

# OMi Management Pack for Oracle WebLogic

Software Version: 1.00

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
- · Graph Templates

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

### Abbreviations Used in this Manual

Abbreviations	Expansion
OMi	Operations Manager i
RTSM	Run-time Service Model
OMi MP	OMi Management Pack
OMi MP for Oracle WebLogic	OMi Management Pack for Oracle WebLogic

## Related Documentation

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

- OMi MP for Oracle WebLogic Release Notes
- OMi MP for Oracle WebLogic User 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 Skype for Business Server, 10 licenses of OMi MP for Oracle Database with any other combination of supported applications.

There are three types of licenses:

- Evaluation: A license with a fixed trial period of up to 60 days. This type of license is available only
  until a Time Based or Permanent license is purchased. Once purchased, the trial period
  immediately terminates.
- Term: A license that has a time-based expiration date.
- Perpetual: A license that does not expire.

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

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

# Chapter 2: Installing OMi MP for Oracle WebLogic

This section provides information about installing OMi MP for Oracle WebLogic on BSM 9.2x or OMi 10.x (Linux or Windows) servers.

### Installation Media

The following section provides information about the installation media for OMi MP for Oracle WebLogic. The OMi MP for Oracle WebLogic is available in the OMi MP for Oracle WebLogic DVD (MPDVD) and also through electronic media (e-media). The MPDVD and e-media are available for English and Non-English locale environments. You can use the appropriate installation media based on your locale requirements.

Product	Marketplace links
OMi MP for Oracle WebLogic	Unified Marketplace

The OMi MP for Oracle WebLogic DVD and e-media contains the software and the product documentation. In a distributed environment, it must be installed on all BSM or OMi Data Processing Servers (DPS) and BSM or OMi Gateway Servers (GWS).

The following table provides information about the documentation available in the MPDVD and the e-media:

Document	Location	Purpose
Online Help	Available in the BSM console Help menu.  From the BSM console, go to Help > BSM Help > Application Administration > Operations Management > OMi Management Pack for Oracle WebLogic  Available in the OMi console menu.  From the OMi console, go to > General Help > Administration Guide > Management Packs > OMi Management Pack for Oracle WebLogic.	To provide information about the following:  Using Management Templates  Using Aspects and Policy Templates  Using Indicators - HIs, ETIs, and TBEC Rules

Document	Location	Purpose
Installation Guide	<mpdvd>\DOCUMENTATION\en</mpdvd>	
User Guide	<mpdvd>\DOCUMENTATION\en</mpdvd>	
Release Notes	<mpdvd>\DOCUMENTATION\en</mpdvd>	To provide information about the following:
		Salient Features
		Installation Notes

## Installation Prerequisites

The following section lists the software prerequisites for installing OMi MP for Oracle WebLogic on BSM 9.2x (Linux and Windows) and OMi 10.x (Linux and Windows) servers. It also provides information about the prerequisites required for monitoring Oracle WebLogic instances.

## Software Requirements

Before installing OMi MP for Oracle WebLogic version 1.00, the following components must be installed and configured on the BSM 9.2x or OMi 10.x servers.

Component	Version
BSM	9.23 or higher*
Operations Manager i	9.23 or higher*
Monitoring Automation	9.23 or higher*
OMi MP for Infrastructure	1.10

<sup>\*</sup> See the Support Matrix for latest versions supported.

Note: For large scale environments, it is recommended to use BSM 9.24.

### **Managed Node**

Component	Version
Operations Agent	11.12 or higher*

Component	Version
Oracle Java	1.6 or higher*

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

### SiteScope Server:

Component	Version
SiteScope	11.22 or higher*

<sup>\*</sup> See the Support Matrix for latest versions supported.

**Note:** If you are deploying Hybrid WebLogic Management Template, you need to install SiteScope 11.22 or higher version.

## Installation Checklist

Make sure that the installation tasks described in the following table are completed in the specified order:

If you have already installed OMi 10.x, skip to Task 6.

