the Thread Pool.	Low, Normal
J2EE Server	Thread Pool Utilization	The number of threads used in the server to execute tasks.	High, Normal
J2EE Server	Thread Request Service Time	The time a request has to wait for a thread.	High, Normal
J2EE Server	Thread Request Wait Time	The time (in milliseconds) a request had to wait for a thread.	High, Normal
J2EE Server	Threads Request Pending	Requests that are pending because they are waiting for an available thread.	High, Normal
J2EE Server	Transaction Application Errors	Transaction errors due to application errors.	High, Normal
J2EE Server	Transaction Capacity Utilization	The number of simultaneous in-progress transactions.	High, Normal
J2EE Server	Transaction Commit Rate	The number of transactions that were committed per second.	High, Normal
J2EE Server	Transaction Resource Errors	Transaction errors caused due to system resource errors.	High, Normal
J2EE Server	Transaction Rollback Rate	The number of transactions rolled back due to system, resource, or others.	High, Normal

CI Type	HI	Description	Value
J2EE Server	Transaction Start Rate	The number of transactions that were begun per second.	High, Normal
J2EE Server	Transaction System Errors	Transaction errors caused due to system errors.	High, Normal
J2EE Server	Transaction Time	Time taken to complete a transaction.	High, Normal
J2EE Server	Transaction Timeout Errors	Transaction errors caused due to transaction timeout.	High, Normal
J2EE Server	Transaction Timeout Rate	The number of transactions that timed out per second.	High, Normal
J2EE Server	Transactions Rolled Back	Number/Percentage of transactions rolled back due to system, resource, or other errors.	High, Normal
J2EE Server	EJB Concurrent Lives	The average number of bean objects in the pool.	High, Normal
J2EE Server	EJB Utilization	The utilization of the EJB pool.	High, Normal
J2EE Server	Execute Queue Wait Count	The number of client requests waiting to be serviced by the execute queue.	High, Normal
J2EE Server	HTTP Sessions	Number of open HTTP sessions.	High, Normal
J2EE Server	EJB Missed Count Rate	Total number of times a failed attempt was made to get an instance from the free pool.	High, Normal
J2EE Server	EJB Free Pool Wait Rate	The number of times per minute no EJBs were available from the free pool.	High, Normal
J2EE Server	EJB Performance	The performance statistics such as cache utilization.	Low, Normal
J2EE Server	EJB Timeout Rate	The number of times per minute a client timed out waiting for an EJB.	High, Normal
J2EE Server	EJB Transaction Rollback Rate	Number of EJB Transaction Rolled back in unit time.	High, Normal
J2EE Server	Servlet Performance	Performance statistics such as execution time.	Low, Normal
J2EE Server	Servlet Requests	Number of incoming requests to the servlet.	High, Normal
J2EE	Connections in Use	Number of currently used JDBC connections.	High,

CI Type	HI	Description	Value
Server			Normal
J2EE Server	JDBC Connection Pool Wait Count	Number of clients waiting for a JDBC connection.	High, Normal
J2EE Server	Data Source Connection Pool Availability	Availability of JDBC connections in the connection pool.	Low, Normal
J2EE Server	Data Source Connection Pool Failures	Number of failed attempts to refresh a connection in the connection pool.	Critical, Normal
J2EE Server	Data Source Connection Pool Utilization	Data Source Connection Pool Utilization	High, Normal
J2EE Server	Data Source Connection Pool Performance	Data Source Connection Pool Performance	Low, Normal
J2EE Server	Data Source Connection Waiters	The average number of threads waiting for a connection from the connection pool.	High, Normal
J2EE Server	JDBC Active Connection Count	Active JDBC connections	High, Normal
J2EE Server	Total Number of Threads	Total number of threads for garbage collection.	High, Normal
J2EE Server	Total Garbage Collection Count	Number of times garbage collector has run.	High, Normal
J2EE Server	Total Garbage Collection Time	Total time taken for garbage collection.	High, Normal
J2EE Server	JVM Memory Utilization	The percentage of heap size used.	High, Normal
J2EE Server	Heap Free Current	Amount of free heap available.	Low, Normal
J2EE Server	Heap Size Current	Amount of heap in use.	High, Normal
J2EE Server	All Processors Average Load	Average load on all the processors on the system.	High, Normal
J2EE Cluster	Cluster Health	Cluster health in terms of performance.	Poor, Normal

CI Type	HI	Description	Value
J2EE Cluster	Cluster Incoming Message Failure Rate	The number of multicast messages that were lost from the cluster.	High, Normal
J2EE Cluster	Cluster Outgoing Message Failure Rate	The number of multicast messages that were sent to the cluster.	High, Normal
J2EE Cluster	Cluster Status	Cluster Status in terms of availability.	Started, Partial Stopped, Stopped
JDBC Data Source	Connections in Use	Number of currently used JDBC connections.	High, Normal
JDBC Data Source	Data Source Connection Waiters	The average number of threads waiting for a connection from the connection pool.	High, Normal
JDBC Data Source	Data Source Connection Pool Availability	Availability of JDBC connections in the connection pool.	Low, Normal
JDBC Data Source	Data Source Connection Pool Failures	The number of failed attempts to refresh a connection in the connection pool.	Normal, Critical
JDBC Data Source	Data Source Connection Pool Performance	Data source connection pool performance.	Low, Normal
JDBC Data Source	Data Source Connection Pool Utilization	Data source connection pool utilization.	High, Normal
JDBC Data Source	Data Source Leaked Connections Rate	The rate of new leaked JDBC connections.	High, Normal
JDBC Data Source	JDBC Active Connections Count	Active JDBC connections	High, Normal
JDBC Data Source	JDBC Connection Pool Wait Count	The number of clients waiting for a JDBC connection.	High, Normal
J2EE	EJB Concurrent	The average number of bean objects in the pool.	High,

CI Type	HI	Description	Value
Application	Lives		Normal
J2EE Application	EJB Free Pool Wait Rate	The number of times per minute no EJBs were available from the free pool.	High, Normal
J2EE Application	EJB Missed Count Rate	The total number of times a failed attempt was made to get an instance from the free pool.	High, Normal
J2EE Application	EJB Performance	The performance statistics such as cache utilization.	Low, Normal
J2EE Application	EJB Timeout Rate	The number of times per minute a client timed out waiting for an EJB.	High, Normal
J2EE Application	EJB Transaction Rollback Rate	Number of EJB transaction rolled back in unit time.	High, Normal
J2EE Application	EJB Transaction Throughput Rate	Number of EJBs Transactions completed in unit time.	High, Normal
J2EE Application	EJB Utilization	The utilization of the EJB pool.	High, Normal
J2EE Application	HTTP Sessions	Number of open HTTP sessions.	High, Normal
J2EE Application	Servlet Performance	The performance statistics such as execution time.	Low, Normal
J2EE Application	Servlet Requests	Number of incoming requests to the servlet.	High, Normal
JVM	All Processors Average Load	Average load on all the processors on the system.	High, Normal
JVM	Heap Free Current	Amount of free heap available.	Low, Normal
JVM	Heap Size Current	Amount of heap in use.	High, Normal
JVM	JVM Memory Utilization	The percentage of heap size used.	High, Normal
JVM	Total Garbage Collection Count	Number of times garbage collector has run.	High, Normal
JVM	Total Garbage Collection Time	Total time taken for garbage collection.	High, Normal
JVM	Total Number of Threads	Total number of threads for garbage collection.	High, Normal

CI Type	HI	Description	Value
J2EE Domain	Domain Status	The status of domain.	Normal, Poor

Topology Based Event Correlation (TBEC) Rules

The OMi MP for Oracle WebLogic includes the following rules to correlate WebLogic Application Server related events:

For more information on how the correlation rules work, see the *Operations Manager i Concepts Guide*.

How to Access TBEC Rules

- Open Topology-Based Event Correlation Rules pane:

  On BSM, click**Admin > Operations Management > Event Correlation > Topology-Based Event Correlation**

  On OMi, click**Administration > Event Processing > Correlation > Topology-Based Event Correlation**

J2EE::Computer:CPU Load >> JVM Memory Utilization & JMS Server Utilization & Transaction System Errors & EJB Performance

Description: Computer CPU Load Impacts JVM Memory Utilization and JMS Server Utilization and Transaction System Errors and EJB Performance		
Cause		
CIT: Computer	ETI: CPU Load	Value: Overloaded
Symptom 1		
CIT: J2EE Application	ETI: EJB Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: EJB Performance	Value: Low
Symptom 3		
CIT: J2EE Server	ETI: JMS Server Utilization	Value: High
Symptom 3		

Description: Computer CPU Load Impacts JVM Memory Utilization and JMS Server Utilization and Transaction System Errors and EJB Performance		
CIT: J2EE Server	ETI: Transaction System Errors	Value: High
Symptom 4		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::Computer:CPU Load >> Real User Transaction Performance & Real User Sessions Performance

Description: Computer CPU Load Impacts Real User Transaction Performance and Real User Sessions Performance		
Cause		
CIT: Computer	ETI: CPU Load	Value: Overloaded
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Performance	Value: Critical
Symptom 2		
CIT: Business Transaction	ETI: Real User Transaction Performance event	Value: Critical

J2EE::Computer:CPU Load >> Synthetic User Transaction Performance

Description: Computer CPU Load Impacts Synthetic User Transaction Performance		
Cause		
CIT: Computer	ETI: CPU Load	Value: Overloaded
Symptom 1		
CIT: Business Transaction	ETI: Synthetic User Transaction Performance event	Value: Critical

J2EE::Computer:Memory Usage Level >> Server Status & Transaction System Errors & Thread Hung Rage

Description: Computer Memory Usage Level Impacts Server Status and Transaction System Errors and Thread Hung Rate		
Cause		
CIT: Computer	ETI: Memory Usage Level	Value: Much Higher Than Normal

Description: Computer Memory Usage Level Impacts Server Status and Transaction System Errors and Thread Hung Rate		
Symptom 1		
CIT: J2EE Server	ETI: Server Status	Value: Unavailable
Symptom 2		
CIT: J2EE Server	ETI: Thread Hung Rate	Value: High
Symptom 3		
CIT: J2EE Server	ETI: Transaction System Errors	Value: High

J2EE::File System:Disk Usage Level >> Server Status & Transaction Resource Errors & Transaction System Errors

Description: File System Disk Usage Level Impacts Server Status and Transaction Resource Errors and Transaction System Errors		
Cause		
CIT: FileSystem	ETI: Disk Usage Level	Value: Near Capacity
Symptom 1		
CIT: J2EE Server	ETI: Server Status	Value: Unavailable
Symptom 2		
CIT: J2EE Server	ETI: Transaction Resource Errors	Value: High
Symptom 3		
CIT: J2EE Server	ETI: Transactions System Errors	Value: High

J2EE::J2EE Application:EJB Concurrent Lives >> EJB Utilization

Description: EJB Concurrent Lives Impacts EJB Utilization		
Cause		
CIT: J2EE Application	ETI: EJB Concurrent Lives	Value: High
Symptom 1		
CIT: J2EE Application	ETI: EJB Utilization	Value: High
Symptom 2		
CIT: J2EE Server	ETI: EJB Utilization	Value: High

J2EE::J2EE Application:EJB Free Pool Wait Rate >> Servlet Performance

Description: EJB Free Pool Wait Rate Impacts Servlet Performance		
Cause		
CIT: J2EE Application	ETI: EJB Free Pool Wait Rate	Value: High
Symptom 1		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::J2EE Application:EJB Performance >> EJB Free Pool Wait Rate & EJB Missed Count Rate & Servlet Performance

Description: EJB Performance Impacts EJB Free Pool Wait Rate and EJB Missed Count Rate and Servlet Performance		
Cause		
CIT: J2EE Application	ETI: EJB Performance	Value: Low
Symptom 1		
CIT: J2EE Application	ETI: EJB Free Pool Wait Rate	Value: High
Symptom 2		
CIT: J2EE Application	ETI: EJB Missed Count Rate	Value: High
Symptom 3		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 4		
CIT: J2EE Server	ETI: EJB Free Pool Wait Rate	Value: High
Symptom 5		
CIT: J2EE Server	ETI: EJB Missed Count Rate	Value: High
Symptom 6		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::J2EE Application:EJB Timeout Rate >> Servlet Performance & EJB Transaction Throughput Rate & EJB Transaction Rollback Rate

Description: EJB Timeout Rate Impacts Servlet Performance and EJB Transaction Throughput Rate and EJB Transaction Rollback Rate		
Cause		
CIT: J2EE Application	ETI: EJB Timeout Rate	Value: High
Symptom 1		
CIT: J2EE Application	ETI: EJB Transaction Rollback Rate	Value: High
Symptom 2		
CIT: J2EE Application	ETI: EJB Transaction Throughput Rate	Value: High
Symptom 3		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 4		
CIT: J2EE Server	ETI: EJB Transaction Rollback Rate	Value: High
Symptom 5		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::J2EE Application:EJB Utilization >> DataSource Connection Waiters & DataSource Connection Pool Utilization

