HP Operations Smart Plug-in for BEA WebLogic Server

For HP Operations Manager for Windows®

Software Version: 7.00

PDF version of the online help

This document is a PDF version of the online help that is available in the BEA WebLogic Server SPI. It is provided to allow you to print the help, should you want to do so. Note that some interactive topics are not included because they will not print properly, and that this document does not contain hyperlinks.

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- Software Version number, which indicates the software version.
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HP Operations Smart Plug-in for BEA WebLogic Server

The HP Operations Smart Plug-in for BEA WebLogic Server (WebLogic SPI) allows you to manage WebLogic servers from an HP Operations Manager console.

To install and configure the HP Operations Smart Plug-in for BEA WebLogic Server (WebLogic SPI), see the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide* located on the HP Operations Smart Plug-ins DVD, in the file
`\Documentation\SPI Guides\WebLogic_AppServer_Install_Config.pdf`.

Related Topics:

- Overview

- Getting Started

- Components

Overview

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) adds monitoring capabilities otherwise unavailable to HP Operations Manager for Windows (HPOM).

Smart Plug-in integration uses : Used in conjunction with HPOM, the WebLogic SPI offers centralized tools that help you monitor and manage systems using WebLogic Server. From the HPOM console, an operator can apply the same familiar HPOM performance and problem managing processes to monitor a system using WebLogic Server. The WebLogic SPI metrics are automatically sent to the HP Operations agent and can be either alarmed on or consolidated (the metrics can be also be set to do both) into reports and graphs which help you analyze trends in server usage, availability, and performance. The WebLogic SPI can be integrated with HP Reporter and HP Performance Manager (both products must be purchased separately) to provide additional reporting and graphing flexibility and capabilities.

Smart Plug-in data : After completing the WebLogic SPI installation, you can find key server-related metrics that cover the following areas:

- server availability

- server performance

- memory usage

- transaction rates

- servlet executing times, time-outs, request rates

- JDBC connection status

- Web application processing

- Java message service processing

- cluster processing

- exception counts of scheduled WLS actions

Smart Plug-in uses/customizations : WLS administrators can choose those metrics that are most crucial to the successful operation of WebLogic Server by modifying the WebLogic SPI policies. The policies contain settings that allow incoming data to be measured against predefined rules that generate useful information in the form of messages. These messages with severity-level color-coding can be reviewed for problem analysis and resolution. Corrective actions that are pre-defined for specific events or threshold violations can be automatically triggered or operator-initiated.

Related Topics:

- Introduction

- Getting Started

- Components

Getting started

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) messaging, reporting, and action-executing capabilities are based on the HPOM concept of policies . The settings within these policies define various conditions within the WebLogic Server. Once in use, the WebLogic SPI policies allow information to be sent back to the HPOM management server to help you proactively address potential or existing problems and avoid serious disruptions to Web transaction processing. The WebLogic SPI helps you perform the following functions:

- **Collect and interpret server performance/availability information**

  After you configure and deploy the WebLogic SPI to managed nodes it gathers data that is interpreted and acted upon, according to settings within the deployed policies. These policies define conditions that can occur within the WebLogic Server, such as queue throughput rates, cache use percentages, timeout rates, average transaction times, and so on. The default thresholds, set within the policies monitor these conditions and trigger messages to the console when a threshold is exceeded.

- **Display information**

  Messages in the Message Browser : Comparing the values gathered for WebLogic Server performance/availability against the policy settings relating to those specific areas, HP Operations agent software forwards the appropriate messages to the OVO console. These messages are displayed with color-coded severity levels in the HPOM Message Browser.

  Instruction Text: Messages generated by the WebLogic SPI programs contain instruction text to help diagnose and remedy problems. Corrective actions that are preassigned to events can be triggered automatically or manually by an operator.

  You can usually find instruction text in the message details; this same text is also available in the metric definition .

  ASCII-Text Reports : In addition to the instruction text mentioned above, some messages cause automatic action reports to be generated. These reports show conditions of specific WebLogic Server instance. When a report is available, like the instruction text, you can find it within the Message Details, specifically in the Annotations area.

- **Generate reports using HP Reporter**

  The WebLogic Server-SPI also integrates with HP Reporter to provide you with management-ready, Web-based reports. WebLogic SPI includes the policies for generating these reports within its Report package, which you can install on the Reporter Windows system. After you have installed the

product and completed some configuration steps, you can expect to see new reports of summarized, consolidated data generated nightly that will help you assess how WebLogic Server is performing over time.

- **Graph data with HP Performance Manager**

  The WebLogic SPI can be used with HP Performance Manager to generate graphs showing the WebLogic SPI collected metric values. If you have purchased HP Performance Manager, use it according to its instructions.

- **Customize WLS SPI Policies**

  You can use the WebLogic SPI policies with no customization, or you can change them as you find necessary. Possible minor modifications and major customizations are listed here:

  - **Modification of Default Policies:** Within a policy you can change the default settings for collection interval, threshold, message text, duration, severity level of the condition, and actions assigned to the condition (operator-initiated or automatic).

  - **Creation of Custom Policy Groups:** Create custom policy groups, using default policies as a starting point.

  - **Custom Metrics:** The ability to define your own metrics or user-definable metrics (UDMs) is a powerful feature that you can use to expand the monitoring capabilities of the WebLogic SPI.

  For more information about completing these changes, see the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide* located on the HP Operations Smart Plug-ins DVD, in the file
  `\Documentation\SPI Guides\WebLogic_AppServer_Install_Config.pdf`.

Related Topics:

- Introduction

- Overview

- Components

Components

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) components include:

- tools

- policies

These components allow you to configure and receive data in the form of messages, annotations, and metric reports. These messages (available in the Message Browser), annotations (available through message properties), and metric reports reports (available through tools) provide you with information about conditions present in the server(s) running on specific managed nodes.

The WebLogic SPI configuration tools let you configure the management server's connection to named server instances on specific managed nodes. After you have configured the connection, you can deploy policies to the nodes. With HP Operations agent software running on the managed nodes, you can use the WebLogic SPI reporting tools to generate metric reports. In addition, you can generate graphs that show the WebLogic SPI data (available through message properties).

Related Topics:

- Tools

- Policies

- Reports and graphs

- Getting Started

Tools

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) tools include configuration and troubleshooting utilities. From the HPOM console, select **Tools ➝ SPI for WebLogic Server** to access the tools which are divided into the following categories:

- Metric Reports tools group

- SPI Admin tools group

- WebLogic Admin tools group

Related Topics:

- Components

- Policies

SPI Admin tools group

The SPI Admin tools group allows you to perform the WebLogic SPI related tasks.

For a more detailed description of the tools, click the tool name in the table below.

Tool	Description
Discover or Configure WLSSPI	Discovers the WebLogic Server instances or Configures the WebLogic SPI.
Create WLSSPI Node Groups	Create WebLogic SPI node groups based on discovered services.
Self-Healing Info	Collect log, trace, and other information to be used by your HP support representative.
Start/Stop Monitoring	Starts/Stops WebLogic SPI monitoring.
Start/Stop Tracing	Starts/Stops tracing. The tracing information collected is to be used by your HP support representative.
Verify	Verifies that WebLogic SPI is properly installed on the managed node.
View Error File	View the WebLogic SPI error log.

Related Topics:

- Metric Reports tools group

- WebLogic Admin tools group

Discover or Configure WLSSPI

You can run either discovery or configuration using Discover or Configure WLSSPI tool.
The tool Discover or Configure WLSSPI tool launches the configuration editor. The tool Discover or Configure WLSSPI allows you to either identify instances of a WebLogic Server on a managed node from the HPOM console (on selecting Launch Discover Tool option) or maintain the WebLogic SPI configuration by viewing, editing, or setting configuration properties in the configuration editor (on selecting Launch Configure Tool option).

Function

The following functions are performed by running the Discover tool:

- Updates the configuration on the HPOM management server and selected managed nodes.

- Deploys the Discovery group policies to the selected managed nodes.

The following functions are performed by running the Configure tool:

- Updates the configuration on the HPOM management server and selected managed nodes.

- Creates the directories and files required by WebLogic SPI on the selected managed nodes.

- Sets up data sources for reporting and graphing.

- Sets up the WebLogic Server log files and the WebLogic SPI error log file for monitoring.

Configuration information for all WebLogic Servers on HPOM managed nodes is maintained on the HPOM management server. Configuration information for a specific WebLogic Server on an HPOM managed node is maintained on that managed node (each managed node maintains a subset of the configuration information maintained on the HPOM management server).

When saved, changes made with the configuration editor are always saved on the HPOM management server.

An HPOM managed node must be selected when this tool is launched, and changes to the configuration affecting any WebLogic Servers on that managed node are automatically saved on that managed node.

If a specific HPOM managed node is selected when this tool is launched and changes are made that affect a WebLogic Server on a non-selected managed node, the changes are saved to the configuration on the HPOM management server, but are *not* saved to the non-selected managed node. To save the changes on the affected managed node, select the affected managed node and run the tool again.

To launch Discover or Configure WLSSPI

To launch the Discover or Configure WLSSPI tool, perform these steps:

1. From the HPOM console for Windows, select **Tools → SPI for WebLogic Server → SPI Admin** .

2. Double-click **Discover or Configure WLSSPI** .

3. Select the managed nodes on which you want to launch the tool.

4. Click **Launch** .

   The "Tool Selector" window opens.

5. To run the discovery, select the Launch Discover Tool radio button and click **OK** . To run the configuration, select the Launch Configure Tool radio button and click **OK** . By default, the Launch Configure Tool radio button is selected.

See *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide for Windows* for more information on how to launch Discover or Configure WLSSPI tool.

Create WLSSPI Node Groups

Create WLSSPI Node Groups tool allows you to create node groups that contains all the managed nodes running supported versions of the WebLogic Server.

If new managed nodes are added, you must run this tool again to add these managed nodes to the WebLogic SPI node groups.

Function

Create WLSSPI Node Groups tool does the following:

- In the Nodes folder, creates the SPI for WebLogic Server node group.

- Places all HPOM managed nodes running a supported version of WebLogic Server in the node group.

- Assigns tools, reports, and graphs to the nodes and node groups.

To launch Create WLSSPI Node Groups tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **SPI Admin** .

2. Double-click **Create WLSSPI Node Groups** . The "Tool Status" window opens.

3. In the Launched Tools field, check the Status of the tool for each node:

   ○ Started/Starting - The tool is running.

   ○ Succeeded - WebLogic SPI has successfully created the node groups. Scroll to the bottom of the Tool Output field. The message "Done" displays.

   ○ Failed - The tool did not succeed. Scroll through the Tool Output field for more information about the problem.

4. Click **Close** to close the "Tool Status" window.

5. To verify the node groups have been created, select **Nodes** → **SPI for WebLogic Server** . The node group should contain managed nodes running supported versions of the WebLogic Server. If no supported versions of the WebLogic Server is running, the node group is not created.

Self-Healing Info

Self-Healing Info tool allows you to collect data that is used by your HP support representative.

Function

Self-Healing Info application performs the following functions:

1. Saves data in the following file:
   - On a UNIX managed node: `/tmp/wasspi_wls_support.tar`
   - On a Windows managed node: `wasspi_wls_support.zip` in `%TEMP%` directory

2. Launches and saves data using the Verify application.

To launch Self-Healing Info tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **SPI Admin** .
2. Double-click **Self-Healing Info** .
3. Select the managed nodes on which to data.
4. Click **Launch** . The "Tool Status" window opens. In the Tool Output field, the location of the collected data is given.
5. Send the collected data to your HP support representative.
6. Click **Close** to close the "Tool Status" window.

Start/Stop Monitoring

Start and Stop Monitoring tools allow you to start or stop the WebLogic SPI from collecting metrics from one or more application servers on a managed node.

These metrics generate alarms (when thresholds are exceeded) and are used to create reports (automatically or manually generated) and graphs. The reports and graphs are used to analyze trends in server usage, availability, and performance.

Typically, you would stop monitoring on a managed node if the node is not running for a known reason (for example, the node is down for maintenance). Stopping the monitoring prevents unnecessary alarms from being generated.

Run Verify to determine if monitoring is started or stopped. By default, monitoring is on.

Function

Start Monitoring tool starts the collection of metrics for one or all application servers on a managed node. Stop Monitoring tool stops the collection of metrics for one or all application servers on a managed node.

To launch Start/Stop Monitoring tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **SPI Admin** .

2. Double-click **Start Monitoring** or **Stop Monitoring** .

3. Select the managed nodes on which you want to start or stop collection of metrics.

4. Select **Launch** .

   The "Console Status" window and then the "Server Selection" window open.

5. From the "Server Selection" window, select one application server or all application servers on which you want to start or stop collection of metrics.

6. Click **OK** .

7. From the "Console Status" window in the Launched Tool field, check the Status of the tool for each node:

   ○ Started/Starting - The tool is running.

     o Finished - The tool has completed. Scroll through the Tool Output field for more information.

8. Click **Close** to close the "Console Status" window.

Start/Stop Tracing

Start and Stop Tracing tools allow you to start or stop logging the information about each of the activity performed by the SPI on the managed node. Run this tool only when instructed by your HP support representative.

Self-Healing Info collects the files created by this tool as part of its data to be used by your HP support representative.

Function

Start Tracing tool saves the information about each of the activity performed by the SPI on the managed node. Stop Tracing tool stops saving information each of the activity performed by the SPI on the managed node.

To launch the Start/Stop Tracing tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **SPI Admin** .

2. Double-click **Start Tracing** or **Stop Tracing** .

3. Select the managed nodes on which you want to start or stop tracing.

4. Click **Launch** . The "Tool Status" window opens.

5. In the Launched Tools field, check the Status of the tool for each node:

    ○ Started/Starting - The tool is running.

    ○ Succeeded - Tracing is successfully started/stopped for the WebLogic SPI on the managed node. Select the node in the Launched Tools field and scroll to the bottom of the Tool Output field. The message "Tracing is ON/OFF." appears.

    ○ Failed - The tool did not succeed. Select the node in the Launched Tools field and scroll through the Tool Output field for more information about the problem.

6. Click **Close** to close the "Tool Status" window.

Verify

The tool Verify enables you to verify whether the files required for the functioning of the SPI (instrumentation, library, configuration files, and so on) are properly deployed.

Function

The Verify tool verifies whether the files required for the functioning of the SPI (instrumentation, library, configuration files, and so on) are properly deployed. It gives a list of missing instrumentation files.

> **⊙ NOTE:**
> Before you launch the Verify tool ensure that you have installed the latest version of Self-Healing Service (SHS) component from the SPI DVD.

To launch the Verify tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **SPI Admin** .

2. Double-click **Verify** .

3. Select the managed nodes on which you want to verify the WebLogic SPI installation.

4. Click **Launch** . The "Tool Status" window opens.

5. In the Launched Tools field, check the Status of the tool for each node:

   ○ Started/Starting - The tool is running.

   ○ Succeeded - WebLogic SPI has been properly installed on the managed node. Select the node in the Launched Tools field and scroll to the bottom of the Tool Output field. The message "Installation is clean" appears.

   ○ Failed - The tool did not succeed. Select the node in the Launched Tools field and scroll through the Tool Output field for more information about the problem.

6. Click **Close** to close the "Tool Status" window.

View Error File

View Error File tool allows you to view the contents of the error log file.

Function

View Error File displays the contents of the WebLogic SPI error file *`<OvAgentDir>`*
`/wasspi/wls/log/errorlog` .

where *`<OvAgentDir>`* typically is:

- On UNIX managed nodes: `/var/opt/OV`

- On Windows Managed Nodes: `\Program Files\HP\HP BTO Software\`

To launch the View Error tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **SPI Admin** .

2. Double-click **View Error File** .

3. Select the managed nodes on which you want to view the WebLogic SPI error log file.

4. Click **Launch** . The "Tool Status" window opens.

5. In the Launched Tools field, check the Status of the tool for each node:

    ○ Started/Starting - The tool is running.

    ○ Succeeded - You can view the WebLogic SPI error log file. Select the node in the Launched
       Tools field and scroll through the Tool Output field to view the error log file.

    ○ Failed - The tool did not succeed. Select the node in the Launched Tools field and scroll
       through the Tool Output field for more information about the problem.

6. Click **Close** to close the "Tool Status" window.

WebLogic Admin tools group

WebLogic Admin tools group allows the you to perform tasks related to WebLogic Server.

For a more detailed description of the tools, click the tool name in the table below.

Tool	Description
Check WebLogic	Allows you to checks the state of WebLogic Servers.
Start/Stop WebLogic	Allows you to start and stop the WebLogic Server (requires setup).
View Deployed Apps	Allows you to view applications running on a WebLogic Server.
Start WLS Console	Allows you to launch the WebLogic Administration Server console (requires
View WebLogic Log	Allows you to view the WebLogic Server log files.
View WebLogic Servers	Allows you to view the WebLogic domain configuration, cluster information physical machines .
View Application Activation Status	Allows you to view the activation status of the applications running on a We Server.
View Application Timeout	Allows you to view the time left before retiring applications running on a W Server will timeout.

Related Topics:

- Metric Reports tools group

- SPI Admin tools group

Check WebLogic

Check WebLogic tool allows you to check the status of the WebLogic servers running on selected managed nodes.

Function

Check WebLogic tool displays the following information for each application server on the selected managed nodes:

Server Name	The server name as defined in the WebLogic Server.
Server State	The status of the WebLogic Server.
Start Date	The date when the WebLogic Server was started.
Port	The port the WebLogic Server listens on.
Admin Server Host	The location of the WebLogic administration server for this WebLogic Server.
Admin Server Port	The port of the WebLogic administration server for this WebLogic Server.
Current Open Socket Count	The number of open sockets for the WebLogic Server.
WebLogic Version	The version number of the WebLogic Server.

If you configure WebLogic SPI not to collect metrics for the WebLogic Server, the message "Collection is temporarily OFF for <*server_name* >" appears.

> **NOTE:**
> Before you launch the Check WebLogic tool on a node ensure that the Collector is running for the WebLogic server instance on that node.

To launch Check WebLogic tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **WebLogic Admin** .

2. Double-click **Check WebLogic** .

3. Select the managed node(s) on which you want to view the status.

4. Click **Launch** . The "Tool Status" window opens.

5. In the Launched Tools field, check the Status of the tool for each node:

    ○ Started/Starting - The tool is running.

    ○ Succeeded - A status report is available for each instance of the WebLogic Server on the managed node. Select the node in the Launched Tools field and scroll through the Tool Output field.

    ○ Failed - The tool did not succeed. Select the node in the Launched Tools field and scroll through the Tool Output field for more information about the problem.

6. Click **Close** to close the "Tool Status" window.

Related Topics:

- Start/Stop WebLogic

- Start WLS Console

- View WebLogic Log

- Metric Reports tools group

- SPI Admin tools group

Start/Stop WebLogic

Start and Stop WebLogic tools allow you to start or stop WebLogic Servers from the HPOM console. You can start or stop an application server or all application servers on the selected managed nodes and do not have to log in to each WebLogic Administration Server to perform these functions.

Required Setup

You must configure the START_CMD and STOP_CMD properties to launch this tool successfully.

See Configuration Properties and Discover or Configure WLSSPI for more information about configuring these properties.

Function

Start WebLogic tool starts one or more application servers on the selected managed nodes. Stop WebLogic tool stops one or more application servers on the selected managed nodes.

To launch Start/Stop WebLogic tool

After setting the required configuration properties, follow these steps:

1. From the HPOM console, select **Tools** ⟶ **SPI for WebLogic Server** ⟶ **WebLogic Admin** .

2. Double-click **Start WebLogic** or **Stop WebLogic** .

3. Select the managed nodes on which you want to start or stop the WebLogic Server(s).

4. Select **Launch** .

   A "Console Status" window and then the "Server Selection" window open.

5. From the "Server Selection" window, select one application server or all application servers to start or stop.

6. Click **OK** .

7. From the "Console Status" window in the Launched Tool field, check the Status of the tool for each node:

   ○ Started/Starting - The tool is running.

    o Finished - The tool has completed. Scroll through the Tool Output field for more information.

8. Click **Close** to close the "Console Status" window.

View Deployed Apps

View Deployed Apps tool allows you to view the applications deployed and running on a WebLogic Server instance without logging in to the system on which the WebLogic Server is running.

Function

You can use the View Deployed Apps tool to get the following information for each WebLogic Server instance on the selected managed node. The information displayed in the Description column is dependent on the WebLogic Server version.

Information	WLS Version	Description
Application	9.x, 10.0	The application instance
Name	9.x, 10.0	The name of the application
Version	9.x, 10.0	The application version (if the application is not versioned, the valu displayed in the Tool Status window is "null")
Module Type	9.x, 10.0	The J2EE module type such as CAR, EAR, EJB, RAR, or WAR

To launch View Deployed Apps tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **WebLogic Admin** .

2. Double-click **View Deployed Apps** . Select Where To Launch This Tool window opens.

3. Select the managed node on which you want to run the View Deployed Apps tool.

4. Click **Launch** . The Tool Status window opens. The output appears in the Tool Output frame.

5. Click **Close** to exit.

□

Start WLS Console

Start WLS Console tool allows you to start the WebLogic Administration Server console from the HPOM console. You can bring up the console for an application server or all application servers on the selected managed nodes.

Required Setup

You *must* configure the ADMIN_HOST and ADMIN_PORT properties for this tool to run successfully. See Configuration Properties and Configure WLSSPI for more information about configuring these properties.

Function

Start WLS Console tool opens the WebLogic Administration Server console, in a web browser, for an application server or all application servers on the selected managed nodes.

To launch Start WLS Console tool

After setting the required configuration properties, follow these steps:

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **WebLogic Admin** .

2. Double-click **Start WLS Console** .

3. Select the managed nodes on which you want to start the WebLogic Admin Server consoles.

4. Click **Launch** .

   The "Console Status" window and then the "Server Selection" window open.

5. From the "Server Selection" window, select one application server on which to start or stop the console. If you select an admin server, its console is started. If you select a managed server, the console of the WebLogic Admin Server for the managed server is started.

6. Click **OK** . The system's login window opens.

7. Type the user name and password required to access the system. The WebLogic Admin Server console opens.

View WebLogic Log

View WebLogic Log tool allows you to select a WebLogic Server log file to view without having to log in to the system on which the WebLogic Server is running.

Function

View WebLogic Log does the following:

- When you run View WebLogic Log without entering a parameter, a numbered list of available log files for a managed node is presented.

- When you run View WebLogic Log with a parameter entered, if the parameter is not valid (a non-numeric value is entered or the number entered does not correspond to the list of available log files), a numbered list of available log files for the managed node is presented.

- When you run View WebLogic Log with a valid parameter, the contents of the corresponding log file for the managed node is presented.

You may only enter one numeric value in the parameter field. This is the number used to designate the log file to view for all managed nodes selected. Select one log file per managed node to view each time you launch the tool.

If you keep the "Tool Status" window open and re-launch View WebLogic Log, the output in the "Tool Status" window accumulates.

To launch View WebLogic Log

1. From the HPOM console, select **Tools → SPI for WebLogic Server → WebLogic Admin** .

2. Double-click **View WebLogic Log** .

3. Select the managed nodes on which you want to view the WebLogic Server log file.

4. Click **Launch** . The "Edit Parameters" window appears. If you know the number of the log file you want to view, enter it into the Parameters field. Otherwise, leave this field blank to list available log files to view.

5. Select **Launch** . The "Tool Status" window opens.

6. In the Launched Tools field, check the Status of the tool for each node:

    ○ Started/Starting - The tool is running.

    ○ Succeeded - A list of available log files to view appears. Select the node in the Launched Tools field and scroll through the Tool Output field to view the list of available log files.

    ○ Failed - The tool did not succeed. Select the node in the Launched Tools field and scroll through the Tool Output field for more information about the problem.

    Leave the "Tool Status" window open.

7. Double-click **View WebLogic Log** . Select the managed nodes on which you want to view the WebLogic Server log file.

8. Click **Launch** . The "Edit Parameters" window opens.

9. In the Parameters text box, enter the number of the log file you want to view. Only one log file can be selected.

    If you do not remember the number of the log file, go to the "Tool Status" window, Select the node in the Launched Tools field, scroll through the Tool Output field to view the list of available log files, and enter the number of the log file you want to view in the "Edit Parameters" window.

10. Click **Launch** .

11. In the "Tool Status" window, Select the node on which to view the selected log file and scroll through the Tool Output field to view the log file.

12. Repeat steps 7 - 12 for each log file you want to view.

13. Click **Close** to close the "Tool Status" window.

View WebLogic Servers

View WebLogic Servers tool allows you to view the WebLogic domain configuration, cluster information, and physical machines without logging in to the system on which the WebLogic server is running.

Function

You can use the View WebLogic Servers tool to get the following information for each WebLogic Server instance on the selected managed node. The information displayed in the Description column is dependent on the WebLogic Server version.

Information	WLS Version	Description
Domain	9.x, 10.0	The WebLogic domain instance
Admin Server	9.x, 10.0	The name of the WebLogic Administration Server instance
Version	9.x, 10.0	The release identifier for the configuration
Server	9.x, 10.0	The WebLogic Server instance
Name	9.x, 10.0	The name of the server instance. This name is similar to the server name displayed in the Administration Console.
Listen Port	9.x, 10.0	The default TCP port that the WebLogic Server instance uses to listen to regular (non-SSL) incoming connections
Listen Address	9.x, 10.0	The IP Address or DNS name that the WebLogic Server instance uses to listen for incoming connections
Cluster	9.x, 10.0	The cluster instance
Name	9.x, 10.0	User-specified name of the cluster instance
Type	9.x, 10.0	The method by which clustered servers send data for optimization of cross-cluster replication such as MAN, WAN, or none
Address	9.x, 10.0	The address that the clients use to connect to the cluster and for generating EJB handles and entity EJB failover addresses
Multicast Address	9.x, 10.0	The address that the cluster members use to communicate with each other
Machine	9.x, 10.0	The machine instance
Name	9.x, 10.0	User-specified name of the machine instance

To launch View WebLogic servers

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **WebLogic Admin** .

2. Double-click **View WebLogic Servers** . Select Where To Launch This Tool window opens.

3. Select the managed node on which you want to run the View Deployed Apps tool.

4. Click **Launch** . The Tool Status window opens. The output appears in the Tool Output frame.

5. Click **Close** to exit.

View Application Activation Status

View Application Activation Status tool allows you to view the activation status of the applications deployed and running on a WebLogic Server instance without logging in to the system on which the WebLogic Server is running.

Function

You can use the View Application Activation Status tool to get the following information for each WebLogic Server instance on the selected managed node. The information given in the Description column is dependent on the WebLogic Server version.

Information	WLS Version	Descrip
AppRuntimeStateRuntime	9.x, 10.0	AppRuntimeStateRuntime MBean
Application ID	9.x, 10.0	Serial Number for the Application ID (generated
Application-ID	9.x, 10.0	The name of the application
Is Active?	9.x, 10.0	If "true" appears in this field, then the application application is inactive

> **NOTE:**
> Before you launch View Application Activation Status tool, you must set the following value for the configuration property URL_PATH :
> `/jndi/weblogic.management.mbeanservers.domainruntime` .

