

HP OPENVIEW

Smart Plug-in for BEA WebLogic Server

Release Notes

RELEASE A.03.50

This document contains information supplementary to the documentation set for the Smart Plug-in for BEA WebLogic Server (WLS-SPI), which consists of a configuration guide and a reference manual.

Table of Contents:

- **Chapter 1: Announcements**
- **Chapter 2: Enhancements/Fixes**
- **Chapter 3: Known Problems and Workarounds**
- **Chapter 4: Required Patches**
- **Chapter 5: Compatibility and Installation Requirements**
- **Chapter 6: Software Availability in Native Languages**

Chapter 1: ANNOUNCEMENTS

The Smart Plug-In for WebLogic Server (WLS-SPI) offers a full-featured plug-in to HP OpenView Operations for UNIX® (OVO). For a description of the WLS-SPI and an overview of how it works with OVO, please see the introductory chapter of the *HP OpenView Operations Smart Plug-in for BEA WebLogic Server Configuration Guide*.

A.03.50

This release of WLS-SPI fixes a number of bugs and adds the following capability:

- OVOU 8.0 HTTPS Support
- OVOU 8.1 Support
- Support for OVPM on UNIX
- JMX Metric Builder application
- Auto-acknowledgment of messages

A.03.10.21

This release of WLS-SPI fixes a number of bugs:.

A.03.10.20

This release of WLS-SPI fixes a number of bugs and adds the following capability:

- SSL Support for WebLogic Server 8.1

A.03.10

This release of WLS-SPI fixes a number of bugs and adds the following capability:

- OVOU 8.0 Support (DCE agents only, no HTTPS support at this time)
- Support for Linux AS 3.0

A.03.00

This release of WLS-SPI fixes a number of bugs and adds the following capability:

- Configuration editor GUI to view, edit, and set configuration properties
- Automatic discovery of basic configuration properties
- Support of duplicate server names
- Support of Linux managed nodes
- JMX server connection

DOCUMENTATION

The following manuals are included with this release and can be view or printed. They offer all the information that you need to install, configure, and use WLS-SPI.

- *HP OpenView Smart Plug-in for BEA WebLogic Server: Configuration Guide*
- *HP OpenView Smart Plug-in for BEA WebLogic Server: Reference*

Chapter 2: Enhancements and Fixes

ENHANCEMENTS WITH VERSION A.03.50

CR NUMBER	DESCRIPTION
QXCR1000113892	<p>WLS-SPI does not support SSL</p> <p>General Topic Area : Security</p> <p>Background: Prior versions of the WebLogic SPI did not support the Secure Socket Layer (SSL).</p> <p>Benefits of the Enhancement: Functionality</p> <p>Description of the Enhancement: Starting with A.03.50, it is possible to configure SSL ports.</p> <p>Steps Necessary to Use/Implement the Enhancement: See the configuration guide for details on how to properly configure SSL.</p>

FIXES WITH VERSION A.03.50

CR NUMBER	DESCRIPTION
QXCR1000158681	<p>WASSPI-4 error after installing A.03.10</p> <p>Problem: 07/01/2004 10:05:12: WASSPI-4: Error getting the metric definitions. com.hp.openview.wasspi.DeserializeException: An error occurred when trying to deserialize: Error deserializing metric objects from file=/var/opt/OV/wasspi/wls/conf/WLSAppServerFactory_metrics.ser (java.io.InvalidClassException: com.hp.openview.wasspi.Metric; Local class not compatible: stream classdesc(JSpiCola.java:577)</p> <p>Cause: WLSAppServerFactory_metrics.ser file isn't removed during configuration and the old .ser file is not compatible with the new collector.</p> <p>Fix: This file is now removed and automatically regenerated by the collector.</p>
QXCR1000190059	<p>Incorrect ASCII report output when server is down</p> <p>Problem: ASCII reporting outputs the following incorrect message when a server cannot be contacted: "There are no servers available to collect data from."</p> <p>The message should be: "Server <server_name> is not available."</p> <p>Cause: Unanticipated condition.</p> <p>Fix: ASCII reporting has been updated to output: "Server <server_name> is not available." when a server cannot be contacted.</p>

<p>QXCR1000158698</p>	<p>Errors generated on German WebLogic systems</p> <p>Problem: When using WLS-SPI on a German localized NT system, the following errors are seen:</p> <pre>wasspi_wls_perl -S wasspi_wls_ca -c WLSSPI-70-15min -m 5,10-5,25,26,225,226,235,238,251-256 -matchver 7.0 -x print=on</pre> <p>Metric: WLSSPI_0251, Server: "HPOVProxy", Instance: "no instances",</p> <p>Value: no data</p> <p>...</p> <p>Metric: WLSSPI_0010, Server: "HPOVProxy", Instance: "default", Value:</p> <p>Exception in thread "main" java.lang.NumberFormatException: 13,33</p> <p>...</p> <p>Cause: The collector could not handle the "," separator in metric values (as opposed to the expected ".").</p> <p>Fix: A better routine which detects internationalized environments is used to read metric values.</p>
<p>QXCR1000195432</p>	<p>Collector handling boolean types as strings</p> <p>Problem: The collector interprets boolean MBean attribute types as string values ("true"/"false"). The JMX Metric Builder treats booleans as numeric 1/0. Booleans should be treated as numerics since strings are not alarm (opcmon) compatible.</p> <p>Cause: Incorrect design.</p> <p>Fix: Booleans are now returned as values 0 for false and 1 for true.</p>
<p>QXCR1000195451</p>	<p>Collector script ignoring -o reporting option</p> <p>Problem: ASCII reporting allows for a specific metric instance to be specified using the -o option. The collector script is not passing this option to the java collector.</p> <p>Cause: An error in the script.</p> <p>Fix: The script is fixed.</p>