Description: EJB Utilization Impacts DataSource Connection Waiters and DataSource Connection Pool Utilization		
Cause		
CIT: J2EE Application	ETI: EJB Utilization	Value: High
Symptom 1		
CIT: J2EE Server	Data Source Connection Pool Utilization	Value: High
Symptom 2		
CIT: J2EE Server	ETI: Data Source Connection Waiters	Value: High
Symptom 3		
CIT: JDBC Data Source	ETI: Data Source Connection Waiters	Value: High

Description: EJB Utilization Impacts DataSource Connection Waiters and DataSource Connection Pool Utilization		
Symptom 4		
CIT: JDBC Data Source	ETI: Data Source Connection Pool Utilization	Value: High

J2EE::J2EE Application:HTTP Sessions >> JVM Memory Utilization

Description: J2EE Application HTTP Sessions Impacts JVM Memory Utilization		
Cause		
CIT: J2EE Application	ETI: HTTP Sessions	Value: High
Symptom 1		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 2		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::J2EE Application:Servlet Requests >> InterfaceUtilization

Description: J2EE Application Servlet Requests Impacts Interface Utilization		
Cause		
CIT: J2EE Application	ETI: Servlet Requests	Value: High
Symptom		
CIT: Interface	ETI: InterfaceUtilization	Value: Much Higher Than Normal

J2EE::J2EE Application:Servlet Requests >> Real User Transaction Performance & Real User Sessions Performance

Description: J2EE Application Servlet Requests Impacts Real User Transaction Performance and Real User Sessions Performance		
Cause		
CIT: J2EE Application	ETI: Servlet Requests	Value: High
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Performance	Value: Critical
Symptom 2		
CIT: Business Transaction	ETI: Real User Transaction Performance event	Value: Critical

J2EE::J2EE Application:Servlet Requests >> Synthetic User Transaction Performance

Description: J2EE Application Servlet Requests Impacts Synthetic User Transaction Performance		
Cause		
CIT: J2EE Application	ETI: Servlet Requests	Value: High
Symptom 1		
CIT: Business Application	ETI: Synthetic User Transaction Performance event	Value: Critical

J2EE::J2EE Application:Servlet Requests >> Thread Pool Utilization & Active Sockets Count & JVM Memory Utilization & HTTP Sessions & Thread Requests Pending & Servlets Loaded & Interface Discard Rate & Interface Utilization

Description: J2EE Application Servlet Requests Impacts Thread Pool Utilization and Active Sockets Count and JVM Memory Utilization and HTTP Sessions and Thread Requests Pending and Servlets Loaded and Interface Discard Rate and Interface Utilization		
Cause		
CIT: J2EE Application	ETI: Servlet Requests	Value: High
Symptom 1		
CIT: Interface	ETI: Interface Discard Rate	Value: High
Symptom 2		
CIT: Interface	ETI: Interface Utilization	Value: High
Symptom 3		
CIT: Interface	ETI: Interface Utilization	Value: Higher Than Normal
Symptom 4		
CIT: J2EE Application	ETI: HTTP Sessions	Value: High
Symptom 5		
CIT: J2EE Server	ETI: Active Sockets Count	Value: High
Symptom 6		
CIT: J2EE Server	ETI: HTTP Sessions	Value: High
Symptom 7		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High

Description: J2EE Application Servlet Requests Impacts Thread Pool Utilization and Active Sockets Count and JVM Memory Utilization and HTTP Sessions and Thread Requests Pending and Servlets Loaded and Interface Discard Rate and Interface Utilization		
Symptom 8		
CIT: J2EE Server	ETI: Servlets Loaded	Value: High
Symptom 9		
CIT: J2EE Server	ETI: Thread Pool Utilization	Value: High
Symptom 10		
CIT: J2EE Server	ETI: Thread Requests Pending	Value: High
Symptom 11		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::J2EE Cluster:Cluster Health >> Domain Status

Description: J2EE Cluster Health Impacts Domain Status		
Cause		
CIT: J2EE Cluster	ETI: Cluster Health	Value: Poor
Symptom 1		
CIT: J2EE Domain	ETI: Domain Status	Value: Poor

J2EE::J2EE Cluster:Cluster Health >> Real User Transaction Performance & Real User Sessions Performance

Description: J2EE Cluster Health Impacts Real User Transaction Performance and Real User Sessions Performance		
Cause		
CIT: J2EE Cluster	ETI: Cluster Health	Value: Poor
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Performance	Value: Critical
Symptom 2		
CIT: Business Application	ETI: Real User Transaction Performance event	Value: Critical

J2EE::J2EE Cluster:Cluster Health >> Synthetic User Transaction Performance

Description: J2EE Cluster Health Impacts Synthetic User Transaction Performance		
Cause		
CIT: J2EE Cluster	ETI: Cluster Health	Value: Poor
Symptom 1		
CIT: Business Application	ETI: Synthetic User Transaction Performance event	Value: Critical

J2EE::J2EE Cluster:Cluster Status >> Domain Status

Description: J2EE Cluster Status Impacts Domain Status		
Cause		
CIT: J2EE Cluster	ETI: Cluster Status	Value: Stopped
Symptom 1		
CIT: J2EE Domain	ETI: Domain Status	Value: Poor

J2EE::J2EE Cluster:Cluster Status >> Real User Transaction Availability & Real User Sessions Availability

Description: J2EE Cluster Status Impacts Real User Transaction Availability and Real User Sessions Availability		
Cause		
CIT: J2EE Cluster	ETI: Cluster Status	Value: Stopped
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Availability	Value: Critical
Symptom 2		
CIT: Business Application	ETI: Real User Transaction Availability event	Value: Critical

J2EE::J2EE Cluster:Cluster Status >> Synthetic User Transaction Availability

Description: J2EE Cluster Status Impacts Synthetic User Transaction Availability		
Cause		
CIT: J2EE Cluster	ETI: Cluster Status	Value: Stopped
Symptom 1		

Description: J2EE Cluster Status Impacts Synthetic User Transaction Availability		
CIT: Business Transaction	ETI: Synthetic User Transaction Availability event	Value: Critical

J2EE::J2EE Server:DataSource Connection Pool Availability >> EJBPerformance & Transaction Timeout Rate & Transaction Commit Rate

Description: J2EE Server DataSource Connection Pool Availability Impacts EJBPerformance and Transaction Timeout Rate and Transaction Commit Rate		
Cause		
CIT: J2EE Server	ETI: Data Source Connection Pool Availability	Value: Low
Symptom 1		
CIT: J2EE Application	ETI: EJB Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: EJB Performance	Value: Low
Symptom 3		
CIT: J2EE Server	ETI: Transaction Commit Rate	Value: High
Symptom 4		
CIT: J2EE Server	ETI: Transaction Timeout Rate	Value: High

J2EE::J2EE Server:DataSource Connection Pool Performance >> EJB Performance

Description: J2EE Server DataSource Connection Pool Performance Impacts EJB Performance		
Cause		
CIT: J2EE Server	ETI: Data Source Connection Pool Performance	Value: Low
Symptom 1		
CIT: J2EE Application	ETI: EJB Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: EJB Performance	Value: Low

J2EE::J2EE Server:DataSource Connection Waiters >> DataSource Connection Pool Availability

Description: J2EE Server DataSource Connection Waiters Impacts DataSource Connection Pool Availability		
Cause		
CIT: J2EE Server	ETI: Data Source Connection Waiters	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Data Source Connection Pool Availability	Value: Low
Symptom 2		
CIT: JDBC Data Source	ETI: Data Source Connection Pool Availability	Value: Low

J2EE::J2EE Server:DataSource ConnectionPool Utilization >> Transaction Capacity Utilization & JDBC Connection Pool Wait Count & Transaction Time & Transaction Commit Rate & Transaction Start Rate & DataSource Connection Pool Availability

Description: J2EE Server DataSource ConnectionPool Utilization Impacts Transaction Capacity Utilization and JDBC Connection Pool Wait Count and Transaction Time and Transaction Commit Rate and Transaction Start Rate and DataSource Connection Pool Availability		
Cause		
CIT: J2EE Server	ETI: Data Source Connection Pool Utilization	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Data Source Connection Pool Availability	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: JDBC Connection Pool Wait Count	Value: High
Symptom 3		
CIT: J2EE Server	ETI: Transaction Capacity Utilization	Value: High
Symptom 4		
CIT: J2EE Server	ETI: Transaction Commit Rate	Value: High
Symptom 5		

Description: J2EE Server DataSource ConnectionPool Utilization Impacts Transaction Capacity Utilization and JDBC Connection Pool Wait Count and Transaction Time and Transaction Commit Rate and Transaction Start Rate and DataSource Connection Pool Availability		
CIT: J2EE Server	ETI: Transaction Start Date	Value: High
Symptom 6		
CIT: J2EE Server	ETI: Transaction Time	Value: High
Symptom 7		
CIT: JDBC Data Source	ETI: Data Source Connection Pool Availability	Value: Low
Symptom 8		
CIT: JDBC Data Source	ETI: JDBC Connection Pool Wait Count	Value: High

J2EE::J2EE Server:EJB Concurrent Lives >> EJB Utilization

Description: EJB Concurrent Lives Impacts EJB Utilization		
Cause		
CIT: J2EE Server	ETI: EJB Concurrent Lives	Value: High
Symptom 1		
CIT: J2EE Application	ETI: EJB Utilization	Value: High
Symptom 2		
CIT: J2EE Server	ETI: EJB Utilization	Value: High

J2EE::J2EE Server:EJB Free Pool Wait Rate >> Servlet Performance

Description: EJB Free Pool Wait Rate Impacts Servlet Performance		
Cause		
CIT: J2EE Server	ETI: EJB Free Pool Wait Rate	Value: High
Symptom 1		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::J2EE Server:EJB Performance >> EJB Free Pool Wait Rate & EJB Missed Count Rate & Servlet Performance

Description: EJB Performance Impacts EJB Free Pool Wait Rate and EJB Missed Count Rate and Servlet Performance		
Cause		
CIT: J2EE Server	ETI: EJB Performance	Value: Low
Symptom 1		
CIT: J2EE Application	ETI: EJB Free Pool Wait Rate	Value: High
Symptom 2		
CIT: J2EE Application	ETI: EJB Missed Count Rate	Value: High
Symptom 3		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 4		
CIT: J2EE Server	ETI: EJB Free Pool Wait Rate	Value: High
Symptom 5		
CIT: J2EE Server	ETI: EJB Missed Count Rate	Value: High
Symptom 6		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::J2EE Server:EJB Timeout Rate >> Servlet Performance & EJB Transaction Throughput Rate & EJB Transaction Rollback Rate

Description: EJB Timeout Rate Impacts Servlet Performance and EJB Transaction Throughput Rate and EJB Transaction Rollback Rate		
Cause		
CIT: J2EE Server	ETI: EJB Timeout Rate	Value: High
Symptom 1		
CIT: J2EE Application	ETI: EJB Transaction Rollback Rate	Value: High
Symptom 2		
CIT: J2EE Application	ETI: EJB Transaction Throughput Rate	Value: High
Symptom 3		
CIT: J2EE Application	ETI: EJB Transaction Rollback Rate	Value: High

Description: EJB Timeout Rate Impacts Servlet Performance and EJB Transaction Throughput Rate and EJB Transaction Rollback Rate		
Symptom 4		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::J2EE Server:EJB Utilization >> DataSource Connection Waiters & DataSource Connection Pool Utilization

Description: EJB Utilization Impacts DataSource Connection Waiters and DataSource Connection Pool Utilization		
Cause		
CIT: J2EE Server	ETI: EJB Utilization	Value: High
Symptom 1		
CIT: J2EE Server	ETI: DataSource Connection Pool Utilization	Value: High
Symptom 2		
CIT: J2EE Server	ETI: DataSource Connection Waiters	Value: High
Symptom 3		
CIT: JDBC Data Source	ETI: DataSource Connection Waiters	Value: High
Symptom 4		
CIT: JDBC Data Source	ETI: DataSource Connection Pool Utilization	Value: High

J2EE::J2EE Server:HTTP Sessions >> JVM Memory Utilization

Description: J2EE Server HTTP Sessions Impacts JVM Memory Utilization		
Cause		
CIT: J2EE Server	ETI: HTTP Sessions	Value: High
Symptom 1		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 2		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::J2EE Server:JVM Memory Utilization >> Real User Transaction Performance & Real User Sessions Performance