### Server

Serial	Task	Reference
1	Check the Installation Prerequisites for BSM	See the chapter General Prerequisites in the BSM Installation Guide.
2	Install BSM version 9.23 or higher	See the BSM Installation Guide.
3	Install Monitoring Automation version 9.23 or higher	See the chapters Installation Prerequisites and Installing and Configuring Monitoring Automation on BSM servers in the Monitoring Automation for Operations Manager i Installation Guide.
4	Verify the Monitoring Automation installation	See the chapter Verifying the Installation and Using

Serial	Task	Reference
		Monitoring Automation in the Monitoring Automation for Operations Manager i Installation Guide.
5	Install Additional Software Update for Monitoring Automation 9.23	See the section "Installing Additional Software Update for Monitoring Automation 9.23".
6	Clean up OMi MP for Infrastructure version 1.00	If OMi MP for Infrastructure version 1.00 is already installed, see <i>Removing OMi MP for Infrastructure</i> version 1.00 in the <i>OMi Management Pack for Infrastructure 1.10 Installation Guide</i> .
7	Install OMi MP for Infrastructure 1.10	See the chapter Installing OMi MP for Infrastructure 1.10 in the OMi Management Pack for Infrastructure 1.10 Installation Guide.
8	Install OMi MP for Oracle WebLogic 1.00	See the section "Installing OMi Management Pack for Oracle WebLogic version 1.00 on BSM or OMi".
9	Applying the License	See the section "Applying the License".

### **Managed Node**

Task	Reference
Install Operations Agent 11.12	See the chapter Installing Operations Agent 11.12 in the Operations Agent and Operations Smart Plug-ins for Infrastructure Installation Guide.

# Installing Additional Software Update for Monitoring Automation 9.23

**Note:** You must install additional software update for Monitoring Automation 9.23 only for BSM 9.23.

Before installing OMi MP for WebLogic, you must install an additional software update for Monitoring Automation 9.23. If you are using Monitoring Automation 9.24 or a later version, you do not need to install this additional software update. The additional software update for Monitoring Automation 9.23 (HPOprMA\_update.zip) is available in the e-media or MPDVD, under the folder HPOprMA\_update.

For more information about installing the update software, see "Installing Monitoring Automation 9.23 Software Update".

## Installing OMi MP for Infrastructure version 1.10

For information about installing OMi MP for Infrastructure version 1.10, see the chapter *Installing OMi MP for Infrastructure version 1.10 on BSM or OMi* in the *OMi Management Pack for Infrastructure Installation Guide*.

# Installing OMi Management Pack for Oracle WebLogic version 1.00 on BSM or OMi

You can use the e-media or MPDVD to install the OMi MP for Oracle WebLogic on BSM or OMi Server (Linux or Windows). The following section provides information about installing the OMi MP for Oracle WebLogic on the BSM 9.2x or OMi 10.x Server.

**Note:** In a BSM 9.2x or OMi 10.x distributed environment, OMi MP for Oracle WebLogic must be installed on all BSM or OMi Servers - (BSM or OMi) DPS and (BSM or OMi) GWS. For BSM 9.2x, you must make sure that Monitoring Automation is running before proceeding with the installation. To check the status, log on to BSM console and navigate to **Admin > Setup and Maintenance > Server Deployment** and then check if Monitoring Automation is enabled.

### On a Linux BSM 9.2x or OMi 10.x Server

To install the OMi MP for Oracle WebLogic on a Linux BSM 9.2x or OMi 10.x Server, follow these steps:

- 1. Log on as a root user.
- 2. Set the umask by typing the command umask 022.
- 3. Create a directory to mount the DVD or e-media by typing the command mkdir /<mount\_point>.