<p>QXCR1000198766</p>	<p>Problems with config GUI and LOGFILE</p> <p>Problem: When using the WLS-SPI configuration editor, it is possible to set the logfiles monitored for one instance using the SERVER<n>_LOG_FILE property. However the correct syntax is SERVER<n>_LOGFILE (without the underscore between LOG and FILE). If SERVER<n>_LOG_FILE is set in the GUI, the configuration distribution fails because of a syntax error.</p> <p>Cause: Incorrect code logic.</p> <p>Fix: The code for the configuration editor uses SERVER<n>_LOGFILE instead of SERVER<n>_LOG_FILE.</p>
<p>QXCR1000199087</p>	<p>Need to allow discovery to work when Server Options are set to no duplicate msg</p> <p>Problem: When the OVO UNIX server has “suppress duplicates” enabled in Server Options, discovery sometimes fails because duplicate messages are "eaten" and the auto action is not executed.</p> <p>Cause: The discovery process did not anticipate this situation.</p> <p>Fix: A timestamp is added to the end of the message to force unique messages and avoid the duplicate messages from being “eaten.”</p>
<p>QXCR1000201641</p>	<p>Log cause when UDM xml content is incorrect</p> <p>Problem: When manually defining a metric containing empty ObjectName and Attribute elements:</p> <pre> <Metric id="sample" name=" " alarm="no" graph="no" report="no" previous="yes"> <MBean instanceType="single" dataType="numeric"> <ObjectName/> <Attribute/> </MBean> </Metric> </pre> <p>The resulting error gives no indication of the cause:</p> <p>10/15/2004 17:02:16: WASSPI-4: Error getting the metric definitions.</p> <p>com.hp.openview.wasspi.DefinitionDocumentException: An error occurred while trying to access the metric definition document: Metric object instantiation error.</p> <p>Cause: Unanticipated condition.</p> <p>Fix: The error message includes the metric ID and the incorrect xml element:</p> <p>10/17/2004 18:56:07: WASSPI-4: Error getting the metric definitions.</p> <p>com.hp.openview.wasspi.InvalidMBeanDefinitionException: The MBean was not defined correctly. It must have a valid object name and attribute: ObjectName element for metric sample cannot be empty.</p>

FIXES WITH VERSION A.03.10.21

CR NUMBER	DESCRIPTION
JAGaf20206/ 1000113785/ NSMbb71757	<p>SPI Verify incorrectly reports that DSI2DDF version is incorrect</p> <p>Problem: The SPI's Verify application reports that the version of the DSI2DDF files are incorrect, when in fact, they are correct.</p> <p>Cause: The proper version was incorrectly specified in the verify application.</p> <p>Fix: The application was fixed so specify the correct versions.</p>
3206122616 1000183975	<p>Discovery does not properly update the SiteConfig files on agent or server.</p> <p>Problem: Depending upon circumstances, the discovery process, may not discover any WebLogic servers (even when they exist), or it may discover them and configure them on the managed node, but not pass the information to the management server.</p> <p>Cause: There were mismatches between components of the data transfer code when it was transferring SiteConfig files between the management server and managed node.</p> <p>Fix: The discovery code was corrected so that the mismatches have been corrected.</p>

ENHANCEMENTS WITH VERSION A.03.10.20

CR NUMBER	DESCRIPTION
JAGaf23285	<p>The SPI can be configured to work in an SSL environment</p> <p>Background: In past releases of the SPI, customer environments using WebLogic Server's SSL feature were not able to use the SPI to monitor WebLogic</p> <p>Benefits of the Enhancement: Functionality/Usability</p> <p>Description of the Enhancement: Starting with this release, the SPI can communicate with WebLogic when used in SSL mode.</p> <p>Steps Necessary to Use/Implement the Enhancement:</p> <ol style="list-style-type: none"> 1. Three new properties (KEYSTORE, PASSPHRASE, and PROTOCOL) are in the Config GUI. These properties can be set at any level (global, group, node, server, etc.). Please note PROTOCOL is required for customers using SSL. KEYSTORE and PASSPHRASE are conditionally required if the customer is using a keystore and passphrase in their SSL environment. If not, those properties do not need to be defined. 2. These properties show up in the Property selection menu only when the GUI is launched in the WLSSPI context and via the Configure tool/application. They don't show up in the Discover tool/app mode or in the WBSSPI context. So the customer must manually define these properties using the Configure tool/application. <p>For PASSPHRASE:</p> <ol style="list-style-type: none"> 1. The value entered by the user is shown in plain text while typing.

	<ol style="list-style-type: none"> 2. As long as the user stays in the same view, the value remains in plain text. 3. As soon as the user changes the view (i.e. selects other item on the tree or selects the view props tab), the value is encrypted. 4. The value gets decrypted (but shown as *'s) the next time the property gets displayed. Thus, the number of *'s is the same as the number of the characters in the PASSPHRASE, so the user can at least verify the char count. (We use the same scheme for the PASSWORD). 5. The PASSPHRASE has to contain at least 2 characters. Otherwise, an error message pops up, and the new value is rejected. <p>For PROTOCOL:</p> <ol style="list-style-type: none"> 1. When the user selects this property from the menu and clicks on the "Set Property" button, the PROTOCOL property is added to the table, along with the suggested value "t3s". 2. The value can be either "t3" or "t3s". The default PROTOCOL used by the Collector is "t3", if the property is not set. Thus, there is really no need to set the PROTOCOL to "t3" unless the user wants to override the inherited (i.e., global) value which may have been set to "t3s". The value must be set to "t3s" to utilize the SPI's support of SSL. 3. The value is always converted to lowercased letters when saved. 4. The GUI validates the value entered for the PROTOCOL. If incorrect value is entered, an error message pops up, and the value is not accepted. Again, this happens only the view is changed. <p>For KEYSTORE:</p> <ol style="list-style-type: none"> 1. It's free-for-all. The user can do whatever he/she wants.
--	---

ENHANCEMENTS WITH VERSION A.03.10

CR NUMBER	DESCRIPTION
NSMbb66541	<p>Change OVPM integration to have graphs show up in GUI</p> <p>Background: In past releases of the SPI, OVPM graphs were only available from the OVO Application bank or from alarm's operator actions.</p> <p>Benefits of the Enhancement: Functionality/Usability</p> <p>Description of the Enhancement: Starting with this release, when the OVPM integration package is installed, entries show up in the OVPM interface which allow a user to generate a WebLogic graph from the OVPM interface.</p> <p>Steps Necessary to Use/Implement the Enhancement: Display the graph in OVPM against the desired node and server.</p>
	<p>OVO 8.0 Support</p> <p>Background: Prior SPI versions worked with OVOU 6.x and 7.x only</p> <p>Benefits of the Enhancement: Platform Support</p> <p>Description of the Enhancement: This release drops support for OVOU 6.x and adds support for OVOU 8.0.</p> <p>Steps Necessary to Use/Implement the Enhancement: Install and use on an OVOU 8.0 system.</p>