Description: J2EE Server Memory Utilization Impacts Real User Transaction Performance and Real User Sessions Performance		
Cause		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Performance	Value: Critical
Symptom 2		
CIT: Business Application	ETI: Real User Transaction Performance event	Value: Critical
Symptom 3		
CIT: J2EE Application	ETI: EJB Transaction Rollback Rate	Value: High
Symptom 4		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::J2EE Server:JVM Memory Utilization >> Synthetic User Transaction Performance

Description: J2EE Server Memory Utilization Impacts Synthetic User Transaction Performance		
Cause		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 1		
CIT: Business Application	ETI: Synthetic User Transaction Performance event	Value: Critical

J2EE::J2EE Server:JVM Memory Utilization >> Transaction Time & Transaction System Errors & Servlet Performance

Description: J2EE Server JVMMemoryUtilization Impacts Transaction Time and Transaction System Errors and Servlet Performance		
Cause		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High

Description: J2EE Server JVMMemoryUtilization Impacts Transaction Time and Transaction System Errors and Servlet Performance		
Symptom 1		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low
Symptom 3		
CIT: J2EE Server	ETI: Transaction System Errors	Value: High
Symptom 4		
CIT: J2EE Server	ETI: Transaction Time	Value: High

J2EE::J2EE Server:Server Sessions >> JVM Memory Utilization

Description: J2EE Server Sessions Impact JVM Memory Utilization		
Cause		
CIT: J2EE Server	ETI: Server Sessions	Value: High
Symptom 1		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 2		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::J2EE Server:Server Status >> Domain Status & Cluster Health & Cluster Status

Description: J2EE Server Status Impacts Domain Status and Cluster Health and Cluster Status		
Cause		
CIT: J2EE Server	ETI: Server Status	Value: Unavailable
Symptom 1		
CIT: J2EE Cluster	ETI: Cluster Health	Value: Poor
Symptom 2		
CIT: J2EE Cluster	ETI: Cluster Status	Value: Partial Stop
Symptom 3		
CIT: J2EE Cluster	ETI: Cluster Status	Value: Stopped

J2EE::J2EE Server:Server Status >> Real User Transaction Availability & Real User Sessions Availability

Description: J2EE Server Status Impacts Real User Transaction Availability and Real User Sessions Availability		
Cause		
CIT: J2EE Server	ETI: Server Status	Value: Unavailable
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Availability	Value: Critical
Symptom 2		
CIT: Business Application	ETI: Real User Transaction Availability event	Value: Critical

J2EE::J2EE Server:Server Status >> Synthetic User Transaction Availability

Description: J2EE Server Status Impacts Synthetic User Transaction Availability		
Cause		
CIT: J2EE Server	ETI: Server Status	Value: Unavailable
Symptom 1		
CIT: Business Application	ETI: Synthetic User Transaction Availability event	Value: Critical

J2EE::J2EE Server:Servlet Requests >> Real User Transaction Performance & Real User Sessions Performance

Description: J2EE Server Servlet Requests Impacts Real User Transaction Performance and Real User Sessions Performance		
Cause		
CIT: J2EE Server	ETI: Servlet Requests	Value: High
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Performance	Value: Critical
Symptom 2		
CIT: Business Application	ETI: Real User Transaction Performance event	Value: Critical

J2EE::J2EE Server:Servlet Requests >> Synthetic User Transaction Performance

Description: J2EE Server Servlet Requests Impacts Synthetic User Transaction Performance		
Cause		
CIT: J2EE Server	ETI: Servlet Requests	Value: High
Symptom 1		
CIT: Business Application	ETI: Synthetic User Transaction Performance event	Value: Critical

J2EE::J2EE Server:Servlet Requests >> Thread Pool Utilization & Active Sockets Count & JVM Memory Utilization & HTTP Sessions & Thread Requests Pending & Servlets Loaded & Interface Discard Rate & Interface Utilization

Description: J2EE Server Servlet Requests Impacts Thread Pool Utilization and Active Sockets Count and JVM Memory Utilization and HTTP Sessions and Thread Requests Pending and Servlets Loaded and Interface Discard Rate and Interface Utilization		
Cause		
CIT: J2EE Server	ETI: Servlet Requests	Value: High
Symptom 1		
CIT: Interface	ETI: Interface Discard Rate	Value: High
Symptom 2		
CIT: Interface	ETI: Interface Utilization	Value: Higher Than Normal
Symptom 3		
CIT: J2EE Server	ETI: Active Sockets Count	Value: High
Symptom 4		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 5		
CIT: J2EE Server	ETI: Servlets Loaded	Value: High
Symptom 6		
CIT: J2EE Server	ETI: Thread Pool Utilization	Value: High
Symptom 7		
CIT: J2EE Server	ETI: Thread Requests Pending	Value: High

Description: J2EE Server Servlet Requests Impacts Thread Pool Utilization and Active Sockets Count and JVM Memory Utilization and HTTP Sessions and Thread Requests Pending and Servlets Loaded and Interface Discard Rate and Interface Utilization		
Symptom 8		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::J2EE Server:Servlets Loaded >> JVM Memory Utilization

Description: J2EE Server Status Impacts Real User Transaction Availability and Synthetic User Transaction Availability and Real User Sessions Availability		
Cause		
CIT: J2EE Server	ETI: Servlets Loaded	Value: High
Symptom 1		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 1		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::J2EE Server:ThreadPoolUtilization >> ExecuteQueueWaitCount & ActiveSocketsCount & ServletPerformance & DeferredThreadRequests & ThreadRequestWaitTime & ThreadRequestsPending & ThreadRequestServiceTime & ThreadPoolAvailability & JVMMemoryUtilization

Description: J2EE Server Thread Pool Utilization Impacts Execute Queue Wait Count and Active Sockets Count and Servlet Performance and Deferred Thread Requests and Thread Request Wait Time and Thread Requests Pending and Thread Request Service Time and Thread Pool Availability and JVM Memory Utilization		
Cause		
CIT: J2EE Server	ETI: Thread Pool Utilization	Value: High
Symptom 1		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: Active Sockets Count	Value: High
Symptom 3		
CIT: J2EE Server	ETI: Deferred Thread Requests	Value: High
Symptom 4		

Description: J2EE Server Thread Pool Utilization Impacts Execute Queue Wait Count and Active Sockets Count and Servlet Performance and Deferred Thread Requests and Thread Request Wait Time and Thread Requests Pending and Thread Request Service Time and Thread Pool Availability and JVM Memory Utilization		
CIT: J2EE Server	ETI: Execute Queue Wait Count	Value: High
Symptom 5		
CIT: J2EE Server	ETI: JVM Memory Utilization	Value: High
Symptom 6		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low
Symptom 7		
CIT: J2EE Server	ETI: Thread Pool Availability	Value: Low
Symptom 8		
CIT: J2EE Server	ETI: Thread Request Service Time	Value: High
Symptom 9		
CIT: J2EE Server	ETI: Thread Request Wait Time	Value: High
Symptom 10		
CIT: J2EE Server	ETI: Thread Requests Pending	Value: High
Symptom 11		
CIT: JVM	ETI: JVM Memory Utilization	Value: High

J2EE::J2EE Server:Total Garbage Collection Count >> CPU Load

Description: J2EE Server Total Garbage Collection Count Impacts CPU Load		
Cause		
CIT: J2EE Server	ETI: Total Garbage Collection Count	Value: High
Symptom 1		
CIT: Computer	ETI: CPU Load	Value: Overloaded

J2EE::J2EE Server:Total Garbage Collection Time >> CPU Load

Description: J2EE Server Total Garbage Collection Time Impacts CPU Load
Cause

Description: J2EE Server Total Garbage Collection Time Impacts CPU Load		
CIT: J2EE Server	ETI: Total Garbage Collection Time	Value: High
Symptom 1		
CIT: Computer	ETI: CPU Load	Value: Overloaded

J2EE::J2EE Server:Total Number of Threads >> CPU Load & Memory Usage Level

Description: J2EE Server Total Number Of Threads Impacts CPU Load and Memory Usage Level		
Cause		
CIT: J2EE Server	ETI: Total Number Of Threads	Value: High
Symptom 1		
CIT: Computer	ETI: CPU Load	Value: Overloaded
Symptom 2		
CIT: Computer	ETI: Memory Usage Level	Value: Higher Than Normal
Symptom 3		
CIT: Computer	ETI: Memory Usage Level	Value: Much Higher Than Normal

J2EE::J2EE Server:Transaction Application Errors >> Transactions Rolled Back

Description: J2EE Server Transaction Application Errors Impacts Transactions Rolled Back		
Cause		
CIT: J2EE Server	ETI: Transaction Application Errors	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Transactions Rolled Back	Value: High

J2EE::J2EE Server:Transaction Resource Errors >> Transactions Rolled Back

Description: J2EE Server Transaction Resource Errors Impacts Transactions Rolled Back		
Cause		
CIT: J2EE Server	ETI: Transaction Resource Errors	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Transactions Rolled Back	Value: High

J2EE::J2EE Server:Transaction System Errors >> Transactions Rolled Back

Description: J2EE Server Transaction System Errors Impacts Transactions Rolled Back		
Cause		
CIT: J2EE Server	ETI: Transaction System Errors	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Transactions Rolled Back	Value: High

J2EE::J2EE Server:Transaction Time >> JDBC Connection Pool Wait Count

Description: J2EE Server Transaction Time Impacts JDBC Connection Pool Wait Count		
Cause		
CIT: J2EE Server	ETI: Transaction Time	Value: High
Symptom 1		
CIT: J2EE Server	ETI: JDBC Connection Pool Wait Count	Value: High
Symptom 2		
CIT: JDBC Data Source	ETI: JDBC Connection Pool Wait Count	Value: High

J2EE::J2EE Server:Transaction Timeout Errors >> Transactions Rolled Back

Description: J2EE Server Transaction Timeout Errors Impacts Transactions Rolled Back		
Cause		
CIT: J2EE Server	ETI: Transaction Timeout Errors	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Transactions Rolled Back	Value: High

J2EE::JDBC Data Source:DataSource Connection Pool Availability >> EJBPerformance & Transaction Timeout Rate & Transaction Commit Rate

Description: JDBC DataSource Connection Pool Availability Impacts EJBPerformance and Transaction Timeout Rate and Transaction Commit Rate		
Cause		
CIT: JDBC Data Source	ETI: Data Source Connection Pool Availability	Value: Low
Symptom 1		

Description: JDBC DataSource Connection Pool Availability Impacts EJBPerformance and Transaction Timeout Rate and Transaction Commit Rate		
CIT: J2EE Application	ETI: EJB Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: EJB Performance	Value: Low
Symptom 3		
CIT: J2EE Server	ETI: Transaction Commit Rate	Value: High
Symptom 4		
CIT: J2EE Server	ETI: Transaction Timeout Rate	Value: High

J2EE::JDBC Data Source:DataSource Connection Pool Performance >> EJB Performance

Description: JDBC DataSource Connection Pool Performance Impacts EJB Performance		
Cause		
CIT: JDBC Data Source	ETI: Data Source Connection Pool Performance	Value: Low
Symptom 1		
CIT: J2EE Application	ETI: EJB Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: EJB Performance	Value: Low

J2EE::JDBC Data Source:DataSource Connection Waiters >> DataSource Connection Pool Availability

Description: JDBC DataSource Connection Waiters Impacts DataSource Connection Pool Availability		
Cause		
CIT: JDBC Data Source	ETI: Data Source Connection Waiters	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Data Source Connection Pool Availability	Value: Low
Symptom 2		
CIT: JDBC Data Source	ETI: Data Source Connection Pool Availability	Value: Low

J2EE::JDBC Data Source:DataSource ConnectionPool Utilization >> Transaction Capacity Utilization & JDBC Connection Pool Wait Count & Transaction Time & Transaction Commit Rate & Transaction Start Rate & DataSource Connection Pool Availability

Description: JDBC DataSource ConnectionPool Utilization Impacts Transaction Capacity Utilization and JDBC Connection Pool Wait Count and Transaction Time and Transaction Commit Rate and Transaction Start Rate and DataSource Connection Pool Availability		
Cause		
CIT: JDBC Data Source	ETI: Data Source Connection Pool Utilization	Value: High
Symptom 1		
CIT: J2EE Server	ETI: Data Source Connection Pool Availability	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: JDBC Connection Pool Wait Count	Value: High
Symptom 3		
CIT: J2EE Server	ETI: Transaction Capacity Utilization	Value: High
Symptom 4		
CIT: J2EE Server	ETI: Transaction Commit Rate	Value: High
Symptom 5		
CIT: J2EE Server	ETI: Transaction Start Rate	Value: High
Symptom 6		
CIT: J2EE Server	ETI: Transaction Time	Value: High
Symptom 7		
CIT: JDBC Data Source	ETI: DataSource Connection Pool Availability	Value: Low
Symptom 8		
CIT: JDBC Data Source	ETI: JDBC Connection Pool Wait Count	Value: High

J2EE::JDBC Data Source:DataSource Leaked Connections Rate >> DataSource ConnectionPool Utilization