For example: mkdir /dvdrom

4. Insert the DVD into the disk drive or you can copy the e-media installation package and mount using the following commands:

For DVD: mount /dev/<dvdrom\_drive\_name> /<mount\_point>

For e-media: mount -o loop <e-media> /<mount point>

- 5. Change the directory to /<mount\_point>.
- 6. Run the following command:

<PATH>/mpinstall.sh -i

Based on the locale, you can see the following table and run the command accordingly:

E-media	MP locale same as BSM locale	MP locale different from BSM locale
English e-media	./mpinstall.sh -i	./mpinstall.sh -i
Non-English e- media	./mpinstall.sh -i	<pre>./mpinstall.sh -i -locale <mplocale></mplocale></pre>

For example, to install OMi MP for Oracle WebLogic in the Simplified Chinese locale with BSM in a non Simplified Chinese locale, specify the following command:

./mpinstall.sh -i -locale zh CN

**Note:** You can use the following command options:

- ./mpinstall.sh -i [-locale <MP Locale>] [-h|help]
- -i: Install Management Pack.
- -locale: Locale specific Management Pack to install.
- -h|-help: Shows the help message.

You can specify the <mplocale> as follows:

- o zh\_CN: Simplified Chinese locale
- ja: Japanese locale
- 7. To accept the End User License Agreement (EULA), type **Yes** or **Y** and to decline the license agreement, type **No** or **N**.

Note: If you decline the EULA, the OMi MP for Oracle WebLogic will not be installed.

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

### On a Windows BSM 9.2x or OMi 10.x Server

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

To install the OMi MP for Oracle WebLogic on a Windows BSM 9.2x or OMi 10.x Server, follow these steps:

- 1. Insert the DVD into the disk drive or you can copy the ZIP file to the BSM or OMi Server and extract it.
- Open the command prompt, change the directory to <DVD- ROM> or to folder that has the installer script and run the following command:

cscript mpinstall.vbs -i

Based on the locale, you can see the following table and run the command accordingly:

E-media	MP locale same as BSM locale	MP locale different from BSM locale
English e- media	cscript mpinstall.vbs -i	cscript mpinstall.vbs -i
Non-English e-media	cscript /nologo mpinstall.vbs -i	<pre>cscript /nologo mpinstall.vbs -i -locale <mplocale></mplocale></pre>

For example, to install OMi MP for Oracle WebLogic in Simplified Chinese locale with BSM in a non Simplified Chinese locale, specify the following command:

cscript /nologo mpinstall.vbs -i -locale zh CN

Note: You can use the following command options:

cscript /nologo mpinstall.vbs -i [-locale <MP Locale>] [-h|help]

- -i: Install Management Pack.
- -locale: Locale specific Management Pack to install.
- -h|-help: Shows the help message.

You can specify the <mplocale> as follows:

- o zh\_CN: Simplified Chinese locale
- o ja: Japanese locale
- 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 MP for Oracle WebLogic is 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 MP for Oracle WebLogic.

**Note:** The OO flows shipped by OMi MP 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 MP for Oracle WebLogic can be installed on an OO server and launched through the OMi-OO integration. For more information about the OMi-OO integration, see the *BSM - Operations Orchestrations Integration Guide*.

## **Uploading OO Flows**

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

1. In BSM 9.2x or OMi 10.x, go to the directory:

### On Linux:

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

### On Windows:

%TOPAZ\_HOME%\conf\opr\oo

2. 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>/HPOpr00JEE90" -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 BSM 9.2x, click **Admin > Integration > Operations Orchestration.** 

On OMi 10.x, click Administration > Operations Console > Run Books Mapping.

## Applying the License

This section provides information about updating and activating the license.

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

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

1. Navigate to the License Management pane:

On BSM 9.2x, click Admin > Platform > Setup and Maintenance > License Management.

On OMi 10.x, 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.

## Verifying the OMi MP for Oracle WebLogic Installation

This section provides information about verifying the installation of OMi MP for Oracle WebLogic on BSM 9.2x or OMi 10.x (Linux and Windows) servers.