FIXES WITH VERSION A.03.10

CR NUMBER	DESCRIPTION
<p>JAGaf14300</p>	<p>Incorrect pattern matching for WebLogic Log Template</p> <p>Problem: Some WebLogic logfile entries with WebLogic Server 8.1 would not be detected and sent to the message browser.</p> <p>Cause: A pattern matching condition was incorrectly formatted.</p> <p>Fix: The logfile entry was fixed. The entry was changed from:</p> <pre data-bbox="443 562 1287 615">^<*.file>:###\<<*.date>\> \<[Notice Error Alert]\> \<<*.object>\> \<<@.node>\> \<<@.server>\> <*.junk> \<<#\> \<<*.message>\></pre> <p>to</p> <pre data-bbox="443 709 1287 762">^<*.file>:###\<<*.date>\> \<[Notice Error Alert]\> \<<*.object>\> \<<@.node>\> \<<@.server>\> <*.junk> \<<@\> \<<*.message>\></pre>
<p>ROSmm35309</p>	<p>Logfile alarm does not light up service map</p> <p>Problem: When logfile messages come into the browser, sometimes the service map does not light up with the severity color.</p> <p>Cause: The properties of the logfile service map does not match the service id in the logfile message</p> <p>The service map displays (for example):</p> <pre data-bbox="443 1098 951 1129">WLS_LOG_petstoreServer_7001_test1.hp.com</pre> <p>The message browser Service ID displays (for example):</p> <pre data-bbox="443 1224 889 1255">WLS_LOG_petstoreServer_7001_TEST1</pre> <p>Fix: A WLS-SPI configure script was modified to use the NODE_NAME if the server address is not configured.</p>
<p>ROSmm36384</p>	<p>Status check uses name not alias, not all servers checked.</p> <p>Problem: Using the Check WebLogic application for the HP OpenView Smart Plug-In for BEA WebLogic Server on Sun Solaris version A.03.00.00, the resulting report displays incorrect information when the WebLogic Server instances on the node have the same name and the SERVER<n>_ALIAS property is configured. The report shows data applicable for one instance for each like named instance rather than showing the actual data for each individual instance.</p> <p>Cause: A flaw in the script</p> <p>Fix: The report resulting from the Check WebLogic application correctly references and displays the name and information corresponding to the server name configured in SERVER<n>_ALIAS for all identically named WebLogic instances.</p>

<p>ROSmm36365</p>	<p>Verify detects problem with DSI2DDF version incorrectly on UNIX systems</p> <p>Problem: The following error occurs when running the Verify application:</p> <p>HP OpenView Smart Plug-In for WebLogic Application Server for (any UNIX) A.03.00.00 (03/17/04)"</p> <p>/var/lpp/OV/OpC/monitor/ddfcomp (A.01.20.00) should be >A.01.22 /var/lpp/OV/OpC/monitor/ddfcomp_coda (A.01.20.00) should be >A.01.22 /var/lpp/OV/OpC/monitor/ddflog (A.01.20.00) should be >A.01.22 /var/lpp/OV/OpC/monitor/ddflog_coda (A.01.20.00) should be >A.01.22 /var/lpp/OV/OpC/monitor/ddfutil (A.01.20.00) should be >A.01.22</p> <p>Cause: The script was looking for a newer version.</p> <p>Fix: The script looks for the correct version depending on the platform.</p>
<p>NSMbb66801</p>	<p>WLSSPI View Graph application fails with incorrect parameter error</p> <p>Problem: When running the application View Graphs, it opens the Netscape web browser and tries to load the graph but fails with error in the web browser saying "The parameter is incorrect".</p> <p>Cause: An incorrect file was being referenced.</p> <p>Fix: The filename was changed.</p>
<p>NSMbb70542</p>	<p>Locale problems with metric values</p> <p>Problem: Customer is seeing errors from opcmon due to metric values that look like "GBL-WAS-WLSSPI_0005=41,82" The system is located in France. The number looks like a French locale number. However, the Windows system is running a US English locale.</p> <p>Cause: An incorrect API was being called.</p> <p>Fix: A correct I18N enabled API is now being used.</p>

<p>NSMbb71260</p>	<p>Collector should handle unmapped strings more gracefully</p> <p>Problem: A udm can contain an AttributeValueMapping element to map strings to numerics:</p> <pre> <AttributeValueMapping> <Map from="Running" to="1"></Map> <Map from="Shutdown Pending" to="2"></Map> <Map from="Shutdown In Progress" to="3"></Map> <Map from="Suspended" to="4"></Map> <Map from="Unknown" to="5"></Map> </AttributeValueMapping> </pre> <p>If no match is found a null pointer exception is written to stdout:</p> <pre> ava.lang.NullPointerException at com.hp.openview.wasspi.Metric.publish(Metric.java:808) at com.hp.openview.wasspi.collector.JSpiCola.getData (JSpiCola.java:496) at com.hp.openview.wasspi.collector.JSpiCola.main (JSpiCola.java:577) Exception in thread "main" </pre> <p>This should be handled more gracefully.</p> <p>Cause: Coding error</p> <p>Fix: If a string is not found in the metric definition map table, a default map value of -1 is assigned and error is logged to the errorlog.</p>
<p>ROSmm36371</p>	<p>WebLogic SPI does not run discovery/config on Linux without ksh</p> <p>Problem: The discovery and config features of the WebLogic SPI requires ksh to be installed on Linux. ksh is not installed on Linux systems by default.</p> <p>Cause: The situation was not anticipated.</p> <p>Fix: Updated /AppSrvSPI/lib/ksh_shell to include a test for Linux that has all scripts on Linux run /bin/sh</p>
<p>ROSmm36162</p>	<p>Host name problem in service map</p> <p>Problem: The host name used in the service map is a short name and that used in the messages sent by the SPI is fully qualified host name. As a result, the service map does not respond to messages sent by the SPI.</p> <p>Cause: Discovery uses java.net.InetAddress class to get a fully qualified host name given a host name. In this particular system, this call returns the short host name instead of the fully qualified host name.</p> <p>Fix: The fix is to use the value of the NODE_NAME.</p>