Description: JDBC DataSource Leaked Connections Rate Impacts DataSource ConnectionPool Utilization		
Cause		
CIT: JDBC Data Source	ETI: DataSource Leaked Connections Rate	Value: High
Symptom 1		
CIT: J2EE Server	ETI: DataSource ConnectionPool Utilization	Value: High
Symptom 2		
CIT: JDBC Data Source	ETI: DataSource ConnectionPool Utilization	Value: High

J2EE::JVM:All Processors Average Load >> CPU Load

Description: JVM All Processors Average Load Impacts CPU Load		
Cause		
CIT: JVM	ETI: All Processors Average Load	Value: High
Symptom 1		
CIT: Computer	ETI: CPU Load	Value: Overloaded

J2EE::JVM:JVM Memory Utilization >> Real User Transaction Performance & Real User Sessions Performance

Description: JVM Memory Utilization Impacts Real User Transaction Performance and Synthetic User Transaction Performance and Real User Sessions Performance		
Cause		
CIT: JVM	ETI: JVM Memory Utilization	Value: High
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Performance	Value: Critical
Symptom 2		
CIT: Business Application	ETI: Real User Transaction Performance event	Value: Critical

J2EE::JVM:JVM Memory Utilization >> Synthetic User Transaction Performance

Description: JVM Memory Utilization Impacts Synthetic User Transaction Performance		
Cause		
CIT: JVM	ETI: JVM Memory Utilization	Value: High
Symptom 1		
CIT: Business Application	ETI: Synthetic User Transaction Performance event	Value: Critical

J2EE::JVM:JVM Memory Utilization >> Transaction Time & Transaction System Errors & Servlet Performance

Description: JVMMemoryUtilization Impacts Transaction Time and Transaction System Errors and Servlet Performance		
Cause		
CIT: JVM	ETI: JVM Memory Utilization	Value: High
Symptom 1		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low
Symptom 3		
CIT: J2EE Server	ETI: Transaction System Errors	Value: High
Symptom 4		
CIT: J2EE Server	ETI: Transaction Time	Value: High

J2EE::JVM:Total Garbage Collection Count >> CPU Load

Description: JVM Total Garbage Collection Count Impacts CPU Load		
Cause		
CIT: JVM	ETI: Total Garbage Collection Count	Value: High
Symptom 1		
CIT: Computer	ETI: CPU Load	Value: Overloaded

J2EE::JVM:Total Garbage Collection Time >> CPU Load

Description: JVM Total Garbage Collection Time Impacts CPU Load		
Cause		
CIT: JVM	ETI: Total Garbage Collection Time	Value: High
Symptom 1		
CIT: Computer	ETI: CPU Load	Value: Overloaded

J2EE::JVM:Total Number Of Threads >> CPU Load & Memory Usage Level

Description: JVM Total Number Of Threads Impacts CPU Load and Memory Usage Level		
Cause		
CIT: JVM	ETI: Total Number Of Threads	Value: High
Symptom 1		
CIT: Computer	ETI: CPU Load	Value: Constrained
Symptom 2		
CIT: Computer	ETI: Memory Usage Level	Value: Higher Than Normal

J2EE::Network Interface:Interface Communication Status >> Server Status

Description: Network Interface Communication Status Impacts Server Status		
Cause		
CIT: Interface	ETI: Interface Communication Status	Value: Unavailable
Symptom		
CIT: J2EE Server	ETI: Server Status	Value: Unavailable

J2EE::Network Interface:Interface Utilization >> Real User Transaction Performance & Real User Sessions Performance

Description: Network Interface Utilization Impacts Real User Transaction Performance and Real User Sessions Performance		
Cause		
CIT: Interface	ETI: Interface Utilization	Value: Higher Than Normal
Symptom 1		
CIT: Business Application	ETI: Real User Sessions Performance	Value: Critical

Description: Network Interface Utilization Impacts Real User Transaction Performance and Real User Sessions Performance		
Symptom 2		
CIT: Business Transaction	ETI: Real User Transaction Performance event	Value: Critical

J2EE::Network Interface:Interface Utilization >> Servlet Performance

Description: Network Interface Utilization Impacts Servlet Performance		
Cause		
CIT: Interface	ETI: Interface Utilization	Value: Higher Than Normal
Symptom 1		
CIT: J2EE Application	ETI: Servlet Performance	Value: Low
Symptom 2		
CIT: J2EE Server	ETI: Servlet Performance	Value: Low

J2EE::Network Interface:Interface Utilization >> Synthetic User Transaction Performance

Description: Network Interface Utilization Impacts Synthetic User Transaction Performance		
Cause		
CIT: Interface	ETI: Interface Utilization	Value: Higher Than Normal
Symptom 1		
CIT: Business Application	ETI: Synthetic User Transaction Performance	Value: Critical

Operations Orchestration (OO) Flows

When creating the mapping for the OO flows, you can set default values for the attributes listed in the following table. You need not specify these values each time you run the flows.

Attribute	Description
omServerPort	Port number of the OM Tool WS. This is an optional attribute.
omServerUser	User name for the OM Server that will be used in the HPOM Tool WS.
omServerPassword	Password for the OM Server that will be used in the HPOM Tool WS.

The following section lists the OO flows:

Application Server Health Check

You can use this flow to check the health of an Application Server.

You must map this flow to the CIT **J2EEServer**.

The following table lists the user input items when executing this OO flow.

Flow input	Description
omNode	FQDN of the node. This must be a managed node for the OM Server and must be specified each time you run the OO flow.
jeeserver	Determines the type and the valid values are wls/wbs. You must specify this value each time you run the OO flow.
omServer	FQDN of the OM Server. You can map this input to the Event attribute **Originating Server**.
jeeserverName	Name of the J2EE Server.You can map this input to the CI attribute **J2eeserver_ fullname** of CI Type **J2EEServer**.
timeout	Used when running the remote command on the node. This is an optional attribute and the default value is 100000.

Application Server Performance Check

You can use this flow to check the performance of an Application Server.

You must map this flow to the CIT **J2EEServer**.

The following table lists the user input items when executing this OO flow.

Flow input	Description
omNode	FQDN of the node. This must be a managed node for the OM Server and must be specified each time you run the OO flow.
jeeserver	Determines the type and the valid values are wls/wbs. You must specify this value each time you run the OO flow.
omServer	FQDN of the OM Server. You can map this input to the Event attribute **Originating Server**.
jeeserverName	Name of the J2EE Server.You can map this input to the CI attribute **J2eeserver_ fullname** of CI Type **J2EEServer**.
timeout	Used when running the remote command on the node. This is an optional attribute and the default value is 100000.

JDBC Health Check

You can use this flow to check the health of the JDBC Connection.

You must map this flow to the CIT **J2EEServer**.

The following table lists the user input items when executing this OO flow.

Flow input	Description
omNode	FQDN of the node. This must be a managed node for the OM Server and must be specified each time you run the OO flow.
jeeserver	Determines the type and the valid values are wls/wbs. You must specify this value each time you run the OO flow.
omServer	FQDN of the OM Server. You can map this input to the Event attribute **Originating Server**.
jeeserverName	Name of the J2EE Server. You can map this input to the CI attribute **J2eeserver_ fullname** of CI Type **J2EEServer**.
timeout	Used when running the remote command on the node. This is an optional attribute and the default value is 100000.

HI Assignment

The following table lists the HI assignments for OMi MP for Oracle WebLogic.

HI Mapping	HI Assignment
J2EE Application	J2EE Application Mapping for HIs assignment
	J2EE Application Mapping for HIs assignment with empty monitor
J2EE Cluster	J2EE Cluster for HIs assignment
	J2EE Cluster for HIs assignment with empty monitor
J2EE Domain	J2EE Domain Mapping for HIs assignment
	J2EE Domain Mapping for HIs assignment with empty monitor
J2EE Server	J2EE Server Mapping for HIs assignment
	J2EE Server Mapping for HIs assignment with empty monitor
JDBC Data Source	JDBC Data Source Mapping for HIs assignment
	JDBC Data Source Mapping for HIs assignment with empty monitor
JVM	JVM Mapping for HIs assignment
	JVM Mapping for HIs assignment with empty monitor

KPI Assignment

The following table lists the KPI assignments for OMi MP for Oracle WebLogic.

CI Type	KPI Assignment
J2EE Application	J2EE Application Mapping for Service Health
	J2EE Application Mapping for SLM
J2EE Cluster	J2EE Cluster Mapping for Service Health
	J2EE Cluster Mapping for SLM
J2EE Domain	J2EE Domain Mapping for Service Health
	J2EE Domain Mapping for SLM
J2EE Server	J2EE Server Mapping for Service Health
	J2EE Server Mapping for SLM
JDBC Data Source	JDBC Data Source Mapping for Service Health
	JDBC Data Source Mapping for SLM
JVM	JVM Mapping for Service Health
	JVM Mapping for SLM

Graphs

The OMi MP for Oracle WebLogic contains a set of graphs mapped to WebLogic CIs.

The following table lists the graph templates present in the OMi MP for Oracle WebLogic and the mapped metrics.

Graph Template	Description	Metric Name
WebLogic Cluster	This graph plots details of WebLogic cluster.	• Cluster Runtime Resend Request • Cluster Out Message Failure Rate • Musticast message List Count • Cluster In Message Failure Rate

		• Cluster Health
WebLogic EJB	This graph plots details of WebLogic EJB.	• EJB Pool Waiter Current Count • EJB Pool Wait Rate • EJB Pool Runtime Timeout Count • EJB Timeout Rate • EJB Transaction Throughput Rate • EJB Transaction Rollback Rate • EJB Runtime Cache Access Count • EJB Destroyed Total Count
WebLogic Connections	This graph plots details of WebLogic connections.	• Active Connection Current Count • Connector Pool Utilization • Free Connection Current Count • Number of Waiters Current Count • Connections Rejected Current Count • Connections Destroyed by Error Total Count • Deferred Requests Count
WebLogic JDBC	This graph plots details of WebLogic JDBC.	• Active JDBC Connections Current Count • JDBC Connection Pool Utilization • JDBC Connection Pool Throughput Rate • JDBC Wait for Connections Current Count • JDBC Connections Total Count • JDBC Leaked Connections Count • JDBC Connections Failed
WebLogic JMS	This graph plots details of WebLogic JMS.	• Processed Message Count • Message Pending Count

		• Throughput Message Rate • JMS Utilization by Bytes Percentage • JMS Utilization by Messages Percentage • JMS Runtime Messages Received Count • JMS Runtime Bytes Received Count
WebLogic JVM	This graph plots details of WebLogic JVM.	• JVM Memory Utilization Percentage • JVM heap Free Memory • Garbage Collection Count • All Processes Average Load • Open Sockets Current Count • Socket Traffic Rate
WebLogic Server	This graph plots details of WebLogic Server.	• Server Status • Invalid Logon Attempts Total Count • Server Restart Required
WebLogic Servlets	This graph plots details of WebLogic Servlets.	• Servlets Average Execution Time • Servlets Request Rate • Servlets Time Count • Webapp Session Count • Webapp Hit Rate
WebLogic Threads	This graph plots details of WebLogic Threads.	• Execution Thread Count • Idle Thread Count • Execution Queue Wait Count • Pending User Request Count • Execution Queue Throughput • Standby Thread count • Executing Thread Requests • Completed Thread Requests • Maximum Wait Time for a Request

WebLogic Transactions	This graph plots details of WebLogic Transactions.	• Transactions Committed Total Count • Transactions RolledBack Total Count • Transactions Average Time • Transactions Throughput Rate • Transactions Heuristics Count • Transactions Capacity Utilization
WebLogic XML Cache	This graph plots details of WebLogic XML Cache.	• XML Cache Disk Size • XML Cache Memory Size

Tools

The OMi MP for Oracle WebLogic is packaged with tools which enables administering, monitoring, and troubleshooting the WebLogic Application Server CIs. OMi MP for Oracle WebLogic comprises of the following tools:

How to Access Tools

1. Open Tools pane:

   On BSM, click**Admin > Operations Management > Operations Console > Tools**

   On OMi, click **Administration > Operations Console > Tools**

2. In the CI Type pane, click **ConfigurationItem > InfrastructureElement > RunningSoftware > ApplicationServer > J2EE Server > Weblogic AS**.

CI Type	Tool	Description
Computer	Restart Weblogic Monitoring	Restarts Weblogic monitoring on the managed server.
	Start Weblogic Monitoring	Starts Weblogic monitoring on the managed server.
	Stop Weblogic Monitoring	Stops Weblogic monitoring on the managed server.

Chapter 4: Customizing OMi MP for Oracle WebLogic

OMi MP for Oracle WebLogic can be customized to suit your monitoring requirements. You can edit the existing WebLogic Management Templates or create new WebLogic Management Templates to monitor your WebLogic Application Server environment.

