

Oracle Integrated Lights Out Manager (ILOM) 3.0

Supplement for the Sun Datacenter InfiniBand
Switch 36 Firmware Version 2.1



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Using This Documentation

This supplement provides detailed information regarding the installation, administration, and reference of Oracle Integrated Lights Out Manager (ILOM) 3.0 firmware for the Sun Datacenter InfiniBand Switch 36 from Oracle. This document is written for system administrators and authorized service providers who have experience with the Oracle ILOM firmware.

- “Product Notes” on page xvii
- “Related Documentation” on page xviii
- “Feedback” on page xviii
- “Access to Oracle Support” on page xviii

Product Notes

For late-breaking information and known issues about this product, refer to the product notes at:

http://docs.oracle.com/cd/E36265_01

Related Documentation

Documentation	Links
Sun Datacenter InfiniBand Switch 36 Firmware Version 2.1	http://docs.oracle.com/cd/E36265_01
Oracle Integrated Lights Out Manager (ILOM) 3.0	http://docs.oracle.com/cd/E19860-01
All Oracle products	http://www.oracle.com/documentation

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Understanding Oracle ILOM on the Switch

These topics provide an overview of Oracle ILOM and its implementation on the switch.

- [“Oracle ILOM Overview”](#) on page 1
- [“Supported Features”](#) on page 2
- [“Understanding Oracle ILOM Targets”](#) on page 4

Related Information

- [“Administering Oracle ILOM \(CLI\)”](#) on page 27
- [“Administering Oracle ILOM \(Web\)”](#) on page 117
- [“Using the Fabric Monitor”](#) on page 175
- [“Administering Oracle ILOM \(SNMP\)”](#) on page 197
- [“Administering Hardware \(IPMI\)”](#) on page 257
- [“Understanding Oracle ILOM Commands”](#) on page 265

Oracle ILOM Overview

This document provides basic Oracle ILOM 3.0 information as it pertains to the switch. See [“Related Documentation”](#) on page xviii.

Oracle ILOM is a means of remotely managing a hardware device through a SP. For the switch, the SP is the Komtron management controller within the switch. Oracle ILOM enables monitoring and controlling of users, hardware, services, protocols, and configuration. You can use Oracle ILOM to perform tasks that could otherwise be accomplished with the hardware commands.

Oracle ILOM has two primary interfaces, a command line and a web interface. The Oracle ILOM web interface enables point-and-click administration of the Oracle ILOM components and services. You access these interfaces using the default `ilom-admin` or `ilom-operator` user accounts. The `ilom-admin` account is for Oracle ILOM system administration. This account is fully privileged to add, delete, create, enable, disable, and so on, the Oracle ILOM targets, components, and services. The `ilom-operator` account is for users to only monitor the many aspects of Oracle ILOM.

Additionally, the Oracle ILOM implementation supports industry-standard SNMP and IPMI interfaces.

When you upgrade the management controller firmware to version 1.1.2 or higher, Oracle ILOM 3.0 support is installed. An additional benefit of Oracle ILOM is that future management controller and I4 firmware upgrades are greatly simplified.

Related Information

- [“Understanding Oracle ILOM Commands” on page 265](#)
- [“Web Interface Overview” on page 117](#)
- [“Accessing Oracle ILOM From the CLI” on page 28](#)
- [“Access Oracle ILOM From the Web Interface” on page 120](#)
- [“Upgrading the Switch Firmware Through Oracle ILOM \(CLI\)” on page 108](#)

Supported Features

For the implementation of Oracle ILOM 3.0 on the management controller, these features are supported:

- **Interfaces** – These interfaces are supported:
 - **CLI** – Succinct and human-readable administration interface.
 - **BI** – Browser interface or web interface. User-friendly administration interface.
 - **SNMP** – Advanced user interface for those experienced with SNMP.
 - **IPMI** – An interface between hardware devices.
- **Fault Management** – Automatically diagnose and report hardware faults.
- **Event and fault monitoring** – These events are logged:
 - **Oracle ILOM events**
 - **Switch-specific events** – Non-Oracle ILOM events are also logged into the Oracle ILOM event log.

- **Firmware upgrade** – I4 switch chip and management controller firmware upgrade from a single repository file.
- **Fabric Monitor** – Browser interface to monitor switch configuration, status, and activity.
- **Oracle ILOM support** – These features are supported for this implementation of Oracle ILOM:
 - **User management** – `ilom-admin`, `ilom-operator`, and user-created Oracle ILOM accounts.

Note – SSH key-based user authentication is not supported.

- **Network management** – IP address, netmask, gateway, and other parameters.
- **Session monitoring** – Monitor active user sessions.
- **Service management** – HTTP, HTTPS, SNMP, and others.
- **Alert management** – Manage propagation of SNMP alerts, IPMI PEs, and Email alerts.
- **DNS** – Domain name services are provided.
- **SMTP management** – Configure SMTP client setting to support email alerts.
- **Snapshot feature** – Take a *snapshot* of the state of Oracle ILOM.
- **Event management** – Manage the local Oracle ILOM event log.
- **Remote syslog** – Forward the Syslog to a remote server.
- **Service Tag** – Support for the Service Tag program.
- **Back up and restore Oracle ILOM configuration** – Save and restore the state of Oracle ILOM.
- **Modification of back up and restore** – Switch-specific configuration information can be selectively backed up or restored.
- **NTP management** – Automatically set time with NTP servers.
- **Timezone management** – Configure the correct timezone for the management controller.
- **Start OS shell from Oracle ILOM CLI** – Toggle between the Oracle ILOM CLI and the Linux OS.
- **Sensors**
 - **Aggregate sensor** – Reports general health of switch, power redundancy, cooling redundancy status, etc.
 - **Fan sensors** – Return the speed of the fans.
 - **Power supply sensors** – Report the state of the power supplies.
 - **Voltage sensors** – Return the various voltages on the main board.
 - **Temperature sensors** – Report the temperatures within the switch.

- **Indicators**
- **FRU ID** – FRU identification information display.

Related Information

- [“Administering Oracle ILOM \(CLI\)”](#) on page 27
- [“Administering Oracle ILOM \(Web\)”](#) on page 117

Understanding Oracle ILOM Targets

These topics describe the Oracle ILOM targets and their properties.

- [“Oracle ILOM Target Overview”](#) on page 4
- [“Oracle ILOM Targets and Descriptions”](#) on page 5
- [“Oracle ILOM General System Targets and Properties”](#) on page 9
- [“Oracle ILOM Fan Targets and Properties”](#) on page 12
- [“Oracle ILOM Indicator Targets and Properties”](#) on page 13
- [“Oracle ILOM Power Supply Targets and Properties”](#) on page 14
- [“Oracle ILOM Temperature Targets and Properties”](#) on page 15
- [“Oracle ILOM Voltage Targets and Properties”](#) on page 17
- [“Oracle ILOM Voltage State Targets and Properties”](#) on page 20
- [“Oracle ILOM General Targets and Properties”](#) on page 21
- [“Oracle ILOM Service Targets and Properties”](#) on page 23
- [“Oracle ILOM User and Session Targets and Properties”](#) on page 25

Related Information

- [“Understanding Oracle ILOM Commands”](#) on page 265

Oracle ILOM Target Overview

Oracle ILOM targets represent all software and hardware components and services managed by Oracle ILOM. Targets are identified by a hierarchal path very similar to the directories and files of a file system. Each target has properties and commands that can affect it.

Target properties are of two types:

- **Read and write** – Display the value of these properties with the `show` command. Change the properties with the `set` command. A typical read and write property would be an IP address.
- **Write only** – You cannot display the value of these properties with the `show` command. The value is typically displayed as `(Cannot show property)`. When you set the property value with the `set` command, it initiates a one-time action. For example, when the `commitpending` property is set to `true`, it copies the pending network properties into the standard network properties.

Target commands are specific to the permissions of the user that wants to affect the target. For example, the `ilom-admin` user can use the `show` or `set` command to affect an IP address property, but the `ilom-operator` user can only use the `show` command.

Related Information

- [“show Command” on page 275](#)
- [“set Command” on page 274](#)
- [“Oracle ILOM Targets and Descriptions” on page 5](#)
- [“Oracle ILOM General System Targets and Properties” on page 9](#)
- [“Oracle ILOM Fan Targets and Properties” on page 12](#)
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Oracle ILOM Targets and Descriptions

This table lists the Oracle ILOM targets supported in the switch and provides a short description of the target.

Oracle ILOM Target	Description
/	Hierarchy root
/SP	Management controller or Host
/SP/alertmgmt/rules	Alert rules
/SP/cli	CLI
/SP/clients	Clients that connect to external services
/SP/clients/dns	DNS client configuration
/SP/clients/ntp	NTP configuration
/SP/clients/ntp/server	NTP server configuration
/SP/clients/smtp	SMTP email client configuration
/SP/clients/syslog	syslogd management
/SP/clock	Clock management
/SP/config	Configuration back up and restore settings
/SP/diag/snapshot	State of switch snapshot
/SP/Fabric_Mgmt	Fabric management Linux shell (ilom-admin user)
/SP/faultmgmt	List of faulted components
/SP/logs/event	Event log management
/SP/logs/event/list	List of events
/SP/network	External network interface
/SP/network/test	Ping test
/SP/Platform_CLI	Comprehensive Linux shell
/SP/services	Available services
/SP/services/http	HTTP service
/SP/services/https	HTTPS service
/SP/services/https/ssl	HTTPS SSL certificate settings
/SP/services/https/ssl/custom_cert	Custom SSL certificate settings
/SP/services/https/ssl/custom_key	Custom SSL private key settings
/SP/services/https/ssl/default_cert	Default SSL certificate settings
/SP/services/ipmi	Management of the IPMI service
/SP/services/servicetag	Service Tag configuration
/SP/services/snmp	SNMP agent service configuration

Oracle ILOM Target	Description
/SP/services/snmp/communities/private	SNMP community
/SP/services/snmp/communities/public	SNMP community
/SP/services/snmp/mibs	SNMP MIBs downloadable
/SP/services/snmp/users	SNMP users
/SP/sessions	Monitor active user sessions
/SP/Switch_Diag	Diagnostic Linux shell (ilom-operator and ilom-admin users)
/SP/users	User management
/SP/users/root	User root role and password
/SP/users/ilom-admin	User ilom-admin role and password
/SP/users/ilom-operator	User ilom-operator role and password
/SYS	Sensors and FRU information
/SYS/CABLE_ATTN	Aggregate sensor – Overall connector hardware state
/SYS/CABLE_CONN_STAT	Aggregate sensor – Change in cable connectivity state
/SYS/CHASSIS_STATUS	Aggregate sensor – Overall chassis state
/SYS/COOLING_ATTN	Aggregate sensor – Overall cooling state
/SYS/COOLING_REDUN	Aggregate sensor – Cooling redundancy state
/SYS/Fabric_Mgmt	Fabric management Linux shell (ilom-admin user)
/SYS/FANx	Fan x information
/SYS/FANx/FAULT	Fault state of fan x
/SYS/FANx/PRSNT	Presence of fan x
/SYS/FANx/TACH	Speed of fan x
/SYS/I_ATTENTION	State of Attention LED
/SYS/I_LOCATOR	State of Locator LED
/SYS/I_POWER	State of Power LED
/SYS/IBDEV_ATTN	Aggregate sensor – Overall I4 switch chip state
/SYS/MB	Motherboard information
/SYS/MB/BAT_FAULT	State of the real time clock battery.
/SYS/MB/BOOT_I4A	Status of I4 switch chip boot
/SYS/MB/DISK_FAULT	State of the life span of the flash drive.
/SYS/MB/T_BACK	Temperature at rear of chassis
/SYS/MB/T_FRONT	Temperature at front of chassis

Oracle ILOM Target	Description
/SYS/MB/T_I4A	Temperature of the I4 switch chip
/SYS/MB/T_SP	Temperature of the management controller
/SYS/MB/V_1.8V	Voltage of the main 1.8V source
/SYS/MB/V_1.8VOK	State of the main 1.8V source
/SYS/MB/V_2.5V	Voltage of the main 2.5V source
/SYS/MB/V_2.5VOK	State of the main 2.5V source
/SYS/MB/V_3.3VMain	Voltage of the main 3.3V source
/SYS/MB/V_3.3VMainOK	State of the main 3.3V source
/SYS/MB/V_3.3VStby	Voltage of the standby 3.3V source
/SYS/MB/V_5V	Voltage of the main 5V source
/SYS/MB/V_5VOK	State of the main 5V source
/SYS/MB/V_12V	Voltage of the main 12V source
/SYS/MB/V_BAT	Voltage of the battery
/SYS/MB/V_ECB	State of the Electronic Circuit Breaker
/SYS/MB/V_I41.2V	Voltage of the I4 switch chip
/SYS/MB/V_I41.2VOK	State of the I4 switch chip 1.2V source
/SYS/Platform_CLI	Comprehensive Linux shell
/SYS/POWER_ATTN	Aggregate sensor – Overall power state
/SYS/POWER_REDUN	Aggregate sensor – Power redundancy state
/SYS/PSUx	Power supply x information
/SYS/PSUx/AC_PRESENT	Presence of AC input power for power supply x
/SYS/PSUx/ALERT	State of power supply x
/SYS/PSUx/FAULT	Fault state of power supply x
/SYS/PSUx/PRSNT	Presence of power supply x
/SYS/Switch_Diag	Diagnostic Linux shell (ilom-operator and ilom-admin users)
/SYS/TEMP_ATTN	Aggregate sensor – Overall temperature state

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
- [“Oracle ILOM General System Targets and Properties” on page 9](#)
- [“Oracle ILOM Fan Targets and Properties” on page 12](#)

- “Oracle ILOM Indicator Targets and Properties” on page 13
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Oracle ILOM General System Targets and Properties

This table lists the Oracle ILOM /SYS targets and their properties. Targets without properties are not listed.

Target and Path	Properties
/SYS	<ul style="list-style-type: none"> • type = Host System • ipmi_name = SYS • product_name = Sun Datacenter InfiniBand Switch 36 • product_part_number = 541-3495-06 • product_serial_number = 0924AK2285 • product_manufacturer = Sun Microsystems
/SYS/CABLE_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = CABLE_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/CABLE_CONN_STAT	<ul style="list-style-type: none"> • type = OEM • ipmi_name = CABLE_CONN_STAT • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/CHASSIS_STATUS	<ul style="list-style-type: none"> • type = OEM • ipmi_name = CHASSIS_STATUS • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Target and Path	Properties
/SYS/COOLING_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = COOLING_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/COOLING_REDUN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = COOLING_REDUN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/IBDEV_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = IBDEV_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB	<ul style="list-style-type: none"> • type = Motherboard • ipmi_name = MB • product_name = Sun Datacenter InfiniBand Switch 36 • product_part_number = 541-3495-06 • product_serial_number = 0924AK2285 • product_manufacturer = Sun Microsystems • fru_name = Chassis and Motherboard • fru_description = Chassis and Motherboard • fru_part_number = 5111232 • fru_serial_number = 0110SJC-09183P0020 • fru_extra_1 = ComEx: manufacturing_date - 2010.01.26 • fru_extra_2 = ComEx: serial_number - NCD2T0307 • fru_extra_3 = ComEx: hardware_rev - 0x100, firmware_rev - 0x102 • fru_extra_4 = ComEx: bios_version - NOW1R112 , bios_date - 04/24/2009 • fault_state = OK • clear_fault_action = (none)
/SYS/MB/BAT_FAULT	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/BAT_FAULT • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Target and Path	Properties
/SYS/MB/BOOT_I4A	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/BOOT_I4A • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/DISK_FAULT	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/DISK_FAULT • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/POWER_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = POWER_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/POWER_REDUN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = POWER_REDUN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/TEMP_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = TEMP_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
- [“Oracle ILOM Targets and Descriptions” on page 5](#)
- [“Oracle ILOM Fan Targets and Properties” on page 12](#)
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Oracle ILOM Fan Targets and Properties

This table lists the Oracle ILOM `/SYS/FANx` targets and their properties. Targets without properties are not listed.

Note – The `/SYS/FANx` target is only available for currently present fans.

Target and Path	Properties
<code>/SYS/FANx</code>	<ul style="list-style-type: none"> • <code>type</code> = Rear Fan • <code>fault_state</code> = OK • <code>clear_fault_action</code> = (none)
<code>/SYS/FANx/FAULT</code>	<ul style="list-style-type: none"> • <code>type</code> = OEM • <code>ipmi_name</code> = FANx/FAULT • <code>class</code> = Discrete Sensor • <code>value</code> = State Deasserted • <code>alarm_status</code> = cleared
<code>/SYS/FANx/PRSNT</code>	<ul style="list-style-type: none"> • <code>type</code> = Entity Presence • <code>ipmi_name</code> = FANx/PRSNT • <code>class</code> = Discrete Sensor • <code>value</code> = Present • <code>alarm_status</code> = cleared
<code>/SYS/FANx/TACH</code>	<ul style="list-style-type: none"> • <code>type</code> = Fan • <code>ipmi_name</code> = FANx/TACH • <code>class</code> = Threshold Sensor • <code>value</code> = 12208.000 RPM • <code>upper_critical_threshold</code> = 26705.000 RPM • <code>lower_noncritical_threshold</code> = 6322.000 RPM • <code>alarm_status</code> = cleared

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
- [“Oracle ILOM Targets and Descriptions” on page 5](#)
- [“Oracle ILOM General System Targets and Properties” on page 9](#)
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Oracle ILOM Indicator Targets and Properties

This table lists the Oracle ILOM `/SYS/I_`*indicator* indicator targets and their properties. Targets without properties are not listed.

Target and Path	Properties
<code>/SYS/I_ATTENTION</code>	<ul style="list-style-type: none"> • type = Indicator • ipmi_name = I_ATTENTION • value = Off
<code>/SYS/I_LOCATOR</code>	<ul style="list-style-type: none"> • type = Indicator • ipmi_name = I_LOCATOR • value = Off
<code>/SYS/I_POWER</code>	<ul style="list-style-type: none"> • type = Indicator • ipmi_name = I_POWER • value = On

Related Information

- “Oracle ILOM Target Overview” on page 4
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Oracle ILOM Power Supply Targets and Properties

This table lists the Oracle ILOM `/SYS/PSUx` targets and their properties. Targets without properties are not listed.

Note – The `/SYS/PSUx` target is only available for currently present power supplies.

Target and Path	Properties
<code>/SYS/PSUx</code>	<ul style="list-style-type: none"> • <code>type = Power Supply</code> • <code>ipmi_name = PSUx</code> • <code>fru_name = A237</code> • <code>fru_description = Power Supply</code> • <code>fru_manufacturer = EMERSON</code> • <code>fru_version = 02</code> • <code>fru_part_number = 3002134</code> • <code>fru_serial_number = BFOCFE</code> • <code>fru_extra_1 = sun_spec_part_number - 885-1165-02</code> • <code>fru_extra_2 = ipmi_serial_number - 1357ZHO-0919BFOCFE</code> • <code>fru_extra_3 = ipmi_part_number - 300-2143-02</code> • <code>fault_state = OK</code> • <code>clear_fault_action = (none)</code>
<code>/SYS/PSUx/AC_PRESENT</code>	<ul style="list-style-type: none"> • <code>type = OEM</code> • <code>ipmi_name = PSUx/AC_PRESENT</code> • <code>class = Discrete Sensor</code> • <code>value = State Deasserted</code> • <code>alarm_status = cleared</code>
<code>/SYS/PSUx/ALERT</code>	<ul style="list-style-type: none"> • <code>type = OEM</code> • <code>ipmi_name = PSUx/ALERT</code> • <code>class = Discrete Sensor</code> • <code>value = State Deasserted</code> • <code>alarm_status = cleared</code>

Target and Path	Properties
/SYS/PSUx/FAULT	<ul style="list-style-type: none"> • type = OEM • ipmi_name = PSUx/FAULT • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/PSUx/PRSNT	<ul style="list-style-type: none"> • type = Entity Presence • ipmi_name = PSUx/PRSNT • class = Discrete Sensor • value = Present • alarm_status = cleared

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Oracle ILOM Temperature Targets and Properties

This table lists the Oracle ILOM /SYS/MB temperature parameter targets and their properties. Targets without properties are not listed.

Target and Path	Properties
/SYS/MB/T_BACK	<ul style="list-style-type: none"> • type = Temperature • ipmi_name = MB/T_BACK • class = Threshold Sensor • value = 27.000 degree C • upper_nonrecov_threshold = 80.000 degree C • upper_critical_threshold = 70.000 degree C • alarm_status = cleared
/SYS/MB/T_FRONT	<ul style="list-style-type: none"> • type = Temperature • ipmi_name = MB/T_FRONT • class = Threshold Sensor • value = 28.000 degree C • upper_nonrecov_threshold = 80.000 degree C • upper_critical_threshold = 70.000 degree C • alarm_status = cleared
/SYS/MB/T_I4A	<ul style="list-style-type: none"> • type = Temperature • ipmi_name = MB/T_I4A • class = Threshold Sensor • value = 45.000 degree C • upper_nonrecov_threshold = 100.000 degree C • upper_critical_threshold = 70.000 degree C • alarm_status = cleared
/SYS/MB/T_SP	<ul style="list-style-type: none"> • type = Temperature • ipmi_name = MB/T_SP • class = Threshold Sensor • value = 41.000 degree C • upper_nonrecov_threshold = 70.000 degree C • upper_critical_threshold = 60.000 degree C • alarm_status = cleared

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
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Oracle ILOM Voltage Targets and Properties

This table lists the Oracle ILOM /SYS/MB voltage parameter targets and their properties. Targets without properties are not listed.

Target and Path	Properties
/SYS/MB/V_1.8V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_1.8V • class = Threshold Sensor • value = 1.785 Volts • upper_nonrecov_threshold = 1.979 Volts • upper_critical_threshold = 1.940 Volts • upper_noncritical_threshold = 1.891 Volts • lower_noncritical_threshold = 1.697 Volts • lower_critical_threshold = 1.639 Volts • lower_nonrecov_threshold = 1.591 Volts • alarm_status = cleared
/SYS/MB/V_2.5V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_2.5V • class = Threshold Sensor • value = 2.480 Volts • upper_nonrecov_threshold = 2.878 Volts • upper_critical_threshold = 2.679 Volts • upper_noncritical_threshold = 2.586 Volts • lower_noncritical_threshold = 2.387 Volts • lower_critical_threshold = 2.282 Volts • lower_nonrecov_threshold = 2.083 Volts • alarm_status = cleared

Target and Path	Properties
/SYS/MB/V_3.3VMain	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_3.3VMain • class = Threshold Sensor • value = 3.283 Volts • upper_nonrecov_threshold = 3.540 Volts • upper_critical_threshold = 3.454 Volts • upper_noncritical_threshold = 3.403 Volts • lower_noncritical_threshold = 3.112 Volts • lower_critical_threshold = 3.061 Volts • lower_nonrecov_threshold = 2.958 Volts • alarm_status = cleared
/SYS/MB/V_3.3VStby	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_3.3VStby • class = Threshold Sensor • value = 3.420 Volts • upper_nonrecov_threshold = 3.540 Volts • upper_critical_threshold = 3.454 Volts • upper_noncritical_threshold = 3.403 Volts • lower_noncritical_threshold = 3.112 Volts • lower_critical_threshold = 3.061 Volts • lower_nonrecov_threshold = 2.958 Volts • alarm_status = warning
/SYS/MB/V_5V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_5V • class = Threshold Sensor • value = 5.018 Volts • upper_nonrecov_threshold = 5.902 Volts • upper_critical_threshold = 5.694 Volts • upper_noncritical_threshold = 5.486 Volts • lower_noncritical_threshold = 4.498 Volts • lower_critical_threshold = 4.290 Volts • lower_nonrecov_threshold = 4.108 Volts • alarm_status = cleared

Target and Path	Properties
/SYS/MB/V_12V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_12V • class = Threshold Sensor • value = 11.966 Volts • upper_nonrecov_threshold = 12.710 Volts • upper_critical_threshold = 12.524 Volts • upper_noncritical_threshold = 12.338 Volts • lower_noncritical_threshold = 11.346 Volts • lower_critical_threshold = 11.160 Volts • lower_nonrecov_threshold = 10.974 Volts • alarm_status = cleared
/SYS/MB/V_BAT	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_BAT • class = Threshold Sensor • value = 3.120 Volts • upper_critical_threshold = 3.494 Volts • lower_noncritical_threshold = 2.746 Volts • lower_critical_threshold = 2.621 Volts • alarm_status = cleared
/SYS/MB/V_I41.2V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_I41.2V • class = Threshold Sensor • value = 1.217 Volts • upper_nonrecov_threshold = 1.498 Volts • upper_critical_threshold = 1.462 Volts • upper_noncritical_threshold = 1.392 Volts • lower_noncritical_threshold = 1.041 Volts • lower_critical_threshold = 0.994 Volts • lower_nonrecov_threshold = 0.901 Volts • alarm_status = cleared

Related Information

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Oracle ILOM Voltage State Targets and Properties

This table lists the Oracle ILOM `/SYS/MB` voltage state targets and their properties. Targets without properties are not listed.

Target and Path	Properties
<code>/SYS/MB/V_1.8VOK</code>	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_1.8VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
<code>/SYS/MB/V_2.5VOK</code>	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_2.5VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
<code>/SYS/MB/V_3.3VMainOK</code>	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_3.3VMainOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
<code>/SYS/MB/V_5VOK</code>	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_5VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
<code>/SYS/MB/V_ECB</code>	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_ECB • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Target and Path	Properties
/SYS/MB/V_I41.2VOK	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_I41.2VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
- [“Oracle ILOM Targets and Descriptions” on page 5](#)
- [“Oracle ILOM General System Targets and Properties” on page 9](#)
- [“Oracle ILOM Fan Targets and Properties” on page 12](#)
- [“Oracle ILOM Indicator Targets and Properties” on page 13](#)
- [“Oracle ILOM Power Supply Targets and Properties” on page 14](#)
- [“Oracle ILOM Temperature Targets and Properties” on page 15](#)
- [“Oracle ILOM Voltage Targets and Properties” on page 17](#)
- [“Oracle ILOM General Targets and Properties” on page 21](#)
- [“Oracle ILOM Service Targets and Properties” on page 23](#)
- [“Oracle ILOM User and Session Targets and Properties” on page 25](#)

Oracle ILOM General Targets and Properties

This table lists general Oracle ILOM /SP targets and their properties. Targets without properties are not listed.

Note – Only the /SP/alertmgmt/rules/1 target is listed, because there are 15 rules targets with identical default properties.

Target and Path	Properties
/SP	<ul style="list-style-type: none"> • hostname = mnm • system_contact = (none) • system_description = Sun Datacenter InfiniBand Switch 36, ILOM v2.1.2-1, r47111 • system_identifier = (none) • system_location = (none)
/SP/alertmgmt/rules/1	<ul style="list-style-type: none"> • community_or_username = public • destination = 123.45.67.89 • destination_port = 0 • email_custom_sender = (none) • email_message_prefix = (none) • event_class_filter = (none) • event_type_filter = (none) • level = minor • snmp_version = 2c • testrule = (Cannot show property) • type = snmptrap
/SP/cli	<ul style="list-style-type: none"> • timeout = 0
/SP/clients/dns	<ul style="list-style-type: none"> • auto_dns = enabled • nameserver = (none) • retries = 1 • searchpath = (none) • timeout = 5
/SP/clients/ntp/server/x	<ul style="list-style-type: none"> • address = 0.0.0.0
/SP/clients/smtp	<ul style="list-style-type: none"> • address = 0.0.0.0 • custom_sender = (none) • port = 25 • send_test_email_to = (Cannot show property) • state = disabled
/SP/clients/syslog/x	<ul style="list-style-type: none"> • address = 0.0.0.0
/SP/clock	<ul style="list-style-type: none"> • datetime = Thu Dec 13 05:19:52 2012 • timezone = UTC • usentpserver = disabled
/SP/config	<ul style="list-style-type: none"> • dump_uri = (Cannot show property) • load_uri = (Cannot show property) • passphrase = none

Target and Path	Properties
/SP/diag/snapshot	<ul style="list-style-type: none"> • dataset = normal • dump_uri = (Cannot show property) • encrypt_output = false • result = (none)
/SP/logs/event	<ul style="list-style-type: none"> • clear = (Cannot show property)
/SP/network	<ul style="list-style-type: none"> • commitpending = (Cannot show property) • dhcp_server_ip = none • ipaddress = 123.45.67.89 • ipdiscovery = static • ipgateway = 123.45.67.1 • ipnetmask = 255.255.255.0 • macaddress = 00:AB:CD:EF:AB:CD • pendingipaddress = 123.45.67.89 • pendingipdiscovery = static • pendingipgateway = 123.45.67.1 • pendingipnetmask = 255.255.255.0 • state = enabled
/SP/network/test	<ul style="list-style-type: none"> • ping = (Cannot show property)

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
- [“Oracle ILOM Targets and Descriptions” on page 5](#)
- [“Oracle ILOM General System Targets and Properties” on page 9](#)
- [“Oracle ILOM Fan Targets and Properties” on page 12](#)
- [“Oracle ILOM Indicator Targets and Properties” on page 13](#)
- [“Oracle ILOM Power Supply Targets and Properties” on page 14](#)
- [“Oracle ILOM Temperature Targets and Properties” on page 15](#)
- [“Oracle ILOM Voltage Targets and Properties” on page 17](#)
- [“Oracle ILOM Voltage State Targets and Properties” on page 20](#)
- [“Oracle ILOM Service Targets and Properties” on page 23](#)
- [“Oracle ILOM User and Session Targets and Properties” on page 25](#)

Oracle ILOM Service Targets and Properties

This table lists the Oracle ILOM `/SP/services` targets and their properties. Targets without properties are not listed.

Note – The `/SP/services/snmp/users/snmpuser` target was created for this table so that the default SNMP user properties could be displayed.

Target and Path	Properties
<code>/SP/services/http</code>	<ul style="list-style-type: none"> • port = 80 • securerredirect = enabled • servicestate = disabled
<code>/SP/services/https</code>	<ul style="list-style-type: none"> • port = 443 • servicestate = enabled
<code>/SP/services/https/ssl</code>	<ul style="list-style-type: none"> • cert_status = Using Default (No custom certificate or private key loaded)
<code>/SP/services/https/ssl/custom_cert</code>	<ul style="list-style-type: none"> • clear_action = (Cannot show property) • issuer = (none) • load_uri = (Cannot show property) • subject = (none) • valid_from = (none) • valid_until = (none)
<code>/SP/services/https/ssl/custom_key</code>	<ul style="list-style-type: none"> • clear_action = (Cannot show property) • key_present = false • load_uri = (Cannot show property)
<code>/SP/services/https/ssl/default_cert</code>	<ul style="list-style-type: none"> • issuer = /C=US/ST=California/L=Redwood Shores/O=Oracle America, Inc./CN=Oracle Integrated Lights Out Manager • subject = /C=US/ST=California/L=Redwood Shores/O=Oracle America, Inc./CN=Oracle Integrated Lights Out Manager • valid_from = Jul 1 19:53:05 2010 GMT • valid_until = Jun 26 19:53:05 2030 GMT
<code>/SP/services/ipmi</code>	<ul style="list-style-type: none"> • servicestate = enabled
<code>/SP/services/servicetag</code>	<ul style="list-style-type: none"> • passphrase = none • state = enabled
<code>/SP/services/snmp</code>	<ul style="list-style-type: none"> • engineid = (none) • port = 161 • servicestate = enabled • sets = disabled • v1 = disabled • v2c = disabled • v3 = enabled

Target and Path	Properties
/SP/services/snmp/communities/private	• permission = rw
/SP/services/snmp/communities/public	• permission = ro
/SP/services/snmp/mibs	• dump_uri = (Cannot show property)
/SP/services/snmp/users/snmpuser	• authenticationpassword = (Cannot show property) • authenticationprotocol = MD5 • permission = ro • privacypassword = (Cannot show property) • privacyprotocol = none

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
- [“Oracle ILOM Targets and Descriptions” on page 5](#)
- [“Oracle ILOM General System Targets and Properties” on page 9](#)
- [“Oracle ILOM Fan Targets and Properties” on page 12](#)
- [“Oracle ILOM Indicator Targets and Properties” on page 13](#)
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- [“Oracle ILOM General Targets and Properties” on page 21](#)
- [“Oracle ILOM User and Session Targets and Properties” on page 25](#)

Oracle ILOM User and Session Targets and Properties

This table lists the Oracle ILOM `/SP/users` targets and their properties. Targets without properties are not listed.

Note – The `/SP/sessions/1` target is included in this table because it is created when a user logs in.

Target and Path	Properties
/SP/sessions/1	<ul style="list-style-type: none"> • username = ilom-admin • role = aucro • starttime = Thu Dec 13 03:58:59 2012 • type = shell • mode = normal
/SP/users/root	<ul style="list-style-type: none"> • role = aucro • password = *****
/SP/users/ilom-admin	<ul style="list-style-type: none"> • role = aucro • password = *****
/SP/users/ilom-operator	<ul style="list-style-type: none"> • role = o • password = *****

Related Information

- [“Oracle ILOM Target Overview” on page 4](#)
- [“Oracle ILOM Targets and Descriptions” on page 5](#)
- [“Oracle ILOM General System Targets and Properties” on page 9](#)
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- [“Oracle ILOM General Targets and Properties” on page 21](#)
- [“Oracle ILOM Service Targets and Properties” on page 23](#)

Administering Oracle ILOM (CLI)

These topics describe how to administer Oracle ILOM from the CLI.

- “CLI Overview” on page 27
- “Accessing Oracle ILOM From the CLI” on page 28
- “Switching Between the Oracle ILOM Shell and the Linux Shell” on page 30
- “Monitoring Oracle ILOM Targets (CLI)” on page 36
- “Controlling Oracle ILOM Targets (CLI)” on page 68
- “Upgrading the Switch Firmware Through Oracle ILOM (CLI)” on page 108

Related Information

- “Administering Oracle ILOM (Web)” on page 117
- “Using the Fabric Monitor” on page 175
- “Administering Oracle ILOM (SNMP)” on page 197
- “Administering Hardware (IPMI)” on page 257
- “Understanding Oracle ILOM Commands” on page 265

CLI Overview

The Oracle ILOM CLI interface uses a set of commands that affect targets. The commands act like verbs, and the targets are analogous to nouns. The command line is like a rudimentary sentence. For example, to *display* the *event log*, the command line is:

```
-> show /SP/logs/event/list
```

where:

- `show` is the command (or verb).
- `/SP/logs/event/list` is the target (or noun).

For a list of the basic commands in the Oracle ILOM CLI, see “Understanding Oracle ILOM Commands” on page 265.

Related Information

- “Understanding Oracle ILOM Targets” on page 4
- “Access Oracle ILOM From the Web Interface” on page 120
- “Switching Between the Oracle ILOM Shell and the Linux Shell” on page 30
- “Monitoring Oracle ILOM Targets (CLI)” on page 36
- “Controlling Oracle ILOM Targets (CLI)” on page 68

Accessing Oracle ILOM From the CLI

You use the same method to access the Oracle ILOM shell as you would the management controller. Specifying the user name determines the shell (Linux or Oracle ILOM) that is presented.

- “Access the Oracle ILOM Shell From the CLI (NET MGT Port)” on page 28
- “Access the Oracle ILOM Shell From the CLI (USB Management Port)” on page 29

Related Information

- *Switch Installation*, accessing the management controller
- “Access Oracle ILOM From the Web Interface” on page 120
- “Monitoring Oracle ILOM Targets (CLI)” on page 36
- “Controlling Oracle ILOM Targets (CLI)” on page 68
- “Switching Between the Oracle ILOM Shell and the Linux Shell” on page 30

▼ Access the Oracle ILOM Shell From the CLI (NET MGT Port)

1. **If you have not already done so, configure the DHCP server with the MAC address and new host name of the management controller inside of the switch.**

The MAC address is printed on the customer information (yellow) sheet on the outside of the switch shipping carton and on the pull-out tab on the left side front of the switch, adjacent to power supply 0.

2. Open an SSH session and connect to the management controller by specifying the controller's host name.

For example:

```
% ssh -l ilom-admin nm2name
ilom-admin@nm2name's password: password
->
```

where *nm2name* is the host name of the management controller. Initially, the password is `ilom-admin`.

Note – You can change the *password* at a later time. See [“Change an Oracle ILOM User’s Password and or Role \(CLI\)”](#) on page 86 for instructions on how to change Oracle ILOM user passwords.

The Oracle ILOM shell prompt (`->`) is displayed.

Note – You can also log in as the `ilom-operator` user with the password `ilom-operator`. The `ilom-operator` user has only read permissions.

Related Information

- [“Access the Oracle ILOM Shell From the CLI \(USB Management Port\)”](#) on page 29

▼ Access the Oracle ILOM Shell From the CLI (USB Management Port)

1. If you have not already done so, connect a USB-to-serial adapter to the USB port of the switch.
2. Connect a serial terminal, terminal server, or workstation with a TIP connection to the USB-to-serial adapter.

Configure the terminal or terminal emulator with these settings:

- 115200 baud
- 8 bits
- No parity
- 1 Stop bit
- No handshaking

3. Press the Return or Enter key on the serial device several times to synchronize the connection.

You might see text similar to this.

```
...
CentOS release 5.2 (Final)
Kernel 2.6.27.13-nm2 on an i686

nm2name login:
```

where *nm2name* is the host name of the management controller.

4. Type `ilom-admin` for the login name followed by the `ilom-admin` password.

Note – You can also log in as the `ilom-operator` user with the password `ilom-operator`. The `ilom-operator` user has only read permissions.

```
nm2name login: ilom-admin
Password: password
->
```

Note – As shipped, the `ilom-admin` user password is `ilom-admin`. See [“Change an Oracle ILOM User’s Password and or Role \(CLI\)”](#) on page 86 for instructions on how to change Oracle ILOM user passwords.

The Oracle ILOM shell prompt (`->`) is displayed.

Related Information

- [“Access the Oracle ILOM Shell From the CLI \(NET MGT Port\)”](#) on page 28

Switching Between the Oracle ILOM Shell and the Linux Shell

If you accessed the management controller as the `root` user within the Linux shell, you can switch to the Oracle ILOM shell with the `spsh` command. Similarly, if you accessed the management controller as an Oracle ILOM user within the Oracle ILOM shell, you can switch to the Linux shell through the `/SYS/Switch_Diag` or `/SYS/Fabric_Mgmt` target.

These tasks enable you to switch back and forth between the Oracle ILOM shell and Linux shell.

- [“/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells”](#) on page 31
- [“Switch From the Oracle ILOM Shell to the Linux Shell”](#) on page 34
- [“Switch From the Linux Shell to the Oracle ILOM Shell”](#) on page 36

Related Information

- [“Accessing Oracle ILOM From the CLI”](#) on page 28

/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells

The preferred method of accessing the Linux shell is through the /SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux shell targets of the Oracle ILOM CLI interface.

Using the `show` command on the /SYS/Switch_Diag target opens a restricted Linux shell that enables the `ilom-admin` user, `ilom-operator` user, and users with similar permissions, to run diagnostic commands.

Using the `show` command on the /SYS/Fabric_Mgmt target opens still an other restricted Linux shell that enables the `ilom-admin` user, and users with similar permissions, to run diagnostic and fabric management commands.

Note – The `ilom-operator` user cannot access the Linux shell from the /SYS/Fabric_Mgmt target.

This table lists the Linux shell commands and their availability from the respective Linux shell targets. Typing the `help all` command from within the restricted shells lists the commands available to that shell.

Note – Linux shell commands that are not listed are unavailable from the /SYS/Switch_Diag or /SYS/Fabric_Mgmt targets.

