Oracle Integrated Lights Out Manager (ILOM) 3.0

Supplement for the Sun Network QDR InfiniBand Gateway Switch

Part No. 821-1545-11
June 2011, Revision A

Contents

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 Network QDR Infiniband Gateway Switch from Oracle. This document is written for system administrators and authorized service providers who have experience with the Oracle ILOM firmware.

- "Related Documentation" on page xvii
- "Documentation, Support, and Training" on page xix

Related Documentation

The documents listed as online are available at:

(http://www.oracle.com/pls/topic/lookup?ctx=E19671-01&id=homepage)

Application	Title	Format	Location
Getting started	*Sun Network QDR Infiniband Gateway Switch Getting Started Guide*	Printed PDF	Shipping kit Online
Last-minute information	*Sun Network QDR Infiniband Gateway Switch Product Notes*	PDF	Online
Installation, administration, and service	*Sun Network QDR Infiniband Gateway Switch User's Guide*	PDF HTML	Online

Application	Title	Format	Location
Command reference	*Sun Network QDR Infiniband Gateway Switch Command Reference*	PDF HTML	Online
Compliance	*Sun Network QDR Infiniband Gateway Switch Safety and Compliance Guide*	PDF	Online
Oracle ILOM information	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Supplement for the Sun Network QDR Infiniband Gateway Switch*	PDF HTML	Online

The Oracle ILOM 3.0 documents listed as online are available at:

(http://www.oracle.com/pls/topic/lookup?ctx=E19860-01&id=homepage)

Application	Title	Format	Location
Last-minute information	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Feature Updates and Release Notes*	PDF HTML	Online
Getting started	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Quick Start Guide*	PDF HTML	Online
Overview	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Daily Management -- Concepts Guide*	PDF HTML	Online
Administration from web interface	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Daily Management -- Web Procedures Guide*	PDF HTML	Online
Administration from CLI interface	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Daily Management -- CLI Procedures Guide*	PDF HTML	Online
Administration from SNMP and other interfaces	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Protocol Management -- SNMP, IPMI, CIM, WS-MAN*	PDF HTML	Online
Maintenance operations and diagnostics	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Maintenance and Diagnostics -- CLI and Web Guide*	PDF HTML	Online
Remote redirection consoles	*Oracle Integrated Lights Out Manager (ILOM) 3.0 Remote Redirection Consoles -- CLI and Web Guide*	PDF HTML	Online

Documentation, Support, and Training

These web sites provide additional resources:

- Documentation (http://www.oracle.com/technetwork/indexes/documentation/index.html)
- Support (https://support.oracle.com)
- Training (https://education.oracle.com)

Understanding Oracle ILOM on the Gateway

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

Related Information

- "Administering Oracle ILOM (CLI)" on page 29
- "Administering Oracle ILOM (Web)" on page 111
- "Using the Fabric Monitor" on page 161
- "Administering Oracle ILOM (SNMP)" on page 191
- "Administering Hardware (IPMI)" on page 247
- "Understanding Oracle ILOM Commands" on page 255

Oracle ILOM Overview

This document provides basic Oracle ILOM 3.0 information as it pertains to the gateway. See "Related Documentation" on page xvii for a list of Oracle ILOM 3.0 documents.

Oracle ILOM is a means of remotely managing a hardware device through a SP. For the gateway, the SP is the Komtron management controller within the gateway. 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 255
- "Web Interface Overview" on page 111
- "Accessing Oracle ILOM From the CLI" on page 30
- "Access Oracle ILOM From the Web Interface" on page 114
- "Upgrading the Gateway Firmware Through Oracle ILOM (CLI)" on page 102

Supported Features

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

- **Interfaces** – The following 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.
- **Event and fault monitoring** – The following events are logged:
  - **Oracle ILOM events**
  - **Gateway-specific events** – Non-Oracle ILOM events are also logged into the Oracle ILOM event log.

- **Firmware upgrade** – I4 switch chip, BridgeX, and management controller firmware upgrade from a single repository file.
- **Fabric Monitor** – Browser interface to monitor gateway configuration, status, and activity.
- **Oracle ILOM support** – The following features are supported for this implementation of Oracle ILOM:
  - **User management** – `ilom-admin`, `ilom-operator`, and user-created Oracle ILOM accounts.
  - **Network management** – IP address, netmask, gateway, and other parameters.
  - **Session monitoring** – Monitor active user sessions.
  - **Service management** – HTTP, HTTPS, SNMP, and others.

Note – You can only monitor the IPMI service. You cannot enable, disable, or manage the service.

  - **Alert management** – Manage propagation of SNMP alerts, IPMI PETs, and Email alerts.
  - **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 29
- "Administering Oracle ILOM (Web)" on page 111

Understanding Oracle ILOM Targets

These topics describe the Oracle ILOM targets and their properties.

Related Information

- "Understanding Oracle ILOM Commands" on page 255

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 265
- "set Command" on page 264
- "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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "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 22
- "Oracle ILOM Service Targets and Properties" on page 24
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM Targets and Descriptions

The following table lists the Oracle ILOM targets supported in the gateway and provides a short description of the target.

Oracle ILOM Target	Description
`/`	Hierarchy root
`/SYS`	Sensors and FRU information
`/SYS/CABLE_ATTN`	Aggregate sensor – Overall cable connectivity state

Oracle ILOM Target	Description
/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/FAN*x*	Fan *x* information
/SYS/FAN*x*/PRSNT	Presence of fan *x*
/SYS/FAN*x*/TACH	Speed of fan *x*
/SYS/Gateway_Mgmt	Gateway management Linux shell (ilom-admin user)
/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/BOOT_I4A	Status of I4 switch chip boot
/SYS/MB/T_B0	Temperature of BridgeX chip 0
/SYS/MB/T_B1	Temperature of BridgeX chip 1
/SYS/MB/T_BACK	Temperature at rear of chassis
/SYS/MB/T_FRONT	Temperature at front of chassis
/SYS/MB/T_I4A	Temperature of the I4 switch chip
/SYS/MB/T_SP	Temperature of the management controller
/SYS/MB/V_1.0V	Voltage of the main 1.0V source
/SYS/MB/V_1.0VOK	State of the main 1.0V source
/SYS/MB/V_1.2VStby	Voltage of the standby 1.2V source
/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

Oracle ILOM Target	Description
/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_BX1.2V	Voltage of the BridgeX main 1.2V source
/SYS/MB/V_BX1.2VOK	State of the BridgeX main 1.2V source
/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/MB/V_V1P2ANG	1.2V source for analog power pins
/SYS/MB/V_V1P2DIG	1.2V source for digital power pins
/SYS/Platform_CLI	Comprehensive Linux shell
/SYS/POWER_ATTN	Aggregate sensor – Overall power state
/SYS/POWER_REDUN	Aggregate sensor – Power redundancy state
/SYS/PSU*x*	Power supply *x* information
/SYS/PSU*x*/PRSNT	Presence of power supply *x*
/SYS/PSU*x*/ALERT	State of power supply *x*
/SYS/PSU*x*/AC_PRESENT	Presence of AC input power for power supply *x*
/SYS/TEMP_ATTN	Aggregate sensor – Overall temperature state
/SYS/Switch_Diag	Diagnostic Linux shell (`ilom-operator` and `ilom-admin` users)
/SP	Management controller
/SP/alertmgmt	Alert rule management
/SP/alertmgmt/rules	Alert rules
/SP/cli	CLI
/SP/clients	Clients that connect to external services
/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/clients/syslog/1	`syslogd` remote logging management 1
/SP/clients/syslog/2	`syslogd` remote logging management 2

Oracle ILOM Target	Description
/SP/clock	Clock management
/SP/config	Configuration back up and restore settings
/SP/diag/snapshot	State of gateway snapshot
/SP/logs	Log events
/SP/logs/event	Designations for event log
/SP/logs/event/list	Designations for event log
/SP/network	External network interface
/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
/SP/services/snmp/communities	SNMP communities
/SP/services/snmp/communities/private	SNMP community
/SP/services/snmp/communities/public	SNMP community
/SP/services/snmp/users	SNMP users
/SP/sessions	Session description
/SP/users	User description

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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "Oracle ILOM Temperature Targets and Properties" on page 15
- "Oracle ILOM Voltage Targets and Properties" on page 17

Oracle ILOM General System Targets and Properties

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

Target and Path	Properties
`/SYS`	• type = Host System • ipmi_name = SYS • product_name = Sun Datacenter InfiniBand Switch GW • product_part_number = 5111402 • product_serial_number = 0110SJC-1099XY9992 • product_manufacturer = Sun Microsystems
`/SYS/CABLE_ATTN`	• type = OEM • ipmi_name = CABLE_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
`/SYS/CABLE_CONN_STAT`	• type = OEM • ipmi_name = CABLE_CONN_STAT • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
`/SYS/CHASSIS_STATUS`	• type = OEM • ipmi_name = CHASSIS_STATUS • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
`/SYS/COOLING_ATTN`	• type = OEM • ipmi_name = COOLING_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Target and Path	Properties
/SYS/COOLING_REDUN	• type = OEM • ipmi_name = COOLING_REDUN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/IBDEV_ATTN	• type = OEM • ipmi_name = IBDEV_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB	• type = Motherboard • ipmi_name = MB • product_name = Sun Datacenter InfiniBand Switch GW • product_part_number = 5111402 • product_serial_number = 0110SJC-1099XY9992 • product_manufacturer = Sun Microsystems • fru_name = Chassis and Motherboard • fru_description = Chassis and Motherboard • fru_extra_1 = ComEx: manufacturing_date - 2010.01.26 • fru_extra_2 = ComEx: serial_number - NCD4J0289 • fru_extra_3 = ComEx: hardware_rev - 0x6, firmware_rev - 0x102 • fru_extra_4 = ComEx: bios_version - NOW1R112 , bios_date - 04/24/2009
/SYS/MB/BOOT_I4A	• type = OEM • ipmi_name = MB/BOOT_I4A • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Target and Path	Properties
/SYS/POWER_ATTN	• type = OEM • ipmi_name = POWER_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/POWER_REDUN	• type = OEM • ipmi_name = POWER_REDUN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/TEMP_ATTN	• 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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "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 22
- "Oracle ILOM Service Targets and Properties" on page 24
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM Fan Targets and Properties

The following table lists the Oracle ILOM /SYS/FAN*x* targets and their properties. Targets without properties are not listed.

Note – The /SYS/FAN*x* target is only available for currently present fans.

Target and Path	Properties
/SYS/FAN*x*	• type = Rear Fan
/SYS/FAN*x*/PRSNT	• type = Entity Presence • ipmi_name = FAN1/PRSNT • class = Discrete Sensor • value = Present • alarm_status = cleared
/SYS/FAN*x*/TACH	• type = Fan • ipmi_name = FAN1/TACH • class = Threshold Sensor • value = 12208.000 RPM • upper_critical_threshold = 26705.000 RPM • lower_noncritical_threshold = 6322.000 RPM • 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 Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "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 22
- "Oracle ILOM Service Targets and Properties" on page 24
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM Indicator Targets and Properties

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

Target and Path	Properties
/SYS/I_ATTENTION	• type = Indicator • ipmi_name = I_ATTENTION • value = Off
/SYS/I_LOCATOR	• type = Indicator • ipmi_name = I_LOCATOR • value = Off
/SYS/I_POWER	• type = Indicator • ipmi_name = I_POWER • value = On

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 11
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "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 22
- "Oracle ILOM Service Targets and Properties" on page 24
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM Power Supply Targets and Properties

The following table lists the Oracle ILOM /SYS/PSU*x* targets and their properties. Targets without properties are not listed.

Note – The /SYS/PSU*x* target is only available for currently present power supplies.

