Oracle Integrated Lights Out Manager (ILOM) 3.1

Feature Updates and Release Notes

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Using This Documentation

The Feature Updates and Release Notes guides describes firmware enhancements, known issues, and work-arounds for Oracle Integrated Lights Out Manager (ILOM) 3.1 firmware.

Use this guide in conjunction with other guides in the Oracle ILOM 3.1 Documentation Library. This guide is intended for technicians, system administrators, and authorized Oracle service providers, and users who have experience managing system hardware.

- "Related Documentation" on page v
- "Documentation Feedback" on page vi
- "Product Downloads" on page vi
- "Oracle ILOM 3.1 Firmware Version Numbering Scheme" on page vii
- "Support and Accessibility" on page viii

Related Documentation

Documentation	Links
All Oracle products	http://www.oracle.com/documentation
Oracle Integrated Lights Out Manager (Oracle ILOM) 3.1 Documentation Library	http://www.oracle.com/pls/topic/lookup?ctx=ilom31

Documentation	Links
System management, single system management (SSM) security, and diagnostic documentation	www.oracle.com/technetwork/documentation/sys-mgmt-networking-190072.html
Oracle Hardware Management Pack 2.2	http://www.oracle.com/pls/topic/lookup?ctx=ohmp

Note: To locate Oracle ILOM 3.1 documentation that is specific to your Oracle server platform, see the Oracle ILOM section of the Administration Guide that is available for your server.

Documentation Feedback

Provide feedback on this documentation at:

http://www.oracle.com/goto/docfeedback

Product Downloads

Updates to the Oracle ILOM 3.1 firmware are available through standalone software updates that you can download from the My Oracle Support (MOS) web site for each Oracle server or blade chassis system. To download these software updates from the MOS web site, see the instructions that follow.

▼ Download Product Software and Firmware

1. **Go to** http://support.oracle.com**.**
2. **Sign in to My Oracle Support.**
3. **At the top of the page, click the Patches & Updates tab.**
4. **In the Patch Search panel, at the top of the Search tab, select Product or Family (Advanced).**

5. **In the Product Is list box, type a full or partial product name until a list of product matches appear in the list box, and then select the product name of interest.**

   Example Product Names: Sun Fire X4470 M2 Server or Sun Enterprise SPARC T5120.

6. **In the Release Is list box:**

   a. **Click the Down arrow in the Release Is list box to display a list of matching product folders.**

      A list of one or more product software releases appears.

   b. **Select the check box next to the software release of interest.**

      For example: `X4470 M2 SW 1.4` or `Sun SPARC Enterprise T5120`.

7. **Click Search.**

   A Patch Search Results screen appears displaying a list of patch names and descriptions.

8. **In the Patch Search Results screen, select the Patch Name of interest.**

   For example: `X4470 M2 Server SW 1.4. ILOM and BIOS (Patch)` or `Firmware SPARC Enterprise T5120 Sun System Firmware 7.1.3.2`.

9. **In the Patch Name selection, click one of the following actions:**
   - **Readme –** Opens the selected patch Readme file.
   - **Add to Plan –** Adds the selected patch to a new or existing plan.
   - **Download** – Downloads the selected patch.

Oracle ILOM 3.1 Firmware Version Numbering Scheme

Oracle ILOM 3.1 uses a firmware version numbering scheme that helps you to identify the firmware version you are running on your server or chassis monitoring module (CMM). This numbering scheme includes a five-field string, for example, `a.b.c.d.e`, where:

- `a` – Represents the major version of Oracle ILOM.
- `b` – Represents a minor version of Oracle ILOM.
- `c` – Represents the update version of Oracle ILOM.

- `d` – Represents a micro version of Oracle ILOM. Micro versions are managed per platform or group of platforms. See your platform product notes for details.
- `e` – Represents a nano version of Oracle ILOM. Nano versions are incremental iterations of a micro version.

For example, Oracle ILOM 3.1.2.1.a would designate:

- Oracle ILOM 3 as the major version
- Oracle ILOM 3.1 as a minor version
- Oracle ILOM 3.1.2 as the second update version
- Oracle ILOM 3.1.2.1 as a micro version
- Oracle ILOM 3.1.2.1.a as a nano version of 3.1.2.1

Tip – To identify the Oracle ILOM firmware version installed on your Oracle server or blade chassis, click System Information > Firmware in the web interface, or type `version` in the command-line interface.