To launch View Application Activation Status tool

1. From the HPOM console, select **Tools → SPI for WebLogic Server → WebLogic Admin** .

2. Double-click **View Application Activation Status.**

3. Select the managed nodes on which you want to view the status of the applications.

4. Click **Launch** . The Tool Status window opens.

5. In the Launched Tool field you can see the status of the tool: Starting - The tool is running. Succeeded - The tool has completed.

6. Scroll through the Tool Output field for details about the applications running on the application servers.

View Application Timeout

View Application Timeout tool allows you to view the time left before retiring applications deployed and running on a WebLogic Server instance will timeout, without logging in to the system on which the WebLogic Server is running.

Function

You can use the View Application Timeout tool to get the following information for each WebLogic Server instance on the selected managed node. The information given in the Description column is dependent on the WebLogic Server version.

Information	WLS Version	Descrip
AppRuntimeStateRuntime	9.x, 10.0	AppRuntimeStateRuntime MBean
Application ID	9.x, 10.0	Serial Number for the Application ID (generated l
Application-ID	9.x, 10.0	The name of the application
Time Left to Retire	9.x, 10.0	The amount of time the application is given to ret version of the application exists on the server and

> **NOTE:**
> Before you launch the View Application Timeout tool, you must set the following value for the configuration property URL_PATH :
> `/jndi/weblogic.management.mbeanservers.domainruntime` .

To launch View Application Timeout tool

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **WebLogic Admin** .

2. Double-click **View Application Timeout** .

3. Select the managed nodes on which you want to view the time left for timeout.

4. Click **Launch** . The Tool Status window opens.

5. In the Launched Tool field you can see the status of the tool: Starting - The tool is running. Succeeded - The tool has completed.

6. Scroll through the Tool Output field for details about the applications running on the application servers.

Metric Reports tools group

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) reports show information on WebLogic conditions in the server. Each report displays the condition of all configured server instances on the managed node in relation to the metric.

To generate a report, do the following:

1. From the HPOM console, select **Tools** → **SPI for WebLogic Server** → **Metric Reports** .

2. Double-click a report.

3. Select the node(s) on which to run the report.

4. Select **Launch** .

WebLogic SPI reports generated from alarms

A WebLogic SPI Report can also be triggered by an alarm condition. When such a situation occurs, the report is generated *automatically* . This report is context sensitive, relating only to a single server on the managed node. The information in the report is generated at the time the report was run (when the alarm condition occurred). You can find the report by double-clicking on the message and selecting the Annotations tab.

If you configure your Message Browser to display the *A* column, an "S" under the *A* column (adjacent to the message) indicates that the report was *successfully* generated and is waiting in the *Annotations* of the message.

Metric reports description

Name/Associated Metric	Description
B001_ServerStatus	Status of a server
B005_JVMMemUtilPct	Percentage of heap space used in the JVM
B011_ExQThrdUtilPct	Percentage of threads in use for a server's execute queue
B012_ExQueWaitCnt	The number of client requests waiting to be serviced
B014_ActiveSocketCnt	Number of socket connections opened

B025_EJBPoolWtRtSum	Number of times per minute that no EJB beans were available from the free pool
B026_EJBTimeoutRtSum	The number of times per minute a client timed out waiting for an EJB bean
B061_JDBCConPlWtCnt	Status of a server, monitors whether running or not
B070_TranAveTime	Average commit time for transactions
B071_TransRollbackPct	Percentage of transactions rolled back, based on the total
B072_TranResErrRbPct	Percentage of the transactions rolled back due to resource error
B073_TranAppErrRbPct	Percentage of transactions rolled back due to application error
B074_TranTimErrRbPct	Percentage of transactions rolled back due to a timeout error
B075_TranSysErrRbPct	Percentage of the transactions rolled back due to system error
B077_TranHeurCnt	Percentage of transactions returning a heuristic decision
B080_ClsOutMesFailRt	Number of multicast messages per minute to cluster re-sent
B081_ClsInMesFailRt	Number of multicast messages per minute from cluster lost by server
B085_InvLoginAttCnt	Number of invalid login attempts
B090_TimeSerExcepCnt	Number of exceptions thrown for all triggers
B092_ExQueThroughput	Average number of requests completed by the Execute Queue per second
B225_EJBFreePoolWaitRate	Number of times per minute no EJB beans were available from the free pool
B226_EJBTimeoutRate	Number of times per minute a client timed out waiting for an EJB bean
B238_EJBCacheHitPct	Percentage of EJBs in the cache in use
B240_ServletAveExecTime	Average execution time for a servlet in milliseconds
B242_ServletReqRate	Number of requests for a servlet per second
B245_WebAppSessionCnt	Number of open sessions for a Web application
B251_JMSUtilByMessagePct	Percentage of the JMS server filled, based on the number of messages
B252_JMSUtilByBytePct	Percentage the JMS server filled, based on total bytes

B253_JMSThreshByMessagePct	Percentage of time the server threshold condition was satisfied, based on the number of messages
B254_JMSThreshByBytePct	Percentage of time server threshold condition was satisfied, based on total bytes
B260_JDBCConnectionPoolUtil	Percentage utilization of available JDBC connections in connection pool
B289_MDBProcMsgRate	Number of processed messages
B812_DomainInfo	WebLogic domain configuration, cluster information, and physical machines
B813_ApplicationInfo	Applications running on a WebLogic server
B815_TransactionInfo	Status for the WebLogic Servers

Related Topics:

- SPI Admin tools group

- WebLogic Admin tools group

Metric B001_ServerStatus

Policy Name	WLSSPI_0001
Metric Name	B001_ServerStatus
Metric Type	Alarming
Description	Status of a server, monitors whether running or not.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0001.1, threshold .5 Warning: WLSSPI-0001.2, threshold 1.5
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0001.1: Server status is unknown (down) [Policy: <$NAME>] WLSSPI-0001.2: Server status: Suspended [Policy: <$NAME>]
Instruction Text	**Probable cause** : For each server, this metric reports the status (running, shutdown in progress, shutdown pending, suspended, or unknown). If the server is not in a running state, the following events may have occurred: 1. The WebLogic Administrator has selected 'Shutdown this server' from the Administration console. 2. The WebLogic Administrator has selected 'Suspend this server' from the Administration console. 3. The server may have gone down for other reasons. **Potential Impact:** If the server is Shut Down or in the process of shutting down, the server will no longer be available. If the server is Suspended, it only accepts requests from the Administration Server. Note that suspending the WebLogic Server only suspends server responses to HTTP requests. Java applications and RMI invocations are not suspended.

		Suggested action : If the designated server is not running, the WebLogic Administrator must start the server using the appropriate script. It is important to note whether this is the Administration Server or a Managed Server, since the startup script will be different for each type. If the server has been suspended, it may have been placed in this state for a reason. A typical use of this feature would be in a situation where a WebLogic Server is running as a 'hot' backup for another server. When the reason for putting the server in the suspended mode is resolved, execute the 'Resume this server' command from the Administration console.
	Report Type	N/A
	Area	Availability

Metric B005_JVMMemUtilPct

Policy Name	WLSSPI_0005
Metric Name	B005_JVMMemUtilPct
Metric Type	Alarming
Description	Percentage of heap space used in the JVM
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0005.1, threshold 98 Major: WLSSPI-0005.2, threshold 95
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0005.1: % of heap space used (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>] WLSSPI-0005.2: % of heap space used (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** :The JVM is running out of available heap space. The JVM heap size may be set too low for the client load. **Potential impact** : The JVM heap size determines how often and how long the VM spends collecting garbage (de-allocating unused Java objects). The Java heap is where the objects of a Java program live. When an object can no longer be reached from any pointer in the running program, the object is garbage. Garbage collection affects performance because JVM work cannot proceed during full garbage collection. An acceptable rate for garbage collection is application specific and should be adjusted after analyzing the actual time and frequency of garbage collections.

The goal of tuning your heap size is to minimize the time that you spend doing garbage collection while maximizing the number of clients that you can handle at a given time.

If you set a large heap size, full garbage collection is slower, but it occurs less frequently. For a smaller heap size, full garbage collection is faster, but occurs more frequently.

Suggested action : For additional information on tuning your heap size, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ .

You can set the heap size using the options -Xms and -Xmx on the Java command line in the script used to start the server. Use the -Xms option to set the minimum size of the heap. Set this value to a multiple of 1024 that is greater than 1MB. Use the -Xmx option to set the maximum Java heap size. Set this value to a multiple of 1024 that is greater than 1MB. As a general rule, set minimum heap size equal to the maximum heap size. If you are using 1.3 Java HotSpot JVM, also set generation sizes. Make sure that the heap size is not larger than the available free RAM on your system. Use as large a heap size as possible without causing your system to swap pages to disk. The amount of free RAM on your system depends on your hardware configuration and the memory requirements of running processes on your machine. See your system administrator for help in determining the amount of free RAM on your system.

Typically, you should use 80% of the available RAM (not taken by the operating system or other processes) for your JVM. If you find that you have a large amount of RAM remaining, run more WebLogic Servers on your machine.

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| Report Type | Operator-initiated graph, Automatic action, Metrics tool |
| Area | JVM |

Metric B011_ExQThrdUtilPct

Policy Name	WLSSPI_0011
Metric Name	B011_ExQThrdUtilPct
Metric Type	Alarming, Reporting, Graphing
Description	Percentage of threads in use for a server's execute queue. For WebLogic Server version 9.x, there is only one execute queue.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0011.1, threshold 90 Major: WLSSPI-0011.2, threshold 85 Minor: WLSSPI-0011.3, threshold 80
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0011.1: % of execute queue threads used (<$VALUE>%) too high (>=<$THRESHOLD>%)[Policy: <$NAME>] WLSSPI-0011.2: % of execute queue threads used (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>] WLSSPI-0011.3: % of execute queue threads used (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** :The utilization of the WebLogic server execute threads has exceeded a threshold value. The number of incoming client requests has resulted in all the execute threads being allocated. **Potential impact** : At 100% utilization, the WebLogic Server will not have any threads available to service incoming requests.

Suggested action : For additional information on tuning the execute thread pool, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ . System administrators can increase the total number of execute threads through the administrator's console. However, it should be noted that adding more threads does not necessarily imply that you can process more work. Even if you add more threads, you are still limited by the power of your processor. You can degrade performance by increasing this value unnecessarily. Because threads are resources that consume memory, a very high execute thread count causes more memory to be used and increases context switching. This degrades your performance. The value of the Thread Count depends very much on the type of work the application does. For example, if your client application is thin and does a lot of its work through remote invocation, the time your client application spends connected will be greater than for a client application that does a lot of client-side processing. So, if you do not need to use the additional threads for your work then you should not change the value of this attribute. The thread will not be held for the client application.

If your application makes database calls that take a long time to return, you need more execute threads than an application that makes calls that are short and turn over very rapidly. For the latter, you can use a small number of execute threads and improve performance.

The following scenarios can be used as a guideline for setting the ThreadCount:

Thread Count < number of CPUs	Increase the thread count
Thread Count = number of CPUs	Increase the thread count
Thread Count > number of CPUs by a moderate number of threads	Practically ideal, although some tuning may be necessary
Thread Count > number of CPUs by a significant number	Reduce the number of threads

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Report Type	Application Bank
Area	Performance

Metric B012_ExQueWaitCnt

Policy Name	WLSSPI_0012
Metric Name	B012_ExQueWaitCnt
Metric Type	Alarming, Graphing
Description	The metric monitors an execute queue and its associated thread pool for each server. This metric particularly monitors the number of client requests waiting to be serviced.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0012.1, threshold 10
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0012.1: ># of requests waiting to be serviced (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of client requests waiting to be serviced has exceeded a threshold value. The rate of incoming requests has exceeded the number of threads available to perform the work. **Potential impact** : Degradation in performance from a client perspective. **Suggested action** : Although client requests are waiting for an execute thread to be allocated, it is important to note that adding more threads does not necessarily imply that you can process more work. Even if you add more threads, you are still limited by the power of your processor. You can degrade performance by increasing this value unnecessarily. Because threads are resources that consume

memory, a very high execute thread count causes more memory to be used and increases context switching. This degrades your performance.

If this condition persists, you may need to upgrade your processor power. Another solution is to simply add resources. If your WebLogic server is configured in a cluster, then to increase the load handling capabilities you can add another WebLogic server to the cluster. Given a well-designed application, adding additional servers should provide linear scalability.

For information about tuning the execute thread pool, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ .

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Report Type	Automatic action, Metrics tool
Area	Performance

Metric B014_ActiveSocketCnt

Policy Name	WLSSPI_0014
Metric Name	B014_ActiveSocketCnt
Metric Type	Alarming, Graphing
Description	Number of socket connections opened.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0014.1, threshold 5
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0014.1: # of socket connections currently open (<$VALUE>) too high (>=<$THRESHOLD>)
Instruction Text	**Probable cause** : The number of open sockets has exceeded a threshold value. The current number of open sockets is greater than the expected number of open sockets for this WebLogic Server. **Potential impact** : If the number of open sockets is greater than the number of socket reader threads allocated, incoming requests may be required to wait until a socket reader thread is free. **Suggested action** : Consider increasing the number of socket reader threads from the Administration Server console, preferably equal to the potential maximum number of opened sockets. Allocating execute threads to act as socket reader threads increases the speed and the ability of the server to accept client requests. However, it is essential to balance the number of execute threads that are devoted to reading messages from a socket and those threads that perform the actual

execution of tasks in the server.

For information about tuning the execute thread pool, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ .

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Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	Performance

Metric B025_EJBPoolWtRtSum

Policy Name	WLSSPI_0025
Metric Name	B025_EJBPoolWtRtSum
Metric Type	Alarming, Reporting, Graphing
Description	Number of times no EJB beans were available from the free pool per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0025.1, threshold 10
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0025.1: # of times per minute no EJBs were available from the free pool (<$VALUE>/min) too high (>=<$THRESHOLD>/min) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of times per minute no EJBs were available from the free pool has exceeded the threshold value.

The max-beans-in-free-pool element may have been set too low, or all instances of an EJB class may be active.

Potential impact : New clients requesting an EJB class will be blocked until an active EJB completes a method call.

Suggested action : When EJBs are created, the session bean instance is created and given an identity. When the client removes a bean, the bean instance is placed in the free pool. When you create a subsequent bean, you can avoid object allocation by reusing the previous instance that is in the free pool. The max-beans-in-free-pool element can improve performance if EJBs are frequently created and removed. The container creates new instances of message beans as needed for |

concurrent message processing. The max-beans-in-pool element puts an absolute limit on how many of these instances will be created. The container may override this setting according to the runtime resources that are available.

For the best performance for stateless session and message beans, use the default setting max-beans-in-free-pool element. (The default is no limit.) This way, you can run as many beans in parallel, using as many threads as possible.

The only reason to change the setting would be to limit the number of beans running in parallel or to limit access to an underlying resource. For example, if you use stateless session EJBs to implement a legacy connection pool, you do not want to allocate more bean instance than the number of connections that can be supported by your legacy system.

For information about tuning EJB parameters, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ .

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Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	EJB

Metric B026_EJBTimeoutRtSum

Policy Name	WLSSPI_0026
Metric Name	B026_EJBTimeoutRtSum
Metric Type	Alarming, Reporting, Graphing
Description	Number of times a client timed out waiting for an EJB bean per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0026.1: Threshold 10
Collection Interval	15m
Default Threshold	10
Message Group	WebLogic
Message Text	WLSSPI-0026.1: # of times per minute a client timed out waiting for an EJB (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of times per minute a client timed out waiting for an EJB has exceeded the threshold value. If all instances of an EJB class are active and max-beans-in-free-pool has been reached, new clients requesting the EJB class will be blocked until an active EJB completes a method call. **Potential impact** : If the transaction times out (or, for non-transactional calls, if five minutes elapse), WebLogic Server throws a RemoteException. **Suggested action** : Verify that the max-beans-in-free-pool element has not been set too low. Also, while WebLogic Server will always try to allocate a new bean instance if one is not available, in reality you are limited by the number of executable threads. In most cases, each thread will need, at most, a single bean instance.

	For information about tuning EJB parameters, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	EJB

Metric B061_JDBCConPlWtCnt

Policy Name	WLSSPI_0061
Metric Name	B061_JDBCConPlWtCnt
Metric Type	Alarming, Graphing
Description	Aggregate JDBC Connection Pool Wait Count
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0061.1, threshold 10
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0061.1: # of clients waiting for a connection from connection pools (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of clients waiting for a connection has exceeded the threshold value. The size of the connection pool is too small relative to the number of current client sessions that require JDBC Connections. **Potential impact** : Client connection requests will be forced to wait for an available connection from the connection pool. **Suggested action** : Increase the maximum size of the connection pool. A good rule of thumb is that the maximum size of the connection pool should be equal to the number of Execute Threads configured in the WebLogic Server. This assumes that each thread uses one transaction to service a request and therefore needs just one connection. If this is not the case, then a slightly larger connection pool may be more efficient.

	The connection pool minimum size should be equal to the maximum size. This ensures that all database connections are acquired during server start-up and not when the server is under load.
Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	JDBC

Metric B070_TranAveTime

Policy Name	WLSSPI_0070
Metric Name	B070_TranAveTime
Metric Type	Alarming, Reporting, Graphing
Description	Average Commit time for transactions.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0070.1, threshold 100 msec
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0070.1: Ave. commit time for transactions (<$VALUE>ms) too high (>=<$THRESHOLD>ms) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The average commit time for a transaction has exceeded the threshold value. This may be an indication of system load. **Potential impact** : Degradation in the transaction throughput rate for the WebLogic Server. **Suggested action** : The administrator can monitor individual transactions from the Administration Console. In addition to displaying statistics, the following information can also be displayed: 1. Transactions by name, including rollback and time active information. 2. Transactions by resource, including statistics on total, committed, and rolled back transactions. 3. All active transactions, including information on status, servers, resources, properties, and the transaction identifier.
Report Type	Operator-initiated graph, Automatic action, Metrics tool

Area	Transactions

Metric B071_TransRollbackPct

Policy Name	WLSSPI_0071
Metric Name	B071_TransRollbackPct
Metric Type	Alarming, Reporting, Graphing
Description	Percentage of transactions rolled back, based on the total.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0071.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0071.1: % of transactions rolled back (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The percentage of transactions rolled back has exceeded the threshold value. Application design issues or resource issues. **Potential impact** : User requests are not being successfully completed. **Suggested action** : The WebLogic administrator should check the necessary database systems and ensure they are functioning correctly. In addition, the administrator should check the following configurable transaction attributes: • Timeout Seconds - the time a transaction may be active before the system forces a rollback. • Abandon Timeout Seconds - the maximum time that a transaction coordinator persists in attempting to complete a transaction. • Before Completion Iteration Limit - The number of beforeCompletion callbacks that are processed before a system forces a rollback. The administrator can monitor individual transactions from the Administration

Console. In addition to displaying statistics, the following information can also be displayed:

1. Transactions by name, including rollback and time active information.

2. Transactions by resource, including statistics on total, committed, and rolled back transactions.

3. All active transactions, including information on status, servers, resources, properties, and the transaction identifier.

Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	Transactions

Metric B072_TranResErrRbPct

Policy Name	WLSSPI_0072
Metric Name	B072_TranResErrRbPct
Metric Type	Alarming, Reporting, Graphing
Description	Percentage of transactions rolled back due to resource error.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0072.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0072.1: % of transactions rolled back due to resource error (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>])
Instruction Text	**Probable cause** : The percent of transactions rolled back due to resource errors has exceeded the threshold value. Transactions are not successfully completing due to resource errors. **Potential impact** : Fewer user requests are being successfully completed. **Suggested action** : The administrator can monitor individual transactions from the Administration Console. In addition to displaying statistics, the following information can also be displayed: 1. Transactions by name, including rollback and time active information. 2. Transactions by resource, including statistics on total, committed, and rolled back transactions. 3. All active transactions, including information on status, servers, resources, properties, and the transaction identifier.
Report Type	Operator-initiated graph, Automatic action, Metrics tool

Area	Transactions

Metric B073_TranAppErrRbPct

Policy Name	WLSSPI_0073
Metric Name	B073_TranAppErrRbPct
Metric Type	Alarming, Reporting, Graphing
Description	Percentage of transactions rolled back due to an application error.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0073.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0073.1: % of transactions rolled back due to application error (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The percent of transactions rolled back due to application errors has exceeded the threshold value. Transactions are not successfully completing due to application errors. **Potential impact** : Fewer user requests are being successfully completed. **Suggested action** : The administrator can monitor individual transactions from the Administration Console. In addition to displaying statistics, the following information can also be displayed: 1. Transactions by name, including rollback and time active information. 2. Transactions by resource, including statistics on total, committed, and rolled back transactions. 3. All active transactions, including information on status, servers, resources, properties, and the transaction identifier.
Report Type	Operator-initiated graph, Automatic action, Metrics tool

Area	Transactions

Metric B074_TranTimErrRbPct

Policy Name	WLSSPI_0074
Metric Name	B074_TranTimErrRbPct
Metric Type	Alarming, Reporting, Graphing
Description	Percentage of transactions rolled back due to a timeout error.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0074.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0074.1: % of transactions rolled back due to timeout error (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The percent of transactions rolled back due to timeout errors has exceeded the threshold value. Transactions are not successfully completing due to timeout errors. **Potential impact** : Fewer user requests are being successfully completed. **Suggested action** : The administrator can monitor individual transactions from the Administration Console. In addition to displaying statistics, the following information can also be displayed: 1. Transactions by name, including rollback and time active information. 2. Transactions by resource, including statistics on total, committed, and rolled back transactions. 3. All active transactions, including information on status, servers, resources, properties, and the transaction identifier.
Report Type	Operator-initiated graph, Automatic action, Metrics tool

Area	Transactions

Metric B075_TranSysErrRbPct

Policy Name	WLSSPI_0075
Metric Name	B075_TranSysErrRbPct
Metric Type	Alarming, Reporting, Graphing
Description	Percentage of transactions rolled back due to system error.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0075.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0075.1: % of transactions rolled back due to system error (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The percent of transactions rolled back due to system errors has exceeded the threshold value. Transactions are not successfully completing due to system errors. **Potential impact** : Fewer user requests are being successfully completed. **Suggested action** : The administrator can monitor individual transactions from the Administration Console. In addition to displaying statistics, the following information can also be displayed: 1. Transactions by name, including rollback and time active information. 2. Transactions by resource, including statistics on total, committed, and rolled back transactions. 3. All active transactions, including information on status, servers, resources, properties, and the transaction identifier.
Report Type	Operator-initiated graph, Automatic action, Metrics tool

Area	Transactions

Metric B077_TranHeurCnt

Policy Name	WLSSPI_0077
Metric Name	B077_TranHeurCnt
Metric Type	Alarming, Reporting, Graphing
Description	Percentage of transactions returning a heuristic decision.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0077.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0077.1: % of transactions returning a heuristic decision (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The percentage of transactions returning a heuristic decision has exceeded the threshold value. A heuristic completion (or heuristic decision) occurs when a resource makes a unilateral decision during the completion stage of a distributed transaction to commit or rollback updates. Network failures or transaction timeouts are possible causes for heuristic completion. **Potential impact** : A heuristic decision can leave distributed data in an indeterminate state. **Suggested action** : In the event of a heuristic decision, one of the following heuristic outcome exceptions may be thrown: • HeuristicRollback - one resource participating in a transaction decided to

autonomously rollback its work, even though it agreed to prepare itself and wait for a commit decision. If the Transaction Manager decided to commit the transaction, the resource's heuristic rollback decision was incorrect, and might lead to an inconsistent outcome since other branches of the transaction were committed.

- HeuristicCommit - one resource participating in a transaction decided to autonomously commit its work, even though it agreed to prepare itself and wait for a commit decision. If the Transaction Manager decided to rollback the transaction, the resource's heuristic commit decision was incorrect, and might lead to an inconsistent outcome since other branches of the transaction were rolled back.

- HeuristicMixed - the Transaction Manager is aware that a transaction resulted in a mixed outcome, where some participating resources committed and some rolled back. The underlying cause was most likely heuristic rollback or heuristic commit decisions made by one or more of the participating resources.

- HeuristicHazard - the Transaction Manager is aware that a transaction might have resulted in a mixed outcome, where some participating resources committed and some rolled back. But system or resource failures make it impossible to know for sure whether a Heuristic Mixed outcome definitely occurred. The underlying cause was most likely heuristic rollback or heuristic commit decisions made by one or more of the participating resources.

When a heuristic completion occurs, a message is written to the server log. Refer to your database vendor documentation for instructions on resolving heuristic completions.

Some resource managers save context information for heuristic completions. This information can be helpful in resolving resource manager data inconsistencies. If the ForgetHeuristics attribute is selected (set to true) on the JTA panel of the WebLogic Console, this information is removed after an heuristic completion. When using a resource manager that saves context information, you may want to set the ForgetHeuristics attribute to false.

Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	Transactions

Metric B080_ClsOutMesFailRt

Policy Name	WLSSPI_0080
Metric Name	B080_ClsOutMesFailRt
Metric Type	Alarming, Graphing
Description	Number of multicast messages to cluster that were re-sent per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0080.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0080.1: # of multicast messages to cluster that were resent (<$VALUE>/min) too high (>=<$THRESHOLD>/min) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of multicast messages to the cluster that were resent has exceeded the threshold value. This could be caused by the cluster configuration or the network topology. **Potential impact** : Potential loss of multicast packets. **Suggested action** : Because multicast controls critical functions related to detecting failures and maintaining the cluster-wide JNDI tree, it is important that neither the cluster configuration nor the basic network topology interfere with multicast communication. Always consider the following rules when configuring or planning a WebLogic Server cluster. For most deployments, limiting clustered servers to a single subnet ensures that multicast messages are reliably transmitted. In special cases, however, you may want to distribute a WebLogic Server cluster across subnets in a Wide Area Network (WAN). This may be desirable to increase redundancy in a clustered deployment, or to distribute clustered instances over a larger geographical area.

If you choose to distribute a cluster over a WAN (or across multiple subnets), you must plan and configure your network topology to ensure that multicast messages are reliably transmitted to all servers in the cluster. Specifically, your network must meet the following requirements:

1. The network must fully support IP multicast packet propagation. In other words, all routers and other tunneling technologies must be configured to propagate multicast messages to clustered instances.

2. The network latency must be sufficiently small as to ensure that most multicast messages reach their final destination in 200 to 300 milliseconds.

3. The multicast Time-To-Live (TTL) value must be high enough to ensure that routers do not discard multicast packets before they reach their final destination.

> **NOTE:**
> Distributing a WebLogic Server cluster over a WAN may require network facilities in addition to the multicast requirements described above. For example, you may want to configure load balancing hardware to ensure that client requests are directed to servers in the most efficient manner (to avoid unnecessary network hops).

Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	Cluster

Metric B081_ClsInMesFailRt

Policy Name	WLSSPI_0081
Metric Name	B081_ClsInMesFailRt
Metric Type	Alarming, Graphing
Description	Number of multicast messages from cluster lost by server per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0081.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0081.1: # of multicast messages from cluster lost by server (<$VALUE>/min) too high (>=<$THRESHOLD>/min)
Instruction Text	The number of multicast messages from the cluster that were lost by the server has exceeded the threshold value. **Probable cause** : This could be caused by the cluster configuration or the network topology. **Potential impact** : Potential loss of critical data. **Suggested action** : Because multicast controls critical functions related to detecting failures and maintaining the cluster-wide JNDI tree, it is important that neither the cluster configuration nor the basic network topology interfere with multicast communication. Always consider the following rules when configuring or planning a WebLogic Server cluster. For most deployments, limiting clustered servers to a single subnet ensures that multicast messages are reliably transmitted. In special cases, however, you may want to distribute a WebLogic Server cluster across subnets in a Wide Area

Network (WAN). This may be desirable to increase redundancy in a clustered deployment, or to distribute clustered instances over a larger geographical area.

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> **NOTE:**
> Distributing a WebLogic Server cluster over a WAN may require network facilities in addition to the multicast requirements described above. For example, you may want to configure load balancing hardware to ensure that client requests are directed to servers in the most efficient manner (to avoid unnecessary network hops).

Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	Cluster

Metric B085_InvLoginAttCnt

Policy Name	WLSSPI_0085
Metric Name	B085_InvLoginAttCnt
Metric Type	Alarming, Graphing
Description	Number of invalid login attempts.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Minor: WLSSPI-0085.1, threshold 2
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0085.1: # of invalid login attempts (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of invalid login attempts has exceeded the threshold value. This could be an attempted security breach. **Potential impact** : If the security breach is successful, the security of the WebLogic Server environment could be compromised. **Suggested action** : If the invalid login attempts is repeated frequently, you may want to implement the weblogic.security.audit package. This will allow you to review the audit records to determine if there has been a security breach or an attempted security breach.
Report Type	Operator-initiated graph, Automatic action, Metrics tool
Area	Security

Metric B090_TimeSerExcepCnt

Policy Name	WLSSPI_0090
Metric Name	B090_TimeSerExcepCnt
Metric Type	Alarming
Description	Number of exceptions thrown for all triggers.
WebLogic Server Version	7.0
Severity: Condition with Threshold	Minor: WLSSPI-0090.1, threshold 1
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0090.1: # of exceptions thrown for all triggers (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of exceptions thrown for all triggers has exceeded the threshold value. Exceptions were thrown during a scheduled action. **Potential impact** : The trigger throwing the exception will not be rescheduled. **Suggested action** : If you want to reschedule a trigger after an exception, the application must catch the exception and schedule the trigger again.
Report Type	Automatic action, Metrics tool
Area	Time Service

Metric B092_ExQueThroughput

Policy Name	WLSSPI_0092
Metric Name	B092_ExQueThroughput
Metric Type	Graphing and Reporting
Description	Average number of requests completed by the Execute Queue per second
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	N/A
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Time Service

Metric B225_EJBFreePoolWaitRate

Policy Name	WLSSPI_0225
Metric Name	B225_EJBFreePoolWaitRate
Metric Type	Alarming
Description	Number of times no EJB beans were available from the free pool (drill down) per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0225.1, threshold 10
Collection Interval	15m
Default Threshold	10
Message Group	WebLogic
Message Text	WLSSPI-0225.1: # of times per minute no EJBs were avavailable from the free pool (<$VALUE>/min) for application (<$OPTION(applicationname)>) too high (>=<$THRESHOLD>/min) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of times per minute no EJBs were available from the free pool has exceeded the threshold value. The max-beans-in-free-pool element may have been set too low, or all instances of an EJB class may be active.
	Potential impact : New clients requesting an EJB class will be blocked until an active EJB completes a method call.
	Suggested action : When EJBs are created, the session bean instance is created and given an identity. When the client removes a bean, the bean instance is placed in the free pool. When you create a subsequent bean, you can avoid object

allocation by reusing the previous instance that is in the free pool. The max-beans-in-free-pool element can improve performance if EJBs are frequently created and removed.

The container creates new instances of message beans as needed for concurrent message processing. The max-beans-in-pool element puts an absolute limit on how many of these instances will be created. The container may override this setting according to the runtime resources that are available.

For the best performance for stateless session and message beans, use the default setting max-beans-in-free-pool element. (The default is no limit.) This way, you can run as many beans in parallel, using as many threads as possible. The only reason to change the setting would be to limit the number of beans running in parallel or to limit access to an underlying resource. For example, if you use stateless session EJBs to implement a legacy connection pool, you do not want to allocate more bean instance than the number of connections that can be supported by your legacy system.

For information about tuning EJB parameters, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ .

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Report Type	Automatic action, Metrics tool
Area	EJB

Metric B226_EJBTimeoutRate

Policy Name	WLSSPI_0226
Metric Name	B226_EJBTimeoutRate
Metric Type	Alarming
Description	Number of times a client timed out waiting for an EJB bean (drill down) per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	WLSSPI-0226.1: Warning, threshold 10
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0226.1: # of times per minute a client timed out for application (<$OPTION(applicationname)>) waiting for an EJB (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of times per minute a client timed out waiting for an EJB has exceeded the threshold value. If all instances of an EJB class are active and max-beans-in-free-pool has been reached, new clients requesting the EJB class will be blocked until an active EJB completes a method call. **Potential impact** : If the transaction times out (or, for non-transactional calls, if five minutes elapse), WebLogic Server throws a RemoteException. **Suggested action** : Verify that the max-beans-in-free-pool element has not been set too low. Also, while WebLogic Server will always try to allocate a new bean instance if one is not available, in reality you are limited by the number of executable threads. In most cases, each thread will need, at most, a single bean instance. For information about tuning EJB parameters, see the 'Performance and Tuning'

	documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	Automatic action, Metrics tool
Area	EJB

Metric B238_EJBCacheHitPct

Policy Name	WLSSPI_0238
Metric Name	B238_EJBCacheHitPct
Metric Type	Alarming, Reporting
Description	Percentage of EJBs in the cache in use.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0238.1, threshold 90
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0238.1: % of EJBs in the cache in use (<$VALUE>%) for application (<$OPTION(applicationname)>) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The utilization of the EJB cache has exceeded a threshold value. The cache size may be set too low.
	Potential impact : When the maximum cache size is reached, WebLogic Server passivates (transfer from memory to secondary storage) some EJBs that have not been recently used by a client. This could result in performance degradation.
	Suggested action : Set the max-beans-in-cache attribute in the weblogic-ejb-jar.xml file to a higher value. Tuning this value too high could consume memory unnecessarily. For information on tuning EJB parameters, see the *Performance and Tuning* documentation for your WebLogic Server version available through http://e-docs.bea.com/ .
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Report Type	Automatic action
Area	EJB

Metric B240_ServletAveExecTime

Policy Name	WLSSPI_0240
Metric Name	B240_ServletAveExecTime
Metric Type	Alarming, Reporting
Description	Average execution time for a servlet in milliseconds.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0240.1, threshold 1000
Collection Interval	1h
Message Group	WebLogic
Message Text	WLSSPI-0240.1: Ave. execution time for a servlet (<$VALUE>ms) belongs to application <$OPTION(applicationname)> too high (>=<$THRESHOLD>ms) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The average execution time for a servlet has exceeded the threshold value. Application design issues. **Potential impact** : Slow response time in returning an HTML or XML response to the HTTP request from a client application. **Suggested action** : The cause of high execution time for the servlet could be a resource contention problem, or it could be due to the design of the servlet. You may also choose to re-evaluate the threshold setting for this metric if values consistently exceed the threshold value. If JSPs are used extensively in the Web-based application, there could be a performance impact due to having to compile the corresponding .jsp files into Java servlet code, and then compiling the Java code to a Java class file. In this situation, performance can be significantly improved by setting the server's java compiler to sj or jikes instead of javac.

Report Type	Automatic action
Area	Servlets

Metric B242_ServletReqRate

Policy Name	WLSSPI_0242
Metric Name	B242_ServletReqRate
Metric Type	Alarming, Reporting
Description	Number of requests for a servlet per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0242.1, threshold 10000
Collection Interval	1h
Message Group	WebLogic
Message Text	WLSSPI-0242.1: # of requests for application (<$OPTION(applicationname)>) for a servlet (<$VALUE>/sec) too high (>=<$THRESHOLD>/sec) [Policy: <$NAME>]
Instruction Text	**Probable cause** : Sudden increase in client transactions. **Potential impact** : Average response time of servlet might increase. **Suggested action** : In a clustered environment, keep checking the performance of load balancer.
Report Type	Automatic action, Metrics tool
Area	Servlets

Metric B245_WebAppSessionCnt

Policy Name	WLSSPI_0245
Metric Name	B245_WebAppSessionCnt
Metric Type	Alarming, Reporting
Description	Number of open sessions for a Web application.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0245.1, threshold 100
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0245.1: # of open sessions for web application <$OPTION(applicationname)> (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : Sudden increase in client transactions. **Potential impact** : • JVM Heap space might reduce rapidly. • Frequent JVM garbage collection calls. **Suggested action** : Verify the number of client connections created.
Report Type	Automatic action, Metrics tool
Area	Web Applications

Metric B251_JMSUtilByMessagePct

Policy Name	WLSSPI_0251
Metric Name	B251_JMSUtilByMessagePct
Metric Type	Alarming, Reporting
Description	Percentage of the JMS server filled, based on the number of messages. ⓘ **NOTE:** Messages Maximum (the maximum message quota that can be stored in a JMS server) must be set to a number greater than zero in order for this metric to log reporter data and monitor thresholds. You can configure this value from the WebLogic console. If the Messages Maximum value is set to the default value (-1), data is not logged and thresholds are not monitored.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0251.1, threshold 98 Major: WLSSPI-0251.2, threshold 95%
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0251.1: % of JMS queue filled by message count (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>] WLSSPI-0251.2: % of JMS queue filled by message count (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The JMS Server queue utilization is greater than the threshold value. The size of the queue may be set too low. **Potential impact** : If the queue reaches one hundred percent capacity, users will not be able to deliver messages to this queue. **Suggested action** : If possible, the administrator may want to increase the size

	of the queue using the Administration Server console. The administrator can also inspect the individual destinations within this JMS Server using the console to determine which destination queues are having problems.
Report Type	Automatic action, Metrics tool
Area	Java Message Service (JMS)

Metric B252_JMSUtilByBytePct

Policy Name	WLSSPI_0252
Metric Name	B252_JMSUtilByBytePct
Metric Type	Alarming, Reporting
Description	Percentage of the JMS server filled, based on total bytes. **ⓘ NOTE:** Bytes Maximum (the maximum byte quota that can be stored in a JMS server) must be set to a number greater than zero in order for this metric to log reporter data and monitor thresholds. You can configure this value from the WebLogic console. If the Bytes Maximum value is set to the default value (-1), data is not logged and thresholds are not monitored.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0252.1, threshold 98 Major: WLSSPI-0252.2, threshold 95
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0252.1: % of JMS queue filled by byte count (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The JMS Server queue utilization is greater than the threshold value. The size of the queue may be set too low. **Potential impact** : If the queue reaches one hundred percent capacity, users will not be able to deliver messages to this queue. **Suggested action** : If possible, the administrator may want to increase the size of the queue using the Administration Server console. The administrator can

	also inspect the individual destinations within this JMS Server using the console to determine which destination queues are having problems.
Report Type	Automatic action, Metrics tool
Area	Java Message Service (JMS)

Metric B253_JMSThreshByMessagePct

Policy Name	WLSSPI_0253
Metric Name	B253_JMSThreshByMessagePct
Metric Type	Alarming, Reporting
Description	Percentage of time the server threshold condition was satisfied, based on the number of messages.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0253.1, threshold 10
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0253.1: # of time queue threshold condition was satisfied by message count (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The amount of time this JMS queue has spent in the threshold condition has exceeded the threshold value. The JMS Server message queue threshold condition for the number of messages stored, as configured in the administration console, has been satisfied for a significant amount of time. **Potential impact** : If the queue reaches one hundred percent capacity, users will not be able to deliver messages to this queue. **Suggested action** : If possible, the administrator may want to increase the size of the queue using the Administration Server console. The administrator can also inspect the individual destinations within this JMS Server using the console to determine which destination queues are having problems.
Report Type	Automatic action, Metrics tool
Area	Java Message Service (JMS)

Metric B254_JMSThreshByBytePct

Policy Name	WLSSPI_0254
Metric Name	B254_JMSThreshByBytePct
Metric Type	Alarming, Reporting
Description	Percentage of time server threshold condition was satisfied, based on total bytes.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0254.1, threshold 10
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0254.1: # of time queue threshold condition was satisfied by byte count (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The amount of time this JMS queue has spent in the threshold condition has exceeded the threshold value. The JMS Server message queue threshold condition for the number of bytes stored, as configured in the administration console, has been satisfied for a significant amount of time. **Potential impact** : If the queue reaches one hundred percent capacity, users will not be able to deliver messages to this queue. **Suggested action** : If possible, the administrator may want to increase the size of the queue using the Administration Server console. The administrator can also inspect the individual destinations within this JMS Server using the console to determine which destination queues are having problems.
Report Type	Automatic action, Metrics tool
Area	Java Message Service (JMS)

Metric B260_JDBCConnectionPoolUtil

Policy Name	WLSSPI_0260
Metric Name	B260_JDBCConnectionPoolUtil
Metric Type	Alarming, Reporting
Description	Percentage utilization of available JDBC connections in connection pool.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0260.1, threshold 98 Major: WLSSPI-0260.2, threshold 95
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0260.1: % utilization of available JDBC connections in connection pool (<$VALUE>%) for application (<$OPTION(applicationname)>) too high (>=<$THRESHOLD>%) [Policy: <$NAME>] WLSSPI-0260.2: % utilization of available JDBC connections in connection pool (<$VALUE>%) for application (<$OPTION(applicationname)>) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The JDBC connection pool utilization has exceeded the threshold value. The number of available JDBC connections is low. **Potential impact** : Performance degradation caused by having to wait for a JDBC connection to a DBMS. **Suggested action** : If the database system can support additional connections, the WebLogic administrator should increase the number of connections available for

	this connection pool. A good rule of thumb is that the maximum size of the connection pool should be equal to the number of Execute Threads configured in the WebLogic Server. This assumes that each thread uses one transaction to service a request and therefore needs just one connection. If this is not the case, then a slightly larger connection pool may be more efficient. The connection pool minimum size should be equal to the maximum size. This ensures that all database connections are acquired during server start-up and not when the server is under load.
Report Type	Automatic action, Metrics tool
Area	JDBC

Metric B289_MDBProcMsgRate

Policy Name	N/A
Metric Name	B289_MDBProcMsgRate
Metric Type	Reporting
Description	Number of processed messages
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	Application Bank Report (ASCII report)
Area	Special Reports

Metric B812_DomainInfo

Policy Name	N/A—Used to generate a report similar to the output displayed by the View WebLogic Servers tool
Metric Name	B812_DomainInfo
Metric Type	Reporting
Description	WebLogic domain configuration, cluster information, and physical machines
WebLogic Server Version	10.x
Severity: Condition with Threshold	N/A
Collection Interval	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	Application Bank Report (ASCII report)
Area	Special Reports

Metric B813_ApplicationInfo

Policy Name	N/A—Used to generate a report similar to the output displayed by the View Deployed Apps tool
Metric Name	B813_ApplicationInfo
Metric Type	Reporting
Description	Applications running on a WebLogic Server
WebLogic Server Version	10.x
Severity: Condition with Threshold	N/A
Collection Interval	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	Application Bank Report (ASCII report)
Area	Special Reports

Metric B815_TransactionInfo

Policy Name	N/A—Used to generate a report similar to the output displayed by the Check WebLogic tool
Metric Name	B815_TransactionInfo
Metric Type	Reporting
Description	Status for the WebLogic Servers
WebLogic Server Version	10.x
Severity: Condition with Threshold	N/A
Collection Interval	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	Application Bank Report (ASCII report)
Area	Special Reports

Policies

The SPI for WebLogic policy group contains the following subgroups:

- WLSSPI Discovery

- WLSSPI

WLSSPI Discovery

The WLSSPI Discovery policy group contains the following policies:

- **WLSSPI-Messages** – A single policy that intercepts messages related to the discovery process.

- **WLSSPI Service Discovery** – A single policy that does the following:

  ○ Checks for any version of the WebLogic Server installed on the HPOM managed node.

  ○ Updates the service map with WebLogic Admin servers and WebLogic managed servers running on the HPOM managed node.

  ○ Updates the WebLogic SPI configuration file with WebLogic Admin servers and WebLogic managed servers running in the WebLogic domain.

  ○ Deploys the appropriate version of the policy group to the HPOM managed node. If two versions of WebLogic Server are running on the HPOM managed node, both versions of the policy group are deployed.

  ○ Deploys the Discovery policies on a remote managed node if it discovers a WebLogic managed server on it.

WLSSPI

The WLSSPI policy group contains the following subgroups and policy:

- **Logfiles** – Monitors WebLogic Server-generated and WebLogic SPI-generated logfiles. The information captured from these logfiles includes changes to WebLogic Server configurations and errors that occur in the operation of the WebLogic Server or the WebLogic SPI.

- **Metrics** – Monitors incoming values that reflect WebLogic Server's performance levels and availability. Each measurement threshold policy determines the threshold conditions of a monitored metric, the message text sent to the HPOM Message browser when the threshold is exceeded, the actions to complete, and instructions to follow (if necessary).

- **Monitors** – Controls what metrics are collected by running the collector/analyzer at the specified polling interval and defining the metrics that are collected.

- **WLSSPI-Messages** – A single policy that intercepts WebLogic Server and internal WebLogic SPI messages.

Policy Variables

The following variables are used by the WebLogic SPI policies. If you are creating your own policies, you may use these variables.

Name	Description
instancename	The instance for which the metric is being reported for multi-instance metrics. Example: `medRecServer_MedRecServer_wl_management_internal2_com.bea.wli.bpm.runtim`
map_port	See port. This variable may be deprecated in future releases.
map_servername	The application server name with spaces replaced with underscores ("_"). Used for serv where spaces are prohibited. Example: `my_server`
node	The node on which the application server is running. Example: `moo1.hp.com`
port	The port on which the application server is listening. Corresponds to the PORT configu Example: `9001`
servername	The application server name. Corresponds to the NAME configuration property. Example: `my server`

Related Topics:

- Metrics

- Monitors

- Logfiles

- Components

- Tools

- Metrics by version

- Metric naming/numbering conventions

- Metrics by number

Metrics

WebLogic SPI metric policies have pre-defined settings that simplify setup tasks for the WebLogic Server SPI. Over time, however, you may want to customize some of those settings. Basic pieces of information you need for those customizations are provided.

For easy reference, the tables list all metrics by area. Click the Metric Name in the metric summary table to display individual metric details for every WebLogic Server metric and, when available, its policy settings. For metrics used for reporting or graphing only, no settings exist, hence the setting is labeled "N/A" (not applicable).

Availability Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
1	B001_ServerStatus	Status of a server.	9.x	A	Critical Minor	Availability
2	B002_ServerStatusRep	Status of a server - reporting.	9.x	R	 	Availability

JVM Metric

ID	Metric Name	Description	Version	Type	Severity	Area
5	B005_JVMMemUtilPct	Percentage of heap space used in the JVM.	9.x	AG	Critical Major	JVM
819	B819_JVMHeapFreeMem	JVM Heap Free Memory in kilobytes	10.x	G	N/A	JVM

Performance Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
10	B010_ExQueThruRate	Number of requests serviced by an execute queue per second.	9.x	RG	 	Performance
11	B011_ExQThrdUtilPct	Percentage of threads in use for a server's execute queue.	9.x	ARG	Critical Major Minor	Performance
12	B012_ExQueWaitCnt	The number of client requests waiting to be serviced.	9.x	AG	Minor	Performance
13	B013_SocketTrafficRt	Number of socket connections opened per second.	9.x	G	 	Performance
14	B014_ActiveSocketCnt	Number of socket connections opened.	9.x	AG	Minor	Performance
15	B015_ServerRestarts	Number of times the server restarts.	9.x	AG	 	Performance
16	B016_GloThrePoolOverload	Global Thread Pool Overload Condition.	9	A	Critical	Performance
17	B017_WorkloadMgrOverload	Workload Manager Overload Condition.	9	A	Critical	Performance

EJB Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
25	B025_EJBPoolWtRtSum	Number of times no EJB beans were available from the free pool per minute.	9.x	A	Warning	EJB
225	B225_EJBFreePoolWaitRate	Number of times no EJB beans were available from the free pool (drill down) per minute.	9.x	ARG	Warning	EJB
26	B026_EJBTimeoutRtSum	Number of times a client timed out waiting for an EJB bean per minute.	9.x	ARG	Warning	EJB
226	B226_EJBTimeoutRate	Number of times a client timed out waiting for an EJB bean (drill down) per minute.	9.x	A	Warning	EJB
35	B035_EJBTranThruRt	Number of EJB transactions per second.	9.x	ARG	Warning	EJB
36	B036_EJBTranRbRt	Number of EJB transactions rolled back per second.	9.x	ARG	Warning	EJB
238	B238_EJBCacheHitPct	Percentage of EJB beans in the cache available for use.	9.x	AR	 	EJB

Servlets Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
240	B240_ServletAveExecTime	Average execution time for a servlet in milliseconds.	9.x	AR	Warning	Servlets
241	B241_ServletTimeCnt	Time spent in a servlet.	9.x	R	 	Servlets
242	B242_ServletReqRate	Number of requests for a servlet per second.	9.x	AR	Warning	Servlets

Web Applications Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
245	B245_WebAppSessionCnt	Number of open sessions for a Web application.	9.x	AR	Warning	Web Applications
246	B246_WebAppHitRt	Number of open sessions for a Web application per second.	9.x	R		Web Applications

JMS Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
251	B251_JMSUtilByMessagePct	Percentage of the JMS server filled, based on the number of messages.	9.x	AR	Critical Major	JMS
252	B252_JMSUtilByBytePct	Percentage of the JMS server filled, based on total bytes.	9.x	AR	Critical Major	JMS
253	B253_JMSThreshByMessagePct	Percentage of time the server threshold condition was satisfied, based on the number of messages.	9.x	AR	Warning	JMS
254	B254_JMSThreshByBytePct	Percentage of time server threshold condition was satisfied, based on total bytes.	9.x	AR	Warning	JMS
255	B255_JMSServerThruMessageRt	Number of messages passed through the JMS server per second.	9.x	R		JMS
256	B256_JMSServerThruByteRt	Number of bytes passed through the JMS server per second.	9.x	R		JMS

JDBC Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
260	B260_JDBCConnectionPoolUtil	Percentage utilization of available JDBC connections in connection pool.	9.x	AR	Critical Major	JDBC
61	B061_JDBCConPlWtCnt	Number of clients waiting for a connection from connection pools.	9.x	AG	Warning	JDBC
262	B262_JDBCConnectionPoolThruRt	Number of clients serviced by connection pool per second.	9.x	R	 	JDBC
63	B063_JDBCConLkRtSum	Number of unclosed JDBC connections and JDBC connections that have exceeded their maximum idle times in the connection pool per minute.	9.x	G	 	JDBC
263	B263_JDBCConLkRt	Number of unclosed JDBC connections in the connection pool per minute.	9.x	AR	 	JDBC
264	B264_JDBCConFail	Number of JDBC connections lost by the server.	9.x	A	 	JDBC
265	B265_JDBCConTime	The average amount of time a client waits for a JDBC connection from the connection pool.	9.x	AR	 	JDBC

Transactions Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
70	B070_TranAveTime	Average Commit time for transactions.	9.x	ARG	Minor	Transactions
71	B071_TransRollbackPct	Percentage of transactions rolled back, based on the total.	9.x	ARG	Minor	Transactions
72	B072_TranResErrRbPct	Percentage of transactions rolled back due to resource error.	9.x	ARG	Minor	Transactions
73	B073_TranAppErrRbPct	Percentage of transactions rolled back due to an application error.	9.x	ARG	Minor	Transactions
74	B074_TranTimErrRbPct	Percentage of transactions rolled back due to a timeout error.	9.x	ARG	Minor	Transactions
75	B075_TranSysErrRbPct	Percentage of transactions rolled back due to system error.	9.x	ARG	Minor	Transactions
76	B076_TranThruRate	Number of transactions processed per second.	9.x	RG	 	Transactions
77	B077_TranHeurCnt	Percentage of transactions returning a heuristic decision.	9.x	ARG	Minor	Transactions
79	B079_TranCapUtil	Percentage of active transactions.	9.x	ARG	 	Transactions

Connector Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
270	B270_CnctrPoolUtil	Percentage utilization of available connector connections in the connection pool.	9.x	AR		Connecto
78	B078_CnctrLeakRt	Number of unclosed connector connections and connector connections that have exceeded their maximum idle times in the connection pool per minute.	9.x	G		Connecto
278	B278_ConnectorConnectionPoolLeakedConnRate	Number of unclosed connector connections in the connection pool per minute.	9.x	AR		Connecto

Cluster Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
80	B080_ClsOutMesFailRt	Number of multicast messages to cluster that were re-sent per minute.	9.x	AG	Minor	Cluster
81	B081_ClsInMesFailRt	Number of multicast messages from cluster lost by server per minute.	9.x	AG	Minor	Cluster

XML Cache Metrics

ID	Metric Name	Description	Version	Type	Severity	Area
281	B281_XMLCacheDiskSize	Size of the XML cache.	9.x	R	 	XML Cache
282	B282_XMLCacheMemSize	Size of the XML memory.	9.x	R	 	XML Cache
283	B283_DeferredRequestsCnt	Number of deferred requests.	9.x	AG	Warning	XML Cache
284	B284_ReqWaitTimeForThread	Thread request wait time.	9.x	AG	Warning	XML Cache
285	B285_PendingReqCount	Number of pending requests.	9.x	AG	Warning	XML Cache
286	B286_PendingReqPct	Percentage of requests pending.	9.x	AG	Major, Warning	XML Cache
287	B287_ReqMaxWaitTime	Maximum time a request waits for a thread.	9.x	AG	Warning	XML Cache
288	B288_StandbyThreadCount	Number of threads in the standby pool.	9.x	AG	Warning	XML Cache

Security Metric

ID	Metric Name	Description	Version	Type	Severity	Area
85	B085_InvLoginAttCnt	Number of invalid login attempts.	9.x	AG	Minor	Security

Related Topics:

- Golden Metrics

- Metric naming/numbering conventions

- Metrics by number

- Monitors

- Logfiles

Golden Metrics

Golden metrics are a set of metrics which monitor the basic functionality of your WebLogic Server. The golden metrics cover the critical areas (such as server status) for which you would like to receive messages as a critical or major event happens on the WebLogic Server. Implementing golden metrics and taking action against the events generated by these metrics ensure the smooth functioning of the WebLogic server

The WebLogic SPI contains the following golden metrics:

Metric Type	Metric Name
Availability	Metric B001_ServerStatus
JVM	Metric B005_JVMMemUtilPct
Performance	Metric B011_ExQThrdUtilPct
EJB	Metric B026_EJBTimeoutRt
	Metric B036_EJBTranRbRt
Transactions	Metric B071_TranRollbackPct
	Metric B072_TranResErrRbPct
	Metric B073_TranAppErrRbPct
	Metric B074_TranTimErrRbPct
	Metric B075_TranSysErrRbPct
Cluster	Metric B080_ClsOutMesFailRt
	Metric B081_ClsInMesFailRt
	Metric B082_ClusterHealth
Servlets	Metric B242_ServletReqRate
Web Applications	Metric B245_WebAppSessionCnt

Java Message Service (JMS)	Metric B251_JMSUtilByMessagePct
	Metric B252_JMSUtilByBytePct
JDBC	Metric B260_JDBCConnectionPoolUtil
	Metric B264_JDBCConnectionPoolFailures
Connector	Metric B270_ConnectorConnectionPoolUtil
XML cache	Metric B287_ReqMaxWaitTime8

- Metrics

- Metric naming/numbering conventions

- Monitors

- Logfiles

Metric B036_EJBTranRbRt

Policy Name	WLSSPI_0036
Metric Name	B036_EJBTranRbRt
Metric Type	Alarming, Reporting, Graphing
Description	Number of EJB transactions rolled back per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0036.1,threshold 1
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0036.1: # of EJB transactions rolled back per second (<$VALUE>/sec) too high (>=<$THRESHOLD>/sec) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of EJB transactions rolled back per second has exceeded the threshold value.
	Application design or resource issues. Refer to metrics 72 , 73 , 74 , or 75 for additional information for possible cause of the rollbacks.
	Potential impact : Fewer user requests are being successfully completed.
	Suggested action : The WebLogic administrator should check the necessary database systems and ensure they are functioning correctly. In addition, the administrator can monitor transactions from the Administration Console.
	This includes:
	1. Transactions by name, including rollback and time active information
	2. Transactions by resource, including statistics on total, committed, and rolled back transactions.