Target and Path	Properties
/SYS/PSU*x*	• type = Power Supply • ipmi_name = PSU0 • fru_name = A236 • fru_description = Power Supply • fru_manufacturer = Delta Energy Systems • fru_version = 01 • fru_part_number = 3002234 • fru_serial_number = 006541 • fru_extra_1 = sun_spec_part_number - 885-1390-01 • fru_extra_2 = ipmi_serial_number - 1841DET-0915B26541 • fru_extra_3 = ipmi_part_number - 300-2234-01
/SYS/PSU*x*/PRSNT	• type = Entity Presence • ipmi_name = PSU0/PRSNT • class = Discrete Sensor • value = Present • alarm_status = cleared
/SYS/PSU*x*/ALERT	• type = OEM • ipmi_name = PSU0/ALERT • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/PSU*x*/AC_PRESENT	• type = OEM • ipmi_name = PSU0/AC_PRESENT • 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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Temperature Targets and Properties" on page 15

Oracle ILOM Temperature Targets and Properties

The following 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_B0`	• type = Temperature • ipmi_name = MB/T_B0 • class = Threshold Sensor • value = 49.000 degree C • upper_nonrecov_threshold = 70.000 degree C • upper_critical_threshold = 70.000 degree C • alarm_status = cleared
`/SYS/MB/T_B1`	• type = Temperature • ipmi_name = MB/T_B1 • class = Threshold Sensor • value = 54.000 degree C • upper_nonrecov_threshold = 70.000 degree C • upper_critical_threshold = 70.000 degree C • alarm_status = cleared
`/SYS/MB/T_BACK`	• 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

Target and Path	Properties
/SYS/MB/T_FRONT	• 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	• 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	• 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
- "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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "Oracle ILOM Voltage Targets and Properties" on page 17
- "Oracle ILOM General Targets and Properties" on page 22
- "Oracle ILOM Service Targets and Properties" on page 24
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM Voltage Targets and Properties

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

Target and Path	Properties
/SYS/MB/V_1.0V	• type = Voltage • ipmi_name = MB/V_1.0V • class = Threshold Sensor • value = 1.006 Volts • upper_nonrecov_threshold = 1.252 Volts • upper_critical_threshold = 1.205 Volts • upper_noncritical_threshold = 1.158 Volts • lower_noncritical_threshold = 0.877 Volts • lower_critical_threshold = 0.819 Volts • lower_nonrecov_threshold = 0.749 Volts • alarm_status = cleared
/SYS/MB/V_1.2VStby	• type = Voltage • ipmi_name = MB/V_1.2VStby • class = Threshold Sensor • value = 1.203 Volts • upper_nonrecov_threshold = 1.494 Volts • upper_critical_threshold = 1.436 Volts • upper_noncritical_threshold = 1.387 Volts • lower_noncritical_threshold = 1.048 Volts • lower_critical_threshold = 0.999 Volts • lower_nonrecov_threshold = 0.892 Volts • alarm_status = cleared
/SYS/MB/V_1.8V	• 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

Target and Path	Properties
/SYS/MB/V_2.5V	• 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
/SYS/MB/V_3.3VMain	• 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	• 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

Target and Path	Properties
/SYS/MB/V_5V	• 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
/SYS/MB/V_12V	• 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	• 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

Target and Path	Properties
/SYS/MB/V_BX1.2V	• type = Voltage • ipmi_name = MB/V_BX1.2V • class = Threshold Sensor • value = 1.193 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
/SYS/MB/V_I41.2V	• 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
/SYS/MB/V_V1P2ANG	• type = Voltage • ipmi_name = MB/V_V1P2ANG • class = Threshold Sensor • value = 1.182 Volts • upper_nonrecov_threshold = 1.498 Volts • upper_critical_threshold = 1.462 Volts • upper_noncritical_threshold = 1.392 Volts • lower_noncritical_threshold = 1.135 Volts • lower_critical_threshold = 1.123 Volts • lower_nonrecov_threshold = 0.901 Volts • alarm_status = cleared

Target and Path	Properties
/SYS/MB/V_V1P2DIG	• type = Voltage • ipmi_name = MB/V_V1P2DIG • class = Threshold Sensor • value = 1.182 Volts • upper_nonrecov_threshold = 1.498 Volts • upper_critical_threshold = 1.462 Volts • upper_noncritical_threshold = 1.392 Volts • lower_noncritical_threshold = 1.135 Volts • lower_critical_threshold = 1.123 Volts • lower_nonrecov_threshold = 0.901 Volts • alarm_status = cleared
/SYS/MB/V_1.0VOK	• type = OEM • ipmi_name = MB/V_1.0VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_1.8VOK	• type = OEM • ipmi_name = MB/V_1.8VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_2.5VOK	• type = OEM • ipmi_name = MB/V_2.5VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_3.3VMain OK	• type = OEM • ipmi_name = MB/V_3.3VMainOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_5VOK	• type = OEM • ipmi_name = MB/V_5VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Target and Path	Properties
/SYS/MB/V_BX1.2VOK	• type = OEM • ipmi_name = MB/V_BX1.2VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_ECB	• type = OEM • ipmi_name = MB/V_ECB • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_I41.2VOK	• 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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "Oracle ILOM Temperature Targets and Properties" on page 15
- "Oracle ILOM General Targets and Properties" on page 22
- "Oracle ILOM Service Targets and Properties" on page 24
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM General Targets and Properties

The following 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`	• `system_contact = (none)` • `system_description = Sun Datacenter InfiniBand Switch GW, ILOM v1.3.2-1, r47111` • `system_identifier = (none)` • `system_location = (none)`
`/SP/alertmgmt/rules/1`	• `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`	• `timeout = 0`
`/SP/clients/ntp/server/1`	• `address = 0.0.0.0`
`/SP/clients/ntp/server/2`	• `address = 0.0.0.0`
`/SP/clients/smtp`	• `address = 0.0.0.0` • `custom_sender = (none)` • `port = 25` • `send_test_email_to = (Cannot show property)` • `state = disabled`
`/SP/clients/syslog/1`	• `address = 0.0.0.0`
`/SP/clients/syslog/2`	• `address = 0.0.0.0`
`/SP/clock`	• `datetime = Thu Oct 15 02:54:28 2009` • `timezone = UTC` • `usentpserver = disabled`
`/SP/config`	• `dump_uri = (Cannot show property)` • `load_uri = (Cannot show property)` • `passphrase = none`

Target and Path	Properties
/SP/diag/snapshot	• dataset = normal • dump_uri = (Cannot show property) • encrypt_output = false • result = (none)
/SP/logs/event	• clear = (Cannot show property)
/SP/network	• 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	• 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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "Oracle ILOM Temperature Targets and Properties" on page 15
- "Oracle ILOM Voltage Targets and Properties" on page 17
- "Oracle ILOM Service Targets and Properties" on page 24
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM Service Targets and Properties

The following 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
`/SP/services/http`	• `port = 80` • `secureredirect = enabled` • `servicestate = disabled`
`/SP/services/https`	• `port = 443` • `servicestate = enabled`
`/SP/services/https/ssl`	• `cert_status = Using Default (No custom certificate or private key loaded)`
`/SP/services/https/ssl/custom_cert`	• `clear_action = (Cannot show property)` • `issuer = (none)` • `load_uri = (Cannot show property)` • `subject = (none)` • `valid_from = (none)` • `valid_until = (none)`
`/SP/services/https/ssl/custom_key`	• `clear_action = (Cannot show property)` • `key_present = false` • `load_uri = (Cannot show property)`
`/SP/services/https/ssl/default_cert`	• `issuer = /C=US/ST=California/L=Santa Clara/O=Sun Microsystems, Inc./CN=sun-ilom` • `subject = /C=US/ST=California/L=Santa Clara/O=Sun Microsystems, Inc./CN=sun-ilom` • `valid_from = Apr 27 17:10:36 2005 GMT` • `valid_until = Apr 25 17:10:36 2015 GMT`
`/SP/services/ipmi`	• `servicestate = enabled`
`/SP/services/servicetag`	• `passphrase = none` • `state = enabled`
`/SP/services/snmp`	• `engineid = (none)` • `port = 161` • `servicestate = enabled` • `sets = disabled` • `v1 = disabled` • `v2c = disabled` • `v3 = enabled`
`/SP/services/snmp/communities/private`	• `permission = rw`

Target and Path	Properties
/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 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "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 22
- "Oracle ILOM User and Session Targets and Properties" on page 26

Oracle ILOM User and Session Targets and Properties

The following 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`	• `username = ilom-admin` • `role = aucro` • `starttime = Thu Oct 15 02:36:11 2009` • `type = shell` • `mode = normal`
`/SP/users/ilom-admin`	• `role = aucro` • `password = *****`
`/SP/users/ilom-operator`	• `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
- "Oracle ILOM Fan Targets and Properties" on page 11
- "Oracle ILOM Indicator Targets and Properties" on page 13
- "Oracle ILOM Power Supply Targets and Properties" on page 13
- "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 22
- "Oracle ILOM Service Targets and Properties" on page 24

Administering Oracle ILOM (CLI)

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

Related Information

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 255.

Related Information

- "Understanding Oracle ILOM Targets" on page 4
- "Access Oracle ILOM From the Web Interface" on page 114
- "Switching Between the Oracle ILOM Shell and the Linux Shell" on page 32
- "Monitoring Oracle ILOM Targets (CLI)" on page 39
- "Controlling Oracle ILOM Targets (CLI)" on page 66

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 30
- "Access the Oracle ILOM Shell From the CLI (USB Management Port)" on page 31

Related Information

- *Gateway Installation*, accessing the management controller
- "Access Oracle ILOM From the Web Interface" on page 114
- "Monitoring Oracle ILOM Targets (CLI)" on page 39
- "Controlling Oracle ILOM Targets (CLI)" on page 66
- "Switching Between the Oracle ILOM Shell and the Linux Shell" on page 32

▼ 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 gateway 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 82 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 31

▼ 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 the following:

```
...
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 82 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 30

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`, `/SYS/Gateway_Mgmt`, 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, /SYS/Gateway_Mgmt, and /SYS/Fabric_Mgmt Linux Shells" on page 33
- "Switch From the Oracle ILOM Shell to the Linux Shell" on page 36
- "Switch From the Linux Shell to the Oracle ILOM Shell" on page 38

Related Information

- "Accessing Oracle ILOM From the CLI" on page 30

/SYS/Switch_Diag, /SYS/Gateway_Mgmt, and /SYS/Fabric_Mgmt Linux Shells

The preferred method of accessing the Linux shell is through the `/SYS/Switch_Diag`, `/SYS/Gateway_Mgmt`, 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/Gateway_Mgmt` target opens a different restricted Linux shell that enables the `ilom-admin` user, and users with similar permissions, to run both diagnostic and gateway management 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, gateway, and fabric management commands.

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

The following 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, /SYS/Gateway_Mgmt, or /SYS/Fabric_Mgmt targets.

Command	/SYS/Switch_Diag	/SYS/Gateway_Mgmt	/SYS/Fabric_Mgmt
checkboot	Available	Available	Available
checkguidfilesftree			Available
checkpower	Available	Available	Available
checktopomax			Available
checkvoltages	Available	Available	Available
connector	Available	Available	Available
createvlan		Available	Available
createvnic		Available	Available
dcsport	Available	Available	Available
deletevlan		Available	Available
deletevnic		Available	Available
disablecablelog			Available
disablegwport		Available	Available
disablelinklog			Available
disablesm			Available
disableswitchport			Available
disablevnic		Available	Available
enablecablelog			Available
enablegwport		Available	Available
enablelinklog			Available
enablesm			Available
enableswitchport			Available
enablevnic		Available	Available
env_test	Available	Available	Available
exit	Available	Available	Available
generatetopology			Available
getfanspeed	Available	Available	Available
getmaster	Available	Available	Available

Command	/SYS/Switch_Diag	/SYS/Gateway_Mgmt	/SYS/Fabric_Mgmt
getportcounters	Available	Available	Available
getportstatus	Available	Available	Available
help	Available	Available	Available
ibdiagnet			Available
ibhosts	Available	Available	Available
ibnetstatus	Available	Available	Available
ibnodes	Available	Available	Available
ibportstate	Available	Available	Available
ibroute	Available	Available	Available
ibrouters	Available	Available	Available
ibstat	Available	Available	Available
ibswitches	Available	Available	Available
ibtracert	Available	Available	Available
listlinkup	Available	Available	Available
matchtopology			Available
perfquery	Available	Available	Available
saquery			Available
setcontrolledhandover			Available
setgwethport		Available	Available
setgwinstance		Available	Available
setgwsl		Available	Available
setmsmlocationmonitor			Available
setsmpriority			Available
setsubnetprefix			Available
showfruinfo	Available	Available	Available
showgwconfig		Available	Available
showgwports		Available	Available
showpsufru	Available	Available	Available
showsmlog	Available	Available	Available
showtemps	Available	Available	Available
showtopology	Available	Available	Available

Command	/SYS/Switch_Diag	/SYS/Gateway_Mgmt	/SYS/Fabric_Mgmt
showunhealthy	Available	Available	Available
showvlan		Available	Available
showvnics		Available	Available
smconfigtest			Available
smpquery	Available	Available	Available
version	Available	Available	Available

Related Information

- "show Command" on page 265
- "Switch From the Oracle ILOM Shell to the Linux Shell" on page 36
- "Switch From the Linux Shell to the Oracle ILOM Shell" on page 38

▼ 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 30.

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@hostname->
```

