

OMi Management Pack for Oracle WebLogic

Software Version: 2.00

Operations Manager i for Linux and Windows® operating systems

Installation 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 components of WebLogic Application Servers and underlying infrastructure operating in your environment. The OMi MP for Oracle WebLogic includes the following components for monitoring health and status of Oracle WebLogic Application Servers:

- WebLogic Management Templates
- WebLogic Aspects and Policy Templates
- Parameters
- Run-Time Service Model (RTSM) Views
- Event Type Indicators (ETIs)
- Health Indicators (HIs)
- Topology Based Event Correlation (TBEC) Rules
- Operations Orchestration (OO) Flows
- HI Assignment
- KPI Assignment
- Tools
- Performance Dashboard

Note: For more information about the components, see the *OMi Management Pack for Oracle WebLogic User Guide*.

Abbreviations Used in this Manual

Convention	Description
ОМі	Operations Manager i
RTSM	Run-time Service Model
OMi DPS	OMi Data Processing Server

Convention	Description
OMi GWS	OMi Gateway Server
OMi MP	OMi Management Pack

Related Documentation

For more information about OMi, see the OMi documentation.

For more information about OMi Management Pack for Oracle WebLogic, see the following documents:

- Release Notes
- User Guide
- Reference Guide

Licensing

The OMi MP licenses are available in a pack of 25 license units. Each license can be used per OS instance, irrespective of the application type. For example, the license pack can contain 5 licenses of OMi MP for Microsoft SQL Server, 10 licenses of OMi MP for Oracle Database with any other combination of supported applications.

To procure the license for the Entitlement Order Number (EON), go to http://enterpriselicense.hpe.com and log on using your Passport credentials to redeem the license.

For information about applying the license, see "Applying the License".

Deployment Scenarios

This section provides information about deploying OMi MP for Oracle WebLogic on different WebLogic Server configurations .OMi MP for Oracle WebLogic can be used to monitor the following configurations:

- Single Domain
- Cluster

- Secure configurations with LDAP or SSL authentication
- High Availability Environment (Hardware Cluster)

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 WebLogic in a standard environment, follow these steps:

- 1. You must add the nodes you want to monitor to the OMi 10.x Console. For more information, see "Task 1: Adding Nodes to OMi Console".
- Deploy the WebLogic Discovery Aspect to discover WebLogic Application Server CIs on the managed nodes. For more information, see "Task 4: Deploying Weblogic Discovery Aspect".
- 3. Identify and deploy WebLogic Management Template as per your monitoring requirement. For more information, see "Task 6a: Identifying and Deploying WebLogic Management Templates".

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



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 WebLogic in WebLogic cluster environment, follow these steps:

Note: OMi MP for 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 OMi 10.x Console. For more information, see "Task 1: Adding Nodes to OMi Console".
- 2. Deploy the WebLogic Discovery Aspect to discover WebLogic CIs on the managed nodes in the cluster. For more information, see "Task 4: Deploying Weblogic Discovery Aspect".
- Deploy Extensive WebLogic Management Template on all nodes in the cluster you want to monitor. For more information, see "Task 6a: Identifying and Deploying WebLogic Management Templates".

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



Note: To verify discovery for cluster environment, in the **View Explorer** of **Event Perspective**, select the **J2EE_Deployment** view.

WebLogic Application Servers Using LDAP or 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 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 OMi 10.x Console. For more information, see "Task 1: Adding Nodes to OMi Console".
- Deploy the WebLogic Discovery Aspect to discover WebLogic Application Server CIs on the managed nodes:
 - a. Open the Management Templates & Aspects pane:

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

b. In the Configuration Folders pane:

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

- c. In the WebLogic Aspects folder, click the **Weblogic Discovery** Aspect, and then click ⁴ to open the Assign and Deploy Wizard.
- d. 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.