	3. All active transactions, including information on status, servers, resources, properties, and the transaction identifier.
Report Type	Operator-initiated graph
Area	EJB

Metric B082_ClusterHealth

Policy Name	WLSSPI_0082
Metric Name	B082_ClusterHealth
Metric Type	Alarming, Graphing
Description	Health of the cluster
WebLogic Server Version	9.x, 10.0
Severity: Condition with Threshold	Critical: WLSSPI-0082.1, threshold 4.5
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0082.1: Cluster Health is poor.
Instruction Text	**Probable cause** : • Load balancing is not proper. • Network latency is more. **Potential impact** : • If cluster fails, disaster recovery might be impacted. • Availability might come down. **Suggested action** : • Check load balancer's behaviour. • Choose sticky routing algorithm.
Report Type	Operator-initiated graph
Area	Cluster

Metric B264_JDBCConFail

Policy Name	WLSSPI_0264
Metric Name	B264_JDBCConFail
Metric Type	Alarming
Description	JDBC connection pool failures.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0264.1, threshold 10
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0264.1: JDBC conection pool failures (<$VALUE>) for application (<$OPTION(applicationname)>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of times a connection pool attempted to refresh a connection to a database and failed exceeds the threshold. This failure may happen because of database unavailability or broken connection to the database. **Potential impact** : Client connection requests to the database may fail. **Suggested action** : For information about managing JDBC connections, see the *Programming WebLogic JDBC* documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	Automatic action

Area	JDBC

Metric B270_CnctrPoolUtil

Policy Name	WLSSPI_0270
Metric Name	B270_CnctrPoolUtil
Metric Type	Alarming, Reporting
Description	Percentage utilization of available JCA connections in connection pool.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0270.1, threshold 98 Major: WLSSPI-0270.2, threshold 95
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0270.x: % utilization of available JCA connections in connection pool (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of connections being used in the J2EE Connector connection pool has exceeded a threshold value. The number of requested connections to a resource is approaching or has reached the maximum allowed. **Potential impact** : As ManagedConnections are created over time, the amount of system resources-such as memory and disk space-that each ManagedConnection consumes increases and may affect the performance of the overall system. If a new ManagedConnection needs to be created during a connection request, WebLogic Server ensures that no more than the maximum number of allowed ManagedConnections are created. If the maximum number is reached, WebLogic Server attempts to recycle a ManagedConnection from the connection pool. However, if there are no connections to recycle, a warning is logged indicating that the attempt to recycle failed and that the connection request can only be granted for the amount of connections up to the allowed maximum amount.

	Suggested action : WebLogic Server allows you to configure a setting for the allowed maximum number of allocated connections. For information about managing J2EE connections, see the *Connection Management* section of the *Programming WebLogic J2EE Connectors* documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	Automatic action
Area	Connector

Metric B287_ReqMaxWaitTime

Policy Name	WLSSPI_0287
Metric Name	B287_ReqMaxWaitTime
Metric Type	Alarming, Graphing
Description	Maximum time a request waits for a thread
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0287.1, threshold 1000
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0287.1: Maximum time a request had to wait for a thread (<$VALUE> ms) too high (>=<$THRESHOLD> ms) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : This metric is used to monitor the maximum time a request had to wait for a thread. **Potential Impact** : - Applications might respond slowly. - Applications might block the threads to be available. - Application deadlock situation might arise. **Suggested Action** : Increase the size of the thread pool or mark them growable.
Report Type	N/A
Area	XML Cache

Metric naming/numbering conventions

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) metrics are identified by a metric name/number. These numbers also appear in the policies and reports (if either exists for the parallel metric). The naming/numbering conventions are as follows:

- *metric names/numbers* : The "B" preceding each metric number designates the metric as a WebLogic SPI metric. WebLogic SPI metrics can then be identified as BXXX, where XXX represents the number assigned to the metric; for example, B005.

- *metric number ranges* : WebLogic SPI numbers range from 0000 to 0999.

  In addition, metrics defined by the user, or User Defined Metrics, range from 0700 to 0799 and are reserved.

- *report names* : If available for a specific WebLogic SPI metric, the report name is the metric number followed by an underscore and the abbreviated metric name; for example, B005_JVMMemUtilPct.

- *policy names* : If a policy is available for a metric, the policy name omits the "B" and begins with WLSSPI followed by an underscore and the metric number. Zeroes are used as necessary to total a four-digit number; for example, metric number B005 = policy WLSSPI_0005

Metric Specification Description

Policy Name	Always begins with "WLSSPI," followed by the metric number. Within the policy you can change settings as described in the definition. For example, you can change the setting of threshold value, severity, and so on
Metric Name	The name assigned to the metric.
Metric Type	Shows how the metric is used, such as: • *Alarming* (using policy settings) • *Reporting* (within a report of the separately purchased HP Reporter) • *Graphing* (within a graph of the separately purchased HP Performance Manager)
Description	What the metric represents.
WebLogic Server Version	The WebLogic Server version for which the metric is available.

Severity: Condition with Threshold	The severity of the exceeded threshold condition (Critical, Major, Minor, Warning, Normal). If multiple conditions--for example, graduated thresholds-- are defined within the metric, severity levels are identified according to the specific condition.
Collection Interval	How often the metric is collected and analyzed (for example, 5 min, 15 min, 1 hour, 1 time daily).
Min/Max Threshold	Because this setting is the same for all WebLogic Server metrics, which have maximum thresholds, it is omitted.
Default Threshold	Shows the default threshold for metrics with parallel policies. (Metrics that should have been assigned a threshold value of 0 are set at 0.5 because alarms must occur at <= or >= values. Since a 0 value would always trigger an alarm, the threshold is set to 0.5).
Threshold Type	Because this setting is the same for all WebLogic Server metrics, which are without reset, it is omitted.
Message Group	The message group to which the metric belongs: • *WLSSPI* : conditions occurring in the WebLogic SPI • *WebLogic* : conditions occurring in WebLogic Server.
Message Text	The message displayed for each condition.
Instruction Text	Problem-solving information (Probable causes, Potential impact, Suggested actions, and Reports).
Report Type	When a report is available, the method in which it is generated: Operator-initiated graph (available through message properties commands), Automatic action (available through message properties annotations), Metrics tool (available using a report metrics tool), N/A (no report is planned).
Area	The logical area to which the metric belongs (Availability, JVM, Performance, EJB, Servlets, Web Applications, JMS, JDBC, Transactions, Connector, Cluster, Security, Time Service).

Related Topics:

- Metrics

- Golden Metrics

- Metrics by number

- Monitors

- Logfiles

Metrics by number

Related Topics:

1 - 63	70 - 92	225 - 246	251 - 289	812 - 824
B001	B070	B225	B251	B812
B002	B071	B226	B252	B813
B005	B072	B238	B253	B815
B010	B073	B240	B254	B819
B011	B074	B241	B255	B820
B012	B075	B242	B256	B821
B013	B076	B245	B260	B822
B014	B077	B246	B262	B823
B015	B078		B263	B824
B016	B079		B264	
B017	B080		B265	
B025	B081		B270	
B026	B085		B278	
B035	B092		B281	
B036			B282	
B061			B283	
B063			B284	
			B285	
			B286	

			B287	
			B288	
			B289	

- Metrics

- Golden Metrics

- Metric naming/numbering conventions

- Monitors

- Logfiles

Metric B002_ServerStatusRep

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B002_ServerStatusRep
Metric Type	Reporting
Description	Status of server—reporting.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	ASCII report
Area	Availability

Metric B010_ExQueThruRate

Policy Name	N/A—Used for reporting (HP Reporter) and graphing (HP Performance Manager) only
Metric Name	B010_ExQueThruRate
Metric Type	Reporting, Graphing
Description	Number of requests serviced by an execute queue per second. For WebLogic Server version 9.x, there is only one execute queue.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	15m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Performance

Metric B013_SocketTrafficRt

Policy Name	N/A—Used for graphing only.
Metric Name	B013_SocketTrafficRt
Metric Type	Graphing
Description	Number of socket connections opened per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	15m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Performance

Metric B015_ServerRestarts

Policy Name	WLSSPI_0015
Metric Name	B015_ServerRestarts
Metric Type	Alarming, Reporting
Description	Number of times the server restarts.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0015.1, threshold 100 Major: WLSSPI-0015.2, threshold 80 Warning: WLSSPI-0015.3, threshold 50
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0015.1: % of permissible restarts (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]) WLSSPI-0015.2: % of permissible restarts (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>] WLSSPI-0015.3: % of permissible restarts (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : The server restart rate exceeded the a threshold value. The server restart rates is percentage of the maximum restarts permitted in the time interval. The maximum and the interval are both configured in WebLogic Server. Simply, this in an indication that the server has been restarted too many times. Check the underlying cause of the restarts, and (or) raise the configured maximum or interval in WebLogic Server. **Potential Impact** : If this is a clustered server, it might affect the health of the cluster.

	Suggested Action : Analyze the root cause of restarts.
Report Type	N/A
Area	Performance

Metric B016_GloThrePoolOverload

Policy Name	WLSSPI_0016
Metric Name	B016_GloThrePoolOverload
Metric Type	Alarming
Description	Global Thread Pool Overload Condition.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0016.1, threshold 1.0
Collection Interval	15m
Message Group	WebLogic
Message Text	Global thread pool overload condition has occurred. Further incoming requests will get rejected. See the annotated reports for details. [Policy: <$NAME>]
Instruction Text	**Probable cause** : Global thread pool overload condition has occurred. The total number of requests that can be present in the server (en queued and those under execution) is exceeded. **Potential impact** : Further incoming requests will get rejected. **Suggest action** : For information about tuning the execute thread pool, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	Automatic Action
Area	Performance

Metric B017_WorkloadMgrOverload

Policy Name	WLSSPI_0017
Metric Name	B017_WorkloadMgrOverload
Metric Type	Alarming
Description	Workload Manager Overload Condition.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0017.1, threshold 80
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0017.1: Workload manager <$OPTION(workManager)> overload condition has occurred for the application <$OPTION(appName)>. Further incoming requests will get rejected. See the annotated reports for details. [Policy: <$NAME>]
Instruction Text	**Probable cause** : Workload Manager overload condition has occurred. The number of requests that are currently executing for given work manager is very close to the configured value of maximum number of concurrent threads that can execute requests. **Potential impact** : Further incoming requests for the particular application will get rejected. **Suggested action** : For information about tuning the workload managers, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.

Report Type	Automatic Action
Area	Performance

Metric B035_EJBTranThruRt

Policy Name	WLSSPI_0035
Metric Name	B035_EJBTranThruRt
Metric Type	Alarming, Reporting, Graphing
Description	Number of EJB transactions per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0035.1, threshold, 10000
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0035.1: # of EJB transactions per second (<$VALUE>/sec) too high (>=<$THRESHOLD>/sec) [Policy: <$NAME>]
Instruction Text	**Probable cause** : • Sufficient Entity Beans are not present in pooled state. • Entity Bean pool size is set to small value. **Potential impact** : • JVM Heap space might reduce rapidly. • Frequent JVM garbage collection calls. **Suggested action** : Verify Entity Bean pool size set.
Report Type	Operator-initiated graph
Area	EJB

Metric B063_JDBCConLkRtSum

Policy Name	N/A—Used for graphing only
Metric Name	B063_JDBCConLkRtSum
Metric Type	Graphing
Description	Number of unclosed JDBC connections and JDBC connections that have exceeded their maximum idle times in the connection pool per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	JDBC

Metric B076_TranThruRate

Policy Name	N/A—Used for HP Reporter reports and Performance Manager graphs only
Metric Name	B076_TranThruRate
Metric Type	Graphing, Reporting
Description	Number of transactions processed per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Transactions

Metric B078_CnctrLeakRtSum

Policy Name	N/A—Used for graphing only
Metric Name	B078_CnctrLeakRtSum
Metric Type	Graphing
Description	Number of unclosed connector connections and connector connections that have exceeded their maximum idle times in the connection pool per minute.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Connector

Metric B079_TranCapUtil

Policy Name	WLSSPI_0079
Metric Name	B079_TranCapUtil
Metric Type	Alarming, Graphing, Reporting
Description	Percentage of active transactions.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Critical: WLSSPI-0079.1, threshold 98 Major: WLSSPI-0079.2, threshold 95
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0079.1: % utilization of transaction capacity (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>] WLSSPI-0079.2: % utilization of transaction capacity (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The number of simultaneous in-progress transactions (as a percent of the maximum number of transactions allowed in the server) has exceeded a threshold value. **Potential impact** : Sudden spike in transactions roll back rate might be observed. **Suggested action** : 1. Restrict simultaneous concurrent transactions. 2. Verify ACID properties of simultaneous transactions.
Report Type	Automatic action
Area	Transactions

Metric B091_TimeSerThruRt

Policy Name	N/A—Used for graphing (HP Performance Manager) only
Metric Name	B091_TimeSerThruRt
Metric Type	Graphing
Description	Number of triggers executed per second.
WebLogic Server Version	7.0
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Time Service

Metric B223_EJBStatelessCacheSize

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B223_EJBStatelessCacheSize
Metric Type	Reporting
Description	Size of the stateless EJB cache.
WebLogic Server Version	6.1
Severity: Condition with Threshold	N/A
Collection Interval	1h
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	EJB

Metric B224_EJBStatelessCacheUtilPct

Policy Name	WLSSPI_0224
Metric Name	B224_EJBStatelessCacheUtilPct
Metric Type	Alarming, Reporting
Description	Percentage of stateless EJB beans in the cache in use.
WebLogic Server Version	6.1
Severity: Condition with Threshold	Warning: WLSSPI-0224.1, threshold 90%
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0224.1: % of Stateless EJBs in the cache in use (<$VALUE>%) too high (>=<$THRESHOLD>%)
Instruction Text	**Probable cause** : The utilization of the EJB cache has exceeded a threshold value. The cache size may be set too low. **Potential impact** : When the maximum cache size is reached, WebLogic Server passivates (transfer from memory to secondary storage) some EJBs that have not been recently used by a client. This could result in performance degradation. **Suggested action** : Set the max-beans-in-cache attribute in the weblogic-ejb-jar.xml file to a higher value. Tuning this value too high could consume memory unnecessarily. For information about tuning EJB parameters, see the 'Performance and Tuning' documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	N/A

Area	EJB

Metric B241_ServletTimeCnt

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B241_ServletTimeCnt
Metric Type	Reporting
Description	Time spent in a servlet.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	1h
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Servlets

Metric B246_WebAppHitRt

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B246_WebAppHitRt
Metric Type	Reporting
Description	Number of open sessions for a Web application per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Web Applications

Metric B255_JMSServerThruMessageRt

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B255_JMSServerThruMessageRt
Metric Type	Reporting
Description	Number of messages passed through the JMS server per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	15m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Java Message Service (JMS)

Metric B256_JMSServerThruByteRt

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B256_JMSServerThruByteRt
Metric Type	Reporting
Description	Number of bytes passed through the JMS server per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	15m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	Java Message Service (JMS)

Metric B262_JDBCConnectionPoolThruRt

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B262_JDBCConnectionPoolThruRt
Metric Type	Reporting
Description	Number of clients serviced by connection pool per second.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	JDBC

Metric B263_JDBCConLkRt

Policy Name	WLSSPI_0263
Metric Name	B263_JDBCConLkRt
Metric Type	Alarming, Reporting
Description	Rate of leaked connections for the JDBC connection pool.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0263.1, threshold 100
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0263.1: Rate of leaked connections for the JDBC conection pool(<$VALUE>) belongs to application (<$OPTION(applicationname)>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The rate of new leaked JDBC connections has exceeded the threshold value. JDBC connection leaks represent connections that were checked out of the connection pool but never returned with a close() method. Leaked connections cannot be used to fulfill later connection requests. **Potential Impact** : When a connection is closed, the connection is then available for a future connection request. If the application fails to close the connection, the connection pool can be exhausted of its available connections, and future connection requests can therefore fail. **Suggested action** : Correct the faulty application component. Connection pools provide ready-to-use pools of connections to a database, therefore eliminating the overhead of creating each connection when as needed by the application.

		When finished with a connection, applications must return the connection to the connection pool. For information about managing JDBC connections, see the *Programming WebLogic JDBC* documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type		Automatic action
Area		JDBC

Metric B265_JDBCConTime

Policy Name	WLSSPI_0265
Metric Name	B265_JDBCConTime
Metric Type	Alarming, Reporting
Description	JDBC connection pool connection delay.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0265.1, threshold 10
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0265.1: JDBC conection pool connection delay (<$VALUE>) for application (<$OPTION(applicationname)>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : The average time it takes to get a physical connection from the database has exceeded the threshold. **Potential Impact** : Application response time might increase drastically. **Suggested action** : For information about managing JDBC connections, see the *Programming WebLogic JDBC* documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	Automatic action
Area	JDBC

Metric B278_CnctrLeakRt

Policy Name	WLSSPI_0278
Metric Name	B278_CnctrLeakRt
Metric Type	Alarming, Reporting
Description	Rate of leaked connections for the JCA connection pool.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0278.1, threshold 100
Collection Interval	5m
Message Group	WebLogic
Message Text	WLSSPI-0278.1: Rate of leaked connections for the JCA conection pool(<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable cause** : The rate of new leaked connections has exceeded the threshold value. Connection leaks result from application components not closing a connection after using it. **Potential Impact** : When a connection is closed, the connection is then available for a future connection request. If the application fails to close the connection, the connection pool can be exhausted of its available connections, and future connection requests can therefore fail. **Suggested action** : Correct the faulty application components. See the annotation report for information about current connections and indicates which have been idle for a period extending beyond the configured maximum. For information about connection leaks, see the *Programming WebLogic J2EE Connectors* documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer** : Clicking on a URL in the above text may take the user to a non-

	HP site. HP does not control the content of any non-HP site.
Report Type	Automatic action
Area	Connector

Metric B281_XMLCacheDiskSize

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B281_XMLCacheDiskSize
Metric Type	Reporting
Description	Total number of cached entries on disk which contain external references in an XML parser.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	XML Cache

Metric B282_XMLCacheMemSize

Policy Name	N/A—Used in a report generated by HP Reporter
Metric Name	B282_XMLCacheMemSize
Metric Type	Reporting
Description	Total number of cached entries in memory which contain external references in an XML parser.
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	N/A
Collection Interval	5m
Message Group	N/A
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	XML Cache

Metric B283_DeferredRequestsCnt

Policy Name	WLSSPI_0283
Metric Name	B283_DeferredRequestsCnt
Metric Type	Alarming, Graphing
Description	Number of deferred requests
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning:WLSSPI-0283.1, threshold 100
Collection Interval	15 m
Message Group	WebLogic
Message Text	WLSSPI-0283.1: Deferred requests count (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : This metric is used to monitor the number of requests that were denied a thread for execution because of the max-threads-constraint constraint. Max-threads-constraint is one of the work manager components that you can use to control the performance of your application by referencing the name of the component in the application's deployment descriptor. Max-threads-constraint limits the number of concurrent threads executing requests from the constrained work set. The default is unlimited. When the constraint is reached the server stops scheduling requests of this type until the number of concurrent executions falls below the limit. **Potential Impact** : • Application response time might increase with further deferrals.

	• Application might move into a suspended state. • Application deadlock situation might arise. **Suggested Action** : If possible, increase the max-threads-constraint for this application.
Report Type	N/A
Area	XML Cache

Metric B284_ReqWaitTimeForThread

Policy Name	WLSSPI_0284
Metric Name	B284_ReqWaitTimeForThread
Metric Type	Alarming, Graphing
Description	Thread request wait time
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning:WLSSPI-0284.1, threshold 1000
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0284.1: Request wait time for a thread (<$VALUE> ms) too high (>=<$THRESHOLD> ms) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : This metric is used to monitor the time (in milliseconds) a request had to wait for a thread. Only requests whose execution is needed to satisfy the min_threads_constraint are considered. The min-threads-constraint is one of the work manager components that you can use to control the performance of your application by referencing the name of the component in the application's deployment descriptor. This constraint guarantees a number of threads the server will allocate to affected requests to avoid deadlocks. The default is zero. This type of constraint has an effect primarily when the server instance is close to a deadlock condition. In that case, the constraint will cause WebLogic Server to schedule a request from a even if requests in the service class have gotten more than its fair share recently. **Potential Impact** :

	- Applications might respond slowly. - Applications might block the threads to be available. - Application deadlock situation might arise. **Suggested Action** : Increase the size of the thread pool or mark them growable.
Report Type	N/A
Area	XML Cache

Metric B285_PendingReqCount

Policy Name	WLSSPI_0285
Metric Name	B285_PendingReqCount
Metric Type	Alarming, Graphing
Description	Number of pending requests
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning:WLSSPI-0285.1, threshold 100
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0285.1: Number of pending requests (<$VALUE>) too high (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : Small thread pool size is chosen. **Potential Impact** : • Applications might respond slowly. • Applications might block the threads to be available. • Application deadlock situation might arise. **Suggested Action** : Increase the size of the thread pool or mark them growable.
Report Type	N/A
Area	XML Cache

Metric B286_PendingReqPct

Policy Name	WLSSPI_0286
Metric Name	B286_PendingReqPct
Metric Type	Alarming, Graphing
Description	Percentage of requests pending
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Major: WLSSPI-0286.1, threshold 98
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0286.1: Percentage of pending requests (<$VALUE>%) too high (>=<$THRESHOLD>%) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : This metric is used to monitor the percentage of the requests that are pending because they are waiting for an available thread. **Potential Impact** : • Applications might respond slowly. • Applications might block the threads to be available. • Application deadlock situation might arise. **Suggested Action** : Increase the size of the thread pool or mark them growable.
Report Type	N/A
Area	XML Cache

Metric B288_StandbyThreadCount

Policy Name	WLSSPI_0288
Metric Name	B288_StandbyThreadCount
Metric Type	Alarming, Graphing
Description	Number of threads in the standby pool
WebLogic Server Version	9.x, 10.x
Severity: Condition with Threshold	Warning: WLSSPI-0288.1, threshold 10
Collection Interval	15m
Message Group	WebLogic
Message Text	WLSSPI-0288.1: Number of threads in the standby pool (<$VALUE>) too low (>=<$THRESHOLD>) [Policy: <$NAME>]
Instruction Text	**Probable Cause** : This metric is used to monitor the number of threads in the standby pool. Surplus threads that are not needed to handle the present work load are designated as standby and added to the standby pool. These threads become active when more threads are needed. The value of this count must be in an acceptable range to meet performance criteria. **Potential Impact** : • Thread pool saturation condition might occur. • CPU utilization might keep shooting up consistently. **Suggested Action** : 1. To fix a saturated thread pool, keep changing the thread pool size in steps until the CPU utilization reaches between 75 to 85 percent.

	2. Tune the application using a code profiling tool.
Report Type	N/A
Area	XML Cache

Metric B819_JVMHeapFreeMem

Policy Name	WLSSPI_0819
Metric Name	B819_JVMHeapFreeMem
Metric Type	Graphing
Description	JVM Heap Free Memory in kilobytes
WebLogic Server Version	10.x
Severity: Condition with Threshold	N/A
Collection Interval	15m
Message Text	N/A
Instruction Text	N/A
Report Type	N/A
Area	JVM

Metric B820_SrvrRestReqrd

Policy Name	WLSSPI_0820
Metric Name	B820_SrvrRestReqrd
Metric Type	Alarming and Graphing
Description	Server Restart Required
WebLogic Server Version	10.x
Severity: Condition with Threshold	WLSSPI-0820.1: Warning, threshold 1
Collection Interval	15m
Message Text	WLSSPI 0820.10: The server must be restarted in order to activate configuration changes. WLSSPI 0820.11: No new configuration changes needing the server restart.
Instruction Text	**Probable cause** : Indicates whether the server must be restarted in order to activate configuration changes. **Potential Impact:** The configured changes does not occur until the server is restarted. **Suggested action** : Restart the server.
Report Type	N/A
Area	Server

Metric B821_Suspnded

Policy Name	WLSSPI_0821
Metric Name	B821_Suspnded
Metric Type	Alarming and Graphing
Description	RequestManager suspended
WebLogic Server Version	10.x
Severity: Condition with Threshold	WLSSPI-0821.1: Warning, threshold 1
Collection Interval	15m
Message Text	WLSSPI 0821.10: Thread pool RequestManager is suspended. WLSSPI 0821.11: Thread Pool RequestManager is running
Instruction Text	**Probable cause** : Indicates if the RequestManager is suspended. **Potential Impact:** A suspended manager will not dequeue work and dispatch threads until the RequestManager is resumed. **Suggested action** : For information on tuning the execute thread pool, see the *Performance and Tuning* documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer:** Clicking on a URL in the above text might take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	N/A
Area	ThreadPool

Metric B822_DstroydTlCnt

Policy Name	WLSSPI_0822
Metric Name	B822_DstroydTlCnt
Metric Type	Alarming and Graphing
Description	Total number of times a bean instance from the pool was destroyed due to a non-application Exception being thrown from it
WebLogic Server Version	10.x
Severity: Condition with Threshold	WLSSPI-0822.1: Warning, threshold 10
Collection Interval	15m
Message Text	WLSSPI 0822.10: # of times a bean instance from this pool was destroyed due to a non-application Exception being thrown from it (<$VALUE>) too high (>= <$THRESHOLD>) WLSSPI 0822.11: # of times a bean instance from this pool was destroyed due to a non-application Exception being thrown from it (<$VALUE>) is within the threshold(<$THRESHOLD>)
Instruction Text	**Probable cause** : Provides a count of the total number of times a bean instance from this pool was destroyed due to a non-application Exception being thrown from it. **Potential Impact:** The Business logic associated with this EJB will not complete successfully. This action impacts the application response time. **Suggested action** : Check the excpetions thrown and refer the documentation for your WebLogic Server version available through http://e-docs.bea.com/ . **Disclaimer:** Clicking on a URL in the above text might take the user to a non-HP site. HP does not control the content of any non-HP site.
Report Type	N/A
Area	EJBPool

Metric B823_EJBMssdCntRtSum

Policy Name	WLSSPI_0823
Metric Name	B823_EJBMssdCntRtSum
Metric Type	Alarming, Graphing, and Reporting
Description	Number of times a failed attempt was made to get an instance from the free pool
WebLogic Server Version	10.x
Severity: Condition with Threshold	WLSSPI-0823.1: Warning, threshold 10
Collection Interval	15m
Message Text	WLSSPI 0823.10: # of times a failed attempt was made to get an instance from the free pool (<$VALUE>) too high (>= <$THRESHOLD>) WLSSPI 0823.11: # of times a failed attempt was made to get an instance from the free pool (<$VALUE>)is within the threshold (<$THRESHOLD>)
Instruction Text	**Probable cause** : The total number of times a failed attempt was made to get an instance from the free pool. **Potential Impact:** An attempt to get a bean from the pool fails if there are no available instances in the pool. This results in delayed execution of the business logic and hence slows the response time of the application. **Suggested action** : Verify that the max-beans-in-free-pool element has not been set too low. Also, while WebLogic Server will always try to allocate a new bean instance if one is not available, in reality you are limited by the number of executable threads. In most cases, each thread will need at most, a single bean instance. For information on tuning EJB parameters, see the *Performance and Tuning* documentation for your WebLogic Server version available through http://e-docs.bea.com/ .