Or:

```
-> show /SYS/Gateway_Mgmt
NOTE: show on Gateway_Mgmt will launch a restricted Linux shell.
      User can execute switch diagnosis, Ethernet Gateway resource
      administration and configuration commands 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.

GWMan@hostname->
```

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@hostname->
```

where *hostname* 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/Gateway_Mgmt` or `/SYS/Fabric_Mgmt` Linux

shell as the `ilom-operator` user, the following message is displayed:

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

Related Information

- "show Command" on page 265
- "exit Command (ILOM)" on page 260
- "/SYS/Switch_Diag, /SYS/Gateway_Mgmt, and /SYS/Fabric_Mgmt Linux Shells" on page 33
- "Switch From the Linux Shell to the Oracle ILOM Shell" on page 38

▼ Switch From the Linux Shell to the Oracle ILOM Shell

1. **Access the management controller.**

   See *Gateway Administration*, accessing the managment controller.

2. **Switch to 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.

Related Information

- "exit Command (ILOM)" on page 260
- "/SYS/Switch_Diag, /SYS/Gateway_Mgmt, and /SYS/Fabric_Mgmt Linux Shells" on page 33
- "Switch From the Oracle ILOM Shell to the Linux Shell" on page 36

Monitoring Oracle ILOM Targets (CLI)

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

Related Information

- "Accessing Oracle ILOM From the CLI" on page 30
- "Controlling Oracle ILOM Targets (CLI)" on page 66
- "Monitoring Oracle ILOM Targets (Web)" on page 115
- "Upgrading the Gateway Firmware Through Oracle ILOM (CLI)" on page 102
- "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.

Related Information

- "Performing Daily Tasks (Web)" on page 115

- "Checking the Status of Services (CLI)" on page 51
- "Verifying Other Aspects With Oracle ILOM (CLI)" on page 57

▼ Display the Date (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the date:**

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

   The date and time are displayed as the `datetime` property.

   For example:

```
-> show -d properties /SP/clock
 /SP/clock
  Properties:
      datetime = Fri Apr 29 07:21:25 2011
      timezone = UTC
      usentpserver = disabled
->
```

Related Information

- "show Command" on page 265
- "Display the Date (Web)" on page 116
- "Display the Date and Time (SNMP)" on page 196

▼ Display Gateway Status LEDs States (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the status of the Power LED:**

```
-> show -d properties /SYS/I_POWER
 /SYS/I_POWER
  Properties:
      type = Indicator
```

```
      ipmi_name = I_POWER
      value = On
->
```

3. **Display the status of the Attention LED:**

```
-> show -d properties /SYS/I_ATTENTION
 /SYS/I_ATTENTION
  Properties:
      type = Indicator
      ipmi_name = I_ATTENTION
      value = Off
->
```

4. **Display the status of the Locator LED:**

```
-> show -d properties /SYS/I_LOCATOR
 /SYS/I_LOCATOR
  Properties:
      type = Indicator
      ipmi_name = I_LOCATOR
      value = Off
->
```

Related Information

- "show Command" on page 265
- "Display the Gateway Status LEDs States (Web)" on page 116
- "Display Gateway Status LED States (IPMI)" on page 253
- "Enable the Locator LED (CLI)" on page 69
- "Disable the Locator LED (CLI)" on page 70

▼ Display the Aggregate Sensors State (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the aggregate sensor state:**

```
-> show -d properties aggregate_sensor_target
```

where *aggregate_sensor_target* is from the table in "Aggregate Sensor States" on page 42.

For example, to display the overall gateway state:

```
-> show -d properties /SYS/CHASSIS_STATUS
 /SYS/CHASSIS_STATUS
  Properties:
      type = OEM
      ipmi_name = CHASSIS_STATUS
      class = Discrete Sensor
      value = State Deasserted
      alarm_status = cleared
->
```

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

Related Information

- "show Command" on page 265
- "Display the Aggregate Sensors State (Web)" on page 116
- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display the Sensor States (IPMI)" on page 248
- "Aggregate Sensor States" on page 42

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 faults.

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

Aspect	Aggregate Sensor Target
Overall cable connectivity state	/SYS/CABLE_ATTN
Change in cable connectivity state	/SYS/CABLE_CONN_STAT
Overall gateway 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 41
- "Display the Aggregate Sensors State (Web)" on page 116
- "Display the Entity Numbers" on page 212

▼ Display Power Supply Status (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Check for the presence of the power supply:**

```
-> show -d properties /SYS/PSUx/PRSNT
```

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

```
-> show -d properties /SYS/PSU0/PRSNT
 /SYS/PSU0/PRSNT
  Properties:
      type = Entity Presence
      ipmi_name = PSU0/PRSNT
      class = Discrete Sensor
```

```
      value = Present
      alarm_status = cleared
->
```

Note – The `/SYS/PSU`*x* target is available only for currently installed power supplies.

3. Check for the presence of input power:

```
-> show -d properties /SYS/PSUx/AC_PRESENT
 /SYS/PSU0/AC_PRESENT
  Properties:
      type = OEM
      ipmi_name = PSU0/AC_PRESENT
      class = Discrete Sensor
      value = State Deasserted
      alarm_status = cleared
->
```

4. Check for an alert:

```
-> show -d properties /SYS/PSUx/ALERT
 /SYS/PSU0/ALERT
  Properties:
      type = OEM
      ipmi_name = PSU0/ALERT
      class = Discrete Sensor
      value = State Deasserted
      alarm_status = cleared
->
```

Related Information

- "show Command" on page 265
- "Display Power Supply Status (Web)" on page 117
- "Display Power Supply Status (SNMP)" on page 198

▼ 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 30.

2. **Display the board-level voltage data:**

```
-> 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 voltage 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 265
- "Display Board-Level Voltages (Web)" on page 118
- "Display Board-Level Voltages (SNMP)" on page 200
- "Board Level Voltages" on page 45

Board Level Voltages

The following 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 1.0V source	`/SYS/MB/V_1.0V`
State of the main 1.0V source	`/SYS/MB/V_1.0VOK`
Voltage of the standby 1.2V source	`/SYS/MB/V_1.2VStby`

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
Voltage of the BridgeX main 1.2V source	/SYS/MB/V_BX1.2V
State of the BridgeX main 1.2V source	/SYS/MB/V_BX1.2VOK
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
Voltage of the 1.2V source for analog power pins.	/SYS/MB/V_V1P2ANG
Voltage of the 1.2V source for digital power pins.	/SYS/MB/V_V1P2DIG

Related Information

- "Display Board-Level Voltages (CLI)" on page 44
- "Display Board-Level Voltages (Web)" on page 118
- "Display the Entity Numbers" on page 212

▼ Display Internal Temperatures (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the internal temperatures:**

```
-> 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 temperature at the front of the switch:

```
-> show -d properties /SYS/MB/T_FRONT
 /SYS/MB/T_FRONT
  Properties:
      type = Temperature
      ipmi_name = MB/T_FRONT
      class = Threshold Sensor
      value = 27.000 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 265
- "Display Internal Temperatures (Web)" on page 118
- "Display Internal Temperatures (SNMP)" on page 204
- "Internal Temperature Sensors" on page 47

Internal Temperature Sensors

The following table provides the temperature sensor locations and their respective sensor targets.

Temperature Location	Temperature Sensor Target
Temperature of BridgeX chip 0	/SYS/MB/T_B0
Temperature of BridgeX chip 1	/SYS/MB/T_B1
Temperature at front of switch	/SYS/MB/T_FRONT
Temperature of the I4 switch chip	/SYS/MB/T_I4A

Temperature Location	Temperature Sensor Target
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 118
- "Display the Entity Numbers" on page 212

▼ Display Fan Status (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Check for the presence of the fan module:**

```
-> show -d properties /SYS/FANx/PRSNT
```

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

```
-> show -d properties /SYS/FAN1/PRSNT
 /SYS/FAN1/PRSNT
  Properties:
      type = Entity Presence
      ipmi_name = FAN1/PRSNT
      class = Discrete Sensor
      value = Present
      alarm_status = cleared
->
```

Note – The /SYS/FAN*x* target is available only for currently installed fans.

3. **Display the fan speed:**

```
-> show -d properties /SYS/FAN1/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 265
- "Display Fan Status (Web)" on page 119
- "Display Fan Status (SNMP)" on page 207

▼ Display the Oracle ILOM Sessions (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 = Sat Oct 10 01:38:36 2009
      type = shell
      mode = normal
 /SP/sessions/24
  Properties:
      username = ilom-operator
      role = o
      starttime = Sat Oct 10 03:12:48 2009
```

```
      type = web
      mode = normal
->
```

Related Information

- "show Command" on page 265
- "Display the Oracle ILOM Sessions (Web)" on page 119
- "Display Oracle ILOM Sessions (SNMP)" on page 214

▼ 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 30.

2. **Display the Oracle ILOM event log:**

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

   For example:

Note – The output in the example is a portion of the full output.

```
-> show /SP/logs/event/list
/SP/logs/event/list
  Targets:
  Properties:
  Commands:
      cd
      show
ID      Date/Time                  Class      Type       Severity
------  -------------------------  ---------  ---------  ---------
94      Fri Oct  9 01:15:13 2009   Audit      Log        minor
 root : Open Session : object = /session/type : value = shell : success
93      Fri Oct  9 01:13:51 2009   Audit      Log        minor
 test : Close Session : object = /session/type : value = www : success
92      Fri Oct  9 00:59:44 2009   Audit      Log        minor
.
```

```
.
.
->
```

Related Information

- "show Command" on page 265
- "Display the Oracle ILOM Event Log (Web)" on page 120
- "Display the Oracle ILOM Event Log (SNMP)" on page 215
- "Display the System Event Log (IPMI)" on page 251

Checking the Status of Services (CLI)

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

- "Display the HTTP Service Status (CLI)" on page 51
- "Display the HTTPS Service Status (CLI)" on page 52
- "Display the SSL Certificates (CLI)" on page 52
- "Display the SNMP Service Status (CLI)" on page 53
- "Display the SNMP User Accounts (CLI)" on page 54
- "Display the SNMP Service Communities (CLI)" on page 54
- "Display the IPMI Service Status (CLI)" on page 55
- "Display the SMTP Client Status (CLI)" on page 56
- "Display the NTP Servers (CLI)" on page 56

Related Information

- "Checking the Status of Services (Web)" on page 120
- "Performing Daily Tasks (CLI)" on page 39
- "Verifying Other Aspects With Oracle ILOM (CLI)" on page 57

▼ Display the HTTP Service Status (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the HTTP status:**

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

Related Information

- "show Command" on page 265
- "Display the HTTP Service Status (Web)" on page 121
- "Display the HTTP Service Status (SNMP)" on page 217

▼ Display the HTTPS Service Status (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 265
- "Display the HTTPS Service Status (Web)" on page 121
- "Display the HTTPS Service Status (SNMP)" on page 218

▼ Display the SSL Certificates (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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=Santa Clara/O=Sun Microsystems, Inc./CN=
sun-ilom
      subject = /C=US/ST=California/L=Santa Clara/O=Sun Microsystems, Inc./CN=
sun-ilom
      valid_from = Apr 27 17:10:36 2005 GMT
      valid_until = Apr 25 17:10:36 2015 GMT
->
```

Related Information

- "show Command" on page 265
- "Display the SSL Certificates (Web)" on page 121

▼ Display the SNMP Service Status (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 265
- "Display the SNMP Service Status (Web)" on page 122

▼ Display the SNMP User Accounts (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 265
- "Display the SNMP Service User Accounts (Web)" on page 122

▼ Display the SNMP Service Communities (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 265
- "Display the SNMP Service Communities (Web)" on page 123

▼ Display the IPMI Service Status (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the IPMI status:**

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

Related Information

- "show Command" on page 265
- "Display the IPMI Service Status (Web)" on page 123

▼ Display the SMTP Client Status (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the SMTP client status:**

Note – The following example shows that the SMTP client is not enabled

---

```
-> show -d properties /SP/client/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 265
- "Display the SMTP Client Status (Web)" on page 123
- "Display the SMTP Client Status (SNMP)" on page 218
- "Configure the SMTP Client (CLI)" on page 72

▼ Display the NTP Servers (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the IP addresses of the NTP servers:**

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

-> show -d properties /SP/clients/ntp/server/2
 /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 -d properties /SP/clock
 /SP/clock
  Properties:
      datetime = Sun Jan 20 20:18:02 2002
      timezone = UTC
      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 265
- "Display the Network Time Protocol Servers (Web)" on page 124
- "Display the NTP State (SNMP)" on page 219
- "Display the NTP Servers (SNMP)" on page 219
- "Set the Date and Time (CLI)" on page 68

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 39 or "Checking the Status of Services (CLI)" on page 51.