Command	/SYS/Switch_Diag	/SYS/Fabric_Mgmt
<code>autodisable</code>		Available
<code>checkboot</code>	Available	Available

Command	<i>/SYS/Switch_Diag</i>	<i>/SYS/Fabric_Mgmt</i>
checkpower	Available	Available
checktopomax		Available
checkvoltages	Available	Available
connector	Available	Available
create_ipoib		Available
createfabric		Available
dcSPORT	Available	Available
delete_ipoib		Available
disablecablelog		Available
disablelinklog		Available
disablesm		Available
disableswitchport		Available
enablecablelog		Available
enablelinklog		Available
enablesm		Available
enableswitchport		Available
env_test	Available	Available
exit	Available	Available
fdconfig		Available
fwverify	Available	Available
generatetopology		Available
getfanspeed	Available	Available
getmaster	Available	Available
getportcounters	Available	Available
getportstatus	Available	Available
help	Available	Available
ibdiagnet		Available
ibhosts	Available	Available
ibnetstatus	Available	Available
ibnodes	Available	Available
ibportstate	Available	Available

Command	/SYS/Switch_Diag	/SYS/Fabric_Mgmt
ibroute	Available	Available
ibrouters	Available	Available
ibstat	Available	Available
ibswitches	Available	Available
ibtracert	Available	Available
listlinkup	Available	Available
localmkeypersistence		Available
matchtopology		Available
perfquery	Available	Available
saquery		Available
setcontrolledhandover		Available
setmsmlocationmonitor		Available
setsmmkey		Available
setsmpriority		Available
setsmrouting		Available
setsubnetprefix		Available
showdisk	Available	Available
showfree	Available	Available
showfruinfo	Available	Available
showpsufriu	Available	Available
showsmlog	Available	Available
showtemps	Available	Available
showtopology	Available	Available
showunhealthy	Available	Available
smconfigtest		Available
smnodes		Available
smpartition		Available
smpquery	Available	Available
smsubnetprotection		Available
version	Available	Available

Related Information

- [“show Command” on page 275](#)
- [“Switch From the Oracle ILOM Shell to the Linux Shell” on page 34](#)
- [“Switch From the Linux Shell to the Oracle ILOM Shell” on page 36](#)

▼ **Switch From the Oracle ILOM Shell to the Linux Shell**

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Switch to the Linux shell.

```
-> show /SYS/Switch_Diag
```

```
NOTE: show on Switch_Diag will launch a restricted Linux shell.  
      User can execute switch diagnosis and IB monitoring commands  
      in the shell. To view the list of commands, use "help" at  
      rsh prompt.
```

```
      Use exit command at rsh prompt to revert back to  
      ILOM shell.
```

```
Diag@switch_name->
```

Or.

```
-> show /SYS/Fabric_Mgmt
```

```
NOTE: show on Fabric_Mgmt will launch a restricted Linux shell.  
      User can execute switch diagnosis, SM Configuration and IB  
      monitoring commands in the shell. To view the list of commands,  
      use "help" at rsh prompt.
```

```
      Use exit command at rsh prompt to revert back to  
      ILOM shell.
```

```
FabMan@switch_name->
```

where *switch_name* is the host name of the management controller.

You are now in the Linux shell.

You can use the exit command to return to the Oracle ILOM shell.

If you try to switch to the /SYS/Fabric_Mgmt Linux shell as the ilom-operator user, this message is displayed.

```
-> show /SYS/Fabric_Mgmt
```

```
show: User role does not allow this action to be performed  
->
```

Related Information

- [“show Command” on page 275](#)
- [“exit Command \(Oracle ILOM\)” on page 270](#)
- [“/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells” on page 31](#)
- [“Switch From the Linux Shell to the Oracle ILOM Shell” on page 36](#)

▼ Switch From the Linux Shell to the Oracle ILOM Shell

1. Access the management controller.

Refer to *Switch Administration*, accessing the management controller.

2. Switch to the Oracle ILOM shell.

```
# spsb
Oracle(R) Integrated Lights Out Manager
Version ILOM 3.0 r47111
Copyright (c) 2012, Oracle and/or its affiliates. All rights reserved.
->
```

You are now in the Oracle ILOM shell.

You can use the `exit` command to return to the Linux shell.

Related Information

- [“exit Command \(Oracle ILOM\)”](#) on page 270
- [“/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells”](#) on page 31
- [“Switch From the Oracle ILOM Shell to the Linux Shell”](#) on page 34

Monitoring Oracle ILOM Targets (CLI)

These topics enable you to display the status of many Oracle ILOM targets.

- [“Performing Daily Tasks \(CLI\)”](#) on page 37
- [“Checking the Status of Services \(CLI\)”](#) on page 52
- [“Verifying Other Aspects With Oracle ILOM \(CLI\)”](#) on page 59

Related Information

- [“Accessing Oracle ILOM From the CLI”](#) on page 28
- [“Controlling Oracle ILOM Targets \(CLI\)”](#) on page 68
- [“Monitoring Oracle ILOM Targets \(Web\)”](#) on page 121
- [“Upgrading the Switch Firmware Through Oracle ILOM \(CLI\)”](#) on page 108
- [“Understanding Oracle ILOM Targets”](#) on page 4

Performing Daily Tasks (CLI)

These tasks help you see the status of Oracle ILOM targets that are continually changing.

- “Display the Date (CLI)” on page 37
- “Display Faulted System Components (CLI)” on page 38
- “Display Switch Status LEDs States (CLI)” on page 40
- “Display the Aggregate Sensors State (CLI)” on page 40
- “Aggregate Sensor States” on page 41
- “Display Power Supply Status (CLI)” on page 42
- “Display Board-Level Voltages (CLI)” on page 44
- “Board Level Voltages” on page 45
- “Display Internal Temperatures (CLI)” on page 46
- “Internal Temperature Sensors” on page 47
- “Display Fan Status (CLI)” on page 47
- “Display the Oracle ILOM Sessions (CLI)” on page 49
- “Display the Oracle ILOM Event Log (CLI)” on page 50
- “Oracle ILOM Log Entry Filters” on page 52

Related Information

- “Performing Daily Tasks (Web)” on page 121
- “Checking the Status of Services (CLI)” on page 52
- “Verifying Other Aspects With Oracle ILOM (CLI)” on page 59

▼ Display the Date (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Display the date.

```
-> show /SP/clock datetime timezone
```

For example:

```
-> show /SP/clock datetime timezone
/SP/clock
Properties:
  datetime = Wed Dec 12 05:50:58 2012
  timezone = CEST (Europe/Oslo)
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the Date \(Web\)” on page 122](#)
- [“Display the Date and Time \(SNMP\)” on page 202](#)

▼ Display Faulted System Components (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display any faulted components.

```
-> show -d targets /SP/faultmgmt
/SP/faultmgmt
Targets:
  x (faulted_target)
->
```

where:

- *x* is the target sequence number (starting at 0).
- *faulted_target* is the Oracle ILOM target of the faulted component.

Note – If there are several faulted components, then their respective targets are listed with increasing target sequence numbers.

Note – If no number is displayed, there are no faulted components.

For example:

```
-> show -d targets /SP/faultmgmt
/SP/faultmgmt
Targets:
    0 (/SYS/PSU0)
->
```

3. Display details of the fault.

```
-> show -d properties /SP/faultmgmt/x/faults/y
```

where:

- *x* is the target sequence number (starting at 0).
- *y* is the fault sequence number (starting at 0) for the target *x*.

For example:

```
-> show /SP/faultmgmt/0/faults/0
/SP/faultmgmt/0/faults/0
Properties:
    class = fault.chassis.device.psu.fail
    sunw-msg-id = DCSIB-8000-23
    uuid = e8f7a292-62ab-43a2-9f32-30991cf8fbd5
    timestamp = 2012-12-12/10:34:18
    fru_part_number = 3002234
    fru_serial_number = 006541
    product_serial_number = AK00022680
    chassis_serial_number = AK00022680
->
```

The `class` property provides a general reason for the fault.

Note – For more fault information, refer to *Switch Service, detecting and managing faults*.

Related Information

- *Switch Service, fault management*
- [“Display Faulted System Components \(Web\)” on page 122](#)

▼ Display Switch Status LEDs States (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Display the status of the Power LED.

```
-> show /SYS/I_POWER value
/SYS/I_POWER
Properties:
  value = On
->
```

3. Display the status of the Attention LED.

```
-> show /SYS/I_ATTENTION value
/SYS/I_ATTENTION
Properties:
  value = Off
->
```

4. Display the status of the Locator LED.

```
-> show /SYS/I_LOCATOR value
/SYS/I_LOCATOR
Properties:
  value = Off
->
```

Related Information

- “[show Command](#)” on page 275
- “[Display the Switch Status LEDs States \(Web\)](#)” on page 123
- “[Display Switch Status LED States \(IPMI\)](#)” on page 263
- “[Enable the Locator LED \(CLI\)](#)” on page 72
- “[Disable the Locator LED \(CLI\)](#)” on page 73

▼ Display the Aggregate Sensors State (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Display the aggregate sensor state.

```
-> show aggregate_sensor_target value alarm_status
```

where *aggregate_sensor_target* is from the table in “Aggregate Sensor States” on page 41.

For example, to display the overall switch state:

```
-> show /SYS/CHASSIS_STATUS value alarm_status  
/SYS/CHASSIS_STATUS  
Properties:  
  value = State Deasserted  
  alarm_status = cleared  
->
```

The `value = State Deasserted` and `alarm_status = cleared` means there are no errors.

Related Information

- “show Command” on page 275
- “Display the Aggregate Sensors State (Web)” on page 123
- “Display the Aggregate Sensors State (SNMP)” on page 203
- “Display the Sensor States (IPMI)” on page 258
- “Aggregate Sensor States” on page 41

Aggregate Sensor States

Nine aggregate sensors provide an overall status of particular aspects of the switch. Each aggregate sensor is the logical and summation of many binary sensor checks.

When all of the checks are `true`, the respective aggregate sensor’s `value` property is set to `State Deasserted`, and the `alarm_status` property is set to `cleared`. This situation means all binary sensors indicate that there are no errors.

When one of the binary sensor checks is `false`, an error occurs, the `value` property becomes `State Asserted`, and the `alarm_status` property is set to `major`. That aspect of the switch is in an unhealthy state.

Aspect	Aggregate Sensor Target
Overall connector hardware state	/SYS/CABLE_ATTEN
Change in cable connectivity state	/SYS/CABLE_CONN_STAT

Aspect	Aggregate Sensor Target
Overall switch state	/SYS/CHASSIS_STATUS
Overall cooling state	/SYS/COOLING_ATTN
Cooling redundancy state	/SYS/COOLING_REDUN
Overall I4 switch chip state	/SYS/IBDEV_ATTN
Overall power state	/SYS/POWER_ATTN
Power redundancy state	/SYS/POWER_REDUN
Overall temperature state	/SYS/TEMP_ATTN

Related Information

- [“Display the Aggregate Sensors State \(CLI\)”](#) on page 40
- [“Display the Aggregate Sensors State \(Web\)”](#) on page 123
- [“Display the Entity Numbers”](#) on page 218

▼ Display Power Supply Status (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Check for the presence of the power supply.

```
-> show /SYS/PSUx/PRSNT value
```

where *x* is either 0 (left power supply) or 1 (right power supply). For example:

```
-> show /SYS/PSU0/PRSNT value
/SYS/PSU0/PRSNT
Properties:
  value = Present
->
```

Note – The /SYS/PSUx target is available only for currently installed power supplies.

3. Check for the presence of input power.

```
-> show /SYS/PSUx/AC_PRESENT value alarm_status
/SYS/PSU0/AC_PRESENT
Properties:
    value = State Deasserted
    alarm_status = cleared
->
```

The value = State Deasserted and alarm_status = cleared means that there is no error, and input power is present.

4. Check for a fault.

```
-> show /SYS/PSUx/FAULT value alarm_status
/SYS/PSU0/FAULT
Properties:
    value = State Deasserted
    alarm_status = cleared
->
```

The value = State Deasserted and alarm_status = cleared means that there is no fault.

5. Check for an alert.

```
-> show /SYS/PSUx/ALERT value alarm_status
/SYS/PSU0/ALERT
Properties:
    value = State Deasserted
    alarm_status = cleared
->
```

The value = State Deasserted and alarm_status = cleared means that there is no alert.

Related Information

- [“show Command” on page 275](#)
- [“Display Power Supply Status \(Web\)” on page 124](#)
- [“Display Power Supply Status \(SNMP\)” on page 204](#)

▼ Display Board-Level Voltages (CLI)

There are sensor targets that enable you to display the voltage levels and alarm states on the motherboard.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Display the board-level voltage data.

```
-> show voltage_sensor_target value
```

where *voltage_sensor_target* is from the table in “Board Level Voltages” on page 45.

For example, to display the voltage of the main 1.8V source:

```
-> show /SYS/MB/V_1.8V value
/SYS/MB/V_1.8V
Properties:
  value = 1.785 Volts
->
```

3. For more sensor information, type.

```
-> show -d properties voltage_sensor_target
```

where *voltage_sensor_target* is from the table in “Board Level Voltages” on page 45.

For example, to display the properties of the main 1.8V source:

```
-> show -d properties /SYS/MB/V_1.8V
/SYS/MB/V_1.8V
Properties:
  type = Voltage
  ipmi_name = MB/V_1.8V
  class = Threshold Sensor
  value = 1.785 Volts
  upper_nonrecov_threshold = 1.979 Volts
  upper_critical_threshold = 1.940 Volts
  upper_noncritical_threshold = 1.891 Volts
  lower_noncritical_threshold = 1.697 Volts
  lower_critical_threshold = 1.639 Volts
  lower_nonrecov_threshold = 1.591 Volts
  alarm_status = cleared
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display Board-Level Voltages \(Web\)” on page 124](#)
- [“Display Board-Level Voltages \(SNMP\)” on page 207](#)
- [“Board Level Voltages” on page 45](#)

Board Level Voltages

This table lists board voltages and their respective sensor targets, which enable you to check the voltage levels and alarm states.

Board Level Voltage	Voltage Sensor Target
Voltage of the main 1.8V source	/SYS/MB/V_1.8V
State of the main 1.8V source	/SYS/MB/V_1.8VOK
Voltage of the main 2.5V source	/SYS/MB/V_2.5V
State of the main 2.5V source	/SYS/MB/V_2.5VOK
Voltage of the main 3.3V source	/SYS/MB/V_3.3VMain
State of the main 3.3V source	/SYS/MB/V_3.3VMainOK
Voltage of the standby 3.3V source	/SYS/MB/V_3.3VStby
Voltage of the main 5V source	/SYS/MB/V_5V
State of the main 5V source	/SYS/MB/V_5VOK
Voltage of the main 12V source	/SYS/MB/V_12V
Voltage of the battery	/SYS/MB/V_BAT
State of the ECB	/SYS/MB/V_ECB
Voltage of the I4 switch chip	/SYS/MB/V_I41.2V
State of the I4 switch chip 1.2V source	/SYS/MB/V_I41.2VOK

Related Information

- [“Display Board-Level Voltages \(CLI\)” on page 44](#)
- [“Display Board-Level Voltages \(Web\)” on page 124](#)
- [“Display the Entity Numbers” on page 218](#)

▼ Display Internal Temperatures (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Display the internal temperatures.

```
-> show temperature_sensor_target value
```

where *temperature_sensor_target* is from the table in “Internal Temperature Sensors” on page 47.

For example, to display the temperature at the front of the switch:

```
-> show /SYS/MB/T_FRONT value  
/SYS/MB/T_FRONT  
Properties:  
  value = 27.000 degree C  
->
```

3. For more sensor information, type.

```
-> show -d properties temperature_sensor_target
```

where *temperature_sensor_target* is from the table in “Internal Temperature Sensors” on page 47.

For example, to display the properties of the front temperature sensor:

```
-> show -d properties /SYS/MB/T_FRONT  
/SYS/MB/T_FRONT  
Properties:  
  type = Temperature  
  ipmi_name = MB/T_FRONT  
  class = Threshold Sensor  
  value = 33.000 degree C  
  upper_nonrecov_threshold = 80.000 degree C  
  upper_critical_threshold = 70.000 degree C  
  upper_noncritical_threshold = N/A  
  lower_noncritical_threshold = N/A  
  lower_critical_threshold = N/A  
  lower_nonrecov_threshold = N/A  
  alarm_status = cleared  
->
```


Related Information

- “show Command” on page 275
- “Display Internal Temperatures (Web)” on page 125
- “Display Internal Temperatures (SNMP)” on page 210
- “Internal Temperature Sensors” on page 47

Internal Temperature Sensors

This table provides the temperature sensor locations and their respective sensor targets.

Temperature Location	Temperature Sensor Target
Temperature at front of switch	/SYS/MB/T_FRONT
Temperature of the I4 switch chip	/SYS/MB/T_I4A
Temperature of the management controller	/SYS/MB/T_SP
Temperature at rear of switch	/SYS/MB/T_BACK

Related Information

- “Display Internal Temperatures (CLI)” on page 46
- “Display Internal Temperatures (Web)” on page 125
- “Display the Entity Numbers” on page 218

▼ Display Fan Status (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Check for the presence of the fan module.

```
-> show /SYS/FANx/PRSNT value
```

where *x* is either 0 (far left) to 4 (far right). For example:

```
-> show /SYS/FAN1/PRSNT value  
/SYS/FAN1/PRSNT
```

```
Properties:
  value = Present
->
```

Note – The /SYS/FANx target is available only for currently installed fans.

3. Check for a fault.

```
-> show /SYS/FANx/FAULT value alarm_status
/SYS/FAN1/FAULT
Properties:
  value = State Deasserted
  alarm_status = cleared
->
```

The value = State Deasserted and alarm_status = cleared means that there is no fault.

4. Display the fan speed.

```
-> show /SYS/FANx/TACH value
/SYS/FAN1/TACH
Properties:
  value = 12208.000 RPM
->
```

5. For more sensor information, type.

```
-> show -d properties /SYS/FANx/TACH
/SYS/FAN1/TACH
Properties:
  type = Fan
  ipmi_name = FAN1/TACH
  class = Threshold Sensor
  value = 12208.000 RPM
  upper_nonrecov_threshold = N/A
  upper_critical_threshold = 26705.000 RPM
  upper_noncritical_threshold = N/A
  lower_noncritical_threshold = 6322.000 RPM
  lower_critical_threshold = N/A
  lower_nonrecov_threshold = N/A
  alarm_status = cleared
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display Fan Status \(Web\)” on page 125](#)
- [“Display Fan Status \(SNMP\)” on page 214](#)

▼ Display the Oracle ILOM Sessions (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the active Oracle ILOM sessions.

```
-> show -d properties -l 2 /SP/sessions
```

For example:

Note – The `type` property indicates whether the user is using the CLI (`shell`) or web (`web`) interface.

```
-> show -d properties -l 2 /SP/sessions
/SP/sessions
  Properties:
/SP/sessions/23
  username = ilom-admin
  role = aucro
  starttime = Wed Dec 12 03:48:06 2012
  type = shell
  mode = normal
/SP/sessions/24
  Properties:
  username = ilom-operator
  role = o
  starttime = Thu Dec 13 03:58:59 2012
  type = web
  mode = normal
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the Oracle ILOM Sessions \(Web\)” on page 126](#)
- [“Display Oracle ILOM Sessions \(SNMP\)” on page 221](#)

▼ Display the Oracle ILOM Event Log (CLI)

The Oracle ILOM event message log contains Oracle ILOM events that happened to or were initiated by the management controller. Example events include user login, sensor state change, configuring of `syslog` servers, and so on. You can view these events using the Oracle ILOM `show` command for the `/SP/logs/event/list` target.

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Display the Oracle ILOM event log unfiltered.

Note – The most recent events are listed at the top of the log.

```
-> show /SP/logs/event/list
/SP/logs/event/list
Targets:
Properties:
Commands:
  cd
  show
ID      Date/Time                Class   Type      Severity
-----
94      Tue Oct 9 01:15:13 2012  Audit   Log       minor
  root : Open Session : object = /session/type : value = shell : success
93      Tue Oct 9 01:13:51 2012  Audit   Log       minor
  test : Close Session : object = /session/type : value = www : success
92      Tue Oct 9 00:59:44 2012  Audit   Log       minor
.
.
.
->
```

The columns of the output are:

- ID – The sequence number of the event, starting with 1.
- Date/Time – The day and time the event occurred.
- Class – Can be Audit, IPMI, Chassis, or Fault.
- Type – Can be Log, State, Action, Fault, or Repair.
- Severity – Can be Debug, Down, Critical, Major, or Minor.

3. Or, display the Oracle ILOM event log filtered for a particular class and type of entry

```
-> show /SP/logs/event/list Class==class Type==type
```

where *class* and *type* are from the table in “Oracle ILOM Log Entry Filters” on page 52.

For example, to display the IPMI log events, type:

```
-> show /SP/logs/event/list Class==IPMI Type==Log
ID      Date/Time                Class      Type      Severity
-----
61600   Mon Jan 14 14:36:55 2013  IPMI      Log       critical
        ID = 16cf : 01/14/2013 : 14:36:55 : OEM sensor : CABLE_CONN_STAT : State
        Deasserted
61599   Mon Jan 14 14:36:45 2013  IPMI      Log       critical
        ID = 16ce : 01/14/2013 : 14:36:45 : OEM sensor : CABLE_CONN_STAT : State
        Asserted
61594   Wed Jan 9 11:29:03 2013  IPMI      Log       critical
        ID = 16cd : 01/09/2013 : 11:29:03 : OEM sensor : PSU0/ALERT : State Deass
        erted
.
.
.
->
```

Note – Refer to *Switch Service*, detecting and managing faults, for more information about filtering the Oracle ILOM event log for fault information.

4. Press the spacebar to scroll to the next screen of output.

The Q key quits.

Related Information

- “show Command” on page 275
- *Switch Service*, identifying faults in the event log
- “Display the Oracle ILOM Event Log (Web)” on page 126
- “Display the Oracle ILOM Event Log (SNMP)” on page 222
- “Display the System Event Log (IPMI)” on page 261

Oracle ILOM Log Entry Filters

When you display the Oracle ILOM log, you can filter the output to specific classes and types of entries using combinations of the `Class` and `Type` parameters. See [“Display the Oracle ILOM Event Log \(CLI\)” on page 50](#). This table describes the combinations and the entries that are displayed.

Parameters	Entries Displayed
<code>Class==Audit Type==Log</code>	Commands that result in a configuration change. Description includes user, command, command parameters, and success or failure.
<code>Class==IPMI Type==Log</code>	Any event that is place in the IPMI SEL is also put into the management log.
<code>Class==Chassis Type==Action</code>	Hot-insertion and removal of components.
<code>Class==Fault Type==Fault</code>	Fault management faults. Description gives the time fault was detected and the suspect component.
<code>Class==Fault Type==Repair</code>	Fault management repairs. Description gives the component repaired.

The output can be further filtered with the `Severity` parameter. The `Severity` parameter has one of five values:

- Debug
- Down
- Critical
- Major
- Minor

For example, this command displays only log entries indicating a minor change to the system inventory:

```
-> show /SP/logs/event/list Class==Chassis Type==State Severity==Minor
```

Related Information

- [“Display the Oracle ILOM Event Log \(CLI\)” on page 50](#)

Checking the Status of Services (CLI)

These topics enable you to display the status of the services supported by Oracle ILOM.

- “Display the HTTP Service Status (CLI)” on page 53
- “Display the HTTPS Service Status (CLI)” on page 54
- “Display the SSL Certificates (CLI)” on page 54
- “Display the SNMP Service Status (CLI)” on page 55
- “Display the SNMP User Accounts (CLI)” on page 55
- “Display the SNMP Service Communities (CLI)” on page 56
- “Display the IPMI Service Status (CLI)” on page 57
- “Display the DNS Client Status (CLI)” on page 57
- “Display the SMTP Client Status (CLI)” on page 58
- “Display the NTP Servers (CLI)” on page 58

Related Information

- “Checking the Status of Services (Web)” on page 127
- “Performing Daily Tasks (CLI)” on page 37
- “Verifying Other Aspects With Oracle ILOM (CLI)” on page 59

▼ Display the HTTP Service Status (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Display the HTTP status.

```
-> show -d properties /SP/services/http
/SP/services/http
Properties:
  port = 80
  securereredirect = enabled
  servicestate = disabled
->
```

Related Information

- “show Command” on page 275
- “Display the HTTP Service Status (Web)” on page 128
- “Display the HTTP Service Status (SNMP)” on page 224

▼ Display the HTTPS Service Status (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Display the HTTPS status.

```
-> show -d properties /SP/services/https
/SP/services/https
Properties:
  port = 443
  servicestate = enabled
->
```

Related Information

- “show Command” on page 275
- “Display the HTTPS Service Status (Web)” on page 128
- “Display the HTTPS Service Status (SNMP)” on page 225

▼ Display the SSL Certificates (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Display the SSL status.

```
-> show -d properties /SP/services/https/ssl
/SP/services/https/ssl
Properties:
  cert_status = Using Default (No custom certificate or private key loaded)
->
```

3. Display the properties of the default_cert certificate.

```
-> show -d properties /SP/services/https/ssl/default_cert
/SP/services/https/ssl/default_cert
Properties:
  issuer = /C=US/ST=California/L=Redwood Shores/O=Oracle America, Inc./CN=
Oracle Integrated Lights Out Manager
  subject = /C=US/ST=California/L=Redwood Shores/O=Oracle America, Inc./CN=
Oracle Integrated Lights Out Manager
  valid_from = Jul 1 19:53:05 2010 GMT
  valid_until = Jun 26 19:53:05 2030 GMT
->
```


Related Information

- [“show Command” on page 275](#)
- [“Display the SSL Certificates \(Web\)” on page 128](#)

▼ Display the SNMP Service Status (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the SNMP status.

```
-> show -d properties /SP/services/snmp
/SP/services/snmp
Properties:
engineid = (none)
port = 161
servicestate = enabled
sets = disabled
v1 = disabled
v2c = disabled
v3 = enabled
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the SNMP Service Status \(Web\)” on page 129](#)

▼ Display the SNMP User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the SNMP users.

```
-> show -d targets /SP/services/snmp/users
```

For example:

```
-> show -d targets /SP/services/snmp/users
/SP/services/snmp/users
```

```
Targets:
  snmpuser
->
```

3. Display the snmpuser user properties.

```
-> show -d properties /SP/services/snmp/users/snmpuser
/SP/services/snmp/users/snmpuser
Properties:
  authenticationpassword = (Cannot show property)
  authenticationprotocol = MD5
  permission = ro
  privacypassword = (Cannot show property)
  privacyprotocol = none
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the SNMP Service User Accounts \(Web\)” on page 129](#)

▼ Display the SNMP Service Communities (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the SNMP communities.

```
-> show -d targets /SP/services/snmp/communities
/SP/services/snmp/communities
Targets:
  private
  public
->
```

3. Display the private community properties.

```
-> show -d properties /SP/services/snmp/communities/private
/SP/services/snmp/communities/private
Properties:
  permission = rw
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the SNMP Service Communities \(Web\)” on page 130](#)

▼ Display the IPMI Service Status (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the IPMI status.

```
-> show -d properties /SP/services/ipmi
/SP/services/ipmi
Properties:
    servicestate = enabled
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the IPMI Service Status \(Web\)” on page 130](#)
- [“Enable the IPMI Service \(CLI\)” on page 102](#)
- [“Disable the IPMI Service \(CLI\)” on page 102](#)

▼ Display the DNS Client Status (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the DNS status.

```
-> show -d properties /SP/clients/dns
/SP/clients/dns
Properties:
    auto_dns = enabled
    nameserver = 10.172.157.73, 10.172.157.74
    retries = 1
    searchpath = no.oracle.com
    timeout = 5
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the DNS Client Status \(Web\)” on page 130](#)
- [“Display the DNS Client Status \(SNMP\)” on page 225](#)
- [“Configure the DNS Client \(CLI\)” on page 75](#)

▼ Display the SMTP Client Status (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the SMTP client status.

Note – This example shows that the SMTP client is not enabled

```
-> show -d properties /SP/clients/smtp
/SP/clients/smtp
Properties:
  address = 0.0.0.0
  custom_sender = (none)
  port = 25
  send_test_email_to = (Cannot show property)
  state = disabled
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the SMTP Client Status \(Web\)” on page 131](#)
- [“Display the SMTP Client Status \(SNMP\)” on page 226](#)
- [“Configure the SMTP Client \(CLI\)” on page 76](#)

▼ Display the NTP Servers (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the IP addresses of the NTP servers.

```
-> show /SP/clients/ntp/server/1 address
/SP/clients/ntp/server/1
Properties:
address = 123.45.67.89

-> show /SP/clients/ntp/server/2 address
/SP/clients/ntp/server/2
Properties:
address = 0.0.0.0
->
```

In the output, the IP address of NTP server 1 is 123.45.67.89. The IP address of 0.0.0.0 for NTP server 2 means the server is not configured.

3. Display the NTP server status.

```
-> show /SP/clock usentpserver
/SP/clock
Properties:
usentpserver = disabled
->
```

The value of the `usentpserver` property determines if the management controller synchronizes time with the configured NTP servers. The value is either enabled or disabled.

Related Information

- [“show Command” on page 275](#)
- [“Display the Network Time Protocol Servers \(Web\)” on page 131](#)
- [“Display the NTP State \(SNMP\)” on page 226](#)
- [“Display the NTP Servers \(SNMP\)” on page 227](#)
- [“Set the Date and Time \(CLI\)” on page 70](#)

Verifying Other Aspects With Oracle ILOM (CLI)

These tasks display the status of aspects of Oracle ILOM not included in [“Performing Daily Tasks \(CLI\)” on page 37](#) or [“Checking the Status of Services \(CLI\)” on page 52](#).

- [“Get Help on an Oracle ILOM Command \(CLI\)” on page 60](#)
- [“Get Help on an Oracle ILOM Target Property \(CLI\)” on page 61](#)
- [“Display the Alert Properties \(CLI\)” on page 61](#)

- “Display the Oracle ILOM User Accounts (CLI)” on page 62
- “Display the Remote Log Hosts (CLI)” on page 63
- “Display the Network Management Configuration (CLI)” on page 64
- “Display the CLI Session Timeout (CLI)” on page 65
- “Display Switch FRU ID (CLI)” on page 65
- “Display Power Supply FRU ID (CLI)” on page 66
- “Display the Firmware Version (CLI)” on page 67
- “Display System Identification Properties (CLI)” on page 67

Related Information

- “Verifying Other Aspects With Oracle ILOM (Web)” on page 132
- “Performing Daily Tasks (CLI)” on page 37
- “Checking the Status of Services (CLI)” on page 52

▼ Get Help on an Oracle ILOM Command (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Get help on a command.

```
-> help -o verbose command
```

where *command* is the Oracle ILOM command for which you need help.

For example, to get help on the `exit` command:

```
-> help -o verbose exit
The exit command is used to terminate a session.
Usage: exit
Example:
  -> exit
      Connection to nyc-sp closed.
->
```

Related Information

- “help Command (Oracle ILOM)” on page 271
- “Get Help on an Oracle ILOM Target Property (CLI)” on page 61

▼ Get Help on an Oracle ILOM Target Property (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Get help on a target property.

```
-> help target property
```

where:

- *target* is the target and path to act upon.
- *property* is the property of the *target* for which you need help.

For example, to get help about the `ilom-operator` user’s role property:

```
-> help /SP/users/ilom-operator role  
Properties:  
  role : Role of ilom-operator  
  role : Possible values = Operator, Administrator, a, u, c, r, o, s  
  role : User role required for set = u  
->
```

Related Information

- “[help Command \(Oracle ILOM\)](#)” on page 271
- “[Get Help on an Oracle ILOM Command \(CLI\)](#)” on page 60

▼ Display the Alert Properties (CLI)

Alerts can provide advance notice of a system failure. The Oracle ILOM implementation in the management controller supports 15 alert rules, which configure alert properties. Supported alert types are SNMP traps, IPMI PETs, and email alerts. For SNMP traps and PETs, the alert destination must have the relevant Oracle ILOM MIBs installed and must support SNMP traps.

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Display the alert properties.

```
-> show -d properties /SP/alertmgmt/rules/alert
```

where *alert* is the number of the alert to display.

For example, to display the properties for alert 1:

```
-> show -d properties /SP/alertmgmt/rules/1
/SP/alertmgmt/rules/1
Properties:
  community_or_username = public
  destination = 0.0.0.0
  destination_port = 0
  email_custom_sender = (none)
  email_message_prefix = (none)
  event_class_filter = (none)
  event_type_filter = (none)
  level = disable
  snmp_version = 1
  testrule = (Cannot show property)
  type = snmptrap
->
```

Note – In the output, alert 1 is not configured to send any alerts.

Related Information

- [“show Command” on page 275](#)
- [“Display the Alert Properties \(Web\)” on page 132](#)
- [“Display the Alert Properties \(SNMP\)” on page 228](#)
- [“Enable Alerts to Send SNMP Traps \(CLI\)” on page 103](#)
- [“Enable Alerts to Send PETs \(CLI\)” on page 105](#)
- [“Enable Alerts to Send Email Alerts \(CLI\)” on page 106](#)
- [“Disable Alerts \(CLI\)” on page 107](#)

▼ Display the Oracle ILOM User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the Oracle ILOM user accounts.

```
-> show -d targets /SP/users
/SP/users
Targets:
    ilom-admin
    ilom-operator
->
```

3. Display the ilom-admin user's role.

```
-> show /SP/users/ilom-admin role
/SP/users/ilom-admin
Properties:
    role = aucro
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the Oracle ILOM User Accounts \(Web\)” on page 133](#)
- [“Display Oracle ILOM User Accounts \(SNMP\)” on page 229](#)

▼ Display the Remote Log Hosts (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the remote log hosts.

```
-> show /SP/clients/syslog/number address
```

where *number* is the number of the host, either 1 or 2.

For example, to display the IP address of remote host 1:

```
-> show /SP/clients/syslog/1 address
/SP/clients/syslog/1
Properties:
    address = 0.0.0.0
->
```

Note – The address of 0.0.0.0 or (none) indicates that remote host 1 functionality is not configured.

Related Information

- [“show Command” on page 275](#)
- [“Display the Remote Log Hosts \(Web\)” on page 133](#)
- [“Display the Remote Log Hosts \(SNMP\)” on page 230](#)
- [“Set the Remote Log Hosts \(CLI\)” on page 74](#)

▼ Display the Network Management Configuration (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the network management configuration.

```
-> show -d properties /SP/network
```

For example:

```
-> show -d properties /SP/network
/SP/network
Properties:
  commitpending = (Cannot show property)
  dhcp_server_ip = 10.12.235.35
  ipaddress = 10.12.235.70
  ipdiscovery = dhcp
  ipgateway = 10.12.235.254
  ipnetmask = 255.255.255.0
  macaddress = 00:E0:4B:28:00:8E
  pendingipaddress = 10.12.235.70
  pendingipdiscovery = dhcp
  pendingipgateway = 10.12.235.254
  pendingipnetmask = 255.255.255.0
  state = enabled
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display the Network Management Configuration \(Web\)” on page 134](#)
- [“Display the Network Management Configuration \(SNMP\)” on page 230](#)

▼ Display the CLI Session Timeout (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Display the CLI session timeout.

```
-> show /SP/cli timeout
/SP/cli
Properties:
    timeout = 0
->
```

Related Information

- [“show Command”](#) on page 275
- [“Display the CLI Session Timeout \(Web\)”](#) on page 134
- [“Set the Oracle ILOM CLI Session Timeout \(CLI\)”](#) on page 108

▼ Display Switch FRU ID (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Display the switch FRU information.

```
-> show -d properties /SYS/MB
/SYS/MB
Properties:
    type = Motherboard
    ipmi_name = MB
    product_name = Sun Datacenter InfiniBand Switch 36
    product_part_number = 541-3495-03
    product_serial_number = 0924AK2285
    product_manufacturer = Sun Microsystems
    fru_name = Chassis and Motherboard
    fru_description = Chassis and Motherboard
    fru_part_number = 5111232
    fru_serial_number = 0110SJC-09183P0020
    fru_extra_1 = ComEx: manufacturing_date - 2009.02.20
    fru_extra_2 = ComEx: serial_number - NCD2T0307
    fru_extra_3 = ComEx: hardware_rev - 0x100, firmware_rev - 0x102
    fru_extra_4 = ComEx: bios_version - NOW1R112
, bios_date - 04/24/2009
```

```
fault_state = OK
clear_fault_action = (none)
->
```

Related Information

- “show Command” on page 275
- “Display System Component FRU ID (Web)” on page 135
- “Display Switch FRU ID (SNMP)” on page 231
- “Display FRU ID Information (IPMI)” on page 262

▼ Display Power Supply FRU ID (CLI)

Note – You can only display FRU ID information for currently present power supplies.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Display the power supply FRU information.

```
-> show -d properties /SYS/PSUslot
```

where *slot* is the slot of the power supply (0 or 1).

In the output, the FRU information is listed under *Properties*.

For example, for power supply 0:

```
-> show -d properties /SYS/PSU0
/SYS
Properties:
  type = Power Supply
  ipmi_name = PSU0
  fru_name = A237
  fru_description = Power Supply
  fru_manufacturer = EMERSON
  fru_version = 02
  fru_part_number = 3002143
  fru_serial_number = BF0CFE
  fru_extra_1 = sun_spec_part_number - 885-1165-02
  fru_extra_2 = ipmi_serial_number - 1357ZHO-0919BF0CFE
  fru_extra_3 = ipmi_part_number - 300-2143-02
```

```
fault_state = OK
clear_fault_action = (none)
->
```

Related Information

- [“show Command” on page 275](#)
- [“Display System Component FRU ID \(Web\)” on page 135](#)
- [“Display Power Supply FRU ID \(SNMP\)” on page 233](#)
- [“Display FRU ID Information \(IPMI\)” on page 262](#)

▼ Display the Firmware Version (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the firmware version.

```
-> version
```

For example:

```
-> version
SP firmware 2.1.2-1
SP firmware build number: 47111
SP firmware date: Mon Oct 1 12:07:21 IST 2012
SP filesystem version: 0.1.22
->
```

Related Information

- [“version Command \(Oracle ILOM\)” on page 277](#)
- [“Display the Oracle ILOM Version \(Web\)” on page 136](#)
- [“Display the Firmware Version \(SNMP\)” on page 238](#)

▼ Display System Identification Properties (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Display the identification properties.

```
-> show -d properties /SP
/SP/cli
Properties:
  hostname = mmm
  system_contact = (none)
  system_description = Sun Datacenter InfiniBand Switch 36, ILOM v2.1.2-1,
r47111
  system_identifier = (none)
  system_location = (none)
->
```

Related Information

- [“Display System Identification Properties \(Web\)”](#) on page 136
- [“Display System Identification Properties \(SNMP\)”](#) on page 238
- [“Set the System Identification Properties \(CLI\)”](#) on page 84

Controlling Oracle ILOM Targets (CLI)

These topics enable you to change the behavior or configuration of many Oracle ILOM targets.

- [“Performing General Tasks on Oracle ILOM Targets \(CLI\)”](#) on page 69
- [“Performing Oracle ILOM User Tasks \(CLI\)”](#) on page 85
- [“Managing HTTP Services \(CLI\)”](#) on page 88
- [“Managing HTTPS Services \(CLI\)”](#) on page 90
- [“Managing SNMP Services \(CLI\)”](#) on page 93
- [“Managing IPMI Services \(CLI\)”](#) on page 101
- [“Managing Other Aspects With Oracle ILOM \(CLI\)”](#) on page 103

Related Information

- [“Accessing Oracle ILOM From the CLI”](#) on page 28
- [“Controlling Oracle ILOM Targets \(Web\)”](#) on page 137
- [“Monitoring Oracle ILOM Targets \(CLI\)”](#) on page 36
- [“Upgrading the Switch Firmware Through Oracle ILOM \(CLI\)”](#) on page 108
- [“Understanding Oracle ILOM Targets”](#) on page 4

Performing General Tasks on Oracle ILOM Targets (CLI)

You can perform these tasks periodically on a few Oracle ILOM targets.

- [“Restart the Management Controller \(CLI\)”](#) on page 69
- [“Set the Date and Time \(CLI\)”](#) on page 70
- [“Clear Faulted System Components \(CLI\)”](#) on page 72
- [“Enable the Locator LED \(CLI\)”](#) on page 72
- [“Disable the Locator LED \(CLI\)”](#) on page 73
- [“Clear the Oracle ILOM Event Log \(CLI\)”](#) on page 73
- [“Set the Remote Log Hosts \(CLI\)”](#) on page 74
- [“Configure the DNS Client \(CLI\)”](#) on page 75
- [“Configure the SMTP Client \(CLI\)”](#) on page 76
- [“Back Up the Configuration \(CLI\)”](#) on page 77
- [“Switch Configuration Information Backed Up”](#) on page 78
- [“Restore the Configuration \(CLI\)”](#) on page 78
- [“Create a Snapshot of the Switch State \(CLI\)”](#) on page 79
- [“Snapshot Dataset Information \(CLI\)”](#) on page 81
- [“Set the Network Management Parameters \(CLI\)”](#) on page 82
- [“Set the System Identification Properties \(CLI\)”](#) on page 84

Related Information

- [“Performing General Tasks on Oracle ILOM Targets \(Web\)”](#) on page 137
- [“Performing Oracle ILOM User Tasks \(CLI\)”](#) on page 85

▼ Restart the Management Controller (CLI)

Note – Restarting the management controller severs any management console link to the management controller. You must reaccess the management controller to regain administrative control.

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Reset the management controller.

```
-> reset /SP  
Are you sure you want to reset /SP (y/n)? y  
->
```

The management controller is reset and you must reaccess the management controller to regain administrative control.