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Report Type	Automatic action, Operator-initiated
Area	EJBPool

Metric B824_EJBMssdCntRt

Policy Name	WLSSPI_0824
Metric Name	B824_EJBMssdCntRt
Metric Type	Alarming
Description	Number of times a failed attempt was made to get an instance from the free pool per minute
WebLogic Server Version	10.x
Severity: Condition with Threshold	WLSSPI-0824.1: Warning, threshold 10
Collection Interval	15m
Message Text	WLSSPI 0824.10: # of times a failed attempt was made to get an instance from the free pool (<$VALUE>) too high (>= <$THRESHOLD>) WLSSPI 0824.11: # of times a failed attempt was made to get an instance from the free pool (<$VALUE>) is within the threshold(<$THRESHOLD>)
Instruction Text	**Probable cause** : The total number of times a failed attempt was made to get an instance from the free pool. **Potential Impact:** An attempt to get a bean from the pool fails if there are no available instances in the pool. This results in delayed execution of the business logic and hence slows the response time of the application. **Suggested action** : Verify that the max-beans-in-free-pool element has not been set too low. Also, while WebLogic Server will always try to allocate a new bean instance if one is not available, in reality you are limited by the number of executable threads. In most cases, each thread will need at most, a single bean instance. For information on tuning EJB parameters, see the *Performance and Tuning* documentation for your WebLogic Server version available through http://e-docs.bea.com/ .

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Report Type	N/A
Area	EJBPool

Data Store Table for WebLogic Server

The WebLogic SPI creates the following data tables for the WebLogic SPI metrics in the data store on the node to facilitate the data-collection procedure.

Table Name	Area	Metric Description	Column Name
WLSSPI_RPT_METRICS	Server	Status of a server - reporting	B002_ServerStatusRep
WLSSPI_METRICS	JVM	% of heap space used in the JVM	B005_JVMMemUtilPct
WLSSPI_METRICS WLSSPI_RPT_METRICS	ThreadPool	# of requests serviced by an execute queue per second	B010_ExQueThruRate
		% of threads in use for a server's execute queue	B011_ExQThrdUtilPct
WLSSPI_METRICS	ThreadPool	# of client requests waiting to be serviced	B012_ExQueWaitCnt
	Server	# of socket connections opened per second	B013_SocketTrafficRt
		# of socket connections opened	B014_ActiveSocketCnt
		% of permissible restarts	B015_SrvrRestartsPct
		# of times no EJB beans were available	

		beans were available from the free pool per minute	B025_EJBPoolWtRtSum
WLSSPI_METRICS WLSSPI_RPT_METRICS	EJB	# of times a client timed out waiting for an EJB bean per minute	B026_EJBTimeoutRtSum
		# of EJB transactions per second	B035_EJBTranThruRt
		# of EJB transactions rolled back per second	B036_EJBTranRbRt
WLSSPI_METRICS		# of clients waiting for a connection from connection pools	B061_JDBCConPlWtCnt
		# of unclosed JDBC connections and JDBC connections that have exceeded their max idle times	B063_JDBCConLkRtSum
		Average commit time for transactions	B070_TranAveTime
		% of transactions rolled back	B071_TranRollbackPct
		% of transactions rolled back due to resource error	B072_TranResErrRbPct

WLSSPI_METRICS WLSSPI_RPT_METRICS	JDBC	% of transactions rolled back due to an application error	B073_TranAppErrRbPct
		% of transactions rolled back due to timeout error	B074_TranTimErrRbPct
		% of transactions rolled back due to system error	B075_TranSysErrRbPct
		# of transactions processed per second	B076_TranThruRate
		% of transactions returning a heuristic decision	B077_TranHeurCnt
WLSSPI_METRICS		# of unclosed connector connections and ones that have exceeded their max idle time	B078_CnctrLeakRtSum
WLSSPI_METRICS WLSSPI_RPT_METRICS		% utilization of transaction capacity	B079_TranCapUtil
	Cluster	# of multicast messages to cluster that were re-sent per minute	B080_ClsOutMesFailRt
WLSSPI_METRICS		# of multicast messages from cluster lost by server per minute	B081_ClsInMesFailRt

	Server	# of invalid login attempts	B085_InvLoginAttCnt
WLSSPI_METRICS WLSSPI_RPT_METRICS	ThreadPool	Average # of requests completed by the execute per second	B092_ExQueThroughput
	EJB	% of EJBs in the cache in use	B238_EJBCacheHitPct
	WebModule	Ave execution time for a servlet in msec	B240_ServletAveExecTime
		Time spent in a servlet	B241_ServletTimeCnt
		# of requests for a servlet per second	B242_ServletReqRate
		# of open sessions for a web application	B245_WebAppSessionCnt
		# of open sessions for a web application per second	B246_WebAppHitRt
		% of JMS server filled based on # of All messages	B251_JMSUtilByMessagePct
		% of the JMS server filled, based on total bytes	B252_JMSUtilByBytePct
		% of time server threshold condition satisfied based on #	B253_JMSThreshByMessagePct

WLSSPI_RPT_METRICS	JMS	of messages	
		% of time server threshold condition satisfied based on total bytes	B254_JMSThreshByBytePct
		# of messages passed through JMS server per second	B255_JMSServerThruMessageRt
		# of bytes passed through JMS server per second	B256_JMSServerThruByteRt
	JDBC	% utilization of available JDBC connections in connection pool	B260_JDBCConnectionPoolUtil
		# of clients serviced by connection pool per second	B262_JDBCConnectionPoolThruRt
		Rate of leaked connections for the JDBC conection pool	B263_JDBCConLkRt
		JDBC conection pool connection delay	B265_JDBCConTime
	JCA	% utilization of available JCA connections in connection pool	B270_CnctrPoolUtil

		Rate of leaked connections for the JCA conection pool	B278_CnctrLeakRt
	Server	Total number of cached entries on disk which contain external references in an XML parser	B281_XMLCacheDskSize
		Total number of cached entries in memory which contain external references in an XML parser	B282_XMLCacheMemSize
WLSSPI_METRICS	ThreadPool	Number of deferred requests	B283_DeferredReqsCnt
		Request wait time for a thread	B284_ReqWaitTimThrd
		Number of pending requests	B285_PendingReqCount
	Server	Percentage of pending requests	B286_PendingReqPct
	ThreadPool	Maximum wait time for a thread request	B287_ReqMaxWaitTime
		Number of threads in the standby pool	B288_StandbyThrdCnt
WLSSPI_RPT_METRICS	EJB	Number of processed messages	B289_MDBProcMsgRate
		WebLogic domain configuration,	

	Server	cluster information, and physical machines	B812_DomainInfo
WLSSPI_METRICS	JVM	JVM Heap Free Memory in kilobytes	B819_JVMHeapFreeMem
	Server	Server Restart Required	B820_SrvrRestReqrd
		RequestManager suspended	B821_Suspnded
	EJB	Total number of times a bean instance from the pool was destroyed due to a non-application Exception being thrown from it	B822_DstroydTlCnt
WLSSPI_METRICS WLSSPI_RPT_METRICS		Number of times a failed attempt was made to get an instance from the free pool	B823_EJBMssdCntRtSum

Monitors

WebLogic SPI Monitors policy group contains:

- collector policies
- WLSSPI-ConfigCheck policy
- WLSSPI-Performance policy

Collector Policies

Collector policies control what metrics are collected by running the collector/analyzer at the specified polling interval and defining the metrics that are collected.

Collector Policy Name	Polling Interval	Description	Metrics Collected
WLSSPI-05min	5m	Runs the WebLogic Server SPI collector/analyzer every 5 minutes	1, 2, 61, 63, 70-81, 85, 245, 246, 26 270, 278, 281-282
WLSSPI-15min	14m	Runs the WebLogic Server SPI collector/analyzer every 15 minutes	5, 10-17, 25, 26, 35, 36, 225, 226, 2
WLSSPI-1h	59m	Runs the WebLogic Server SPI collector/analyzer every one hour	240-242

WLSSPI-ConfigCheck

WLSSPI-ConfigCheck is a single policy. It checks if you have configured the managed node.

WLSSPI-Performance

WLSSPI-Performance is a single policy that logs performance data every five minutes.

Related Topics:

- Metrics
- Logfiles

- Golden Metrics

- Metric naming/numbering conventions

- Metrics by number

Logfiles

Logfile policies monitor WebLogic Server-generated and WebLogic SPI-generated logfiles. The information captured from these logfiles includes changes to WebLogic Server configurations and errors that occur in the operation of the WebLogic Server or the WebLogic SPI.

Logfiles Policy Name	Description
WebLogic Logs	Detects critical errors and warnings in the WebLogic Server log file.
WLSSPI-Logfile-Monitor	Collects information from a WebLogic Server's log file(s).
WLSSPI Error Log	Monitors the WebLogic SPI error log and sends the error messages to the message browser.
WLSSPI Java Discovery Error Log	Monitors the WLSSPI Java Discovery Error Log.
WLSSPI Java Collector Error Log	Monitors the WLSSPI Java Collector Error Log.

Related Topics:

- Metrics

- Golden Metrics

- Metric naming/numbering conventions

- Policies

WebLogic Logs

Description	Detects critical errors and warnings in the WebLogic Server log file.
Polling Interval	30s
Severity	Critical Warning
Message Group	WebLogic
Help Text	**Probable Cause** : Critical - A message with the indicator "Emergency" or "Critical" was detected in the WebLogic Server log file. Warning - A message with the indicator "Notice," "Error," or "Alert" was detected in the WebLogic Server log file. **Suggested Action** : See the WebLogic Server documentation (manuals or online help) for more information about the error.

WLSSPI-Logfile-Monitor

Description	Collects information from a WebLogic Server's log file(s).
Polling Interval	1m
Help Text	N/A

WLSSPI Error Log

This logfile policy monitors the WLSSPI log file located at
`%OvAgentdir%\wasspi\wls\log\wasspi_perl.log.`

Description	Monitors the WebLogic SPI error log and sends the error messages to the message browser.
Polling Interval	30s
Help Text	Refer to the specific error message listed in WebLogic SPI error messages for information about the error message.

WLSSPI Java Discovery Error Log

This logfile policy monitors the WLSSPI discovery error log file located at
`%OvAgentdir%\wasspi\wls\log\Discovery.log` .

Description	Monitors the WLSSPI Java Discovery Error Log.
Polling Interval	30s
Severity	Normal Major Critical Warning
Message Group	WLSSPI
Help Text	Available for each error as detected: WASSPI-1 through WASSPI-254. For detailed help text for all error messages, see the specific error message listed in WebLogic SPI error messages for information about the error message.

WLSSPI Java Collector Error Log

This logfile policy monitors the WLSSPI collector error log file located at
`%OvAgentdir%\wasspi\wls\log\Collector.log`.

Description	Monitors the WLSSPI Java Collector Error Log.
Polling Interval	30s
Severity	Normal Major Critical Warning
Message Group	WLSSPI
Help Text	Available for each error as detected: WASSPI-1 through WASSPI-254. For detailed help text for all error messages, see the specific error message listed in WebLogic SPI error messages for information about the error message.

Configuration editor

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) maintains a configuration that consists of property value assignments. The configuration editor is a graphical user interface used to view and edit the configuration.

The configuration editor is used by the Discover or Configure WLSSPI tool.

Related Topics:

- The configuration

- Using the configuration editor

- Example configurations

- Configuration properties

The configuration editor - getting started

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) maintains a configuration that consists of property value assignments.

On the HPOM for Windows management server, the configuration maintains information for your entire environment and contains information for all WebLogic Servers on all managed nodes.

On a managed node, the configuration contains information only for the WebLogic Servers running on that node. This information is extracted from the configuration on the management server.

Structure

The structure of the configuration is (lines beginning with "#" are treated as comments and ignored):

```
# Global Properties

   <config_property >=<value > ...


# GROUP Block

   GROUP <group_name >
   {
      <nodename > ...
   }


# NODE Block

   NODE [<group_name > | <nodename >]
   {
      <config_property >=<value > ...
   }
```

- **Global Properties**

```
# Global Properties

   <config_property >=<value > ...
```

Properties set at the global level apply to all nodes. However, these global properties can be overridden by properties set within a GROUP or NODE block or by server-specific properties.

Using the configuration editor, view, set, or edit global properties by selecting the Default Properties item in the Defaults folder.

- **GROUP Block**

```
# GROUP Block

  GROUP <group_name >
  {
      <nodename > ...
  }
```

GROUP blocks are used to group nodes together that have common properties.

<group_name > identifies the group of nodes with common properties. If a GROUP block *<group_name >* is repeated within the configuration file, the last definition takes precedence.

<nodename > lists the nodes in the group and each node name is the primary node name configured in HPOM.

Set the common properties using the NODE block.

Using the configuration editor, view, set, or edit GROUP block properties by selecting the Default Properties item in the *<Group_Name>* folder.

- **NODE Block**

```
# NODE Block

  NODE [<group_name > | <nodename >]
  {
      <config_property >=<value > ...
  }
```

Properties set in a NODE block apply to nodes belonging to the group defined by *<group_name >* (to set common properties for a group) or to the specified *<nodename >* (to set properties for a single node).

For a group, enter the *<group_name >* defined by the GROUP block and set the common properties.

For a single node, enter the *<nodename >* and set the properties.

<nodename > is the primary node name configured in HPOM.

If a property definition is repeated within the NODE block, the last definition takes precedence.

Using the configuration editor, view, set, or edit NODE block properties by selecting the Default

Properties item in the *<Node_Name>* folder.

Server-specific properties

Each property specified as SERVER*<n >_config_property* refers to a specific WebLogic Server instance. When more than one WebLogic Server is running on a given managed node, the number *<n >* differentiates the servers. Numbering begins at "1" and each WebLogic Server instance is assigned a unique number.

Using the configuration editor, view, set, or edit server-specific properties by selecting the *<Application_Server_Name>* item in the Application Servers folder.

Configuration property precedence

The order of precedence of properties set in the configuration file are (listed from highest to lowest):

1. SERVER*<n >_config_property* (server-specific)

2. NODE *nodename* block *config_property*

3. NODE *group_name* block *config_property*

4. Global *config_property*

Primary node name

The *<nodename >* specified in a GROUP and NODE block is the primary node name configured in HPOM. To display the primary node name, do the following:

1. From the HPOM console, select **Operations Manager → Nodes** .

2. Right-click the node and select **Properties** .

3. Select the **Network** tab.

Configuration location

The location of the configuration file is listed for your convenience. Edit the configuration using the configuration editor only.

- **Management server**

<ShareInstallDir> \SPI-Share\wasspi\wls\conf\SiteConfig

where *<ShareInstallDir>* by default is `C :\Documents and Settings\All Users\Application Data\HP\HP BTO Software\shared`

This file contains all configuration information for all managed nodes on which WebLogic is running.

- **Windows managed node**

`\<OvAgentDir> \wasspi\wls\conf\SiteConfig`

where *<AgentDir>* is typically `\Program Files\HP\HP BTO Software` (for HTTPS managed nodes) or
`C:\Program Files\HP OpenView\Installed Packages\{790C06B4-844E-11D2-972B-080009EF8C2A}` (for DCE managed nodes)

This file contains the local configuration information for this managed node on which WebLogic is running.

- **Unix managed node**

`/<OvAgentDir> /wasspi/wls/conf/SiteConfig`

where *<OvAgentDir>* is typically `/var/opt/OV/` or `/var/lpp/OV/`

This file contains the local configuration information for this managed node on which WebLogic is running.

Related Topics:

- Using the configuration editor

- Example configurations

- Configuration properties

Components of configuration editor

The configuration editor is provided by the Smart Plug-in for BEA WebLogic Server (WebLogic SPI) to view and edit the configuration. You must update the configuration using this editor only.

The configuration editor has three components:

- **The configuration editor tree**

  The Configuration Editor - Tree, displayed in the left pane of the Discover or Configure WLSSPI Tool main window, displays the WebLogic SPI configuration file in a tree structure.

  The following is an example of the tree.

  > **ⓘ NOTE:**
  > If no application servers or groups are configured, the "Application Servers" and "Groups" folders are not displayed. If you are running Discover or Configure WLSSPI for the first time and you did not select any nodes when you launched the tool, the "Nodes" folder is not displayed.
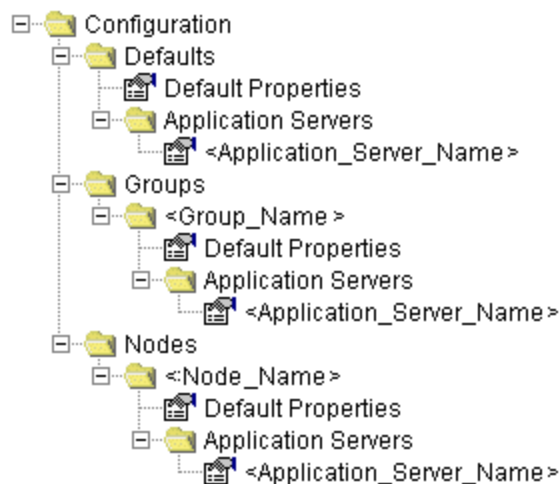
  The 📁 icon denotes that you can view configuration properties.

  The 🖼 icon denotes that you can view and set configuration properties.

  The following table lists each item in the tree and a brief description of the item.

Item Name	Description
Application Servers	A folder that contains a list of all the application servers. This folder can appear under Defaults (global properties level), Group_Name(s) (GROUP level), or Node_Name(s) (NODE level).
<Application_Server_Name >	The server name as defined in the WebLogic Server.
Configuration	A folder that contains all WebLogic SPI configuration information for the WebLogic environment.
Default Properties	Lists the configuration properties that have been set. This item appears under Defaults (global properties level), Group_Name(s) (GROUP level), or Node_Name(s) (NODE level).
Defaults	A folder that represents the global properties level .
Groups	A folder that represents the GROUP level .
<Group_Name >	A folder that identifies the name of a group of nodes with common properties.
Nodes	A folder that represents the NODE level .
<Node_Name >	A folder that represents a single node whose name must match the primary node name configured in HPOM.

- **Actions to perform**

  Actions that you can perform depend on the item that is selected in the tree. The following actions are available either using the Actions menu or by right-clicking on an item in the tree.

  In the table below, click the action for a more detailed description (if available) of how to perform that action.

Action	Description	Selected Tree Item
Add Application Server	Add an application server.	📁 Application Servers 📁 Defaults 📁 *<Group_Name >* 📁 *<Node_Name >*
Add Group	Create a group to which you can assign nodes that have common properties.	📁 Any item in the tree 🖹 Any item in the tree
Add Node	Add a managed node to the Nodes folder.	📁 Any item in the tree 🖹 Any item in the tree
Exit	Exit the Discover or Configure WLSSPI tool. This action is available from the File menu. If any changes were made that have not been saved, the "Confirm Cancel" window displays.	📁 Any item in the tree 🖹 Any item in the tree
Remove Application Server/Remove ALL App Servers	Remove an application server or all listed application servers.	📁 Application Servers 🖹 *<Application_Server_Name >*
Remove Group/Remove ALL Groups	Remove a WebLogic SPI group or all listed WebLogic SPI groups.	📁 Groups 📁 *<Group_Name >*
Remove Node/Remove ALL Nodes	Remove a managed node or remove all managed nodes.	📁 Nodes 📁 *<Node_Name >*
Save	Save changes to the configuration file. This action is available from the File menu only if changes were made to the configuration file.	📁 Any item in the tree 🖹 Any item in the tree
Set Configuration Properties tab	Set WebLogic SPI configuration properties.	🖹 *<Application_Server_Name >* 🖹 Default Properties
View Configuration Settings tab	View WebLogic SPI configuration properties.	📁 Any item in the tree 🖹 Any item in the tree

- **The configuration editor buttons**

  The following buttons are available in Discover or Configure WLSSPI:

Button	Description
Cancel	Exit Discover or Configure WLSSPI. If you have set configuration properties without saving them, these changes are not saved. If you added or removed an application server, node, or group without saving the change or if you have modified a configuration property, a "Confirm Cancel" window displays. Select **Save and Exit** to save the changes before exiting, **Exit without Save** to exit without saving the changes, or **Return to Editing** to continue editing the configuration file (changes are not saved).
Finish	Exit Discover or Configure WLSSPI. Appears instead of the **Next** button if you launched Discover or Configure WLSSPI without selecting any nodes.
Next	Exit Discover or Configure WLSSPI. Takes you to the "Confirm Operation" window that lists the managed nodes you selected when Discover or Configure WLSSPI was started. The selected managed nodes' configuration files are updated with your changes. If you made changes to managed nodes that were not selected (are not displayed in the "Confirm Operation" window), the changes are saved to the HPOM management server's configuration file, but to make the changes to those managed nodes' configuration file, you must restart Discover or Configure WLSSPI, select those managed nodes, and then exit.
Save	Save changes to the HPOM management server's configuration file and continue editing the configuration file. You may also select **File ➜ Save** to save your changes.

Related Topics:

○ The configuration

○ Example configurations

○ Configuration properties

Add Application Server

Add a WebLogic Server instance at the global properties , GROUP , or NODE level in the WebLogic SPI configuration file.

To add an application server, do the following:

1. Right-click one of the following items in the tree: Defaults (global properties level), Application Servers (global properties level), <*Group_Name* > (GROUP level), or <*Node_Name* > (NODE level) and select **Add Application Server** .

   The "Configure WLSSPI Tool: Add App Server" window displays.

2. Enter the "Application Server Name." This is the name as defined in the WebLogic Server and is case-sensitive. The WebLogic administration console displays the server names of all configured application servers in a domain. Use these names for the "Application Server Name."

3. Enter the "Application Server Port." This is the port the WebLogic Server listens on. The WebLogic administration console displays the port numbers of all configured application servers in a domain. Use these for the "Application Server Port."

4. Select **OK** .

   The NAME and PORT properties are set.

   The application server is added and its properties are displayed. You may also set additional configuration properties for this server. Refer to Set Configuration Properties tab for more information.

5. Select **Save** to save your changes.

   If you do not want to add this application server, right-click the application server name, select Remove Application Server , and select **Save** .

Related Topics:

- Add Group

- Add Node

- Remove Application Server/Remove ALL App Servers

- Remove Group/Remove ALL Groups

- Remove Node/Remove ALL Nodes

- Set Configuration Properties tab

- View Configuration Settings tab

- Using the configuration editor

Add Group

Assign nodes to a group that have common properties in the WebLogic SPI configuration file.

To add a group, do the following:

1. Right-click any item in the tree and select **Add Group** .

   The "Configure WLSSPI Tool: Add Group" window displays.

2. Enter the "Group Name." The group name identifies the group of nodes with common properties and is NOT case-sensitive.

3. Select **OK** .

   The group is added and the Set Configuration Properties tab for the group displays.

4. Select **Add Node to Group** , select one node from the list to add to the group, and then select **OK** . Repeat this step until all nodes are added to the group.

5. Set the configuration properties for this group using the **Select a Property to Set** pulldown list. Refer to Set Configuration Properties tab for more information.

6. Select **Save** to save your changes.

   If you do not want to add the group, right-click the group name, select Remove Group , and select **Save** .

Related Topics:

- Add Application Server

- Add Node

- Remove Application Server/Remove ALL App Servers

- Remove Group/Remove ALL Groups

- Remove Node/Remove ALL Nodes

- Set Configuration Properties tab

- View Configuration Settings tab

- Using the configuration editor

Add Node

Add a managed node to the WebLogic SPI configuration file.

To add a node, do the following:

1. Right-click any item in the tree and select **Add Node** .

   If no additional managed nodes are available to add to the configuration file, the message "All available managed nodes have been added to the configuration." displays. Click **OK** to exit this action.

   Otherwise, the "Configure WLSSPI Tool: Add Node" window displays.

2. From the pulldown menu, select a node to add.

3. Select **OK** .

   The node is added and the Set Configuration Properties tab for the node displays.

4. Set the configuration properties for this node using the **Select a Property to Set** pulldown list. Refer to Set Configuration Properties tab for more information.

5. Select **Save** to save your changes.

   If you do not want to add the node, right-click the node name, select Remove Node , and select **Save** .

Related Topics:

- Add Application Server

- Add Group

- Remove Application Server/Remove ALL App Servers

- Remove Group/Remove ALL Groups

- Remove Node/Remove ALL Nodes

- Set Configuration Properties tab

- View Configuration Settings tab

- Using the configuration editor

Remove Application Server/Remove ALL App Servers

Remove a WebLogic Server or all listed WebLogic Servers from the WebLogic SPI configuration file.

To remove an application server, do the following:

1. Right-click the application server name and select **Remove Application Server** .

   The selected application server name is removed from the list and its configuration properties are removed from the configuration file.

2. Select **Cancel** to cancel the removal of the application server (the application server name appears the next time you run Discover or Configure WLSSPI). In the "Confirm Cancel" window, select **Exit without Save** .

   Otherwise, select **Save** to permanently remove the application server.

To remove ALL application servers, do the following:

1. Right-click the Application Servers folder and select **Remove ALL App Servers** .

   The selected Application Servers folder and all application servers listed in the selected folder are removed (all configuration properties for the listed application servers are removed from the configuration file).