This section provides information customizing WebLogic Management Templates before deployment.

Customizing WebLogic Management Templates Before Deployment

OMi MP for Oracle WebLogic can be customized to optimally and seamlessly monitor the WebLogic Application Servers in your environment. OMi MP for Oracle WebLogic provides the following customization scenarios:

- "Editing WebLogic Management Templates"
- "Creating WebLogic Management Templates"

Editing WebLogic Management Templates

You can edit the WebLogic Management Templates and modify the following components:

- Parameters
- WebLogic Aspects

Editing Parameters

Use Case: You are using Essential WebLogic Management Template to monitor WebLogic JVM Heap Memory usage in your environment. You are monitoring the percentage of heap space used in JVM and want to modify the parameters corresponding to JVM Heap Space to closely monitor the memory usage.

To closely monitor the JVM Heap Space usage in your environment, you must modify the JVM Heap Space parameters - Percentage of heap space used in the JVM Frequency, Percentage of heap space used in the JVM Severity, and Percentage of heap space used in the JVM Threshold.

1. Open the Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects**.

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**.

2. In the Configuration Folders pane:

   Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates > Essential Weblogic Management Template

3. Select the **Essential Weblogic Management Template** from the list, and then click  . The Edit Management Template dialog box opens.
4. Click the **Parameters** tab. The list of parameters appear.
5. Double-click the Percentage of heap space used in the JVM parameter. The Edit Parameter window appears.

   In this instance, Percentage of heap space used in JVM parameter is Percentage of heap space used in JVM Frequency, Percentage of heap space used in JVM Severity, and Percentage of heap space used in JVM Threshold.

6. You can change the default value by using the drop-down text. For example, you can change the value of the parameter Percentage of heap space used in JVM Severity Lower to Major from Minor.
7. Click **OK**. The Edit Management Template dialog box opens.
8. Click **OK**. The version of the WebLogic Management Template is incremented.

> **Note:** The version number of the WebLogic Management Template is incremented when any customizations are made to the WebLogic Management Template.

Editing WebLogic Aspects

Use Case: You are using Extensive WebLogic Management Template to monitor your J2EE environment. You do not want to use some Aspects which are part of the Extensive WebLogic Management Template.

1. Open the Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects**.

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**.

2. In the Configuration Folders pane:

   Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates > Extensive Weblogic Management Template

3. Select the **Extensive Weblogic Management Template** from the list, and then click  . The Edit Management Template dialog box opens.
4. Click the **Aspects** tab. The list of Aspects appear.
5. Select the Aspect that you want to delete from the list. For example, you want to delete the Weblogic JCA Statistics.
6. Click  to delete the selected aspect.
7. Click **OK**. The version of the WebLogic Management Template is incremented.

Creating WebLogic Management Templates

1. Open the Management Templates & Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates & Aspects**.

   On OMi, click**Administration > Monitoring > Management Templates & Aspects**.

2. In the Configuration Folders pane:

   Configuration Folders > Application Server Management > Oracle WebLogic Management

3. Select the Weblogic configuration folder and if you need to create a new configuration folder, click  . The Create Configuration Folder opens.
4. Type the name of the new configuration folder and the description. For example, you can type the new configuration folder name as `<Test>`.
5. Click **OK**. The new configuration folder is created.

Configuration Folders > Application Server Management > Oracle WebLogic Management > Test

6. In the Management Templates & Aspects pane, select the new configuration folder and click and then click **Create Management Template**. The Create Management Template wizard opens.
7. In the General page, type a **Name** for the new WebLogic Management Template. Click **Next**.
8. A WebLogic Management Template enables you to manage WebLogic Application Server CIs and all the related dependent CIs. Select **J2EE_Deployment** from the list as the Topology View. The J2EE_ Deployment shows the WebLogic CIs and all the related CI Types.
9. Click an item in the topology map to select the **CI Type** of the CIs that this Management Template enables you to manage. This is the type of CI to which the Management Template can be assigned. For example, you can select J2EE Application to monitor WebLogic Application server.

   Click **Next**.
10. In the Aspects page, click , and then click **Add Existing Aspect** to add existing Aspects to the new WebLogic Management Template. The Add Existing Aspect dialog box opens. Select the Aspects that you want to add, and then click **OK**.

    If suitable Aspects do not exist, click the , and then click **Add New Aspect** to create them from here.
11. For each aspect that you add, you must specify at least one **Target CI**.

    Click an aspect in the list, and then in the topology map click the CIT you want the Aspect to monitor when this Management Template is assigned. (Press **CTRL** to select several CITs.) Each CIT that you select here must correspond to one of the CI types assigned within the aspect itself (or a child of one of those CITs). For example, you can select WebLogic CI from the topology map.
12. In the Parameters page, you see a list of all the parameters from the Aspects that you added to this Management Template.

    To combine parameters:

    a. Press **CTRL** and click the parameters that you want to combine.

    b. Click the . The Edit/Combine Parameters dialog box opens.

    c. Type a **Name** for the combined parameters.

    d. *Optional.* Specify a **Description**, **Default Value**, and whether the combined parameter is **Read Only**, an **Expert Setting**, or **Hidden**.

You can specify either a specific default value, or you can click **From CI Attribute** and then browse for a CI attribute. When you specify a CI attribute, Operations Management sets the parameter value automatically during the deployment of the underlying policy templates, using the actual value of this attribute from the CI. You can also change values of conditional parameters. (The conditions are read-only and cannot be changed at Management Template level.)

Read Only prevents changes to the parameter value when the Management Template is assigned to a configuration item. Hidden also prevents changes, but additionally makes the parameter invisible when the Management Template is assigned, and during parameter tuning. Users can choose whether to show expert settings when they make an assignment.

e. Click **OK**.

You can also edit the parameters without combining them, to override the defaults in the Aspects or policy templates. Click one parameter, and then click . The Edit/Combine Parameters dialog box opens.

13. In the Create Management Template wizard, click **Finish** to save the Management Template and close the wizard. The new Management Template appears in the Management Templates & Aspects pane.

Chapter 5: Deployment Scenarios

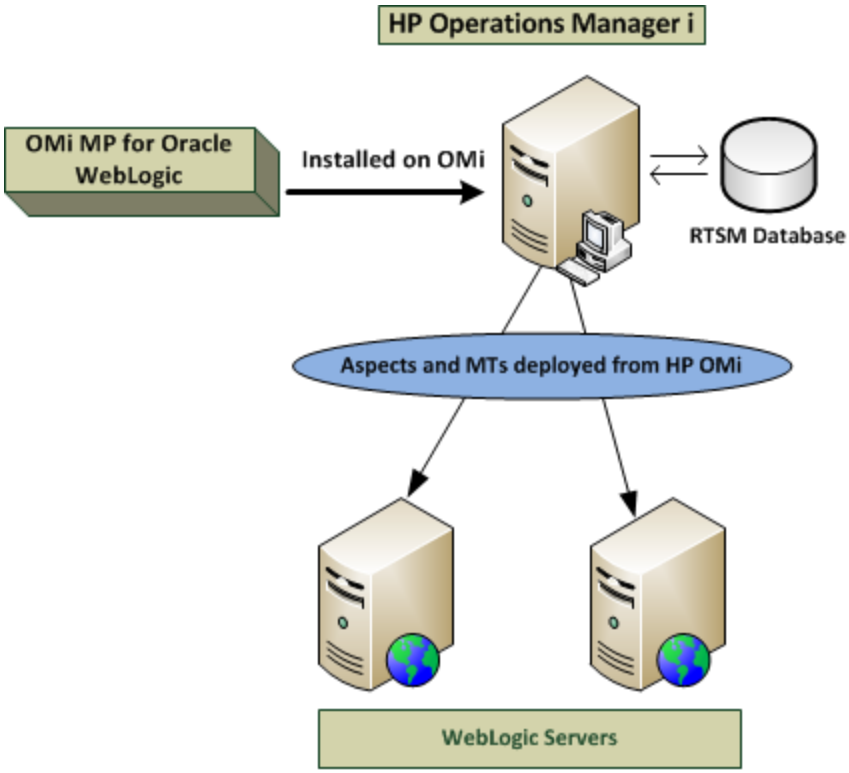
OMi MP for Oracle WebLogic supports different WebLogic Server configurations like Single Domain Non-Cluster, Cluster, Secure configurations with LDAP and SSL and so on. This section provides information about deploying OMi MP for Oracle WebLogic on different WebLogic Server configurations.

WebLogic Application Servers in a Standard Environment

WebLogic Standard environment consists of standalone WebLogic Servers monitored by a management server. To deploy OMi MP for Oracle WebLogic in WebLogic a standard environment, follow these steps:

1. You must add the nodes you want to monitor to the BSM Console.
2. Deploy the WebLogic Discovery Aspect to discover WebLogic Application Server CIs on the managed nodes.
3. Identify and deploy WebLogic Management Template as per your monitoring requirement.

The following figure shows a typical deployment scenario where the OMi MP for Oracle WebLogic is deployed on WebLogic Servers in Standard Non-cluster environment:



For more information about deploying OMi MP for Oracle WebLogic see, Getting Started.

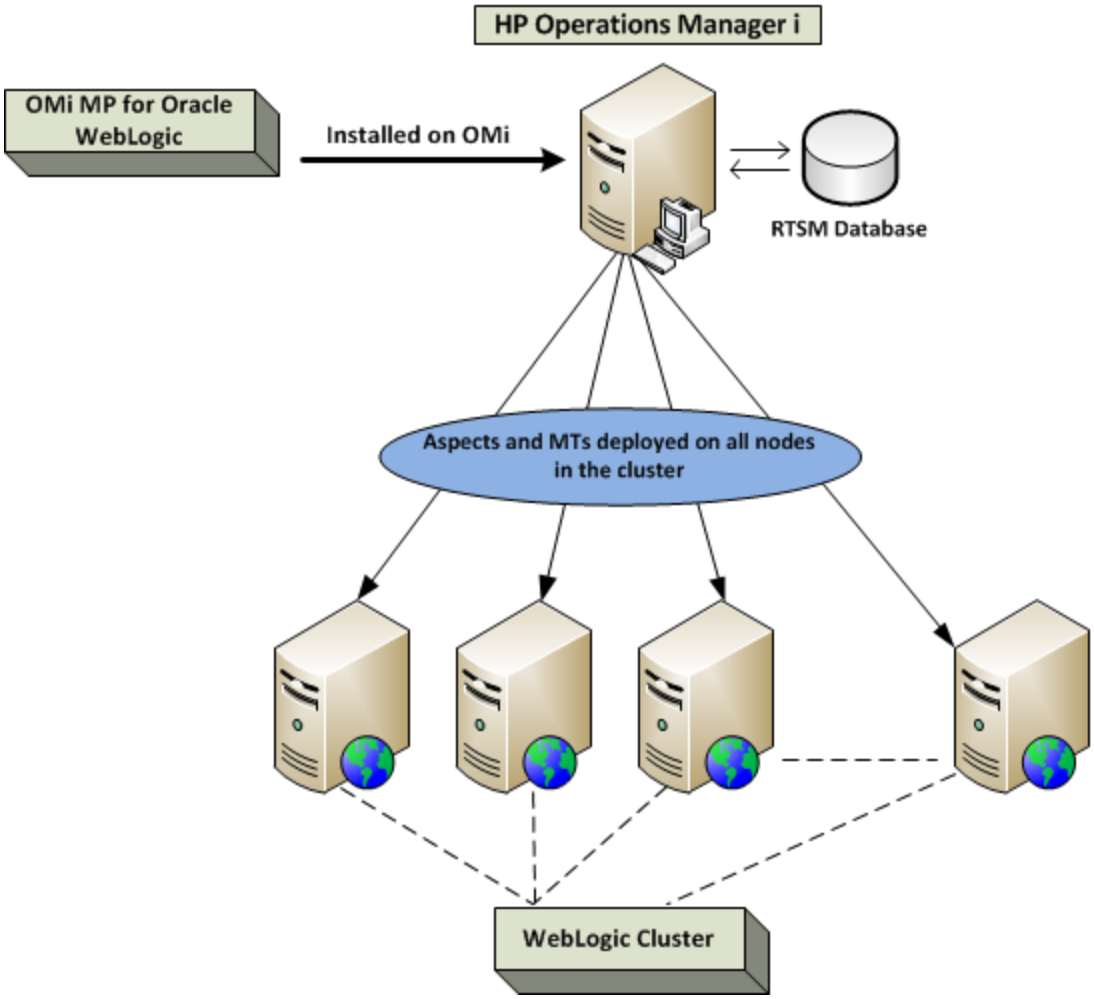
WebLogic Application Servers in Cluster Environment

WebLogic cluster environment consists of different WebLogic server instances connected to each other operating simultaneously to provide high availability and scalability. To deploy OMi MP for Oracle WebLogic in WebLogic cluster environment, follow these steps:

> **Note:** OMi MP for Oracle WebLogic must be deployed on all WebLogic Application Servers in the WebLogic cluster environment you want to monitor.