Related Information

- [“reset Command” on page 273](#)
- *Switch Administration*, restarting the management controller
- [“Restart the Management Controller \(Web\)” on page 138](#)

▼ Set the Date and Time (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Set the date and time.

```
-> set /SP/clock datetime=MMDDhhmmYYYY
```

where *MMDDhhmmYYYY* is the month, date, hour, and minute as two digits, and the year as four digits.

For example:

```
-> set /SP/clock datetime=121206242012  
Set 'datetime' to '121206242012'  
-> show /SP/clock datetime  
/SP/clock  
Properties:  
    datetime = Wed Dec 12 06:24:01 2012  
->
```


3. Set the time zone.

```
-> set /SP/clock timezone=XXX
```

where XXX is the identifier of the time zone.

For example:

```
-> set /SP/clock timezone=CET  
Set 'timezone' to 'CET'  
-> show /SP/clock timezone  
/SP/clock  
Properties:  
    timezone = CET  
->
```

4. (Optional) If you want to use a time server, follow these steps:

a. Set the IP addresses of the time servers.

```
-> set /SP/clients/ntp/server/number address=IP_address
```

where:

- *number* is 1 for the first time server and 2 for the second time server.
- *IP_address* is the IP address of the time server.

For example, to use the time servers with addresses 123.45.67.89 and 123.45.67.88:

```
-> set /SP/clients/ntp/server/1 address=123.45.67.89  
Set 'address' to '123.45.67.89'  
-> set /SP/clients/ntp/server/2 address=123.45.67.88  
Set 'address' to '123.45.67.88'  
->
```

b. Start using the time servers.

```
-> set /SP/clock usentpserver=enabled  
Set 'usentpserver' to 'enabled'  
->
```

The management controller is configured to use the time servers.

Related Information

- [“set Command” on page 274](#)

- “Set the Date and Time (Web)” on page 139
- “Set the Date and Time (SNMP)” on page 240

▼ Clear Faulted System Components (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Clear the faulted component.

```
-> set faulted_target clear_fault_action=true
```

where *faulted_target* is the Oracle ILOM target of the faulted component, as found in the procedure, “Display Faulted System Components (CLI)” on page 38.

For example:

```
-> set /SYS/PSU0/ clear_fault_action=true
Are you sure you want to clear /SYS/PSU0 (y/n)? y
Set 'clear_fault_action' to 'true'
->
```

Related Information

- *Switch Service*, clear faults manually
- “Clear Faulted System Components (Web)” on page 140
- “Display Faulted System Components (CLI)” on page 38

▼ Enable the Locator LED (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Enable the Locator LED.

```
-> set /SYS/I_LOCATOR value=on
Set 'value' to 'on'
->
```

The Locator LED flashes.

Related Information

- “set Command” on page 274

- “Enable the Locator LED (Web)” on page 140
- “Enable the Locator LED (IPMI)” on page 264
- “Disable the Locator LED (CLI)” on page 73
- “Display Switch Status LEDs States (CLI)” on page 40

▼ Disable the Locator LED (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Disable the Locator LED.

```
-> set /SYS/I_LOCATOR value=off
Set 'value' to 'off'
->
```

The Locator LED is unlit.

Related Information

- “set Command” on page 274
- “Disable the Locator LED (Web)” on page 141
- “Disable the Locator LED (IPMI)” on page 264
- “Enable the Locator LED (CLI)” on page 72
- “Display Switch Status LEDs States (CLI)” on page 40

▼ Clear the Oracle ILOM Event Log (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Clear the Oracle ILOM event log.

```
-> set /SP/logs/event clear=true
Are you sure you want to clear /SP/logs/event (y/n)? y
Set 'clear' to 'true'
->
```

The Oracle ILOM event log is cleared.

Related Information

- “set Command” on page 274
- “Clear the Oracle ILOM Event Log (Web)” on page 141
- “Clear the Oracle ILOM Event Log (SNMP)” on page 242
- “Display the Oracle ILOM Event Log (CLI)” on page 50
- “Set the Remote Log Hosts (CLI)” on page 74

▼ Set the Remote Log Hosts (CLI)

The Oracle ILOM implementation in the management controller provides a protocol for transmitting Oracle ILOM events to a remote log host. The events transmitted are similar to those displayed in the local log.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Set the remote log host IP address.

```
-> set /SP/clients/syslog/number address=IP_address
```

where:

- *number* is 1 for the first log host and 2 for the second log host.
- *IP_address* is the IP address of the log host.

For example, to set the IP address of remote host 1 to 123.45.67.89:

```
-> set /SP/clients/syslog/1 address=123.45.67.89
Set 'address' to '123.45.67.89'
->
```

Note – Setting a remote log host IP address to 0.0.0.0 disables that functionality.

Related Information

- “set Command” on page 274
- “Set the Remote Log Hosts (Web)” on page 142
- “Set the Remote Log Hosts (SNMP)” on page 242
- “Display the Remote Log Hosts (CLI)” on page 63

▼ Configure the DNS Client (CLI)

To enable name services within the management controller, Oracle ILOM must be configured as a DNS client.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Configure the client with the DNS server information.

```
-> set /SP/clients/dns auto_dns=state nameserver=IP_addresses searchpath='domains'
```

where:

- *state* is whether to retrieve DNS settings from the DHCP server. A value of *enabled* means from the DHCP server. A value of *disabled* means local settings.
- *IP_addresses* are a comma delimited list of up to three IP addresses of name servers in search order.
- *domains* are a comma delimited list of up to six domains or search suffixes in search order.

For example, to configure for local settings for the DNS client:

```
-> set /SP/clients/dns auto_dns=disabled nameserver=123.45.67.89,123.45.67.90
searchpath='india.sun.com,norway.sun.com'
Set 'auto_dns' to 'disabled'
Set 'nameserver' to '123.45.67.89,123.45.67.90'
Set 'searchpath' to 'india.sun.com,norway.sun.com'
->
```

Note – The number of retries and timeout are configurable. The default values of 1 and 5, respectively, provide for optimal performance.

Related Information

- “set Command” on page 274
- “Configure the DNS Client (Web)” on page 142
- “Configure the DNS Client (SNMP)” on page 243
- “Display the DNS Client Status (CLI)” on page 57

▼ Configure the SMTP Client (CLI)

To enable email alerts, Oracle ILOM must be configured as an SMTP client.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Configure the client with the SMTP server information.

```
-> set /SP/clients/smtp address=IP_address custom_sender=email state=state
```

where:

- *IP_address* is the IP address of the SMTP server.
- *email* is the sender, as seen in the From: field. For example: *ilom-36p@hostname*, where *hostname* is the host name of the management controller.
- *state* is either enabled or disabled.

For example:

```
-> set /SP/clients/smtp address=123.45.67.89 custom_sender=ilom-36p@hostname
state=enabled
Set 'address' to '123.45.67.89'
Set 'custom_sender' to 'ilom-36p@hostname'
Set 'state' to 'enabled'
->
```

3. (Optional) Send a test email to verify SMTP client settings:

a. Type.

```
-> set /SP/clients/smtp send_test_email_to=email_to
```

where *email_to* is the destination email address.

b. Verify the email was received.

Related Information

- “set Command” on page 274
- “Configure the SMTP Client (Web)” on page 143
- “Configure the SMTP Client (SNMP)” on page 244
- “Display the SMTP Client Status (CLI)” on page 58

▼ Back Up the Configuration (CLI)

Note – You must use a passphrase to back up sensitive information, such as passwords.

Note – See [“Switch Configuration Information Backed Up”](#) on page 78 for what switch configuration information is backed up.

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Set the passphrase for the backup.

```
-> set /SP/config passphrase=phrase
```

where *phrase* is an alphanumeric string. For example:

```
-> set /SP/config passphrase=user1234
Set 'passphrase' to 'user1234'
->
```

3. Back up the configuration.

```
-> set /SP/config dump_uri=URI
```

where *URI* is the uniform resource indicator.

For example, to dump the configuration as the `my.config` file to the `/opt/dump` directory on a server with IP address 123.45.67.89 using the SCP protocol:

```
-> set /SP/config dump_uri=scp://root:changeme@123.45.67.89/opt/dump/my.config
Dump successful.
->
```

The configuration is backed up as the `my.config` XML file.

Related Information

- [“set Command”](#) on page 274
- [“Switch Configuration Information Backed Up”](#) on page 78
- [“Back Up the Configuration \(Web\)”](#) on page 144
- [“Restore the Configuration \(CLI\)”](#) on page 78

Switch Configuration Information Backed Up

When you back up the configuration with a passphrase, this switch-specific information is saved into an `.xml` file:

- DCS configuration
- User Subnet Manager configuration
- Environment daemon configuration
- List of disabled ports
- SNMP IB configuration
- IPoIB settings
- IPoIB interface settings
- List of ports configured for autodisable

Related Information

- [“Back Up the Configuration \(CLI\)” on page 77](#)
- [“Back Up the Configuration \(Web\)” on page 144](#)

▼ Restore the Configuration (CLI)

Note – You must use the correct passphrase when restoring the configuration that was backed up with a passphrase.

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Set the passphrase for the restore.

```
-> set /SP/config passphrase=phrase
```

where *phrase* is an alphanumeric string. For example

```
-> set /SP/config passphrase=user1234  
Set 'passphrase' to 'user1234'  
->
```


3. Restore the configuration.

```
-> set /SP/config load_uri=URI
```

where *URI* is the uniform resource indicator.

For example, to load the configuration as the `my.config` file from the `/opt/dump` directory on a server with IP address `123.45.67.89` using the SCP protocol:

```
-> set /SP/config load_uri=scp://root:changeme@123.45.67.89/opt/dump/my.config
Load successful.
->
```

The configuration is restored.

Related Information

- “set Command” on page 274
- “Restore the Configuration (Web)” on page 145
- “Back Up the Configuration (CLI)” on page 77
- “Switch Configuration Information Backed Up” on page 78

▼ Create a Snapshot of the Switch State (CLI)

The snapshot utility collects log files, executes various commands and collects their output, and sends the data collected to a user-defined location. The dataset property of the `/SP/diag/snapshot` target defines the data that is collected. See “[Snapshot Dataset Information \(CLI\)](#)” on page 81.

The snapshot describes the state of the switch at a particular moment in time. You can use this information for diagnosing system problems. The snapshot utility requires administrator privileges.

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Create a snapshot of the switch state.

```
-> set /SP/diag/snapshot dataset=value dump_uri=URI
```

where:

- *value* is the type of dataset, as described in the table in “[Snapshot Dataset Information \(CLI\)](#)” on page 81.

- *URI* is the uniform resource indicator (FTP and SFTP supported)

For example, to take a snapshot of the normal dataset and transfer the snapshot using the FTP protocol to the /tftpboot/normal directory of the host with IP address 123.45.67.89 as the root user:

```
-> set /SP/diag/snapshot dataset=normal dump_uri=
ftp://root:changeme@123.45.67.89//tftpboot/normal
Set 'dataset' to 'normal'
Set 'dump_uri' to 'ftp://root:changeme@123.45.67.89//tftpboot/normal'
->
```

The snapshot process takes several minutes to complete.

3. (Optional) Check the progress of the snapshot process.

```
-> show /SP/diag/snapshot result
/SP/diag/snapshot
Properties:
    result = Running
->
```

This example shows the progress of the snapshot process, after it has finished:

```
-> show /SP/diag/snapshot result
/SP/diag/snapshot
Properties:
    result = Collecting data into
ftp://root:*****@123.45.67.89//tftpboot/normal/magnum_123.45.67.89_2012-12T06-
43-15.zip
Snapshot Complete
Done.
->
```

Related Information

- [“set Command” on page 274](#)
- [“show Command” on page 275](#)
- [“Snapshot Dataset Information \(CLI\)” on page 81](#)
- [“Create a Snapshot of the Switch State \(Web\)” on page 146](#)

Snapshot Dataset Information (CLI)

The dataset property of the `/SP/diag/snapshot` target determines what data is included in the snapshot. This table provides a listing of the dataset values and the data that is included in the snapshot.

Dataset Value	Description
<code>normal</code>	Contains Oracle ILOM data, basic operating system data, and switch configuration data.
<code>normal-logonly</code>	Contains only log entries that pertain to Oracle ILOM data, basic operating system data, and switch hardware data.
<code>fruid</code>	Contains normal dataset information, with additional FRUID data.
<code>fruid-logonly</code>	Contains only log entries that pertain to Oracle ILOM data, basic operating system data, switch hardware data, and additional FRUID data.
<code>full</code>	Contains normal dataset information, with additional FRUID data and diagnostic data.
<code>full-logonly</code>	Contains only log entries that pertain to Oracle ILOM data, basic operating system data, switch hardware data, additional FRUID data, and diagnostic data.

The snapshot is stored as a `.zip` file with a filename of this format:

hostname_IP_address_year-month-dayThour-minute-second.zip

for example:

`magnum_123.45.67.89_2012-12-12T06-43-15.zip`

Note – The `normal`, `fruid`, and `full` datasets of the snapshot utility are currently equivalent and contain the same data in the snapshot.

Related Information

- [“Create a Snapshot of the Switch State \(CLI\)” on page 79](#)

▼ Set the Network Management Parameters (CLI)

This task enables you to configure the NET MGT interface.

Note – This procedure makes changes that do not require a reset or reboot.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Configure the network management parameters.

```
-> set /SP/network property=value property=value . . .
```

where:

- *property* is the parameter of the network to configure.
- *value* is the value of the *property* to configure.

These properties are supported:

- `pendingipaddress` – The *value* is the IP address of the management controller to be configured.
- `pendingipdiscovery` – The *value* is the method of IP discovery to be configured, either `static` or `dhcp`.
- `pendingipgateway` – The *value* is the IP address of the gateway to be configured.
- `pendingipnetmask` – The *value* is the netmask to be configured.

Note – You can configure one, several, or all properties in one command line.

3. Commit the changes.

```
-> set /SP/network commitpending=true
```

For example, to set the IP address of the management controller:

```
-> show /SP/network ipaddress  
/SP/network  
Properties:  
    ipaddress = 123.45.67.89  
-> set /SP/network pendingipaddress=123.45.67.90  
Set 'pendingipaddress' to '123.45.67.90'  
-> set /SP/network commitpending=true  
Set 'commitpending' to 'true'
```

The IP address has changed to 123.45.67.90.

Note – Changing some network management properties terminates the NET MGT connection to the management controller. You must re-establish the connection to continue administering the management controller. See [“Accessing Oracle ILOM From the CLI” on page 28](#).

4. Access the Oracle ILOM CLI using the new IP address.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

5. Display the new IP address.

```
-> show /SP/network ipaddress  
/SP/network  
Properties:  
    ipaddress = 123.45.67.90  
->
```

Related Information

- [“set Command” on page 274](#)
- [“show Command” on page 275](#)
- [“Set the Network Management Parameters \(Web\)” on page 147](#)
- [“Set the Network Parameters \(SNMP\)” on page 245](#)

▼ Set the System Identification Properties (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Set the host name property.

```
-> set /SP hostname=string
```

For example:

```
-> set /SP hostname=mmm  
Set 'hostname' to 'mmm'  
->
```

3. Set the system contact property.

```
-> set /SP system_contact=string
```

For example:

```
-> set /SP system_contact='sysadmin'  
Set 'system_contact' to 'sysadmin'  
->
```

4. Set the system identifier property.

```
-> set /SP system_identifier=string
```

For example:

```
-> set /SP system_identifier='data center'  
Set 'system_identifier' to 'data center'  
->
```

5. Set the system location property.

```
-> set /SP system_location=string
```

For example:

```
-> set /SP system_location='3rd floor'  
Set 'system_location' to '3rd floor'  
->
```

6. Display the identification properties.

```
-> show -d properties /SP  
/SP/cli  
Properties:  
  hostname = mnm  
  system_contact = sysadmin  
  system_description = Sun Datacenter InfiniBand Switch 36, ILOM v2.1.2-1,  
r47111  
  system_identifier = data center  
  system_location = 3rd floor  
->
```

Related Information

- [“Set the System Identification Properties \(Web\)”](#) on page 148
- [“Set the System Identification Properties \(SNMP\)”](#) on page 247
- [“Display System Identification Properties \(CLI\)”](#) on page 67

Performing Oracle ILOM User Tasks (CLI)

These tasks enable you to change and configure Oracle ILOM user targets.

- [“Add an Oracle ILOM User Account \(CLI\)”](#) on page 86
- [“Change an Oracle ILOM User’s Password and or Role \(CLI\)”](#) on page 86
- [“Delete an Oracle ILOM User Account \(CLI\)”](#) on page 88

Related Information

- [“Performing Oracle ILOM User Tasks \(Web\)”](#) on page 148
- [“Performing General Tasks on Oracle ILOM Targets \(CLI\)”](#) on page 69

▼ Add an Oracle ILOM User Account (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Add an Oracle ILOM user.

```
-> create /SP/user/username
```

where *username* is the name of the user’s account.

For example, to add a user named testuser:

```
-> create /SP/users/testuser  
Creating user...  
Enter new password: *****  
Enter new password again: *****  
Created /SP/users/testuser  
->
```

Note – New users are assigned the role of o (operator) or Read only by default.

The Oracle ILOM user testuser is added.

Related Information

- “[create Command](#)” on page 267
- “[Add an Oracle ILOM User Account \(Web\)](#)” on page 149
- “[Add an Oracle ILOM User Account \(SNMP\)](#)” on page 248
- “[Delete an Oracle ILOM User Account \(CLI\)](#)” on page 88

▼ Change an Oracle ILOM User’s Password and or Role (CLI)

Note – To change the root user’s password, refer to *Switch Administration*, changing the root user’s password.

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Change the Oracle ILOM user's configuration.

```
-> set /SP/users/username password=password role=role
```

where:

- *username* is the user account name.
- *password* is the new password.
- *role* is the new role for the user.

For the *role*, you can use the characters of the aucros string to enable the respective abilities:

- a – Administrator
- u – User management
- c – Console
- r – Reset and host control
- o – Read only (operator)
- s – Service

Note – You can change the user password and role independently.

For example, to change the password for the `ilom-operator` user:

```
-> set /SP/users/ilom-operator password=knockknock  
Changing password for user /SP/users/ilom-operator...  
Enter new password again: *****  
New password was successfully set for user /SP/users/ilom-operator  
->
```

The `ilom-operator` user's password is changed.



Caution – With this procedure, it is also possible for the `ilom-admin` user to reset the `root` user password, should it be lost or forgotten. The `ilom-admin` user must use the USB management port to reset the `root` user password. See [“Access the Oracle ILOM Shell From the CLI \(USB Management Port\)”](#) on page 29.

Related Information

- [“set Command”](#) on page 274
- [“Change an Oracle ILOM User's Password and or Role \(Web\)”](#) on page 150

▼ Delete an Oracle ILOM User Account (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Delete the Oracle ILOM user.

```
-> delete /SP/users/username
```

where *username* is the name of the user’s account.

For example, to delete the testuser user:

```
-> delete /SP/users/testuser
Are you sure you want to delete /SP/users/testuser (y/n)? y
Deleted /SP/users/testuser
->
```

The Oracle ILOM user testuser is deleted.

Related Information

- “delete Command” on page 268
- “Delete an Oracle ILOM User Account (Web)” on page 150
- “Delete an Oracle ILOM User Account (SNMP)” on page 249
- “Add an Oracle ILOM User Account (CLI)” on page 86

Managing HTTP Services (CLI)

These tasks help you manage the Oracle ILOM HTTP service targets.

- “Enable the HTTP Service (CLI)” on page 89
- “Disable the HTTP Service (CLI)” on page 89

Related Information

- “Managing HTTP Services (Web)” on page 151
- “Managing HTTPS Services (CLI)” on page 90
- “Managing SNMP Services (CLI)” on page 93
- “Managing IPMI Services (CLI)” on page 101

▼ Enable the HTTP Service (CLI)

Note – The HTTP service is disabled and the HTTPS service is enabled by default.

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Enable the HTTP service.

```
-> set /SP/services/http servicestate=enabled
Set 'servicestate' to 'enabled'
->
```

The HTTP service is enabled.

Related Information

- [“set Command”](#) on page 274
- [“Enable the HTTP Service \(Web\)”](#) on page 151
- [“Set the HTTP Service State \(SNMP\)”](#) on page 250
- [“Disable the HTTP Service \(CLI\)”](#) on page 89

▼ Disable the HTTP Service (CLI)

Note – The HTTP service is disabled by default.

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Disable the HTTP service.

```
-> set /SP/services/http servicestate=disabled
Set 'servicestate' to 'disabled'
->
```

The HTTP service is disabled.

Related Information

- [“set Command”](#) on page 274
- [“Disable the HTTP Service \(Web\)”](#) on page 152

- “Set the HTTP Service State (SNMP)” on page 250
- “Enable the HTTP Service (CLI)” on page 89

Managing HTTPS Services (CLI)

These tasks help you manage the Oracle ILOM HTTPS service targets.

- “Enable the HTTPS Service (CLI)” on page 90
- “Install a Custom SSL Certificate and Key (CLI)” on page 91
- “Remove the Custom SSL Certificate and Key (CLI)” on page 92
- “Disable the HTTPS Service (CLI)” on page 93

Related Information

- “Managing HTTPS Services (Web)” on page 153
- “Managing HTTP Services (CLI)” on page 88
- “Managing SNMP Services (CLI)” on page 93
- “Managing IPMI Services (CLI)” on page 101

▼ Enable the HTTPS Service (CLI)

Note – This procedure enables an HTTPS connection to the web interface. The HTTPS service is enabled by default.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Enable secure redirection.

```
-> set /SP/services/http securerredirect=enabled  
Set 'securerredirect' to 'enabled'  
->
```

3. Enable the HTTPS service.

```
-> set /SP/services/https servicestate=enabled
Set 'servicestate' to 'enabled'
->
```

The HTTPS service is enabled.

Related Information

- “set Command” on page 274
- “Enable the HTTPS Service (Web)” on page 153
- “Set the HTTPS Service State (SNMP)” on page 250
- “Disable the HTTPS Service (CLI)” on page 93

▼ Install a Custom SSL Certificate and Key (CLI)

Note – To use a custom certificate, you must install both a custom SSL certificate and key.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Load the certificate.

```
-> load -source URI /SP/services/https/ssl/custom_cert
```

where *URI* is the uniform resource indicator.

For example, to load a certificate named `server.pem` from IP address 123.45.67.89 using the TFTP protocol:

```
-> load -source tftp://123.45.67.89//server.pem
/SP/services/https/ssl/custom_cert
Load successful.
->
```

3. Load the key.

```
-> load -source URI /SP/services/https/ssl/custom_key
```

where *URI* is the uniform resource indicator.

For example, to load a certificate named `server-key.pem` from IP address 123.45.67.89 using the TFTP protocol:

```
-> load -source tftp://123.45.67.89//server-key.pem
/SP/services/https/ssl/custom_key
Load successful.
->
```

Related Information

- “load Command” on page 272
- “Install a Custom SSL Certificate and Key (Web)” on page 154
- “Remove the Custom SSL Certificate and Key (CLI)” on page 92

▼ Remove the Custom SSL Certificate and Key (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Remove the certificate.

```
-> reset /SP/services/https/ssl/custom_cert
Are you sure you want to reset /SP/services/https/ssl/customer_cert (y/n)? y
Performing reset on /SP/services/https/ssl/custom_cert
->
```

3. Remove the key.

```
-> reset /SP/services/https/ssl/custom_key
Are you sure you want to reset /SP/services/https/ssl/customer_key (y/n)? y
Performing reset on /SP/services/https/ssl/custom_key
->
```

Related Information

- “reset Command” on page 273
- “Remove the Custom SSL Certificate and Key (Web)” on page 155
- “Install a Custom SSL Certificate and Key (CLI)” on page 91

▼ Disable the HTTPS Service (CLI)

Note – This procedure disables the HTTPS connection to the web interface. To access the web interface, either the HTTP service or the HTTPS service must be enabled.

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Disable secure redirection.

```
-> set /SP/services/http secureredirect=disabled  
Set 'secureredirect' to 'disabled'  
->
```

3. Disable the HTTPS service.

```
-> set /SP/services/https servicestate=disabled  
Set 'servicestate' to 'disabled'  
->
```

The HTTPS service is disabled.

Related Information

- “[set Command](#)” on page 274
- “[Disable the HTTPS Service \(Web\)](#)” on page 156
- “[Set the HTTPS Service State \(SNMP\)](#)” on page 250
- “[Enable the HTTPS Service \(CLI\)](#)” on page 90

Managing SNMP Services (CLI)

These tasks help you manage the Oracle ILOM SNMP service targets.

- “[Enable the SNMP Service \(CLI\)](#)” on page 94
- “[Configure the SNMP Service \(CLI\)](#)” on page 94
- “[Add SNMP Service User Accounts \(CLI\)](#)” on page 95
- “[Modify SNMP Service User Accounts \(CLI\)](#)” on page 97
- “[Delete SNMP Service User Accounts \(CLI\)](#)” on page 97
- “[Add SNMP Service Communities \(CLI\)](#)” on page 98
- “[Modify SNMP Service Communities \(CLI\)](#)” on page 99

- “Delete SNMP Service Communities (CLI)” on page 99
- “Download SNMP Service MIBs (CLI)” on page 100
- “Disable the SNMP Service (CLI)” on page 101

Related Information

- “Managing SNMP Services (Web)” on page 156
- “Managing HTTP Services (CLI)” on page 88
- “Managing HTTPS Services (CLI)” on page 90
- “Managing IPMI Services (CLI)” on page 101

▼ Enable the SNMP Service (CLI)

Note – The SNMP service is enabled by default.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Enable the SNMP service.

```
-> set /SP/services/snmp servicestate=enabled  
Set 'servicestate' to 'enabled'  
->
```

The SNMP service is enabled.

Related Information

- “set Command” on page 274
- “Enable the SNMP Service (Web)” on page 157
- “Disable the SNMP Service (CLI)” on page 101

▼ Configure the SNMP Service (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Configure the SNMP parameters.

```
-> set /SP/services/snmp property=value property=value ...
```

where:

- *property* is the parameter of the SNMP service to configure.
- *value* is the value of the *property* to configure

These properties are supported:

- *port* – The *value* is the UDP port for SNMP.
- *servicestate* – The *value* is either enabled or disabled.
- *sets* – The *value* is either enabled or disabled for set requests.
- *v1* – The *value* is either enabled or disabled for this protocol.
- *v2c* – The *value* is either enabled or disabled for this protocol.
- *v3* – The *value* is either enabled or disabled for this protocol.

Note – You can configure one to all properties in one command line.

For example, to enable *sets* and the *v2c* protocol:

```
-> set /SP/services/snmp sets=enabled v2c=enabled  
Set 'sets' to 'enabled'  
Set 'v2c' to 'enabled'  
->
```

Related Information

- [“set Command” on page 274](#)
- [“Configure the SNMP Service \(Web\)” on page 157](#)

▼ Add SNMP Service User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Add a new SNMP user.

```
-> create /SP/services/snmp/users/username authenticationpassword=password
```

where:

- *username* is the name of the SNMP user.

- *password* is the password used for authentication.

Note – The authentication password is 8 to 12 characters in length.

For example, to create an SNMP user with the name of `snmpuser` and the password of `changeme`:

```
-> create /SP/services/snmp/users/snmpuser authenticationpassword=changeme
Created /SP/services/snmp/users/snmpuser
->
```

Note – By default, new users are given read-only permissions and no privacy protocol.

3. (Optional) Configure the user with a privacy protocol and password.

```
-> set /SP/services/snmp/users/snmpuser privacyprotocol=DES privacypassword=
password authenticationpassword=password
```

Note – The privacy password is exactly 8 characters in length.

For example, to configure the `snmpuser` with the DES protocol and privacy password of `changeme`:

```
-> set /SP/services/snmp/users/snmpuser privacyprotocol=DES privacypassword=
changeme authenticationpassword=changeme
Set 'privacyprotocol' to 'DES'
Set 'privacypassword' to 'changeme'
Set 'authenticationpassword' to 'changeme'
User /SP/services/snmp/users/snmpuser properties were updated successfully
->
```

The SNMP user `snmpuser` is configured.

Related Information

- [“load Command” on page 272](#)
- [“set Command” on page 274](#)
- [“Add SNMP Service User Accounts \(Web\)” on page 158](#)
- [“Delete SNMP Service User Accounts \(CLI\)” on page 97](#)

▼ Modify SNMP Service User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Modify an SNMP user.

```
-> set /SP/services/snmp/users/username property=value property=value ...
```

where:

- *username* is the name of the SNMP user to modify.
- *property* is the parameter of the SNMP user to configure.
- *value* is the value of the *property* to configure.

These properties are supported:

- `authenticationpassword` – The *value* is the password used for authentication (8 to 12 characters).
- `authenticationprotocol` – The *value* is the protocol used for authentication.
- `permission` – The *value* is permission granted to the SNMP user.
- `privacypassword` – The *value* is the password used for privacy (exactly 8 characters).
- `privacyprotocol` – The *value* is the protocol used for privacy.

For example, to configure the `snmpuser` with read and write permissions:

```
-> set /SP/services/snmp/users/snmpuser permission=rw
Set 'permission' to 'rw'
User /SP/services/snmp/users/snmpuser properties were updated successfully
->
```

Related Information

- [“set Command”](#) on page 274
- [“Modify SNMP Service User Accounts \(Web\)”](#) on page 159

▼ Delete SNMP Service User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Delete an SNMP user.

```
-> delete /SP/services/snmp/users/username
```

where *username* is the name of the SNMP user to be deleted.

For example, to delete the *snmpuser*:

```
-> delete /SP/services/snmp/users/snmpuser
Are you sure you want to delete /SP/services/snmp/users/snmpuser (y/n)? y
Deleted /SP/services/snmp/users/snmpuser
->
```

The SNMP user *snmpuser* is deleted.

Related Information

- [“delete Command” on page 268](#)
- [“Delete SNMP Service User Accounts \(Web\)” on page 160](#)
- [“Add SNMP Service User Accounts \(CLI\)” on page 95](#)

▼ Add SNMP Service Communities (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Add an SNMP community.

```
-> create /SP/services/snmp/communities/community permission=rw
```

where *community* is the name of the SNMP community to create.

For example, to add the community *newcom*:

```
-> create /SP/services/snmp/communities/newcom permission=rw
Created /SP/services/snmp/communities/newcom
->
```

The SNMP community *newcom* is added.

Related Information

- [“create Command” on page 267](#)
- [“Add SNMP Service Communities \(Web\)” on page 160](#)
- [“Delete SNMP Service Communities \(CLI\)” on page 99](#)

▼ Modify SNMP Service Communities (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Modify an SNMP community.

```
-> set /SP/services/snmp/communities/community property=value property=
value ...
```

where:

- *community* is the name of the SNMP community to modify.
- *property* is the parameter of the SNMP community to configure.
- *value* is the value of the *property* to configure.

This property is supported:

- *permission* – The *value* is permission granted to the SNMP community.

For example, to configure the *newcom* community with read only permissions:

```
-> set /SP/services/snmp/communities/newcom permission=ro
Set 'permission' to 'ro'
->
```

Related Information

- [“set Command”](#) on page 274
- [“Modify SNMP Service Communities \(Web\)”](#) on page 161

▼ Delete SNMP Service Communities (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI”](#) on page 28.

2. Delete an SNMP community.

```
-> delete /SP/services/snmp/communities/community
```

where *community* is the name of the SNMP community to delete.

For example, to delete the newcom community:

```
-> delete /SP/services/snmp/communities/newcom
Are you sure you want to delete /SP/services/snmp/communities/newcom (y/n)? y
Deleted /SP/services/snmp/communities/newcom
->
```

The SNMP community newcom is deleted.

Related Information

- [“delete Command” on page 268](#)
- [“Delete SNMP Service Communities \(Web\)” on page 161](#)
- [“Add SNMP Service Communities \(CLI\)” on page 98](#)

▼ Download SNMP Service MIBs (CLI)

This procedure creates a compressed file, `ilom-mibs.zip`, that contains these MIBs:

- ENTITY-MIB.mib
- SUN-HW-TRAP-MIB.mib
- SUN-ILOM-CONTROL-MIB.mib
- SUN-PLATFORM-MIB.mib
- SUN-FABRIC-MIB.mib
- SUN-DCS-IB-MIB.txt

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Download the MIBs.

```
-> dump -destination URI /SP/services/snmp/mibs
```

where *URI* is the uniform resource indicator.

For example, to dump the MIBs as the `ilom-mibs.zip` file to a server with IP address 123.45.67.89 using the FTP protocol:

```
-> dump -destination ftp://root:changeme@123.45.67.89/tftpboot/ilom-mibs.zip  
/SP/services/snmp/mibs  
Dump successful.  
->
```

The MIBs are downloaded.

Related Information

- [“dump Command” on page 269](#)
- [“Download SNMP Service MIBs \(Web\)” on page 162](#)

▼ Disable the SNMP Service (CLI)

1. Access the Oracle ILOM CLI.

See [“Accessing Oracle ILOM From the CLI” on page 28](#).

2. Disable the service.

```
-> set /SP/services/snmp servicestate=disabled  
Set 'servicestate' to 'disabled'  
->
```

The SNMP service is disabled.

Related Information

- [“set Command” on page 274](#)
- [“Disable the SNMP Service \(Web\)” on page 163](#)
- [“Enable the SNMP Service \(CLI\)” on page 94](#)

Managing IPMI Services (CLI)

These tasks help you manage the Oracle ILOM IPMI service target.

- “Enable the IPMI Service (CLI)” on page 102
- “Disable the IPMI Service (CLI)” on page 102

Related Information

- “Managing IPMI Services (Web)” on page 163
- “Managing HTTP Services (CLI)” on page 88
- “Managing HTTPS Services (CLI)” on page 90
- “Managing SNMP Services (CLI)” on page 93

▼ Enable the IPMI Service (CLI)

Note – The IPMI service is enabled by default.

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Enable the IPMI service.

```
-> set /SP/services/ipmi servicestate=enabled
Set 'servicestate' to 'enabled'
->
```

The IPMI service is enabled.

Related Information

- “set Command” on page 274
- “Enable the IPMI Service (Web)” on page 164
- “Disable the IPMI Service (CLI)” on page 102
- “Display the IPMI Service Status (CLI)” on page 57

▼ Disable the IPMI Service (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Disable the service.

```
-> set /SP/services/ipmi servicestate=disabled
Set 'servicestate' to 'disabled'
->
```

The IPMI service is disabled.

Related Information

- “set Command” on page 274
- “Disable the IPMI Service (Web)” on page 164
- “Enable the IPMI Service (CLI)” on page 102
- “Display the IPMI Service Status (CLI)” on page 57

Managing Other Aspects With Oracle ILOM (CLI)

These tasks help you manage other aspect of Oracle ILOM.

- “Enable Alerts to Send SNMP Traps (CLI)” on page 103
- “Enable Alerts to Send PETs (CLI)” on page 105
- “Enable Alerts to Send Email Alerts (CLI)” on page 106
- “Disable Alerts (CLI)” on page 107
- “Set the Oracle ILOM CLI Session Timeout (CLI)” on page 108

Related Information

- “Managing Other Aspects With Oracle ILOM (Web)” on page 165
- “Managing Other Aspects With Oracle ILOM (SNMP)” on page 249
- “Performing General Tasks on Oracle ILOM Targets (CLI)” on page 69

▼ Enable Alerts to Send SNMP Traps (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Enable alerts to send SNMP traps.

```
-> set /SP/alertmgmt/rules/alert/ destination=IP_address destination_port=162 level=level snmp_version=version
```

where:

- *alert* is the number of the alert.
- *IP_address* is the IP address of the host to receive the SNMP trap.
- *level* is the level of the alert.
- *version* is the version of SNMP trap.

For example, to set alert 1 to send v2c SNMP traps on occurrence of minor or higher severity events to the host at 123.45.67.89:

```
-> set /SP/alertmgmt/rules/1/ destination=123.45.67.89 destination_port=162 level=minor snmp_version=2c
Set 'destination' to '123.45.67.89'
Set 'destination_port' to '162'
Set 'level' to 'minor'
Set 'snmp_version' to '2c'
->
```

Note – The destination port of 162 is the default used.

This is an example of an SNMP v2c trap of when the aggregate sensor is in the state of Asserted:

```
Sep 25 10:18:08 mnm-blr-9 snmptrapd[3579]: [ID 702911 daemon.warning]
mnm-blr-60.in.oracle.com [123.45.67.90]: Trap
DISMAN-EVENT-MIB::sysUpTimeInstance = Timeticks: (2814848) 7:49:08.48,
SNMPv2-MIB::snmpTrapOID.0 = OID:
SUN-HW-TRAP-MIB::sunHwTrapComponentError,
SUN-HW-TRAP-MIB::sunHwTrapSystemIdentifier.0 = STRING: 123.45.67.90,
SUN-HW-TRAP-MIB::sunHwTrapChassisId.0 = STRING: AK00022680,
SUN-HW-TRAP-MIB::sunHwTrapProductName.0 = STRING: Sun Datacenter
InfiniBand Switch 36p, SUN-HW-TRAP-MIB::sunHwTrapComponentName.0 = STRING:
/SYS/CHASSIS_STATUS,
SUN-HW-TRAP-MIB::sunHwTrapAdditionalInfo.0 = STRING: State Asserted,
SUN-HW-TRAP-MIB::sunHwTrapAssocObjectId.0 = OID:
ENTITY-MIB::entPhysicalDescr.37
```

In the output, the trap source is the switch and the component raising the trap is /SYS/CHASSIS_STATUS or the aggregate sensor. The sensor is State Asserted.

Related Information

- “set Command” on page 274
- “Enable Alerts to Send SNMP Traps (Web)” on page 165
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 251
- “Enable Alerts to Send PETs (CLI)” on page 105
- “Enable Alerts to Send Email Alerts (CLI)” on page 106
- “Display the Alert Properties (CLI)” on page 61
- “Disable Alerts (CLI)” on page 107

▼ Enable Alerts to Send PETs (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Enable alerts to send PETs.

```
-> set /SP/alertmgmt/rules/alert/ destination=IP_address level=level type=ipmipet
```

where:

- *alert* is the number of the alert.
- *IP_address* is the IP address of the host to receive the PET trap.
- *level* is the level of the alert.

For example, to set alert 2 to send PET traps on occurrence of minor or higher severity events to the host at 123.45.67.89:

```
-> set /SP/alertmgmt/rules/2/ destination=123.45.67.89 level=minor type=ipmipet
Set 'destination' to '123.45.67.89'
Set 'level' to 'minor'
Set 'type' to 'ipmipet'
->
```

This is an example of a PET trap of when the aggregate sensor is in the state of Asserted:

```
Sep 12 13:12:38 mnm-blr-2 snmptrapd[1514]: [ID 702911 daemon.warning]
123.45.67.90: Enterprise Specific Trap (12583681) Uptime: 117 days, 8:00:20.80,
SNMPv2-SMI::enterprises.3183.1.1.1 = Hex-STRING: FF 20 00 08 FF FF FF FF FF FF
8E 00 28 4B E0 00
Sep 12 13:12:38 mnm-blr-2 02 00 A0 EB C1 07 FF FF 20 20 02 20 01 00 00 01
Sep 12 13:12:38 mnm-blr-2 FF FF 00 00 00 00 00 19 2A 00 00 00 30 30 80 0F
Sep 12 13:12:38 mnm-blr-2 03 43 48 41 53 53 49 53 5F 53 54 41 54 55 53 00
```

```
Sep 12 13:12:38 mnm-blr-2 80 26 03 53 75 6E 54 4D 20 44 61 74 61 63 65 6E
Sep 12 13:12:38 mnm-blr-2 74 65 72 20 49 6E 66 69 6E 69 42 61 6E 64 20 53
Sep 12 13:12:38 mnm-blr-2 77 69 74 63 68 20 33 36 00 C1 00 00 00 00
```

Related Information

- “set Command” on page 274
- “Enable Alerts to Send PETs (Web)” on page 166
- “Enable Alerts to Send PETs (SNMP)” on page 252
- “Enable Alerts to Send SNMP Traps (CLI)” on page 103
- “Enable Alerts to Send Email Alerts (CLI)” on page 106
- “Display the Alert Properties (CLI)” on page 61
- “Disable Alerts (CLI)” on page 107

▼ Enable Alerts to Send Email Alerts (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Enable alerts to send emails.

```
-> set /SP/alertmgmt/rules/alert destination=email_to type=email
email_custom_sender=email_from level=level
```

where:

- *alert* is the number of the alert.
- *email_to* is the email address to receive the alert.
- *email_from* is the sender, as seen in the From: field. For example:
ilom-36p-hostname, where *hostname* is the host name of the management controller.
- *level* is the level of the alert.