- e. In the **Required Parameters** tab, you must specify the mandatory parameters, Username and Password.
 - i. Select the **Weblogic Username** parameter in the list, and then click <a>. The Edit Parameter: Weblogic Username dialog box opens.
 - ii. Click **Value**, specify your LDAP username depending on the type of authentication, and then click **OK**.
 - iii. Select the **Weblogic Password** parameter in the list, and then click \checkmark . The Edit Parameter: Weblogic Password dialog box opens.
 - iv. Click **Value**, specify your LDAP password depending on the type of authentication, and then click **OK**.
- f. Click Next to go to Parameter Summary tab on OMi 10.x. To change the default values of the parameters, you can select the parameter and then click *O*. The Edit Parameter dialog box opens. Click Value, specify the value, and then click OK.

Note: In the **Parameter Summary** tab, 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**.

- g. Click Next.
- h. (Optional). If you do not want to enable the assignment immediately, clear the Enable
 Assignment(s) check box on OMi and . 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 WebLogic is deployed on WebLogic Servers using SSL or LDAP Authentication Providers:



WebLogic Application Servers in High Availability Environment

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

1. You must add the nodes you want to monitor to the OMi 10.x Console. For more information, see "Task 1: Adding Nodes to OMi Console".

- Deploy the WebLogic Discovery Aspect to discover WebLogic Application Server CIs on the managed nodes. For more information, see "Task 4: Deploying Weblogic Discovery Aspect".
- 3. Identify and deploy Weblogic Management Template as per your monitoring requirement. For more information, see "Task 6a: Identifying and Deploying WebLogic Management Templates".
- 4. Create the OMi MP for 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.apminfo.xml file:

Note: OMi MP for WebLogic uses a monitoring configuration file WebLogic.apminfo.xml that works in conjunction with the clustered application configuration file. The WebLogic.apminfo.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.
- 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 WebLogic is deployed in Veritas Two Node Cluster:



Chapter 2: Installing OMi MP for Oracle WebLogic

This section provides information about installing OMi MP for Oracle WebLogic on Linux or Windows OMi servers.

Installation Package

This section provides information about the installation packages for OMi Management Pack for Oracle WebLogic.

You can download OMi Management Pack for Oracle WebLogic 2.00 (**OMi_MP_for_WebLogic_ Application_Server_02.00.009.zip**) from Unified Marketplace. The package is available for English environments only.

The OMi Management Pack for Oracle WebLogic contains features, software and the product documentation. In a distributed environment, it must be installed on all OMi Data Processing Servers (OMi DPS) and OMi Gateway Servers (OMi GWS).

The following table provides information about the documents available in the OMi Management Pack for Oracle WebLogic:

Document	Location	Purpose
Release Notes	Unified Marketplace	To provide information about the following:New featuresInstallation notes
Installation Guide	Unified Marketplace	To provide information about the following:Installing OMi MP for WebLogicUpgrade scenarioGetting started
User Guide	Unified Marketplace	 To provide information about the following: Using Management Templates Using Aspects and Policy Templates Using Indicators - HIs, ETIs, and TBEC Rules

Document	Location	Purpose
Reference Guide	Unified Marketplace	Provides information about metrics and datasource.

Installation Prerequisites

The following section lists the hardware and software prerequisites for installing OMi Management Pack for Oracle WebLogic on OMi 10.x (Linux and Windows) servers.

Software Requirements

Before installing OMi Management Pack for Oracle WebLogic, the following components must be installed and configured on the OMi 10.x (Linux and Windows) servers.

Management Server

Component	Version
Operations Manager i	10.10 or higher*
OMi MP for Infrastructure	2.00
OMi MP for Oracle	1.10

Note: * For more information about Support Matrix, see https://softwaresupport.hpe.com/km/KM323488.

Managed Node

Component	Version
Operations Agent	12.01 or higher*
JRE	1.7 or higher

Note: You must use 64 bit JRE with 64 bit Operations Agent and 32 bit JRE with 32 bit Operations Agent.