<p>NSMbb67011</p>	<p>When aliasing, ASCII reporting may report on the wrong server.</p> <p>Problem: When aliasing is used to distinguish servers with identical NAME properties, ASCII reporting may report data for the wrong server depending on the SiteConfig settings. For example, when the collector is invoked with the command options:</p> <pre>-r -m 25 -i examplesServer</pre> <p>and SiteConfig:</p> <pre>NUM_SERVERS=2 SERVER1_HOME=C:/bea_6_1/wlserver6.1 SERVER1_LOGIN=system SERVER1_PASSWORD=openview SERVER1_NAME=examplesServer SERVER1_PORT=7001 SERVER2_ADDRESS=test1 SERVER2_HOME=C:/bea_6_1/wlserver6.1 SERVER2_LOGIN=system SERVER2_PASSWORD=WebLogic SERVER2_ALIAS=examplesServer61_test1 SERVER2_NAME=examplesServer SERVER2_PORT=7001</pre> <p>the resulting ASCII report gets data from the alias server and calls it examplesServer.</p> <p>Cause: Logic error</p> <p>Fix: This is only an ASCII reporting issue (-r option). The collector now looks for the non alias server if the name is mapped to multiple servers.</p>
--------------------------	--

ENHANCEMENTS WITH VERSION A.03.00

CR NUMBER	DESCRIPTION
	<p>Added support for Linux, and HPUX 11.23</p> <p>Description of the Enhancement: The SPI now fully supports running the WLS-SPI on Red Hat Advanced Server 2.1 Linux and HPUX 11.23 systems. When OVO is managing these platforms, the SPI may be deployed so that alarms will be generated, OV-Reporter and OV-PM integration will be available, WLS log file monitoring will be done, and OVO applications can be run.</p> <p>Steps Necessary to Use/Implement the Enhancement:</p> <ol style="list-style-type: none"> 1) Install the new version on the management server following the steps for installing or upgrading the SPI in the <i>Configuration Guide</i>. 2) Configure the SPI and deploy to the Linux or HPUX 11.23 nodes as you would any other node.

	<p>Configuration Editor</p> <p>Background: The SPI's configuration is in a file that had to be edited manually with a text editor. The syntax of the file has to be followed exactly, and there has been confusion about how global, server, and group properties interact.</p> <p>Benefits of the Enhancement: The configuration editor eliminates the need for the user to understand the syntax of the configuration file and abstracts the layers of properties in a way that is easier to understand.</p> <p>Description of the Enhancement: The configuration editor is a Graphical User Interface that the user runs as an OVO application. The user enters or edits the configuration values in a hierarchical format that is more understandable. The properties for a certain server or group are visible while all other non-pertinent information can be hidden. The effects of all global properties can be seen.</p> <p>Steps Necessary to Use/Implement the Enhancement: After installing the new version of the SPI on the management server, run the "Configure SPI" application. The new configuration editor will appear. Detailed instructions are in the <i>Configuration Guide</i>.</p>
	<p>Automatic discovery of basic configuration properties</p> <p>Background: The SPI's configuration is in a file that has had to be edited manually with a text editor. This syntax of the file has to be followed exactly, and there has been confusion about how global, server, and group properties interact, and about what information must be set.</p> <p>Benefits of the Enhancement: All of the properties necessary for the SPI to perform its basic functions will be configured automatically with only minimal information necessary from the user.</p> <p>Description of the Enhancement: This enhancement is an application and set of underlying functions that will attempt to automatically configure all of the application servers that are running on the specified OVO managed node. The user just runs the application, supplies any passwords needed to access the application server, and after a few minutes of discovery, the servers are automatically configured for the SPI to perform all of its basic functionality.</p> <p>Steps Necessary to Use/Implement the Enhancement:</p> <p>After installing the new version of the SPI on the management server, follow the steps in chapter 3, "Configuring the WLS-SPI" in the <i>Configuration Guide</i>.</p>

	<p>Support of duplicate server names</p> <p>Background: The SPI could not support multiple WebLogic servers with the same server name on the same managed node, regardless of domain. This was due to structural limitations in various components of the SPI.</p> <p>Benefits of the Enhancement: If there is more than one server with the same name on a managed node, the SPI can now monitor all of those servers.</p> <p>Description of the Enhancement: The SPI has been enhanced so that it can support more than one server with the same server name on the same managed node. Also, if a node is being used as a proxy for remote monitoring of application servers, it can monitor servers on different remote nodes with the same name where with previous versions, it could not.</p> <p>Steps Necessary to Use/Implement the Enhancement:</p> <p>After installing or upgrading the SPI on the management server, run the "Configure SPI" application and specify the servers. Or, run the "Discover" application and let the SPI find all of the servers (following the instructions in chapter 3 of the <i>Configuration Guide</i>).</p>
	<p>Generic JMX monitoring</p> <p>Background: The SPI could only monitor metrics from WebLogic Server applications. But, some customers have other application servers or JMX compliant applications that they would like to monitor with OVO.</p> <p>Benefits of the Enhancement: Any JMX compliant application or application server may be monitored with the <i>Smart Plug-In for WebLogic Server</i>.</p> <p>Description of the Enhancement: This enhancement consists of an RMI connector that the user installs into the application or server to which the SPI collector can connect; improvements to the collector to support those connection; and supporting configuration to define the connection. Together these allow the SPI to connect to any arbitrary JMX compliant application and gather MBean values that the application exposes.</p> <p>Steps Necessary to Use/Implement the Enhancement:</p> <ol style="list-style-type: none"> 1) Install the new version on the management server following the steps for installing or upgrading the SPI in the <i>Configuration Guide</i>. 2) Install the provided JMX connector into the application server to be monitored following the instructions in Appendix D, "Installing the JMX Connector," in the <i>Configuration Guide</i>. 3) Run the "Configure SPI" application and add the application server its properties (also specified in Appendix D). 4) Create user defined metrics to access MBean information in the application or server and templates to access the new metrics. Follow all of the steps in chapter 6 in the <i>Configuration Guide</i>.