For example, to set alert 1 to send an email to *user@headsup.com* whenever a major or higher severity event happens:

```
-> set /SP/alertmgmt/rules/1 destination=user@headsup.com type=email
email_custom_sender=ilom-36p-magnum level=major
Set 'destination' to 'user@headsup.com'
Set 'type' to 'email'
Set 'email_custom_sender' to 'ilom-36p-magnum'
Set 'level' to 'major'
->
```

Related Information

- “set Command” on page 274
- “Enable Alerts to Send Email Alerts (Web)” on page 167
- “Enable Alerts to Send Email Alerts (SNMP)” on page 253
- “Enable Alerts to Send SNMP Traps (CLI)” on page 103
- “Enable Alerts to Send PETs (CLI)” on page 105
- “Display the Alert Properties (CLI)” on page 61
- “Disable Alerts (CLI)” on page 107

▼ Disable Alerts (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 28.

2. Disable the alerts.

```
-> set /SP/alertmgmt/rules/alert level=disable
```

where *alert* is the number of the alert to disable.

For example, to disable alert 1:

```
-> set /SP/alertmgmt/rules/1 level=disable
Set 'level' to 'disable'
->
```

The alert is disabled.

Related Information

- “set Command” on page 274
- “Disable Alerts (Web)” on page 167
- “Disable Alerts (SNMP)” on page 255
- “Display the Alert Properties (CLI)” on page 61
- “Enable Alerts to Send SNMP Traps (CLI)” on page 103
- “Enable Alerts to Send PETs (CLI)” on page 105
- “Enable Alerts to Send Email Alerts (CLI)” on page 106

▼ Set the Oracle ILOM CLI Session Timeout (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 28.

2. Set the Oracle ILOM CLI session timeout.

```
-> set /SP/cli timeout=value
```

where *value* is the number of minutes for session timeout (1–1440).

For example, to set the timeout for 100 minutes:

```
-> set /SP/cli timeout=100
Set 'timeout' to '100'
->
```

Note – Setting a timeout *value* of 0 disables the timeout feature.

The CLI session timeout is set.

Related Information

- “[set Command](#)” on page 274
- “[Set the CLI Session Timeout \(Web\)](#)” on page 168

Upgrading the Switch Firmware Through Oracle ILOM (CLI)

One of the advantages of Oracle ILOM support on the management controller is that all firmware upgrades and downgrades have been simplified into a two-task process.

These topics enable you to either upgrade or downgrade the switch firmware through the Oracle ILOM CLI.

- “[Firmware Overview](#)” on page 109
- “[Verify Firmware Integrity \(CLI\)](#)” on page 109
- “[Acquire the Switch Firmware Package \(CLI\)](#)” on page 110
- “[Upgrade the Switch Firmware \(CLI\)](#)” on page 112

Related Information

- “Upgrade the Switch Firmware (Web)” on page 169
- “Monitoring Oracle ILOM Targets (CLI)” on page 36
- “Controlling Oracle ILOM Targets (CLI)” on page 68

Firmware Overview

The management controller has firmware that represents the following:

- Basic I/O system for initial startup of the controller.
- Linux operating system that enables the management controller to function as a service processor and host for the switch.
- File system that contains the many hardware commands, InfiniBand commands, Subnet Manager, and other applications for the administration of the switch and InfiniBand fabric.

The switch chip has firmware that instructs how to route links, set data rates, and configure signal parameters.

When improvements to the operation of the switch are made or features are added, these enhancements are delivered through a firmware upgrade.

Related Information

- “Verify Firmware Integrity (CLI)” on page 109
- “Acquire the Switch Firmware Package (CLI)” on page 110
- “Upgrade the Switch Firmware (CLI)” on page 112

▼ Verify Firmware Integrity (CLI)

Over time, you might become concerned that the filesystem of the management controller is corrupted, or inappropriate `.rpm` packages have been installed. The `fwverify` command can help troubleshoot these problems for you.

The `fwverify` command checks for correct version numbers of present packages, if any required packages are missing, and the integrity of installed files. More information about the `fwverify` command is provided in the *Switch Reference*, `fwverify` command.

- On the management controller, verify the firmware integrity.

```
FabMan@switch_name->fwverify
Checking all present packages:
..... OK
Checking if any packages are missing:
..... OK
Verifying installed files:
..... OK
Checking FW Coreswitch:
  FW Version: 7.4.2200 OK
  PSID: SUN_NM2-36p_004 OK
  Verifying image integrity OK
FabMan@switch_name->
```

Related Information

- *Switch Reference*, fwverify command
- “Firmware Overview” on page 109
- “Acquire the Switch Firmware Package (CLI)” on page 110
- “Upgrade the Switch Firmware (CLI)” on page 112

▼ Acquire the Switch Firmware Package (CLI)

Note – Refer to the *Switch Product Notes* for the most up-to-date method of acquiring the firmware. If no information is provided there, use these instructions.

Note – The version numbers in this procedure are represented as *x.y*, *x.y.z*, and *x.y.z.w*. For example, for the 2.1.2-1 version of the firmware, *x=2*, *y=1*, *z=2*, and *w=1*. Refer to the *Switch Product Notes* for the most current version numbers.

1. **Open a web browser on a host that is on the same Ethernet network as the management controller to receive the firmware update.**
2. **Go to this URL.**
<http://support.oracle.com>
Oracle’s My Oracle Support page is displayed.
3. **Sign in if you already have an account.**
The dashboard page is displayed.

Note – If you do not have an account, you must register.

- 4. Click the Patches & Updates tab.**
The Patches and Updates page is displayed.
- 5. In the Patch Search window, click the Search tab.**
The Patch Search window updates.
- 6. Click the Product or Family (Advance) link.**
The Patch Search window updates.
- 7. In the Product Is drop-down menu, select Sun Datacenter InfiniBand Switch 36.**
- 8. In the Release Is drop-down menu, select Sun Datacenter InfiniBand Switch 36 *x.y.z*.**
Where *x.y.z* is the version number of the firmware package to be acquired. For example, 2.1.2.
- 9. Click outside of the drop-down menu.**
- 10. Click Search.**
The Patch Search window expands with the search results.
- 11. In the Patch Name column, click the respective patch number link.**
For example, 16221424. The Patch Search window reformats.
- 12. Click Read Me to display the README file.**
- 13. Click Download.**
The File Download window opens.
- 14. Click the *filename.zip* link to initiate the download.**
For example, p16221424_212_Generic.zip.
- 15. Indicate where the file should be saved.**
The file is downloaded and saved.
- 16. In your receiving directory, decompress the *filename.zip* file.**
The firmware is in the SUN_DCS_36p_*x.y.z*.tar.gz file.
The readme file contains the latest information about the firmware release.

17. Unpack the .gz file.

```
$ gtar -zxvf SUN_DCS_36p_x.y.z.tar.gz
```

The extracted files are displayed.

18. Move the switch firmware package (*filename.pkg*) to a directory on a host that is accessible by Oracle ILOM.

19. Upgrade the switch firmware.

See “Upgrade the Switch Firmware (CLI)” on page 112 or “Upgrade the Switch Firmware (Web)” on page 169.

Related Information

- “Firmware Overview” on page 109
- “Verify Firmware Integrity (CLI)” on page 109
- “Upgrade the Switch Firmware (CLI)” on page 112

▼ Upgrade the Switch Firmware (CLI)

Note – If you are going to downgrade the firmware to a version earlier than 2.1, you must disable secret M_Keys. Refer to *Switch Administration*, disabling secret M_Key functionality.

Note – If you are going to downgrade the firmware to a version earlier than 2.0, you must remove user partitions and depopulate the Subnet Manager nodes list. Refer to *Switch Administration*, removing partitions for firmware downgrade.

1. Open an SSH session as user `root` and connect to the management controller by specifying the controller’s host name.

```
% ssh -l root switch_name  
root@switch_name's password: password  
#
```

where *switch_name* is the host name of the management controller. Initially, the *password* is changeme.

2. If the Subnet Manager is running on the management controller, disable the Subnet Manager.

```
# disablesm
Stopping partitiond daemon.           [ OK ]
Stopping IB Subnet Manager..         [ OK ]
#
```

3. Consider your next step.

- If you are upgrading from firmware version 2.0 or newer, go to [Step 7](#).
- If you are upgrading from a firmware version earlier than 2.0, go to [Step 4](#).

4. Verify that there is at least 80 MB available in the / filesystem.

```
# df -h /
Filesystem      Size  Used Avail Use% Mounted on
/dev/hda2       471M  276M  172M  62% /
#
```

In this example, there are 172 MB available. If not enough space is available, you must delete or move files from the / filesystem.

5. Verify that there is at least 120 MB available in the /tmp directory.

```
# df -h /tmp
Filesystem      Size  Used Avail Use% Mounted on
tmpfs           250M  240K  249M  1% /tmp
#
```

In this example, there are 249 MB available. If not enough space is available, you must delete files from the /tmp directory.

6. Verify that there is at least 120 MB free memory available.

```
# free -m
total          used          free          shared        buffers         cached
Mem:           498           104           393            0             12             47
-/+ buffers/cache:
              45             453
Swap:           0             0             0
#
```

In the -/+ buffers/cache: row of the free column, there should be at least 120 MB free memory. In this example, there are 453 MB available. If not enough memory is available, you must exit nonessential applications that are running.

7. Start the Oracle ILOM shell.

```
# spsh
Oracle(R) Integrated Lights Out Manager
Version ILOM 3.0 r47111
Copyright (c) 2010, Oracle and/or its affiliates. All rights reserved.
->
```

You are now in the Oracle ILOM shell.

You can use the `exit` command to return to the Linux shell.

8. Begin the upgrade process.

```
-> load -source URI/pkgname
```

where:

- *URI* is the uniform resource indicator for the host where the switch firmware package is located. The FTP and HTTP protocols are supported.
- *pkgname* is the name of the firmware package in the transfer directory.

For example, using the FTP protocol:

```
-> load -source
ftp://root:changeme@123.45.67.89//tmp/sundcs_36p_repository_2.1.2_1.pkg
Downloading firmware image. This will take a few minutes.
```

Note – If you are upgrading from firmware version 2.0.x, you can use the `-force` option to disable version number checking, and force the upgrade.

The firmware is downloaded. The upgrade begins. A caution is displayed and you are asked to commit to the upgrade.

```
NOTE: Firmware upgrade will upgrade the SUN DCS 36p firmware.
ILOM will enter a special mode to load new firmware. No
other tasks should be performed in ILOM until the firmware
upgrade is complete.
```

```
Subnet manager is running on the switch. Proceeding with installation will stop
it.
Are you sure you want to load the specified file (y/n)?
```

9. Answer y to the prompt to commit to the upgrade.

The upgrade begins.

```
Setting up environment for firmware upgrade. This will take few minutes.
Subnet manager has been temporarily disabled on this switch so that
firmware upgrade can go on. After the upgrade is done, please make
sure that the SM is running again, using commands sminfo and enablesm.
Starting SUN DCS 36p FW update
=====
Performing operation: I4 A
=====
I4 fw upgrade from 7.4.0(INI:4) to 7.4.2200(INI:4):
Upgrade started...
Upgrade completed.
INFO: I4 fw upgrade from 7.4.0(INI:4) to 7.4.2200(INI:4) succeeded
=====
Summary of Firmware update
=====
I4 status           : FW UPDATE - SUCCESS
I4 update succeeded on : A
I4 already up-to-date on : none
I4 update failed on   : none
=====
Performing operation: SUN DCS 36p firmware update
=====
SUN DCS 36p fw upgrade from 2.0.7-2 to 2.1.2-1:
Upgrade started...
Upgrade completed.
INFO: SUN DCS 36p fw upgrade from 2.0.7-2 to 2.1.2-1 succeeded

Post-install checks started...
Post-install checks completed.
Firmware update is complete.
ILOM will be restarted and will take 2 minutes to come up.
You will need to reconnect to Integrated Lights Out Manager.

Stopping any already executing ILOM daemons
Starting event manager
Starting log manager
Starting ILOM IPMI stack
Started ILOM IPMI stack
Starting lumain
Starting luproxy
Starting ealertd
Starting web server
Starting SNMP
Connection to 123.45.67.89 closed.
#
```

10. Exit the Oracle ILOM CLI shell.

```
-> exit
exit
#
```

11. Restart the switch to enable the new firmware.

Refer to *Switch Administration*, restarting the entire switch.

Note – The restart process takes between 4 to 5 minutes to complete. The Oracle ILOM stack requires at least 2 minutes to become operational after a reboot.

12. If the Subnet Manager was previously disabled, log in as the `root` user and enable the Subnet Manager.

```
% ssh -l root switch_name
root@switch_name's password: password
# enableesm
Starting IB Subnet Manager.                [ OK ]
Starting partitiond daemon.                [ OK ]
#
```

13. Verify the firmware version.

```
# version
SUN DCS 36p version: 2.1.2-1
Build time: Dec 7 2012 09:33:54
SP board info:
Manufacturing Date: 2009.02.20
Serial Number: "NCD2T0307"
Hardware Revision: 0x0100
Firmware Revision: 0x0102
BIOS version: NOW1R112
BIOS date: 04/24/2009
#
```

In the first line of the output is SUN DCS 36p version *x.y.z-w*, where *x.y.z-w* is the version of the firmware upgraded (or downgraded). For example, 2.1.2-1.

14. Verify the firmware integrity.

See “Verify Firmware Integrity (CLI)” on page 109.

Related Information

- “Upgrade the Switch Firmware (Web)” on page 169

Administering Oracle ILOM (Web)

These topics describe how to administer Oracle ILOM from the web interface.

- [“Web Interface Overview”](#) on page 117
- [“Access Oracle ILOM From the Web Interface”](#) on page 120
- [“Monitoring Oracle ILOM Targets \(Web\)”](#) on page 121
- [“Controlling Oracle ILOM Targets \(Web\)”](#) on page 137
- [“Upgrade the Switch Firmware \(Web\)”](#) on page 169

Related Information

- [“Administering Oracle ILOM \(CLI\)”](#) on page 27
- [“Using the Fabric Monitor”](#) on page 175
- [“Administering Oracle ILOM \(SNMP\)”](#) on page 197
- [“Administering Hardware \(IPMI\)”](#) on page 257
- [“Understanding Oracle ILOM Commands”](#) on page 265

Web Interface Overview

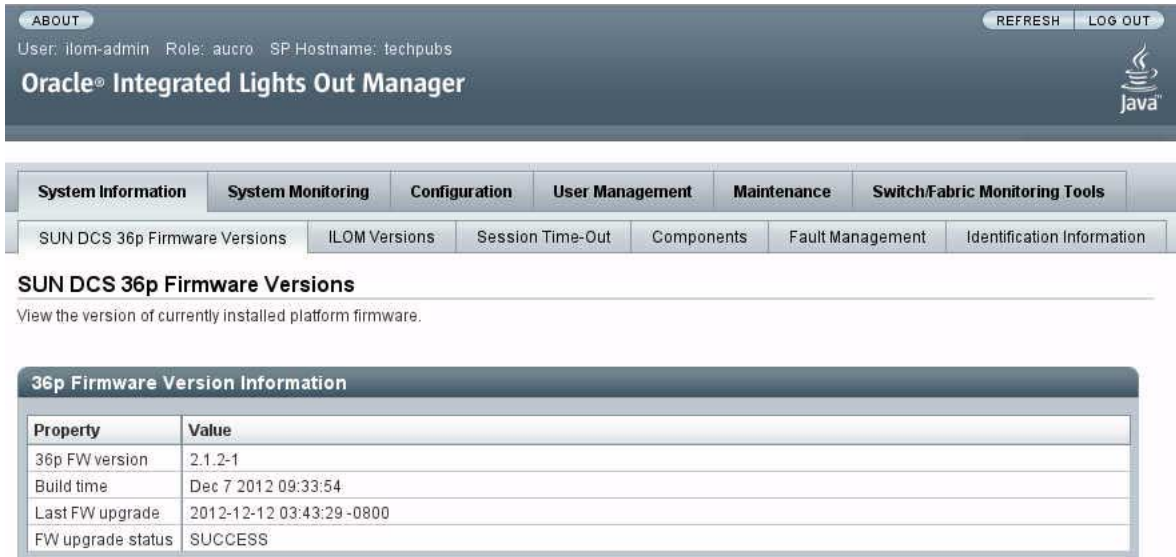
The Oracle ILOM web interface uses a model of hierarchical tabbed pages that you select by clicking on the tab name. Once a page is displayed, you can provide information, set parameters, or access other subtabs. For some pages, initiating a task might spawn an additional window, which accepts further parameters. Clicking Save or Close closes the window.

Note – The Oracle ILOM web interface is only supported with the Internet Explorer and Mozilla Firefox web browsers.

The web interface enables you to accomplish most of the same tasks that are possible using the Oracle ILOM CLI. With the web interface, you do not need to use a command to specify a target or property. Therefore, the web interface is more user-friendly.

Note – The web interface does not support the management controller’s Linux shell. You must access the management controller using the methods described in “Accessing Oracle ILOM From the CLI” on page 28 to enable Oracle ILOM shell - Linux shell toggling.

This illustration displays the initial Oracle ILOM web interface page.



This table lists the tabs and subtabs in the Oracle ILOM web interface.

Tab	Subtabs	Description
System Information	SUN DCS 36p Firmware Versions	Displays version information of the switch firmware.
	ILOM Versions	Displays Oracle ILOM version information.
	Session Time-Out	Displays and sets inactivity timeout for autologout.
	Components	Displays component information and clear fault status.
	Fault Management	Displays faulted components
	Identification Information	Displays and sets switch identification information.

Tab	Subtabs	Description
System Monitoring	Sensor Readings	Displays sensor values.
	Indicators	Displays and sets switch status LED state.
	Event Logs	Displays and clears event log.
Configuration	System Management Access	Subtabs for: <ul style="list-style-type: none"> • Web Server – Displays and sets web server behavior and ports. • SSL Certificate – Displays and sets certificate information. • SNMP – Displays and sets SNMP users, communities, and access. • IPMI – Displays and sets the state of the IPMI service. • CLI – Displays and sets inactivity timeout for autologout.
	Alert Management	Displays and sets alerts.
	Network	Displays and sets basic network parameters. Has ping test.
	DNS	Displays and sets DNS client parameters.
	Clock	Displays and sets date, time, and time server parameters.
	Timezone	Displays and sets time zone.
	Syslog	Displays and sets Syslog redirection to IP address.
	SMTP Client	Displays and sets SMTP client for email alerts. Has email test.
User Management	User Accounts	Displays and sets user accounts.
	Active Sessions	Displays active sessions.
Maintenance	Firmware Upgrade	Enables firmware upgrade.
	Back Up/Restore	Enables system configuration back up and restore.
	Reset SP	Resets the management controller.
	Snapshot	Enables a snapshot of the switch state.
Switch/Fabric Monitoring Tools	SUN DCS 36p Monitor	Enables the Fabric Monitor interactive GUI.

Related Information

- [“Oracle ILOM Targets and Descriptions” on page 5](#)

▼ Access Oracle ILOM From the Web Interface

1. **Open a web browser and connect to the Oracle ILOM web interface by specifying the management controller's network address in the URL.**

The Oracle ILOM login page is displayed.

Note – If the login page is not displayed or a 404 error is displayed, verify that the web interface is enabled. See [“Enable the HTTP Service \(CLI\)” on page 89](#) and [“Enable the HTTPS Service \(CLI\)” on page 90](#) to enable the web interface from the CLI.

2. **Type `ilom-admin` into the User Name field and the `ilom-admin` password into the Password field.**

Note – As shipped, the `ilom-admin` user password is `ilom-admin`. See [“Change an Oracle ILOM User's Password and or Role \(Web\)” on page 150](#) for instructions on how to change Oracle ILOM user passwords.

3. **Click Submit.**

The Oracle ILOM web interface is displayed.

Note – You can also log in as the `ilom-operator` user with the password `ilom-operator`. The `ilom-operator` user has only read permissions.

Related Information

- [“Accessing Oracle ILOM From the CLI” on page 28](#)
- [“Web Interface Overview” on page 117](#)
- [“Monitoring Oracle ILOM Targets \(Web\)” on page 121](#)
- [“Controlling Oracle ILOM Targets \(Web\)” on page 137](#)

Monitoring Oracle ILOM Targets (Web)

These topics enable you to display the status of many Oracle ILOM targets.

- [“Performing Daily Tasks \(Web\)”](#) on page 121
- [“Checking the Status of Services \(Web\)”](#) on page 127
- [“Verifying Other Aspects With Oracle ILOM \(Web\)”](#) on page 132

Related Information

- [“Access Oracle ILOM From the Web Interface”](#) on page 120
- [“Monitoring Oracle ILOM Targets \(CLI\)”](#) on page 36
- [“Controlling Oracle ILOM Targets \(Web\)”](#) on page 137

Performing Daily Tasks (Web)

These tasks help you see the status of Oracle ILOM targets that are continually changing.

- [“Display the Date \(Web\)”](#) on page 122
- [“Display Faulted System Components \(Web\)”](#) on page 122
- [“Display the Switch Status LEDs States \(Web\)”](#) on page 123
- [“Display the Aggregate Sensors State \(Web\)”](#) on page 123
- [“Display Power Supply Status \(Web\)”](#) on page 124
- [“Display Board-Level Voltages \(Web\)”](#) on page 124
- [“Display Internal Temperatures \(Web\)”](#) on page 125
- [“Display Fan Status \(Web\)”](#) on page 125
- [“Display the Oracle ILOM Sessions \(Web\)”](#) on page 126
- [“Display the Oracle ILOM Event Log \(Web\)”](#) on page 126

Related Information

- [“Performing Daily Tasks \(Web\)”](#) on page 121
- [“Checking the Status of Services \(Web\)”](#) on page 127
- [“Verifying Other Aspects With Oracle ILOM \(Web\)”](#) on page 132

▼ Display the Date (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. **Click the Clock subtab.**

The Clock Settings pane is displayed.

The current date and time is displayed in the Date and Time fields respectively.

Related Information

- [“Display the Date \(CLI\)”](#) on page 37
- [“Display the Date and Time \(SNMP\)”](#) on page 202

▼ Display Faulted System Components (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the System Information tab.**

3. **Consider your next steps:**

- To display component fault status, click the Components subtab.

The Component Management pane is displayed.

In the Component Status table, the component names (targets), type, and fault status are listed.

- To display component fault information and status, click the Fault Management subtab.

The Fault Management pane is displayed.

In the Faulted Components table, the component names (targets) and type are listed.

4. **Click a component name (target) link in the table.**

A new window opens and displays additional information about the faulted component.

5. **Click Close.**

Related Information

- *Switch Service*, fault management
- [“Display Faulted System Components \(CLI\)”](#) on page 38

- [“Clear Faulted System Components \(Web\)”](#) on page 140
- [“Display the Oracle ILOM Event Log \(Web\)”](#) on page 126

▼ Display the Switch Status LEDs States (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the System Monitoring tab.**
3. **Click the Indicators subtab.**
The Indicators pane is displayed.
In the Indicators table, the indicator target and status are displayed.

Related Information

- [“Display Switch Status LEDs States \(CLI\)”](#) on page 40
- [“Display Switch Status LED States \(IPMI\)”](#) on page 263
- [“Enable the Locator LED \(Web\)”](#) on page 140
- [“Disable the Locator LED \(Web\)”](#) on page 141

▼ Display the Aggregate Sensors State (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the System Monitoring tab.**
3. **Click the Sensor Readings subtab.**
The Sensor Readings pane is displayed.
In the Sensor Readings table, the sensor name (aggregate sensor target), type, and reading are displayed. Use the table in [“Aggregate Sensor States”](#) on page 41 to determine the aggregate sensor target for the respective sensor.
4. **Click an aggregate sensor’s target link in the table.**
A new window opens and displays the sensor’s properties and values. The property value of `State Deasserted` means no errors.
5. **Click Close.**

Related Information

- [“Aggregate Sensor States”](#) on page 41

- “Display the Aggregate Sensors State (CLI)” on page 40
- “Display the Aggregate Sensors State (SNMP)” on page 203
- “Display the Sensor Alarm State (SNMP)” on page 217
- “Display the Sensor States (IPMI)” on page 258

▼ Display Power Supply Status (Web)

1. **Access the Oracle ILOM web interface.**
See “Access Oracle ILOM From the Web Interface” on page 120.
2. **Click the System Monitoring tab.**
3. **Click the Sensor Readings subtab.**
The Sensor Readings pane is displayed.
4. **Click the next page arrow.**
The Sensor Readings table is updated.
5. **Look for /SYS/PSU in the Sensor Readings table.**
A Reading value of State Deasserted means no errors.

Related Information

- “Display Power Supply Status (CLI)” on page 42
- “Display Power Supply Status (SNMP)” on page 204

▼ Display Board-Level Voltages (Web)

1. **Access the Oracle ILOM web interface.**
See “Access Oracle ILOM From the Web Interface” on page 120.
2. **Click the System Monitoring tab.**
3. **Click the Sensor Readings subtab.**
The Sensor Readings pane is displayed.
4. **Select Type: Voltage from the Filter drop-down menu.**
The voltage sensor target, type, and reading are displayed. Use the table in “Board Level Voltages” on page 45 to determine the voltage sensor target for the respective voltage sensor.
5. **Click a voltage sensor’s target link in the table.**
A new window opens and displays the voltage sensor’s properties and values.

6. Click Close.

Related Information

- [“Board Level Voltages” on page 45](#)
- [“Display Board-Level Voltages \(CLI\)” on page 44](#)
- [“Display Board-Level Voltages \(SNMP\)” on page 207](#)

▼ Display Internal Temperatures (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. **Click the System Monitoring tab.**

3. **Click the Sensor Readings subtab.**

The Sensor Readings pane is displayed.

4. **Select Type: Temperature from the Filter drop-down menu.**

The temperature sensor target, type, and reading are displayed. Use the table in [“Internal Temperature Sensors” on page 47](#) to determine the temperature sensor target for the respective temperature sensor.

5. **Click a temperature sensor’s target link in the table.**

A new window opens and displays the temperature sensor’s properties and values.

6. Click Close.

Related Information

- [“Internal Temperature Sensors” on page 47](#)
- [“Display Internal Temperatures \(CLI\)” on page 46](#)
- [“Display Internal Temperatures \(SNMP\)” on page 210](#)

▼ Display Fan Status (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. **Click the System Monitoring tab.**

3. **Click the Sensor Readings subtab.**

The Sensor Readings pane is displayed.

4. Select Type: Fan from the Filter drop-down menu.

The fan speed sensor target, type, and reading are displayed.

5. Click a fan speed sensor's target link in the table.

A new window opens and displays the fan speed sensor's properties and values.

6. Click Close.

Related Information

- ["Display Fan Status \(CLI\)" on page 47](#)
- ["Display Fan Status \(SNMP\)" on page 214](#)

▼ Display the Oracle ILOM Sessions (Web)

1. Access the Oracle ILOM web interface.

See ["Access Oracle ILOM From the Web Interface" on page 120](#).

2. Click the User Management tab.

3. Click the Active Sessions subtab.

The Active Sessions pane is displayed.

In the Active Sessions table, the session's user name, the user's role, the session start time, and the session type and mode are displayed.

Related Information

- ["Display the Oracle ILOM Sessions \(CLI\)" on page 49](#)
- ["Display Oracle ILOM Sessions \(SNMP\)" on page 221](#)

▼ Display the Oracle ILOM Event Log (Web)

Note – The event log can be filtered to display Oracle ILOM fault events.

1. Access the Oracle ILOM web interface.

See ["Access Oracle ILOM From the Web Interface" on page 120](#).

2. Click the System Monitoring tab.

3. Click the Event Logs subtab.

The event log is displayed.

The Filter drop-down menu filters events by class, type, and severity.

You can find more information about the filters in [“Oracle ILOM Log Entry Filters”](#) on page 52.

4. (Optional) Select Class:Fault from the Filter drop-down menu to view Oracle ILOM fault events.

Related Information

- [“Display the Oracle ILOM Event Log \(CLI\)”](#) on page 50
- [“Display the Oracle ILOM Event Log \(SNMP\)”](#) on page 222
- [“Display the System Event Log \(IPMI\)”](#) on page 261
- [“Clear the Oracle ILOM Event Log \(Web\)”](#) on page 141

Checking the Status of Services (Web)

These topics enable you to display the status of the services supported by Oracle ILOM.

- [“Display the HTTP Service Status \(Web\)”](#) on page 128
- [“Display the HTTPS Service Status \(Web\)”](#) on page 128
- [“Display the SSL Certificates \(Web\)”](#) on page 128
- [“Display the SNMP Service Status \(Web\)”](#) on page 129
- [“Display the SNMP Service User Accounts \(Web\)”](#) on page 129
- [“Display the SNMP Service Communities \(Web\)”](#) on page 130
- [“Display the IPMI Service Status \(Web\)”](#) on page 130
- [“Display the DNS Client Status \(Web\)”](#) on page 130
- [“Display the SMTP Client Status \(Web\)”](#) on page 131
- [“Display the Network Time Protocol Servers \(Web\)”](#) on page 131

Related Information

- [“Checking the Status of Services \(CLI\)”](#) on page 52
- [“Performing Daily Tasks \(Web\)”](#) on page 121
- [“Verifying Other Aspects With Oracle ILOM \(Web\)”](#) on page 132

▼ Display the HTTP Service Status (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. **Click the Systems Management Access subtab.**

4. **Click the Web Server subtab.**

The Web Server Settings pane is displayed.

The HTTP web server status and port are displayed.

Related Information

- [“Display the HTTP Service Status \(CLI\)”](#) on page 53
- [“Display the HTTP Service Status \(SNMP\)”](#) on page 224

▼ Display the HTTPS Service Status (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. **Click the Systems Management Access subtab.**

4. **Click the Web Server subtab.**

The Web Server Settings pane is displayed.

The HTTPS web server status and port are displayed.

Related Information

- [“Display the HTTPS Service Status \(CLI\)”](#) on page 54
- [“Display the HTTP Service Status \(SNMP\)”](#) on page 224

▼ Display the SSL Certificates (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. **Click the Systems Management Access subtab.**

4. Click the SSL Certificate subtab.

The SSL Certificate Upload pane is displayed.

The certificate status and information about the default certificate, custom certificate, and custom private key are displayed.

Related Information

- [“Display the SSL Certificates \(CLI\)” on page 54](#)

▼ Display the SNMP Service Status (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the Systems Management Access subtab.

4. Click the SNMP subtab.

The SNMP Management pane is displayed.

Under Settings, the service status and operating parameters are displayed.

Related Information

- [“Display the SNMP Service Status \(CLI\)” on page 55](#)

▼ Display the SNMP Service User Accounts (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the Systems Management Access subtab.

4. Click the SNMP subtab.

The SNMP Management pane is displayed.

5. Click the Users link.

The page scrolls to the SNMP Users table, where the configured SNMP users, their authentication protocols, permissions, and privacy protocols are displayed.

Related Information

- [“Display the SNMP User Accounts \(CLI\)” on page 55](#)

▼ Display the SNMP Service Communities (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. **Click the Systems Management Access subtab.**

4. **Click the SNMP subtab.**

The SNMP Management pane is displayed.

5. **Click the Communities link.**

The page scrolls to the SNMP Communities table, where the configured SNMP communities and permissions are displayed.

Related Information

- [“Display the SNMP Service Communities \(CLI\)”](#) on page 56

▼ Display the IPMI Service Status (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. **Click the Systems Management Access subtab.**

4. **Click the IPMI subtab.**

The IPMI Settings pane is displayed.

The status of the IPMI server is displayed.

Related Information

- [“Display the IPMI Service Status \(CLI\)”](#) on page 57

▼ Display the DNS Client Status (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. Click the DNS subtab.

The DNS Configuration pane is displayed.

The DNS client configuration settings are displayed.

Note – If Auto DNS via DHCP is enabled, then the Name Server and Search Path fields are greyed-out.

Related Information

- [“Display the DNS Client Status \(CLI\)” on page 57](#)
- [“Display the DNS Client Status \(SNMP\)” on page 225](#)
- [“Configure the DNS Client \(Web\)” on page 142](#)

▼ **Display the SMTP Client Status (Web)**

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the SMTP Client subtab.

The SMTP Client Settings pane is displayed.

The status of the SMTP client is displayed.

Related Information

- [“Display the SMTP Client Status \(CLI\)” on page 58](#)
- [“Display the SMTP Client Status \(SNMP\)” on page 226](#)
- [“Configure the SMTP Client \(Web\)” on page 143](#)

▼ **Display the Network Time Protocol Servers (Web)**

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the Clock subtab.

The Clock Settings pane is displayed.

The Network Time Protocol status and server IP addresses are displayed.

Related Information

- [“Display the NTP Servers \(CLI\)”](#) on page 58
- [“Display the NTP State \(SNMP\)”](#) on page 226
- [“Display the NTP Servers \(SNMP\)”](#) on page 227
- [“Set the Date and Time \(Web\)”](#) on page 139

Verifying Other Aspects With Oracle ILOM (Web)

These topics enable you to display the status of aspects of Oracle ILOM not included in [“Performing Daily Tasks \(Web\)”](#) on page 121 or [“Checking the Status of Services \(Web\)”](#) on page 127.

- [“Display the Alert Properties \(Web\)”](#) on page 132
- [“Display the Oracle ILOM User Accounts \(Web\)”](#) on page 133
- [“Display the Remote Log Hosts \(Web\)”](#) on page 133
- [“Display the Network Management Configuration \(Web\)”](#) on page 134
- [“Display the CLI Session Timeout \(Web\)”](#) on page 134
- [“Display System Component FRU ID \(Web\)”](#) on page 135
- [“Display the Firmware Version \(Web\)”](#) on page 135
- [“Display the Oracle ILOM Version \(Web\)”](#) on page 136
- [“Display System Identification Properties \(Web\)”](#) on page 136

Related Information

- [“Verifying Other Aspects With Oracle ILOM \(CLI\)”](#) on page 59
- [“Performing Daily Tasks \(Web\)”](#) on page 121
- [“Checking the Status of Services \(Web\)”](#) on page 127

▼ Display the Alert Properties (Web)

Alerts can provide advance notice of a system failure. The Oracle ILOM implementation in the management controller supports 15 alert rules, which configure alert properties. Supported alert types are SNMP traps, IPMI PETs, and email alerts. For SNMP traps and PETs, the alert destination must have the relevant Oracle ILOM MIBs installed and must support SNMP traps.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**
3. **Click the Alert Management subtab.**

The Alert Settings pane is displayed.

In the Alerts table, the Alert ID, Level, Alert Type, and Destination Summary are displayed for each alert.

Related Information

- [“Display the Alert Properties \(CLI\)”](#) on page 61
- [“Display the Alert Properties \(SNMP\)”](#) on page 228
- [“Enable Alerts to Send SNMP Traps \(Web\)”](#) on page 165
- [“Enable Alerts to Send PETs \(Web\)”](#) on page 166
- [“Enable Alerts to Send Email Alerts \(Web\)”](#) on page 167
- [“Disable Alerts \(Web\)”](#) on page 167

▼ Display the Oracle ILOM User Accounts (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the User Management tab.**
3. **Click the User Accounts subtab.**

The User Account Settings pane is displayed.

4. **Click the Users link.**

The page scrolls and the Users table is displayed.

In the Users table, the user’s name and role are displayed.

Related Information

- [“Display the Oracle ILOM User Accounts \(CLI\)”](#) on page 62
- [“Display Oracle ILOM User Accounts \(SNMP\)”](#) on page 229

▼ Display the Remote Log Hosts (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. Click the Syslog subtab.

The Syslog pane is displayed.

The remote log host IP addresses are displayed.

Related Information

- [“Display the Remote Log Hosts \(CLI\)” on page 63](#)
- [“Display the Remote Log Hosts \(SNMP\)” on page 230](#)
- [“Set the Remote Log Hosts \(Web\)” on page 142](#)

▼ Display the Network Management Configuration (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the Network subtab.

The Network Settings pane is displayed.

The network status, MAC address, IP discovery mode, IP address, netmask, and gateway are displayed.

Related Information

- [“Display the Network Management Configuration \(CLI\)” on page 64](#)
- [“Display the Network Management Configuration \(SNMP\)” on page 230](#)

▼ Display the CLI Session Timeout (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the Systems Management Access subtab.

4. Click the CLI subtab.

The CLI Settings pane is displayed.

The CLI session timeout is displayed.

Related Information

- [“Display the CLI Session Timeout \(CLI\)” on page 65](#)
- [“Set the CLI Session Timeout \(Web\)” on page 168](#)

▼ Display System Component FRU ID (Web)

Note – You can only display FRU ID information for currently present fans and power supplies.

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the System Information tab.**
3. **Click the Components subtab.**
The Components Management pane is displayed.
In the Component Status table, the component names (targets), type, and fault state are listed.
4. **Click a component name (target) link in the table.**
A new window opens and displays the component’s properties and values.
5. **Click Close.**

Related Information

- [“Display Switch FRU ID \(CLI\)”](#) on page 65
- [“Display Power Supply FRU ID \(CLI\)”](#) on page 66
- [“Display Switch FRU ID \(SNMP\)”](#) on page 231
- [“Display Power Supply FRU ID \(SNMP\)”](#) on page 233
- [“Display FRU ID Information \(IPMI\)”](#) on page 262

▼ Display the Firmware Version (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the System Information tab.**
3. **Click the SUN DCS 36p Firmware Versions subtab.**
The SUN DCS 36p Firmware Versions pane is displayed.
In the 36p Firmware Version Information table, the firmware version, buildtime, last upgrade date, and update status are displayed.

Related Information

- [“Display the Firmware Version \(CLI\)”](#) on page 67

- [“Display the Firmware Version \(SNMP\)” on page 238](#)
- [“Display the Oracle ILOM Version \(Web\)” on page 136](#)

▼ Display the Oracle ILOM Version (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the System Information tab.

3. Click the ILOM Versions subtab.

The Versions pane is displayed.

In the Version Information table, the firmware, build, date, and file system version information are displayed.

Related Information

- [“Display the Firmware Version \(CLI\)” on page 67](#)
- [“Display the Firmware Version \(SNMP\)” on page 238](#)
- [“Display the Firmware Version \(Web\)” on page 135](#)

▼ Display System Identification Properties (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the System Information tab.

3. Click the Identification Information subtab.

The Identification Information pane is displayed.

The host name, system identifier, system contact, system location, and system description are displayed.

Related Information

- [“Display System Identification Properties \(CLI\)” on page 67](#)
- [“Display System Identification Properties \(SNMP\)” on page 238](#)
- [“Set the System Identification Properties \(Web\)” on page 148](#)

Controlling Oracle ILOM Targets (Web)

These topics enable you to change the behavior or configuration of many Oracle ILOM targets.

- [“Performing General Tasks on Oracle ILOM Targets \(Web\)”](#) on page 137
- [“Performing Oracle ILOM User Tasks \(Web\)”](#) on page 148
- [“Managing HTTP Services \(Web\)”](#) on page 151
- [“Managing HTTPS Services \(Web\)”](#) on page 153
- [“Managing SNMP Services \(Web\)”](#) on page 156
- [“Managing IPMI Services \(Web\)”](#) on page 163
- [“Managing Other Aspects With Oracle ILOM \(Web\)”](#) on page 165

Related Information

- [“Access Oracle ILOM From the Web Interface”](#) on page 120
- [“Controlling Oracle ILOM Targets \(CLI\)”](#) on page 68
- [“Monitoring Oracle ILOM Targets \(Web\)”](#) on page 121
- [“Understanding Oracle ILOM Targets”](#) on page 4

Performing General Tasks on Oracle ILOM Targets (Web)

You can perform these tasks periodically on a few Oracle ILOM targets.

- [“Restart the Management Controller \(Web\)”](#) on page 138
- [“Set the Date and Time \(Web\)”](#) on page 139
- [“Set the Time Zone \(Web\)”](#) on page 139
- [“Clear Faulted System Components \(Web\)”](#) on page 140
- [“Enable the Locator LED \(Web\)”](#) on page 140
- [“Disable the Locator LED \(Web\)”](#) on page 141
- [“Clear the Oracle ILOM Event Log \(Web\)”](#) on page 141
- [“Set the Remote Log Hosts \(Web\)”](#) on page 142
- [“Configure the DNS Client \(Web\)”](#) on page 142
- [“Configure the SMTP Client \(Web\)”](#) on page 143
- [“Back Up the Configuration \(Web\)”](#) on page 144

- [“Restore the Configuration \(Web\)”](#) on page 145
- [“Create a Snapshot of the Switch State \(Web\)”](#) on page 146
- [“Snapshot Dataset Information \(Web\)”](#) on page 146
- [“Set the Network Management Parameters \(Web\)”](#) on page 147
- [“Set the System Identification Properties \(Web\)”](#) on page 148

Related Information

- [“Performing General Tasks on Oracle ILOM Targets \(CLI\)”](#) on page 69
- [“Performing Oracle ILOM User Tasks \(Web\)”](#) on page 148

▼ Restart the Management Controller (Web)

Note – Restarting the management controller severs any management console link to the management controller. You must reaccess the management controller to regain administrative control.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the Maintenance tab.