Support and Accessibility

Description	Links

Access electronic support through My Oracle Support	`http://support.oracle.com`
	
	For hearing impaired:
	`http://www.oracle.com/accessibility/support.html`

Learn about Oracle's commitment to accessibility	`http://www.oracle.com/us/corporate/accessibility/index.html`

Feature Enhancements as of Oracle ILOM 3.1

The Oracle Integrated Lights Out Manager (Oracle ILOM) 3.1 firmware provides all the same behavior previously provided in the 3.0 firmware with the addition of some new feature enhancements.

- "Feature Enhancements Summary" on page 2

Feature Enhancements Summary

The following table identifies some of the firmware feature enhancements for Oracle ILOM 3.1.

TABLE: Feature Enhancements Summary as of Oracle ILOM 3.1

Feature	Enhancement Description	For more details, see
Redesigned Oracle ILOM 3.1 web interface	A new redesigned web interface is available as of Oracle ILOM 3.1.	• *Oracle ILOM 3.1 User's Guide,* "Navigating the Redesigned 3.1 Web Interface" on page 13
Updated Oracle ILOM 3.1 CLI targets and blade system drill-down capabilities	Some server CLI targets and blade system drill-down enhancements for 3.1 include: • `/SYS` target replaced by `/System` target. • `/CH` target replaced by `/System` target. • `/Blades` target replaced by `/Servers` target. • A new seamless drill-down capability is provided for blade system server navigation, thereby, eliminating the need to modify a blade server CLI prompt.	• *Oracle ILOM 3.1 User's Guide,* "Navigating the Command-Line Interface (CLI) Namespace Targets" on page 22
Legacy Oracle ILOM 3.0 CLI targets	All 3.0 legacy CLI targets are available for use but are hidden from view.	• *Oracle ILOM 3.1 User's Guide,* "CLI Legacy Service State Tasks and Applicable CLI Targets" on page 147
Updated CLI IPMI State Property as of Oracle ILOM firmware release 3.1	`set /SP/services/ipmi state=` *disabled*|*enabled*	*Oracle ILOM 3.1 Configuration and Maintenance Guide,* "Modifying Default Management Access Configuration Properties" on page 79
Chassis monitoring module (CMM) 3.0 and 3.1 blade management compatibility	3.0 blade system servers are viewable and manageable from a 3.1 CMM.	• *Oracle ILOM 3.1 User's Guide,* "CMM Web Interface: Blade Server Views" on page 22

TABLE: Feature Enhancements Summary as of Oracle ILOM 3.1 *(Continued)*

Feature	Enhancement Description	For more details, see
System Status, Sub-Component Status, and Open Problems Sensors	All sensors statistics provided in 3.0 have been replaced in 3.1 by the System Summary and Sub-component health status, and Open Problems report.	• *Oracle ILOM 3.1 User's Guide,* "Collecting Information, Status, and Initiating Common Actions" on page 34 • *Oracle ILOM 3.1 User's Guide,* "Administering Open Problems" on page 41
Storage Viewer	The 3.0 Storage Viewer is renamed to Storage in 3.1. All the same 3.0 storage behavior is available in 3.1 plus additional enhancements to view near real-time disk values for RAID volumes. All storage health details appear under Storage in the web interface or under the `/System/storage` target in the CLI.	• *Oracle ILOM 3.1 User's Guide,* "View Subcomponent-Level Information and Health Status (Web)" on page 35 • *Oracle ILOM 3.1 User's Guide,* "View Subcomponent-Level Information and Health Status (CLI)" on page 37
Inventory of PCI Add-On Devices	New inventory and health status information is available in 3.1 for PCI add-on devices.	• *Oracle ILOM 3.1 User's Guide,* "View Subcomponent-Level Information and Health Status (Web)" on page 35 • *Oracle ILOM 3.1 User's Guide,* "View Subcomponent-Level Information and Health Status (CLI)" on page 37
Host server operating system identification	The identity of the host server operating system appears on the 3.1 System Summary web page or under the `/SYSTEM` target in the CLI, when the Hardware Management Pack software is present on the host managed server.	• *Oracle ILOM 3.1 User's Guide,* "View System-Level Information and Health Status (CLI)" on page 36
Oracle System Assistant	The Oracle System Assistant for x86 managed servers is launchable from the 3.1 System Summary web page or CLI.	• *Oracle ILOM 3.1 User's Guide,* "Launch the x86 Oracle System Assistant" on page 57
x86 BIOS configuration management	BIOS configuration management is available in 3.1 for x86 servers from the web interface or CLI.	• *Oracle ILOM 3.1 Configuration and Maintenance Guide,* "Maintaining x86 BIOS Configuration Parameters" on page 215
Audit log	A new audit log is available in 3.1 in addition to the event log previously provided in 3.0.	• *Oracle ILOM 3.1 User's Guide,* "Managing Oracle ILOM Log Entries" on page 45