2. Select **Cancel** to cancel the removal of all application servers (the Application Servers folder and all application server names listed in the folder appear the next time you run Discover or Configure WLSSPI). In the "Confirm Cancel" window, select **Exit without Save** .

   Otherwise, select **Save** to permanently remove the application servers.

Related Topics:

- Add Application Server

- Add Group

- Add Node

- Remove Group/Remove ALL Groups

- Remove Node/Remove ALL Nodes

- Set Configuration Properties tab

- View Configuration Settings tab

- Using the configuration editor

Remove Group/Remove ALL Groups

Remove a WebLogic SPI group or all listed WebLogic SPI groups from the WebLogic SPI configuration file.

To remove a group, do the following:

1. Right-click the group server name and select **Remove Group** .

   The selected group is removed from the list and its configuration properties are removed from the configuration file.

2. Select **Cancel** to cancel the removal of the group (the group name appears the next time you run Discover or Configure WLSSPI). In the "Confirm Cancel" window, select **Exit without Save** .

   Otherwise, select **Save** to permanently remove the group.

To remove ALL groups, do the following:

1. Right-click the Groups folder and select **Remove ALL Groups** .

   The selected Groups folder and all groups listed in the selected folder are removed (all configuration properties for the listed groups are removed from the configuration file).

2. Select **Cancel** to cancel the removal of all groups (the Groups folder and all group names listed in the folder appear the next time you run Discover or Configure WLSSPI). In the "Confirm Cancel" window, select **Exit without Save** .

   Otherwise, select **Save** to permanently remove the groups.

Related Topics:

- Add Application Server
- Add Group
- Add Node
- Remove Application Server/Remove ALL App Servers
- Remove Node/Remove ALL Nodes
- Set Configuration Properties tab

- View Configuration Settings tab

- Using the configuration editor

Remove Node/Remove ALL Nodes

Remove a managed node or all listed managed nodes from the WebLogic SPI configuration file.

To remove a node, do the following:

1. Right-click the node name and select **Remove Node** .

   The selected node is removed from the list and its configuration properties are removed from the configuration file.

2. Select **Cancel** to cancel the removal of the node (the node name appears the next time you run Discover or Configure WLSSPI). In the "Confirm Cancel" window, select **Exit without Save** .

   Otherwise, select **Save** to permanently remove the node.

To remove ALL nodes, do the following:

1. Right-click the Nodes folder and select **Remove ALL Nodes** .

   The selected Nodes folder and all nodes listed in the selected folder are removed (all configuration properties for the listed nodes are removed from the configuration file).

2. Select **Cancel** to cancel the removal of all nodes (the Nodes folder and all node names listed in the folder appear the next time you run Discover or Configure WLSSPI). In the "Confirm Cancel" window, select **Exit without Save** .

   Otherwise, select **Save** to permanently remove the nodes.

Related Topics:

- Add Application Server

- Add Group

- Add Node

- Remove Application Server/Remove ALL App Servers

- Remove Group/Remove ALL Groups

- Set Configuration Properties tab

- View Configuration Settings tab

- Using the configuration editor

Set Configuration Properties tab

Set WebLogic SPI configuration properties at the global properties level or for the selected application server(s), group(s) (GROUP level), or node(s) (NODE level).

Items with the ⊞ icon are the only items for which you can set the configuration properties (Default Properties and *<Application_Server_Name >*).

To set the configuration properties of an item, select the item and click the **Set Configuration Properties** tab in the right pane.

Setting a property

To set a property, do the following:

1. Select a property from the "Select a Property to Set" pulldown menu.

2. Select **Set Property** . The property and an empty value field appear in the table.

3. Click the empty value field and enter a value.

4. Repeat steps 1 - 3 for each property to set.

5. Click **Save** .

> ⓘ **NOTE:**
> For the LOGIN and PASSWORD properties, when you select **Set Property** , a separate window displays. Enter the login and password values in this window.

For more information about individual properties, see Configuration properties .

Modifying a property

To modify a property (except LOGIN) in the configuration file, do the following:

1. Select the property from the table.

2. Double-click the value field.

3. Edit the value.

4. Repeat steps 1 - 3 for each property to modify.

5. Click **Save** .

To modify the LOGIN property in the configuration file, do the following:

1. Select LOGIN/PASSWORD from the "Select a Property to add" pulldown menu.

2. Select **Set Property** . The "Set Access Info for Default Properties" window displays.

3. Enter the new password and verify password.

4. Click **OK** .

5. Click **Save** .

For more information about individual properties, see Configuration properties .

Removing a property

To remove a property from the configuration file, do the following:

1. Select the property from the table.

2. Click **Remove Property** .

3. Repeat steps 1 - 2 for each property to remove.

4. Click **Save** .

Related Topics:

- Add Application Server

- Add Group

- Add Node

- Remove Application Server/Remove ALL App Servers

- Remove Group/Remove ALL Groups

- Remove Node/Remove ALL Nodes

- View Configuration Settings tab

- Using the configuration editor

View Configuration Settings tab

View all WebLogic SPI configuration properties set in the configuration file on the HPOM management server or the WebLogic SPI configuration properties for the selected application server(s), group(s), or node(s).

To view the configuration properties of an item, select the item and click the **View Configuration Settings** tab in the right pane.

The following table describes the view when the specified item is selected.

Item Name	Description of View
Application Servers	View all configuration properties set for all the listed application servers.
<Application_Server_Name >	View all configuration properties set for the application server (these properties can be modified by selecting the Set Configuration Properties tab).
Configurations	View all configuration properties saved in the configuration file on the HPOM management server.
Default Properties	View all set configuration properties (these properties can be modified by selecting the Set Configuration Properties tab)
Defaults	View all configuration properties set at the global properties level .
Groups	View all configuration properties set for all the listed groups.
<Group_Name >	View all configuration properties set for the specific group.
Nodes	View all configuration properties set for all the listed nodes.
<Node_Name >	View all configuration properties set for the specific node.

View Inherited Properties

A View Inherited Properties check box appears near the bottom of the window. By selecting this check box, the view of the configuration properties changes to show all inherited properties (those properties defined at a global properties level or GROUP level) that affect the selected item. Inherited properties are denoted by "<*>" appearing after the property.

By unselecting this check box, the view shows only the configuration properties set at that level for the

selected item.

Inherited properties can only be modified at the level they are set. If "<*>" appears after the property, it cannot be modified at that level. For example, if the property HOME is set at the global properties level (under the Defaults folder), it can only be modified in the Default Properties listed under the Defaults folder. Although HOME appears (with "<*>" after it) in a *<Group_Name >*'s Default Properties view, HOME cannot be modified at this level.

Properties set lower in the tree take precedence over those properties set higher in the tree. For example, if the property HOME is set at the global properties level (under the Defaults folder) and the property HOME is set at the GROUP level, the GROUP level property value takes precedence.

Configuration property precedence is as follows (listed from highest to lowest):

1. Server-specific

2. NODE level

3. GROUP level

4. global properties level

Related Topics:

- Add Application Server

- Add Group

- Add Node

- Remove Application Server/Remove ALL App Servers

- Remove Group/Remove ALL Groups

- Remove Node/Remove ALL Nodes

- Set Configuration Properties tab

- Using the configuration editor

Example configurations

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) sample configurations illustrate various features and utilization methods. Lines preceded by "#" are treated as comments and are ignored.

To display this sample configuration at the Defaults level select View Configuration Settings tab .

Select an example to view:

Petstore

This example shows WebLogic's pet store application server sample.

(Click the image to make it larger or smaller.)
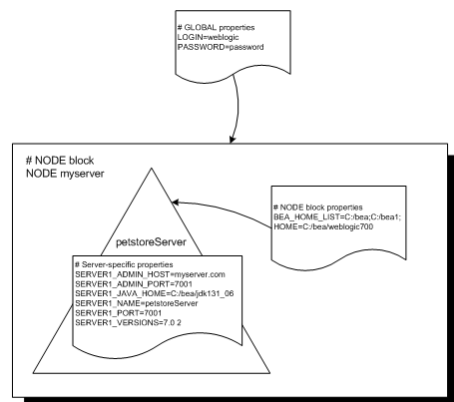

```
LOGIN = weblogic
PASSWORD = password

NODE myserver
{
    BEA_HOME_LIST = C:/bea;C:/bea1;
    HOME = C:/bea/weblogic700

    SERVER1_ADMIN_HOST = myserver.com
    SERVER1_ADMIN_PORT = 7001
    SERVER1_JAVA_HOME = C:/bea/jdk131_06
    SERVER1_NAME = petstoreServer
    SERVER1_PORT = 7001
    SERVER1_VERSION = 10.1.3
}
```

Related Topics:

- The configuration

- Using the configuration editor

- Configuration properties

Configuration properties

The Smart Plug-in for BEA WebLogic Server (WebLogic SPI) maintains a configuration that consists of property value assignments.

If you are not using the discovery process, set all the required properties.

The table lists, in this order, required configuration properties , conditional configuration properties , and optional configuration properties .To display a description of the property, click the property name in the table below, or use the pull-down menu at the bottom of the page. To display the descriptions of all properties based on configuration requirements (required, conditional, or optional), use the pull-down menu at the bottom of the page.

Property	Configuration	Automatically Discovered	Discovery	Level of Configuration	
				Default Properties	Application Server
HOME	**Required**	✓	**Required**	✓	✓
JAVA_HOME	**Required**	✓	**Required**	✓	✓
LOGIN	**Required**		**Required**	✓	✓
NAME	**Required**	✓	N/A		✓
PASSWORD	**Required**		**Required**	✓	✓
PORT	**Required**	✓	N/A		✓
ADDRESS	Conditional	✓ *	Conditional		✓
ADMIN_HOST	Conditional	✓	N/A		✓
ADMIN_PORT	Conditional	✓	N/A		✓
ADMIN_PORTS	Conditional		Conditional	✓	
ALIAS	Conditional		N/A		✓
BEA_HOME_LIST	**Required**	✓	**Required**	✓	
JMB_JAVA_HOME	**Conditional**		Optional	✓	✓
COLLECT_METADATA	Conditional		Optional	✓	✓
JMX_CLASSPATH	Conditional		N/A	✓	✓
KEYSTORE	Conditional		N/A	✓	✓

LAUNCH_DIR	Conditional		N/A	✓	✓
LOGFILE	Conditional		N/A		✓
NODE_NAMES	Conditional		Conditional		✓
PASSPHRASE	Conditional		N/A	✓	✓
PROTOCOL	Conditional		N/A	✓	✓
RMID_PORT	Conditional		N/A	✓	
RMID_START_TIME	Conditional		N/A	✓	
START_CMD	Conditional		N/A		✓
STOP_CMD	Conditional		N/A		✓
USER	Conditional		N/A	✓	✓
VERSION	Conditional	✓	N/A		✓
URL_PATH	Conditional		N/A		✓
EXCLUDE_SAMPLES	Optional		N/A	✓	✓
GRAPH_SERVER	Optional		N/A	✓	
GRAPH_URL	Optional		N/A	✓	
TIMEOUT	Optional		N/A	✓	✓
TYPE	Optional		N/A	✓	✓

Related Topics:

- The configuration

- Using the configuration editor

- Example configurations

Reports and graphs

In addition to metric reports and operator-initiated graphs, the Smart Plug-in for BEA WebLogic
Server (WebLogic SPI) provides a limited version of HP Reporter reports and HP Performance
Manager graphs. These reports and graphs show consolidated data on server performance and
availability on all WebLogic Server systems.

Reports are:

- generated daily at 2 A.M.

- not available until after one full day of metric collection (the "SPI for WebLogic Server" folder does
  not appear until then).

Graphs are:

- generated at the time they are run.

- are available after installing the WebLogic SPI (the "SPI for WebLogic Server" folder is available),
  but display an error message if they are run before data has been collected.

The WebLogic SPI can be integrated with HP Reporter and HP Performance Manager (both products
must be purchased separately) to provide additional reporting and graphing flexibility and capabilities.

For more information about integrating the WebLogic SPI with HP Reporter and HP Performance
Manager, see the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and
Configuration Guide* located on the HP Operations Smart Plug-ins DVD, in the file
`\Documentation\SPI Guides\WebLogic_AppServer_Install_Config.pdf`.

Related Topics:

- Tools

- Policies

HP Reporter Reports for the WebLogic SPI

The reports available through the integration of Reporter and the WebLogic SPI show consolidated data on server performance and availability on all WebLogic Server systems. In addition, other reports show data for single systems. These reports are available one day after you install the WebLogic SPI report package on the Reporter Windows system.

The following tables show pre-defined reports.

Reports for All Systems - WebLogic Performance

Report Title	Description
EJB Free Pool Wait Rate - Top 20	Shows the number of requests for an EJB per minute that had to wait for an instance of the EJB to become available from this EJB's free pool. The top 20 servers are selected based on the highest average number of requests per minute over the reporting period.
EJB Timeout Rate - Top 20	Shows the number of requests for an EJB that timed out per minute while waiting for an instance of the EJB to become available from this EJB's free pool. The top 20 servers are selected based on the highest average number of timeouts per minute over the reporting period.
EJB Transaction Throughput - Top 20	Shows the average number of transactions processed per second by EJBs. The top 20 servers are selected based on the highest average number of transactions processed per second over the reporting period.
Server Queue Throughput - Top 20	Shows the average number of requests processed by a server's execute queue per second. Note that a server may have more than one execute queue. The top 20 server queues are selected based on the highest average number of requests processed per second over the reporting period.
Server Queue Utilization - Top 20	Shows the utilization of the server's execute queue thread pool as a percent of the number of threads configured for the pool. The top 20 server queues are selected based on the queue utilization mean value.
Servlet Average Response Time - Top 20	Shows the average response time for the top 20 servlets. The top 20 servlets are selected based on the highest average number of requests per second for the servlet over the reporting period.

	Shows the number of servlet requests per second by a server.
Servlet Request Rates - Top 20	The top 20 servers are selected based on the highest average number of servlet requests per second for the server over the reporting period. Along with the servlet name, the associated application name is also displayed.
Transaction Throughput - Top 20	Shows the average number of transactions processed per second for each server. The top 20 servers are selected based on the highest average number of transactions processed per second over the reporting period.

WebLogic Availability

Report Title	Description
Server Availability	Contains a daily histogram showing the percentage of uptime. In addition, a trend line provides the number of measurements performed, indicating how much data was available to determine availability. Uptime and downtime are measured by the WebLogic SPI. A lower than expected trend line may indicate systems were unavailable or the data collection was not running.
DB Connection Pools Throughput vs. Connection Utilization - Top 20	Compares the throughput vs. the utilization of the DB connection pools on the server. Throughput is the number of connections allocated by a DB connection pool per second. The utilization of a connection pool is the number of connections being used as a percent of the maximum capacity configured for the pool. The top 20 Servers are selected based on the highest average of throughput over the reporting period.
Stateful and Entity EJB Cache Hits - Top 20	Shows the percent of time a request to access a bean from an EJB's cache succeeded for the server. The top 20 EJBs are selected based on the highest average cache hit percent over the reporting period. Stateful and entity EJBs are included in this data.
Throughput vs. Utilization Of JMS Server by Message Size - Top 20	Compares the throughput vs. utilization of the JMS Servers on the server based on the size of JMS messages. The throughput is the number of JMS messages processed by a JMS server per second. The utilization of the message queue is the total size of the messages being processed as a percent of the maximum size configured for the queue.

	The top 20 Servers are selected based on the highest average of throughput over the reporting period.
Throughput vs. Utilization Of JMS Server by Message Count - Top 20	Compares the throughput vs. utilization of the JMS Servers on the server based on the number of JMS messages. The throughput is the number of JMS messages processed by a JMS server per second. The utilization of the message queue is the number of messages being processed as a percent of the maximum number of messages configured for the queue. The top 20 Servers are selected based on the highest average of throughput over the reporting period
Server Availability Details	Contains spectrum graphs showing minutes of uptime by day and hour for the system. Uptime and downtime are measured by the WebLogic SPI. "No Data" may include system downtime or data collection not running. Graphs are based on measured uptime and downtime only (i.e. standby = down). The spectrum graphs use color to indicate the uptime percentage during each hour of each day.
Server Queue Throughput vs. Utilization - Top 2	Shows the throughput vs. the utilization of the server execute queues on the server. The throughput is the number of requests processed by a server queue per second. The utilization of the server queue is the number of busy threads in the server queue thread pool as a percent of the number of threads configured for the pool. The top 20 Servers are selected based on the highest average of throughput over the reporting period.
Transaction Throughput - Top 20	Shows the average number of transactions processed per second for each server on the system. The top 20 servers are selected based on the highest average number of transactions processed per second over the reporting period.
Servlet Requests - Top 20	Shows the number of requests per second for servlets on the server. The top 20 servlets are selected based on the highest average number of requests per second for the servlet over the reporting period.
Transaction Rollbacks	Shows the percent of processed transactions that had to be rolled back for the server. Each color in the chart bar represents the amount of the rollback percent that is attributable to each error category.

Data Store Details for Reports

The WebLogic SPI creates the following data store details for reports for WebLogic Server.

Report Name	Report Table Name *and* Data Store Class Name	Report Table Attributes	Policy Logging Data
a_wls_availability.rpt g_wls_availability.rpt s_wls_availability_details.rpt a_wls_availability.rpt g_wls_availability.rpt s_wls_availability_details.rpt			WLSSPI-05min
a_wls_perf_server_tput_top.rpt g_wls_perf_server_tput_top.rpt s_wls_perf_load_exec_queues.rpt a_wls_perf_server_tput_top.rpt g_wls_perf_server_tput_top.rpt s_wls_perf_load_exec_queues.rpt			WLSSPI-15min
a_wls_load_exec_util_top.rpt g_wls_load_exec_util_top.rpt s_wls_perf_load_exec_queues.rpt a_wls_load_exec_util_top.rpt g_wls_load_exec_util_top.rpt s_wls_perf_load_exec_queues.rpt			WLSSPI_0011 WLSSPI-15min
a_wls_load_ejb_pool_rate_top.rpt g_wls_load_ejb_pool_rate_top.rpt a_wls_load_ejb_pool_rte_top.rpt g_wls_load_ejb_pool_rate_top.rpt			WLSSPI_0025 WLSSPI-15min
a_wls_load_ejb_timeout_rate_top.rpt g_wls_load_ejb_timeout_rate_top.rpt			WLSSPI_0026

g_wls_load_ejb_timeout_rate_top.rpt a_wls_load_ejb_timeout_rate_top.rpt g_wls_load_ejb_timeout_rate_top.rpt			WLSSPI- 15min
a_wls_perf_ejb_trans_tput_top.rpt g_wls_perf_ejb_trans_tput_top.rpt a_wls_perf_ejb_trans_tput_top.rpt g_wls_perf_ejb_trans_tput_top.rpt			WLSSPI_0035 WLSSPI- 15min
s_wls_trans_rollback_percent.rpt s_wls_trans_rollback_percent.rpt			WLSSPI_0072 WLSSPI- 05min
s_wls_trans_rollback_percent.rpt s_wls_trans_rollback_percent.rpt			WLSSPI_0073 WLSSPI- 05min
s_wls_trans_rollback_percent.rpt s_wls_trans_rollback_percent.rpt		ID SYSTEMNAME DATETIME GMT SHIFTNAME METRICID OBJECTNAME SERVERNAME SORTID VALUE VALUEID APPLICATIONNAME	WLSSPI_0074 WLSSPI- 05min
s_wls_trans_rollback_percent.rpt s_wls_trans_rollback_percent.rpt	WEBLOGIC		WLSSPI_0075 WLSSPI- 05min
a_wls_perf_trans_tput_top.rpt g_wls_perf_trans_tput_top.rpt s_wls_trans_throughput.rpt a_wls_perf_trans_tput_top.rpt g_wls_perf_trans_tput_top.rpt s_wls_trans_throughput.rpt			WLSSPI- 05min
s_wls_state_ejb_cache_util_top.rpt s_wls_state_ejb_cache_util_top.rpt			WLSSPI_0238 WLSSPI- 15min
a_wls_servlet_exec_time_top.rpt g_wls_servlet_exec_time_top.rpt s_wls_servlet_request_rate.rpt a_wls_servlet_exec_time_top.rpt g_wls_servlet_exec_time_top.rpt			WLSSPI_0240 WLSSPI-1h

s_wls_servlet_request_rate.rpt			
a_wls_load_svlt_req_top.rpt a_wls_servlet_exec_time_top.rpt g_wls_load_svlt_req_top.rpt g_wls_servlet_exec_time_top.rpt s_wls_servlet_request_rate.rpt a_wls_load_svlt_req_top.rpt a_wls_servlet_exec_time_top.rpt g_wls_load_svlt_req_top.rpt g_wls_servlet_exec_time_top.rpt s_wls_servlet_request_rate.rpt			WLSSPI_0242 WLSSPI-1h
s_wls_perf_load_jms_servers_msg.rpt s_wls_perf_load_jms_servers_msg.rpt			WLSSPI_0251 WLSSPI- 15min
s_wls_perf_load_jms_servers_byte.rpt s_wls_perf_load_jms_servers_byte.rpt			WLSSPI_0252 WLSSPI- 15min
s_wls_perf_load_jms_servers_msg.rpt s_wls_perf_load_jms_servers_msg.rpt			WLSSPI- 15min
s_wls_perf_load_jms_servers_byte.rpt s_wls_perf_load_jms_servers_byte.rpt			WLSSPI- 15min
s_wls_perf_load_jdbc_conn_pools.rpt s_wls_perf_load_jdbc_conn_pools.rpt			WLSSPI_0260 WLSSPI- 05min
s_wls_perf_load_jdbc_conn_pools.rpt s_wls_perf_load_jdbc_conn_pools.rpt			WLSSPI- 05min

Graphing Metrics

The following tables show the graphs available for mapping collected metric values. If you want to view the graph for any of the metrics included in the following tables, you can use the View Graphs tool. A graph of the metric as well as other related metrics appears in your web browser.

Cluster

Graph Label	Metric Name	Metric Description
Cluster Outgoing Message Failure Rate	B080_ClsOutMesFailRt	Number of multicast messages per minute resent to cluster.
Cluster Incoming Message Failure Rate	B081_ClsInMesFailRt	Number of multicast messages per minute from cluster lost by the server.

Enterprise Java Beans (EJB)

Graph Label	Metric Name	Metric Description
Aggregate EJB Free Pool Wait Rate	B025_EJBFreePoolWtRt	Number of times per minute that no EJB beans were available from the free pool.
EJB Timeout Rate	B026_EJBTimeoutRt	Number of times per minute a client timed out waiting for an EJB.
EJB Transaction Throughput Rate	B035_EJBTranThruRt	Number of EJB transactions per second.
EJB Transaction Rollback Rate	B036_EJBTranRbRt	Number of EJB transactions rolled back per second.
Destroyed Total Count	B822_DstroydTlCnt	Total number of times a bean instance from the pool was destroyed due to a non-application Exception being thrown from it
EJB Missed Count Rate sum	B823_EJBMssdCntRtSum	Number of times a failed attempt was made to get an instance from the free pool

Server Status (Serverstat)

Graph Label	Metric Name	Metric Description
Socket Traffic Rate	B013_ SocketTrafficRt	Number of socket connections opened per second.
Active Socket Count	B014_ActiveSocketCnt	Number of socket connections opened.
JDBC Connect Pool Wait Count	B061_JDBCConPlWtCnt	Number of clients waiting for a connection from the connections pools.
Invalid Login Attempts Count	B085_InvLoginAttCnt	Number of invalid login attempts.
Timer Services Throughput Rate	B091_TimeSerThruRt	Number of triggers executed per second.
Server Restart Required	B820_SrvrRestReqrd	Server Restart Required

Transaction

Graph Label	Metric Name	Metric Description
Transaction Average Time	B070_TranAveTime	Average commit time for transactions.
Transaction Rollback Percent	B071_TranRollbackPct	Percentage of transactions rolled back, based on the total.
Transaction Resource Error Rollback Percent	B072_TranResErrRbPct	Percentage of the transactions rolled back due to resource error.
Transaction Application Error Rollback Percent	B073_TranAppErrRbPct	Percentage of transactions rolled back due to application error.
Transaction Time Error Rollback Percent	B074_TranTimErrRbPct	Percentage of transactions rolled back due to a timeout error.
Transaction System Error Rollback Percent	B075_TranSysErrRbPct	Percentage of the transactions rolled back, based on system error.
Transaction Throughput Rate	B076_TranThruRate	Number of transactions processed per second.

| Transaction Heuristic Count | B077_TranHeurCnt | Percentage of transactions returning a heuristic decision. |

JVM

Graph Label	Metric Name	Metric Description
JVM Memory Utilization Percent	B005_JVMMemUtilPct	Percentage of heap space used in the JVM.
JVM Heap Free Memory	B819_JVMHeapFreeMem	JVM Heap Free Memory in kilobytes

ThreadPool

Graph Label	Metric Name	Metric Description
Suspended	B821_Suspnded	RequestManager Suspended

Data Store Details for Graphs

The WebLogic SPI creates the following data store details for graphs for WebLogic Server.