1. You must add the nodes you want to monitor to the BSM Console.
2. Deploy the WebLogic Discovery Aspect to discover WebLogic CIs on the managed nodes in the cluster.
3. Deploy Extensive WebLogic Management Template on all nodes in the cluster you want to monitor.

The following figure shows a typical deployment example where the OMi MP for Oracle WebLogic is deployed in WebLogic Server cluster:



For more information about deploying OMi MP for Oracle WebLogic see, Getting Started.

WebLogic Application Servers Using LDAP and SSL Authentication Providers

WebLogic Application Servers can be configured using authentication providers like Secure Sockets Layer (SSL) and Lightweight Directory Access Protocol (LDAP) to provide a secure and stable server environment. To deploy OMi MP for Oracle WebLogic on WebLogic Application Servers using SSL and LDAP authentication, follow these steps:

1. You must add the nodes you want to monitor to the BSM Console.
2. Deploy the WebLogic Discovery Aspect to discover WebLogic Application Server CIs on the managed nodes:
   a. Open the Management Templates & Aspects pane:

      On BSM, click**Admin > Operations Management > Monitoring > Management Templates and Aspects**

      On OMi, click**Administration > Monitoring > Management Templates and Aspects**

   b. In the Configuration Folders pane:

      Configuration Folders > Application Server Management > Oracle WebLogic Management > Aspects

   c. In the WebLogic Aspects folder, click the **Weblogic Discovery** aspect, and then click  to open the Assign and Deploy Wizard.

   d. In the Configuration Item page, click the configuration item to which you want to deploy the Discovery aspect and then click **Next**.

      The **Required Parameters** tab opens.

   e. In the **Required Parameters** tab, you must specify the mandatory parameter **Weblogic Server Home** and dependent parameters.

      > **Note:** For every Weblogic Server Home parameter, you must configure the dependent parameters Weblogic JAVA Home, Weblogic Username, and Weblogic Password.

      i. Select the **Weblogic Server Home** parameter in the list, and then click  . The Edit Instance Parameter: Weblogic Server Home dialog box opens.

      ii. Specify values for the dependent parameters:

         A. Select the **Weblogic JAVA Home** parameter in the list, and then click  . The Edit Parameter: Weblogic JAVA Home dialog box opens.

         B. Click **Value**, specify the value, and then click **OK**.

         C. Select the **Weblogic Username** parameter in the list, and then click  . The Edit Parameter: Weblogic Username dialog box opens.

         D. Click **Value**, specify your LDAP username depending on the type of authentication, and then click **OK**.

E. Select the **Weblogic Password** parameter in the list, and then click  . The Edit Parameter: Weblogic Password dialog box opens.

F. Click **Value**, specify your LDAP password depending on the type of authentication, and then click **OK**.

iii. For WebLogic Application Servers using SSL authentication:

A. Select the **Weblogic KeyStore Path** parameter in the list, and then click  . The Edit Parameter: Weblogic KeyStore Path dialog box opens.

B. Click **Value**, specify the path to Weblogic KeyStore, and then click **OK**.

C. Select the **Weblogic Passphrase Password** parameter in the list, and then click  . The Edit Parameter: Weblogic Passphrase Password dialog box opens.

D. Click **Value**, specify the Weblogic Passphrase password, and then click **OK**.

E. Click **OK**.

f. Click **Next** to go to **All Parameters**. To change the default values of the parameters, you can select the parameter and then click  . The **Edit Parameter** dialog box opens. Click **Value**, specify the value, and then click **OK**.

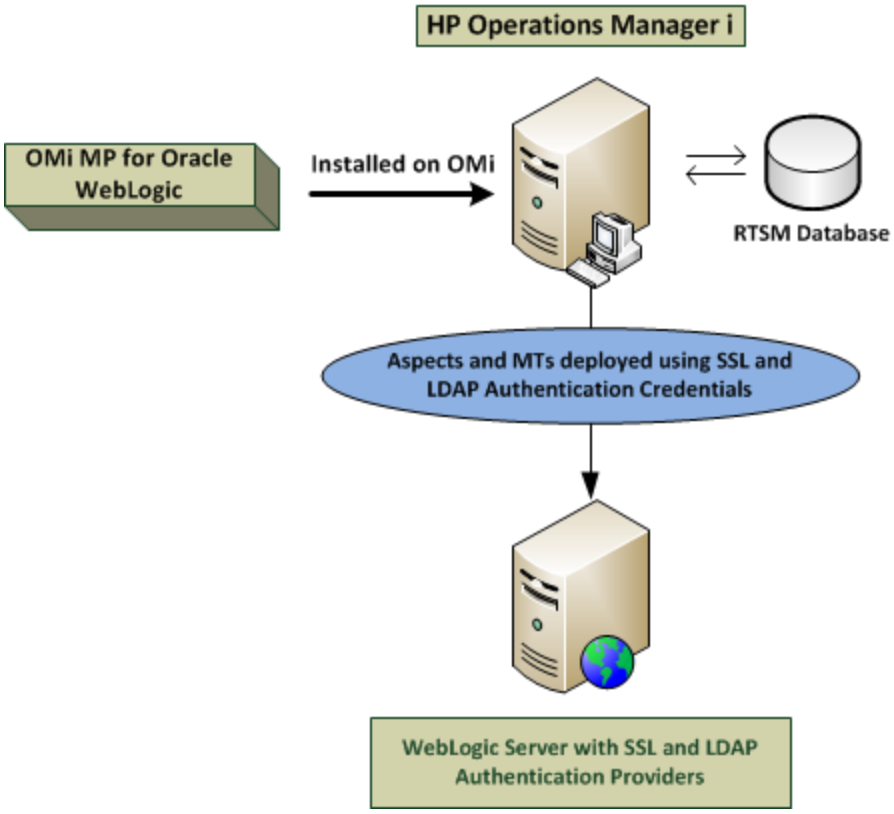
> **Note:** In the All Parameters pane, you can override the default values of any parameter. You can specify a value for each parameter at the Aspect level. By default, parameters defined as expert parameters are not shown. To show expert parameters, click **Hide/Unhide Expert Parameters** .

g. Click **Next**.

h. *Optional*. If you do not want to enable the assignment immediately, clear the **Enable Assigned Objects** check box. You can then enable the assignment later using the Assignments and Tuning manager.

i. Click **Finish**.

The following figure shows a typical deployment example where the OMi MP for Oracle WebLogic is deployed on WebLogic Servers using SSL and LDAP Authentication Providers:



For more information about deploying OMi MP for Oracle WebLogic see, Getting Started.

WebLogic Application Servers in High Availability Environment

To deploy OMi MP for Oracle WebLogic in high availability environment, follow these steps:

1. You must add nodes you want to monitor to the BSM console.
2. Deploy the WebLogic Discovery Aspect to discover WebLogic Application Server CIs on the managed nodes.
3. Identify and deploy Weblogic Management Template as per your monitoring requirement.
4. Create the OMi MP for Oracle WebLogic monitoring configuration file. To create the clustered application configuration file for your WebLogic environment, follow these steps:
   a. Use the following syntax to create the `WebLogic.apm.xml` file:

      Note: OMi MP for Oracle WebLogic uses a monitoring configuration file

> WebLogic.apm.xml that works in conjunction with the clustered application configuration file. The WebLogic.apm.xml file lists all the WebLogic Management Templates on the managed node so that you can disable or enable these templates as appropriate, for inactive and active managed nodes.

```
<?xml version="1.0"?>
<APMApplicationConfiguration>
<Application>
<Name> ... </Name>
<Template> ... </Template>
<StartCommand>Weblogic_Perl Weblogic_Config.pl</StartCommand>
<StopCommand>Weblogic_Perl Weblogic_Config.pl stopMonitoring</StopCommand>
</Application>
</APMApplicationConfiguration>
```

b. Type the **namespace_name** within the <Name></Name> tag.

c. For HTTPS agent save it in the %OVADATADIR%/bin/instrumentation/conf directory.

5. Create the clustered application configuration file. To create the clustered application configuration file apminfo.xml follow these steps:

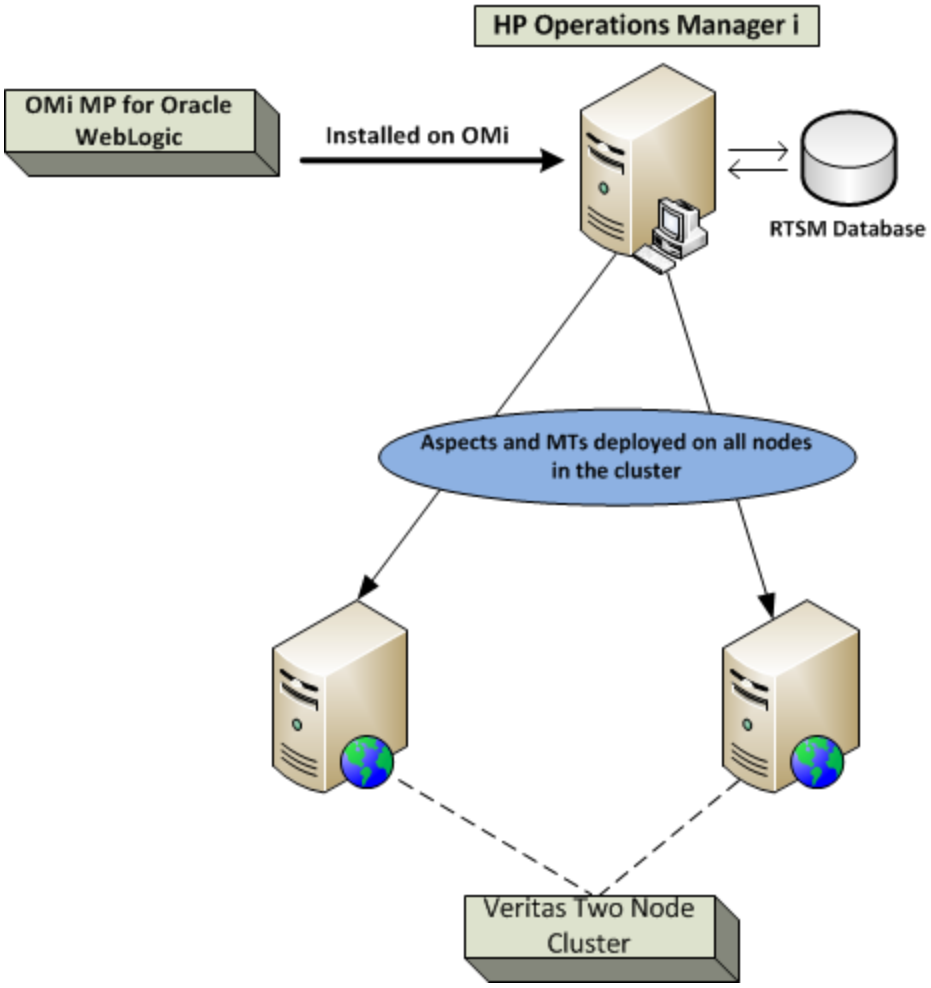
   a. Use a text editor to create the file. The syntax is:

```
<?xml version="1.0" ?>
<APMClusterConfiguration>
<Application>
<Name>namespace_name</Name>
<Instance>
<Name><Instance Name></Name>
<Package><Package Name></Package>
</Instance>
<Application>
</APMClusterConfiguration>
```

   b. Type **namespace_name** within the <Name></Name> tag.

   c. Save the apminfo.xml file in the %OVADATADIR%/conf/conf directory for HTTPS Agent.

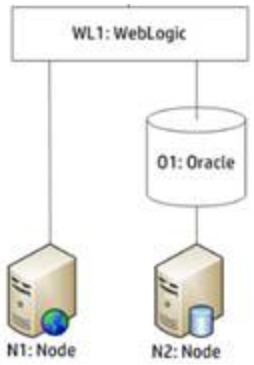
The following figure shows a typical deployment example where the OMi MP for Oracle WebLogic is deployed in Veritas Two Node Cluster:



Chapter 6: Monitoring Oracle Database and WebLogic Composite Application

This section provides information about monitoring Composite Application that includes WebLogic Application Server, Oracle Database and its infrastructure.

Consider a topology for an instance of Composite Application as shown in the following figure which consists of WebLogic server, Oracle Database and Nodes connected to WebLogic Server and Oracle Database. To monitor WebLogic Application Servers, Oracle instances, and infrastructure elements you must deploy Extensive Weblogic and Database Management Template.