Note: Ensure that the domain-registry.xml file is available at the location where middleware is installed on the managed node where OMi MP for WebLogic is deployed. For example, **MW_HOME=/u01/app/oracle/product/fmw12.1.3**.

Also ensure that the .product.properties file is available at the location where Weblogic is installed on the managed node where OMi MP for WebLogic is deployed. For example, **WLS_HOME=/u01/app/oracle/product/fmw12.1.3/wlserver**.

* See the Support Matrix for latest versions supported.

SiteScope Server:

Component	Version
SiteScope	11.3x or higher*

Note: * For more information about Support Matrix, see https://softwaresupport.hpe.com/km/KM323488.

Note: If you are deploying Hybrid WebLogic Management Template, you need to install SiteScope 11.3x or higher version.

The following section lists the hardware and software prerequisites for installing OMi Management Pack for Oracle WebLogic on Linux or Windows OMi servers.

User Privileges

The user must have the local WebLogic Administrator privileges assigned for the WebLogic Admin Server.

If you are using LDAP directory, you must create a user account similar to the user account of LDAP in the local WebLogic instance and grant Administrator privileges to the user.

Installation Checklist

Before you install OMi Management Pack for Oracle WebLogic ensure that the installation tasks described in the following table are completed in the specified order:

Managed Server

Task	Reference
Install OMi MP for Infrastructure 2.00	See the chapter Installing OMi MP for Infrastructure in the OMi Management Pack for Infrastructure 2.00 Installation Guide.

Task	Reference
Install OMi Management Pack for Oracle WebLogic	See the section "Installing OMi MP for Oracle WebLogic".
Applying the License	See the section "Applying the License".

Managed Node

Task	Reference
Install Operations Agent 12.01	See the chapter Installing Operations Agent 12.01 in the Operations Agent and Operations Smart Plug-ins for Infrastructure Installation Guide.
Configure library path on the managed node*	See the section "Configuring Library Path on a Solaris Managed Node".

* This configuration check is applicable only for Solaris managed nodes.

Note: For Solaris and HP-UX operating systems, you must specify the **JAVA_HOME** input parameter which is for 32-bit Java.

Installing OMi MP for Infrastructure version 2.00

For information about installing OMi MP for Infrastructure version 2.00, see the chapter *Installing OMi MP for Infrastructure version* in the *OMi Management Pack for Infrastructure 2.00 Installation Guide*.

Configuring Library Path on a Solaris Managed Node

This section provides information about configuring the library path on Solaris managed node.

Note: The following configuration is a prerequisite for only OMi Management Pack for Oracle WebLogic. It is used for monitoring managed nodes on a Solaris platform.

For OMi Management Pack for Oracle WebLogic to monitor managed nodes on Solaris platform, ensure the Expat.so library used for XML parser perl module is able to resolve dynamic dependency for all the required libraries using following steps as agent user:

1. To find Expat.so library, run the following commands:

```
cd /opt/OV/nonOV/perl/a/lib
```

find . -name Expat.so

2. To find the list of dynamic dependencies, run the following commands:

```
Go to <Expat.so> path
```

ldd Expat.so

If you see an error message "file not found" for libgcc_s.so, configure the libgcc_s.so library path at WLSMP_LIBPATH environment variable on a Solaris managed node by following step 3.

- 3. Set libgcc_s.so library path in WLSMP_LIBPATH environment variable as root user by following these steps:
 - a. Find libgcc_s.so on Solaris managed node using the following command:

find / -name libgcc_s.so

b. Search 32-bit libgcc_s.so using the following command:

file <libgcc_s.so along with path>

- c. If 32-bit libgcc_s.so is not installed on the node, install GCC Runtime libraries package.
- d. Open /etc/profile in vi editor using the following command:

vi /etc/profile

e. Add the following lines at the beginning of the /etc/profile file:

WLSMP_LIBPATH=<32-bit libgcc_s.so path>

export WLSMP_LIBPATH

Note: 32-bit libgcc_s.so path is the result of step 2.

f. Save the file.