- "Get Help on an Oracle ILOM Command (CLI)" on page 58

- "Get Help on an Oracle ILOM Target Property (CLI)" on page 59
- "Display the Alert Properties (CLI)" on page 59
- "Display the Oracle ILOM User Accounts (CLI)" on page 60
- "Display the Remote Log Hosts (CLI)" on page 61
- "Display the Network Management Configuration (CLI)" on page 62
- "Display the CLI Session Timeout (CLI)" on page 63
- "Display Gateway FRU ID (CLI)" on page 63
- "Display Power Supply FRU ID (CLI)" on page 64
- "Display the Firmware Version (CLI)" on page 65
- "Display Identification Properties (CLI)" on page 65

Related Information

- "Verifying Other Aspects With Oracle ILOM (Web)" on page 124
- "Performing Daily Tasks (CLI)" on page 39
- "Checking the Status of Services (CLI)" on page 51

▼ Get Help on an Oracle ILOM Command (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 (ILOM)" on page 261

- "Get Help on an Oracle ILOM Target Property (CLI)" on page 59

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

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 (ILOM)" on page 261
- "Get Help on an Oracle ILOM Command (CLI)" on page 58

▼ 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 30.

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 265
- "Display the Alert Properties (Web)" on page 125
- "Display the Alert Properties (SNMP)" on page 221
- "Enable Alerts to Send SNMP Traps (CLI)" on page 97
- "Enable Alerts to Send PETs (CLI)" on page 98
- "Enable Alerts to Send Email Alerts (CLI)" on page 99
- "Disable Alerts (CLI)" on page 100

▼ Display the Oracle ILOM User Accounts (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 properties:**

```
-> show -d properties /SP/users/ilom-admin
 /SP/users/ilom-admin
  Properties:
      role = aucro
      password = *****
->
```

Related Information

- "show Command" on page 265
- "Display the Oracle ILOM User Accounts (Web)" on page 126
- "Display Oracle ILOM User Accounts (SNMP)" on page 222

▼ Display the Remote Log Hosts (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the remote log hosts:**

```
-> show -d properties /SP/clients/syslog/number
```

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

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

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

Note – The address of `0.0.0.0` indicates that remote host 1 functionality is not configured.

Related Information

- "show Command" on page 265
- "Display the Remote Log Hosts (Web)" on page 126
- "Display the Remote Log Hosts (SNMP)" on page 222
- "Set the Remote Log Hosts (CLI)" on page 71

▼ Display the Network Management Configuration (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 265
- "Display the Network Management Configuration (Web)" on page 126
- "Display the Network Management Configuration (SNMP)" on page 223

▼ Display the CLI Session Timeout (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the CLI session timeout:**

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

Related Information

- "show Command" on page 265
- "Display the CLI Session Timeout (Web)" on page 127
- "Set the Oracle ILOM CLI Session Timeout (CLI)" on page 101

▼ Display Gateway FRU ID (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the gateway FRU information:**

```
-> show -d properties /SYS/MB
 /SYS/MB
  Properties:
      type = Motherboard
      ipmi_name = MB
      product_name = Sun Datacenter InfiniBand Switch GW
      product_part_number = 5111402
      product_serial_number = 0110SJC-1099XY9992
      product_manufacturer =  Sun Microsystems
      fru_name = Chassis and Motherboard
      fru_description = Chassis and Motherboard
      fru_extra_1 = ComEx: manufacturing_date - 2009.02.20
      fru_extra_2 = ComEx: serial_number - NCD3R0527
      fru_extra_3 = ComEx: hardware_rev - 0x100, firmware_rev - 0x102
      fru_extra_4 = ComEx: bios_version - NOW1R112
 , bios_date - 04/24/2009
->
```

Related Information

- "show Command" on page 265
- "Display System Component FRU ID (Web)" on page 127
- "Display Gateway FRU ID (SNMP)" on page 224
- "Display FRU ID Information (IPMI)" on page 252

▼ 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 30.

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 = A247
      fru_description = Power Supply
      fru_manufacturer = Delta Energy Systems
      fru_version = 02
      fru_part_number = 3002233
      fru_serial_number = 001180
      fru_extra_1 = sun_spec_part_number - 885-1389-02
      fru_extra_2 = ipmi_serial_number - 1841DET-1008B51180
      fru_extra_3 = ipmi_part_number - 300-2233-02
->
```

Related Information

- "show Command" on page 265
- "Display System Component FRU ID (Web)" on page 127

- "Display Power Supply FRU ID (SNMP)" on page 225
- "Display FRU ID Information (IPMI)" on page 252

▼ Display the Firmware Version (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the firmware version:**

```
-> version
```

For example:

```
-> version
SP firmware 1.3.2-1
SP firmware build number: 47111
SP firmware date: Mon Jan 17 16:49:11 IST 2011
SP filesystem version: 0.1.22
->
```

Related Information

- "version Command (ILOM)" on page 267
- "Display the Oracle ILOM Version (Web)" on page 128
- "Display the Firmware Version (SNMP)" on page 231

▼ Display Identification Properties (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Display the identification properties:**

```
-> show -d properties /SP
 /SP/cli
  Properties:
      system_contact = (none)
      system_description = Sun Datacenter InfiniBand Switch GW, ILOM v1.3.2-1,
r47111
      system_identifier = (none)
      system_location = (none)
->
```

Related Information

- "Display Identification Properties (Web)" on page 129
- "Display System Identifier (SNMP)" on page 231
- "Set the Identification Properties (CLI)" on page 80

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 66
- "Performing Oracle ILOM User Tasks (CLI)" on page 81
- "Managing HTTP Services (CLI)" on page 84
- "Managing HTTPS Services (CLI)" on page 85
- "Managing SNMP Services (CLI)" on page 88
- "Managing Other Aspects With Oracle ILOM (CLI)" on page 96

Related Information

- "Accessing Oracle ILOM From the CLI" on page 30
- "Controlling Oracle ILOM Targets (Web)" on page 129
- "Monitoring Oracle ILOM Targets (CLI)" on page 39
- "Upgrading the Gateway Firmware Through Oracle ILOM (CLI)" on page 102
- "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 67
- "Set the Date and Time (CLI)" on page 68
- "Enable the Locator LED (CLI)" on page 69
- "Disable the Locator LED (CLI)" on page 70
- "Clear the Oracle ILOM Event Log (CLI)" on page 70

- "Set the Remote Log Hosts (CLI)" on page 71
- "Configure the SMTP Client (CLI)" on page 72
- "Back Up the Configuration (CLI)" on page 73
- "Gateway Configuration Information Backed Up" on page 74
- "Restore the Configuration (CLI)" on page 74
- "Create a Snapshot of the Gateway State (CLI)" on page 75
- "Snapshot Dataset Information (CLI)" on page 77
- "Set the Network Management Parameters (CLI)" on page 78
- "Set the Identification Properties (CLI)" on page 80

Related Information

- "Performing General Tasks on Oracle ILOM Targets (Web)" on page 130
- "Performing Oracle ILOM User Tasks (CLI)" on page 81

▼ 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 30.

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 263
- *Gateway Administration*, restarting the management controller
- "Restart the Management Controller (Web)" on page 130

▼ Set the Date and Time (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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=100922352009
Set 'datetime' to '100922352009'
-> show -d properties /SP/clock
 /SP/clock
  Properties:
      datetime = Fri Oct  9 22:35:30 2009
      timezone = UTC
      usentpserver = disabled
->
```

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 -d properties /SP/clock
 /SP/clock
  Properties:
      datetime = Fri Oct  9 22:35:30 2009
      timezone = CET
      usentpserver = disabled
->
```

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 264
- "Set the Date and Time (Web)" on page 131
- "Set the Date and Time (SNMP)" on page 233

▼ Enable the Locator LED (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 264
- "Enable the Locator LED (Web)" on page 132
- "Enable the Locator LED (IPMI)" on page 254
- "Disable the Locator LED (CLI)" on page 70
- "Display Gateway 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 30.

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 264
- "Disable the Locator LED (Web)" on page 133
- "Disable the Locator LED (IPMI)" on page 254
- "Enable the Locator LED (CLI)" on page 69
- "Display Gateway 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 30.

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 264
- "Clear the Oracle ILOM Event Log (Web)" on page 133
- "Clear the Oracle ILOM Event Log (SNMP)" on page 235
- "Display the Oracle ILOM Event Log (CLI)" on page 50
- "Set the Remote Log Hosts (CLI)" on page 71

▼ 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 30.

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 264
- "Set the Remote Log Hosts (Web)" on page 134
- "Set the Remote Log Hosts (SNMP)" on page 235
- "Display the Remote Log Hosts (CLI)" on page 61

▼ 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 30.

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-gwl@`*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-gwl@hostname
state=enabled
Set 'address' to '123.45.67.89'
Set 'custom_sender' to 'ilom-gwl@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 264
- "Configure the SMTP Client (Web)" on page 134
- "Configure the SMTP Client (SNMP)" on page 236
- "Display the SMTP Client Status (CLI)" on page 56

▼ Back Up the Configuration (CLI)

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

Note – See "Gateway Configuration Information Backed Up" on page 74 for what gateway configuration information is backed up.

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 264
- "Gateway Configuration Information Backed Up" on page 74
- "Back Up the Configuration (Web)" on page 135
- "Restore the Configuration (CLI)" on page 74

Gateway Configuration Information Backed Up

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

- DCS configuration
- User Subnet Manager configuration
- Environment daemon configuration
- List of disabled ports
- Boot monitor configuration
- BridgeX Manager settings
- BridgeX Manager VNIC settings

Related Information

- "Back Up the Configuration (CLI)" on page 73
- "Back Up the Configuration (Web)" on page 135

▼ 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 30.

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 264
- "Restore the Configuration (Web)" on page 136
- "Back Up the Configuration (CLI)" on page 73
- "Gateway Configuration Information Backed Up" on page 74

▼ Create a Snapshot of the Gateway 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 77.

The snapshot describes the state of the gateway at a particular moment in time. You can use this information for fault diagnosis.The snapshot utility requires administrator privileges.

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Create a snapshot of the gateway 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 77.

- *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 -d properties /SP/diag/snapshot
 /SP/diag/snapshot
  Properties:
      dataset = normal
      dump_uri = (Cannot show property)
      result = Running
->
```

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

```
-> show -d properties /SP/diag/snapshot
 /SP/diag/snapshot
  Properties:
      dataset = normal
      dump_uri = (Cannot show property)
      result = Collecting data into
ftp://root:*****@123.45.67.89//tftpboot/normal/magnum_123.45.67.89_2011-01-07T
14-43-15.zip
Snapshot Complete
Done.
->
```

Related Information

- "set Command" on page 264
- "show Command" on page 265
- "Snapshot Dataset Information (CLI)" on page 77
- "Create a Snapshot of the Gateway State (Web)" on page 137

Snapshot Dataset Information (CLI)

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

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

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

hostname_IP_address_year-month-day`T`*hour-minute-second*`.zip`

for example:

`magnum_123.45.67.89_2011-01-07T14-43-15.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 Gateway State (CLI)" on page 75

▼ Set the Network Management Parameters (CLI)

This task enables you to configure the NET MGT interface.