To deploy OMi MP for Oracle WebLogic to monitor an instance of Composite Application, follow these steps:

- Adding Nodes to BSM Console
- Deploying Oracle Discovery Aspect
- Deploying Weblogic Discovery Aspect
- Deploying Extensive Weblogic and Database Management Template

Task 1: Adding Nodes to BSM Console

Before you monitor an instance of Composite Application, you must add the nodes you want to monitor to the BSM console and ensure that the Agent is installed on all the nodes that are added to the BSM console.

> **Note:** For more information about adding nodes to BSM console, see Getting Started.

Task 2: Deploying Oracle Discovery Aspect

> **Note:** To discover the Oracle CIs you must deploy Oracle Discovery Aspect to the Computer CIs. To use and deploy Oracle Aspects, you must install OMi Management Pack for Oracle software.

To deploy Oracle Discovery Aspect, follow these steps:

1. Open the Management Templates and Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates and Aspects**

   On OMi, click**Administration > Monitoring > Management Templates and Aspects**

2. In the Configuration Folders pane:

   Configuration Folders > Database Management > Oracle > Oracle Aspects

3. In the Oracle Aspects folder, right-click the **Oracle Discovery Aspect**, and then click **Assign and Deploy Item** to open the Assign and Deploy Wizard.
4. In the **Configuration Item** tab, click the Computer CI to which you want to deploy the Oracle Discovery Aspect and then click **Next**.
5. Click **Next**.
6. *Optional*. If you do not want to enable the assignment immediately, clear the **Enable Assigned Objects** check box. You can enable the assignment later using the **Assignments and Tuning** manager.
7. Click **Finish**.

Task 3: Deploying Weblogic Discovery Aspect

To deploy WebLogic Discovery Aspect on the Computer CI that is running WebLogic, follow these steps:

1. Open the Management Templates and Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates and Aspects**

   On OMi, click**Administration > Monitoring > Management Templates and Aspects**

2. In the Configuration Folders pane:

   Configuration Folders > Application Server Management > Oracle WebLogic Management > Aspects

3. In the Aspects folder, click **Weblogic Discovery** aspect, and then click  to open the Assign and Deploy Wizard.
4. In the **Configuration Item** tab, select the node CI that hosts the WebLogic server that you want to monitor and then click **Next**.
5. In the **Required Parameters** tab, you must specify the mandatory parameter **Weblogic Server Home** and dependent parameters.

   > **Note:** For every Weblogic Server Home parameter, you must configure the dependent parameters Weblogic JAVA Home, Weblogic Username, and Weblogic Password.
   >
   > - The credentials given during the deployment of a WebLogic Discovery Aspect must have necessary access to the WebLogic Application Server for the OMi MP for Oracle WebLogic to discover WebLogic Application Server CIs.
   > - WebLogic credentials provided must have Administrator or Monitor group user permissions. To configure a user belonging to Administrators or Monitors group, you must use the WebLogic administration server console.
   > - For more information about creating a user and assigning a user to a group, see *Manage Users and Groups from Oracle Weblogic Documentation*.

   a. Select the **Weblogic Server Home** parameter in the list, and then click  . The Edit Instance Parameter: Weblogic Server Home dialog box opens.

   b. Specify values for the dependent parameters

      i. Select the **Weblogic JAVA Home** parameter in the list, and then click  . The Edit Parameter: Weblogic JAVA Home dialog box opens.

      ii. Click **Value**, specify the value, and then click **OK**.

      iii. Select the **Weblogic Username** parameter in the list, and then click  . The Edit Parameter: Weblogic Username dialog box opens.

      iv. Click **Value**, specify the value, and then click **OK**.

      v. Select the **Weblogic Password** parameter in the list, and then click  . The Edit

Parameter: Weblogic Password dialog box opens.

vi. Click **Value**, specify the value, and then click **OK**.

c. Click **OK**.

6. Click **Next** to go to **All Parameters**. To change the default values of the parameters, you can select the parameter and then click  . The **Edit Parameter** dialog box opens. Click **Value**, specify the value, and then click **OK**.

> **Note:** In the All Parameters pane, you can override the default values of any parameter. You can specify a value for each parameter at the Aspect level. By default, parameters defined as expert parameters are not shown. To show expert parameters, click **Hide/Unhide Expert Parameters** .

7. Click **Next**.
8. *Optional*. If you do not want to enable the assignment immediately, clear the **Enable Assigned Objects** check box. You can then enable the assignment later using the **Assignments and Tuning** manager.
9. Click **Finish**.

> **Note:** Single installation of Oracle WebLogic should have same credentials across all the domains.

After you deploy the Discovery Aspect, Weblogic, Oracle, and Infrastructure CIs are created. You can view the CIs and relations created using **J2EE_Database_Deployment** View.

Task 4: Deploying Extensive Weblogic and Database Management Template

To deploy Extensive WebLogic and Database Management Template at the WebLogic Domain level, follow these steps:

1. Open the Management Templates and Aspects pane:

   On BSM, click**Admin > Operations Management > Monitoring > Management Templates and Aspects**

   On OMi, click**Administration > Monitoring > Management Templates and Aspects**

2. In the Configuration Folders pane:

Configuration Folders > Application Server Management > Oracle WebLogic Management > Management Templates > Extensive Weblogic and Database Management Template

3. Click **Extensive Weblogic and Database Management Template** and then click  to open Assign and Deploy wizard.
4. In the **Configuration Item** tab, click the WebLogic Domain CI to which you want to assign the Management Template, and then click **Next**. You can select multiple items by holding down the **CTRL** or **SHIFT** key while selecting them.
5. In the **Required Parameters**, you must specify the database credentials for the Oracle Aspects, and then click **Next**.
6. In the **All Parameters** tab, you can change default values of the parameters. To change the default values of the parameter, follow these steps:
   a. Select the **Oracle Instance Name** parameter and then click  . The Edit Instance Parameter window appears.
   b. Select the parameter from the list and then click  . The Edit Parameter dialog box opens. Click **Value**, specify the value, and then click **OK**.

   > **Note:** In the All Parameters pane, you can override the default values of any parameter. You can specify a value for each parameter at the Management Template level. By default, parameters defined as expert parameters are not shown. To show expert parameters, click **Hide/Unhide Expert Parameters** .
7. Click **Next**.
8. *Optional*. If you do not want to enable the assignment immediately, clear the **Enable Assigned Objects** check box. You can then enable the assignment later using the Assignments and Tuning manager.
9. Click **Finish**.

After you deploy the Management Template, the WebLogic Aspects gets deployed on the WebLogic Application Server CIs, Infrastructure Aspects gets deployed on the Node CIs, and the Oracle Aspects gets deployed on the Oracle CIs related to JDBC data source, thus ensuring the composite application is monitored from a single deployment.

Chapter 7: Troubleshooting

The following section provides information about troubleshooting scenarios:

> **Note:** The troubleshooting steps provided here must be executed on the WebLogic node.

Licensing count is not updated

Problem: Licensing count is not updated on License Management

Solution: To resolve this problem, follow these steps:

1. After installing OMi MP for Oracle WebLogic, ensure that the license is activated by following these steps:
   a. Open the License Management pane:

      On BSM, click **Admin > Platform > Setup and Maintenance > License Management**.

      On OMi, click **Administration > Setup and Maintenance > License Management**.

   b. Click  and select the `license.dat` file. The license details appears in the **License Management** window.

      The License Management provides details about the name, license type, days left, expiration date, capacity, and capacity details.
2. To check for the license usage on the managed node, run the following command on the managed node:

   ```
   <OvAgentDir>/bin/ovodetect -t
   ```

   If the output of the preceding command is mpinstance="1", then Oracle databases are being monitored. If the output of the preceding command is mpinstance="0", then Oracle databases are not being monitored.
3. If the license is still not updated in **License Management**, restart agent on the managed node by running the following command:

   ```
   <OvAgentDir>/bin/ovc- restart opcmsga
   ```

Management Templates and Aspects are not deployed to the managed nodes

Problem: Management Templates and Aspects are not deployed to the managed nodes

Solution: To resolve this problem, follow these steps:

1. To check the deployment status:

   On BSM, click**Admin > Operations Management > Monitoring > Deployment Jobs**

   On OMi, click**Administration > Operations Management > Monitoring > Deployment Jobs**.

2. To check the assignment status:

   On BSM, click**Admin > Operations Management > Monitoring > Assignments & Tuning**

   On OMi, click**Administration > Operations Management > Monitoring > Assignments & Tuning**.

3. Check the following OMi log files:

   Linux:

   `/opt/HP/BSM/log/EJBContainer/opr-webapp.log`

   `/opt/HP/BSM/log/EJBContainer/opr-configserver.log`

   Windows:

   `%topaz_home%/log\EJBContainer/opr-webapp.log`

   `%topaz_home%/log/EJBContainer/opr-configserver.log`

OMi MP for Oracle WebLogic display errors during installation

Problem: Installation of OMi MP for Oracle WebLogic returns errors.

Solution: You can identify specific errors by checking the `mpinstall.log` log file.

The `mpinstall.log` log file is available at the following locations:

Windows:

`%TOPAZ_HOME%/log/mpinstall.log`

UNIX:

`$TOPAZ_HOME/log/mpinstall.log`

OMi MP for Oracle WebLogic display errors during upload of Management Pack

Problem: OMi MP for Oracle WebLogic returns error during upload.

Solution: You can identify specific errors by checking the `opr-configserver.log` log file.

The `opr-configserver.log` log file is available at the following locations:

Windows:

`%TOPAZ_HOME%/log/EJBContainer/opr-configserver.log`

UNIX:

`$TOPAZ_HOME/log/EJBContainer/opr-configserver.log`

Views not getting populated after deployment of WebLogic Discovery Aspect

Problem: Views for OMi MP for Oracle WebLogic not getting populated after deployment of Weblogic Discovery Aspect.

Solution: You can identify specific errors by following these steps:

1. Open the Oracle WebLogic Instrumentation folder:

   Windows:

   `%OVADATADIR%/bin/instrumentation`

   UNIX:

   `/var/opt/OV/bin/instrumentation`

2. In the Instrumentation folder, look for the following file:

   `bin/instrumentation/Weblogic_Discovery_Log4j.properties`

3. Open `Weblogic_Discovery_Log4j.properties` file.
4. Select `log4j.appender.FILE.Threshold` and modify to `log4j.appender.FILE.Threshold=trace`.

   Tracing is enabled for Weblogic Discovery. `WeblogicDiscovery.log` log file is created.
5. Check the `WeblogicDiscovery.log` log file for specific errors.

   The `WeblogicDiscovery.log` log file is available at the following locations.

   Windows:

   `%OVDATADIR%/log/Weblogic/`

   UNIX:

   `/var/opt/OV/log/Weblogic/`

"Connection could not be established" error during deployment of WebLogic Discovery Aspect

Problem: WebLogic Discovery Aspect returns Connection could not be established error during deployment.

Solution: To resolve this problem, follow these steps:

1. Check if the credentials entered during deployment have required access permissions to WebLogic Application Server.
2. Configure WebLogic Keystore and Passphrase if the WebLogic Application Server uses SSL Authentication Providers.

Collection Manager for OMi MP for Oracle WebLogic not getting invoked

Problem: Collection manager for OMi MP for Oracle WebLogic is not getting invoked for data collection.

Solution: To resolve this problem, follow these steps:

1. Open the Oracle WebLogic Instrumentation folder:

   Windows:

   `%ovdatadir%/bin/instrumentation`

   UNIX:

   `/var/opt/OV/bin/instrumentation`

2. In the Instrumentation folder, look for the following file:

   bin/instrumentation/Weblogic_cmlog4j.properties

3. Open **Weblogic_cmlog4j.properties** file.

4. Select `log4j.appender.FILE.Threshold` and modify to `log4j.appender.FILE.Threshold=trace`.

   Tracing is enabled for WebLogic Collection Manager.

5. Check the `Collector.log` and `CollectionManager.log` log file for specific errors.

   The `Collector.log` log file is available at the following locations.

   Windows:

   `%OVDATADIR%/log/Weblogic`

   UNIX:

   `/var/opt/OV/log/Weblogic`

   The `CollectionManager.log` log file is available at the following locations.

   Windows:

   `%OVDATADIR%/log/Weblogic/collectionManager`

   UNIX:

   `/var/opt/OV/log/Weblogic/collectionManager`

No data for Performance Manager i (PMi) Graphs

Problem: The information to create PMi graph is not available from OMi MP for Oracle WebLogic.

Solution: To resolve this problem, follow these steps:

1. Run the following command to check if the graph data sources are created:

   ```
   ovcodautil –obj WEBLOGIC_DATA
   ```

2. Run the following command to check data dumps of WEBLOGIC_DATA data source:

   ```
   ovcodautil –dumpds WEBLOGIC_DATA
   ```

   If there are empty instances, perform step 3 and 4.

3. From the `Weblogic_cmlog4j.properties` file, select `log4j.appender.FILE.Threshold` and modify to `log4j.appender.FILE.Threshold=trace`.