3. Click the Reset SP subtab.

The Reset Service Processor pane is displayed.

4. Click Reset SP.

A dialog box opens and asks you to confirm.

5. Click OK.

A message describing the reset action is displayed with a link, and the management controller is reset.

Related Information

- *Switch Administration*, restarting the management controller
- [“Restart the Management Controller \(CLI\)”](#) on page 69

▼ Set the Date and Time (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the Clock subtab.**
The Clock Settings pane is displayed.
4. **Type the date into the Date field.**
5. **Select the time from the Time drop-down menus.**
6. **(Optional) If you want to use a time server, follow these steps:**
 - a. **Check the Enabled box for Synchronize Time Using NTP.**
 - b. **Type the IP address of the first time server into the Server 1 field.**
 - c. **Type the IP address of the second time server into the Server 2 field.**
7. **Click Save.**

Related Information

- [“Set the Date and Time \(CLI\)”](#) on page 70
- [“Set the Date and Time \(SNMP\)”](#) on page 240

▼ Set the Time Zone (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the Timezone subtab.**
The Timezone Settings pane is displayed.
4. **Select the time zone from the Timezone drop-down menu.**
5. **Click Save.**

Related Information

- [“Set the Date and Time \(CLI\)”](#) on page 70
- [“Set the Time Zone \(SNMP\)”](#) on page 240

▼ Clear Faulted System Components (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the System Information tab.**

3. **Click the Components subtab.**

The Component Management pane is displayed.

In the Components Status table, the component names (targets), type, and fault status are listed.

4. **Click the radio button to the left of the faulted component, and from the Actions drop-down menu, select Clear Faults.**

A dialog box opens and asks you to confirm.

5. **Click OK.**

Related Information

- *Switch Service*, clear faults manually
- [“Clear Faulted System Components \(CLI\)”](#) on page 72
- [“Display Faulted System Components \(Web\)”](#) on page 122

▼ Enable the Locator LED (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the System Monitoring tab.**

3. **Click the Indicators subtab.**

The Indicators pane is displayed.

In the Indicators table, the `/SYS/I_LOCATOR` target identifies the Locator LED.

4. **Click the radio button to the left of the target, and from the Actions drop-down menu, select Set LED to On.**

A dialog box opens and asks you to confirm.

5. **Click OK.**

The Locator LED flashes.

Related Information

- [“Enable the Locator LED \(CLI\)”](#) on page 72

- [“Enable the Locator LED \(IPMI\)” on page 264](#)
- [“Disable the Locator LED \(Web\)” on page 141](#)
- [“Display the Switch Status LEDs States \(Web\)” on page 123](#)

▼ Disable the Locator LED (Web)

- 1. Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface” on page 120](#).
- 2. Click the System Monitoring tab.**
- 3. Click the Indicators subtab.**
The Indicators pane is displayed.
In the Indicators table, the `/SYS/I_LOCATOR` target identifies the Locator LED.
- 4. Click the radio button to the left of the target, and from the Actions drop-down menu, select Turn LED Off.**
A dialog box opens and asks you to confirm.
- 5. Click OK.**
The Locator LED is unlit.

Related Information

- [“Disable the Locator LED \(CLI\)” on page 73](#)
- [“Disable the Locator LED \(IPMI\)” on page 264](#)
- [“Enable the Locator LED \(Web\)” on page 140](#)
- [“Display the Switch Status LEDs States \(Web\)” on page 123](#)

▼ Clear the Oracle ILOM Event Log (Web)

- 1. Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface” on page 120](#).
- 2. Click the System Monitoring tab.**
- 3. Click the Event Logs subtab.**
The Event Log pane is displayed.
- 4. In the Event Log table, click Clear Log.**
A dialog box opens and asks you to confirm.
- 5. Click OK.**

Related Information

- [“Clear the Oracle ILOM Event Log \(CLI\)”](#) on page 73
- [“Clear the Oracle ILOM Event Log \(SNMP\)”](#) on page 242
- [“Display the Oracle ILOM Event Log \(Web\)”](#) on page 126
- [“Set the Remote Log Hosts \(Web\)”](#) on page 142

▼ Set the Remote Log Hosts (Web)

The Oracle ILOM implementation in the management controller provides a protocol for transmitting Oracle ILOM events to a remote log host. The events transmitted are similar to those displayed in the local log.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the Configuration tab.

3. Click the Syslog subtab.

The Syslog pane is displayed.

4. Type the IP address or hostname of the remote log hosts into the respective fields.

Note – Setting a remote log host IP address to 0.0.0.0 disables that functionality.

5. Click Save.

Related Information

- [“Set the Remote Log Hosts \(CLI\)”](#) on page 74
- [“Set the Remote Log Hosts \(SNMP\)”](#) on page 242
- [“Display the Remote Log Hosts \(Web\)”](#) on page 133

▼ Configure the DNS Client (Web)

To enable name services within the management controller, Oracle ILOM must be configured as a DNS client.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the Configuration tab.

3. Click the DNS subtab.

The DNS Configuration pane is displayed.

4. If you want the DHCP server to provide the DNS client configuration, check the Enabled box to the right of Auto DNS via DHCP.

Note – If Auto DNS via DHCP is enabled, then the Name Server and Search Path fields are greyed-out.

5. In the DNS Name Server: field, type up to three IP addresses of name servers, separated by commas.

Note – List the IP address in order of search preference.

6. In the DNS Search Path: field, type up to six domains or search suffixes, separated by commas.

Note – List the domains or search suffixes in order of search preference.

7. In the DNS Timeout: and DNS Retries: field, you can configure timeout and retry values.

Note – The default values provide optimal performance.

8. Click Save.

Related Information

- [“Configure the DNS Client \(CLI\)” on page 75](#)
- [“Configure the DNS Client \(SNMP\)” on page 243](#)
- [“Display the DNS Client Status \(Web\)” on page 130](#)

▼ Configure the SMTP Client (Web)

To enable email alerts, you must configure Oracle ILOM as an SMTP client.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. **Click the SMTP Client subtab.**

The SMTP Client Settings pane is displayed.

4. **Select the Enabled checkbox and provide the SMTP server IP address or hostname, the SMTP server port, and the custom sender string into the respective fields.**

5. **Click Save.**

6. **(Optional) Send a test email to verify SMTP client settings.**

a. **Type an accessible email address into the Address field.**

b. **Click Send Test.**

c. **Verify that the email was received.**

Related Information

- [“Configure the SMTP Client \(CLI\)” on page 76](#)
- [“Configure the SMTP Client \(SNMP\)” on page 244](#)
- [“Display the SMTP Client Status \(Web\)” on page 131](#)

▼ Back Up the Configuration (Web)

Note – See [“Switch Configuration Information Backed Up” on page 78](#) for what switch-specific configuration information is backed up when a passphrase is used.

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. **Click the Maintenance tab.**

3. **Click the Back Up/Restore subtab.**

The Configuration Back Up/Restore pane is displayed.

4. **Select Back Up from the Operation drop-down menu.**

5. **Select the transfer protocol from the Transfer Method drop-down menu.**

6. **For the protocol selected, type the file, host IP address, file path, user name, and password into the respective fields.**

7. **If you want to back up sensitive information in addition to the configuration, type a passphrase into the Passphrase and Confirm Passphrase fields.**

8. Click Run.

A dialog box opens and asks you to confirm.

9. Click OK.

Related Information

- [“Switch Configuration Information Backed Up”](#) on page 78
- [“Back Up the Configuration \(CLI\)”](#) on page 77
- [“Restore the Configuration \(Web\)”](#) on page 145

▼ **Restore the Configuration (Web)**

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the Maintenance tab.

3. Click the Back Up/Restore subtab.

The Configuration Back Up/Restore pane is displayed.

4. Select Restore from the Operation drop-down menu.

5. Select the transfer protocol from the Transfer Method drop-down menu.

6. For the protocol selected, type the file, host IP address, file path, user name, and password into the respective fields.

7. If you used a passphrase with the backup, type the passphrase into the Passphrase and Confirm Passphrase fields so that sensitive information is also restored.

8. Click Run.

A dialog box opens and asks you to confirm.

9. Click OK.

Related Information

- [“Restore the Configuration \(CLI\)”](#) on page 78
- [“Back Up the Configuration \(Web\)”](#) on page 144

▼ Create a Snapshot of the Switch State (Web)

The snapshot utility collects log files, executes various commands and collects their output, and sends the data collected to a user-defined location as a .zip file. The data set selected determines what data is to be included in the snapshot. See [“Snapshot Dataset Information \(Web\)”](#) on page 146.

The snapshot describes the state of the switch at a particular moment in time. This can be used for diagnosing system problems.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the Maintenance tab.

3. Click the Snapshot subtab.

The Service Snapshot Utility pane is displayed.

4. Select the data set from the Data Set drop-down menu.

See the table in [“Snapshot Dataset Information \(Web\)”](#) on page 146.

5. If you chose the Custom data set, check the data that you want to include in the snapshot.

6. If you want only log files, select the Enabled checkbox to the right of Collect Only Log Files From Data Set.

7. Select the transfer protocol from the Transfer Method drop-down menu.

8. Type the host IP address or host name, file path, user name, and password into the respective fields.

9. Click Run.

Related Information

- [“Snapshot Dataset Information \(Web\)”](#) on page 146
- [“Create a Snapshot of the Switch State \(CLI\)”](#) on page 79

Snapshot Dataset Information (Web)

This table provides a listing of the data sets you can choose and the respective data that is included in the snapshot.

Data Set	Description
Normal	Contains Oracle ILOM data, basic operating system data, and switch configuration data.
FRUID	Contains normal dataset information, with additional FRUID data.
Full	Contains normal dataset information, with additional FRUID data and diagnostic data.
Custom	Contains the user's choice of Oracle ILOM data, basic operating system data, switch hardware data, additional FRUID data, and diagnostic data.

The snapshot is stored as a .zip file with a filename of this format:

hostname_IP_address_year-month-dayThour-minute-second.zip

For example:

magnum_123.45.67.89_2012-10-07T14-43-15.zip

Note – The Normal, FRUID, and Full datasets of the snapshot utility are currently equivalent and contain the same data in the snapshot.

Related Information

- [“Create a Snapshot of the Switch State \(Web\)”](#) on page 146

▼ Set the Network Management Parameters (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the Network subtab.**
The Network Settings pane is displayed.
4. **Select the Enabled checkbox for State to enable the NET MGT port.**
5. **Select the IP Discovery Mode, DHCP, or Static.**

6. If you select **Static**, type the management controller's IP address, the netmask, and routing gateway IP address into their respective fields.
7. Click **Save**.

Note – Changing some network management properties terminates the NET MGT connection to the management controller (web interface). You must re-establish the connection to continue administering the management controller.

8. **Re-establish the NET MGT connection to continue administering the management controller.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

Related Information

- [“Set the Network Management Parameters \(CLI\)”](#) on page 82
- [“Set the Network Parameters \(SNMP\)”](#) on page 245

▼ Set the System Identification Properties (Web)

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the System Information tab.**

3. **Click the Identification Information subtab.**

The Identification Information pane is displayed.

4. **Type the host name, system identifier, system contact, and system location into their respective fields.**

5. **Click Save.**

Related Information

- [“Set the System Identification Properties \(CLI\)”](#) on page 84
- [“Set the System Identification Properties \(SNMP\)”](#) on page 247
- [“Display System Identification Properties \(Web\)”](#) on page 136

Performing Oracle ILOM User Tasks (Web)

These topics enable you to change and configure Oracle ILOM user targets.

- [“Add an Oracle ILOM User Account \(Web\)”](#) on page 149

- [“Change an Oracle ILOM User’s Password and or Role \(Web\)”](#) on page 150
- [“Delete an Oracle ILOM User Account \(Web\)”](#) on page 150

Related Information

- [“Performing Oracle ILOM User Tasks \(CLI\)”](#) on page 85
- [“Performing General Tasks on Oracle ILOM Targets \(Web\)”](#) on page 137

▼ **Add an Oracle ILOM User Account (Web)**

- 1. Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
- 2. Click the User Management tab.**
- 3. Click the User Accounts subtab.**
The User Accounts Settings pane is displayed.
- 4. Click the Users link.**
The page scrolls to the Users table.
- 5. In the Users table, click Add.**
A new window opens.
- 6. In the window, type the name of the new user account into the User Name field.**
- 7. Select the abilities of the new user from the Roles drop-down menu.**
If a checkbox is not grayed out, you can add that ability to the selected role.
- 8. Type the password into the New Password and Confirm New Password fields.**
- 9. Click Save.**

Related Information

- [“Add an Oracle ILOM User Account \(CLI\)”](#) on page 86
- [“Add an Oracle ILOM User Account \(SNMP\)”](#) on page 248
- [“Delete an Oracle ILOM User Account \(Web\)”](#) on page 150

▼ Change an Oracle ILOM User's Password and or Role (Web)

Note – To change the root user's password, refer to *Switch Administration*, changing the root user's password.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the User Management tab.

3. Click the User Accounts subtab.

The User Accounts Settings pane is displayed.

4. Click the Users link.

The page scrolls to the Users table.

5. In the Users table, select the radio button to the left of the user whose password and role you want to change, and click Edit.

A new window opens.

6. In the window, type the new password for the user and or select the new abilities of the user from the Roles drop-down menu.

If a checkbox is not grayed out, you can add that ability to the selected role.

7. Click Save.

Related Information

- [“Change an Oracle ILOM User's Password and or Role \(CLI\)”](#) on page 86

▼ Delete an Oracle ILOM User Account (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the User Management tab.

3. Click the User Accounts subtab.

The User Accounts Settings pane is displayed.

4. Click the Users link.

The page scrolls to the Users table.

5. In the **Users** table, select the user to delete and click **Delete**.
A dialog box opens and asks for confirmation.
6. Click **OK**.

Related Information

- [“Delete an Oracle ILOM User Account \(CLI\)”](#) on page 88
- [“Delete an Oracle ILOM User Account \(SNMP\)”](#) on page 249
- [“Add an Oracle ILOM User Account \(Web\)”](#) on page 149

Managing HTTP Services (Web)

These tasks help you manage the Oracle ILOM HTTP service targets.

- [“Enable the HTTP Service \(Web\)”](#) on page 151
- [“Disable the HTTP Service \(Web\)”](#) on page 152

Related Information

- [“Managing HTTP Services \(CLI\)”](#) on page 88
- [“Managing HTTPS Services \(Web\)”](#) on page 153
- [“Managing SNMP Services \(Web\)”](#) on page 156
- [“Managing IPMI Services \(Web\)”](#) on page 163

▼ Enable the HTTP Service (Web)

Note – Performing this task on an already active HTTP server effectively resets the server.

Note – The HTTP service is disabled and the HTTPS service is enabled by default.

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**

4. **Click the Web Server subtab.**

The Web Server Settings pane is displayed.

5. **Select either Enabled or Redirect HTTP Connection to HTTPS from the HTTP Web server drop-down menu.**

6. **Type the web server port number into the HTTP Port field.**

7. **Click Save.**

Related Information

- [“Enable the HTTP Service \(CLI\)” on page 89](#)
- [“Set the HTTP Service State \(SNMP\)” on page 250](#)
- [“Disable the HTTP Service \(Web\)” on page 152](#)

▼ Disable the HTTP Service (Web)

Note – Performing this task on an already active HTTPS server effectively resets the server.

Note – The HTTP service is disabled by default.

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. **Click the Configuration tab.**

3. **Click the System Management Access subtab.**

4. **Click the Web Server subtab.**

The Web Server Settings pane is displayed.

5. **Select Disabled from the HTTP web server drop-down menu.**

6. **Click Save.**

Related Information

- [“Disable the HTTP Service \(CLI\)” on page 89](#)
- [“Set the HTTP Service State \(SNMP\)” on page 250](#)
- [“Enable the HTTP Service \(Web\)” on page 151](#)

Managing HTTPS Services (Web)

These tasks help you manage the Oracle ILOM HTTPS service targets.

- [“Enable the HTTPS Service \(Web\)”](#) on page 153
- [“Install a Custom SSL Certificate and Key \(Web\)”](#) on page 154
- [“Remove the Custom SSL Certificate and Key \(Web\)”](#) on page 155
- [“Disable the HTTPS Service \(Web\)”](#) on page 156

Related Information

- [“Managing HTTPS Services \(CLI\)”](#) on page 90
- [“Managing HTTP Services \(Web\)”](#) on page 151
- [“Managing SNMP Services \(Web\)”](#) on page 156
- [“Managing IPMI Services \(Web\)”](#) on page 163

▼ Enable the HTTPS Service (Web)

Note – Performing this task on an already active HTTPS server effectively resets the server.

Note – The HTTPS service is enabled by default.

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the Web Server subtab.**
The Web Server Settings pane is displayed.
5. **Check the Enabled box for the HTTPS web server.**
6. **Type the web server port into the HTTPS Port field.**
7. **Click Save.**

Related Information

- [“Enable the HTTPS Service \(CLI\)”](#) on page 90

- “Set the HTTPS Service State (SNMP)” on page 250
- “Disable the HTTPS Service (Web)” on page 156

▼ Install a Custom SSL Certificate and Key (Web)

Note – To use a custom certificate, you must install both a custom SSL certificate and key.

1. **Access the Oracle ILOM web interface.**
See “Access Oracle ILOM From the Web Interface” on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SSL Certificate subtab.**
The SSL Certificate Upload pane is displayed.
5. **Under Custom Certificate, click Load.**
The Custom Certificate Upload pane is displayed.
6. **Select the transfer protocol from the Transfer Method drop-down menu.**
7. **For the protocol selected, type the file, host IP address, file path, user name, and password into the respective fields.**
8. **Click Load.**
9. **Under Custom Private Key, click Load.**
The Custom Private Key Upload pane is displayed.
10. **Select the transfer protocol from the Transfer Method drop-down menu.**
11. **For the protocol selected, type the file, host IP address, file path, user name, and password into the respective fields.**
12. **Click Load.**

Note – Loading a custom certificate and key terminates the NET MGT connection to the management controller (web interface). You must re-establish the connection to continue administering the management controller.

13. **Re-establish the NET MGT connection to continue administering the management controller.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

Related Information

- [“Install a Custom SSL Certificate and Key \(CLI\)”](#) on page 91
- [“Remove the Custom SSL Certificate and Key \(Web\)”](#) on page 155

▼ **Remove the Custom SSL Certificate and Key (Web)**

1. **Access the Oracle ILOM web interface.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. **Click the Configuration tab.**

3. **Click the System Management Access subtab.**

4. **Click the SSL Certificate subtab.**

The SSL Certificate Upload pane is displayed.

5. **Under Custom Certificate, click Remove.**

A dialog box opens and asks for you to confirm.

6. **Click OK.**

Note – Removing a custom certificate terminates the NET MGT connection to the management controller (web interface). You must re-establish the connection to continue administering the management controller.

7. **Re-establish the NET MGT connection to continue administering the management controller.**

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

8. **Click the Configuration tab.**

9. **Click the System Management Access subtab.**

10. **Click the SSL Certificate subtab.**

The SSL Certificate Upload pane is displayed.

11. **Under Custom Private Key, click Remove.**

A dialog box opens and asks for you to confirm.

12. **Click OK.**

Related Information

- [“Remove the Custom SSL Certificate and Key \(CLI\)”](#) on page 92
- [“Install a Custom SSL Certificate and Key \(Web\)”](#) on page 154

▼ Disable the HTTPS Service (Web)

Note – Performing this task on an already active HTTPS server effectively resets the server.

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the Configuration tab.

3. Click the System Management Access subtab.

4. Click the Web Server subtab.

The Web Server Settings pane is displayed.

5. Clear the Enabled checkbox for the HTTPS web server.

6. Click Save.

Related Information

- [“Disable the HTTPS Service \(CLI\)”](#) on page 93
- [“Set the HTTPS Service State \(SNMP\)”](#) on page 250
- [“Enable the HTTPS Service \(Web\)”](#) on page 153

Managing SNMP Services (Web)

These tasks help you manage the Oracle ILOM SNMP service targets.

- [“Enable the SNMP Service \(Web\)”](#) on page 157
- [“Configure the SNMP Service \(Web\)”](#) on page 157
- [“Add SNMP Service User Accounts \(Web\)”](#) on page 158
- [“Modify SNMP Service User Accounts \(Web\)”](#) on page 159
- [“Delete SNMP Service User Accounts \(Web\)”](#) on page 160
- [“Add SNMP Service Communities \(Web\)”](#) on page 160
- [“Modify SNMP Service Communities \(Web\)”](#) on page 161
- [“Delete SNMP Service Communities \(Web\)”](#) on page 161

- [“Download SNMP Service MIBs \(Web\)”](#) on page 162
- [“Disable the SNMP Service \(Web\)”](#) on page 163

Related Information

- [“Managing SNMP Services \(CLI\)”](#) on page 93
- [“Managing HTTP Services \(Web\)”](#) on page 151
- [“Managing HTTPS Services \(Web\)”](#) on page 153
- [“Managing IPMI Services \(Web\)”](#) on page 163

▼ Enable the SNMP Service (Web)

Note – The SNMP service is enabled by default.

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Under Settings, select the Enabled checkbox for State.**
6. **Click Save.**

Related Information

- [“Enable the SNMP Service \(CLI\)”](#) on page 94
- [“Disable the SNMP Service \(Web\)”](#) on page 163

▼ Configure the SNMP Service (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**

4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Type the port number into the Port field.**
6. **Select the Enabled checkbox for Set Requests to enable set requests.**
7. **Select the checkboxes for the protocols you want to enable.**
8. **Click Save.**

Related Information

- [“Configure the SNMP Service \(CLI\)” on page 94](#)

▼ **Add SNMP Service User Accounts (Web)**

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface” on page 120](#).
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Click the Users link.**
The page scrolls to the SNMP Users table.
6. **In the SNMP Users table, click Add.**
A new window opens.
7. **Type the user name into the User Name field.**
8. **Select the authentication protocol from the Authentication Protocol drop-down menu.**
9. **Type the authentication password into the Authentication Password and Confirm Password fields.**

Note – The authentication password is 8 to 12 characters in length.

10. **Select the user permissions from the Permission drop-down menu.**
11. **(Optional) Select the privacy protocol from the Privacy Protocol drop-down menu.**

12. If required, type the privacy password into the Privacy Password and Confirm Password fields.

Note – The privacy password is exactly 8 characters in length.

13. Click Save.

Related Information

- [“Add SNMP Service User Accounts \(CLI\)”](#) on page 95
- [“Delete SNMP Service User Accounts \(Web\)”](#) on page 160

▼ **Modify SNMP Service User Accounts (Web)**

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Click the Users link.**
The page scrolls to the SNMP Users table.
6. **In the SNMP Users table, select the radio button to the left of the user to modify and click Edit.**
A new window opens.
7. **Select the authentication protocol from the Authentication Protocol drop-down menu.**
8. **Type the authentication password into the Authentication Password and Confirm Password fields.**
9. **Select the user permissions from the Permission drop-down menu.**
10. **(Optional) Select the privacy protocol from the Privacy Protocol drop-down menu.**
11. **If required, type the privacy password into the Privacy Password and Confirm Password fields.**
12. **Click Save.**

Related Information

- [“Modify SNMP Service User Accounts \(CLI\)” on page 97](#)

▼ **Delete SNMP Service User Accounts (Web)**

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface” on page 120](#).
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Click the Users link.**
The page scrolls to the SNMP Users table.
6. **Select the radio button to the left of the user to delete and click Delete.**
A dialog box opens and asks you to confirm.
7. **Click OK.**

Related Information

- [“Delete SNMP Service User Accounts \(CLI\)” on page 97](#)
- [“Add SNMP Service User Accounts \(Web\)” on page 158](#)

▼ **Add SNMP Service Communities (Web)**

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface” on page 120](#).
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Click the Communities link.**
The page scrolls to the SNMP Communities table.
6. **In the SNMP Communities table, click Add.**
A new window opens.

7. Type the community name into the Community Name field.
8. Select the permissions from the Permission drop-down menu.
9. Click Save.

Related Information

- [“Add SNMP Service Communities \(CLI\)”](#) on page 98
- [“Delete SNMP Service Communities \(Web\)”](#) on page 161

▼ **Modify SNMP Service Communities (Web)**

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Click the Communities link.**
The page scrolls to the SNMP Communities table.
6. **In the SNMP Communities table, select the radio button to the left of the community to modify and click Edit.**
A new window opens.
7. **Select the permissions from the Permission drop-down menu.**
8. **Click Save.**

Related Information

- [“Modify SNMP Service Communities \(CLI\)”](#) on page 99

▼ **Delete SNMP Service Communities (Web)**

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**

4. Click the SNMP subtab.

The SNMP Management pane is displayed.

5. Click the Communities link.

The page scrolls to the SNMP Communities table.

6. Select the radio button to the left of the community to delete and click Delete.

A dialog box opens and asks you to confirm.

7. Click OK.

Related Information

- [“Delete SNMP Service Communities \(CLI\)” on page 99](#)
- [“Add SNMP Service Communities \(Web\)” on page 160](#)

▼ Download SNMP Service MIBs (Web)

This procedure creates a compressed file, `ilom-mibs.zip`, that contains these MIBs:

- `ENTITY-MIB.mib`
- `SUN-HW-TRAP-MIB.mib`
- `SUN-ILOM-CONTROL-MIB.mib`
- `SUN-PLATFORM-MIB.mib`
- `SUN-FABRIC-MIB.mib`
- `SUN-DCS-IB-MIB.txt`

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the System Management Access subtab.

4. Click the SNMP subtab.

The SNMP Management pane is displayed.

5. Click the MIBs link.

The page scrolls to MIBs.

6. Click Download.

Depending on how your web browser is configured, you might either open the file or save the file.

Related Information

- [“Download SNMP Service MIBs \(CLI\)”](#) on page 100

▼ **Disable the SNMP Service (Web)**

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
The SNMP Management pane is displayed.
5. **Under Settings, clear the Enabled checkbox for State.**
6. **Click Save.**

Related Information

- [“Disable the SNMP Service \(CLI\)”](#) on page 101
- [“Enable the SNMP Service \(Web\)”](#) on page 157

Managing IPMI Services (Web)

These tasks help you manage the Oracle ILOM IPMI service target.

- [“Enable the IPMI Service \(Web\)”](#) on page 164
- [“Disable the IPMI Service \(Web\)”](#) on page 164

Related Information

- [“Managing IPMI Services \(CLI\)”](#) on page 101
- [“Managing HTTP Services \(Web\)”](#) on page 151
- [“Managing HTTPS Services \(Web\)”](#) on page 153
- [“Managing SNMP Services \(Web\)”](#) on page 156

▼ Enable the IPMI Service (Web)

Note – The IPMI service is enabled by default.

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the IPMI subtab.**
The IPMI Settings pane is displayed.
5. **Select the Enabled checkbox for State.**
6. **Click Save.**

Related Information

- [“set Command”](#) on page 274
- [“Enable the IPMI Service \(CLI\)”](#) on page 102
- [“Disable the IPMI Service \(Web\)”](#) on page 164

▼ Disable the IPMI Service (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the IPMI subtab.**
The IPMI Settings pane is displayed.
5. **Unselect the Enabled checkbox for State.**
6. **Click Save.**

Related Information

- [“set Command”](#) on page 274
- [“Disable the IPMI Service \(CLI\)”](#) on page 102
- [“Enable the IPMI Service \(Web\)”](#) on page 164

Managing Other Aspects With Oracle ILOM (Web)

These tasks help you manage other aspects of Oracle ILOM.

- [“Enable Alerts to Send SNMP Traps \(Web\)”](#) on page 165
- [“Enable Alerts to Send PETs \(Web\)”](#) on page 166
- [“Enable Alerts to Send Email Alerts \(Web\)”](#) on page 167
- [“Disable Alerts \(Web\)”](#) on page 167
- [“Set the CLI Session Timeout \(Web\)”](#) on page 168

Related Information

- [“Managing Other Aspects With Oracle ILOM \(CLI\)”](#) on page 103
- [“Managing Other Aspects With Oracle ILOM \(SNMP\)”](#) on page 249
- [“Performing General Tasks on Oracle ILOM Targets \(Web\)”](#) on page 137

▼ Enable Alerts to Send SNMP Traps (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the Alert Management subtab.**
The Alert Settings pane is displayed.
4. **In the Alerts table, select the radio button to the left of the alert to enable and click Edit.**
A new window opens.
5. **Select the alert level from the Level drop-down menu.**
6. **Select the SNMP Trap alert type from the Type drop-down menu.**
7. **Type the SNMP trap destination address or host name into the Address field.**
8. **If you want to specify the port, uncheck the Autoselect box and type the port number into the Destination Port field.**
9. **Select the SNMP version from the SNMP Version drop-down menu.**
10. **Type the SNMP community name into the Community Name field.**
11. **Click Save.**

Related Information

- [“Enable Alerts to Send SNMP Traps \(CLI\)”](#) on page 103
- [“Enable Alerts to Send SNMP Traps \(SNMP\)”](#) on page 251
- [“Enable Alerts to Send PETs \(Web\)”](#) on page 166
- [“Enable Alerts to Send Email Alerts \(Web\)”](#) on page 167
- [“Display the Alert Properties \(Web\)”](#) on page 132
- [“Disable Alerts \(Web\)”](#) on page 167

▼ **Enable Alerts to Send PETs (Web)**

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

2. Click the Configuration tab.

3. Click the Alert Management subtab.

The Alert Settings pane is displayed.

4. In the Alerts table, select the radio button to the left of the alert to modify and click Edit.

A new window opens.

5. Select the alert level from the Level drop-down menu.

6. Select the IPMI PET alert type from the Type drop-down menu.

7. Type the IPMI PET destination IP address into the IP Address field.

8. Click Save.

Related Information

- [“Enable Alerts to Send PETs \(CLI\)”](#) on page 105
- [“Enable Alerts to Send PETs \(SNMP\)”](#) on page 252
- [“Enable Alerts to Send SNMP Traps \(Web\)”](#) on page 165
- [“Enable Alerts to Send Email Alerts \(Web\)”](#) on page 167
- [“Display the Alert Properties \(Web\)”](#) on page 132
- [“Disable Alerts \(Web\)”](#) on page 167

▼ Enable Alerts to Send Email Alerts (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**
3. **Click the Alert Management subtab.**
The Alert Settings pane is displayed.
4. **In the Alerts table, select the radio button to the left of the alert to modify and click Edit.**
A new window opens.
5. **Select the alert level from the Level drop-down menu.**
6. **Select the email alert type from the Type drop-down menu.**
7. **Type the destination email address into the Email Address field.**
8. **(Optional) Select the Event Class Filter and Event Type Filter from their respective drop-down menus.**
9. **Type a custom sender identifier into the Custom Sender field.**
10. **(Optional) Type a message prefix into the Message Prefix field.**
11. **Click Save.**

Related Information

- [“Enable Alerts to Send Email Alerts \(CLI\)”](#) on page 106
- [“Enable Alerts to Send Email Alerts \(SNMP\)”](#) on page 253
- [“Enable Alerts to Send SNMP Traps \(Web\)”](#) on page 165
- [“Enable Alerts to Send PETs \(Web\)”](#) on page 166
- [“Display the Alert Properties \(Web\)”](#) on page 132
- [“Disable Alerts \(Web\)”](#) on page 167

▼ Disable Alerts (Web)

1. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
2. **Click the Configuration tab.**

3. Click the Alert Management subtab.

The Alert Settings pane is displayed.

4. In the Alerts table, select the radio button to the left of the alert to disable and click Edit.

A new window opens.

5. Select the Disable level from the Level drop-down menu.

6. Click Save.

Related Information

- [“Disable Alerts \(CLI\)” on page 107](#)
- [“Disable Alerts \(SNMP\)” on page 255](#)
- [“Enable Alerts to Send SNMP Traps \(Web\)” on page 165](#)
- [“Enable Alerts to Send PETs \(Web\)” on page 166](#)
- [“Enable Alerts to Send Email Alerts \(Web\)” on page 167](#)
- [“Display the Alert Properties \(Web\)” on page 132](#)

▼ Set the CLI Session Timeout (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

2. Click the Configuration tab.

3. Click the System Management Access subtab.

4. Click the CLI subtab.

The CLI Settings pane is displayed.

5. Select the Enabled box for Session timeout and type the number of minutes into the Minutes field.

6. Click Save.

Related Information

- [“Set the Oracle ILOM CLI Session Timeout \(CLI\)” on page 108](#)
- [“Display the CLI Session Timeout \(Web\)” on page 134](#)

▼ Upgrade the Switch Firmware (Web)

Note – If you are going to downgrade the firmware to a version earlier than 2.1, you must disable secret M_Keys. Refer to *Switch Administration*, disabling secret M_Key functionality.

Note – If you are going to downgrade the firmware to a version earlier than 2.0, you must remove user partitions and depopulate the Subnet Manager nodes list. Refer to *Switch Administration*, removing partitions for firmware downgrade.

1. Acquire the firmware package.

See “Acquire the Switch Firmware Package (CLI)” on page 110.

2. Consider your next step.

- If you are upgrading from firmware version 2.0 or newer, go to [Step 9](#).
- If you are upgrading from a firmware version earlier than 2.0, go to [Step 3](#).

3. Open an SSH session as user `root` and connect to the management controller by specifying the controller’s host name.

```
% ssh -l root switch_name
root@switch_name's password: password
#
```

where `switch_name` is the host name of the management controller. Initially, the password is `changeme`.

4. If the Subnet Manager is running on the management controller, disable the Subnet Manager.

```
# disablesm
Stopping partitiond daemon.                [ OK ]
Stopping IB Subnet Manager..                [ OK ]
#
```

5. Verify that there is at least 80 MB available in the / filesystem.

```
# df -h /
Filesystem                Size      Used Avail Use% Mounted on
/dev/hda2                  471M    276M   172M  62% /
#
```

In this example, there are 172 MB available. If not enough space is available, you must delete or move files from the / filesystem.

6. Verify that there is at least 120 MB available in the /tmp directory.

```
# df -h /tmp
Filesystem                Size      Used Avail Use% Mounted on
tmpfs                     250M    240K   249M  1% /tmp
#
```

In this example, there are 249 MB available. If not enough space is available, you must delete files from the /tmp directory.

7. If you will perform a local file upload, perform these steps.

Otherwise, go to [Step 8](#).

a. Verify that there is at least 120 MB available in the /dev/shm directory.

```
# df -h /dev/shm
Filesystem                Size      Used Avail Use% Mounted on
tmpfs                     250M    16K   250M  1% /dev/shm
#
```

In this example, there are 250 MB available. If not enough space is available, you must delete or move files from the /dev/shm directory.

b. Verify that there is at least 240 MB free memory available.

```
# free -m
              total        used         free       shared    buffers     cached
Mem:           498           104          393            0          12          47
-/+ buffers/cache:
Swap:            0             0             0
#
```

In the -/+ buffers/cache: row of the free column, there should be at least 240 MB free memory. In this example, there are 453 MB available. If not enough memory is available, you must exit nonessential applications that are running.

c. Go to [Step 9](#).

8. Verify that there is at least 120 MB free memory available.

	total	used	free	shared	buffers	cached
Mem:	498	104	393	0	12	47
-/+ buffers/cache:		45	453			
Swap:	0	0	0			
#						

In the `-/+ buffers/cache:` row of the `free` column, there should be at least 120 MB free memory. In this example, there are 453 MB available. If not enough memory is available, you must exit non-essential applications that are running.

9. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface”](#) on page 120.

10. Click the Maintenance tab.

11. Click the Firmware Upgrade subtab.

The Firmware Upgrade pane is displayed.

12. Click Enter Upgrade Mode.

A dialog box opens and asks you to confirm.

13. Click OK.

The Firmware Upgrade window changes to Upgrade mode and now accepts either a local file path and file name, or a URL and file name of the switch firmware package.

14. Consider your next step:

- # If you are performing a local file upload, click Browse and locate the file.
- # If the switch firmware package is located remotely, click Specify URL and type the fully qualified URL for the package.

Note – Clicking Specify URL also changes the button to Local File Upload. Clicking Local File Upload changes the button back to Specify URL.

Note – For the specified URL, only the FTP or HTTP protocols are supported.

15. Click Upload.

Oracle ILOM transfers the switch firmware package to the management controller. Oracle ILOM verifies the package integrity and displays the current versions of the firmware and versions in the package.

16. Click Start Upgrade.

A dialog box opens and asks you to confirm.

17. Click OK.

The upgrade begins and the status of the upgrade is reported.

When the upgrade process ends, a log and summary report are displayed.

18. Click OK.

A final status is displayed, the upgrade either:

- Succeeded
- Partially succeeded
- Failed

19. Reboot the switch to enable the new firmware.

Refer to *Switch Administration*, restarting the entire switch.

Note – The restart process takes between 4 to 5 minutes to complete. The Oracle ILOM stack requires at least 2 minutes to become operational after a reboot.

20. If the Subnet Manager was disabled in Step 4, log in to Oracle ILOM, access the restricted Linux shell, and enable the Subnet Manager.

```
% ssh -l ilom-admin switch_name
ilom-admin@switch_name's password: password
-> show /SYS/Fabric_Mgmt
NOTE: show on Fabric_Mgmt will launch a restricted Linux shell.
      User can execute switch diagnosis, SM Configuration and IB
      monitoring commands in the shell. To view the list of commands,
      use "help" at rsh prompt.

      Use exit command at rsh prompt to revert back to
      ILOM shell.
FabMan@switch_name->enablesm
Starting IB Subnet Manager.                [ OK ]
Starting partitiond daemon.                [ OK ]
FabMan@switch_name->
```

21. **Access the Oracle ILOM web interface.**
See [“Access Oracle ILOM From the Web Interface”](#) on page 120.
22. **Verify the success of the firmware update.**
See [“Display the Firmware Version \(Web\)”](#) on page 135.
23. **Verify the firmware integrity.**
See [“Verify Firmware Integrity \(CLI\)”](#) on page 109.

Related Information

- [“Upgrade the Switch Firmware \(CLI\)”](#) on page 112

Using the Fabric Monitor

The Fabric Monitor enables you to visually monitor the status of the switch, the I4 switch chip, and the connectors through a web-based interface. The Fabric Monitor is accessible from the Oracle ILOM web interface.

These topics describe how to use the fabric monitor.

- [“Access the Fabric Monitor” on page 175](#)
- [“Fabric Monitor Features” on page 176](#)
- [“Accessing the Rear Panel Diagram” on page 177](#)
- [“Accessing Status Pane Information” on page 181](#)
- [“Control Panel Function” on page 188](#)
- [“Monitoring Parameters and Status” on page 189](#)

Related Information

- [“Understanding Oracle ILOM on the Switch” on page 1](#)
- [“Administering Oracle ILOM \(CLI\)” on page 27](#)
- [“Administering Oracle ILOM \(Web\)” on page 117](#)
- [“Administering Oracle ILOM \(SNMP\)” on page 197](#)
- [“Administering Hardware \(IPMI\)” on page 257](#)
- [“Understanding Oracle ILOM Commands” on page 265](#)

▼ Access the Fabric Monitor

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 120](#).

Note – If the login page is not displayed or an error is displayed, verify that the web interface is enabled. See “Enable the HTTP Service (CLI)” on page 89 and “Enable the HTTPS Service (CLI)” on page 90.

2. Click the Switch/Fabric Monitoring Tools tab.

The SUN DCS 36p Monitor page is displayed.

3. Click Launch SUN DCS 36p Monitor.

The Fabric Monitor GUI is displayed.

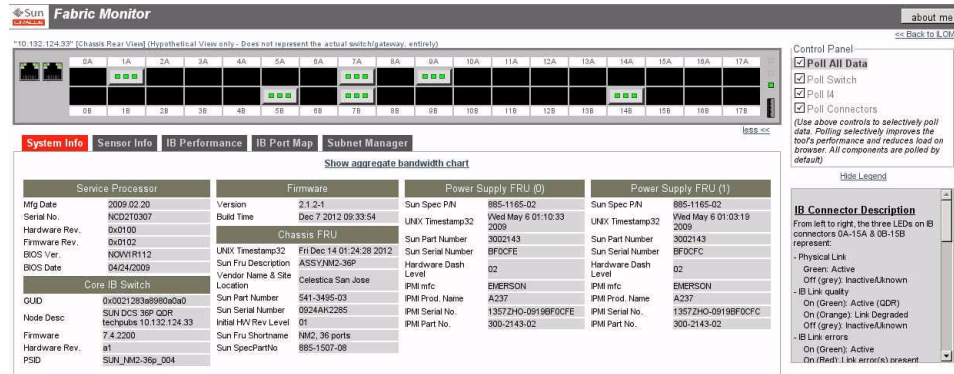
Note – To return to Oracle ILOM, click the <<Back to ILOM link in the upper-right corner of the Fabric Monitor.