TABLE: Feature Enhancements Summary as of Oracle ILOM 3.1 *(Continued)*

Feature	Enhancement Description	For more details, see
Power history web charting	In addition to all the power management features provided in 3.0, a new power history web charting feature is available in 3.1.	• *Oracle ILOM 3.1 User's Guide,* "Comparing Power History Performance" on page 94
Fault Management: Clearing Faults	System faults reported by Oracle ILOM 3.1 are automatically cleared upon replacing the faulted component.	• *Oracle ILOM 3.1 User's Guide,* "Managing Oracle Hardware Faults Through the Oracle ILOM Fault Management Shell" on page 97

Updates to Oracle ILOM 3.1.x Firmware

The section lists initial point releases for Oracle ILOM 3.1 firmware, as well as known issues and workarounds.

- "Initial 3.1 Point Releases for Servers and Sun Blade 6000 CMM" on page 5
- "Deprecation Notice for WS-Man as of Oracle ILOM 3.2.1" on page 6
- "Oracle ILOM 3.1 Known Issues" on page 6
- "Documentation Titles in Translated Documents" on page 9

Initial 3.1 Point Releases for Servers and Sun Blade 6000 CMM

The following table identifies the initial Oracle ILOM 3.1 firmware point releases that are available for Oracle x86 server service processors (SP)s, SPARC server SPs, or a Chassis Monitoring Module (CMM).

Server SP or CMM	Initial Oracle ILOM 3.1 Firmware Point Release
x86 server service processor (SP)	3.1.0 firmware release or later
Sun Blade 6000 CMM*	3.1.1 firmware release or later
SPARC SP	3.1.2 firmware release or later

* Blade servers running 3.0 firmware are viewable and manageable from a CMM running 3.1 firmware.

For additional information about server-specific Oracle ILOM features, refer to the Administration Guide available for your server.

Deprecation Notice for WS-Man as of Oracle ILOM 3.2.1

As of firmware release 3.1.2, the WS-MAN API has been deprecated in Oracle ILOM and will be removed in a future release. Oracle ILOM versions 3.1.2 and earlier will continue to support the WS-MAN API.

WS-MAN refers to the WS-Management specification published by the Distributed Management Task Force (DMTF). WS-MAN provides a common way to access and exchange management information.

Oracle ILOM 3.1 Known Issues

This section describes known issues and workarounds as of Oracle ILOM 3.1.0. Specific change request (CR) numbers and workarounds or updates for the issues are provided, where available.

Topic Descriptions	Links
Launching the Oracle ILOM Remote Console from a Windows XP IPv6 client is not supported.	"Oracle ILOM Remote Console IPv6 Requirement for Windows Client" on page 7
Security message appears in Firefox browser navigation panel.	"Security Message Appears in Oracle ILOM 3.1 Navigation Pane With Firefox Browser" on page 7
Internet Explorer 6 users must upgrade browser environment.	"Internet Explorer 6 Users Must Upgrade Browser or Upload Custom Certificate and Key to Access Web Interface" on page 7
Java Remote Console might disconnect due to network issues.	"Java Remote Console Disconnects Due to Network Issues" on page 8
WS-MAN configuration properties fail to back up in Oracle ILOM firmware 3.2.1 or later.	"Misleading Error Message When Backing Up WS-MAN Properties in Oracle ILOM 3.2.x" on page 8
The Oracle ILOM clock on systems configured for the Israel timezone transitions to standard time early.	"Systems Configured for Israel Timezone: Use Europe/Athens Timezone to Correct SP or CMM Clock Transition for New DST End Date" on page 9

Oracle ILOM Remote Console IPv6 Requirement for Windows Client

CR 6993498

Issue: Since the Java Development Kit (JDK) does not support Microsoft Windows XP for IPv6 network environments, launching the Oracle ILOM Remote Console from a Windows XP IPv6 client is not supported.

Workaround: For network environments using IPv6 and running Microsoft Windows operating systems, launch the Oracle ILOM Remote Console from a Microsoft Windows Vista/2008/7 client using JDK170b36 or higher.

Security Message Appears in Oracle ILOM 3.1 Navigation Pane With Firefox Browser

CR 7052145

Issue: When using a Firefox browser version Firefox 4 or greater, a security message might appear in the navigation pane.