Graph Name	Policy Logging Data	Spec File	Data StoreData Class
JVM Utilization	WLSSPI_0005 WLSSPI-15min		
ThreadPool	WLSSPI_0010 WLSSPI-15min		
	WLSSPI_0011 WLSSPI-15min		
	WLSSPI_0012 WLSSPI-15min		
Server Statistics	WLSSPI_0013 WLSSPI-15min		
	WLSSPI_0014 WLSSPI-15min		
	WLSSPI_0015 WLSSPI-15min		
EJB Performance	WLSSPI_0025 WLSSPI-15min		
	WLSSPI_0026 WLSSPI-15min		
	WLSSPI_0035 WLSSPI-15min		

	WLSSPI_0036 WLSSPI-15min		
JDBC Pool Waits	WLSSPI_0061 WLSSPI-05min		
	WLSSPI_0063 WLSSPI-05min		
Transaction Performance	WLSSPI_0070 WLSSPI-05min		
Transaction Rollback Percent	WLSSPI_0071 WLSSPI-05min		
	WLSSPI_0072 WLSSPI-05min		
Transaction Rollback Analysis	WLSSPI_0073 WLSSPI-05min	wasspi_wls_graph.sp	wasspi_wls_graph
	WLSSPI_0074 WLSSPI-05min		
	WLSSPI_0075 WLSSPI-05min		
	WLSSPI_0076 WLSSPI-05min		
Transaction Performance	WLSSPI_0077 WLSSPI-05min		
Server Statistics	WLSSPI_0078 WLSSPI-05min		
Transaction Performance	WLSSPI_0079 WLSSPI-05min		
	WLSSPI_0080		

Cluster	WLSSPI-05min		
	WLSSPI_0081 WLSSPI-05min		
Security	WLSSPI_0085 WLSSPI-05min		
ThreadPool	WLSSPI_0283 WLSSPI-15min		
	WLSSPI_0284 WLSSPI-15min		
	WLSSPI_0285 WLSSPI-15min		
	WLSSPI_0286 WLSSPI-15min		
	WLSSPI_0287 WLSSPI-15min		
	WLSSPI_0288 WLSSPI-15min		

Error messages

The listed error messages result from conditions detected in the operation of the Smart Plug-in for BEA WebLogic Server (WebLogic SPI), not WebLogic itself. Click on the error message number to display detailed information about that error message.
>

1 - 21	21 - 43	201 - 223	224 - 254
WASSPI-1	WASSPI-21	WASSPI-201	WASSPI-224
WASSPI-2	WASSPI-23	WASSPI-202	WASSPI-225
WASSPI-3	WASSPI-24	WASSPI-203	WASSPI-226
WASSPI-4	WASSPI-26	WASSPI-204	WASSPI-227
WASSPI-5	WASSPI-27	WASSPI-205	WASSPI-228
WASSPI-6	WASSPI-28	WASSPI-206	WASSPI-229
WASSPI-7	WASSPI-29	WASSPI-207	WASSPI-230
WASSPI-8	WASSPI-30	WASSPI-208	WASSPI-231
WASSPI-9	WASSPI-31	WASSPI-209	WASSPI-232
WASSPI-10	WASSPI-32	WASSPI-210	WASSPI-233
WASSPI-11	WASSPI-33	WASSPI-211	WASSPI-234
WASSPI-12	WASSPI-34	WASSPI-212	WASSPI-235
WASSPI-13	WASSPI-35	WASSPI-213	WASSPI-236
WASSPI-14	WASSPI-36	WASSPI-214	WASSPI-237

WASSPI-15	WASSPI-37	WASSPI-215	WASSPI-238
WASSPI-16	WASSPI-38	WASSPI-216	WASSPI-241
WASSPI-17	WASSPI-39	WASSPI-218	WASSPI-244
WASSPI-18	WASSPI-40	WASSPI-219	WASSPI-245
WASSPI-19	WASSPI-41	WASSPI-220	WASSPI-247
WASSPI-20	WASSPI-42	WASSPI-221	WASSPI-248
	WASSPI-43	WASSPI-222	WASSPI-254
		WASSPI-223	Unknown

WASSPI-1

Description	Unable to create the lock file *<filename>* . File already exists.
Severity	Critical
Help Text	**Probable Cause** Temporary lock files are used to avoid collisions when multiple WebLogic SPI data collector processes attempt to access the same data file. This error occurs when the lock file cannot be created after several attempts because it already exists. **Suggested Action** If a file by the same name already exists, it may not have been deleted by a previous run of the WebLogic SPI data collector. You should delete this file manually.

WASSPI-2

Description	Cannot access the SPI configuration.
Severity	Critical
Help Text	**Probable Cause** A WLSSPI configuration file could not be located or accessed. Either the file does not exist or there was a problem reading the file. **Suggested Action** 1. Verify that the WebLogic SPI has been configured correctly by running the SPI Admin ⟶ Verify tool. If the configuration is not correct, run the **SPI Admin ⟶ Discover or Configure WLSSPI** tool to reinstall the files. 2. Refer to the text following the error message in the WLSSPI error log to help identify the underlying cause of the problem, for example, an I/O exception. You can view the SPI error log for a managed node by using the **SPI Admin ⟶ View Error File** tool. The error message can be identified by the date/time stamp.

WASSPI-3

Description	Error parsing command line.
Severity	Critical
Help Text	**Probable Cause** The WebLogic SPI data collector command line is incorrectly specified in a deployed policy. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the data collector command line syntax error. You can view the SPI error log for a managed node by using the **SPI Admin** → **View Error File** tool. The error message can be identified by the date/time stamp. 2. Correct the policy that contains the incorrect command line and redeploy. Refer to the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide* for more information on the WebLogic SPI data collector command line.

WASSPI-4

Description	Error getting the metric definitions.
Severity	Critical
Help Text	**Probable Cause** The WebLogic SPI data collector could not read the metric definitions XML document. This error can be caused by a missing configuration property, an I/O error, an XML parsing error, a missing file, or a corrupted serialized data file. **Suggested Action** 1. Refer to the text following the error message in the WLSSPI error log to help identify the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin ▸ View Error File** tool. The error message can be identified by the date/time stamp. 2. If the UDM_DEFINITIONS_FILE property is missing from the WLSSPI configuration, run the **SPI Admin ▸ Discover or Configure WLSSPI** tool with the managed node selected. 3. If the problem is with the metric definitions file (`MetricDefinitions.xml`) that is shipped with the WebLogic SPI, run the **SPI Admin ▸ Discover or Configure WLSSPI** tool with the managed node selected. 4. If the problem is with a user-defined metric definitions file that is not shipped with the WebLogic SPI, verify that this XML file adheres to the `MetricDefinitions.dtd` specification. Refer to the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide* for more information on writing user-defined metrics. Reinstall your user-defined metric definition file. Run the **SPI Admin ▸ View Error File** tool. The error message can be identified by the date/time stamp. 5. If the UDM_DEFINITIONS_FILE property is missing from the WLSSPI configuration, run the **SPI Admin ▸ Discover or Configure WLSSPI** tool and verify that the UDM_DEFINITIONS_FILE property in the SPI configuration is specified correctly. 6. If the underlying error is 'ClassNotFound', the this is an internal error. Report this to HP support.

WASSPI-5

Description	Error processing metric *<metric_number>* .
Severity	Major
Help Text	**Probable Cause** An error occurred while trying to collect data or perform calculations for the specified metric. **Suggested Action** Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. The error messages previous to this one may also provide more information about the problem. You can view the SPI error log for a managed node by using the **SPI Admin** ⇀ **View Error File** tool. The error message can be identified by the date/time stamp.

WASSPI-6

Description	Required property *<property_name>* is missing from the WLSSPI configuration.
Severity	Major
Help Text	**Probable Cause** The specified required property is missing from the WebLogic SPI configuration file. **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool. Verify that you have specified the correct server information for the WebLogic servers on this managed node. 2. Verify the property is specified correctly in the WLSSPI configuration file (`/var/opt/OV/conf/wlsspi/SiteConfig` or `/var/lpp/OV/conf/wlsspi/SiteConfig` on UNIX platforms or `<%OvAgentDir%>\ wasspi\wls\conf\SiteConfig` on Windows platforms) on the managed node.

WASSPI-7

Description	Unable to contact server *<server_name>* at url=*<URL>* , port=*<port>* .
Severity	Major
Help Text	**Probable Cause** The specified server is not running at the specified port. **Suggested Action** 1. Run the Discover or Configure WLSSPI tool from the SPI Admin tools group. Verify that you have specified the correct server name and port information for the WebLogic servers on this managed node. 2. Verify that the WebLogic server is running on the managed node.

WASSPI-8

Description	Error saving graphing or reporting data to file *<file_name>* .
Severity	Critical
Help Text	**Probable Cause** The specified graphing or reporting data file could not be found or an I/O error occurred when trying to access the file. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin → View Error File** tool. The error message can be identified by the date/time stamp. 2. Identify the steps to reproduce the problem.. 3. Run the **SPI Admin → Start Tracing** tool to turn on tracing. Try to reproduce the problem. 4. Run the **SPI Admin → Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-9

Description	Unable to retrieve property *<property_name>* .
Severity	Critical
Help Text	**Probable Cause** A required property is missing from one of the WebLogic SPI configuration files. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the missing property. You can view the SPI error log for a managed node by using the **SPI Admin → View Error File** tool. The error message can be identified by the date/time stamp. 2. Run the **SPI Admin → Discover or Configure WLSSPI** tool. Verify that you have specified the correct information for the WebLogic servers on the managed node in question.

WASSPI-10

Description	Encountered problem accessing file *<filename>* .
Severity	Critical
Help Text	**Probable Cause** The specified file could not be found, created, or accessed. This file could be a temporary file. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the file in question and the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin → View Error File** tool. The error message can be identified by the date/time stamp. 2. Verify that you have enough disk space to create temporary files.

WASSPI-11

Description	No servers have been specified in the WebLogic SPI configuration file.
Severity	Critical
Help Text	**Probable Cause** The number of WebLogic servers specified in the WebLogic SPI configuration file for the managed node in question is 0. **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool. Verify that you have specified the correct server name and port information for the WebLogic servers on this managed node. 2. Verify that the property, NUM_SERVERS, in the WebLogic SPI configuration file (`/var/opt/OV/wasspi/wls/conf/SiteConfig` on UNIX platforms or `<%OvAgentDir%> \wasspi\wls\conf\SiteConfig` on Windows platforms) is set to the number of WebLogic servers on this managed node.

WASSPI-12

Description	Command *<command>* returned error exit code *<exit code>* .
Severity	Critical
Help Text	**Probable Cause** The command started by the WLSSPI collector has returned an error (non-zero) exit code. **Suggested Action** 1. Identify the steps to reproduce the problem. 2. Run the **SPI Admin → Start Tracing** tool to turn on tracing. 3. Reproduce the problem. 4. Run the **SPI Admin → Stop Tracing** tool to turn off tracing. 5. Run the **SPI Admin → Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-13

Description	Exception occurred while running an opcmon process.
Severity	Critical
Help Text	**Probable Cause** The WebLogic SPI data collector attempted to run a process to execute an opcmon call. Either the process could not be created or was interrupted. **Suggested Action** For Unix systems make sure the kernel configurable parameters NPROC and MAXUPRC are set high enough to allow process creation.

WASSPI-14

Description	Unable to find file *<file_name>* .
Severity	Critical
Help Text	**Probable Cause** A file required by the WebLogic SPI data collector could not be found. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the file in question and the underlying cause of the problem.You can view the SPI error log for a managed node by using the **SPI Admin** ⟶ **View Error File** tool. The error message can be identified by the date/time stamp. 2. Run the **SPI Admin** ⟶ **Discover or Configure WLSSPI** tool with the managed node selected.

WASSPI-15

Description	Error parsing XML document *<file_name>* .
Severity	Critical
Help Text	**Probable Cause** An error occurred while parsing the specified XML document. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin ➔ View Error File** tool. The error message can be identified by the date/time stamp. 2. If the XML document was provided by the user, correct the document. Refer to the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide* for more information about the correct format for a user-defined metric definition document. 3. If the XML document is a document that is shipped with the WebLogic SPI, run the **SPI Admin ➔ Discover or Configure WLSSPI** to reinstall the WebLogic SPI configuration files.

WASSPI-16

Description	A bad filter was specified for metric *<metric_number>* .
Severity	Major
Help Text	**Probable Cause** A metric filter is incorrectly specified in the metric definitions XML document. **Suggested Action** 1. If the metric is specified in an XML document that was provided by the user, correct the document. Refer to the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide* for more information about the correct format for a user-defined metric definition document. 2. If the metric is a pre-defined metric that is shipped with the WebLogic SPI, run the **SPI Admin → Discover or Configure WLSSPI** to reinstall the WebLogic SPI configuration files.

WASSPI-17

Description	Could not access MBean server on server *<server_name>* at url=*<URL>* , port=*<port_number>* .
Severity	Critical
Help Text	**Probable Cause** A problem occurred while the WebLogic SPI data collector was requesting access to the JMX MBean server on the WebLogic server. This could be caused by: 1. The JNDI lookup to find the JMX Mbean server in the application server failed. 2. The login name specified in the WebLogic SPI configuration file does not have the correct permissions in the application server. 3. The password specified in the WebLogic SPI configuration file is incorrect. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin → View Error File** tool. The error message can be identified by the date/time stamp. 2. Run the **SPI Admin → Discover or Configure WLSSPI** tool. Verify that the LOGIN and PASSWORD properties are correct for the server in question. 3. In the WebLogic Administration Console, verify that the user is a valid WebLogic user and has the correct permissions. To set the correct permissions, refer to the *HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide* . 4. In the WebLogic Administration Console, verify that the MBean server (`weblogic.management.home.<server_name>`) is in the JNDI tree of the server in question. Right-click the server in the left pane to view the JNDI tree. If it is not there, restart the WebLogic server.

WASSPI-18

Description	Data logging failed: ddflog returned error *<error_number>* .
Severity	Warning
Help Text	**Probable Cause** The ddflog process started by the WebLogic SPI data collector returned a non-zero error code. **Suggested Action** 1. Identify the steps to reproduce the problem. 2. Run the **SPI Admin** ⟶ **Start Tracing** tool to turn on tracing. Try to reproduce the problem. 3. Run the **SPI Admin** ⟶ **Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-19

Description	Encountered problem instantiating XSLT transformer with *<file_name>* .
Severity	Major
Help Text	**Probable Cause** The XSL document that specifies the auto action report output contains errors. **Suggested Action** Run the **SPI Admin** → **Discover or Configure WLSSPI** tool with the managed node selected.

WASSPI-20

Description	Encountered problem creating report for metric *<metric_number>* .
Severity	Major
Help Text	**Probable Cause** An error occurred while producing a text report for the specified metric. **Suggested Action** Run the **SPI Admin → Discover or Configure WLSSPI** tool with the managed node selected.

WASSPI-21

Description	Encountered problem instantiating factory implementation *<class name>* .
Severity	Critical
Help Text	**Probable Cause** The java property specifying the class name is incorrect or the class does not implement the AppServerFactory interface. **Suggested Action** Verify java property, `appserver.implementation` is set to the fully qualified name which implements the AppServerFactory interface. For example, if set on the java command `-Dappserver.implementation=com.hp.openview.wasspi.WLSAppServe`

WASSPI-23

Description	Error initializing collector analyzer for server *<server_name>* .
Severity	Critical
Help Text	**Probable Cause** An exception was encountered while preparing to monitor server *<server_name>* **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin → View Error File** tool. The error message can be identified by the date/time stamp. 2. Identify the steps to reproduce the problem. 3. Run the **SPI Admin → Start Tracing** tool to turn on tracing. Try to reproduce the problem. 4. Run the **SPI Admin → Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-24

Description	Error logging in to server *<server_name>* with login *<login>* .
Severity	Critical
Help Text	**Probable Cause** A security exception occurred while logging in to the server *<server_name>* . **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool on the managed node on which the error occurred and verify that you have specified the correct LOGIN and PASSWORD properties. 2. Verify the login has appropriate permissions.

WASSPI-26

Description	The data logging process for server *<server_name>* timed-out.
Severity	Major
Help Text	**Probable Cause** Depending on your configuration, either HP Performance Agent or CODA failed to exit before the time-out. **Suggested Action** • Restart CODA using command `opcagt -start`. • Restart HP Performance Agent using command `mwa restart`.

WASSPI-27

Description	RMI collector unable to process *<command>*
Severity	Warning
Help Text	**Probable Cause** An exception was encountered while performing an rmid related operation. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin** → **View Error File** tool. The error message can be identified by the date/time stamp. 2. Identify the steps to reproduce the problem. 3. Run the **SPI Admin** → **Start Tracing** tool to turn on tracing. Try to reproduce the problem. 4. Run the **SPI Admin** → **Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-28

Description	RMID on port *\<port\>* has been *\<status\>*
Severity	Normal

WASSPI-29

Description	Collector server *<server id>* for Java home *<path>* has been started.
Severity	Normal

WASSPI-30

Description	Failed to start *<rmid_path>* on port *<port>* .
Severity	Critical
Help Text	**Probable Cause** The specified port is already in use. **Suggested Action** Run the **SPI Admin → Discover or Configure WLSSPI** tool. Set the RMID_PORT property to a port number which is not currently in use.

WASSPI-31

Description	Lost connection to RMI collector while processing *<command>*
Severity	Warning

WASSPI-32

Description	Unable to retrieve metadata for MBean <JMX-ObjectName>
Severity	Warning

WASSPI-33

Description	No actions matched server <server name>, version <version>
Severity	Warning
Help Text	**Probable Cause** JMXAction element(s) define FromVersion and ToVersion tags which do not match the server version. **Suggested Action** If the action is valid on the server, then either adjust the JMXAction definition's FromVersion/ToVersion elements or the server's VERSION property.

WASSPI-34

Description	Metric *<metric id>* does not define any actions.
Severity	Warning
Help Text	**Probable Cause** The metric ID specified with the action -m option does not define a JMXActions element. **Suggested Action** Correct the action -m option if an incorrect metric ID was specified, otherwise add a JMXActions definition to the metric definition.

WASSPI-35

Description	Error executing action *<action command-line>*
Severity	Major
Help Text	**Probable Cause** An unexpected error occurred while executing the action. **Suggested Action** View the managed node's error log to determine the root cause which is logged following the error message.

WASSPI-36

Description	MBean *<JMX objectname>* on server *<server name>* , does not expose operation *<operation name>*
Severity	Warning
Help Text	**Probable Cause** An action's JMXCalls element defines an operation not exposed by the specified MBean. **Suggested Action** Correct the JMXCalls element or remove the operation from the element.

WASSPI-37

Description	MBean *<JMX objectname>* on server *<server name>* , does not expose attribute *<attribute name>* for write.
Severity	Warning
Help Text	**Probable Cause** An action's JMXCalls element defines a write attribute exposed by the specified MBean as read-only. **Suggested Action** If it is a custom MBean, update the MBean's management interface so the attribute is writable, otherwise remove the attribute definition from the JMXCalls element.

WASSPI-38

Description	MBean *<JMX objectname>* on server *<server name>* , does not expose attribute *<attribute name>*
Severity	Warning
Help Text	**Probable Cause** An action's JMXCalls element defines an attribute not exposed by the specified MBean ObjectName. **Suggested Action** Correct the JMXCalls element or remove the attribute from the element.

WASSPI-39

Description	Error invoking operation *<operation name>* on MBean *<JMX objectname>*
Severity	Major
Help Text	**Probable Cause** An unexpected error occurred while invoking an operation on the specified MBean. The managed resource may have thrown an exception. **Suggested Action** View the managed node's errorlog to determine the root cause which is logged following the error message.

WASSPI-40

Description	Error getting attribute *<attribute name>* on MBean *<JMX objectname>*
Severity	Major
Help Text	**Probable Cause** An unexpected error occurred while getting an attribute on the specified MBean. The managed resource may have thrown an exception. **Suggested Action** View the managed node's errorlog to determine the root cause which is logged following the error message.

WASSPI-41

Description	Error getting attribute *<attribute name>* from MBean *<JMX objectname>*
Severity	Major
Help Text	**Probable Cause** An unexpected error occurred while getting an attribute from the specified MBean. The managed resource may have thrown an exception. **Suggested Action** View the managed node's errorlog to determine the root cause which is logged following the error message.

WASSPI-42

Description	Error running command *\<command\>*
Severity	Critical
Help Text	**Probable Cause** A command started by the WLSSPI collector reported an error. **Suggested Action** 1. Identify the steps to reproduce the problem. 2. Run the **SPI Admin → Start Tracing** tool to turn on tracing. 3. Reproduce the problem. 4. Run the **SPI Admin → Stop Tracing** tool to turn off tracing. 5. Run the **SPI Admin → Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-43

Description	Error publishing event *<event-type>*
Severity	Major
Help Text	**Probable Cause** An unexpected error occurred while a publisher was handling a metric or collect event. **Suggested Action** View the managed node's errorlog to determine the root cause which is logged following the error message.

WASSPI-201

Description	File *<filename>* not found.
Severity	Critical
Help Text	**Probable Cause** A configuration file could not be found. **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool. 2. Verify that the correct information has been specified for the WebLogic servers on the managed node on which the error occurred.

WASSPI-202

Description	Cannot read file *<filename>* .
Severity	Critical
Help Text	**Probable Cause** • A file could not be opened or it could not be found. • Permissions may be incorrect or a directory may be corrupt. **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool. Verify that you have specified the correct information for the WebLogic servers on the managed node on which the error occurred. 2. Verify that the permissions are correct for the HP Operations agent user to read this file.

WASSPI-203

Description	Cannot write file *\<filename\>* .
Severity	Critical
Help Text	**Probable Cause** Permissions may be incorrect, or a file or directory may be corrupt. **Suggested Action** 1. Run the **SPI Admin** → **Discover or Configure WLSSPI** tool. Verify that you have specified the correct information for the WebLogic servers on the managed node on which the error occurred. 2. Verify that the permissions are correct for the HP Operations agent user to write this file.

WASSPI-204

Description	Error sending opcmsg *<message>* .
Severity	Critical
Help Text	**Probable Cause** There was a problem running opcmsg. opcmsg may be missing or not have permissions to execute. **Suggested Action** Confirm that the WLSSPI-Messages policy has been deployed.

WASSPI-205

Description	Error sending opcmon *<command>* .
Severity	Critical
Help Text	**Probable Cause** There was a problem running opcmon. 'opcmon' may be missing or not have permissions to execute. **Suggested Action** Confirm that HPOM is properly installed and deployed to the managed node. Ensure that the process table is not full. If it is, consider having the system administrator increase it.

WASSPI-206

Description	Cannot read directory *<directory>* .
Severity	Critical
Help Text	**Probable Cause** The permissions on the directory prevent the HP Operations agent user from reading it or the directory is corrupt. **Suggested Action** Verify that the permissions are correct for the HP Operations agent user for this directory.

WASSPI-207

Description	Cannot move *\<filename\>* to *\<filename\>* .
Severity	Critical
Help Text	**Probable Cause** • Insufficient permissions. • Insufficient disk space. • File table problems. **Suggested Action** 1. Verify that the permissions are correct for the HP Operations agent user. 2. Verify that there is enough disk space to create files. 3. Run the WebLogic SPI **SPI Admin ➞ Discover or Configure WLSSPI** tool.

WASSPI-208

Description	The SPI must be configured before it can be used
Severity	Critical
Help Text	**Probable Cause** The SPI has not been configured on this node. **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool. Verify that you have specified the correct information for the WebLogic servers on the managed node on which the error occurred. 2. Run the **SPI Admin → Verify** tool on the managed node to confirm that the SPI has been successfully Discover or Configured.

WASSPI-209

Description	Cannot contact WebLogic Server
Severity	Critical
Help Text	**Probable Cause** • The server could be down or not responding. • The SPI may be configured incorrectly. **Suggested Action** 1. Run the **SPI Admin** ➝ **Discover or Configure WLSSPI** tool. 2. Run the **SPI Admin** ➝ **Verify** tool on the managed node to confirm that the SPI has been successfully Discover or Configured.

WASSPI-210

Description	Cannot configure the SPI.
Severity	Critical
Help Text	**Probable Cause** The SPI configuration process failed. **Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. The error messages previous to this one will provide more information about the problem. You can view the SPI error log for a managed node by using the **SPI Admin → View Error File** tool. The error message can be identified by the date/time stamp. 2. Run the **SPI Admin → Discover or Configure WLSSPI** tool on the managed node.

WASSPI-211

Description	Cannot create directory *<directory>*
Severity	Critical
Help Text	**Probable Cause** There are insufficient permissions for the HP Operations agent user to create the directory or there is insufficient disk space. **Suggested Action** 1. Verify that the permissions are correct for the HP Operations agent user for this directory. 2. Verify that there is enough disk space.

WASSPI-212

Description	WLS-5 monitor running on this node but no WLS-5 servers configured
Severity	Critical
Help Text	**Probable Cause** The agent template for WebLogic 5 is assigned to a node but the SPI configuration does not indicate that any WebLogic 5 servers are located on this node. **Suggested Action** 1. If there are no WebLogic 5 server located on this node, unassign the WebLogic 5 policies from this node and redeploy agent to the managed node. 2. If there is a WebLogic 5 server located on this node, run the **SPI Admin → Discover or Configure WLSSPI** tool and specify the correct information in the configuration.

WASSPI-213

Description	Improper parameters to program *\<name\>* . Usage: *\<usage\>*
Severity	Critical
Help Text	**Probable Cause** The parameters to the program are incorrect. **Suggested Action** Correct the parameters.

WASSPI-214

Description	Cannot run program *<program name>*
Severity	Critical
Help Text	**Probable Cause** The program failed to run. It may be missing, permissions may be incorrect, the process table may be full. **Suggested Action** 1. Verify that the file exists. If it is a SPI program and the file is missing, run the **SPI Admin → Discover or Configure WLSSPI** tool again on the managed node. 2. Verify that the permissions are correct for the HP Operations agent user.

WASSPI-215

Description	A WebLogic server was not found in *<directory>*
Severity	Critical
Help Text	**Probable Cause** The directory specified as HOME in the SPI configuration does not exist on the managed node. **Suggested Action** 1. Verify that WebLogic is installed on the managed node. 2. Run the **SPI Admin → Discover or Configure WLSSPI** tool. 3. Verify that the correct information has been specified for HOME on the managed node on which the error occurred.

WASSPI-216

Description	Configuration variable *\<name>* missing for server *\<server_name>*
Severity	Critical
Help Text	**Probable Cause** A required SPI configuration variable was not found. **Suggested Action** 1. Run the **SPI Admin ➝ Discover or Configure WLSSPI** tool. 2. Verify that the correct information has been specified in the configuration for the managed node on which the error occurred.

WASSPI-218

Description	WebLogic monitoring has been turned OFF for *<server_name>* .
Severity	Warning
Help Text	**Probable Cause** Collection has been turned off for the specified server. **Suggested Action** If desired, collection can be turned on by running the **SPI Admin** ➝ **Start Monitoring** tool on the managed node.

WASSPI-219

Description	WebLogic monitoring has been turned ON for *<server_name>* .
Severity	Critical
Help Text	**Probable Cause** Collection has been turned on for the specified server **Suggested Action** If desired, collection can be turned OFF by running the **SPI Admin → Stop Monitoring** tool on the managed node.

WASSPI-220

Description	This feature only applies to WebLogic 5.1.
Severity	Warning
Help Text	**Probable Cause** User attempted to perform a function on a WebLogic 6 or higher server that only applies to WebLogic 5 servers. **Suggested Action** This function can only be performed on a WebLogic Server version 5.1.

WASSPI-221

Description	*<file_name>* does not exist.
Severity	Critical
Help Text	**Probable Cause** The specified file does not exist. If it is a log file, no entries have ever been logged to it. If it is a property file, then it has not been configured. **Suggested Action** Run the **SPI Admin → Discover or Configure WLSSPI** tool.

WASSPI-222

Description	*<file_name>* is empty.
Severity	Critical
Help Text	**Probable Cause** The specified file is empty. If it is a log file, no entries have ever been logged to it, or the entries have been cleaned out. If it is a property file, then it is not properly configured. **Suggested Action** If the file is a configuration file, run the **SPI Admin → Discover or Configure WLSSPI** tool.

WASSPI-223

Description	Cannot read *<file_name>* .
Severity	Critical
Help Text	**Probable Cause** • A file could not be opened or it could not be found. • Permissions may be incorrect or a directory may be corrupt. **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool. Verify that you have specified the correct information for the WebLogic servers on the managed node on which the error occurred. 2. Verify that the permissions are correct for the HP Operations agent user to read this file.

WASSPI-224

Description	ddfcomp returned an error configuring *\<name\>* .
Severity	Critical
Help Text	**Probable Cause** ddfcomp returned an error. This could be because neither OVPA nor CODA is installed on the system or because an error occurred while configuring the performance agent. **Suggested Action** 1. If the performance agent is not installed, this error can be ignored. 2. Otherwise, identify the steps to reproduce the problem. 3. Run the **SPI Admin** → **Start Tracing** tool to turn on tracing. Try to reproduce the problem. 4. Run the **SPI Admin** → **Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-225

Description	No logfiles were found. Did you run 'Config WLSSPI'?
Severity	Critical
Help Text	**Probable Cause** The logfile list is empty. **Suggested Action** Run the **SPI Admin → Discover or Configure WLSSPI** tool with the managed node selected.