You can perform any one of the following checks to verify the OMi MP for Oracle WebLogic installation:

• Check the log files for any errors on GWS (BSM 9.2x or OMi 10.x), DPS (BSM 9.2x or OMi 10.x), and typical servers (BSM 9.2x or OMi 10.x) at the following locations:

### For Linux:

/opt/HP/BSM/log/mpinstall.log

### For Windows:

%TOPAZ\_HOME%\log\mpinstall.log

**Note:** The OMi logs are available on both (BSM 9.2x or OMi 10.x) GWS and (BSM 9.2x or OMi 10.x) DPS at the following location:

On BSM < or = 9.25

Linux: /opt/HP/BSM/log/EJBContainer/opr-configserver.log

**Windows**: %TOPAZ\_HOME%\log\EJBContainer\opr-configserver.log

On BSM > or =9.26 and OMi 10.x

Linux: /opt/HP/BSM/log/jboss/opr-webapp.log

Windows: %TOPAZ\_HOME%\log\jboss\opr-webapp.log

- Check the following location BSM 9.2x or on the OMi 10.x console:
  - On BSM 9.2x, click Admin > Operations Management > Setup > Content Packs.

The **OMi Management Pack for Oracle WebLogic 1.00** must appear in the Content Pack Definitions pane.

• On OMi 10.x, click Administration > Setup and Maintenance > Content Packs.

The **OMi Management Pack for Oracle WebLogic 1.00** must appear in the Content Pack Definitions pane.

• To list the OMi MPs installed on the BSM 9.2x or OMi 10.x server, run the following command on BSM 9.2x or OMi 10.x GWS:

### For Linux:

/opt/HP/BSM/bin/ContentManager.sh -l -username <username> -password <pwd>

### For Windows:

%TOPAZ\_HOME%\bin\ContentManager.bat -1 -username <username> -password <pwd>>

**Note:** The ContentManager.bat or ContentManager.sh command lists the Content Pack name and version.

## **Chapter 3: 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 using the BSM or OMi console. It includes Indicators - Health Indicators (HIs), Event Type Indicators (ETIs), and Correlation Rules that analyze different events that occur in your WebLogic Application Server.

## 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 the WebLogic Discovery Aspect".

Before you begin monitoring, you need to add the nodes to the BSM or OMi 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.
- In the Node Views pane, click Predefined Node Filter > Monitored Nodes, then click \*\* and select Computer > <select the OS type>. 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.
- 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 the 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.

- 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:
  - 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, 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
  - 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** tab on BSM 9.2x or **Parameter Summary** tab on OMi 10.x. 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:** 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 these steps:

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 and 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.

- 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 provides more information about data collection, deploying the management templates and aspects. For more information about deploying WebLogic Management Template, go to Task 5a: Identifying and Deploying Management Templates. For more information about deploying WebLogic Aspects, go to Task 5b: Deploying WebLogic Aspects.

## Management Pack Data Collection Process

The frequency (polling interval) at which each policy must be monitored is predefined with a default value in a specific frequency parameter. Frequency parameter is an expert parameter that is defined for each of the metrics regardless of whether they are for generating events or logging data.

Following are the four predefined frequency parameters:

Scheduler Frequency	Default value
Very High	5 mins
High	15 mins
Medium	1 hour
Low	24 hours

After Management Templates and Aspects are deployed, collector is triggered based on the parameter value in a specific policy. You can modify the default value of the parameter at following two levels:

- During deployment of the Management Template or Aspects using the Management Templates & Aspects pane.
- After deployment using the Assignments & Tuning pane.

For more information about how to modify the parameter values, see the section *Editing Parameters* in the *OMi Management Pack for Oracle WebLogic 1.00 User Guide*.

# Task 5a: Identifying and Deploying Management Templates

You **must** deploy the Weblogic Discovery Aspect even if the CIs are already populated by any other source such as SiteScope, DDM and so on. For more information, see "Task 3: Deploying the 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, Server logs and so on along with critical Infrastructure components (CPU, Memory, and Disk), you can deploy Essential Weblogic Management Template.
- If you want to monitor basic components along with the advanced components of WebLogic
  Application Server like Transactions, Cluster status, Cache usage, Threads, Server Logs and so on
  and Infrastructure components (CPU, Memory, Disk etc.), 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 so on), 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 & 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:
  - 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**.
- 5. In the All Parameters tab on BSM 9.2x or 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 **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**.