Related Information

- “Fabric Monitor Features” on page 176
- “Accessing the Rear Panel Diagram” on page 177
- “Accessing Status Pane Information” on page 181
- “Control Panel Function” on page 188
- “Monitoring Parameters and Status” on page 189

Fabric Monitor Features

This figure displays the basic aspects of the FM interface.



1	Rear panel diagram
2	Control panel
3	Status pane
4	Legend

Note – Both the control panel and legend are hidden by default. Clicking the [more>>](#) link makes them visible.

The FM also has status windows for:

- **Connector indicators** – Moving the mouse cursor over an indicator that is orange or red opens a small window that provides the reason for the respective state.
- **InfiniBand connector status** – Clicking on a gray InfiniBand connector opens a window that displays connector FRU, port state, error, and statistical information for that connection.

These status windows are explained in depth in [“Accessing the Rear Panel Diagram” on page 177](#).

Related Information

- [“Access the Fabric Monitor” on page 175](#)
- [“Accessing the Rear Panel Diagram” on page 177](#)
- [“Accessing Status Pane Information” on page 181](#)
- [“Control Panel Function” on page 188](#)
- [“Monitoring Parameters and Status” on page 189](#)

Accessing the Rear Panel Diagram

The rear panel diagram provides a visual representation of the switch’s connector and link status. Aspects of the diagram are discussed in these topics:

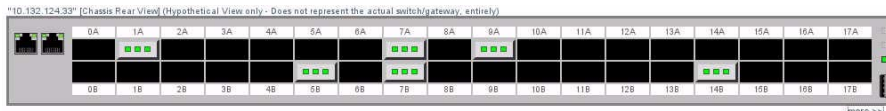
- [“Rear Panel Diagram Overview” on page 178](#)
- [“InfiniBand Connector Status Window” on page 178](#)

Related Information

- “Access the Fabric Monitor” on page 175
- “Fabric Monitor Features” on page 176
- “Accessing Status Pane Information” on page 181
- “Control Panel Function” on page 188
- “Monitoring Parameters and Status” on page 189

Rear Panel Diagram Overview

This figure provides an example of the rear panel diagram.



The rear panel diagram displays the presence of connectors and their status within a mockup of the switch rear panel. The diagram displays the management controller’s IP address, and the connector receptacles and their respective connector names. When a cable is attached to a receptacle, a connection is made. That connection is displayed in the diagram as a gray rectangle, with three or four smaller indicators. Moving the mouse cursor over an indicator, clicking on an indicator, or clicking on a connection opens a window that provides additional information about that indicator or connection.

Related Information

- “InfiniBand Connector Status Window” on page 178

InfiniBand Connector Status Window

In the rear panel diagram, there are 32 InfiniBand receptacles displayed, labeled 0A to 15A and 0B to 15B. Moving the mouse cursor over a connector name opens a small window that states the respective I4 switch chip port for that connector. This figure provides an example of moving the mouse cursor over the 0A for connection 0A.



When a connector is physically present in an InfiniBand receptacle, the receptacle changes from a black rectangle to a gray rectangle with three indicators.

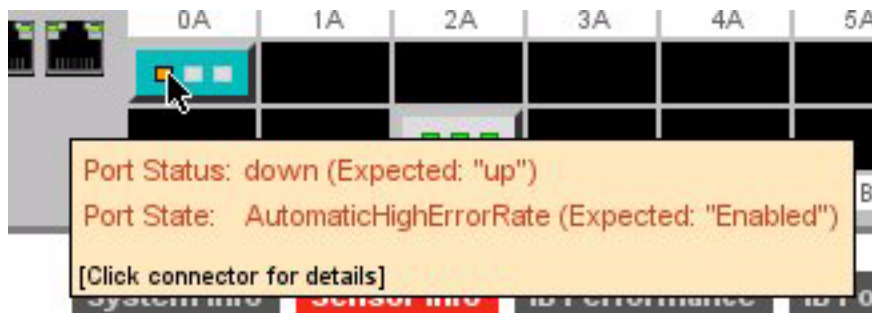
This table describes the three indicators of the InfiniBand connection rectangle.

Object	Left Indicator	Center Indicator	Right Indicator
Description	Physical link	InfiniBand link quality	InfiniBand link errors
Color	<ul style="list-style-type: none"> • Gray – No link • Green – Link established • Orange – Link autotdisabled 	<ul style="list-style-type: none"> • Gray – No activity • Green – QDR • Orange – DDR, SDR 	<ul style="list-style-type: none"> • Gray – No activity • Green – No errors • Red – Errors

Moving the mouse cursor over an indicator that is orange or red opens a small window that states the reason for the respective state:

- A left indicator is orange because the link has been autotdisabled, either because of high link error rate or suboptimal link speed and width.
- A center indicator is orange because the link is at a speed slower than QDR, such as SDR or DDR.
- A right indicator is red because there are errors (symbol, recovery, and so on) on the link.

This figure provides an example of moving the mouse cursor over the orange left indicator for connection 0A.



Clicking on the connection opens the InfiniBand connector status window for that connector. This figure provides an example of an InfiniBand connector status window.

Connector: 1A Port: 22

Property	Value
Identifier	QSFP
Connector Type	Copper pigtail
Vendor	LEONI
Vendor OUI	000000
Part Number	530-4415-01
Revision	30
Serial Number	L45593-D102-C30
Date	

Property	Value
LinkWidthEnabled	3 [1x/4x]
LinkWidthActive	2 [4x]
LinkSpeedEnabled	7 [2.5/5.0/10.0 Gbps]
LinkSpeedActive	4 [10.0 Gbps]
HighErrorRate	NO
Link State	Enabled
Link Status	up
Link Stable	true

Property	Value
Device Name	SUN DCS 36P QDR
Device type	techpubs 10.132.124.33
GUID	0x0021283a8980a0a0
LID	0x1
Port	22
Link Status	Active
Link Quality	QDR

Counter Name	Value
SymbolErrors	0
LinkRecoveries	0
LinkDowned	0
RcvErrors	0
RcvRemotePhysErrors	0
RcvSwRelayErrors	0
XmtDiscards	0
XmtConstraintErrors	0
RcvConstraintErrors	0
LinkIntegrityErrors	0
ExcBufOverrunErrors	0
VL15Dropped	0
XmtData	12585384
RcvData	12585384
XmtPkts	174797
RcvPkts	174797

Property	Value
Device Name	SUN DCS 36P QDR
Device type	techpubs 10.132.124.33
GUID	0x0021283a8980a0a0
LID	1
Port	8
Link Status	Active
Link Quality	QDR

Counter Name	Value
SymbolErrors	0
LinkRecoveries	0
LinkDowned	0
RcvErrors	0
RcvRemotePhysErrors	0
RcvSwRelayErrors	0
XmtDiscards	0
XmtConstraintErrors	0
RcvConstraintErrors	0
LinkIntegrityErrors	0
ExcBufOverrunErrors	0
VL15Dropped	0
XmtData	12585384
RcvData	12585384
XmtPkts	174797
RcvPkts	174797

close

At the top of the window are the connector name and the respective I4 switch chip port. There are four sets of information in the window, the cable FRU ID information, the link status, information about the I4 switch chip port (Switch Port), and similar information about the port's InfiniBand peer (Peer Port).

The cable FRU ID information includes:

- Identifier
- Connector type
- Vendor

- Vendor OUI
- Part number
- Revision
- Serial number
- Date of manufacture

The link information includes:

- Link width, both enabled and active
- Link speed, both enabled and active
- High error rate present
- Link state, status, and stability

The port information includes:

- Device name and type
- GUID, LID, and respective port
- Link status and quality
- Symbol errors
- Recovery errors
- Errors of various categories
- Throughput statistics

Clicking Close dismisses the InfiniBand connector status window.

Related Information

- [“Rear Panel Diagram Overview” on page 178](#)

Accessing Status Pane Information

At the center of the FM is the status pane, which displays the majority of information regarding the switch. The status pane has five tabs:

- [“System Info Tab” on page 182](#)
- [“Sensor Info Tab” on page 183](#)
- [“IB Performance Tab” on page 184](#)
- [“IB Port Map Tab” on page 186](#)
- [“Subnet Manager Tab” on page 187](#)

Related Information

- “Access the Fabric Monitor” on page 175
- “Fabric Monitor Features” on page 176
- “Accessing the Rear Panel Diagram” on page 177
- “Control Panel Function” on page 188
- “Monitoring Parameters and Status” on page 189

System Info Tab

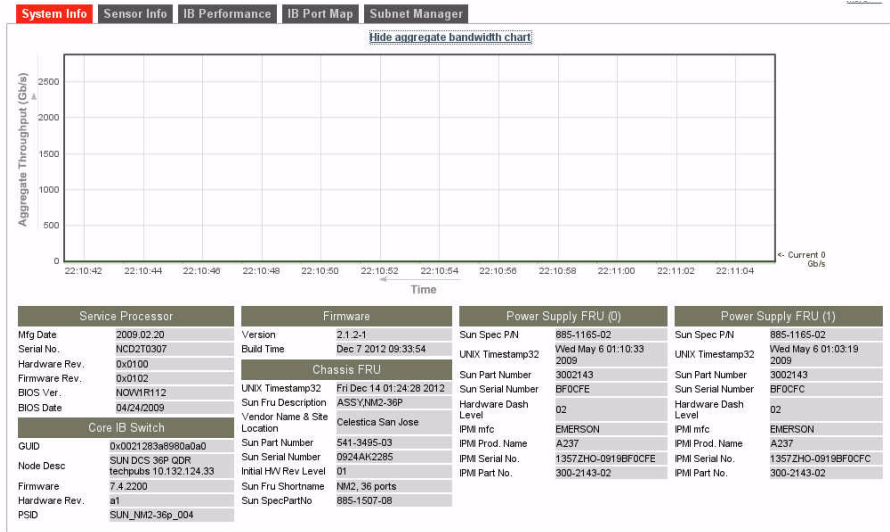
This figure provides an example of the System Info tab.

System Info		Sensor Info	IB Performance	IB Port Map	Subnet Manager
Show aggregate bandwidth chart					
Service Processor		Firmware		Power Supply FRU (0)	
Mfg Date	2009.02.20	Version	2.1.2-1	Sun Spec P/N	885-1165-02
Serial No.	NCD2T0307	Build Time	Dec 7 2012 09:33:54	UNIX Timestamp32	Wed May 6 01:10:33 2009
Hardware Rev.	0x0100	Chassis FRU		Sun Part Number	3002143
Firmware Rev.	0x0102			Sun Serial Number	BFOCFE
BIOS Ver.	NOW1R112	UNIX Timestamp32	Fri Dec 14 01:24:28 2012	Hardware Dash Level	02
BIOS Date	04/24/2009	Sun Fru Description	ASSY,NM2-36P	IPMI mfc	EMERSON
Core IB Switch		Vendor Name & Site Location	Celestica San Jose	IPMI Prod. Name	A237
GUID	0x0021283a8980a0a0	Sun Part Number	541-3495-03	IPMI Serial No.	1357ZHO-0919BFOCFE
Node Desc	SUN DCS 36P QDR techpubs 10.132.124.33	Sun Serial Number	0924AK2285	IPMI Part No.	300-2143-02
Firmware	7.4.2200	Initial HW Rev Level	01	IPMI Prod. Name	EMERSON
Hardware Rev.	a1	Sun Fru Shortname	NM2, 36 ports	IPMI Serial No.	1357ZHO-0
PSID	SUN_NM2-36p_004	Sun SpecPartNo	885-1507-08	IPMI Part No.	300-2143-0

The System Info tab displays status information regarding the switch hardware. The information is categorized in these groups:

- **Service Processor** – Basic information about the management controller
- **Core IB Switch** – Basic information about the I4 switch chip
- **Firmware** – Version and build date
- **Chassis FRU** – FRU ID information about the chassis
- **Power Supply FRU (0)** – FRU ID information about the left power supply
- **Power Supply FRU (1)** – FRU ID information about the right power supply

If the Poll I4 checkbox in the control panel is selected (default), then you can click [Show aggregate bandwidth chart](#) to display the historic total bandwidth. This figure provides an example of the aggregate bandwidth.



Note – The aggregate bandwidth chart has a dynamic time scale. The scale is continually adjusting for the initiation time on the left and the current time on the right.

Clicking Hide aggregate bandwidth chart removes the bandwidth chart.

Related Information

- “Sensor Info Tab” on page 183
- “IB Performance Tab” on page 184
- “IB Port Map Tab” on page 186
- “Subnet Manager Tab” on page 187

Sensor Info Tab

This figure provides an example of the Sensor Info tab.

System Info			Sensor Info			IB Performance			IB Port Map			Subnet Manager		
Voltage Sensors			Power Sensors				Temperature Sensors							
Name	Value	Status	Name	Present	A/C Present	Status	Name	Value	Status					
ECB	-	OK	PSU 0	true	true	OK	Back	28	OK					
3.3V Main	3.28	OK	PSU 1	true	true	OK	Front	29	OK					
3.3V Stby	3.4	OK	Fan Sensors				SP	41	OK					
12V	11.9	OK	Name	Present	RPM	Status	Switch	32	OK					
5V	5.02	OK	FAN 0	false	-	-	IB Device Sensors							
VBAT	3.04	OK	FAN 1	true	11881	OK	Name	Status						
2.5V	2.5	OK	FAN 2	true	11772	OK	Switch	OK						
1.8V	1.78	OK	FAN 3	true	12099	OK								
I4 1.2V	1.22	OK	FAN 4	false	-	-								

The Sensor Info tab displays status information regarding the switch sensors. The information is categorized in these groups:

- **Voltage Sensors** – Assorted voltages on the main board
- **Power Sensors** – Presence, AC presence, and status for both power supply slots
- **Fan Sensors** – Presence, RPM, and status for each fan slot
- **Temperature Sensors** – Back, front, management controller, and I4 switch chip
- **IB Device Sensors** – I4 switch chip status

Related Information


- [“System Info Tab” on page 182](#)
- [“IB Performance Tab” on page 184](#)
- [“IB Port Map Tab” on page 186](#)
- [“Subnet Manager Tab” on page 187](#)

IB Performance Tab

This figure provides an example of the IB Performance tab.

Hide Chart

Connector	I4 Port	Link Status	RX B/w (Gbps)	TX B/w (Gbps)	B/W (Gbps)
0A	20	Down	0.0	0.0	
0B	19	Down	0.0	0.0	
1A	22	Active	0.0	0.0	
1B	21	Down	0.0	0.0	
2A	24	Down	0.0	0.0	
2B	23	Down	0.0	0.0	



The IB Performance tab displays the status of the I4 switch chip ports. A table describes this information:

- **Connector** – Rear panel connector respective to the I4 switch chip port
- **I4 Port** – Port of the I4 switch chip
- **Link Status** – Present link state of the that port. Either Down (yellow) or Active (green)
- **RX B/w (Gbps)** – Instantaneous receive link bandwidth for that port
- **TX B/w (Gbps)** – Instantaneous transmit link bandwidth for that port

By clicking Show Chart, a sixth column for the table is displayed:

- **B/W (Gbps)** – Running bandwidth of the link for that port (0 to 40 Gbps)

Note – You must select the Poll I4 checkbox (default) in the control panel to populate the table with current information.

When displaying the B/W (Gbps) column, the added resource demand on the management controller slows its ability to display the information. Clicking Hide Chart removes the bandwidth charts.

By clicking on a column heading, the information in the table is sorted according to that column heading, either in ascending or descending order. For example, clicking the I4 Port heading sorts the information in the table according to the numeric sequence of the I4 ports. Clicking the Link Status heading sorts the information in the table according to the state of the links.

Related Information

- [“System Info Tab” on page 182](#)
- [“Sensor Info Tab” on page 183](#)

- “IB Port Map Tab” on page 186
- “Subnet Manager Tab” on page 187

IB Port Map Tab

This figure provides an example of the IB Port Map tab.

Switch Port		Peer Device				
Connector	I4 Port	Type	Name	GUID	LID	Port
0A	20			0x0000000000000000	-	-
0B	19			0x0000000000000000	-	-
1A	22	Switch	SUN DCS 36P QDR techpubs 10.132.124.33	0x0021283a8980a0a0	1	8
1B	21			0x0000000000000000	-	-
2A	24			0x0000000000000000	-	-
2B	23			0x0000000000000000	-	-

The IB Port Map tab displays information about peer devices attached to the switch. A table describes this information:

- **Connector** – Rear panel connector respective to the I4 switch chip port
- **I4 Port** – Port of the I4 switch chip
- **Type** – Type of peer device attached to the connector or I4 switch chip port
- **Name** – Contents of the peer device’s NodeDescription field
- **GUID** – GUID of the peer device
- **LID** – LID assigned to the peer device
- **Port** – Port of the node identified by the GUID or LID

Note – You must select the Poll I4 checkbox (default) in the control panel to populate the table with current information.

By clicking on a column heading, the information in the table is sorted according to that column heading, either in ascending or descending order. For example, clicking the Connector heading sorts the information in the table according to the numeric sequence of the connectors. Clicking the peer device Name heading sorts the information in the table according to the NodeDescription field of the peer device.

Related Information

- “System Info Tab” on page 182

- “Sensor Info Tab” on page 183
- “IB Performance Tab” on page 184
- “Subnet Manager Tab” on page 187

Subnet Manager Tab

This figure provides an example of the Subnet Manager tab.

System Info		Sensor Info		IB Performance		IB Port Map		Subnet Manager	
					Active SM Info		Local SM Settings		
SM Lid	1	Enabled	true	SM GUID	0x21283a8980a0a0	Status	running	SM Activity Count	33173
SM Priority	5	State	MASTER	SM State	SMINFO_MASTER	Routing Engine	free	SM Node Description	SUN DCS 36P QDR techpubs 10.132.124.33
SM Detected Time	Wed Dec 12 03:39:49 PST 2012	Priority	5	SM Node Description	SUN DCS 36P QDR techpubs 10.132.124.33	Controlled Handover	true	SM Detected Time	Wed Dec 12 03:39:49 PST 2012
		Polling Timeout	1000			Polling Retry	5		
		Log Max Size	4			Subnet Prefix	0xfe80000000000000		

The Subnet Manager tab displays information about the Subnet Manager within the switch. Information displayed is categorized into these groups:

- **Active SM Info** – Information about the active Subnet Manager, LID, GUID, activity, priority, state, node description, and time.
- **Local SM Settings** – Information about the management controller’s Subnet Manager’s configuration.

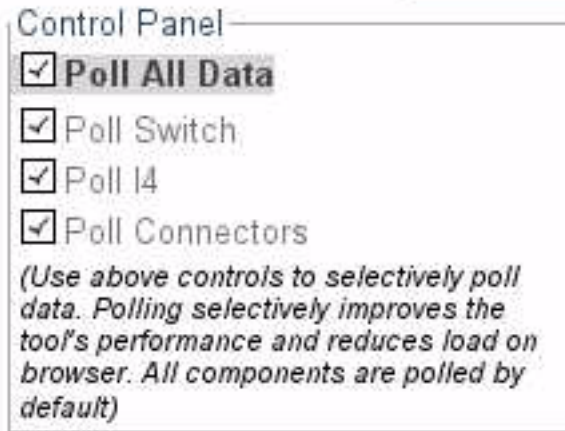
The active Subnet Manager might not be the local Subnet Manager within the management controller.

Related Information

- “System Info Tab” on page 182
- “Sensor Info Tab” on page 183
- “IB Performance Tab” on page 184
- “IB Port Map Tab” on page 186

Control Panel Function

Hidden on the right side of the FM is the control panel. Clicking the more>> link opens the control panel and legend. This figure provides an example of the control panel.



The control panel has five checkboxes that enable you to select what aspect of the switch is to be monitored. You can select to monitor:

Note – All checkboxes are enabled by default. By clearing the checkboxes that are not necessary for your monitoring needs, you reduce the load on the interface and optimize the operation of the FM.

- **Poll All Data** – Selecting this checkbox enables all polling. Consequently, all checkboxes are selected. When all checkboxes are selected, the added resource demand on the management controller slows its ability to display the information.
- **Poll Switch** – Selecting this checkbox enables you to monitor the status of the switch hardware and the Subnet Manager. By checking this box, the System Info, Sensor Info, and Subnet Manager tabs of the status pane become active and are populated with information.
- **Poll I4** – Selecting this checkbox enables you to monitor the status of the I4 switch chip and the links its ports negotiate. By checking this box, the IB Performance and IB Port Map tabs of the status pane become active and are populated with information. Additionally, the Show Aggregate Bandwidth Chart link under the System Info tab becomes active.

- **Poll Connectors** – Selecting this checkbox enables you to monitor the status of the connectors on the switch rear panel. By checking this box, the rear panel diagram becomes active and displays present connectors and their condition.

Related Information

- [“Access the Fabric Monitor”](#) on page 175
- [“Fabric Monitor Features”](#) on page 176
- [“Accessing the Rear Panel Diagram”](#) on page 177
- [“Accessing Status Pane Information”](#) on page 181
- [“Monitoring Parameters and Status”](#) on page 189

Monitoring Parameters and Status

These tables help you quickly find a switch parameter or status value using the FM.

- [“Chassis Parameters and Status”](#) on page 189
- [“InfiniBand Connector Parameters and Status”](#) on page 191
- [“Switch Connector Parameters and Status”](#) on page 194
- [“I4 Switch Chip Port Parameters and Status”](#) on page 194

Related Information

- [“Access the Fabric Monitor”](#) on page 175
- [“Fabric Monitor Features”](#) on page 176
- [“Accessing the Rear Panel Diagram”](#) on page 177
- [“Accessing Status Pane Information”](#) on page 181
- [“Control Panel Function”](#) on page 188

Chassis Parameters and Status

Use this table to determine chassis status with the FM. Find the parameter or status in the left column, then perform the steps from left to right.

Parameter or Status to Monitor	Action in Status Pane	Information Location
Battery voltage.	Click Sensor Info tab.	Look in the first column, Voltage Sensors, in the middle.
Chassis FRU description.	Click System Info tab.	Look in the second column, Chassis FRU, at the top.
Chassis part number.	Click System Info tab.	Look in the second column, Chassis FRU, in the middle.
Chassis serial number.	Click System Info tab.	Look in the second column, Chassis FRU, in the middle.
Chassis temperatures.	Click Sensor Info tab.	Look in the third column, Temperature Sensors.
Controlled handover state.	Click Subnet Manager tab.	Look in the second column, Local SM Settings, in the middle.
Fan presence.	Click Sensor Info tab.	Look in the second column, Fan Sensors, second column.
Fan speed.	Click Sensor Info tab.	Look in the second column, Fan Sensors, third column.
Fan status.	Click Sensor Info tab.	Look in the second column, Fan Sensors, fourth column.
I4 switch chip firmware version.	Click System Info tab.	Look in the first column, Core IB Switch, in the middle.
I4 switch chip GUID.	Click System Info tab.	Look in the first column, Core IB Switch, at the top.
I4 switch chip historic aggregate bandwidth.	Click System Info tab. Click Show Aggregate Bandwidth Chart.	Look in the center.
I4 switch chip LID.	Click Subnet Manager tab.	Look in the first column, Active SM Info, at the top.
I4 switch chip status.	Click Sensor Info tab.	Look in the third column, IB Device Sensors, at the top.
I4 switch chip temperature.	Click Sensor Info tab.	Look in the third column, Temperature Sensors, at the bottom.
I4 switch chip voltage.	Click Sensor Info tab.	Look in the first column, Voltage Sensors, at the bottom.
Main board voltages.	Click Sensor Info tab.	Look in the first column, Voltage Sensors.
Management controller BIOS version.	Click System Info tab.	Look in the first column, Service Processor, at the bottom.
Management controller firmware version.	Click System Info tab.	Look in the second column, Firmware.
Management controller serial number.	Click System Info tab.	Look in the first column, Service Processor, at the top.

Parameter or Status to Monitor	Action in Status Pane	Information Location
Power supply presence.	Click Sensor Info tab.	Look in the second column, Power Sensors, second column.
Power supply line voltage presence.	Click Sensor Info tab.	Look in the second column, Power Sensors, third column.
Power supply status.	Click Sensor Info tab.	Look in the second column, Power Sensors, fourth column.
Subnet Manager controlled handover.	Click Subnet Manager tab.	Look in the second column, Local SM Settings, in the middle.
Subnet Manager GUID.	Click Subnet Manager tab.	Look in the first column, Active SM Info, at the top.
Subnet Manager LID.	Click Subnet Manager tab.	Look in the first column, Active SM Info, at the top.
Subnet Manager priority.	Click Subnet Manager tab.	Look in the first column, Active SM Info, in the middle. Look in the second column, Local SM Settings, in the middle.
Subnet Manager routing algorithm.	Click Subnet Manager tab.	Look in the second column, Local SM Settings, in the middle.
Subnet Manager status.	Click Subnet Manager tab.	Look in the first column, Active SM Info, in the middle. Look in the second column, Local SM Settings, at the top.
Subnet Manager subnet prefix.	Click Subnet Manager tab.	Look in the second column, Local SM Settings, at the bottom.

Related Information

- [“InfiniBand Connector Parameters and Status” on page 191](#)
- [“Switch Connector Parameters and Status” on page 194](#)
- [“I4 Switch Chip Port Parameters and Status” on page 194](#)

InfiniBand Connector Parameters and Status

Use this table to determine InfiniBand connector status for all connectors with the FM. Find the parameter or status in the left column, then perform the steps from left to right.

Parameter or Status to Monitor	Action at Rear Panel Diagram or Status Pane	Information Location
All connectors - cable present.	Check rear panel diagram.	If gray, connector present. If black, connector absent.
All connectors - current receive bandwidth.	Click IB Performance tab.	Look in the first column, Connector. Look in the fourth column, RX B/w (Gbps).
All connectors - current transmit bandwidth.	Click IB Performance tab.	Look in the first column, Connector. Look in the fifth column, TX B/w (Gbps).
All connectors - link active.	Check rear panel diagram.	If left indicator gray, link down. If left indicator green, link up.
All connectors - link quality.	Check rear panel diagram.	If center indicator gray, no activity. If center indicator green, QDR. If center indicator orange, less than QDR.
All connectors - link errors.	Check rear panel diagram.	If right indicator gray, no activity. If right indicator green, insignificant errors. If right indicator red, significant errors.
All connectors - link state.	Click IB Performance tab.	Look in the first column, Connector. Look in the third column, Link Status.
All connectors - peer device GUID and port.	Click IB Port Map tab.	Look in the first column, Connector. Look in the fifth column, GUID. Look in the seventh column, Port.
All connectors - peer device LID and port.	Click IB Port Map tab.	Look in the first column, Connector. Look in the sixth column, LID. Look in the seventh column, Port.
All connectors - peer device type and name.	Click IB Port Map tab.	Look in the first column, Connector. Look in the third column, Type. Look in the fourth column, Name.
All connectors - running bandwidth.	Click IB Performance tab. Click Show Chart.	Look in the first column, Connector. Look in the sixth column, B/W (Gbps).
All connector to I4 switch chip port mapping.	Click IB Port Map tab.	Look in the first column, Connector. Look in the second column, I4 Port.

Use this table to determine InfiniBand connector status for individual connectors with the FM. Find the parameter or status in the left column, then perform the steps from left to right.

Parameter or Status to Monitor	Action at Rear Panel Diagram or Status Pane	Information Location
Individual connector - data throughput.	Check rear panel diagram. Click connection rectangle.	Look in the second column, Switch Port. Look under Counter Name, at the bottom.
Individual connector - device name and type.	Check rear panel diagram. Click connection rectangle.	Look in the second column, Switch Port. Look under Property, at the top.
Individual connector - FRU ID information.	Check rear panel diagram. Click connection rectangle.	Look in the first column, Cable FRU.
Individual connector - GUID and port.	Check rear panel diagram. Click connection rectangle.	Look in the second column, Switch Port. Look under Property, in the middle.
Individual connector - LID and port.	Check rear panel diagram. Click connection rectangle.	Look in the second column, Switch Port. Look under Property, in the middle.
Individual connector - link status and link quality.	Check rear panel diagram. Click connection rectangle.	Look in the second column, Switch Port. Look under Property, at the bottom.
Individual connector - symbol and recovery errors.	Check rear panel diagram. Click connection rectangle.	Look in the second column, Switch Port. Look under Counter Name, at the top.
Individual connector - peer device data throughput.	Check rear panel diagram. Click connection rectangle.	Look in the third column, Peer Port. Look under Counter Name, at the bottom.
Individual connector - peer device GUID and port.	Check rear panel diagram. Click connection rectangle.	Look in the third column, Peer Port. Look under Property, in the middle.
Individual connector - peer device LID and port.	Check rear panel diagram. Click connection rectangle.	Look in the third column, Peer Port. Look under Property, in the middle.
Individual connector - peer device link status and link quality.	Check rear panel diagram. Click connection rectangle.	Look in the third column, Peer Port. Look under Property, at the bottom.
Individual connector - peer device name and type.	Check rear panel diagram. Click connection rectangle.	Look in the third column, Peer Port. Look under Property, at the top.
Individual connector - peer device symbol and recovery errors.	Check rear panel diagram. Click connection rectangle.	Look in the third column, Peer Port. Look under Counter Name, at the top.

Related Information

- [“Chassis Parameters and Status” on page 189](#)
- [“Switch Connector Parameters and Status” on page 194](#)
- [“I4 Switch Chip Port Parameters and Status” on page 194](#)

Switch Connector Parameters and Status

Use this table to determine switch connector status with the FM. Find the parameter or status in the left column, then perform the steps from left to right.

Parameter or Status to Monitor	Action at Rear Panel Diagram or Status Pane	Information Location
All connectors - cable present.	Check rear panel diagram, right side.	If gray, connector present. If black, connector absent.
All connectors - link active.	Check rear panel diagram, right side.	If indicator gray, link down. If indicator green, link up.
All connectors - link quality.	Check rear panel diagram, right side.	If center indicator gray, no activity. If center indicator green, QDR. If center indicator orange, less than QDR.
All connectors - link errors.	Check rear panel diagram, right side.	If right indicator gray, no activity. If right indicator green, insignificant errors. If right indicator red, significant errors.
Individual connector - FRU ID information.	Check rear panel diagram, right side. Click connection rectangle.	Look in the first column, Cable FRU.
Individual connector port - physical status and logical state.	Check rear panel diagram, right side. Click connection rectangle. Port status pane, click port.	Look in the left column.

Related Information

- [“Chassis Parameters and Status” on page 189](#)
- [“InfiniBand Connector Parameters and Status” on page 191](#)
- [“I4 Switch Chip Port Parameters and Status” on page 194](#)

I4 Switch Chip Port Parameters and Status

Use this table to determine I4 switch chip port status with the FM. Find the parameter or status in the left column, then perform the steps from left to right.

Parameter or Status to Monitor	Action at Status Pane	Information Location
I4 switch chip port to connector mapping.	Click IB Performance tab. Click I4 Port heading.	Look in the first column, Connector. Look in the second column, I4 Port.
I4 switch chip port - current receive bandwidth.	Click IB Performance tab. Click I4 Port heading.	Look in the second column, I4 Port. Look in the fourth column, RX B/w (Gbps).
I4 switch chip port - current transmit bandwidth.	Click IB Performance tab. Click I4 Port heading.	Look in the second column, I4 Port. Look in the fifth column, TX B/w (Gbps).
I4 switch chip port - link state.	Click IB Performance tab. Click I4 Port heading.	Look in the second column, I4 Port. Look in the third column, Link.
I4 switch chip port - peer device GUID and port.	Click IB Port Map tab. Click I4 Port heading.	Look in the second column, I4 port. Look in the fifth column, GUID. Look in the seventh column, Port
I4 switch chip port - peer device LID and port.	Click IB Port Map tab. Click I4 Port heading.	Look in the second column, I4 port. Look in the sixth column, LID. Look in the seventh column, Port
I4 switch chip port - peer device type and name.	Click IB Port Map tab. Click I4 Port heading.	Look in the second column, I4 port. Look in the third column, Type. Look in the fourth column, Name.
I4 switch chip port - running bandwidth.	Click IB Performance tab. Click I4 Port heading. Click Show Chart.	Look in the second column, I4 Port. Look in the sixth column, B/W (Gbps).

Related Information

- [“Chassis Parameters and Status” on page 189](#)
- [“InfiniBand Connector Parameters and Status” on page 191](#)
- [“Switch Connector Parameters and Status” on page 194](#)

Administering Oracle ILOM (SNMP)

These topics describe how to administer Oracle ILOM through the Simple Network Management Protocol (SNMP).

- [“SNMP Overview” on page 197](#)
- [“Understanding SNMP Commands” on page 198](#)
- [“Monitoring Oracle ILOM Targets \(SNMP\)” on page 201](#)
- [“Controlling Oracle ILOM Targets \(SNMP\)” on page 239](#)

Related Information

- [“Administering Oracle ILOM \(CLI\)” on page 27](#)
- [“Administering Oracle ILOM \(Web\)” on page 117](#)
- [“Using the Fabric Monitor” on page 175](#)
- [“Administering Hardware \(IPMI\)” on page 257](#)
- [“Understanding Oracle ILOM Commands” on page 265](#)

SNMP Overview

The Oracle ILOM implementation on the management controller within the switch can communicate the state of and enable remote management of Oracle ILOM through SNMP.

An SNMP client is required to interface with the Oracle ILOM SNMP agent on the management controller. The SNMP client must have the appropriate Oracle ILOM MIBs installed. These MIBs are included in the `SUN_DCS_36p_x.y.z_w.tar.gz` file, the Oracle ILOM firmware package that you downloaded. See [“Acquire the Switch Firmware Package \(CLI\)” on page 110](#).

The MIBs are also available using the CLI or web interface. See “Download SNMP Service MIBs (CLI)” on page 100 or “Download SNMP Service MIBs (Web)” on page 162.

Using the SNMP protocol, the client sends requests in the form of object identifiers (OIDs) to the server on the management controller. The tables in *Switch Reference*, understanding MIB OIDs, provide a listing of object identifiers.

For more information about and use of SNMP with Oracle ILOM, refer to the *Oracle Integrated Lights Out Manager (ILOM) 3.0 Protocol Management -- SNMP, IPMI,CIM,WS-MAN*, available online at:

<http://www.oracle.com/pls/topic/lookup?ctx=E19860-01&id=homepage>

Related Information

- “Understanding SNMP Commands” on page 198
- “Monitoring Oracle ILOM Targets (SNMP)” on page 201
- “Controlling Oracle ILOM Targets (SNMP)” on page 239

Understanding SNMP Commands

These topics describe how the SNMP command format is affected by the specified SNMP protocol:

- “SNMP Commands” on page 198
- “V1 and V2c Protocol Command Format” on page 199
- “V3 Protocol Command Format” on page 200

Related Information

- “SNMP Overview” on page 197
- “Monitoring Oracle ILOM Targets (SNMP)” on page 201
- “Controlling Oracle ILOM Targets (SNMP)” on page 239
- “Understanding Oracle ILOM Commands” on page 265

SNMP Commands

You can use several NetSNMP CLI client commands to perform tasks:

- `snmpget` – Returns the value of an SNMP object identifier.
- `snmpset` – Sets the value of an SNMP object identifier.
- `snmpwalk` – Returns values for multiple SNMP object identifiers.

Related Information

- [“V1 and V2c Protocol Command Format” on page 199](#)
- [“V3 Protocol Command Format” on page 200](#)

V1 and V2c Protocol Command Format

The majority of SNMP command examples provided use the V2c protocol for ease of demonstration. To perform the examples, you must enable the `v2c` protocol and sets properties in the Oracle ILOM SNMP service, and the SNMP community `public` has `rw` permission. See these tasks for instructions on how to configure these parameters:

- [“Configure the SNMP Service \(CLI\)” on page 94](#)
- [“Configure the SNMP Service \(Web\)” on page 157](#)
- [“Add SNMP Service Communities \(CLI\)” on page 98](#)
- [“Add SNMP Service Communities \(Web\)” on page 160](#)

The command format for both the V1 and V2c protocols is as follows:

```
$ command -v1|-v2c -c public mc_IP MIB_name::object_id argument
```

where:

- *command* is one of the commands described in [“SNMP Commands” on page 198](#).
- *mc_IP* is the IP address of the management controller.
- *MIB_name* is the name of the MIB.
- *object_id* is the object identifier.
- *argument* is a combination of options and variables that support the object identifier.

Note – When the SNMP command example uses the V2c protocol, the management controller IP address variable *mc_IP* is not defined, as this is different for each switch installation.

For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 s "GMT"
```

While simple in execution, the command and returned information is not encrypted or secure.

Related Information

- [“SNMP Commands” on page 198](#)
- [“V3 Protocol Command Format” on page 200](#)

V3 Protocol Command Format

In situations where a secure exchange is required, the V3 protocol supports authentication and encryption. The V3 protocol is enabled on the management controller by default. Some of the SNMP command examples in this domain use the V3 protocol. The command format for the V3 protocol is as follows:

```
$ command -v3 -u snmp_user -l security_level -a authentication_protocol -A authentication_password -x DES -X privacy_password mc_IP MIB_name::object_id argument
```

where:

- *command* is one of the commands described in [“SNMP Commands” on page 198](#).
- *snmp_user* is a configured user of the SNMP services.
- *security_level* is:
 - `authNoPriv` – There is authentication, but no privacy.
 - `authPriv` – There is authentication and privacy.
- *authentication_protocol* is either MD5 or SHA.
- *authentication_password* is the *snmp_user*'s authentication password.
- *privacy_password* is the *snmp_user*'s privacy password.
- *mc_IP* is the IP address of the management controller.
- *MIB_name* is the name of the MIB.
- *object_id* is the object identifier.
- *argument* is a combination of options and variables that support the object identifier.

Note – For simplification, when an SNMP command example uses the V3 protocol, the *snmp_user*, *security_level*, *authentication_protocol*, *authentication_password*, and *privacy_password* variables are identified as *usersnmp*, *authPriv*, *MD5*, *authpass*, and *privpass* respectively. You must use unique values for *snmp_user*, *authentication_password*, and *privacy_password* variables, specific to the SNMP users of your switch. Additionally, the management controller IP address variable *mc_IP* is not defined, as this is different for each switch installation.

For example:

```
$ snmpset -v3 -u usersnmp -l authPriv -a MD5 -A authpass -x DES -X privpass mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 s "GMT"
```

Note – See “Add SNMP Service User Accounts (CLI)” on page 95 or “Add SNMP Service User Accounts (Web)” on page 158 for instructions to configure an SNMP user and their authentication and privacy passwords.

Related Information

- “SNMP Commands” on page 198
- “V1 and V2c Protocol Command Format” on page 199

Monitoring Oracle ILOM Targets (SNMP)

These topics enable you to display the status of many Oracle ILOM targets.

- “Performing Daily Tasks (SNMP)” on page 202
- “Checking the Status of Services (SNMP)” on page 224
- “Verifying Other Aspects With Oracle ILOM (SNMP)” on page 227

Related Information

- “Monitoring Oracle ILOM Targets (CLI)” on page 36
- “Monitoring Oracle ILOM Targets (Web)” on page 121
- “Controlling Oracle ILOM Targets (SNMP)” on page 239

Performing Daily Tasks (SNMP)

These tasks help you see the status of Oracle ILOM targets that are continually changing.

- “Display the Date and Time (SNMP)” on page 202
- “Display the Time Zone (SNMP)” on page 203
- “Display the Aggregate Sensors State (SNMP)” on page 203
- “Display Power Supply Status (SNMP)” on page 204
- “Display Board-Level Voltages (SNMP)” on page 207
- “Display Internal Temperatures (SNMP)” on page 210
- “Display Fan Status (SNMP)” on page 214
- “Display the Sensor Alarm State (SNMP)” on page 217
- “Display the Entity Numbers” on page 218
- “Display Oracle ILOM Sessions (SNMP)” on page 221
- “Display the Oracle ILOM Event Log (SNMP)” on page 222

Related Information

- “Checking the Status of Services (SNMP)” on page 224
- “Verifying Other Aspects With Oracle ILOM (SNMP)” on page 227

▼ Display the Date and Time (SNMP)

- From the SNMP client, type.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0
SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0 = STRING: 2012-12-12,12:19:19.0
$
```

If you use the V3 protocol, type.

```
$ snmpget -v3 -u usersnmp -l authPriv -a MD5 -A authpass -x DES -X privpass mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0
SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0 = STRING: 2012-12-12,12:19:19.0
$
```

Related Information

- “Display the Date (CLI)” on page 37
- “Display the Date (Web)” on page 122

- [“Display the Time Zone \(SNMP\)” on page 203](#)

▼ Display the Time Zone (SNMP)

- From the SNMP client, type.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0
SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 = STRING: PST (US/Pacific)
$
```

If you use the V3 protocol, type.