WASSPI-226

Description	Cannot read file *<file_name>*
Severity	Critical
Help Text	**Probable Cause** • A file could not be opened or it could not be found. • Permissions may be incorrect or a directory may be corrupt. **Suggested Action** 1. Run the **SPI Admin → Discover or Configure WLSSPI** tool. 2. Verify that the correct information is configured for the WebLogic servers on the managed node on which the error occurred. 3. Verify that the permissions are correct for the HP Operations agent user to read this file.

WASSPI-227

Description	No Operations performance agent is installed. Data source will not be configured.
Severity	Warning
Help Text	**Probable Cause** If an Operations performance tool is available, the SPI will integrate with it. This warning indicates that none is available. **Suggested Action** If you should have a performance agent installed, verify that it is installed correctly and is running; reinstall it if necessary. Otherwise, this message can be ignored.

WASSPI-228

Description	ddflog returned an error logging *\<datasource\>* : *\<message\>*
Severity	Critical
Help Text	**Probable Cause** This could be because the SPI was not properly configured to support logging performance data. **Suggested Action** 1. Redeploy SPI for WebLogic Server and SPI Data Collector instrumentation on the node having the problem. 2. Examine the system error message, if any, for clues to the problem. 3. Run the **SPI Admin** → **Start Tracing** tool to turn on tracing. Try to reproduce the problem. 4. Run the **SPI Admin** → **Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

WASSPI-229

Description	Cannot connect to directory *<dir>*
Severity	Critical
Help Text	**Probable Cause** The directory does not exist, or the user the agent is running under does not have appropriate permissions to the directory. **Suggested Action** Run the **SPI Admin → Discover or Configure WLSSPI** tool with the managed node selected.

WASSPI-230

Description	Cannot get lock *<file>* after *<time>*
Severity	Critical
Help Text	**Probable Cause** The lock file *<file>* was not cleared in the *<time>* indicated. This could be due to a very slow running or hung SPI process. Also could be a SPI process that had a lock was killed before the lock it had open had been cleared. **Suggested Action** Make sure no SPI processes are running. Manually remove the lock file.

WASSPI-231

Description	Error starting JRE *<JVM_file>:<message>*
Severity	Critical
Help Text	**Probable Cause** Some error occurred starting or running Java. This could be that the specified JVM does not exist, or that the collector had some error. The JAVA_HOME variable in the SPI SiteConfig file is not set correctly. **Suggested Action** Check for other errors generated at the same time, they may indicate the real cause. If the specified file does not exist, check the JAVA_HOME or HOME variables by running the **SPI Admin ‑► Discover or Configure WLSSPI** tool.

WASSPI-232

Description	Server *<name>* specified on command line, but not in configuration
Severity	Critical
Help Text	**Probable Cause** There was a -i or -e specified on the collector command line which specified a server name that was not listed in the WLSSPI configuration file. The collector only knows about servers listed in the configuration file. **Suggested Action** 1. Specify a correct server name on the command line. 2. Run the **SPI Admin → Discover or Configure WLSSPI** tool. 3. Verify the WebLogic server names are correctly listed and spelled in the SPI configuration.

WASSPI-233

Description	Cannot get advanced monitoring for WLS 5.x server <name>
Severity	Critical
Help Text	**Probable Cause** An attempt was made to get metrics from a WebLogic Server version 5 instance. Metrics and advanced monitoring are not supported with WLS version 5. **Suggested Action** 1. Do not specify a WLS version 5 server on the command line of wasspi_ca. 2. Run the **SPI Admin ➞ Discover or Configure WLSSPI** tool. Verify that you have specified the correct server versions. 3. Upgrade WebLogic Server to version 6.0 or greater.

WASSPI-234

Description	Error running program *\<file\>* , return value: *\<n\>*
Severity	Critical
Help Text	**Probable Cause** The SPI attempted to run some tool or auxiliary program and encountered an error doing so. The tool or program is shown in the message as *\<file\>* and the return code from attempting to run it is shown as *\<n\>* . **Suggested Action** If the tool is a SPI tool, make sure the SPI has been installed and configured correctly. If not, reinstall or reconfigure. If it is a system tool, make sure there are no system problems that prevent the tool from running.

WASSPI-235

Description	Restart of HP Performance Agent failed
Severity	Warning
Help Text	**Probable Cause** The SPI attempted to automatically restart the HP Performance Agent and the automatic attempt failed. **Suggested Action** Restart the HP Performance Agent manually with the `mwa restart server` command.

WASSPI-236

Description	Failure when running XSLT on *\<xml>* with stylesheet *\<xsl>: \<message>*
Severity	Critical
Help Text	**Probable Cause** As part of setting up graphing for user defined metrics, a translation of the UDM XML is done. This message indicated that the translation failed for some reason. **Suggested Action** Review the message shown. It is most likely that there is an error in the XML.

WASSPI-237

Description	This is an informational message that a OV_PM or OVPA datasource was setup.
Severity	Normal

WASSPI-238

Description	No User Defined Metrics found
Severity	Warning
Help Text	**Probable Cause** The **JMX Metric Builder** → **WLSSPI** → **UDM Graph Enable** tool was run, but no UDM metrics had been defined. **Suggested Action** Check that the UDM XML file has been named correctly.

WASSPI-241

Description	Cannot delete file *<file>*
Severity	Critical
Help Text	**Probable Cause** The SPI attempted to delete a file, but was unable to do so. It may be that the protection of the file is set so that the HP Operations agent user cannot delete it, or that there is some system problem preventing the file from being deleted. **Suggested Action** Make sure the protection of the file is correct.

WASSPI-244

Description	Configuration for node *<node>* is invalid
Severity	Critical
Help Text	**Probable Cause** The configuration for the node is not in the expected format. **Suggested Action** Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and select the node from the list. Verify that the properties configured for the node is valid. Re-initiate the Discovery process by selecting the **OK** button on the Confirm Operation window.

WASSPI-245

Description	Unrecognized variable *<var>* is configured for node *<node>*
Severity	Critical
Help Text	**Probable Cause** An unexpected variable was configured for the node **Suggested Action** 1. Launch the **SPI Admin → Discover or Configure** tool from the HP Operations console and select the node from the list. 2. Look for the variable *<var>* included in the message and make sure that it is valid. 3. Re-initiate the Discovery process by selecting the **OK** button on the Confirm Operation window.

WASSPI-247

Description	Failed to update the *\<product\>* configuration for node *\<node\>* in HPOM server
Severity	Critical
Help Text	**Probable Cause** The configuration for the node is not in the expected format. **Suggested Action** Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and select the node from the list. Verify that the properties configured for the node is valid. Re-initiate the Discovery process by selecting the **OK** button on the Confirm Operation window. If the problem still persists, call HP Support and provide the support representative with the following: • The steps and other information on reproducing the problem. • The trace files which are located in `%OvInstallDir%\install\WASSPI\WLSSPI\English\Discovery\log` directory.

WASSPI-248

Description	Cannot deploy *<policy>* policy group to *<node>*
Severity	Warning
Help Text	**Suggested Action** Refer to the information on policy deployment in the HP Operations Manager for Windows online help. If the problem still persists, call HP Support.

WASSPI-249

Description	Cannot get the agent installation directory for *\<node\>*
Severity	Critical
Help Text	**Suggested Action** Redeploy the WLSSPI discovery policy on the managed node. Make sure to uncheck the Deploy Policy Only if Version is Newer checkbox if selected. If the problem still persists, call HP Support and provide the support representative with the following: • The steps and other information on reproducing the problem • The trace files which are located in `<InstallDir>` `\install\WASSPI\WLSSPI\English\Discovery\log directory`

WASSPI-254

Description	Java exited with an error
Severity	Critical
Help Text	**Probable Cause** While running the collector or other java application, either Java encountered an error of some kind, or the Java application exited with an error exit. **Suggested Action** • Check for other errors generated at the same time, they may indicate the real cause. • Review the SPI's error log, it may give some other clues.

WASSPI-301

Description	Get configuration from server
Severity	Normal
Help Text	This is a normal operation performed by the WLSSPI Discovery policy.

WASSPI-302

Description	Updating WebLogic SPI configuration in HPOM server for *<node_name >*
Severity	Normal
Help Text	This is a normal operation performed by the WLSSPI Discovery policy.

WASSPI-303

Description	Updated WebLogic SPI configuration in HPOM server
Severity	Normal
Help Text	The WLSSPI Discovery policy has discovered some new WebLogic servers configured on the managed node. The policy has updated the WebLogic SPI configuration on the HPOM server.

WASSPI-304

Description	No WebLogic servers were found
Severity	Normal
Help Text	**Probable Cause**

Probable Cause

- Configure the following properties for this node using the **Discover or Configure WLSSPI** application. Make sure to select this node before launching the application.

    - JAVA_HOME
      The java installation directory used by the weblogic servers running on this node. If there are more than one weblogic installations, just select one java installation. For example `JAVA_HOME=/opt/bea/jdk1.3.1`

    - HOME_LIST

      A list separated by semicolon where the weblogic servers are installed in this node. For example
      `HOME_LIST=/opt/weblogic6.1;/opt/weblogic7`

      Make sure that the correct values are entered. For example, if
      `HOME_LIST=<home_dir1>;<home_dir2>` and *<home_dir1>* is a weblogic 7 or 8 home, then make sure that the file
      `<home_dir1>/server/lib/weblogic.jar` exists.

    - ADMIN_PORTS
      A list separated by semicolon containing the ports where the weblogic Admin servers are listening. If the WebLogic server is listening on a virtual IP address, the address should also be specified as shown below.
      For example :
      `ADMIN_PORTS=15.8.155.197:7001;7045`
      Here 15.8.155.197 is the address where the server is listening.

    - LOGIN=*<weblogic_user_id>*
      PASSWORD=*<weblogic_user_password>*
      where *<weblogic_user_id>* is the weblogic user you want this SPI to use for monitoring the server and *<weblogic_user_password>* is the password for that user.

NOTE : If there are more than one WebLogic admin servers on this node and if they do not share the same login and password, then set the LOGIN and PASSWORD to the most

commonly used weblogic login and password in the Set Access Info for Default Properties window. Select **Customize** to start the configuration editor and set the LOGIN, PASSWORD, NAME and PORT properties at the server-specific level, where NAME is the name of

the weblogic admin server and PORT is where this admin server is listening.

Now,select the node and launch the Discover or Configure WLSSPI tool again.

- An incorrect value was entered for LOGIN, PASSWORD, NAME, HOME_LIST or ADMIN_PORTS.

Potential Impact : NA

Suggested Action

1. From the HPOM console, select the node and launch the Discover or Configure WLSSPI application. Make sure that the login and password are correct. Make sure that the values assigned to HOME_LIST are correct. For example, if HOME_LIST=<home_dir1>;<home_dir2> and *<home_dir1>* is a weblogic 7 or 8 home, then make sure that the file <home_dir1>/server/lib/weblogic.jar exists.

2. Make sure that the ports given in the ADMIN_PORTS property are those of weblogic ADMIN server's and they are running.Now, select the node and launch the Discover or Configure WLSSPI tool.

3. If problem persists, refer the document HP Operations Smart Plug-in for BEA WebLogic Server Installation and Configuration Guide. The chapter called Configuring the WebLogic SPI provides instructions on how to manually configure the WebLogic SPI.

4. If even the manual configuration fails, do the following:

    1. Select the node and run the Self-Healing Info application from the WLSSPI Admin application group

    2. Contact your HP Operations representative for assistance.

WASSPI-321

Description	Invalid BEA home directory
Severity	Normal
Help Text	**Probable Cause**

An invalid BEA home was found by discovery. The BEA_HOME_LIST property was configured for the node and the directory (which appears in the message) is not a valid BEA home directory.

Potential Impact : NA

Suggested Action

- Select the node and launch the Discover or Configure WLSSPI application.

- Verify that the BEA_HOME_LIST is configured for the node and it contains the directory which was found to be invalid by discovery. In the managed node, verify that the directory exists and
it contains the following files that is `license.bea` and `registry.xml`.

  If the directory does not exist or does not contain the above mentioned files, find the correct BEA home directories in the managed node and use the Discover or Configure WLSSPI application to correct the value specified for the BEA_HOME_LIST property.

- Now, select the node and launch the Discover or Configure WLSSPI application. |

WASSPI-322

Description	Could not find BEA home directory
Severity	Normal
Help Text	**Probable Cause** The BEA_HOME_LIST property was configured for the node and the directory (which appears in the message) does not exist. **Potential Impact** : NA **Suggested Action** 1. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and select the node from the list. Verify that the BEA_HOME_LIST is Discover or Configured for the node and it contains the directory which was found to be invalid by discovery. In the managed node, verify that the directory exists and it contains the following files that is `license.bea` and `registry.xml.` 2. If the directory does not exist or does not contain the above mentioned files, find the correct BEA home directories in the managed node and use the **SPI Admin → Configure WLSSPI** tool to correct the value specified for the BEA_HOME_LIST property for this node. 3. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and make sure to select the node from the list.

WASSPI-323

Description	Missing BEA home directory list
Severity	Normal

Help Text	**Probable Cause**
	
	• Weblogic server was not installed on the node.
	
	• The weblogic Discover or Configure WLSSPI script did not find the BEA home directories in the node.
	
	Potential Impact : NA
	
	Suggested Action
	
	1. Verify that weblogic server is not installed on the node. If it is not installed, uninstall the 'SPI For Weblogic Server' policy group and all other WLS SPI policies from the node.
	
	2. Configure the following properties for this node using the **SPI Admin → Discover or Configure WLSSPI** tool. Make sure to select this node.
	
	    1. JAVA_HOME
	
	    The java installation directory used by the weblogic servers running on this node. If there are more than one weblogic installations, just select one of them. For example `JAVA_HOME=/opt/bea/jdk1.3.1`
	
	    2. HOME_LIST
	
	    A list separated by semicolon where the weblogic servers are installed in this node. For example `HOME_LIST=/opt/weblogic6.1;/opt/weblogic7`
	
	    Make sure that the correct values are entered. For example if `HOME_LIST=<home_dir1>;<home_dir2>` and *<home_dir1>* is a weblogic 7 or 8 home, then make sure that the file `<home_dir1>/server/lib/weblogic.jar` exists.
	
	    3. ADMIN_PORTS

List separated by semicolon of the ports where the weblogic Admin servers are listening. For example `ADMIN_PORTS=7001;745`

4. LOGIN=*<weblogic_user_id>* PASSWORD=*<weblogic_user_password>*

where *<weblogic_user_id>* is the weblogic user you want this SPI to use for monitoring the server and *<weblogic_user_password>* is the password for that user.

Note: If there are more than one weblogic Admin servers on this node and if they do not share the same login and password, then set the LOGIN and PASSWORD to the most commonly used weblogic login and password in the Set Access Info for Default Properties window. Select **Customize** to start the configuration editor and set the LOGIN, PASSWORD, NAME, and PORT properties at the server-specific level, where NAME is the name of the weblogic Admin server and PORT is where this admin server is listening.

Now, launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations Operations console and make sure to select the node from the list.

WASSPI-324

Description	Could not read weblogic registry file
Severity	Normal
Help Text	**Probable Cause** • The weblogic registry file does not exist. • The directory which contains the file is one of the values assigned to the BEA_HOME_LIST property for the node and is not a BEA home directory. **Potential Impact** : NA **Suggested Action** 1. In the node, check if the file exists. If the file does not exist, it means that this file was manually deleted. The `registry.xml` file is created by the weblogic installation in the BEA home directory and is not supposed to be deleted. Refer to the WebLogic installation document for more information on this file. 2. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and select the node from the list. Verify that the BEA_HOME_LIST is Discover or Configured for the node and its value includes the directory containing the registry file. Verify that the directory exists in the node and it contains the following files that is `license.bea` and `registry.xml`. If the directory does not exist or does not contain the above mentioned files, find the correct BEA home directories in the node. Now use the **SPI Admin → Configure WLSSPI** tool to correct the value specified for the BEA_HOME_LIST property. Now, launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations Manager console and make sure to select the node from the list.

WASSPI-325

Description	Missing LOGIN property
Severity	Normal
Help Text	**Probable Cause** • Security access failure. The LOGIN property is missing for Weblogic Server *<server>* on port: *<port>* • The LOGIN property was not configured for a weblogic server **Potential Impact** : NA **Suggested Action** 1. If a WebLogic user is not already configured for this server, then using the WebLogic administrator console, create a user that you want this SPI to use for monitoring this server. 2. Select the node and launch the Discover or Configure WLSSPI application. Set the correct LOGIN/PASSWORD properties for this server (overwrite the existing encrypted data). 3. Now, select the node and launch the Discover or Configure WLSSPI application.

WASSPI-326

Description	Security access failure. The PASSWORD property is missing for Weblogic Server *\<server\>* on port: *\<port\>*
Severity	Normal
Help Text	**Probable Cause**

Probable Cause

The PASSWORD property was not configured for a weblogic server

Potential Impact : NA

Suggested Action

1. If a WebLogic user is not already configured for this server, then using the Weblogic administrator console, create a user that you want this SPI to use for monitoring this server.

2. Select the node and launch the Discover or Configure WLSSPI application. Set the correct LOGIN/PASSWORD properties for this server (overwrite the existing encrypted data).

3. Now, select the node and launch the Discover or Configure WLSSPI application.

WASSPI-327

Description	Security access failure. The LOGIN and PASSWORD properties are missing for Weblogic Server *\<server\>* on port: *\<port\>*
Severity	Normal
Help Text	**Probable Cause** The LOGIN and PASSWORD property was not configured for a WebLogic Server. **Potential Impact** : NA **Suggested Action** 1. If a WebLogic user is not already configured for this server, then using the Weblogic administrator console, create a user that you want this SPI to use for monitoring this server. 2. Launch the **SPI Admin** ⟶ **Discover or Configure WLSSPI** tool from the HP Operations console and select the node from the list. Set the correct LOGIN/PASSWORD properties for this server (overwrite the existing encrypted data). 3. Now, launch **SPI Admin** ⟶ **Discover or Configure WLSSPI** tool from the HP Operations console and make sure to select this node.

WASSPI-328

Description	Security access failure. Invalid LOGIN and/or PASSWORD for Weblogic Server *<server>* on port: *<port>*
Severity	Normal
Help Text	**Probable Cause** An invalid login and (or) password was configured for a WebLogic Server. **Potential Impact** : NA **Suggested Action** 1. If a WebLogic user is not already configured for this server, then using the Weblogic administrator console, create a user that you want this SPI to use for monitoring this server. 2. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and select the node from the list. Set the correct LOGIN/PASSWORD properties for this server (overwrite the existing encrypted data). 3. Now, launch **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and make sure to select this node.

WASSPI-329

Description	Global login and password required
Severity	Normal
Help Text	**Probable Cause** A global login and password is required when ADMIN_PORTS property is configured. The ADMIN_PORTS property was configured but a global LOGIN and (or) PASSWORD property was not configured for a managed node. **Potential Impact** : NA **Suggested Action** 1. From the HPOM console, use the **SPI Admin → Discover or Configure WLSSPI** tool to view the value assigned to the ADMIN_PORTS property. 2. From the WebLogic administrator console, create a WebLogic user (if it does not already exist) that you want the WebLogic API to use for monitoring the server. 3. From the HPOM console, use the **SPI Admin → Discover or Configure WLSSPI** tool to add the following configuration properties for the node i.e LOGIN and PASSWORD. **Note** : If the ADMIN_PORTS property contains the ports of more than one WebLogic administrator server, then make sure that the same user id is Discover or Configured for all those WebLogic administrator servers. If this is not possible, then you will have to manually configure the following properties for the administrator server i.e NAME, PORT, LOGIN and PASSWORD. 4. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and make sure to select the node from the list.

WASSPI-330

Description	Missing global login and/or password
Severity	Normal
Help Text	**Probable Cause** The global LOGIN and PASSWORD property were not configured **Potential Impact** : NA **Suggested Action** A global LOGIN and PASSWORD is not required if the login and password for individual WebLogic admin servers was configured. But if all the WebLogic admin servers share the same login and password, then you may configure the global LOGIN and PASSWORD property as described below. 1. From the HPOM console, use the **SPI Admin → Discover or Configure WLSSPI** tool to add the following properties for the node if they do not already exist: LOGIN and PASSWORD. 2. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations console and make sure to select the node from the list.

WASSPI-381

Description	Could not find WebLogic SPI instrumentation
Severity	Critical
Help Text	Files required by the WLSSPI Service Discovery policy are missing.

Help Text content:

Files required by the WLSSPI Service Discovery policy are missing.

Probable Cause

- The WLSSPI Service Discovery policy was not installed on the managed node.
- Files required by the WLSSPI Service Discovery policy were moved/removed.

Potential Impact: NA Suggested Action

Deploy the WebLogic SPI instrumentation to the managed node:

1. From the OVO console, select **Operations Manager → Nodes** .
2. Right-click the managed node and select **All Tasks → Deploy instrumentation** .
3. Select **WLSSPI Discovery** .
4. Click **OK** .

WASSPI-401

Description	WebLogic Discovery Internal Error - Could not find `xerces.jar` file
Severity	Critical
Help Text	**Probable Cause** • The agent was not installed on the managed node. • The `xerces.jar` file was deleted from the `<AgentDir >`/`java` directory. **Potential Impact** : NA **Suggested Action** 1. Reinstall the Agent on the managed node. 2. Launch the **SPI Admin** → **Discover or Configure WLSSPI** tool from the HP Operations Manager console and make sure to select the node.

WASSPI-402

Description	WebLogic Discovery Internal Error - Could not find the hostname of the managed node.
Severity	Normal
Help Text	**Probable Cause** • The IP address for the host could not be found. • There was a security violation. **Potential Impact** : NA **Suggested Action** Contact your system administrator.

WASSPI-403

Description	Discovery Internal Error- Could not find WebLogic Java installation
Severity	Normal
Help Text	**Probable Cause** The java installation directory was manually deleted from each of the BEA home directories in the managed node or it was never installed by the weblogic installation script. **Potential Impact** : NA **Suggested Action** 1. Find the Java installation used by the weblogic server running on the node. 2. From the HPOM console, launch the **SPI Admin** → **Discover or Configure WLSSPI** tool and select the node. Add the JAVA_HOME property for that node. 3. Launch the **SPI Admin** → **Discover or Configure WLSSPI** tool from the HP Operations Operations console and make sure to select the node.

WASSPI-404

Description	Discovery Internal Error
Severity	Normal
Help Text	**Probable Cause** • WebLogic server was not installed on the node. • Discovery could not find the installation directory for WebLogic server **Potential Impact** : NA **Suggested Action** 1. Verify that WebLogic server is installed on the managed node. If it is not installed, uninstall the 'SPI for Weblogic Server' policy group and all other WebLogic SPI policies from the node. 2. From the HPOM console, launch the **SPI Admin → Discover or Configure WLSSPI** tool and select the node. Discover or Configure the HOME_LIST property for this node. 3. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations Manager console and make sure to select the node.

WASSPI-405

Description	Discovery Internal Error - An error occurred while reading SiteConfig file
Severity	Normal

Help Text	**Probable Cause** Permissions may be incorrect, or a file or directory may be corrupt.
	
	Potential Impact : NA
	
	Suggested Action
	
	1. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations Operations console and make sure to select the node.
	
	2. If the problem still persists, then do the following:
	
	    1. Run the **SPI Admin → Self-Healing Info** tool.
	
	    2. Call HP Support and provide the support representative with the steps and other information on reproducing the problem

WASSPI-406

Description	Discovery Internal Error - Retrieve WebLogic SPI configuration for node timed out
Severity	Normal

Help Text	**Probable Cause**
	
	• Some communication failure between the management server and managed node.
	
	• It took more than 2 minutes for the WLSSPI configuration to reach the managed node from the management server.
	
	• The **SPI Admin → Discover or Configure WLSSPI** tool was being executed when the WLSSPI discovery policy was deployed on the node.
	
	• The discovery script in the management server failed due to some reason.
	
	• The WLSSPI-Messages policy was not deployed on the managed node.
	
	Potential Impact : NA
	
	Suggested Action
	
	1. Launch the **SPI Admin → Discover or Configure WLSSPI** tool again from the HP Operations Manager console and make sure to select the node. If it fails again, contact your system administrator.
	
	2. Make sure that the **SPI Admin → Discover or Configure WLSSPI** tool is not being run in the management server. Launch the **SPI Admin → Discover or Configure WLSSPI** tool from the HP Operations Manager console and make sure to select the node.
	
	3. In the management server open the trace file: `<InstallDir>/install/WASSPI/WLSSPI/English/Discovery/log`
	
	The trace file is `<node_name> _disc_server.log`, Here `<node_name>` is the primary node name of the managed node. If any error messages are reported in the trace file, then do the following:
	
	    1. Run the **SPI Admin → Self-Healing Info** tool.
	
	    2. Call HP Support and provide the support representative with the following:

1. The steps and other information on reproducing the problem.

2. The file generated by the **SPI Admin → Self-Healing Info** tool.

4. Verify that WLSSPI-Messages policy was not deployed on the managed node. If it is not deployed, then launch the **SPI Admin → Discover or Configure WLSSPI** tool again from the HP Operations Manager console and make sure to select the node.

WLSSPI Error

Description	WebLogic SPI Error
Severity	Critical
Help Text	**Probable Cause** An unexpected WebLogic SPI error has occurred. **Potential Impact** : NA **Suggested Action** Enable tracing, repeat the steps to reproduce the problem, contact your HP support representative, and provide the steps to reproduce the problem along with the trace file(s). To enable tracing: 1. On a Windows managed node, verify that the directory `C:\temp\` exists and open the `<OvAgentDir>` `/bin/instrumentation/wasspi_wls_discoveryWin.pl` file in a text editor. 2. On a UNIX managed node, open the `/var/opt/OV/bin/instrumentation/wasspi_wls_discoveryUnix.pl` or `/var/lpp/OV/bin/instrumentation/wasspi_wls_discoveryUnix.pl` file in a text editor. 3. Change `$trace_on = 0;` to `$trace_on = `**`1`**` ;` 4. Repeat the steps to reproduce the problem. The trace file(s) (`wasspi_wls_disc.trc` and `wasspi_wls_disc.trc.00<x>`) are located in `C:\temp\` (on a Windows managed node) and `/temp/` (on a UNIX managed node).

All Other Errors

Description	An unknown error appears in the WebLogic SPI error log.
Severity	Normal
Help Text	**Suggested Action** 1. Refer to the text following the error message in the WebLogic SPI error log to help identify the underlying cause of the problem. You can view the SPI error log for a managed node by using the **SPI Admin → View Error File** tool. The error message can be identified by the date/time stamp. 2. Identify the steps to reproduce the problem. 3. Run the **SPI Admin → Start Tracing** tool to turn on tracing. Try to reproduce the problem. 4. Run the **SPI Admin → Self-Healing Info** tool. Contact HP support with the information gathered by this tool.

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