	<p>UDM Deployment</p> <p>Background: The SPI has always had a capability to allow customers to define and create their own metrics to access information not already defined in the SPI. These "User Defined Metrics" are defined in an XML file that had to be manually copied to every node from which the new metrics were to be gathered.</p> <p>Benefits of the Enhancement: User Defined Metrics can now be defined in a single XML file on the management server.</p> <p>Description of the Enhancement: The SPI now has an OVO application which will take the UDM XML file that is stored on the OVO management server and automatically copy it to the appropriate place on each of the specified OVO managed nodes.</p> <p>Steps Necessary to Use/Implement the Enhancement:</p> <ol style="list-style-type: none"> 1) After installing or upgrading the SPI on the management server, deploy commands, actions, and monitors to all managed nodes. 2) Edit and save the UDM XML file on the management server. 3) Run the "Deploy UDM" application.
	<p>Performance improvements</p> <p>Background: In some circumstances, the WLS-SPI data collector will take a long time to run. It had been running opcmn once for each metric data value it was collecting, and some runs of the collector would collect a very large number of metric values.</p> <p>Benefits of the Enhancement: The collector will run faster and take fewer system resources.</p> <p>Description of the Enhancement: The WLS-SPI data collector now runs a single process which will deliver multiple metric values to OVO.</p> <p>Steps Necessary to Use/Implement the Enhancement:</p> <p>After installing the new version of the SPI on the management server, deploy actions, commands, and monitors to all of the nodes running the SPI.</p>

FIXES WITH VERSION A.03.00

CR NUMBER	DESCRIPTION
NSMbb63326	<p>Metric 15 inconsistent</p> <p>Problem: The definition of metric 15 is inconsistent with the template definitions. The metric was defined as the number of restarts while the templates were expecting a maximum percentage.</p> <p>Cause: Inconsistency.</p> <p>Fix: The metric was redefined to represent the percentage of the maximum restarts configured in the WebLogic Server configuration. The templates conditions were changed to be more useful relative to the default maximum. The new conditions are critical at 100%, major at 80% and warning at 50%</p>

<p>ROSmm34138 NSMbb64954</p>	<p>Metrics removed</p> <p>Problem: It has been discovered that the MBean values for a number of EJB metrics are incorrect in WebLogic Server.</p> <p>Cause: WebLogic Server internal problem.</p> <p>Fix: Removed metrics 220, 221, 222, 227-235.</p>
<p>NSMbb63200</p>	<p>WebLogic logfile rotation not properly monitored</p> <p>Problem: When the WLS-SPI log file fills, the WLS-SPI looks at the archived log file.</p> <p>Cause: Problem with script.</p> <p>Fix: Script now reads most current log file instead of archived log file.</p>
<p>ROSmm34772</p>	<p>wasspi_wls_lib.pl creates illegal DATASOURCE names for MWA DSI</p> <p>Problem: WLS-SPI creates datasource files that do not follow MeasureWare naming conventions.</p> <p>Cause: MeasureWare requires the name of a datasource file to start with an alphabetic character.</p> <p>Fix: Add "A_" to the front of any datasource file beginning with a non-alphabetic character.</p>
<p>NSMbb61969</p>	<p>Strange Uptime value 166% for Server Availability</p> <p>Problem: Questionable statistics (uptime, downtime, and no data – percentages) provided in single-system reports.</p> <p>Cause: Problem was fixed for all and group reports, but not for single-system reports. Problem is caused if the measurement interval is changed.</p> <p>Fix: New templates created to show uptime, downtime, and number of measurements used to calculate the percentage.</p>
<p>ROSmm34083</p>	<p>Version completion doesn't get SP</p> <p>Problem: SP version of the WebLogic Server is not set by the Config WLSSPI application if it is not set on the management server. Metrics may be gathered for the wrong version of the WebLogic Server.</p> <p>Cause: The script relies on the master SiteConfig file for the WebLogic Server version. If not set, the version is only set to the major WebLogic Server version, but does not set the SP version.</p> <p>Fix: Script gets the SP version of the WebLogic Server, if it exists.</p>

<p>ROSmm35172 NSMbb65451</p>	<p>Logfile grows and grows, never ending</p> <p>Problem: The WLS-SPI log file can grow to a large size.</p> <p>Cause: Checking the log file size only occurs when the WLS-SPI writes to the log file.</p> <p>Fix: The WLS-SPI checks the log file size more frequently and the default maximum size of the log file is set to 2 MB.</p>
<p>ROSmm34049</p>	<p>Graph definition files do not conform to OVPM naming requirements</p> <p>Problem: OVPM does not recognize the WLS-SPI's graph definition files.</p> <p>Cause: The WLS-SPI's graph definition files do not follow OVPM naming conventions.</p> <p>Fix: The graph definition files have been modified to follow OVPM naming conventions.</p>
<p>ROSmm26022</p>	<p>No opcmsg template deployed for WLSSPI</p> <p>Problem: WLS-SPI opc messages are not sent to the message browser if no opcmsg template is deployed to the node.</p> <p>Cause: No opcmsg template is deployed by WLS-SPI.</p> <p>Fix: WLS-SPI deploys an opcmsg template.</p>
<p>JAGae96414</p>	<p>Weblogic SPI 02.06.01 sends messages to non existing message group</p> <p>Problem: Messages sent by a script are not logged.</p> <p>Cause: The script sends messages to an undefined message group.</p> <p>Fix: The script has been changed to use a defined message group.</p>
<p>NSMbb65792</p>	<p>Getting false server down alarms</p> <p>Problem: When running metrics for the first time, receiving "Unable to contact server <server>" message.</p> <p>Cause: Connection timed out.</p> <p>Fix: Increase TIMEOUT property default to two minutes.</p>