- 6. Click Next.
- 7. *(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.

8. Click Finish.

**Note:** The credentials given during the deployment of a Management Template should have required privileges for OMi MP for Oracle WebLogic to collect data.

## Task 5b: Deploying WebLogic Aspects

You **must** deploy the WebLogic Discovery Aspect even if the CIs are already populated by any other source such as SiteScope, DDM and so on. For more information, see "Task 3: Deploying the WebLogic Discovery Aspect".

To deploy WebLogic Aspects to the WebLogic CIs, 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:

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

- 3. In the Weblogic Aspects folder, click the WebLogic Aspect you want to deploy, 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 WebLogic Aspect and then click **Next**.
- 5. (Optional). In the Required Parameters tab, click Next.

**Note:** There are no parameters that requires to be specified for assigning J2EE Aspects.

6. In the **All Parameters** tab on BSM 9.2x or **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 **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**.

7. *(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.

8. 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 pane:
  - 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 Manager, select **Applications > Operations Management**.
- 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.

# Appendix A: Installing Monitoring Automation 9.23 Software Update

This section provides detailed information about installing the software update in a distributed BSM environment.

If you do not have a distributed BSM environment, you can skip to the section "Installing Additional Software Update in a Typical BSM Environment".

## Installing Additional Software Update in a Distributed BSM Environment

In a distributed BSM environment, the BSM DPS and BSM GWS are available on different systems. The additional software update needs to be installed on both the BSM DPS and BSM GWS.

## Installing Additional Software Update on BSM DPS

To install the additional software update on BSM DPS running in a distributed BSM environment, follow these steps:

 Run the following commands to check the version of the current opr-config-contentserver.war file:

### On Linux:

cd /opt/HP/BSM/opr/webapps

/opt/HP/BSM/opr/support/what.sh ./opr-config-content-server.war

### On Windows:

Go to the drive where BSM is installed:

cd /d %TOPAZ\_HOME%\opr\webapps

cscript %TOPAZ\_HOME%\opr\support\what.vbs opr-config-content-server.war

**Note:** If the version number is lower than 09.23.174, then proceed to the next step. If the version number is 09.23.174 or higher, then the current BSM installation already contains the required software update and you do not need to perform the remaining steps in this section.

2. Run the following command to stop the BSM services running on BSM DPS:

### On Linux:

/opt/HP/BSM/scripts/run hpbsm stop

### On Windows:

%TOPAZ\_HOME%\bin\SupervisorStop.bat

Take a backup of the existing opr-config-content-server.war file, which exists in the following folder:

### On Linux:

/opt/HPBSM/opr/webapps

### On Windows:

%TOPAZ\_HOME%\opr\webapps

The opr-config-content-server.war file must be backed up to a different folder.

4. Extract the HPOprMA\_update.zip to a temporary folder and copy opr-config-content-server.war to the following folder:

### On Linux:

/opt/HPBSM/opr/webapps

### On Windows:

%TOPAZ\_HOME%\opr\webapps

5. Run the following command to deploy the new WAR file from the extracted ZIP file:

### On Linux:

/opt/HP/BSM/opr/bin/oprcfg-configuration.sh -setup omi -noGW

### On Windows:

cscript %TOPAZ\_HOME%\opr\bin\oprcfg-configuration.vbs -setup omi -noGW

6. Run the following command to start the BSM services:

### On Linux:

/opt/HP/BSM/scripts/run hpbsm start

### On Windows:

%TOPAZ\_HOME%\bin\SupervisorStart.bat

## Installing Additional Software Update on BSM GWS

To install the additional software update on BSM GWS running in a distributed BSM environment, follow these steps:

1. Run the following commands to check the version of the current opr-config-server.war file:

#### On Linux:

```
cd /opt/HP/BSM/opr/webapps
```

/opt/HP/BSM/opr/support/what.sh ./opr-config-server.war

### On Windows:

Go to the drive where BSM is installed:

```
cd /d %TOPAZ HOME%\opr\webapps
```

cscript %TOPAZ\_HOME%\opr\support\what.vbs opr-config-server.war

**Note:** If the version number is lower than 09.23.174, then proceed to the next step. If the version number is 09.23.174 or higher, then the current BSM installation already contains the required software update and you do not need to perform the remaining steps in this section.

2. Run the following command to stop the BSM services running on BSM GWS:

### On Linux:

```
/opt/HP/BSM/scripts/run hpbsm stop
```

#### On Windows:

%TOPAZ\_HOME%\bin\SupervisorStop.bat

Take a backup of the existing opr-config-server.war file which exists in the following folder:

### On Linux:

/opt/HPBSM/opr/webapps

### On Windows:

%TOPAZ\_HOME%\opr\webapps

The opr-config-server.war file must be backed up to a different folder.

4. Extract the HPOprMA\_update.zip to a temporary folder and copy opr-config-server.war to the following folder:

### On Linux:

/opt/HPBSM/opr/webapps

### On Windows:

%TOPAZ HOME%\opr\webapps

5. Run the following command to deploy the new WAR file from the extracted ZIP file:

### On Linux:

/opt/HP/BSM/opr/bin/oprcfg-configuration.sh -setup omi

### On Windows:

cscript %TOPAZ\_HOME%\opr\bin\oprcfg-configuration.vbs -setup omi

6. Run the following command to start the BSM services:

### On Linux:

/opt/HP/BSM/scripts/run\_hpbsm start

#### On Windows:

%TOPAZ\_HOME%\bin\SupervisorStart.bat

## Installing Additional Software Update in a Typical BSM Environment

In a typical BSM environment, the BSM DPS and BSM GWS are available in the same system. To install the additional software update in a typical BSM environment, perform the following steps:

1. Run the following commands to check the version of the current opr-config-server.war:

### On Linux:

cd /opt/HP/BSM/opr/webapps

/opt/HP/BSM/opr/support/what.sh ./opr-config-server.war

### On Windows:

Go to the drive where BSM is installed:

```
cd /d %TOPAZ_HOME%\opr\webapps
```

cscript %TOPAZ\_HOME%\opr\support\what.vbs opr-config-server.war

**Note:** If the version number is lower than 09.23.174, then proceed to the next step. If the version number is 09.23.174 or higher, then the current BSM installation already contains the required software update and you do not need to perform the remaining steps in this section.

2. Run the following command to stop the BSM services running on BSM Server:

#### On Linux:

/opt/HP/BSM/scripts/run\_hpbsm stop

### On Windows:

%TOPAZ\_HOME%\bin\SupervisorStop.bat

3. Take a backup of the existing opr-config-server war file which exists in the following folder:

### On Linux:

/opt/HPBSM/opr/webapps

### On Windows:

%TOPAZ\_HOME%\opr\webapps

The opr-config-server.war file must be backed up to a different folder.

4. Extract the HPOprMA\_update.zip to a temporary folder and copy opr-config-server.war to the following folder:

### On Linux:

/opt/HPBSM/opr/webapps

### On Windows:

%TOPAZ\_HOME%\opr\webapps

5. Run the following command to deploy the new WAR file from the extracted ZIP file:

### On Linux:

/opt/HP/BSM/opr/bin/oprcfg-configuration.sh -setup omi

### On Windows:

cscript %TOPAZ\_HOME%\opr\bin\oprcfg-configuration.vbs -setup omi

6. Run the following command to start the BSM services:

### On Linux:

/opt/HP/BSM/scripts/run\_hpbsm start

### On Windows:

%TOPAZ\_HOME%\bin\SupervisorStart.bat

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