   Tracing is enabled for WebLogic Collection Manager.

4. Check the `Collector.log` and `CollectionManager.log` log file for specific errors.

   The `Collector.log` log file is available at the following locations.

   Windows:

   `%OVDATADIR%/log/Weblogic`

   UNIX:

   `/var/opt/OV/log/Weblogic`

   The `CollectionManager.log` log file is available at the following locations.

   Windows:

   `%OVDATADIR%/log/Weblogic/collectionManager`

   UNIX:

   `/var/opt/OV/log/Weblogic/collectionManager`

Unable to access Oracle WebLogic lib folder

Problem: Non-root users are unable to access lib folder.

Solution: For non-root users, provide the read access to Oracle WebLogic lib folder in the WebLogic installation path.

Appendix: Metrics and Data Sources

The following table lists the table names and related metrics for OMi MP for Oracle WebLogic:

> **Note:** WEBLOGIC_DATA is the data source used by OMi MP for Oracle WebLogic for logging collected data.

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
WEBLOGIC_CLUSTER	Weblogic Cluster Status	Weblogic_ClusterOutMessageFailRate	WeblgcClsOutMsFailRt	REAL 64
		Weblogic_ClusterInMessageFailureRate	Weblgc_ClsInMsFailRt	REAL 64
		Weblogic_ClusterHealthStatus	Weblgc_ClusterHealth	REAL 64
			WeblgcClusRTRsndRqst	REAL 64
			Weblgc_McastMsgLstCt	REAL 64
WEBLOGIC_EJB	Weblogic EJB Performance		WeblgcEJBPlWtrCurCnt	REAL 64
			SumWaiterCurrCnt	REAL 64
			WeblgcEJBPoolWtRtSum	REAL 64
		Weblogic_EJBPoolWaitCount	WeblgcEJBPoolWtRt	REAL 64
			WeblgcEJBPlRTTmotCnt	REAL 64
			SumTimeoutTotalCount	REAL 64
		Weblogic_EJBTimeoutCount	WeblgcEJBTimeoutR	REAL

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
			tSm	64
		Weblogic_EJBTimeoutRate	WeblgcEJBTimeoutRt	REAL 64
			EJBMissTotalCount	REAL 64
			SumEJBMissTotalCount	REAL 64
		Weblogic_ SumOfEJBMissedCountRate	WeblgcEJBMssdCntRtSm	REAL 64
		Weblogic_EJBMissedCountRate	WeblgcEJBMssdCntRt	REAL 64
		Weblogic_ EJBDestroyedTotalCount	WeblgcDstroydTlCnt	REAL 64
WEBLOGIC_ EJB_CACHE	Weblogic EJB Performance	Weblogic_ EJBCacheHitPercentage	WeblgcEJBCacheHitPct	REAL 64
			WeblgcEJBRTCacAccCnt	REAL 64
			WeblgcEJBRTCacMisCnt	REAL 64
			WeblgcEJBCacheMisPct	REAL 64
WEBLOGIC_ EJB_TRANS	Weblogic EJB Performance	Weblogic_ EJBTransactionThroughputRate	WeblgcEJBTranThruRt	REAL 64
		Weblogic_ NumberEJBTransactionRollBackRate	WeblgcEJBTranRbRt	REAL 64
			WeblgcTrnscComTotCnt	REAL 64
			SumTrnscComTotalCnt	REAL 64
			TrnscRlBkTotalCnt	REAL 64

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
			SumTrnscRlBk	REAL 64
WEBLOGIC_JCA	Weblogic JCA Statistics	Weblogic_JCAConnectionsUtilizationPct	WeblgcCnctrPoolUtil	REAL 64
			WeblgcFreeConnCurCnt	REAL 64
			WeblgcMaxCapacity	REAL 64
			WeblgcNumWaitrCurCnt	REAL 64
		Weblogic_NumWaitersCurrentCount	NumWaitrCurrCnt	REAL 64
			WeblgcConRejTotalCnt	REAL 64
		Weblogic_ConnectionsRejectedTotalCount	ConnRejectedTotalCnt	REAL 64
			WeblgcConDeBErTotCnt	REAL 64
		Weblogic_ConnectionsDestroyedByErrorTotalCount	ConnDestByErrTotCnt	REAL 64
			WeblgcActivConCurCnt	REAL 64
WEBLOGIC_JCA_RQSTS	Weblogic Cache Usage	Weblogic_DeferredRequestsCount	WeblgcDeferredReqCnt	REAL 64
			WeblgcTCnstRTDefRqst	REAL 64
WEBLOGIC_JDBC			WeblgcJDBCConPoolUtl	REAL 64
	Weblogic JDBC Connection Pool	Weblogic_JDBCConnectionPoolUtilization	WeblgcJDBCConPlThrRt	REAL 64

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
	Status			

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
			WeblgcWaiFrConCurCnt	REAL 64
			WeblgcJDBCCnPlRTCrCy	REAL 64
	Weblogic JCA Statistics	Weblogic_ RequestsWaitingForConnection	WeblgcJDBCConPlWtCnt	REAL 64
			WeblgcConnTotCnt	REAL 64
			WeblgcLeakedConnCnt	REAL 64
	Weblogic JDBC Connection Pool Status	Weblogic_ JDBCConnectionLeakRate	WeblgcJDBCConLkRt	REAL 64
			SumLeakedConnCount	REAL 64
			WeblgcJDBCConLkRtSum	REAL 64
	Weblogic JDBC Connection Pool Status	Weblogic_ FailuresToReconnectCount	WeblgcJDBCConFail	REAL 64
	Weblogic JDBC Connection Pool Status	Weblogic_ConnectionDelayTime	WeblgcJDBCConTime	REAL 64
	Weblogic JCA Statistics	Weblogic_WaitSecondsHighCount	WeblgcWaitSecHighCnt	REAL 64
			WaitingForConFailTtl	REAL 64

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
			WeblgcActvConnCurCnt	REAL 64
WEBLOGIC_JDBC_CPTY			WeblgcJDBCCnPlRTCrCy	REAL 64
WEBLOGIC_JMS	Weblogic JMS Performance		WeblgcMsgPendingCnt	REAL 64
			WeblgcMsgsCurCnt	REAL 64
			JMSThruMessageRt	REAL 64
			WeblgcJMSRTBytPndCnt	REAL 64
			WeblgcJMSRTBytCurCnt	REAL 64
			JMSServerThruByteRt	REAL 64
			WeblgcJMSRTMsgThrTim	REAL 64
		Weblogic_JMSMessagesThresholdTime	WeblgcJMSThrByMsgPct	REAL 64
			WeblgcJMSRTBytThrTim	REAL 64
		Weblogic_JMSBytesThresholdTimePercentage	WeblgcJMSThrByBytPct	REAL 64
			WeblgcJMSRTMsgRcvCnt	REAL 64
			WeblgcJMSRTBytRcvCnt	REAL 64
WEBLOGIC_JMS_PROCMSG			WeblgcProcesedMsgCnt	REAL 64
			MDBProcMsgRate	REAL 64

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
WEBLOGIC_JMS_UTIL	Weblogic JMS Performance		WeblgcJMSMsgMaximum	REAL 64
		Weblogic_JMSUtilizationByMessagesPercentage	WeblgcJMSUtlByMsgPct	REAL 64
			WeblgcJMSBytesMax	REAL 64
		Weblogic_JMSUtilizationByBytesPercentage	WeblgcJMSUtlByBytPct	REAL 64
WEBLOGIC_JROCKIT	Weblogic JVM Heap Memory		WeblgcJRktRTTotGCCnt	REAL 64
		Weblogic_GarbageCollectionCount	WeblgcGCCount	REAL 64
		Weblogic_GarbageCollectionTime	WeblgcJRktRTTotGCTme	REAL 64
			WeblgcJRktRTTotalThr	REAL 64
		Weblogic_GarbageCollectionThread	WeblgcGCThread	REAL 64
			WeblgcJRktRTAlPrAvLd	REAL 64
		Weblogic_ProcessorsAverageLoad	WeblgcAllProcAvgLd	REAL 64
WEBLOGIC_JTA			WeblgcJTA_MaxTrnsc	REAL 64
WEBLOGIC_JVM	Weblogic JVM Heap Memory		WeblgcJRktRTHpFreePc	REAL 64
		Weblogic_JVMHeapUsage	WeblgcJVMMemUtilPct	REAL 64
			WeblgcJVMHeapFreeMem	REAL 64
WEBLOGIC_SECURITY	Weblogic Authentica		WeblgcInvlLogAtToCnt	REAL 64

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
	tion			
		Weblogic_ InvalidLoginAttemptsCount	WeblgcInvLoginAttCnt	REAL 64
WEBLOGIC_ SERVER	Weblogic Server Status	Weblogic_ServerStatus	ServerStatus	INT
			WeblgcSrvrRestReqrd	REAL 64
			WeblgcOpenSocCurCnt	REAL 64
			ROCWeblgcOpnSocCurCt	REAL 64
			WeblgcSocketTraficRt	REAL 64
WEBLOGIC_ SERVLETS	Weblogic Servlet Performance	Weblogic_ ServletAverageExecutionTime	WeblgcSrvltAvExTime	REAL 64
			WeblgcSrvltRTExTmTtl	REAL 64
			WeblgcSrvltTimeCnt	REAL 64
			WeblgcSrvltRTInvTlCt	REAL 64
		Weblogic_ServletRequestRate	WeblgcSrvltReqRate	REAL 64
WEBLOGIC_ SRVLTSESN	Weblogic Web Application Status	Weblogic_ WebApplicationSessionsCount	WeblgcWebAppSsnCnt	REAL 64
			WeblgcSsnOpnTotalCnt	REAL 64
			WeblgcWebAppHitRt	REAL 64
WEBLOGIC_ THREADCONS	Weblogic Cache Usage	Weblogic_ RequestWaitTimeforThread	WeblgcReqWaitTimThrd	REAL 64
		Weblogic_PendingRequestCount	WeblgcPendingReqC	REAL

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
			ount	64
		Weblogic_ PendingRequestPercentage	WeblgcPendingReqPct	REAL 64
			WeblgcExecutingRequests	REAL 64
			WeblgcCompletedRequests	REAL 64
		Weblogic_RequestMaxWaitTime	WeblgcReqMaxWaitTime	REAL 64
WEBLOGIC_ THREADPOOL			WeblgcThrPlRTExThrCt	REAL 64
	Weblogic Servlet Performance	Weblogic_ExecuteQThreadsInUse	WeblgcExQThrdUtilPct	REAL 64
			WeblgcTPlRTExThIdlCt	REAL 64
			WeblgcExQueWaitCnt	REAL 64
			WeblgcTPlRTExThToCt	REAL 64
	Weblogic Thread Status	Weblogic_ ThreadPoolOverloadCondition	WeblgcGlblThrPlOvld	REAL 64
			WeblgcShrCapFrWrkMgr	REAL 64
			WeblgcPndngUsrRqstCt	REAL 64
			WeblgcExQThroughput	REAL 64
	Weblogic Cache Usage	Weblogic_StandbyThreadCount	WeblgcStandbyThrdCnt	REAL 64

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
WEBLOGIC_TRANSACTIONS	Weblogic Transactions		WeblgcTrnscComTotCnt	REAL 64
		Weblogic_TransactionAverageTime	WeblgcTranAvgTime	REAL 64
			WeblgcSecActvTotCnt	REAL 64
			WeblgcTrnscRlBkTotCt	REAL 64
		Weblogic_TransactionSystemErrorRollbackPercentage	WeblgcTranRlBkPct	REAL 64
			WeblgcTrnscTotalCnt	REAL 64
		Weblogic_TransactionResErrorRollbackPercentage	TranResErrRbPct	REAL 64
		Weblogic_TransactionAppErrorRollbackPercentage	TranAppErrRbPct	REAL 64
		Weblogic_TransactionTimeErrorRollbackPercentage	TranTimErrRbPct	REAL 64
			TranSysErrRbPct	REAL 64
			TranThruRate	REAL 64
			WeblgcTrnRlBkResToCt	REAL 64
			WeblgcTrnRlBkAppToCt	REAL 64
			WeblgcTrnRlBkTmOtCnt	REAL 64
		Weblogic_TransactionSystemErrorRollbackP	WeblgcTrnRlBkSysToCt	REAL 64

Table/Class Name	Aspects	Policy Name	Metrics	Metric Data Type
		ercentage		
		Weblogic_ TransactionHeuristicsTotalCount	WeblgcTranHeurCnt	REAL 64
			WeblgcActvTrnToCt	REAL 64
		Weblogic_ TransactionCapacityUtilizationPct	WeblgcTranCapUtil	REAL 64
WEBLOGIC_ XMLCACHE			WeblgcXMLCachDskSize	REAL 64
			WeblgcXMLCachMemSize	REAL 64

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