<p>JAGae68979</p>	<p>WLSSPI objects are sent to the browser delimited by single quotes</p> <p>Problem: WLS-SPI objects are delimited by single quotation marks which become part of the object name is used by Service Desk.</p> <p>Cause: The collector does not interpret spaces in a name, therefore an object name that contains a space must be enclosed in single quotation marks.</p> <p>Fix: Incorporate the single quotation marks at the template level, not the collector level. The collector still sees the single quotation marks, but they are not configured in the object.</p>
<p>JAGae90148</p>	<p>Weblogic 2.04 Logfile/config.xml doesn't exist</p> <p>Problem: The following error message is received: Logfile/config.xml doesn't exist. Treating as empty. (OpC30-108)</p> <p>Cause: Invalid file location saved to the SPIConfigCfgFile file.</p> <p>Fix: A script checks the validity of the files in SPIConfigCfgFile. File names are written to SPIConfigCfgFile if the file exists.</p>
<p>JAGae73584</p>	<p>Remove WebLogic SPI requirement that servernames be unique on a host</p> <p>Problem: The WLS-SPI cannot be used in an environment if servers have the same names.</p> <p>Cause: The WLS-SPI does not support duplicate server names.</p> <p>Fix: Duplicate server names are now supported.</p>
<p>ROSm34606</p>	<p>"Element type <name> must be declared" errors running ascii reports</p> <p>Problem: Problems collecting metric 238.</p> <p>Cause: xsl and xml files are written to the tmp directory to avoid issues some scripts have with curly braces in the path names.</p> <p>Fix: Create customized scripts so that curly braces are acceptable in path names and therefore do not need to write to the tmp directory.</p>
<p>JAGaf09476</p>	<p>Request Weblogic SPI reports all able to handle non-default interval</p> <p>Problem: Data collections adding too much overhead to already overloaded systems.</p> <p>Cause: Default collection interval is five minutes</p> <p>Fix: Provide 15 minute interval reports.</p>

<p>NSMbb62277</p>	<p>Exception running ascii report without the -i option on downed server</p> <p>Problem: Exception thrown if ASCII reports run without -i option.</p> <p>Cause: One or more application server is not available</p> <p>Fix: Send the error message that the server is not available when an application server cannot be contacted rather than throwing an exception.</p>
<p>ROSmm31860</p>	<p>Problem: prev function of the Formula element is not documented.</p> <p>Fix: prev function has been added to the configuration guide.</p>
<p>ROSmm31109</p>	<p>SINK entry in OVTrace.tcf has type in path</p> <p>Problem: SINK entry missing leading “/.”</p> <p>Fix: Add leading “/” to file name in SINK entry.</p>
<p>ROSmm26008</p>	<p>InvalidCalculatedMetricDefinitionException being reported</p> <p>Problem: Metrics fail to deliver data.</p> <p>Cause: If, while a calculation is being performed, certaom errors occur, subsequent metrics may report InvalidCalculatedMetricDefinitionException. This is a false exception resulting from the math parser being left in an intermediate state when the original error occurred.</p> <p>Fix: Added a reset method to the to restore it to a start state.</p>

Chapter 3: Known Problems and Workarounds

- **Problem:** On managed nodes using the DCE agent, the /var/opt/OV/wasspi directory and SiteConfig file are not created when running the SPI Discovery or Configuration applications. The problem may be that the component opctranm may be hung.

Workaround: On the management server, run the following commands:

```
ovstop ovoacomm
rm -f /var/opt/OV/share/tmp/OpC/mgmt_sv/magmgr*
ovstart opc
```

- **Problem:** When using OVO 8.x, and running on a DCE node, automatic applications that run on the management server (including those used by the Discovery application) may not work. This may be because OVO8 has implemented a security layer that is automatic in HTTPS nodes, but not DCE.

Workaround: To authorize the WebLogic applications to run properly, the file

```
/etc/opt/OV/share/conf/OpC/mgmt_sv/remactconf.xml
```

must be updated. Merge (if you have previously updated it) or replace this file with the sample authorization file provided with the SPI in

```
/opt/OV/wasspi/wls/OV/remactconf.xml
```

After changing this file, please restart the OVO management server processes via:

```
opcsv -start
```

NOTE – It is necessary to restart the OVO server each time this file is updated.

- **Problem:** When the WebLogic Server is started, multiple WLSSPI-0011.1: % of execute threads used (<VALUE>%) too high messages are displayed in the message browser.

Workaround: These messages can be safely ignored when the WebLogic Server is being started.

- **Problem:** When the Self-Healing Info application is run on a Windows managed node, the output file may be hidden.

Workaround: If you do not see the file, do the following on the managed node:

1. Open Windows Explorer.
2. From the Tools menu, select **Folder Options**.
3. Click on the **View** tab.
4. Under Hidden files and folders, select **Show hidden files and folders**.

- **Problem:** On a Solaris managed node, the ddflog and dsilog processes hang. The error message WASSPI-1: Unable to create the lock file /var/opt/OV/wasspi/wls/datalog/ddflog.lck. File already exists. is reported and running the command `ps -l` shows that the ddflog_coda and ddflog or dsilog processes are hung.

Workaround: On each Solaris managed node on which the problem occurs, do the following:

1. In the `/var/opt/OV/wasspi/wls/conf/SPIConfig` file, set the `DATA_LOGGING_EXECUTABLE_NAME` property after the “#----- Dynamic definitions -----” entry. `DATA_LOGGING_EXECUTABLE_NAME` explicitly sets the data logging program that is used (normally, the collector automatically determines the data logging program to use).

If you are running OVPA, set the property to the following value:

```
DATA_LOGGING_EXECUTABLE_NAME=/opt/perf/bin/dsilog
```

If you are running CODA, set the property to the following value:

```
DATA_LOGGING_EXECUTABLE_NAME=/opt/OV/bin/OpC/monitor/ddflog_coda
```

2. Kill the hung ddflog_coda and ddflog or dsilog processes.

Example excerpt from the SPIConfig file after setting the property:

```
UDM_GRAPH_CAPACITY=50000
UDM_PERF_CAPACITY=50000
#----- Dynamic definitions -----
DATA_LOGGING_ENABLED=TRUE
DATA_LOGGING_EXECUTABLE_NAME=/opt/perf/bin/dsilog
```

- **Problem:** The metrics WLSSPI-0223 and WLSSPI-0224 are no longer available. Refer to “Fixes with Version A.02.04” for more information. The metrics WLSSPI-0220-WLSSPI-0222 and WLSSPI-0227-WLSSPI-0235 0224 are no longer available. Refer to "Fixes with Version A.03.00" for more information.
- **Problem:** The "View Graphs" application does not work.