Note – The following 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 30.

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.

   The following 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 30.

---

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

   See "Accessing Oracle ILOM From the CLI" on page 30.

5. **Display the new IP address:**

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

Related Information

- "set Command" on page 264
- "show Command" on page 265
- "Set the Network Management Parameters (Web)" on page 138
- "Set the Network Parameters (SNMP)" on page 237

▼ Set the Identification Properties (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Set the system contact property:**

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

   For example:

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

3. **Set the system identifier property:**

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

   For example:

```
-> set /SP system_identifier='white house'
Set 'system_identifier' to 'white house'
->
```

4. **Set the system location property:**

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

   For example:

```
-> set /SP system_location='washington'
Set 'system_location' to 'washington'
->
```

5. **Display the identification properties:**

```
-> show -d properties /SP
 /SP/cli
  Properties:
      system_contact = Obama
      system_description = Sun Datacenter InfiniBand Switch GW, ILOM v1.3.2-1,
r47111
```

```
      system_identifier = white house
      system_location = washington
->
```

Related Information

- "Set the Identification Properties (Web)" on page 139
- "Set the System Identifier (SNMP)" on page 238
- "Display Identification Properties (CLI)" on page 65

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 81
- "Change an Oracle ILOM User's Password and or Role (CLI)" on page 82
- "Delete an Oracle ILOM User Account (CLI)" on page 83

Related Information

- "Performing Oracle ILOM User Tasks (Web)" on page 139
- "Performing General Tasks on Oracle ILOM Targets (CLI)" on page 66

▼ Add an Oracle ILOM User Account (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 257
- "Add an Oracle ILOM User Account (Web)" on page 140
- "Add an Oracle ILOM User Account (SNMP)" on page 239
- "Delete an Oracle ILOM User Account (CLI)" on page 83

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

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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.

Related Information

- "set Command" on page 264
- "Change an Oracle ILOM User's Password and or Role (Web)" on page 141

▼ Delete an Oracle ILOM User Account (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 258
- "Delete an Oracle ILOM User Account (Web)" on page 141
- "Delete an Oracle ILOM User Account (SNMP)" on page 240
- "Add an Oracle ILOM User Account (CLI)" on page 81

Managing HTTP Services (CLI)

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

- "Enable the HTTP Service (CLI)" on page 84
- "Disable the HTTP Service (CLI)" on page 84

Related Information

- "Managing HTTP Services (Web)" on page 142
- "Managing HTTPS Services (CLI)" on page 85
- "Managing SNMP Services (CLI)" on page 88

▼ 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 30.

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 264
- "Enable the HTTP Service (Web)" on page 142
- "Set the HTTP Service State (SNMP)" on page 241
- "Disable the HTTP Service (CLI)" on page 84

▼ 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 30.

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 264
- "Disable the HTTP Service (Web)" on page 143
- "Set the HTTP Service State (SNMP)" on page 241
- "Enable the HTTP Service (CLI)" on page 84

Managing HTTPS Services (CLI)

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

- "Enable the HTTPS Service (CLI)" on page 85
- "Install a Custom SSL Certificate (CLI)" on page 86
- "Remove the Custom SSL Certificate (CLI)" on page 87
- "Disable the HTTPS Service (CLI)" on page 88

Related Information

- "Managing HTTPS Services (Web)" on page 144
- "Managing HTTP Services (CLI)" on page 84
- "Managing SNMP Services (CLI)" on page 88

▼ 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 30.

2. **Enable secure redirection:**

```
-> set /SP/services/http secureredirect=enabled
Set 'secureredirect' 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 264
- "Enable the HTTPS Service (Web)" on page 144
- "Set the HTTPS Service State (SNMP)" on page 242
- "Disable the HTTPS Service (CLI)" on page 88

▼ Install a Custom SSL Certificate (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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.
->
```

The certificate is loaded.

Related Information

- "load Command" on page 262
- "Install a Custom SSL Certificate (Web)" on page 145
- "Remove the Custom SSL Certificate (CLI)" on page 87

▼ Remove the Custom SSL Certificate (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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
->
```

The certificate is removed.

Related Information

- "reset Command" on page 263
- "Remove the Custom SSL Certificate (Web)" on page 145
- "Install a Custom SSL Certificate (CLI)" on page 86

▼ 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 30.

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 264
- "Disable the HTTPS Service (Web)" on page 146
- "Set the HTTPS Service State (SNMP)" on page 242
- "Enable the HTTPS Service (CLI)" on page 85

Managing SNMP Services (CLI)

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

- "Enable the SNMP Service (CLI)" on page 89
- "Configure the SNMP Service (CLI)" on page 89
- "Add SNMP Service User Accounts (CLI)" on page 90
- "Modify SNMP Service User Accounts (CLI)" on page 91
- "Delete SNMP Service User Accounts (CLI)" on page 92
- "Add SNMP Service Communities (CLI)" on page 93
- "Modify SNMP Service Communities (CLI)" on page 94

- "Delete SNMP Service Communities (CLI)" on page 94
- "Back Up SNMP Service MIBs (CLI)" on page 95
- "Disable the SNMP Service (CLI)" on page 96

Related Information

- "Managing SNMP Services (Web)" on page 146
- "Managing HTTP Services (CLI)" on page 84
- "Managing HTTPS Services (CLI)" on page 85

▼ 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 30.

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 264
- "Enable the SNMP Service (Web)" on page 147
- "Disable the SNMP Service (CLI)" on page 96

▼ Configure the SNMP Service (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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

The following 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 264
- "Configure the SNMP Service (Web)" on page 147

▼ Add SNMP Service User Accounts (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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.

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
```

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 262
- "set Command" on page 264
- "Add SNMP Service User Accounts (Web)" on page 148
- "Delete SNMP Service User Accounts (CLI)" on page 92

▼ Modify SNMP Service User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See "Accessing Oracle ILOM From the CLI" on page 30.

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.

The following properties are supported:

- `authenticationpassword` – The *value* is the password used for authentication.
- `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.
- `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 264
- "Modify SNMP Service User Accounts (Web)" on page 149

▼ Delete SNMP Service User Accounts (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 258
- "Delete SNMP Service User Accounts (Web)" on page 150
- "Add SNMP Service User Accounts (CLI)" on page 90

▼ Add SNMP Service Communities (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 257
- "Add SNMP Service Communities (Web)" on page 150
- "Delete SNMP Service Communities (CLI)" on page 94

▼ Modify SNMP Service Communities (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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.

   The following 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 264
- "Modify SNMP Service Communities (Web)" on page 151

▼ Delete SNMP Service Communities (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 258
- "Delete SNMP Service Communities (Web)" on page 152
- "Add SNMP Service Communities (CLI)" on page 93

▼ Back Up SNMP Service MIBs (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

2. **Back up 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 dumped.

Related Information

- "dump Command" on page 259

- "Back Up SNMP Service MIBs (Web)" on page 152

▼ Disable the SNMP Service (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 264
- "Disable the SNMP Service (Web)" on page 153
- "Enable the SNMP Service (CLI)" on page 89

Managing Other Aspects With Oracle ILOM (CLI)

These tasks help you manage other aspect of ILOM.

- "Enable Alerts to Send SNMP Traps (CLI)" on page 97
- "Enable Alerts to Send PETs (CLI)" on page 98
- "Enable Alerts to Send Email Alerts (CLI)" on page 99
- "Disable Alerts (CLI)" on page 100
- "Set the Oracle ILOM CLI Session Timeout (CLI)" on page 101

Related Information

- "Managing Other Aspects With Oracle ILOM (Web)" on page 153
- "Managing Other Aspects With Oracle ILOM (SNMP)" on page 240
- "Performing General Tasks on Oracle ILOM Targets (CLI)" on page 66

▼ Enable Alerts to Send SNMP Traps (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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.

The following is an example of an SNMP v2c 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 [123.45.67.90]: Trap
DISMAN-EVENT-MIB::sysUpTimeInstance = Timeticks: (4472) 0:00:44.72,
SNMPv2-MIB::snmpTrapOID.0 = OID:
SNMPv2-SMI::enterprises.42.2.175.103.2.0.53,
SNMPv2-SMI::enterprises.42.2.175.103.2.1.1.0 = STRING: "123.45.67.90",
SNMPv2-SMI::enterprises.42.2.175.103.2.1.14.0 = STRING: "00000002",
SNMPv2-SMI::enterprises.42.2.175.103.2.1.15.0 = STRING: "Sun
Datacenter InfiniBand Switch GW", SNMPv2-SMI::enterprises.42.2.175.103.2.1.2.0
= STRING: "/SYS/CHASSIS_STATUS",
SNMPv2-SMI::enterprises.42.2.175.103.2.1.9.0 = STRING: "State Asserted",
SNMPv2-SMI::enterprises.42.2.175.103.2.1.10.0 = OID:
SNMPv2-SMI::mib-2.47.1.1.1.1.2.3
```

In the output, the trap source is the gateway 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 264
- "Enable Alerts to Send SNMP Traps (Web)" on page 154
- "Enable Alerts to Send SNMP Traps (SNMP)" on page 242
- "Enable Alerts to Send PETs (CLI)" on page 98
- "Enable Alerts to Send Email Alerts (CLI)" on page 99
- "Display the Alert Properties (CLI)" on page 59
- "Disable Alerts (CLI)" on page 100

▼ Enable Alerts to Send PETs (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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'
->
```

The following 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 264
- "Enable Alerts to Send PETs (Web)" on page 155
- "Enable Alerts to Send PETs (SNMP)" on page 243
- "Enable Alerts to Send SNMP Traps (CLI)" on page 97
- "Enable Alerts to Send Email Alerts (CLI)" on page 99
- "Display the Alert Properties (CLI)" on page 59
- "Disable Alerts (CLI)" on page 100

▼ Enable Alerts to Send Email Alerts (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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-gwl-`*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-gwl-magnum level=major
Set 'destination' to 'user@headsup.com'
Set 'type' to 'email'
Set 'email_custom_sender' to 'ilom-gwl-magnum'
Set 'level' to 'major'
->
```

Related Information

- "set Command" on page 264
- "Enable Alerts to Send Email Alerts (Web)" on page 155
- "Enable Alerts to Send Email Alerts (SNMP)" on page 244
- "Enable Alerts to Send SNMP Traps (CLI)" on page 97
- "Enable Alerts to Send PETs (CLI)" on page 98
- "Display the Alert Properties (CLI)" on page 59
- "Disable Alerts (CLI)" on page 100

▼ Disable Alerts (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 264
- "Disable Alerts (Web)" on page 156
- "Disable Alerts (SNMP)" on page 246
- "Display the Alert Properties (CLI)" on page 59
- "Enable Alerts to Send SNMP Traps (CLI)" on page 97
- "Enable Alerts to Send PETs (CLI)" on page 98
- "Enable Alerts to Send Email Alerts (CLI)" on page 99

▼ Set the Oracle ILOM CLI Session Timeout (CLI)

1. **Access the Oracle ILOM CLI.**

   See "Accessing Oracle ILOM From the CLI" on page 30.

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 264
- "Set the CLI Session Timeout (Web)" on page 157

Upgrading the Gateway 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 gateway firmware through the Oracle ILOM CLI.

- "Firmware Overview" on page 102
- "Acquire the Gateway Firmware Package (CLI)" on page 103
- "Upgrade the Gateway Firmware (CLI)" on page 105

Related Information

- "Access Oracle ILOM From the Web Interface" on page 114
- "Switching Between the Oracle ILOM Shell and the Linux Shell" on page 32
- "Monitoring Oracle ILOM Targets (CLI)" on page 39
- "Controlling Oracle ILOM Targets (CLI)" on page 66

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 gateway 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 gateway are made or features are added, these enhancements are delivered through a firmware upgrade.

Related Information

- "Acquire the Gateway Firmware Package (CLI)" on page 103
- "Upgrade the Gateway Firmware (CLI)" on page 105

▼ Acquire the Gateway Firmware Package (CLI)

Note – See the *Gateway 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 the 1.3.2_1 version of the firmware, *x*=1, *y*=3, *z*=2, and *w*=1. See the *Gateway 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://supporthtml.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 Downloads page is displayed.

5. **In the Patch Search for Oracle....window, click the Advanced Search tab.**

   The Patch Search for Oracle... window updates.

6. **In the Product drop-down menu, select Sun Network QDR Infiniband Gateway Switch.**

7. **In the Release drop-down menu, select Sun Network QDR Infiniband Gateway Switch** *x.y.z***.**

   Where *x.y.z* is the version number of the firmware package to be acquired. For example, 1.3.2.

8. **In the Platform drop-down menu, select any platform.**

9. **Click Search.**

   The Patch Search window expands with the search results.

10. **In the Patch Name column, click the respective patch number link.**

    For example, `12353972`. The Patch Search window reformats.

11. **Click the** *filename*`.zip` **link to initiate the download.**

    For example, `p12353972_132-1_Generic.zip`.

12. **Indicate where the file should be saved.**

    The file is downloaded and saved.

13. **In your receiving directory, decompress the** *filename*`.zip` **file.**

    The firmware is in the `SUN_DCS_gw_`*x*`.`*y*`.z.tar.gz` file.

    The readme file contains the latest information about the firmware release.

14. **Unpack the** `.gz` **file:**

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

    The extracted files are displayed.

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

16. **Upgrade the gateway firmware.**

    See "Upgrade the Gateway Firmware (CLI)" on page 105 or "Upgrade the Gateway Firmware (Web)" on page 157.

▼ Upgrade the Gateway Firmware (CLI)

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

   For example:

```
% ssh -l root nm2name
root@nm2name's password: password
#
```

   where *nm2name* 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 it with the** `disablesm` **command.**

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

3. **Verify that there is at least 150 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.

4. **Verify that there is at least 1 MB available in the** `/config` **directory.**

```
# df -h /config
Filesystem            Size  Used Avail Use% Mounted on
/dev/hda2              16M  3.6M   11M  25% /config
#
```

   In this example, there are 11 MB available. If not enough space is available, you must delete files from the `/config` directory.

5. **Verify that there is at least 1 MB available in the `/var/log` directory.**

```
# df -h /var/log
Filesystem            Size  Used Avail Use% Mounted on
/dev/hda3              16M  3.6M   11M  25% /var/log
#
```

In this example, there are 11 MB available. If not enough space is available, you must delete files from the `/var/log` directory.

6. **Verify that there is at least 150 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 `Mem:` row of the `free` column, there should be at least 150 MB free memory. In this example, there are 393 MB available. If not enough memory is available, you must exit non-essential applications that are running.

7. **Start the Oracle ILOM shell:**

```
# spsh
Sun(TM) Integrated Lights Out Manager
Version ILOM 3.0 r47111
Copyright 2009 Sun Microsystems, Inc. All rights reserved.
Use is subject to license terms.
->
```

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 gateway 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@123.45.67.99//tmp/sundcs_gw_repository_1.3.2_1.pkg
Downloading firmware image. This will take a few minutes.
```

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 firmware on SUN DCS gw Kontron module,
      I4, BridgeX and FPGA. Upgrade of Kontron module, I4 and BridgeX takes
      few minutes to complete. FPGA upgrade takes about 4 hours.

      ILOM will enter a special mode to load new firmware. No other tasks
      should be performed in ILOM until the firmware upgrade is complete.

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.
Starting SUN DCS gw FW update

==========================
Performing operation: I4 A
==========================
I4 A: I4 is already at the given version.

==========================
Performing operation: BX A
==========================
BX fw upgrade from 8.3.3164(INI:4) to 8.3.3166(INI:4):
Upgrade started...
Upgrade completed.
INFO: BX fw upgrade from 8.3.3164(INI:4) to 8.3.3166(INI:4) succeeded

==========================
Performing operation: BX B
==========================
BX fw upgrade from 8.3.3164(INI:4) to 8.3.3166(INI:4):
Upgrade started...
Upgrade completed.
INFO: BX fw upgrade from 8.3.3164(INI:4) to 8.3.3166(INI:4) succeeded
```

```
============================
Summary of Firmware update
============================
I4 status                 :  FW UPDATE - SUCCESS
I4 update succeeded on    :  none
I4 already up-to-date on  :  A
I4 update failed on       :  none
BX status                 :  FW UPDATE - SUCCESS
BX update succeeded on    :  A, B
BX already up-to-date on  :  none
BX update failed on       :  none

=========================================
Performing operation: FPGW firmware update
=========================================
INFO: FPGA is already at the given version.

=======================================
Performing operation: SUN DCS gw firmware update
=======================================
SUN DCS gw Kontron module fw upgrade from 1.1.2-2 to 1.3.2-1:
Please reboot the system to enable firmware update of Kontron module. The
download of the Kontron firmware image
happens during reboot.

After system reboot, Kontron FW update progress can be monitored in browser using
URL [http://GWsystem] OR at OS
command line prompt by using command [telnet GWsystem 1234] where GWsystem is
the hostname or IP address of SUN DCS
GW.

Firmware update is complete.
->
```

10. **Exit the Oracle ILOM CLI shell:**

```
-> exit
exit
#
```

11. **Reboot the gateway to enable the new firmware.**

    See *Gateway 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.

The next time you login to the gateway, the following message is displayed:

```
FW upgrade completed successfully on Thu May  5 19:17:10 IST 2011.
For details see file /config/mon.autorun.out
This message will be cleared on next reboot.
```

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

```
% ssh -l root nm2name
root@nm2name's password: password
# enablesm
Starting IB Subnet Manager.                                [  OK  ]
Starting partitiond daemon.                                [  OK  ]
#
```

13. **Verify the firmware version:**