Installing OMi MP for Oracle WebLogic

You can use the MPDVD to install the OMi Management Pack for Oracle WebLogic on a Windows or Linux OMi server. The following section provides information about installing the OMi Management Pack for Oracle WebLogic on OMi server.

Note: In a OMi distributed environment, OMi MP for Oracle WebLogic must be installed on all OMi Servers - OMi DPS and OMi GWS.

On Linux

To install the OMi Management Pack for Oracle WebLogic on Linux OMi Server, follow these steps:

- 1. Log on as root user.
- 2. Set the umask by typing the command umask 022.
- 3. Copy and extract the **OMi_MP_for_WebLogic_Application_Server_02.00.009.zip** file to a temporary folder on OMi 10.x Server.
- 4. Run the following command:

<PATH>/mpinstall.sh -i

where, <PATH> is the location where you have extracted the OMi MP for WebLogic.

5. To accept the End User License Agreement (EULA), type **Yes** or **Y** and to decline the license agreement, type **No** or **N**.

After the installation is completed, a message appears stating that the installation of OMi Management Pack for Oracle WebLogic is completed.

On Windows

Note: In a OMi Distributed environment, OMi Management Pack for Oracle WebLogic must be installed on all OMi Servers, including DPS and Gateway servers.

To install the OMi Management Pack for Oracle WebLogic on a Windows OMi Server, follow these steps:

- 1. Copy and extract the **OMi_MP_for_WebLogic_Application_Server_02.00.009.zip** file to a temporary folder on OMi 10.x Server.
- 2. Open the command prompt, change the directory folder that has the installer script and run the following command:

cscript /nologo mpinstall.vbs -i

3. To accept the End User License Agreement (EULA), type **Yes** or **Y** and to decline the license agreement, type **No** or **N**.

After the installation is completed, a message appears stating that the installation of OMi Management Pack for Oracle WebLogic is completed.

Installing Operations Orchestration (OO) Flows

The OMi Management Pack for Oracle WebLogic packaged with OO flows that enables IT process automation and run book automation. For more information about OO flows, see the *Operations Orchestration* documentation. The following section provides information about installing OO flows on OO Studio (version 9.0x) for OMi Management Pack for Oracle WebLogic.

Note: The OO flows shipped by OMi Management Pack for Oracle WebLogic can only be used in deployment scenarios where the application is monitored by Smart Plug-ins managed by an Operations Manager (OM) server. In such a case, the OO flows included in OMi Management Pack for Oracle WebLogic can be installed on an OO server and launched through the OMi-OO integration.

Uploading OO Flows

To upload OO Flows from OMi Management Pack for Oracle WebLogic, follow these steps:

1. In OMi, go to the directory:

On Linux:

/opt/HP/BSM/conf/opr/oo

On Windows:

%TOPAZ_HOME%\conf\opr\oo

 Copy HPOprOOJEE90.jar to a temporary location on a system where OO Studio (version 9.0x) is installed.

To install and upload the OO Flows, run the command:

java -jar -Xmx1024m "<temp>/HPOprOOJEE90" -centralPassword <centralpassword>

Note: For more information about installing content, see the section *Installing the content* in the *Operations Orchestration Software Development Kit Guide*.

Using OO Studio, you can access the OO flows from the following location:

../Library/Operations Management/..

Complete the mapping of OO flows to CIs and map the OO flow input variables to CI attributes using:

On OMi Console:

Administration > Operations Console > Run Books Mapping

Applying the License

This section provides information about updating the license and activating the license.

Note: For more information about procuring the license , see "Licensing" section.

To update your deployment with a new license and to activate the license, follow these steps:

1. Navigate to License Management:

On OMi Console:

Click Administration > Setup and Maintenance > License Management

The License Management provides details about the name, license type, days left to expiry of license, expiration date, capacity, and capacity details.