```
$ snmpget -v3 -u usersnmp -l authPriv -a MD5 -A authpass -x DES -X privpass mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0
SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 = STRING: PST (US/Pacific)
$
```

Related Information

- [“Display the Date \(CLI\)” on page 37](#)
- [“Display the Date \(Web\)” on page 122](#)
- [“Display the Date and Time \(SNMP\)” on page 202](#)
- [“Set the Time Zone \(SNMP\)” on page 240](#)

▼ Display the Aggregate Sensors State (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration.

1. **Determine the entity number of the aggregate sensor.**

See [“Display the Entity Numbers” on page 218](#).

2. From the SNMP client, display the aggregate sensor's state.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.number
```

where *number* is the entity number.

For example, to determine the overall switch state, use the entity number respective to the /SYS/CHASSIS_STATUS aggregate sensor target. This example uses entity number 27:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.27  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.27 = INTEGER: 1  
$
```

In the output, INTEGER: 1 indicates the sensor is in Deasserted state.
INTEGER: 2 means the sensor is in Asserted state.

Related Information

- [“Display the Aggregate Sensors State \(CLI\)” on page 40](#)
- [“Display the Aggregate Sensors State \(Web\)” on page 123](#)
- [“Display Power Supply Status \(SNMP\)” on page 204](#)
- [“Display Board-Level Voltages \(SNMP\)” on page 207](#)
- [“Display Internal Temperatures \(SNMP\)” on page 210](#)
- [“Display Fan Status \(SNMP\)” on page 214](#)
- [“Display the Sensor Alarm State \(SNMP\)” on page 217](#)
- [“Display the Sensor States \(IPMI\)” on page 258](#)
- [“Display the Entity Numbers” on page 218](#)

▼ Display Power Supply Status (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration. For more information about entity numbers, see [“Display the Entity Numbers” on page 218](#).

1. From the SNMP client, check for the presence of the power supply.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.number
```

where *number* is the entity number for the /SYS/PSUX/PRSNT presence sensor target for the respective power supply. This example uses entity number 37 for the left power supply:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.37  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.37 = INTEGER: 2  
$
```

In the output, the INTEGER: 2 means the power supply is present. INTEGER: 1 means the power supply is not present.

2. Check for the presence of input power.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.number
```

where *number* is the entity number for the /SYS/PSUX/AC_PRESENT sensor target for the respective power supply. This example uses entity number 39 for the left power supply:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.39  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.39 = INTEGER: 1  
$
```

In the output, the INTEGER: 1 means State Deasserted, or input power is present. INTEGER: 2 means State Asserted, or input power is not present.

3. Check for an alert.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.number
```

where *number* is the entity number for the /SYS/PSUX/ALERT sensor target for the respective power supply. This example uses entity number 38 for the left power supply:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.38  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.38 = INTEGER: 1  
$
```

In the output, the INTEGER: 1 means State Deasserted, or there are no errors with the power supply. INTEGER: 2 means State Asserted, or there is an error with the power supply.

4. Check for a fault.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.number
```

where *number* is the entity number for the /SYS/PSUX/FAULT sensor target for the respective power supply. This example uses entity number 40 for the left power supply:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.40  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.40 = INTEGER: 1  
$
```

In the output, the INTEGER: 1 means State Deasserted, or there are no faults with the power supply. INTEGER: 2 means State Asserted, or there is a fault with the power supply.

Related Information

- [“Display Power Supply Status \(CLI\)”](#) on page 42
- [“Display Power Supply Status \(Web\)”](#) on page 124
- [“Display the Aggregate Sensors State \(SNMP\)”](#) on page 203
- [“Display Board-Level Voltages \(SNMP\)”](#) on page 207
- [“Display Internal Temperatures \(SNMP\)”](#) on page 210
- [“Display Fan Status \(SNMP\)”](#) on page 214
- [“Display the Sensor Alarm State \(SNMP\)”](#) on page 217

- “Display the Entity Numbers” on page 218

▼ Display Board-Level Voltages (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration.

Note – The voltage values displayed for this procedure are in millivolts.

1. Determine the entity number of the voltage sensor.

See “Display the Entity Numbers” on page 218.

2. Display the basic board-level voltage data.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.number
```

where *number* is the entity number.

For example, to display the current 3.3 VDC voltage, use the entity number respective to the /SYS/MB/V_3.3VMain voltage sensor target. This example uses entity number 4:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.4  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.4 = INTEGER: 3249  
$
```

The 3.3 VDC voltage displayed in the output of the example is 3249 millivolts, or 3.249 volts.

3. Display comprehensive board-level voltages.

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.4 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.6 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.7 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.8 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.10 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.11 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.13 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.15 = INTEGER: volts(6)  
.
```

```

.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.4 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.6 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.7 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.8 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.10 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.11 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.13 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.15 = INTEGER: -3
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.4 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.6 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.7 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.8 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.10 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.11 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.13 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.15 = INTEGER: none(1)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.4 = INTEGER: 3266
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.6 = INTEGER: 3351
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.7 = INTEGER: 11965
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.8 = INTEGER: 5018
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.10 = INTEGER: 3213
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.11 = INTEGER: 1006
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.13 = INTEGER: 1216
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.15 = INTEGER: 2503
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.4 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.6 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.7 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.8 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.10 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.11 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.13 = INTEGER:
reset(1)

```

```
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.15 = INTEGER:
reset(1)
.
.
.
$
```

4. Look through the output for the entity numbers respective to the voltage sensors.

You can also filter the output of the `snmpwalk` command for a specific entity number. This is an example of filtering the `snmpwalk` command output:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.number ='
```

where *number* is the entity number.

Note – The manner in which you can filter the output varies according to your operating system.

To filter voltage information for the 3.3 VDC main voltage, use the entity number respective to the `/SYS/MB/V_3.3VMain` voltage sensor target. This filtering example uses entity number 4:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.4 ='
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.4 = INTEGER: volts(6)
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.4 = INTEGER: -3
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.4 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.4 = INTEGER: 3266
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMin.4 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMax.4 = INTEGER: 255
SUN-PLATFORM-MIB::sunPlatNumericSensorAccuracy.4 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdNonCritical.4 = INTEGER:
3112
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdNonCritical.4 = INTEGER:
3402
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdCritical.4 = INTEGER: 3060
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdCritical.4 = INTEGER: 3454
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdFatal.4 = INTEGER: 2958
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdFatal.4 = INTEGER: 3539
SUN-PLATFORM-MIB::sunPlatNumericSensorHysteresis.4 = Gauge32: 0
```

```
SUN-PLATFORM-MIB::sunPlatNumericSensorEnabledThresholds.4 = BITS: FC
lowerThresholdNonCritical(0) upperThresholdNonCritical(1)
lowerThresholdCritical(2) upperThresholdCritical(3) lower
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.4 = INTEGER:
reset(1)
$
```

Related Information

- “Display Board-Level Voltages (CLI)” on page 44
- “Display Board-Level Voltages (Web)” on page 124
- “Display the Aggregate Sensors State (SNMP)” on page 203
- “Display Power Supply Status (SNMP)” on page 204
- “Display Internal Temperatures (SNMP)” on page 210
- “Display Fan Status (SNMP)” on page 214
- “Display the Sensor Alarm State (SNMP)” on page 217
- “Display the Entity Numbers” on page 218

▼ Display Internal Temperatures (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration.

Note – The temperature values displayed for this procedure are in degrees celsius.

1. Determine the entity number of the temperature sensor.

See “Display the Entity Numbers” on page 218.

2. Display the basic temperature data.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.number
```

where *number* is the entity number.

For example, to display the current I4 switch chip temperature, use the entity number respective to the /SYS/MB/T_I4A temperature sensor target. This example uses entity number 21.

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.21  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.21 = INTEGER: 36  
$
```

The I4 switch chip temperature displayed in the output of the example is 36 degrees celsius.

Note – Temperature readings can vary and are influenced by the switch environment and loading.

3. Display comprehensive temperature information:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.4 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.6 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.7 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.8 = INTEGER: volts(6)  
  
. . .  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.17 = INTEGER: degC(3)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.18 = INTEGER: degC(3)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.19 = INTEGER: degC(3)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.21 = INTEGER: degC(3)  
  
. . .  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.17 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.18 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.19 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.21 = INTEGER: 0  
  
. . .
```

```

SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.17 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.18 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.19 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.21 = INTEGER: none(1)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.17 = INTEGER: 28
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.18 = INTEGER: 28
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.19 = INTEGER: 42
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.21 = INTEGER: 31
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.17 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.18 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.19 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.21 = INTEGER:
reset(1)
.
.
.
$

```

4. Look through the output for the entity numbers respective to the temperature sensors.

You can also filter the output of the `snmpwalk` command for a specific entity number. This is an example of filtering the `snmpwalk` command output:

```

$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.number ='

```

where *number* is the entity number.

Note – The manner in which you can filter the output varies according to your operating system.

To filter temperature information for the I4 switch chip, use the entity number respective to the /SYS/MB/T_I4A temperature sensor target. This filtering example uses entity number 21:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.21 ='
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.21 = INTEGER: degC(3)
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.21 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.21 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.21 = INTEGER: 36
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMin.21 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMax.21 = INTEGER: 255
SUN-PLATFORM-MIB::sunPlatNumericSensorAccuracy.21 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdNonCritical.21 = INTEGER:
0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdNonCritical.21 = INTEGER:
0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdCritical.21 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdCritical.21 = INTEGER: 70
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdFatal.21 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdFatal.21 = INTEGER: 100
SUN-PLATFORM-MIB::sunPlatNumericSensorHysteresis.21 = Gauge32: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorEnabledThresholds.21 = BITS: 14
upperThresholdCritical(3) upperThresholdFatal(5)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.21 = INTEGER:
reset(1)
$
```

Related Information

- [“Display Internal Temperatures \(CLI\)” on page 46](#)
- [“Display Internal Temperatures \(Web\)” on page 125](#)
- [“Display the Aggregate Sensors State \(SNMP\)” on page 203](#)
- [“Display Power Supply Status \(SNMP\)” on page 204](#)
- [“Display Board-Level Voltages \(SNMP\)” on page 207](#)
- [“Display Fan Status \(SNMP\)” on page 214](#)
- [“Display the Sensor Alarm State \(SNMP\)” on page 217](#)
- [“Display the Entity Numbers” on page 218](#)

▼ Display Fan Status (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration. For more information about entity numbers, see [“Display the Entity Numbers” on page 218](#).

Note – The fan speed values displayed for this procedure are in RPM.

1. From the SNMP client, check for the presence of the fan.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.number
```

where *number* is the entity number for the /SYS/FANx/PRSNT presence sensor target for the respective fan. This example uses entity number 47 for the left fan (FAN1):

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.47  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.47 = INTEGER: 2  
$
```

In the output, the INTEGER: 2 means the fan is present. INTEGER: 1 means the fan is not present.

2. Check the speed of the fan.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.number
```

where *number* is the entity number for the /SYS/FANx/TACH speed sensor target for the respective fan. This example uses entity number 48 for the left fan (FAN1):

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.48  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.48 = INTEGER: 12099  
$
```

The FAN1 speed displayed in the output of the example is 12099 RPM.

Note – Fan speed readings can vary and are influenced by the switch environment and loading.

3. Check for a fault.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.number
```

where *number* is the entity number for the /SYS/FANx/FAULT sensor target for the respective fan. This example uses entity number 49 for the left fan (FAN1):

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.49  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.49 = INTEGER: 1  
$
```

In the output, the INTEGER: 1 means State Deasserted, or there are no faults with the fan. INTEGER: 2 means State Asserted, or there is a fault with the fan.

4. Display comprehensive fan information.

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.4 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.6 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.7 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.8 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.10 = INTEGER: volts(6)  
. . .  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.48 = INTEGER: rpm(20)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.52 = INTEGER: rpm(20)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.56 = INTEGER: rpm(20)  
. . .  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.48 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.52 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.56 = INTEGER: 0  
. . .  
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.48 = INTEGER: none(1)  
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.52 = INTEGER: none(1)  
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.56 = INTEGER: none(1)  
. . .  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.48 = INTEGER: 12208  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.52 = INTEGER: 11772  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.56 = INTEGER: 12099
```

```

.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.48 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.52 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.56 = INTEGER:
reset(1)
$

```

5. Look though the output for the entity numbers respective to the fans.

You can also filter the output of the `snmpwalk` command for a specific entity number. This is an example of filtering the `snmpwalk` command output.:

```

$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.number ='

```

where *number* is the entity number.

Note – The manner in which you can filter the output varies according to your operating system.

To filter speed information for the left fan (FAN1), use the entity number respective to the `/SYS/FAN1/TACH` speed sensor target. This filtering example uses entity number 48:

```

$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.48 ='
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.48 = INTEGER: rpm(20)
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.48 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.48 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.48 = INTEGER: 12208
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMin.48 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMax.48 = INTEGER: 255
SUN-PLATFORM-MIB::sunPlatNumericSensorAccuracy.48 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdNonCritical.48 = INTEGER:
6322
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdNonCritical.48 = INTEGER:
0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdCritical.48 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdCritical.48 = INTEGER:
26705
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdFatal.48 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdFatal.48 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorHysteresis.48 = Gauge32: 0

```

```
SUN-PLATFORM-MIB::sunPlatNumericSensorEnabledThresholds.48 = BITS: 90
lowerThresholdNonCritical(0) upperThresholdCritical(3)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.48 = INTEGER:
reset(1)
$
```

Related Information

- [“Display Fan Status \(CLI\)” on page 47](#)
- [“Display Fan Status \(Web\)” on page 125](#)
- [“Display the Aggregate Sensors State \(SNMP\)” on page 203](#)
- [“Display Power Supply Status \(SNMP\)” on page 204](#)
- [“Display Board-Level Voltages \(SNMP\)” on page 207](#)
- [“Display Internal Temperatures \(SNMP\)” on page 210](#)
- [“Display Fan Status \(SNMP\)” on page 214](#)
- [“Display the Sensor Alarm State \(SNMP\)” on page 217](#)
- [“Display the Entity Numbers” on page 218](#)

▼ Display the Sensor Alarm State (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration.

1. Determine the entity number of the sensor.

See [“Display the Entity Numbers” on page 218](#).

2. From the SNMP client, display the sensor's alarm state.

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.number
```

where *number* is the entity number.

For example, to determine the overall switch alarm state, use the entity number respective to the /SYS/CHASSIS_STATUS aggregate sensor target. This example uses entity number 27:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.27  
SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.27 = INTEGER: cleared(7)  
$
```

In the output, the INTEGER: *cleared(7)* indicates the alarm state for the sensor is clear. These alarm states are possible:

- INTEGER: *critical(1)* – A critical alarm has occurred.
- INTEGER: *major(2)* – A major alarm has occurred.
- INTEGER: *minor(3)* – A minor alarm has occurred.
- INTEGER: *indeterminate(4)* – The alarm is indeterminate, or not applicable.
- INTEGER: *cleared(7)* – The alarm has been cleared.

Related Information

- [“Display the Aggregate Sensors State \(CLI\)”](#) on page 40
- [“Display the Aggregate Sensors State \(Web\)”](#) on page 123
- [“Display the Aggregate Sensors State \(SNMP\)”](#) on page 203
- [“Display Power Supply Status \(SNMP\)”](#) on page 204
- [“Display Board-Level Voltages \(SNMP\)”](#) on page 207
- [“Display Internal Temperatures \(SNMP\)”](#) on page 210
- [“Display Fan Status \(SNMP\)”](#) on page 214
- [“Display the Sensor States \(IPMI\)”](#) on page 258
- [“Display the Entity Numbers”](#) on page 218

▼ Display the Entity Numbers

This procedure outputs the entity numbers and their respective Oracle ILOM targets.

Note – The entity numbers displayed in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration.

1. From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalName
ENTITY-MIB::entPhysicalName.1 = STRING: /SYS
ENTITY-MIB::entPhysicalName.2 = STRING: /SYS/MB
ENTITY-MIB::entPhysicalName.3 = STRING: /SYS/MB/V_ECB
ENTITY-MIB::entPhysicalName.4 = STRING: /SYS/MB/V_3.3VMain
ENTITY-MIB::entPhysicalName.5 = STRING: /SYS/MB/V_3.3VMainOK
.
.
.
ENTITY-MIB::entPhysicalName.58 = STRING: /SYS/I_POWER
ENTITY-MIB::entPhysicalName.59 = STRING: /SYS/I_ATTENTION
ENTITY-MIB::entPhysicalName.60 = STRING: /SYS/I_LOCATOR
$
```

You can also filter the output of the `snmpwalk` command to display just entity numbers and their respective Oracle ILOM targets. This is an example of filtering the `snmpwalk` command output:

Note – The manner in which you can filter the output varies according to your operating system.

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalName | awk -F"me." '{print $2}' | awk '{print $1 " " $4}'
1 /SYS
2 /SYS/MB
3 /SYS/MB/V_ECB
4 /SYS/MB/V_3.3VMain
5 /SYS/MB/V_3.3VMainOK
.
.
.
58 /SYS/I_POWER
59 /SYS/I_ATTENTION
60 /SYS/I_LOCATOR
$
```

2. Use the entity numbers for daily tasks.

See:

- “Display the Aggregate Sensors State (SNMP)” on page 203
- “Display Power Supply Status (SNMP)” on page 204
- “Display Board-Level Voltages (SNMP)” on page 207
- “Display Internal Temperatures (SNMP)” on page 210
- “Display Fan Status (SNMP)” on page 214
- “Display the Sensor Alarm State (SNMP)” on page 217

Related Information

- “Display Switch FRU ID (SNMP)” on page 231
- “Display Power Supply FRU ID (SNMP)” on page 233
- “Display the System Components (SNMP)” on page 235

▼ Display Oracle ILOM Sessions (SNMP)

- From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSessions
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsUsername.118 = STRING: user1
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsUsername.119 = STRING: root
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsUsername.126 = STRING: root
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsConnectionType.118 = INTEGER: web(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsConnectionType.119 = INTEGER: shell(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsConnectionType.126 = INTEGER: other(3)
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.118 = STRING:
2012-10-20,12:14:27.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.119 = STRING:
2012-10-20,12:17:40.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.126 = STRING:
2012-10-20,12:27:4.0
$
```

If you use the V3 protocol, type.

```
$ snmpwalk -v3 -u usersnmp -l authPriv -a MD5 -A authpass -x DES -X privpass
mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSessions
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsUsername.118 = STRING: user1
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsUsername.119 = STRING: root
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsUsername.126 = STRING: root
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsConnectionType.118 = INTEGER: web(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsConnectionType.119 = INTEGER: shell(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsConnectionType.126 = INTEGER: other(3)
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.118 = STRING:
2012-10-20,12:14:27.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.119 = STRING:
2012-10-20,12:17:40.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.126 = STRING:
2012-10-20,12:27:4.0
$
```

The output displays three users. user1 is using the web interface, and the root user is using the CLI interface.

Related Information

- “Display the Oracle ILOM Sessions (CLI)” on page 49
- “Display the Oracle ILOM Sessions (Web)” on page 126
- “Display Oracle ILOM User Accounts (SNMP)” on page 229

▼ Display the Oracle ILOM Event Log (SNMP)

The event log displays:

- type
- timestamp
- class
- severity
- description

● From the SNMP client, type.

```

$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTable
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.1 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.2 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.3 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.4 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.5 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.1 = STRING:
2012-10-20,10:22:28.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.2 = STRING:
2012-10-20,10:22:50.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.3 = STRING:
2012-10-20,10:22:56.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.4 = STRING:
2012-10-20,10:23:20.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.5 = STRING:
2012-10-20,10:23:20.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogClass.1 = INTEGER: audit(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogClass.2 = INTEGER: audit(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogClass.3 = INTEGER: audit(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogClass.4 = INTEGER: audit(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogClass.5 = INTEGER: audit(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogSeverity.1 = INTEGER: minor(4)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogSeverity.2 = INTEGER: minor(4)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogSeverity.3 = INTEGER: minor(4)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogSeverity.4 = INTEGER: minor(4)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogSeverity.5 = INTEGER: minor(4)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogDescription.1 = STRING: Set :
object = /logs/event/clear : value = true : success
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogDescription.2 = STRING: root : Create :
object = /users/user4 : value = N/A : success
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogDescription.3 = STRING: root : Set :
object = /users/user4/password : value = ***** : success
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogDescription.4 = STRING: root : Set :
object = /services/snmp/users/snmpuser/permission : value = rw : success
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogDescription.5 = STRING: root : Set :
object = /services/snmp/users/snmpuser/adminstate : value = enabled : success
$

```

If you use the V3 protocol, type.

```

$ snmpwalk -v3 -u usersnmp -l authPriv -a MD5 -A authpass -x DES -X privpass
mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTable
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.1 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.2 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.3 = INTEGER: log(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.4 = INTEGER: log(1)

```

```
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogType.5 = INTEGER: log(1)
.
.
.
$
```

Related Information

- “Display the Oracle ILOM Event Log (CLI)” on page 50
- “Display the Oracle ILOM Event Log (Web)” on page 126
- “Display the System Event Log (IPMI)” on page 261
- “Clear the Oracle ILOM Event Log (SNMP)” on page 242
- “Set the Remote Log Hosts (SNMP)” on page 242

Checking the Status of Services (SNMP)

These topics enable you to display the status of the many services supported by Oracle ILOM.

- “Display the HTTP Service Status (SNMP)” on page 224
- “Display the HTTPS Service Status (SNMP)” on page 225
- “Display the DNS Client Status (SNMP)” on page 225
- “Display the SMTP Client Status (SNMP)” on page 226
- “Display the NTP State (SNMP)” on page 226
- “Display the NTP Servers (SNMP)” on page 227

Related Information

- “Performing Daily Tasks (SNMP)” on page 202
- “Verifying Other Aspects With Oracle ILOM (SNMP)” on page 227

▼ Display the HTTP Service Status (SNMP)

- From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHttp
SUN-ILOM-CONTROL-MIB::ilomCtrlHttpEnabled.0 = INTEGER: false(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlHttpPortNumber.0 = INTEGER: 80
SUN-ILOM-CONTROL-MIB::ilomCtrlHttpSecureRedirect.0 = INTEGER: true(1)
$
```

Related Information

- “Display the HTTP Service Status (CLI)” on page 53
- “Display the HTTP Service Status (Web)” on page 128
- “Display the HTTPS Service Status (SNMP)” on page 225
- “Set the HTTP Service State (SNMP)” on page 250

▼ Display the HTTPS Service Status (SNMP)

- From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHttps
SUN-ILOM-CONTROL-MIB::ilomCtrlHttpsEnabled.0 = INTEGER: true(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlHttpsPortNumber.0 = INTEGER: 443
$
```

Related Information

- “Display the HTTPS Service Status (CLI)” on page 54
- “Display the HTTPS Service Status (Web)” on page 128
- “Display the HTTP Service Status (SNMP)” on page 224

▼ Display the DNS Client Status (SNMP)

- From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDNS
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSNameServers.0 = STRING: 129.158.227.31,
129.158.227.32
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSSearchPath.0 = STRING: india.sun.com,
norway.sun.com
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSdhcpAutoDns.0 = INTEGER: true(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSTimeout.0 = INTEGER: 5
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSRetries.0 = INTEGER: 1
$
```

Related Information

- “Display the DNS Client Status (CLI)” on page 57
- “Display the DNS Client Status (Web)” on page 130
- “Configure the DNS Client (SNMP)” on page 243

▼ Display the SMTP Client Status (SNMP)

1. From the SNMP client, display the state of the SMTP client.

Note – This example shows that the SMTP client is not enabled.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPEnabled.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPEnabled.0 = INTEGER: false(2)
$
```

2. Display the SMTP server IP address.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPServerIP.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPServerIP.0 = IpAddress: 10.18.223.35
$
```

3. Display the SMTP server port.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPPortNumber.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPPortNumber.0 = INTEGER: 25
$
```

Related Information

- [“Display the SMTP Client Status \(CLI\)” on page 58](#)
- [“Display the SMTP Client Status \(Web\)” on page 131](#)
- [“Configure the SMTP Client \(SNMP\)” on page 244](#)

▼ Display the NTP State (SNMP)

- From the SNMP client, type.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlNTPEnabled.0
SUN-ILOM-CONTROL-MIB::ilomCtrlNTPEnabled.0 = INTEGER: true(1)
$
```

Note – The true(1) in the output signifies that NTP is enabled.

Related Information

- [“Display the NTP Servers \(CLI\)” on page 58](#)

- “Display the Network Time Protocol Servers (Web)” on page 131
- “Display the NTP Servers (SNMP)” on page 227
- “Set the Network Time Protocol State (SNMP)” on page 241

▼ Display the NTP Servers (SNMP)

- From the SNMP client, type.

```
$ snmpget -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerOneIP.0
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerOneIP.0 = IpAddress: 123.45.67.90
$ snmpget -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerTwoIP.0
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerTwoIP.0 = IpAddress: 0.0.0.0
$
```

Note – The IP address of 0.0.0.0 for NTP server two in the output signifies that a second NTP server is not configured.

Related Information

- “Display the NTP Servers (CLI)” on page 58
- “Display the Network Time Protocol Servers (Web)” on page 131
- “Display the NTP State (SNMP)” on page 226
- “Set the Network Time Protocol Servers (SNMP)” on page 241

Verifying Other Aspects With Oracle ILOM (SNMP)

These tasks display the status of aspects of Oracle ILOM not included in “Performing Daily Tasks (SNMP)” on page 202 or “Checking the Status of Services (SNMP)” on page 224.

- “Display the Alert Properties (SNMP)” on page 228
- “Display Oracle ILOM User Accounts (SNMP)” on page 229
- “Display the Remote Log Hosts (SNMP)” on page 230
- “Display the Network Management Configuration (SNMP)” on page 230
- “Display Switch FRU ID (SNMP)” on page 231
- “Display Power Supply FRU ID (SNMP)” on page 233

- “Display the System Components (SNMP)” on page 235
- “Display the Additional System Component Information (SNMP)” on page 237
- “Display the Firmware Version (SNMP)” on page 238
- “Display System Identification Properties (SNMP)” on page 238

Related Information

- “Performing Daily Tasks (SNMP)” on page 202
- “Checking the Status of Services (SNMP)” on page 224

▼ Display the Alert Properties (SNMP)

Alerts can provide advance notice of a system failure. The Oracle ILOM implementation in the management controller supports 15 alert rules, which configure alert properties. Supported alert types are SNMP traps, IPMI PETs, and email alerts. For SNMP traps and PETs, the alert destination must have the relevant Oracle ILOM MIBs installed and must support SNMP traps.

- From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlAlerts
SUN-ILOM-CONTROL-MIB::ilomCtrlAlerts
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.1 = INTEGER: major(3)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = INTEGER: critical(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.3 = INTEGER: disable(1)
.
.
.
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.14 = INTEGER: disable(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.15 = INTEGER: disable(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.1 = INTEGER: snmptrap(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = INTEGER: snmptrap(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.3 = INTEGER: snmptrap(2)
.
.
.
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.14 = INTEGER: snmptrap(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.15 = INTEGER: snmptrap(2)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.2 = IpAddress: 10.60.33.40
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.3 = IpAddress: 0.0.0.0
.
.
.
$
```

Note – The output seen in the example is a portion of the full output and might be different for your environment.

Related Information

- [“Display the Alert Properties \(CLI\)” on page 61](#)
- [“Display the Alert Properties \(Web\)” on page 132](#)
- [“Enable Alerts to Send SNMP Traps \(SNMP\)” on page 251](#)
- [“Modify Alert SNMP Version \(SNMP\)” on page 254](#)
- [“Disable Alerts \(SNMP\)” on page 255](#)

▼ Display Oracle ILOM User Accounts (SNMP)

- From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserTable
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserPassword."root" = STRING: "(Not
Viewable)"
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserPassword."ilom-admin" = STRING: "(Not
Viewable)"
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserPassword."ilom-operator" = STRING:
"(Not Viewable)"
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRoles."root" = STRING: "aucro"
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRoles."ilom-admin" = STRING: "aucro"
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRoles."ilom-operator" = STRING: "o"
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus."root" = INTEGER: active(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus."ilom-admin" = INTEGER:
active(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus."ilom-operator" = INTEGER:
active(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserCLIMode."root" = INTEGER: default(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserCLIMode."ilom-admin" = INTEGER:
default(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserCLIMode."ilom-operator" = INTEGER:
default(1)
$
```

Note – The output identifies three users. Of them, users root and ilom-admin have an administrative role.

Related Information

- “Display the Oracle ILOM User Accounts (CLI)” on page 62
- “Display the Oracle ILOM User Accounts (Web)” on page 133
- “Add an Oracle ILOM User Account (SNMP)” on page 248
- “Delete an Oracle ILOM User Account (SNMP)” on page 249

▼ Display the Remote Log Hosts (SNMP)

- From the SNMP client, type.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest1.0
SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest1.0 = IPAddress: 123.45.67.89
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest2.0
SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest2.0 = IPAddress: 0.0.0.0
$
```

Related Information

- “Display the Remote Log Hosts (CLI)” on page 63
- “Display the Remote Log Hosts (Web)” on page 133
- “Set the Remote Log Hosts (SNMP)” on page 242

▼ Display the Network Management Configuration (SNMP)

- From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlNetwork
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkMacAddress."SP/network" = STRING:
46:46:41:39:00:FF
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpDiscovery."SP/network" = INTEGER:
static(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpAddress."SP/network" = IPAddress:
123.45.67.89
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpGateway."SP/network" = IPAddress:
123.45.67.5
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpNetmask."SP/network" = IPAddress:
255.255.255.0
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpDiscovery."SP/network" =
INTEGER: static(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpAddress."SP/network" =
IpAddress: 123.45.67.89
```



```
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpGateway."SP/network" =
IpAddress: 123.45.67.5
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpNetmask."SP/network" =
IpAddress: 255.255.255.0
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkCommitPending."SP/network" = INTEGER:
false(2)
$
```

Related Information

- [“Display the Network Management Configuration \(CLI\)” on page 64](#)
- [“Display the Network Management Configuration \(Web\)” on page 134](#)
- [“Set the Network Parameters \(SNMP\)” on page 245](#)

▼ Display Switch FRU ID (SNMP)

Note – The entity number for the /SYS switch container target might change with different firmware releases or switch configurations. Verify the switch entity number (1) with the procedure in [“Display the Entity Numbers” on page 218](#).

1. From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36
ENTITY-MIB::entPhysicalDescr.2 = STRING: Motherboard
ENTITY-MIB::entPhysicalDescr.3 = STRING: Fault Sensor
ENTITY-MIB::entPhysicalDescr.4 = STRING: Voltage Sensor
ENTITY-MIB::entPhysicalDescr.5 = STRING: Fault Sensor
.
.
.
ENTITY-MIB::entPhysicalVendorType.1 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalContainedIn.1 = INTEGER: 0
.
.
.
ENTITY-MIB::entPhysicalClass.1 = INTEGER: chassis(3)
.
.
.
ENTITY-MIB::entPhysicalParentRelPos.1 = INTEGER: -1
.
```

```

.
.
ENTITY-MIB::entPhysicalName.1 = STRING: /SYS
.
.
.
ENTITY-MIB::entPhysicalHardwareRev.1 = STRING:
.
.
.
ENTITY-MIB::entPhysicalFirmwareRev.1 = STRING: 2.1.2-1
.
.
.
$

```

2. Look through the output for entity number 1.

You can also filter the output of the `snmpwalk` command for entity number 1. This is an example of filtering the `snmpwalk` command output:

Note – The manner in which you can filter the output varies according to your operating system.

```

$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable | grep -F '.1 ='
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36
ENTITY-MIB::entPhysicalVendorType.1 = OID: SNMPv2-SMI::zeroDotZero
ENTITY-MIB::entPhysicalContainedIn.1 = INTEGER: 0
ENTITY-MIB::entPhysicalClass.1 = INTEGER: chassis(3)
ENTITY-MIB::entPhysicalParentRelPos.1 = INTEGER: -1
ENTITY-MIB::entPhysicalName.1 = STRING: /SYS
ENTITY-MIB::entPhysicalHardwareRev.1 = STRING:
ENTITY-MIB::entPhysicalFirmwareRev.1 = STRING: 2.1.2-1
ENTITY-MIB::entPhysicalSoftwareRev.1 = STRING:
ENTITY-MIB::entPhysicalSerialNum.1 = STRING: 0924AK2285
ENTITY-MIB::entPhysicalMfgName.1 = STRING: Sun Microsystems, Inc.
ENTITY-MIB::entPhysicalModelName.1 = STRING: 541-3495-06
ENTITY-MIB::entPhysicalAlias.1 = STRING:
ENTITY-MIB::entPhysicalAssetID.1 = STRING:
ENTITY-MIB::entPhysicalIsFRU.1 = INTEGER: true(1)
$

```

Related Information

- [“Display Switch FRU ID \(CLI\)” on page 65](#)
- [“Display System Component FRU ID \(Web\)” on page 135](#)
- [“Display FRU ID Information \(IPMI\)” on page 262](#)

- [“Display the Entity Numbers” on page 218](#)

▼ Display Power Supply FRU ID (SNMP)

Note – You can only display FRU ID information for currently present power supplies.

Note – The entity numbers for the /SYS/PSUx power supply FRU targets might change with different firmware releases or switch configurations. Verify the power supply entity numbers with the procedure in [“Display the Entity Numbers” on page 218](#).

1. From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36
ENTITY-MIB::entPhysicalDescr.2 = STRING: Motherboard
ENTITY-MIB::entPhysicalDescr.3 = STRING: Fault Sensor
ENTITY-MIB::entPhysicalDescr.4 = STRING: Voltage Sensor
ENTITY-MIB::entPhysicalDescr.5 = STRING: Fault Sensor
.
.
.
ENTITY-MIB::entPhysicalDescr.36 = STRING: Power Supply FRU
.
.
.
ENTITY-MIB::entPhysicalDescr.41 = STRING: Power Supply FRU
.
.
.
ENTITY-MIB::entPhysicalVendorType.36 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalVendorType.41 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalContainedIn.36 = INTEGER: 1
.
.
.
```

```

ENTITY-MIB::entPhysicalContainedIn.41 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalClass.36 = INTEGER: powerSupply(6)
.
.
.
ENTITY-MIB::entPhysicalClass.41 = INTEGER: powerSupply(6)
.
.
.
ENTITY-MIB::entPhysicalParentRelPos.36 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalParentRelPos.41 = INTEGER: 2
.
.
.
ENTITY-MIB::entPhysicalName.36 = STRING: /SYS/PSU0
.
.
.
ENTITY-MIB::entPhysicalName.41 = STRING: /SYS/PSU1
.
.
.
$

```

2. Look though the output for the entity numbers respective to the power supplies.

You can also filter the output of the `snmpwalk` command for a specific entity number. This is an example of filtering the `snmpwalk` command output.:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable | grep -F '.number ='
```

where *number* is the entity number.

Note – The manner in which you can filter the output varies according to your operating system.

To filter voltage information for the left power supply (PSU0), use the entity number respective to the /SYS/PSU0 power supply FRU target. This filtering example uses entity number 36:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable | grep -F '.36 ='
ENTITY-MIB::entPhysicalDescr.36 = STRING: Power Supply FRU
ENTITY-MIB::entPhysicalVendorType.36 = OID: SNMPv2-SMI::zeroDotZero
ENTITY-MIB::entPhysicalContainedIn.36 = INTEGER: 1
ENTITY-MIB::entPhysicalClass.36 = INTEGER: powerSupply(6)
ENTITY-MIB::entPhysicalParentRelPos.36 = INTEGER: 1
ENTITY-MIB::entPhysicalName.36 = STRING: /SYS/PSU0
ENTITY-MIB::entPhysicalHardwareRev.36 = STRING:
ENTITY-MIB::entPhysicalFirmwareRev.36 = STRING:
ENTITY-MIB::entPhysicalSoftwareRev.36 = STRING: 02
ENTITY-MIB::entPhysicalSerialNum.36 = STRING: BF0CFE
ENTITY-MIB::entPhysicalMfgName.36 = STRING: EMERSON
ENTITY-MIB::entPhysicalModelName.36 = STRING: 3002143
ENTITY-MIB::entPhysicalAlias.36 = STRING: A237
ENTITY-MIB::entPhysicalAssetID.36 = STRING:
ENTITY-MIB::entPhysicalIsFRU.36 = INTEGER: true(1)
$
```

Related Information

- [“Display Power Supply FRU ID \(CLI\)” on page 66](#)
- [“Display System Component FRU ID \(Web\)” on page 135](#)
- [“Display FRU ID Information \(IPMI\)” on page 262](#)
- [“Display the Entity Numbers” on page 218](#)

▼ Display the System Components (SNMP)

1. From the SNMP client, type.

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalName
ENTITY-MIB::entPhysicalName.1 = STRING: /SYS
ENTITY-MIB::entPhysicalName.2 = STRING: /SYS/MB
ENTITY-MIB::entPhysicalName.3 = STRING: /SYS/MB/V_ECB
ENTITY-MIB::entPhysicalName.4 = STRING: /SYS/MB/V_3.3VMain
ENTITY-MIB::entPhysicalName.5 = STRING: /SYS/MB/V_3.3VMainOK
ENTITY-MIB::entPhysicalName.6 = STRING: /SYS/MB/V_3.3VStby
ENTITY-MIB::entPhysicalName.7 = STRING: /SYS/MB/V_12V
```

```
.  
. .  
ENTITY-MIB::entPhysicalName.58 = STRING: /SYS/I_POWER  
ENTITY-MIB::entPhysicalName.59 = STRING: /SYS/I_ATTENTION  
ENTITY-MIB::entPhysicalName.60 = STRING: /SYS/I_LOCATOR  
$
```

Note – The example is a portion of the full output.

2. Display the physical entity descriptions.

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalDescr  
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36  
ENTITY-MIB::entPhysicalDescr.2 = STRING: Motherboard  
ENTITY-MIB::entPhysicalDescr.3 = STRING: Fault Sensor  
ENTITY-MIB::entPhysicalDescr.4 = STRING: Voltage Sensor  
ENTITY-MIB::entPhysicalDescr.5 = STRING: Fault Sensor  
ENTITY-MIB::entPhysicalDescr.6 = STRING: Voltage Sensor  
ENTITY-MIB::entPhysicalDescr.7 = STRING: Voltage Sensor  
. .  
ENTITY-MIB::entPhysicalDescr.58 = STRING: Indicator  
ENTITY-MIB::entPhysicalDescr.59 = STRING: Indicator  
ENTITY-MIB::entPhysicalDescr.60 = STRING: Indicator  
$
```

Note – The example is a portion of the full output.

3. Display the physical entity classes.

Note – The example is a portion of the full output.

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalClass  
ENTITY-MIB::entPhysicalClass.1 = INTEGER: chassis(3)  
ENTITY-MIB::entPhysicalClass.2 = INTEGER: container(5)  
ENTITY-MIB::entPhysicalClass.3 = INTEGER: sensor(8)  
ENTITY-MIB::entPhysicalClass.4 = INTEGER: sensor(8)  
ENTITY-MIB::entPhysicalClass.5 = INTEGER: sensor(8)  
ENTITY-MIB::entPhysicalClass.6 = INTEGER: sensor(8)  
ENTITY-MIB::entPhysicalClass.7 = INTEGER: sensor(8)
```

```

.
.
.
ENTITY-MIB::entPhysicalClass.58 = INTEGER: other(1)
ENTITY-MIB::entPhysicalClass.59 = INTEGER: other(1)
ENTITY-MIB::entPhysicalClass.60 = INTEGER: other(1)
$

```

Related Information

- [“Display System Component FRU ID \(Web\)” on page 135](#)
- [“Display the Additional System Component Information \(SNMP\)” on page 237](#)
- [“Display the Entity Numbers” on page 218](#)

▼ Display the Additional System Component Information (SNMP)

- From the SNMP client, type.

```

$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatEquipmentTable
SUN-PLATFORM-MIB::sunPlatEquipmentAdministrativeState.1 = INTEGER: unlocked(2)
SUN-PLATFORM-MIB::sunPlatEquipmentAdministrativeState.2 = INTEGER: unlocked(2)
.
.
.
SUN-PLATFORM-MIB::sunPlatEquipmentOperationalState.1 = INTEGER: enabled(2)
SUN-PLATFORM-MIB::sunPlatEquipmentOperationalState.2 = INTEGER: enabled(2)
.
.
.
SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.1 = INTEGER: indeterminate(4)
SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.2 = INTEGER: indeterminate(4)
.
.
.
SUN-PLATFORM-MIB::sunPlatEquipmentUnknownStatus.1 = INTEGER: false(2)
SUN-PLATFORM-MIB::sunPlatEquipmentUnknownStatus.2 = INTEGER: false(2)
.
.
.
SUN-PLATFORM-MIB::sunPlatEquipmentLocationName.1 = STRING: unknown
SUN-PLATFORM-MIB::sunPlatEquipmentLocationName.2 = STRING: /SYS
.
.
.
$

```

Note – The output has been truncated to display the information for the first two entities.