Workaround: Right-click on the navigation pane and select Reload.

Internet Explorer 6 Users Must Upgrade Browser or Upload Custom Certificate and Key to Access Web Interface

CR 7122399

Issue: After upgrading to Oracle ILOM 3.1.0, Internet Explorer 6 cannot be used to access the Oracle ILOM web interface.

Workaround: Do one of the following:

Option 1 - Upgrade browser to Internet Explorer 7 or later, or another browser equivalent that is newer.

Option 2 - Log into the CLI and do the following:

1. Enable weak ciphers:

   ```
   set /SP/services/https weak_ciphers=enabled
   ```

2. Upload custom key:

```
set /SP/services/https/ssl/custom_key load_uri=<load uri>
```

3. Upload custom certificate:

```
set /SP/services/https/ssl/custom_cert load_uri=<load uri>
```

Java Remote Console Disconnects Due to Network Issues

CR 7141880

Issue: If you encounter network slowness when logging in to Oracle ILOM or Java Remote Console, this could lead to a failure of Java Remote Console to connect to the remote system.

Workaround: Do one of the following:

- Manually configure the browser to not use proxy for a 10.X.X.X network.
- Remove the JavaWS cache directory, which is in one of the following directories:

  `$HOME_DIR/.java/deployment/cache/javaws/6.0`

  `$HOME_DIR/.java/deployment/cache/javaws/https`

Misleading Error Message When Backing Up WS-MAN Properties in Oracle ILOM 3.2.x

Issue: As of firmware release 3.1.2, the WS-MAN API has been deprecated in Oracle ILOM and it will no longer be supported in future Oracle ILOM firmware releases. Therefore, if you upgrade the Oracle ILOM firmware to 3.2.1 or later and attempt to back up the SP configuration containing WS-MAN properties, Oracle ILOM displays the following error message:

```
Config restore: Unable to restore property
       '/SP/services/wsman/https_port', permission denied.
```

Update: The above restore error message is misleading since it implies that the back up operation for the WS-MAN properties failed due to user permission levels. In this case, Oracle ILOM failed to back up the WS-MAN properties because the WS-MAN properties are no longer supported by Oracle ILOM as of firmware release 3.2.1 and later.

Systems Configured for Israel Timezone: Use Europe/Athens Timezone to Correct SP or CMM Clock Transition for New DST End Date

Issue: If the Oracle ILOM service processor (SP) or chassis monitoring module (CMM) clock is configured to use the Israel timezone, the clock will incorrectly transition from Daylight Saving Time (DST) to standard time on September 8th, 2013. As of 2013, the DST end date in Israel is the last Sunday in October.

Workaround: For systems configured to use the Israel timezone, change the value of the Oracle ILOM Timezone property for the SP or CMM clock to Europe/Athens. The Europe/Athens timezone shares the same offset from Coordinated Universal Time as the Israel timezone, and transitions from DST to standard time on the last Sunday in October.

You can change the Oracle ILOM Timezone property for the SP or CMM clock in the web interface or command-line interface (CLI).

- In the web interface, click ILOM Administration → Date and Time → Timezone → Europe/Athens.
- In the CLI, type **`set /SP|CMM/clock timezone=Europe/Athens`**.

Documentation Titles in Translated Documents

In the translated versions of the PDF documents, the document titles used in cross-references are abbreviated. The abbreviated titles correspond to the complete document titles listed in the table that follows.

Abbreviated Document Title	Complete Document Title
Oracle ILOM 3.1 Quick Start	*Oracle Integrated Lights Out Manager (ILOM) 3.1 Quick Start Guide*
Oracle ILOM 3.1 User's Guide	*Oracle Integrated Lights Out Manager (ILOM) 3.1 User's Guide*
Oracle ILOM 3.1 Configuration and Maintenance	*Oracle Integrated Lights Out Manager (ILOM) 3.1 Configuration and Maintenance Guide*
Oracle ILOM 3.1 Basic CLI Command Reference	Oracle Integrated Lights Out Manager (ILOM) 3.1 Basic CLI Command Reference

Abbreviated Document Title	Complete Document Title
Oracle ILOM 3.1 Protocol Management Reference	*Oracle Integrated Lights Out Manager (ILOM) 3.1 SNMP, IPMI, CIM, WS-MAN Protocol Management Reference Guide*
Oracle ILOM 3.1 Feature Updates and Release Notes	*Oracle Integrated Lights Out Manager (ILOM) 3.1 Feature Updates and Release Notes*