2. Click 🗣 to open the Add License dialog box where you can search for the relevant .dat file.

Note: You can download .dat file from http://enterpriselicense.hpe.com.

Note: There will be a delay in license activation after the installation. If the license does not

activate automatically, you need to perform step 3.

3. *(Optional)*. To activate the license, click the **Server Deployment** link at the bottom of the License Management page.

Chapter 3: Upgrade

This section provides information on upgrading OMi MP for WebLogic from previous version.

To upgrade, perform the following tasks:

- 1. Disable all the Weblogic aspects and management templates on all nodes.
 - a. Open the Assignments & Tuning pane:

Click Administration > Monitoring > Assignments & Tuning.

- b. In the **Browse Views** tab, select a Weblogic view from the drop down and then select all the instances for which you want to disable the assignments.
- c. To disable the Assignments, in the **Assigned Item** column, select the Weblogic aspects or management template and click **Disable Assignment**.
- 2. Stop the collector on all the Weblogic nodes.
 - a. Run the Stop Weblogic Monitoring 2.0 tool.

The Collector for Weblogic is stopped message is displayed.

For more information on the tool, refer OMi MP for WebLogic User Guide.

3. Install the OMi MP for WebLogic version 2.0 on the OMi system.

For information on installing the OMi MP for WebLogic, see "Installing OMi MP for Oracle WebLogic" on page 19.

- 4. Update the existing discovery aspect to version 2.00 and then deploy. To update, follow these steps:
 - a. Open the Assignments & Tuning pane:

Administration > Monitoring > Assignments & Tuning

- b. In the Browse Views pane, select the **Weblogic_Deployment_View** view and select each CI where version update is required.
- c. Click Show Assignments That Require an Update.

All the Management Templates and Aspects that requires an update are listed.

d. Select each of the Management Templates and Aspects and click Multi Update Assigned

Item.

The Update Assigned Item dialog box appears.

- e. In the Update Options tab, follow these steps:
 - i. Select the 2.00 from the Update to Version drop down list.
 - ii. Select the Use default parameter values from version selected above option and click Next.
- f. In the Required Parameters tab, click Next to go to Parameter Summary.
- g. (Optional). In the Parameter Summary tab, to change the default values of the parameters, you can select the parameter and then click
 Value, specify the value, and then click OK.

Note: In the **Parameter Summary** tab, 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**.

- h. Click Next.
- i. (Optional). If you do not want to enable the assignment immediately, clear the Enable Assignment(s) check box. You can then enable the assignment later using the Assignments & Tuning pane.
- j. Click Finish.
- 5. Enable the discovery aspect so that Weblogic servers are discovered.
- 6. Update the other existing aspects and management templates to version 2.0, similar to step 4, and then enable them.

You can now check and verify that the new datasources are created, self monitored collector is registered with ovc, new collector is started, and data logging is happening.

Chapter 4: Getting Started

The following section provides step-by-step information about deploying out of the box components of OMi Management Pack for Oracle WebLogic on OMi.

Task 1: Adding Nodes to OMi Console

Note: If the Node already exists in RTSM, you can skip this step and proceed to Task 2.

Before you begin monitoring, you need to add the nodes to the OMi console.

1. Open the Monitored Nodes manager from the Operations Management Administration:

Click Administration > Setup and maintenance > Monitored Nodes

- In the Node Views pane, click Predefined Node Filter > Monitored Nodes and then click and then 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: Checking the Topology Synchronization Settings

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

1. Open the Infrastructure Settings from the Operations Management Administration:

Click Administration > Setup and Maintenance > Infrastructure Settings

- 2. In the Infrastructure Settings manager, select **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 Sync packages.

Task 3: Enabling the Enrichment Rules

The Enrichment Rules must be enabled to reconcile more than one j2eedomain CIs with the same name as a single CI entity. To enable the enrichment rules, follow these steps:

1. Open the Enrichment Manager:

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.
- In the Enrichment Rules pane, click Root > Operations Management > J2EE Application Servers.
- 9. Select WebLogicJ2EEDomainReconciliation and repeat steps 3 to 7.