Related Information

- [“Display the System Components \(SNMP\)” on page 235](#)

▼ Display the Firmware Version (SNMP)

- From the SNMP client, display the firmware version.

```
$ snmpget -v2c -c public mc_IP ENTITY-MIB::entPhysicalFirmwareRev.1
ENTITY-MIB::entPhysicalFirmwareRev.1 = STRING: 2.1.2-1
$
```

Related Information

- [“Display the Firmware Version \(CLI\)” on page 67](#)
- [“Display the Oracle ILOM Version \(Web\)” on page 136](#)
- [“Display the Entity Numbers” on page 218](#)

▼ Display System Identification Properties (SNMP)

1. From the SNMP client, display the host name.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHostName.0
SUN-ILOM-CONTROL-MIB::ilomCtrlHostName.0 = STRING: mnm
$
```

2. Display the system identifier.

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSystemIdentifier.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSystemIdentifier.0 = STRING: (none)
$
```

Related Information

- [“Display System Identification Properties \(CLI\)” on page 67](#)
- [“Display System Identification Properties \(Web\)” on page 136](#)
- [“Set the System Identification Properties \(SNMP\)” on page 247](#)

Controlling Oracle ILOM Targets (SNMP)

These topics enable you to change the behavior or configuration of many Oracle ILOM targets.

- [“Performing General Tasks \(SNMP\)” on page 239](#)
- [“Performing User Tasks \(SNMP\)” on page 247](#)
- [“Managing Other Aspects With Oracle ILOM \(SNMP\)” on page 249](#)

Related Information

- [“Controlling Oracle ILOM Targets \(CLI\)” on page 68](#)
- [“Controlling Oracle ILOM Targets \(Web\)” on page 137](#)
- [“Monitoring Oracle ILOM Targets \(SNMP\)” on page 201](#)

Performing General Tasks (SNMP)

You can perform these tasks periodically on a few Oracle ILOM targets.

- [“Set the Date and Time \(SNMP\)” on page 240](#)
- [“Set the Time Zone \(SNMP\)” on page 240](#)
- [“Set the Network Time Protocol State \(SNMP\)” on page 241](#)
- [“Set the Network Time Protocol Servers \(SNMP\)” on page 241](#)
- [“Clear the Oracle ILOM Event Log \(SNMP\)” on page 242](#)
- [“Set the Remote Log Hosts \(SNMP\)” on page 242](#)
- [“Configure the DNS Client \(SNMP\)” on page 243](#)
- [“Configure the SMTP Client \(SNMP\)” on page 244](#)
- [“Set the Network Parameters \(SNMP\)” on page 245](#)
- [“Set the System Identification Properties \(SNMP\)” on page 247](#)

Related Information

- [“Performing User Tasks \(SNMP\)” on page 247](#)
- [“Managing Other Aspects With Oracle ILOM \(SNMP\)” on page 249](#)

▼ Set the Date and Time (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0 s  
"YYYY-MM-DD,hh:mm:ss.0"
```

where *YYYY-MM-DD,hh:mm:ss* is the year as four digits, and the month, date, hour, minute, and seconds as two digits.

For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0 s  
"2012-12-12,13:24:31.0"  
SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0 = STRING: 2012-12-12,13:24:31.0  
$
```

Related Information

- [“Set the Date and Time \(CLI\)” on page 70](#)
- [“Set the Date and Time \(Web\)” on page 139](#)
- [“Display the Date and Time \(SNMP\)” on page 202](#)

▼ Set the Time Zone (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 s  
"timezone"
```

where *timezone* is the time zone. For example, to set for Greenwich Mean Time:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 s "GMT"  
SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 = STRING: GMT  
$
```

Related Information

- [“Set the Date and Time \(CLI\)” on page 70](#)
- [“Set the Time Zone \(Web\)” on page 139](#)
- [“Display the Time Zone \(SNMP\)” on page 203](#)

▼ Set the Network Time Protocol State (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlNTPEnabled.0 i state
```

where *state* is either 1 for enabled or 2 for disabled. For example, to enable NTP:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlNTPEnabled.0 i 1
SUN-ILOM-CONTROL-MIB::ilomCtrlNTPEnabled.0 = INTEGER: true(1)
$
```

Related Information

- [“Set the Network Time Protocol Servers \(SNMP\)”](#) on page 241
- [“Display the NTP State \(SNMP\)”](#) on page 226

▼ Set the Network Time Protocol Servers (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServernumberIP.0 = "IP_address"
```

where:

- *number* is the string for the number of the server, either One or Two.
- *IP_address* is the IP address of the NTP server.

For example, to set the NTP server One to the address of 123.45.67.90:

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerOneIP.0 = "123.45.67.90"
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerOneIP.0 = IpAddress: 123.45.67.90
$
```

Note – Setting the NTP server IP address parameter to 0.0.0.0 effectively disables that parameter.

Related Information

- [“Set the Date and Time \(CLI\)”](#) on page 70
- [“Set the Date and Time \(Web\)”](#) on page 139

- “Set the Network Time Protocol State (SNMP)” on page 241
- “Display the NTP Servers (SNMP)” on page 227

▼ Clear the Oracle ILOM Event Log (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogClear.0 i 1
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogClear.0 = INTEGER: true(1)
$
```

Related Information

- “Clear the Oracle ILOM Event Log (CLI)” on page 73
- “Clear the Oracle ILOM Event Log (Web)” on page 141
- “Display the Oracle ILOM Event Log (SNMP)” on page 222
- “Set the Remote Log Hosts (SNMP)” on page 242

▼ Set the Remote Log Hosts (SNMP)

The Oracle ILOM implementation in the management controller provides a protocol for transmitting Oracle ILOM events to a remote log host. The events transmitted are similar to those displayed in the local log.

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDestnumber.0 a "IP_address"
```

where:

- *number* is the number of the remote log host.
- *IP_address* is the IP address of the remote log host.

For example, to set the IP address of remote log host 2:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest2.0
a "123.45.67.90"
SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest2.0 = IpAddress: 123.45.67.90
$
```

Note – Setting a remote log host IP address to 0.0.0.0 disables that functionality.

Related Information

- “Set the Remote Log Hosts (CLI)” on page 74
- “Set the Remote Log Hosts (Web)” on page 142
- “Display the Remote Log Hosts (SNMP)” on page 230

▼ Configure the DNS Client (SNMP)

To enable name services within the management controller, Oracle ILOM must be configured as a DNS client.

1. From the SNMP client, set whether the DNS client will be configured via the DHCP server (1), or configured locally (2).

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDNSdhcpAutoDns.0 i
2
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSdhcpAutoDns.0 = INTEGER: false(2)
$
```

2. If configured locally, set the name server IP addresses.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDNSNameServers.0 s
'IP_addresses'
```

where *IP_addresses* are a comma delimited list of up to three IP addresses of name servers in search order.

For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDNSNameServers.0 s
'123.45.67.89,123.45.67.90'
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSNameServers.0 = STRING: 123.45.67.89,
123.45.67.90
$
```

3. If configured locally, set the search path.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDNSSearchPath.0 s  
'domains'
```

where *domains* are a comma delimited list of up to six domains or search suffixes in search order.

For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlDNSSearchPath.0 s  
'india.sun.com,norway.sun.com'  
SUN-ILOM-CONTROL-MIB::ilomCtrlDNSSearchPath.0 = STRING:  
india.sun.com,norway.sun.com  
$
```

Note – The timeout value and number of retries are configurable. The default values of 5 and 1, respectively, provide for optimal performance.

Related Information

- “Configure the DNS Client (CLI)” on page 75
- “Configure the DNS Client (Web)” on page 142
- “Display the DNS Client Status (SNMP)” on page 225

▼ Configure the SMTP Client (SNMP)

To enable email alerts, you must configure Oracle ILOM as an SMTP client.

1. From the SNMP client, set the SMTP server IP address.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPServerIP.0 a  
"IP_address"
```

where *IP_address* is the IP address of the SMTP server. For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPServerIP.0 a  
123.45.67.89  
SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPServerIP.0 = IPAddress: 123.45.67.89  
$
```

2. Set the SMTP server port.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPPortNumber.0 i port
```

where *port* is the port of the SMTP server. For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPPortNumber.0 i 25
SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPPortNumber.0 = INTEGER: 25
$
```

3. Enable the SMTP client.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPEnabled.0 i 1
SUN-ILOM-CONTROL-MIB::ilomCtrlSMTPEnabled.0 = INTEGER: true(1)
$
```

Related Information

- [“Configure the SMTP Client \(CLI\)” on page 76](#)
- [“Configure the SMTP Client \(Web\)” on page 143](#)
- [“Display the SMTP Client Status \(SNMP\)” on page 226](#)

▼ Set the Network Parameters (SNMP)

1. From the SNMP client, set the network parameter.

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpparameter.\“SP/network\” type “value”
```

where:

- *parameter* is the network parameter to configure:
 - *Discovery* – The IP address discovery method, 1 for static or 2 for DHCP.
 - *Address* – The IP address of the management controller, if static discovery is configured.
 - *Gateway* – The IP address of the subnet gateway.
 - *Netmask* – The netmask for the subnet.
- *type* is the type of parameter, *i* for discovery and *a* for all others

- *value* is the value of the parameter

For example, to set the network netmask:

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpNetmask.\"SP/network\" a
"255.255.0.0"
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpNetmask."SP/network" = IpAddress:
255.255.0.0
$
```

2. Commit the pending netmask.

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkCommitPending.\"SP/network\" i 1
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkCommitPending."SP/network" = INTEGER:
true(1)
$
```

3. Verify the netmask.

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlNetwork
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkMacAddress."SP/network" = STRING:
46:46:41:39:00:FF
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpDiscovery."SP/network" = INTEGER:
static(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpAddress."SP/network" = IpAddress:
123.45.67.89
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpGateway."SP/network" = IpAddress:
123.45.67.5
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpNetmask."SP/network" = IpAddress:
255.255.0.0
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpDiscovery."SP/network" =
INTEGER: static(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpAddress."SP/network" =
IpAddress: 123.45.67.89
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpGateway."SP/network" =
IpAddress: 123.45.67.5
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpNetmask."SP/network" =
IpAddress: 255.255.0.0
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkCommitPending."SP/network" = INTEGER:
false(2)
$
```

Related Information

- [“Set the Network Management Parameters \(CLI\)” on page 82](#)

- [“Set the Network Management Parameters \(Web\)” on page 147](#)
- [“Display the Network Management Configuration \(SNMP\)” on page 230](#)

▼ Set the System Identification Properties (SNMP)

1. From the SNMP client, set the host name.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHostName.0 s "hostname"
```

where *hostname* is the host name of the switch. For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHostName.0 s "mnm"
SUN-ILOM-CONTROL-MIB::ilomCtrlHostName.0 = STRING: mnm
$
```

2. Set the system identifier.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSystemIdentifier.0 s "identity"
```

where *identity* is the string to identify the switch. For example:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlSystemIdentifier.0 s "blr-mnm-1"
SUN-ILOM-CONTROL-MIB::ilomCtrlSystemIdentifier.0 = STRING: blr-mnm-1
$
```

Related Information

- [“Set the System Identification Properties \(CLI\)” on page 84](#)
- [“Set the System Identification Properties \(Web\)” on page 148](#)
- [“Display System Identification Properties \(SNMP\)” on page 238](#)

Performing User Tasks (SNMP)

These tasks enable you to add and delete Oracle ILOM users.

- [“Add an Oracle ILOM User Account \(SNMP\)” on page 248](#)
- [“Delete an Oracle ILOM User Account \(SNMP\)” on page 249](#)

Related Information

- [“Performing General Tasks \(SNMP\)” on page 239](#)
- [“Managing Other Aspects With Oracle ILOM \(SNMP\)” on page 249](#)

▼ Add an Oracle ILOM User Account (SNMP)

1. From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.\“username\” = 5
```

where *username* is the user name. For example, to create a user called *newuser*:

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.\“newuser\” = 5  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRoles.\“newuser\” = “o”  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserPassword.\“newuser\” = “changeme”  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.“newuser” = INTEGER:  
createAndWait(5)  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRoles.“newuser” = STRING: “o”  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserPassword.“newuser” = STRING: “changeme”  
$
```

2. Activate the user.

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.\“newuser\” = 1  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.“newuser” = INTEGER:  
active(1)  
$
```

Related Information

- [“Add an Oracle ILOM User Account \(CLI\)” on page 86](#)
- [“Add an Oracle ILOM User Account \(Web\)” on page 149](#)
- [“Delete an Oracle ILOM User Account \(SNMP\)” on page 249](#)
- [“Display Oracle ILOM User Accounts \(SNMP\)” on page 229](#)

▼ Delete an Oracle ILOM User Account (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.\"username\" = 6
```

where *username* is the user name. For example, to delete newuser:

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.\"newuser\" = 6  
SUN-ILOM-CONTROL-MIB::ilomCtrlLocalUserRowStatus.\"newuser\" = INTEGER:  
destroy(6)  
$
```

Related Information

- “Delete an Oracle ILOM User Account (CLI)” on page 88
- “Delete an Oracle ILOM User Account (Web)” on page 150
- “Add an Oracle ILOM User Account (SNMP)” on page 248
- “Display Oracle ILOM User Accounts (SNMP)” on page 229

Managing Other Aspects With Oracle ILOM (SNMP)

These tasks help you manage the Oracle ILOM services.

- “Set the HTTP Service State (SNMP)” on page 250
- “Set the HTTPS Service State (SNMP)” on page 250
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 251
- “Enable Alerts to Send PETs (SNMP)” on page 252
- “Enable Alerts to Send Email Alerts (SNMP)” on page 253
- “Modify Alert SNMP Version (SNMP)” on page 254
- “Disable Alerts (SNMP)” on page 255

Related Information

- “Managing Other Aspects With Oracle ILOM (CLI)” on page 103
- “Managing Other Aspects With Oracle ILOM (Web)” on page 165
- “Performing General Tasks (SNMP)” on page 239

▼ Set the HTTP Service State (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHttpEnabled.0 i state
```

where *state* is either 1 for enabled or 2 for disabled. For example, to enable the HTTP service:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHttpEnabled.0 i 1
SUN-ILOM-CONTROL-MIB::ilomCtrlHttpEnabled.0 = INTEGER: true(1)
$
```

Related Information

- [“Enable the HTTP Service \(CLI\)” on page 89](#)
- [“Disable the HTTP Service \(CLI\)” on page 89](#)
- [“Enable the HTTP Service \(Web\)” on page 151](#)
- [“Disable the HTTP Service \(Web\)” on page 152](#)
- [“Display the HTTP Service Status \(SNMP\)” on page 224](#)

▼ Set the HTTPS Service State (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHttpsEnabled.0 i state
```

where *state* is either 1 for enabled or 2 for disabled. For example, to enable the HTTPS service:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlHttpsEnabled.0 i 1
SUN-ILOM-CONTROL-MIB::ilomCtrlHttpsEnabled.0 = INTEGER: true(1)
$
```

Related Information

- [“Enable the HTTPS Service \(CLI\)” on page 90](#)
- [“Disable the HTTPS Service \(CLI\)” on page 93](#)
- [“Enable the HTTPS Service \(Web\)” on page 153](#)
- [“Disable the HTTPS Service \(Web\)” on page 156](#)
- [“Display the HTTPS Service Status \(SNMP\)” on page 225](#)

▼ Enable Alerts to Send SNMP Traps (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.number = "IP_address"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationPort.number = port
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.number = severity
```

where:

- *number* is the number of the alert.
- *IP_address* is the IP address of the host to receive the trap.
- *port* is the destination port.
- *severity* is the severity of the alert.

For example, to enable alert 2 to send traps to the host at IP address 123.45.67.90:

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.2 = "123.45.67.90"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationPort.2 = 162
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = 4
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.2 = IpAddress: 123.45.67.90
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationPort.2 = INTEGER: 162
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = INTEGER: minor(4)
$
```

Related Information

- [“Enable Alerts to Send SNMP Traps \(CLI\)”](#) on page 103
- [“Enable Alerts to Send SNMP Traps \(Web\)”](#) on page 165
- [“Enable Alerts to Send PETs \(SNMP\)”](#) on page 252
- [“Enable Alerts to Send Email Alerts \(SNMP\)”](#) on page 253
- [“Display the Alert Properties \(SNMP\)”](#) on page 228
- [“Disable Alerts \(SNMP\)”](#) on page 255

▼ Enable Alerts to Send PETs (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.number = "IP_address"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.number = 3
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.number = severity
```

where:

- *number* is the number of the alert.
- *IP_address* is the IP address of the host to receive the trap.
- *severity* is the severity of the alert.

For example, to enable alert 2 to send PET to the host at IP address 123.45.67.90:

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.2 = "123.45.67.90"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = 3
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = 4
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationIP.2 = IPAddress: 123.45.67.90
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = INTEGER: ipmipet(3)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = INTEGER: minor(4)
$
```

Related Information

- [“Enable Alerts to Send PETs \(CLI\)” on page 105](#)
- [“Enable Alerts to Send PETs \(Web\)” on page 166](#)
- [“Enable Alerts to Send SNMP Traps \(SNMP\)” on page 251](#)
- [“Enable Alerts to Send Email Alerts \(SNMP\)” on page 253](#)
- [“Display the Alert Properties \(SNMP\)” on page 228](#)
- [“Disable Alerts \(SNMP\)” on page 255](#)

▼ Enable Alerts to Send Email Alerts (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationEmail.number = "email_address"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.number = 1
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertEmailCustomSender.number =
"ilom-36p-hostname" SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.number = severity
```

where:

- *number* is the number of the alert.
- *email_address* is the fully qualified email address to receive the trap.
- *hostname* is the host name of the management controller.
- *severity* is the severity of the alert.

For example, to enable alert 2 to send to user@yahoo.com:

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationEmail.2 = "user@yahoo.com"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = 1
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertEmailCustomSender.2 = "ilom-36p-hostname"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = 4
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationEmail.2 = STRING: user@yahoo.com
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = INTEGER: email(1)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertEmailCustomSender.2 = STRING:
ilom-36p-hostname
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = INTEGER: minor(4)
$
```

Related Information

- “Enable Alerts to Send Email Alerts (CLI)” on page 106
- “Enable Alerts to Send Email Alerts (Web)” on page 167
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 251
- “Enable Alerts to Send PETs (SNMP)” on page 252
- “Display the Alert Properties (SNMP)” on page 228
- “Disable Alerts (SNMP)” on page 255

▼ Modify Alert SNMP Version (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSNMPVersion.number = version
```

where:

- *number* is the number of the alert.
- *version* is the SNMP version, 1 is v1, 2 is v2c, or 3 is v3.

For example, to modify alert 2 for SNMP version v2c:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSNMPVersion.2  
= 2  
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSNMPVersion.2 = INTEGER: v2c(2)  
$
```

Note – You can modify all alert configuration parameters using SNMP. Refer to the *Oracle Integrated Lights Out Manager (ILOM) 3.0 Protocol Management -- SNMP, IPMI, CIM, WS-MAN*, for more information.

Related Information

- [“Enable Alerts to Send SNMP Traps \(SNMP\)”](#) on page 251
- [“Enable Alerts to Send PETs \(SNMP\)”](#) on page 252
- [“Enable Alerts to Send Email Alerts \(SNMP\)”](#) on page 253
- [“Display the Alert Properties \(SNMP\)”](#) on page 228
- [“Disable Alerts \(SNMP\)”](#) on page 255

▼ Disable Alerts (SNMP)

- From the SNMP client, type.

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.number = 1
```

where *number* is the number of the alert. For example, to disable alert 2:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = 1  
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = INTEGER: disable(1)  
$
```

Related Information

- [“Disable Alerts \(CLI\)” on page 107](#)
- [“Disable Alerts \(Web\)” on page 167](#)
- [“Display the Alert Properties \(SNMP\)” on page 228](#)
- [“Enable Alerts to Send SNMP Traps \(SNMP\)” on page 251](#)
- [“Enable Alerts to Send PETs \(SNMP\)” on page 252](#)
- [“Enable Alerts to Send Email Alerts \(SNMP\)” on page 253](#)
- [“Modify Alert SNMP Version \(SNMP\)” on page 254](#)

Administering Hardware (IPMI)

These topics describe how to administer the hardware of the switch using the `ipmitool` utility.

- [“ipmitool Overview” on page 257](#)
- [“Display the Sensor States \(IPMI\)” on page 258](#)
- [“Display the Sensor Information \(IPMI\)” on page 259](#)
- [“Display the System Event Log \(IPMI\)” on page 261](#)
- [“Display FRU ID Information \(IPMI\)” on page 262](#)
- [“Display Switch Status LED States \(IPMI\)” on page 263](#)
- [“Enable the Locator LED \(IPMI\)” on page 264](#)
- [“Disable the Locator LED \(IPMI\)” on page 264](#)

Related Information

- [“Administering Oracle ILOM \(CLI\)” on page 27](#)
- [“Administering Oracle ILOM \(Web\)” on page 117](#)
- [“Using the Fabric Monitor” on page 175](#)
- [“Administering Oracle ILOM \(SNMP\)” on page 197](#)
- [“Understanding Oracle ILOM Commands” on page 265](#)

`ipmitool` Overview

The Oracle ILOM implementation on the management controller within the switch provides an IPMI server, which can communicate the state of the switch hardware through the Intelligent Platform Management Interface.

An IPMI client is required to interface with the Oracle ILOM IPMI stack on the management controller. You must have administrator privileges to interface with the stack and the IPMI service must be enabled on the switch.

The `ipmitool` utility is the IPMI client used in these topics and has this format:

```
$ ipmitool -v -I lan -H mc_IP -U user command option
```

where:

- `mc_IP` is the IP address of the management controller.
- `user` is the user with administrative privileges. For example, `ilom-admin`.
- `command` is the command to be run on the management controller.
- `option` is an optional argument or parameter to the `command`.

Note – After typing the `ipmitool` command line, you must type the password of the user for the utility to continue. For the `ilom-admin` user, the default password is `ilom-admin`.

For more information about and use of IPMI with Oracle ILOM, refer to the *Oracle Integrated Lights Out Manager (ILOM) 3.0 Protocol Management -- SNMP, IPMI, CIM, WS-MAN*, available online at:

<http://www.oracle.com/pls/topic/lookup?ctx=E19860-01&id=homepage>

▼ Display the Sensor States (IPMI)

- From the IPMI client, type.

Note – This example is a portion of the full output.

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin sensor
Password: password
Sensor ID           : CHASSIS_STATUS (0x1)
  Entity ID         : 7.0
  Sensor Type (Discrete): OEM reserved #c0
  States Asserted   : Digital State
                    [State Deasserted]
Sensor ID           : PSU0/PRSNT (0x2)
  Entity ID         : 10.0
  Sensor Type (Discrete): Entity Presence
  States Asserted   : Availability State
                    [Device Present]
.
.
```

```

.
Sensor ID           : COOLING_REDUN (0x2b)
Entity ID          : 7.0
Sensor Type (Discrete): OEM reserved #c0
States Asserted    : Digital State
                   [State Deasserted]

Sensor ID           : CABLE_CONN_STAT (0x2c)
Entity ID          : 7.0
Sensor Type (Discrete): OEM reserved #c0
States Asserted    : Digital State
                   [State Deasserted]

$

```

Related Information

- “Display the Aggregate Sensors State (CLI)” on page 40
- “Display the Aggregate Sensors State (Web)” on page 123
- “Display the Aggregate Sensors State (SNMP)” on page 203
- “Display the Sensor Alarm State (SNMP)” on page 217
- “Display the Sensor Information (IPMI)” on page 259

▼ Display the Sensor Information (IPMI)

- From the IPMI client, type.

Note – This example is a portion of the full output.

```

$ ipmitool -v -I lan -H mc_IP -U ilom-admin sdr
Password: password
Sensor ID           : CHASSIS_STATUS (0x1)
Entity ID          : 7.0 (System Board)
Sensor Type (Discrete): OEM reserved #c0
Sensor Reading      : 0h
Event Message Control : Per-threshold
States Asserted    : Digital State
                   [State Asserted]

Assertions Enabled  : Digital State
                   [State Deasserted]
                   [State Asserted]

Sensor ID           : PSU0/PRSNT (0x2)
Entity ID          : 10.0 (Power Supply)

```

```

Sensor Type (Discrete): Entity Presence
Sensor Reading          : 0h
Event Message Control  : Per-threshold
States Asserted        : Availability State
                        [Device Present]
Assertions Enabled      : Availability State
                        [Device Absent]
                        [Device Present]
.
.
.
Sensor ID               : COOLING_REDUN (0x2b)
Entity ID               : 7.0 (System Board)
Sensor Type (Discrete): OEM reserved #c0
Sensor Reading          : 0h
Event Message Control  : Per-threshold
States Asserted        : Digital State
                        [State Deasserted]
Assertions Enabled      : Digital State
                        [State Deasserted]
                        [State Asserted]
Sensor ID               : CABLE_CONN_STAT (0x2c)
Entity ID               : 7.0 (System Board)
Sensor Type (Discrete): OEM reserved #c0
Sensor Reading          : 0h
Event Message Control  : Per-threshold
States Asserted        : Digital State
                        [State Deasserted]
Assertions Enabled      : Digital State
                        [State Deasserted]
                        [State Asserted]
$

```

Related Information

- [“Display the Sensor States \(IPMI\)” on page 258](#)
- [“Display the Sensor Alarm State \(SNMP\)” on page 217](#)

▼ Display the System Event Log (IPMI)

- From the IPMI client, type.

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin sel list number
```

where *number* is the number of records to display. For example:

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin sel list 2
Password: password
SEL Record ID      : 0001
Record Type        : 02
Timestamp          : 12/12/2012 21:57:05
Generator ID       : 0020
EvM Revision       : 04
Sensor Type        : OEM
Sensor Number      : 01
Event Type         : Generic Discrete
Event Direction    : Assertion Event
Event Data         : 00ffff
Description        : State Deasserted

SEL Record ID      : 0002
Record Type        : 02
Timestamp          : 12/12/2012 03:17:11
Generator ID       : 0020
EvM Revision       : 04
Sensor Type        : OEM
Sensor Number      : 01
Event Type         : Generic Discrete
Event Direction    : Assertion Event
Event Data         : 01ffff
Description        : State Asserted
$
```

In the output, the events were both for sensor 1, the aggregate sensor. The events describe the sensor going from State Deasserted to State Asserted.

Related Information

- [“Display the Oracle ILOM Event Log \(CLI\)” on page 50](#)
- [“Display the Oracle ILOM Event Log \(Web\)” on page 126](#)
- [“Display the Oracle ILOM Event Log \(SNMP\)” on page 222](#)

▼ Display FRU ID Information (IPMI)

- From the IPMI client, type.

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin fru print
Password: password
FRU Device Description : Builtin FRU Device (ID 0)
  Product Manufacturer : Sun Microsystems
  Product Name         : ILOM
  Product Version      : 2.1.2-1

FRU Device Description : SYS (ID 4)
  Product Manufacturer : Sun Microsystems
  Product Name         : Sun Datacenter InfiniBand Switch 36
  Product Part Number  : 541-3495-03
  Product Serial       : 0924AK2285

FRU Device Description : PSU0 (ID 5)
  Board Mfg            : EMERSON
  Board Product        : A237
  Board Serial         : BF15Y6
  Board Part Number    : 3002143
  Board Extra          : sun_spec_part_number - 885-1165-02

FRU Device Description : PSU1 (ID 6)
  Board Mfg            : EMERSON
  Board Product        : A237
  Board Serial         : BF15Y8
  Board Part Number    : 3002143
  Board Extra          : sun_spec_part_number - 885-1165-02

FRU Device Description : MB (ID 7)
  Board Serial         : 0110SJC-09183P0020
  Board Part Number    : 5111232
  Board Extra          : ComEx: manufacturing_date - 2009.08.19
  Product Manufacturer : Sun Microsystems
  Product Name         : Sun Datacenter InfiniBand Switch 36
  Product Part Number  : 541-3495-03
  Product Serial       : 0924AK2285
  Product Extra        : ComEx: serial_number - NCD2T0307
$
```

In the output, the FRU Device Description field identifies the FRUs:

- Builtin FRU Device (ID 0) – Oracle ILOM firmware

- SYS (ID 4) – Management controller
- PSU0 (ID 5) – Power supply 0
- PSU1 (ID 6) – Power supply 1
- MB (ID 7) – Motherboard

Related Information

- “Display Switch FRU ID (CLI)” on page 65
- “Display Power Supply FRU ID (CLI)” on page 66
- “Display System Component FRU ID (Web)” on page 135
- “Display Switch FRU ID (SNMP)” on page 231
- “Display Power Supply FRU ID (SNMP)” on page 233

▼ Display Switch Status LED States (IPMI)

- From the IPMI client, type.

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin sunoem sbled get
Password: password
I_POWER          | ON
I_ATTENTION      | OFF
I_LOCATOR        | OFF
$
```

In the output, the Power LED is on, and the Attention and Locator LEDs are off.

Related Information

- “Display Switch Status LEDs States (CLI)” on page 40
- “Display the Switch Status LEDs States (Web)” on page 123
- “Enable the Locator LED (IPMI)” on page 264
- “Disable the Locator LED (IPMI)” on page 264

▼ Enable the Locator LED (IPMI)

- From the IPMI client, type.

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin sunoem sbled set I_LOCATOR ON
Password: password
I_LOCATOR      | ON
$
```

The Locator LEDs is lit.

Related Information

- [“Enable the Locator LED \(CLI\)” on page 72](#)
- [“Enable the Locator LED \(Web\)” on page 140](#)
- [“Disable the Locator LED \(IPMI\)” on page 264](#)
- [“Display Switch Status LED States \(IPMI\)” on page 263](#)

▼ Disable the Locator LED (IPMI)

- From the IPMI client, type.

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin sunoem sbled set I_LOCATOR OFF
Password: password
I_LOCATOR      | OFF
$
```

The Locator LEDs is unlit.

Related Information

- [“Disable the Locator LED \(CLI\)” on page 73](#)
- [“Disable the Locator LED \(Web\)” on page 141](#)
- [“Enable the Locator LED \(IPMI\)” on page 264](#)
- [“Display Switch Status LED States \(IPMI\)” on page 263](#)

Understanding Oracle ILOM Commands

Only the `ilom-admin` user of the Oracle ILOM shell can run all of the Oracle ILOM commands on the switch. The format of the Oracle ILOM commands is typically as follows:

-> `command [option] [target] [property=value] . . .`

where:

- `command` is the command being issued.
- `option` is any option to that command.
- `target` is the target and path to act upon.
- `property` is the property of the target to change.
- `value` is what to change the property to.

Command Syntax	Links
<code>cd [-default] [target]</code>	“cd Command” on page 266
<code>create [target] [property=value property=value . . .]</code>	“create Command” on page 267
<code>delete [-script] [target]</code>	“delete Command” on page 268
<code>dump [-destination URI] [target]</code>	“dump Command” on page 269
<code>exit</code>	“exit Command (Oracle ILOM)” on page 270
<code>help [-o terse verbose] [command legal targets target target property]</code>	“help Command (Oracle ILOM)” on page 271
<code>load [-force] [-o verbose] [-script] -source URI [target]</code>	“load Command” on page 272
<code>reset [-script] [target]</code>	“reset Command” on page 273

Command Syntax	Links
set [<i>target</i>] <i>property=value</i> [<i>property=value...</i>]	“set Command” on page 274
show [-d <i>targets properties commands all</i>] [-1 1 2 3...255 all] [-o <i>table</i>] [<i>target</i>] [<i>property property...</i>]	“show Command” on page 275
version	“version Command (Oracle ILOM)” on page 277

Related Information

- [Switch Reference](#)
- [“Administering Oracle ILOM \(CLI\)” on page 27](#)
- [“Administering Oracle ILOM \(Web\)” on page 117](#)
- [“Using the Fabric Monitor” on page 175](#)
- [“Administering Oracle ILOM \(SNMP\)” on page 197](#)
- [“Administering Hardware \(IPMI\)” on page 257](#)

cd Command

Changes the current target.

Syntax

```
cd [-default] target
```

where *target* is the target and path to act upon.

Description

This Oracle ILOM command changes the Oracle ILOM attention to the specified *target*. This command is similar to the change directory (cd) command of many operating systems. The `-default` option returns the attention to the default target.

Example

This example shows how to change to the `/SP/logs/event/list` target with the `cd` command.

Note – The output in the example is a portion of the full output.

```
-> cd /SP/logs/event/list
/SP/logs/event/list

-> show
  /SP/logs/event/list
    Targets:
    Properties:
    Commands:
      cd
  s    how
ID    Date/Time                Class    Type    Severity
-----
75    Wed Oct 7 20:12:31 2009  Audit   Log     minor
      root : Open Session : object = /session/type : value = shell : success
74    Wed Oct 7 20:12:28 2009  Audit   Log     minor
      root : Close Session : object = /session/type : value = shell : success
73    Wed Oct 7 20:11:21 2009  Audit   Log     minor
      root : Open Session : object = /session/type : value = shell : success
.
.
.
->
```

create Command

Creates a target or property.

Syntax

```
create target [property = value property = value ...]
```

where:

- *target* is the target and path to create or act upon.
- *property* is the property of the target to create.
- *value* is the value of the property created.

Description

This Oracle ILOM command creates the specified target with the specified properties. Your user must have administrator (a) privileges to use this command.

Example

This example shows how to create a `/SP/users/test` user target with the `create` command.

```
-> create /SP/users/test
Creating user...
Enter new password: password
Enter new password again: password
Created /SP/users/test
->
```

Related Information

- [“delete Command” on page 268](#)

delete Command

Deletes a target.

Syntax

```
delete [-script] [target]
```

where *target* is the target and path to act upon.

Description

This Oracle ILOM command deletes the *target* and all subordinate targets. If no *target* is specified, the current target is affected. Your user must have administrator (a) privileges to use this command. The `-script` option skips confirmation of the target deletion and proceeds as if `y` was specified.

Example

This example shows how to delete the `/SP/users/test` target with the `delete` command.

```
-> delete /SP/users/test
Are you sure you want to delete /SP/users/test (y/n)? y
Deleted /SP/users/test.
->
```

Related Information

- [“create Command” on page 267](#)

dump Command

Dumps target information to a remote location.

Syntax

```
dump [-destination URI] [target]
```

where:

- *URI* is the uniform resource indicator.
- *target* is the target and path to act upon.

Description

This Oracle ILOM command transfers *target* information to a remote location specified by the *URI*. If no *target* is specified, the current target is affected. Your user must have administrator (a) privileges to use this command. The `-destination` option specifies the location. If the `-destination` option is not used, then the information is transferred to `stdout`.

Example

This example shows how to transfer the `/SP/services/snmp/mibs` target information to the `ilom-mibs.zip` file on the host with IP address 123.45.67.89 using the FTP protocol with the `dump` command.

```
-> dump -destination ftp://root:changeme@123.45.67.89/tftpboot/ilom-mibs.zip
/SP/services/snmp/mibs
->
```

Related Information

- [“load Command” on page 272](#)

exit Command (Oracle ILOM)

Terminates the Oracle ILOM session.

Syntax

```
exit
```

Description

This Oracle ILOM command exits the Oracle ILOM shell and either:

- Returns the `root` user to the Linux `root` user prompt of the management controller.

- Logs off the `ilom-admin` user or `ilom-operator` user from the management controller.

Example

This example shows how to exit the Oracle ILOM session using the `exit` command.

```
-> exit
#
```

Related Information

- *Switch Reference*, `exit` command

help Command (Oracle ILOM)

Provides help with Oracle ILOM commands.

Syntax

```
help [-o terse|verbose] [command | legal | targets | target | target property]
```

where:

- *command* is the Oracle ILOM command for which you are seeking help.
- *target* is the target for which you are seeking help.
- *property* is the property of the target for which you are seeking help.

Description

This Oracle ILOM command gives information and assistance about commands and targets. The `-o` option enables either terse or verbose output. The `help targets` command displays a basic list of targets. The `help legal` command displays the legal notice.

Example

This example shows how to display verbose help about the `exit` command with the `help` command.

```
-> help -o verbose exit
The exit command is used to terminate a session.
Usage: exit
Example:
  -> exit
      Connection to nyc-sp closed.
->
```

Related Information

- *Switch Reference*, `help` command

load Command

Transfers a file from a remote location to update a target.

Syntax

```
load [-force] [-o verbose] [-script] -source URI [target]
```

where:

- *URI* is the uniform resource indicator.
- *target* is the target and path to act upon.

Description

This Oracle ILOM command transfers information in a file from a remote location specified by the *URI* to update a *target*. If no *target* is specified, the current target is affected. Your user must have administrator (a) privileges to use this command.

Options

This table describes the options to the `load` command and their purposes:

Option	Purpose
<code>-force</code>	Disables the version number check for firmware updates.
<code>-o</code>	Enables verbose output.
<code>-script</code>	Skips confirmation of the action and proceeds as if <code>y</code> was specified.

Example

This example shows how to load a custom certificate file, `server.pem`, to the `/SP/services/https/ssl/custom_cert` target from the host at IP address 123.45.67.89 using the TFTP protocol with the `load` command.

```
-> load -source tftp://123.45.67.89/server.pem
/SP/services/https/ssl/custom_cert
Load successful.
->
```

Related Information

- [“dump Command” on page 269](#)

reset Command

Resets a target.

Syntax

```
reset [-script][target]
```

where *target* is the target and path to act upon.

Description

This Oracle ILOM command resets a resettable *target* to default conditions. If no *target* is specified, the current target is affected. The `-script` option skips confirmation of the action and proceeds as if `yes` was specified. Your user must have administrator (a) privileges to use this command.

Example

This example shows how to reset the custom SSL certificate with the `reset` command.

```
-> reset /SP/services/https/ssl/custom_cert  
Are you sure you want to reset /SP/services/https/ssl/custom_cert (y/n)? y  
Performing reset on /SP/services/https/ssl/custom_cert  
->
```

Related Information

- [“set Command” on page 274](#)

set Command

Sets a property.

Syntax

```
set [target] property=value [property=value . . .]
```

where:

- *target* is the target and path to act upon.
- *property* is the property of the target to change.
- *value* is what to change the property to.

Description

This Oracle ILOM command sets the *property* of a *target*. If no *target* is specified, the current target is affected. Your user must have administrator (a) privileges to use this command.

Example

This example shows how to change the role of the `/SP/users/test` user to administrator with the `set` command.

```
-> set /SP/users/test role=a
Set 'role' to 'a'
->
```

Related Information

- [“show Command” on page 275](#)
- [“reset Command” on page 273](#)

show Command

Display information about targets, properties, and commands.

Syntax

```
show [-d targets|properties|commands|all] | [-1  
1|2|3...255|all] [-o table] [target] [property property...]
```

where:

- *target* is the target and path to act upon.
- *property* is the property of the target to show.

Description

This Oracle ILOM command displays information about targets, their properties, and associated commands. If no *target* is specified, information about the current target is displayed.

Options

This table describes the options to the show command and their purposes:

Option	Purpose
-d	Specifies what information to display. <ul style="list-style-type: none">• <i>targets</i> – The subtargets of the target.• <i>properties</i> – The properties of the target.• <i>commands</i> – The supported commands of the target.• <i>all</i> – The subtargets, properties, and supported commands of the target.
-l	Specifies the relative level in the target hierarchy to which the action applies.
-o	Enables output in tabular form.

Example

This example shows how to display the Oracle ILOM user accounts with the show command.

```
-> show -d targets /SP/users
  /SP/users
    Targets:
      root
      ilom-admin
      ilom-operator
      for_Check
      test
->
```

Related Information

- [“set Command” on page 274](#)

version Command (Oracle ILOM)

Displays version information.

Syntax

```
version
```

Description

This Oracle ILOM command displays the version information within the management controller of the Sun Datacenter InfiniBand Switch 36 from Oracle.

Example

This example shows how to display the version information with the `version` command.

```
-> version  
SP firmware 2.1.2-1  
SP firmware build number: 47111  
SP firmware date: Mon Oct 1 12:07:21 IST 2012  
SP filesystem version: 0.1.22  
->
```

Related Information

- *Switch Reference*, version command

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