Workaround: On the OVPM Windows system, copy the file:

```
\Program Files\HP Openview\newconfig\WLSSPI_Graphs.txt
to:
\Program Files\HP Openview\newconfig\VPI_GraphsWLSSPI.txt
```

- **Problem:** On Linux nodes, the "Configure SPI" or "Discovery" application can fail without configuring the SPI on the managed Linux node. This happens because some of the configuration processes require udecode to be present on the local node.

Workaround: Ensure that udecode is installed on the target managed node. It is available in the SHARUTILS package.

- **Problem:** The "Start WebLogic" and "Stop WebLogic" applications fail on Windows nodes if the `USER` or `SERVERn_USER` configuration property is set. The application is trying to run the "su" command, which is only available on UNIX.

Workaround: Do not set the USER or SERVERn_USER property when configuring the SERVERn_START_CMD or SERVERn_STOP_CMD properties for Windows nodes.

- **Problem:** The SPI's configuration log `/var/opt/OV/wasspi/wls/log/config.log` on a managed node grows without being managed for size. This file is appended to whenever the SPI's configuration is run, either manually or when the discovery process finds a change that requires configure to run (such as a WebLogic server being added or removed). Unless there are frequent changes to the environment requiring reconfiguration, this should not be a problem.

Workaround: Manually delete the file if it gets too large.

- **Problem:** WebLogic Server SPI cannot locate and therefore is unable to monitor the WebLogic log file when WebLogic Server is not started from the HOME directory. **This is only a problem in WebLogic Server 6.0 and 6.1.**

The location and name of the WebLogic Server log file is specified in the WebLogic Administration Console in the "Logging" tab on the server configuration page. If this log file is specified with a relative path, this path is relative to the directory in which the WebLogic Server is started. The default is the WebLogic home (WL_HOME) directory specified when the WebLogic SPI is configured. The startup scripts installed by BEA start WebLogic Server from its home directory.

No means currently exists for querying the server for its startup directory. So, if the WebLogic Server is started up in a directory other than WL_HOME and the log file is specified as a relative path, the WLSSPI may not be able to locate and monitor the WebLogic Server log file.

Workarounds (choose either A, B, or C):

(A) Configure the LAUNCH_DIR variable in the WebLogic Server SPI configuration file to define the location of the WebLogic Server startup directory. Please see Chapter 2 of the User's Guide for details.

(B) Ensure that WebLogic Server is started from the WL_HOME directory, which is the default if you use the startup scripts provided by BEA. Also, note that the WLSSPI will not recognize a fully qualified path name for the log file. You must use a relative path for the WebLogic Server log file in order for it to be located and monitored by the WLSSPI.

Or

(C) In the WLS-SPI configuration file, include the fully qualified name(s) of the WebLogic Server logfile(s) you want to monitor. For multiple logfile entries, separate each logfile name with a comma.

To edit the file:

(1) Run the **WLSSPI→WLSSPI Admin→Config WLSSPI** application to edit the file.

(2) Insert an additional line beginning with keyword `SERVER<n>_LOGFILE` as shown below, followed by the fully qualified file name:

```
SERVER<n>_LOGFILE = <path>/<file_name_1>,</path>/<file_name_2>
```

(3) Save the file and deploy to the node.

NOTE: This workaround is an enhancement to the syntax as documented in the *HP OpenView Operations Smart Plug-in for BEA WebLogic Server Configuration Guide*.

- **Problem:** Two Netscape Navigator browser windows are launched when running the View Graphs application. The top window obscures the OVPM function buttons in the lower window.

Workaround: This problem only occurs with Netscape Navigator version 4.79. Use Netscape Navigator version 6.0 or higher.

- **Problem:** The Web browser cannot be launched from an operator action after you have correctly configured the WLS-SPI as instructed in the “Configure the Management Server to Launch your Web Browser” task in chapter 2 of the *HP OpenView Operations Smart Plug-in for BEA WebLogic Server Configuration Guide*.

Workaround:

1. Stop and restart the agent from a user other than `root` by entering the following commands on the managed node:

```
opcagt -kill
opcagt -start
```

2. Run the operator action.

- **Problem:** Netscape fails to refresh graphing data. Specifically, when you use Netscape as the browser to graph your data (graphing capability included with Reporter 3.0 or higher), the browser fails to refresh when new selections are made.

For example, in the OVO console after you drag and drop a managed node onto the WLSSPI Admin application *View Graphs*, Netscape appears and displays a blank WLS-SPI graphing page where you can accept or change the following default selections:

```
Server: MyServer_1
Graph Name: Serverstat
Data Range: 7 Days (ending now)
```

By clicking Draw, you successfully generate the graph.

However, when you select a different server, let's say *MyServer_2*, you see that the graph that appears after you click the Draw button is the same graph/data as the one you just viewed (for *MyServer_1*).

Workaround:

1. In Netscape from the Edit menu select **Preferences→Advanced→Cache**.
 2. In the segment labeled Document in cache is compared to document on network, select radio button **Never**.
 3. After successfully generating the first WLS-SPI graph, for any subsequent graphs, always change a minimum of two selections to refresh the data; for example select a different server and a different graph; or select a different graph and a different date range. Any two differing selections work to clear the current graph data from the browser cache.
 4. **Note:** The underlined text Refresh Graph Now at the bottom of the Web page does not work; when clicked, it may return the error: the parameter is incorrect.
- **Problem:** In version A.02.00, the SPI configuration variables `WL_HOME` and `SERVER<n>_WL_HOME` are deprecated and are replaced with the variables `HOME` and `SERVER<n>_HOME`. The original variables are still supported in this release but may not be in future releases. See chapter 2 in the *HP OpenView Operations Smart Plug-in for BEA WebLogic Server Configuration Guide* for SPI configuration details.

Chapter 4: Required Patches

Please ensure that you have the minimum patches installed for your version of the OVO/UNIX management server and managed nodes. If you have the minimum patch installed, you do not need to install the most recent patch.