Task 4: 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:

Click Administration > Monitoring > Management Templates and Aspects

2. In the Configuration Folders pane:

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

- 3. In the Aspects folder, click **Weblogic Discovery** aspect, and then click ⁴/₄ to open the Assign and Deploy Wizard.
- 4. 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 and a message appears stating that there are no parameters that require editing for this Assignment.

- 5. In the Required Parameters tab, click Next to go to Parameter Summary.

Note: In the **Parameter Summary** tab, 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.

- (Optional). If you do not want to enable the assignment immediately, clear the Enable Assignment(s) check box. You can then enable the assignment later using the Assignments & Tuning pane.
- 9. Click Finish.

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 **Administration > Monitoring > Deployment Jobs**.

Task 5: 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 OMi 10.x, click Workspaces > Operations Console > Event Perspective.

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



Task 6: Deploying the WebLogic Management Templates or WebLogic Aspects

If you are using **Monitoring Automation for Composite Applications** license, you can either deploy WebLogic Management Templates to the j2eedomain CI or WebLogic Aspects to the weblogicas CIs. For more information about deploying WebLogic Management Templates, go to "Task 6a: Identifying and Deploying WebLogic Management Templates". For more information about deploying WebLogic Aspects, go to "Task 6b: Deploying WebLogic Aspects".

If you are using **Monitoring Automation for Servers** license, you can deploy WebLogic Aspects. For more information about deploying WebLogic Aspects, go to "Task 4: Deploying Weblogic Discovery Aspect".

Task 6a: Identifying and Deploying WebLogic Management Templates

Before deploying the WebLogic Management Templates, you must deploy Weblogic Discovery Aspect. For more information, see "Task 4: Deploying Weblogic Discovery Aspect".

The WebLogic Management Template discovers the CIs of the following CITs and completes the topology as shown in the following figure:

- JVM
- J2EE Application
- JDBC Data Source



You can 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. For details about deploying Extensive Weblogic and Database Management Template, see *Deploying Extensive Weblogic and Database Management Template* in the *Online Help*.

1. Open the Management Templates and Aspects manager:

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 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. Click Next to accept the CIs and go to Required Parameters tab.
- In the Required Parameters tab, you must specify the values of mandatory Parameters,
 Username and Password. To specify the values of the parameters, you can select the parameter

and then click *I*. 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 "User Privileges".

- 6. Click **Next** to go to **Parameter Summary** tab.
- 7. (Optional). In the Parameter Summary tab, you can edit the values.

To change the default values of the parameters, you can select the parameter and then click \checkmark . The Edit Parameter dialog box opens. Click **Value**, specify the value, and then click **OK**.

Note: In the **Parameter Summary** tab, 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**.

Note: For SSL configurations, you must specify value for **Weblogic KeyStore Path** and **Weblogic Passphrase Password** parameters.

- 8. Click Next.
- (Optional). If you do not want to enable the assignment immediately, clear the Enable Assignment(s) check box. You can then enable the assignment later using the Assignments & Tuning pane.
- 10. Click Finish.

Task 6b: Deploying WebLogic Aspects

Before deploying the WebLogic Aspects, you must deploy the Weblogic Base Aspect to discover the CIs of the following CITs:

- JVM
- J2EE Application
- JDBC Data Source

To deploy the Weblogic Base Aspects, follow these steps:

1. Open the Management Templates and Aspects pane:

Click Administration > Monitoring > Management Templates and Aspects

2. In the Configuration Folders pane:

Click Configuration Folders > Application Server Management > Oracle WebLogic Management > Aspects > Weblogic Base

- 3. In the Weblogic Aspects folder, click **Weblogic Base**, and then click ⁴. The Assign and Deploy Wizard opens.
- 4. In the Configuration Item tab, select the WebLogic CI 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 tab.