```
# version
SUN DCS gw version: 1.3.2-1
Build time: Feb 17 2011 10:02:40
FPGA version: 0x33
SP board info:
Manufacturing Date: 2010.01.22
Serial Number: "NCD4J0165"
Hardware Revision: 0x0006
Firmware Revision: 0x0102
BIOS version: NOW1R112
BIOS date: 04/24/2009
#
```

In the first line of the output is `SUN DCS gw version` *x.y.z-w*, where *x.y.z-w* is the version of the firmware upgraded (or downgraded). For example, 1.3.2-1.

Related Information

- "Upgrade the Gateway Firmware (Web)" on page 157

Administering Oracle ILOM (Web)

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

Related Information

Web Interface Overview

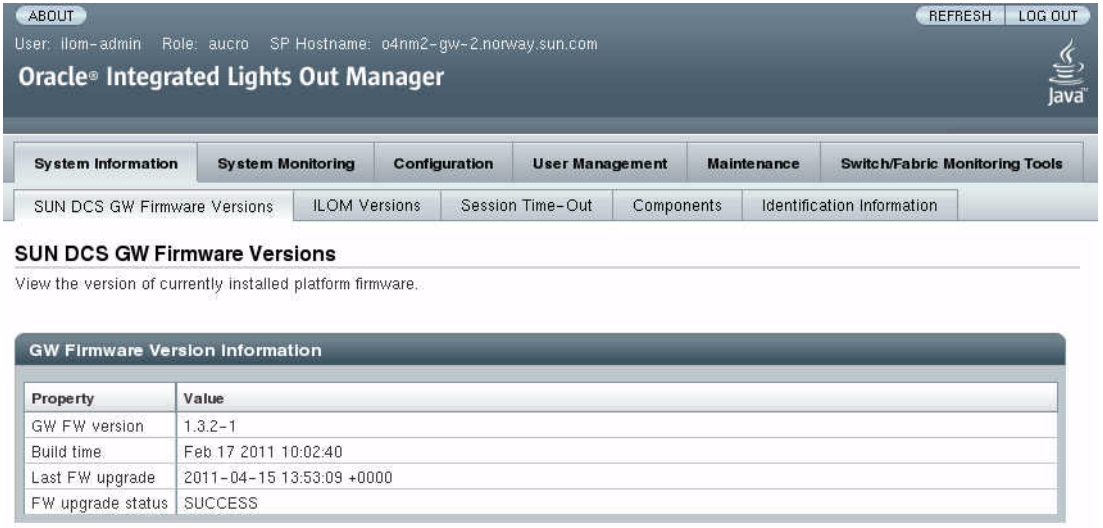
The Oracle ILOM web interface uses a model of hierarchical tabbed pages that you select by clicking on the tab name. Once a page is displayed, you can provide information, set parameters, or access other subtabs. For some pages, initiating a task might spawn an additional window, which accepts further 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 30 to enable Oracle ILOM shell - Linux shell toggling.

The following illustration displays the initial Oracle ILOM web interface page.



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

Tab	Subtabs	Description
System Information	SUN DCS GW Firmware Versions	Displays version information of the gateway firmware.
	ILOM Versions	Displays Oracle ILOM version information.
	Session Time-Out	Sets inactivity timeout for autologout.
	Components	Displays component status.
	Identification Information	Displays gateway identification information.
System Monitoring	Sensor Readings	Displays sensor values.
	Indicators	Displays gateway status LED state.
	Event Logs	Displays event log.

Tab	Subtabs	Description
Configuration	System Management Access	Subtabs for: • Web Server – Configures web server behavior and ports. • SSL Certificate – Displays certificate information. • SNMP – Manages SNMP users, communities, and access. • IPMI – Toggles the state of the IPMI service. • CLI – Sets inactivity timeout for autologout.
	Alert Management	Configures alerts.
	Network	Sets and enables basic network parameters. Has ping test.
	Clock	Sets date, time, and time server parameters.
	Timezone	Sets time zone.
	Syslog	Configures Syslog redirection to IP address.
	SMTP Client	Configures SMTP client for email alerts. Has email test.
User Management	User Accounts	Configures user accounts.
	Active Sessions	Displays active sessions.
Maintenance	Firmware Upgrade	Enables firmware upgrade.
	Back Up/Restore	Configures system back up and restore.
	Reset SP	Resets the management controller.
	Snapshot	Configures and takes a snapshot of the gateway state.
Switch/Fabric Monitoring Tools	SUN DCS GW 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 84 and "Enable the HTTPS Service (CLI)" on page 85 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 141 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 30
- "Web Interface Overview" on page 111
- "Monitoring Oracle ILOM Targets (Web)" on page 115
- "Controlling Oracle ILOM Targets (Web)" on page 129

Monitoring Oracle ILOM Targets (Web)

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

- "Performing Daily Tasks (Web)" on page 115
- "Checking the Status of Services (Web)" on page 120
- "Verifying Other Aspects With Oracle ILOM (Web)" on page 124

Related Information

- "Access Oracle ILOM From the Web Interface" on page 114
- "Monitoring Oracle ILOM Targets (CLI)" on page 39
- "Controlling Oracle ILOM Targets (Web)" on page 129

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 116
- "Display the Gateway Status LEDs States (Web)" on page 116
- "Display the Aggregate Sensors State (Web)" on page 116
- "Display Power Supply Status (Web)" on page 117
- "Display Board-Level Voltages (Web)" on page 118
- "Display Internal Temperatures (Web)" on page 118
- "Display Fan Status (Web)" on page 119
- "Display the Oracle ILOM Sessions (Web)" on page 119
- "Display the Oracle ILOM Event Log (Web)" on page 120

Related Information

- "Performing Daily Tasks (Web)" on page 115
- "Checking the Status of Services (Web)" on page 120
- "Verifying Other Aspects With Oracle ILOM (Web)" on page 124

▼ Display the Date (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Clock subtab.**
   The Clock Settings window opens.
   The current date is displayed in the Date field.

Related Information

- "Display the Date (CLI)" on page 40
- "Display the Date and Time (SNMP)" on page 196

▼ Display the Gateway Status LEDs States (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the System Monitoring tab.**
3. **Click the Indicators subtab.**
   The Indicators window opens.
   In the Indicators table, the indicator target and status are displayed.

Related Information

- "Display Gateway Status LEDs States (CLI)" on page 40
- "Display Gateway Status LED States (IPMI)" on page 253
- "Enable the Locator LED (Web)" on page 132
- "Disable the Locator LED (Web)" on page 133

▼ Display the Aggregate Sensors State (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the System Monitoring tab.**

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

   The Sensor Readings window opens.

   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 42 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 faults.

5. **Click Close.**

Related Information

- "Aggregate Sensor States" on page 42
- "Display the Aggregate Sensors State (CLI)" on page 41
- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display the Sensor Alarm State (SNMP)" on page 211
- "Display the Sensor States (IPMI)" on page 248

▼ Display Power Supply Status (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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

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

   The Sensor Readings window opens.

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 faults.

Related Information

- "Display Power Supply Status (CLI)" on page 43
- "Display Power Supply Status (SNMP)" on page 198

▼ Display Board-Level Voltages (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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

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

   The Sensor Readings window opens.

4. **Select Type: Voltage from the All Sensors 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 200

▼ Display Internal Temperatures (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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

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

   The Sensor Readings window opens.

4. **Select Type: Temperature from the All Sensors 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 204

▼ Display Fan Status (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the System Monitoring tab.**
3. **Click the Sensor Readings subtab.**

   The Sensor Readings window opens.

4. **Select Type: Fan from the All Sensors 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 48
- "Display Fan Status (SNMP)" on page 207

▼ Display the Oracle ILOM Sessions (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the User Management tab.**
3. **Click the Active Sessions subtab.**

   The Active Sessions window opens.

   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 214

▼ Display the Oracle ILOM Event Log (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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 type.

Related Information

- "Display the Oracle ILOM Event Log (CLI)" on page 50
- "Display the Oracle ILOM Event Log (SNMP)" on page 215
- "Display the System Event Log (IPMI)" on page 251
- "Clear the Oracle ILOM Event Log (Web)" on page 133

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 121
- "Display the HTTPS Service Status (Web)" on page 121
- "Display the SSL Certificates (Web)" on page 121
- "Display the SNMP Service Status (Web)" on page 122
- "Display the SNMP Service User Accounts (Web)" on page 122
- "Display the SNMP Service Communities (Web)" on page 123
- "Display the IPMI Service Status (Web)" on page 123
- "Display the SMTP Client Status (Web)" on page 123
- "Display the Network Time Protocol Servers (Web)" on page 124

Related Information

- "Checking the Status of Services (CLI)" on page 51
- "Performing Daily Tasks (Web)" on page 115
- "Verifying Other Aspects With Oracle ILOM (Web)" on page 124

▼ Display the HTTP Service Status (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Systems Management Access subtab.**
4. **Click the Web Server subtab.**
   The Web Server Settings window opens.
   The HTTP web server status and port are displayed.

Related Information

- "Display the HTTP Service Status (CLI)" on page 51
- "Display the HTTP Service Status (SNMP)" on page 217

▼ Display the HTTPS Service Status (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Systems Management Access subtab.**
4. **Click the Web Server subtab.**
   The Web Server Settings window opens.
   The HTTPS web server status and port are displayed.

Related Information

- "Display the HTTPS Service Status (CLI)" on page 52
- "Display the HTTP Service Status (SNMP)" on page 217

▼ Display the SSL Certificates (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Systems Management Access subtab.**

4. **Click the SSL Certificate subtab.**

   The SSL Certificate Upload window opens.

   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 52

▼ Display the SNMP Service Status (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

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

4. **Click the SNMP subtab.**

   The SNMP Management window opens.

   Under Settings, the service status and operating parameters are displayed.

Related Information

- "Display the SNMP Service Status (CLI)" on page 53

▼ Display the SNMP Service User Accounts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

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

4. **Click the SNMP subtab.**

   The SNMP Management window opens.

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 54

▼ Display the SNMP Service Communities (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the Systems Management Access subtab.**
4. **Click the SNMP subtab.**

   The SNMP Management window opens.

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 54

▼ Display the IPMI Service Status (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the Systems Management Access subtab.**
4. **Click the IPMI subtab.**

   The IPMI Settings window opens.

   The status of the IPMI server is displayed.

Related Information

- "Display the IPMI Service Status (CLI)" on page 55

▼ Display the SMTP Client Status (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

3. **Click the SMTP Client subtab.**

   The SMTP Client Settings window opens.

   The status of the SMTP client is displayed.

Related Information

- "Display the SMTP Client Status (CLI)" on page 56
- "Display the SMTP Client Status (SNMP)" on page 218
- "Configure the SMTP Client (Web)" on page 134

▼ Display the Network Time Protocol Servers (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

3. **Click the Clock subtab.**

   The Clock Settings window opens.

   The Network Time Protocol status and server IP addresses are displayed.

Related Information

- "Display the NTP Servers (CLI)" on page 56
- "Display the NTP State (SNMP)" on page 219
- "Display the NTP Servers (SNMP)" on page 219
- "Set the Date and Time (Web)" on page 131

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 115 or "Checking the Status of Services (Web)" on page 120.

- "Display the Alert Properties (Web)" on page 125
- "Display the Oracle ILOM User Accounts (Web)" on page 126
- "Display the Remote Log Hosts (Web)" on page 126
- "Display the Network Management Configuration (Web)" on page 126
- "Display the CLI Session Timeout (Web)" on page 127
- "Display System Component FRU ID (Web)" on page 127
- "Display the Firmware Version (Web)" on page 128

- "Display the Oracle ILOM Version (Web)" on page 128
- "Display Identification Properties (Web)" on page 129

Related Information

- "Verifying Other Aspects With Oracle ILOM (CLI)" on page 57
- "Performing Daily Tasks (Web)" on page 115
- "Checking the Status of Services (Web)" on page 120

▼ 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 114.

2. **Click the Configuration tab.**

3. **Click the Alert Management subtab.**

   The Alert Settings window opens.

   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 59
- "Display the Alert Properties (SNMP)" on page 221
- "Enable Alerts to Send SNMP Traps (Web)" on page 154
- "Enable Alerts to Send PETs (Web)" on page 155
- "Enable Alerts to Send Email Alerts (Web)" on page 155
- "Disable Alerts (Web)" on page 156

▼ Display the Oracle ILOM User Accounts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the User Management tab.**
3. **Click the User Accounts subtab.**

   The User Account Settings window opens.
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 60
- "Display Oracle ILOM User Accounts (SNMP)" on page 222

▼ Display the Remote Log Hosts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Syslog subtab.**

   The Syslog window opens.

   The remote log host IP addresses are displayed.

Related Information

- "Display the Remote Log Hosts (CLI)" on page 61
- "Display the Remote Log Hosts (SNMP)" on page 222
- "Set the Remote Log Hosts (Web)" on page 134

▼ Display the Network Management Configuration (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Network subtab.**

   The Network Settings window opens.

   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 62
- "Display the Network Management Configuration (SNMP)" on page 223

▼ Display the CLI Session Timeout (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the Systems Management Access subtab.**
4. **Click the CLI subtab.**

   The CLI Settings window opens.

   The CLI session timeout is displayed.

Related Information

- "Display the CLI Session Timeout (CLI)" on page 63
- "Set the CLI Session Timeout (Web)" on page 157

▼ 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 114.

2. **Click the System Information tab.**
3. **Click the Components subtab.**

   The Components Management window opens.

   In the Component Status 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 the component's properties and values.

5. **Click Close.**

Related Information

- "Display Gateway FRU ID (CLI)" on page 63
- "Display Power Supply FRU ID (CLI)" on page 64
- "Display Gateway FRU ID (SNMP)" on page 224
- "Display Power Supply FRU ID (SNMP)" on page 225
- "Display FRU ID Information (IPMI)" on page 252

▼ Display the Firmware Version (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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

3. **Click the SUN DCS GW Firmware Versions subtab.**

   The SUN DCS GW Firmware Versions window opens.

   In the GW 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 65
- "Display the Firmware Version (SNMP)" on page 231
- "Display the Oracle ILOM Version (Web)" on page 128

▼ Display the Oracle ILOM Version (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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

3. **Click the ILOM Versions subtab.**

   The Versions window opens.

   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 65
- "Display the Firmware Version (SNMP)" on page 231
- "Display the Firmware Version (Web)" on page 128

▼ Display Identification Properties (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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

3. **Click the Identification Information subtab.**

   The Identification Information window opens.

   The system identifier, system contact, system location, and system description are displayed.

Related Information

- "Display Identification Properties (CLI)" on page 65
- "Display System Identifier (SNMP)" on page 231
- "Set the Identification Properties (Web)" on page 139

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 130
- "Performing Oracle ILOM User Tasks (Web)" on page 139
- "Managing HTTP Services (Web)" on page 142
- "Managing HTTPS Services (Web)" on page 144
- "Managing SNMP Services (Web)" on page 146
- "Managing Other Aspects With Oracle ILOM (Web)" on page 153

Related Information

- "Access Oracle ILOM From the Web Interface" on page 114
- "Controlling Oracle ILOM Targets (CLI)" on page 66
- "Monitoring Oracle ILOM Targets (Web)" on page 115
- "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.

Related Information

- "Performing General Tasks on Oracle ILOM Targets (CLI)" on page 66
- "Performing Oracle ILOM User Tasks (Web)" on page 139

▼ 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 114.

2. **Click the Maintenance tab.**

3. **Click the Reset SP subtab.**

   The Reset Service Processor window opens.

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

- *Gateway Administration*, restarting the management controller
- "Restart the Management Controller (CLI)" on page 67

▼ Set the Date and Time (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

3. **Click the Clock subtab.**

   The Clock Settings window opens.

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 68
- "Set the Date and Time (SNMP)" on page 233

▼ Set the Time Zone (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the Timezone subtab.**

   The Timezone Settings window opens.
4. **Select the time zone from the Timezone drop-down menu.**
5. **Click Save.**

Related Information

- "Set the Date and Time (CLI)" on page 68
- "Set the Time Zone (SNMP)" on page 233

▼ Enable the Locator LED (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the System Monitoring tab.**
3. **Click the Indicators subtab.**

   The Indicators window opens.

   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 69
- "Enable the Locator LED (IPMI)" on page 254
- "Disable the Locator LED (Web)" on page 133
- "Display the Gateway Status LEDs States (Web)" on page 116

▼ Disable the Locator LED (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the System Monitoring tab.**
3. **Click the Indicators subtab.**

   The Indicators window opens.

   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 70
- "Disable the Locator LED (IPMI)" on page 254
- "Enable the Locator LED (Web)" on page 132
- "Display the Gateway Status LEDs States (Web)" on page 116

▼ Clear the Oracle ILOM Event Log (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the System Monitoring tab.**
3. **Click the Event Logs subtab.**

   The Event Log window opens.
4. **In the Event Log table, click Clear Log.**

   A dialog box opens and asks you to confirm.
5. **Click OK.**

   The event log is cleared.

Related Information

- "Clear the Oracle ILOM Event Log (CLI)" on page 70
- "Clear the Oracle ILOM Event Log (SNMP)" on page 235
- "Display the Oracle ILOM Event Log (Web)" on page 120
- "Set the Remote Log Hosts (Web)" on page 134

▼ 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 114.

2. **Click the Configuration tab.**

3. **Click the Syslog subtab.**

   The Syslog window opens.

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.**

   The remote log hosts are set.

Related Information

- "Set the Remote Log Hosts (CLI)" on page 71
- "Set the Remote Log Hosts (SNMP)" on page 235
- "Display the Remote Log Hosts (Web)" on page 126

▼ 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 114.

2. **Click the Configuration tab.**

3. **Click the SMTP Client subtab.**

   The SMTP Client Settings window opens.

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 72
- "Configure the SMTP Client (SNMP)" on page 236
- "Display the SMTP Client Status (Web)" on page 123

▼ Back Up the Configuration (Web)

Note – See "Gateway Configuration Information Backed Up" on page 74 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 114.

2. **Click the Maintenance tab.**

3. **Click the Back Up/Restore subtab.**

   The Configuration Back Up/Restore window opens.

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.**

   The configuration is backed up in the specified file on the specified host using the specified protocol.

Related Information

- "Gateway Configuration Information Backed Up" on page 74

- "Back Up the Configuration (CLI)" on page 73
- "Restore the Configuration (Web)" on page 136

▼ Restore the Configuration (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Maintenance tab.**
3. **Click the Back Up/Restore subtab.**

   The Configuration Back Up/Restore window opens.

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.**

   The configuration is restored from the specified file on the specified host using the specified protocol.

Related Information

- "Restore the Configuration (CLI)" on page 74
- "Back Up the Configuration (Web)" on page 135

▼ Create a Snapshot of the Gateway 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 138.

The snapshot describes the state of the gateway at a particular moment in time. This can be used for fault diagnosis.

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Maintenance tab.**

3. **Click the Snapshot subtab.**

   The Service Snapshot Utility window opens.

4. **Select the data set from the Data Set drop-down menu.**

   See the table in "Snapshot Dataset Information (Web)" on page 138.

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 138
- "Create a Snapshot of the Gateway State (CLI)" on page 75

Snapshot Dataset Information (Web)

The following 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 gateway 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, gateway hardware data, additional FRUID data, and diagnostic data.

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

hostname_IP_address_year-month-dayThour-minute-second`.zip`

For example:

```
magnum_123.45.67.89_2011-01-07T14-43-15.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 Gateway State (Web)" on page 137

▼ Set the Network Management Parameters (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the Network subtab.**

   The Network Settings window opens.