If you are installing patches for the first time, install the most recent patches listed (as of October 2004). In some cases, the most recent patches listed here may be superseded.

Refer to the “Downloading Patches” section for more information about downloading these patches.

HP-UX Management Server and Managed Nodes

OS (Management Server)	Minimum		Most Recent	
	Patch Number	Version	Patch Number	Version
HP-UX	PHSS_32174	A.07.23	PHSS_32174	A.07.23

OS (Managed Nodes)	Minimum		Most Recent	
	Patch Number	Version	Patch Number	Version
AIX	PHSS_30466	A.07.23	PHSS_32096	A.07.26
HP-UX 11 IA	PHSS_30169	A.07.23	PHSS_30994	A.07.25
HP-UX 11 PA	PHSS_30124	A.07.23	PHSS_30759	A.07.25
Linux	PHSS_30548	A.07.23.1	PHSS_31006	A.07.25
Solaris	PHSS_30673	A.07.23.1	PHSS_31005	A.07.25
Tru64	PHSS_30203	A.07.23	PHSS_31007	A.07.25
Windows	PHSS_30202	A.07.24	PHSS_30854	A.07.25

Solaris Management Server and Managed Nodes

OS (Management Server)	Minimum		Most Recent	
	Patch Number	Version	Patch Number	Version
Solaris	ITOSOL_00367	A.07.23	ITOSOL_00367	A.07.23

OS (Managed Nodes)	Minimum		Most Recent	
	Patch Number	Version	Patch Number	Version
AIX	ITOSOL_00297	A.07.23	ITOSOL_00355	A.07.26
HP-UX 11 IA	ITOSOL_00300	A.07.23	ITOSOL_00300	A.07.23
HP-UX 11 PA	ITOSOL_00273	A.07.23	ITOSOL_00313	A.07.25
Solaris	ITOSOL_00312	A.07.23.1	ITOSOL_00324	A.07.25
Tru64	ITOSOL_00276	A.07.23	ITOSOL_00326	A.07.25
Windows	ITOSOL_00298	A.07.24	ITOSOL_00314	A.07.25

Downloading Patches

To download patches from HP's management software site, do the following:

1. Go to the following web site: http://support.openview.hp.com/patches/patch_index.jsp
2. Sign in or register with hp passport.
3. Scroll to the bottom of the "Software patches" page.
4. Locate "Find by patch name" and enter a patch number.
5. Select **Enter** or click >>.
6. Click "download patch now" to start downloading the patch.
7. Repeat steps 4 - 6 until you have downloaded all the necessary patches.

To download the patches from the hp IT Resource Center:

1. Go to the following web site: <http://www.itrc.hp.com>
2. Under “maintenance and support (hp products),” select **patch/firmware database**.
3. Log in to or register with the site.
4. Under “find a specific patch,” enter a patch number.
5. In the “search results” page, scroll down until you can see all four steps in the “Search again” area.
6. In step 2, enter all patches you want to download.
7. In step 4, click **search >>**.
8. Under the “most recent (hp rating)” heading in the table, select the check boxes next to the patches you are downloading.
9. Click **add to selected patch list >>**.
10. Click **download selected >>**.
11. In the “download items in one operation” area, in step 2, select the desired file format of the patch.
12. In the “download items in one operation” area, in step 3, click **download >>** to start downloading the patches. Refer to the documentation that comes with the patch for information on how to install the patch.

Chapter 5: Compatibility and Installation Requirements

UPGRADING FROM PREVIOUS VERSIONS

The WLS-SPI may be upgraded to version A.03.50 from previous versions by following the steps listed in the *HP OpenView Operations Smart Plug-in for BEA WebLogic Server Configuration Guide*, chapter 2, section "How to Upgrade from a Previous Version."

SOFTWARE REQUIREMENTS

Service Navigator is not required to run the WLS-SPI. However, if you want to view service maps, Service Navigator must be installed.

NOTE – New platforms are shown in **bold and red**

MANAGEMENT SERVERS

COMPONENT	SUPPORTED VERSIONS
HP OpenView Operations for UNIX	7.x, 8.0, 8.1

MANAGED NODES

COMPONENT	SUPPORTED VERSIONS
WebLogic Application Server 6.1 sp1+ ¹	HP-UX 11.00, 11.11 HP Tru64 5.1A, 5.1B Solaris 2.6, 7, 8, 9 Windows NT, 2000, 2003/x86
WebLogic Application Server 7.0	HP-UX 11.00, 11.11 HP Tru64 5.1A, 5.1B Solaris 7, 8, 9 Windows NT, 2000, 2003/x86 Red Hat Linux Advanced Server 2.1
WebLogic Application Server 8.1 sp1, sp2, sp3	HP-UX 11.00, 11.11, 11.23 HP Tru64 5.1A, 5.1B Solaris 8, 9 Windows 2000, 2003/x86, 2003/IA64 Red Hat Linux Advanced Server 2.1, 3.0
HP OpenView Performance Agent (UNIX or Windows)	C.03.00+
HP OpenView Reporter	A.03+
HP OpenView Performance Manager (HP-UX)	4.x
HP OpenView Performance Manager (Windows)	4.x, 5.x

¹ Any service pack, sp1 or greater, must be installed on WLS 6.1. WLS-SPI only supports WLS 6.1 with a service pack installed.

Chapter 6: SOFTWARE AVAILABILITY IN NATIVE LANGUAGES

None

Legal Notices

Warranty

Hewlett-Packard makes no warranty of any kind with regard to this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental or consequential damages in connection with the furnishing, performance, or use of this material.

A copy of the specific warranty terms applicable to your Hewlett-Packard product can be obtained from your local Sales and Service Office.

Restricted Rights Legend

Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013.

Hewlett-Packard Company
United States of America

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

Copyright Notices

©Copyright 2001-2004 Hewlett-Packard Development Company, L.P.

No part of this document may be copied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company. The information contained in this material is subject to change without notice.

Trademark Notices

UNIX® is a registered trademark of The Open Group.

Microsoft®, Windows NT®, and Windows® are U.S. registered trademark of Microsoft Corporation.

Linux is a U.S. registered trademark of Linus Torvalds.

Java™ is a U.S. trademark of Sun Microsystems, Inc.