Note: If you want to deploy Aspects to Node CIs, select Show All CIs of Type Node.

Note: The credentials given during the deployment of a Management Template should have required privileges. For more information, see "User Privileges".

- 6. Click **Next** to go to **Parameter Summary** tab.
- 7. (Optional). In the Parameter Summary tab, you can edit the values.

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 **Parameter Summary** tab, 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**.

Note: For SSL configurations, you must specify value for **Weblogic KeyStore Path** and **Weblogic Passphrase Password** parameters.

- 8. Click Next.
- (Optional). If you do not want to enable the assignment immediately, clear the Enable Assignment(s) check box. You can then enable the assignment later using the Assignments & Tuning pane.
- 10. Click Finish.

To deploy the remaining Weblogic Aspects, follow these steps:

1. Open the Management Templates & Aspects pane:

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 4. 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 Show All CIs of Type Node.

Note: The credentials given during the deployment of WebLogic Aspects should have required privileges. For more information, see "User Privileges".

- 6. Click Next to go to Parameter Summary tab.
- In the Parameter Summary tab, you can override the default value 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.
- 8. Click Next.
- (Optional). If you do not want to enable the assignment immediately, clear the Enable Assignment(s) check box. You can then enable the assignment later using the Assignments & Tuning pane.
- 10. Click Finish.

Task 7: Verifying Discovery for Extended Topology

After you deploy the Weblogic Management Templates or Weblogic Base aspect, you can verify if the CIs are populated in the View Explorer.

To view the CIs in the View Explorer, follow these steps:

- 1. In the OMi Console, click **Applications > Operations Management > Event Perspective**.
- In the View Explorer, select Weblogic_Deployment_View from the drop-down list. You can see the extended topology comprising CIs associated with the Weblogic_Deployment_View as shown in the following figure.



Composite Applications

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

Consider an enterprise environment topology for an instance of Composite Application as shown in the following figure that 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.



Monitor Composite Application

To monitor an instance of a composite application, follow these steps:

- 1. Perform Task 1 to Task 7 in Getting Started.
- 2. Deploying Extensive Weblogic and Database Management Template

Before deploying the WebLogic Management Templates, you must deploy the WebLogic Discovery Aspect. For more information, see "Task 1: Adding Nodes to OMi Console".

The WebLogic Management Template discovers the CIs of the following CITs and completes the topology as shown in the following figure:

- JVM
- Application Servers
- JDBC and underlying databases
- Oracle

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

a. Open the Management Templates and Aspects manager:

Click Administration > Monitoring > Management Templates & Aspects

b. In the Configuration Folders pane:

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

- c. Click Extensive Weblogic and Database Management Template and then click 🏶 to open Assign and Deploy wizard.
- d. 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.
- e. In the Required Parameters tab, you must specify the values of mandatory parameters, Username and Password. To specify the values of the parameters, you can select the parameter and then click *O*. The Edit Parameter dialog box opens. Click Value, specify the value, and then click OK.

Note: You must specify all the values of the parameters to be able to continue the configuration process.

f. In the **Parameter Summary** you can change default values of the parameters.

Note: In the **Parameter Summary**, 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 **Show Expert Parameters**.

- g. Click Next.
- h. (Optional). If you do not want to enable the assignment immediately, clear the Enable
 Assignment(s) check box. You can then enable the assignment later using the Assignments
 & Tuning pane.
- i. Click Finish.

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

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

After you deploy the Weblogic Management Templates or Weblogic Base Aspect, you can verify if the CIs are populated in the View Explorer.

To view the CIs in the View Explorer, follow these steps:

a. Open Event Perspective pane:

Click Workspaces > Operation Console > Event Perspective.

b. In the View Explorer, select J2EE_Database_Deployment from the drop-down list. You can see the extended topology comprising CIs associated with the J2EE_Database_
 Deployment.

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