4. **Select the IP Discovery Mode, DHCP, or Static.**
5. **If you select Static, type the IP address, netmask, and gateway into their respective fields.**
6. **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.

---

7. **Re-establish the NET MGT connection to continue administering the management controller.**

   See "Access Oracle ILOM From the Web Interface" on page 114.

Related Information

- "Set the Network Management Parameters (CLI)" on page 78
- "Set the Network Parameters (SNMP)" on page 237

▼ Set the Identification Properties (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the System Information tab.**
3. **Click the Identification Information subtab.**

   The Identification Information window opens.

4. **Type the system identifier, system contact, and system location into their respective fields.**
5. **Click Save.**

Related Information

- "Set the Identification Properties (CLI)" on page 80
- "Set the System Identifier (SNMP)" on page 238
- "Display Identification Properties (Web)" on page 129

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 140
- "Change an Oracle ILOM User's Password and or Role (Web)" on page 141
- "Delete an Oracle ILOM User Account (Web)" on page 141

Related Information

- "Performing Oracle ILOM User Tasks (CLI)" on page 81
- "Performing General Tasks on Oracle ILOM Targets (Web)" on page 130

▼ Add an Oracle ILOM User Account (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the User Management tab.**
3. **Click the User Accounts subtab.**

   The User Accounts Settings window opens.

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 Password fields.**

9. **Click Save.**

   The new user account is created and the window closes.

Related Information

- "Add an Oracle ILOM User Account (CLI)" on page 81
- "Add an Oracle ILOM User Account (SNMP)" on page 239
- "Delete an Oracle ILOM User Account (Web)" on page 141

▼ Change an Oracle ILOM User's Password and or Role (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the User Management tab.**

3. **Click the User Accounts subtab.**

   The User Accounts Settings window opens.

4. **Click the Users link.**

   The page scrolls to the Users table.

5. **In the Users table, select 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.**

   The new settings are saved and the window closes.

Related Information

- "Change an Oracle ILOM User's Password and or Role (CLI)" on page 82

▼ Delete an Oracle ILOM User Account (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the User Management tab.**

3. **Click the User Accounts subtab.**

   The User Accounts Settings window opens.

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.**

   The user account is deleted.

Related Information

- "Delete an Oracle ILOM User Account (CLI)" on page 83
- "Delete an Oracle ILOM User Account (SNMP)" on page 240
- "Add an Oracle ILOM User Account (Web)" on page 140

Managing HTTP Services (Web)

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

- "Enable the HTTP Service (Web)" on page 142
- "Disable the HTTP Service (Web)" on page 143

Related Information

- "Managing HTTP Services (CLI)" on page 84
- "Managing HTTPS Services (Web)" on page 144

- "Managing SNMP Services (Web)" on page 146

▼ 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 114.

2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the Web Server subtab.**

   The Web Server Settings window opens.

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 84
- "Set the HTTP Service State (SNMP)" on page 241
- "Disable the HTTP Service (Web)" on page 143

▼ 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 114.

2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the Web Server subtab.**

   The Web Server Settings window opens.

5. **Select Disabled from the HTTP web server drop-down menu.**
6. **Click Save.**

Related Information

- "Disable the HTTP Service (CLI)" on page 84
- "Set the HTTP Service State (SNMP)" on page 241
- "Enable the HTTP Service (Web)" on page 142

Managing HTTPS Services (Web)

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

- "Enable the HTTPS Service (Web)" on page 144
- "Install a Custom SSL Certificate (Web)" on page 145
- "Remove the Custom SSL Certificate (Web)" on page 145
- "Disable the HTTPS Service (Web)" on page 146

Related Information

- "Managing HTTPS Services (CLI)" on page 85
- "Managing HTTP Services (Web)" on page 142
- "Managing SNMP Services (Web)" on page 146

▼ 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 114.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the Web Server subtab.**
   The Web Server Settings window opens.
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 85
- "Set the HTTPS Service State (SNMP)" on page 242
- "Disable the HTTPS Service (Web)" on page 146

▼ Install a Custom SSL Certificate (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SSL Certificate subtab.**
   The SSL Certificate Upload window opens.
5. **Under Custom Certificate, click Load.**
   The Custom Certificate Upload window opens.
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.**
   The custom certificate is loaded and the window closes.

Related Information

- "Install a Custom SSL Certificate (CLI)" on page 86
- "Remove the Custom SSL Certificate (Web)" on page 145

▼ Remove the Custom SSL Certificate (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SSL Certificate subtab.**
   The SSL Certificate Upload window opens.
5. **Under Custom Certificate, click Remove.**
   A dialog box opens and asks for you to confirm.
6. **Click OK.**
   The custom SSL certificate is removed.

Related Information

- "Remove the Custom SSL Certificate (CLI)" on page 87
- "Install a Custom SSL Certificate (Web)" on page 145

▼ 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 114.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the Web Server subtab.**
   The Web Server Settings window opens.
5. **Clear the Enabled checkbox for the HTTPS web server.**

6. **Click Save.**

Related Information

- "Disable the HTTPS Service (CLI)" on page 88
- "Set the HTTPS Service State (SNMP)" on page 242
- "Enable the HTTPS Service (Web)" on page 144

Managing SNMP Services (Web)

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

- "Enable the SNMP Service (Web)" on page 147
- "Configure the SNMP Service (Web)" on page 147
- "Add SNMP Service User Accounts (Web)" on page 148
- "Modify SNMP Service User Accounts (Web)" on page 149
- "Delete SNMP Service User Accounts (Web)" on page 150
- "Add SNMP Service Communities (Web)" on page 150
- "Modify SNMP Service Communities (Web)" on page 151
- "Delete SNMP Service Communities (Web)" on page 152
- "Back Up SNMP Service MIBs (Web)" on page 152
- "Disable the SNMP Service (Web)" on page 153

Related Information

- "Managing SNMP Services (CLI)" on page 88
- "Managing HTTP Services (Web)" on page 142
- "Managing HTTPS Services (Web)" on page 144

▼ 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 114.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**

4. **Click the SNMP subtab.**

   The SNMP Management window opens.

5. **Under Settings, select the Enabled checkbox for State.**

6. **Click Save.**

   The SNMP server is enabled.

Related Information

- "Enable the SNMP Service (CLI)" on page 89
- "Disable the SNMP Service (Web)" on page 153

▼ Configure the SNMP Service (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

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

4. **Click the SNMP subtab.**

   The SNMP Management window opens.

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 89

▼ Add SNMP Service User Accounts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

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

4. **Click the SNMP subtab.**

   The SNMP Management window opens.

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 field.**

10. **Type the password again into the Confirm Password field.**

11. **Select the user permissions from the Permission drop-down menu.**

12. **(Optional) Select the privacy protocol from the Privacy Protocol drop-down menu.**

13. **If required, type the privacy password into the Privacy Password field.**

14. **Type the password again into the Confirm Password field.**

15. **Click Save.**

    The user is created and the window closes.

Related Information

- "Add SNMP Service User Accounts (CLI)" on page 90
- "Delete SNMP Service User Accounts (Web)" on page 150

▼ Modify SNMP Service User Accounts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

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

4. **Click the SNMP subtab.**

   The SNMP Management window opens.

5. **Click the Users link.**

   The page scrolls to the SNMP Users table.

6. **In the SNMP Users table, select 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 field.**

9. **Type the password again into the Confirm Password field.**

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 field.**

13. **Type the password again into the Confirm Password field.**

14. **Click Save.**

    The user is modified and the window closes.

Related Information

- "Modify SNMP Service User Accounts (CLI)" on page 91

▼ Delete SNMP Service User Accounts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**

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

4. **Click the SNMP subtab.**

   The SNMP Management window opens.

5. **Click the Users link.**

   The page scrolls to the SNMP Users table.

6. **Select the user to delete and click Delete.**

   A dialog box opens and asks you to confirm.

7. **Click OK.**
   The user is deleted.

Related Information

- "Delete SNMP Service User Accounts (CLI)" on page 92
- "Add SNMP Service User Accounts (Web)" on page 148

▼ Add SNMP Service Communities (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**
   The SNMP Management window opens.
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.**
   The community is created and the window closes.

Related Information

- "Add SNMP Service Communities (CLI)" on page 93
- "Delete SNMP Service Communities (Web)" on page 152

▼ Modify SNMP Service Communities (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**

3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**

   The SNMP Management window opens.
5. **Click the Communities link.**

   The page scrolls to the SNMP Communities table.
6. **In the SNMP Communities table, select the community to modify and click Edit.**

   A new window opens.
7. **Select the permissions from the Permission drop-down menu.**
8. **Click Save.**

   The community is modified and the window closes.

Related Information

- "Modify SNMP Service Communities (CLI)" on page 94

▼ Delete SNMP Service Communities (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**

   The SNMP Management window opens.
5. **Click the Communities link.**

   The page scrolls to the SNMP Communities table.
6. **Select the community to delete and click Delete.**

   A dialog box opens and asks you to confirm.
7. **Click OK.**

   The community is deleted.

Related Information

- "Delete SNMP Service Communities (CLI)" on page 94
- "Add SNMP Service Communities (Web)" on page 150

▼ Back Up SNMP Service MIBs (Web)

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

- `ENTITY-MIB.mib`
- `SUN-HW-CTRL-MIB.mib`
- `SUN-HW-TRAP-MIB.mib`
- `SUN-ILOM-CONTROL-MIB.mib`
- `SUN-PLATFORM-MIB.mib`

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**

   The SNMP Management window opens.

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

- "Back Up SNMP Service MIBs (CLI)" on page 95

▼ Disable the SNMP Service (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the SNMP subtab.**

   The SNMP Management window opens.

5. **Under Settings, clear the Enabled checkbox for State.**

6. **Click Save.**
   The SNMP server is disabled.

Related Information

- "Disable the SNMP Service (CLI)" on page 96
- "Enable the SNMP Service (Web)" on page 147

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 154
- "Enable Alerts to Send PETs (Web)" on page 155
- "Enable Alerts to Send Email Alerts (Web)" on page 155
- "Disable Alerts (Web)" on page 156
- "Set the CLI Session Timeout (Web)" on page 157

Related Information

- "Managing Other Aspects With Oracle ILOM (CLI)" on page 96
- "Managing Other Aspects With Oracle ILOM (SNMP)" on page 240
- "Performing General Tasks on Oracle ILOM Targets (Web)" on page 130

▼ Enable Alerts to Send SNMP Traps (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Alert Management subtab.**
   The Alert Settings window opens.
4. **In the Alerts table, select 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. **Select the SNMP version from the SNMP Version drop-down menu.**
9. **Type the SNMP community name into the Community Name field.**
10. **Click Save.**
    The alert is enabled.

Related Information

- "Enable Alerts to Send SNMP Traps (CLI)" on page 97
- "Enable Alerts to Send SNMP Traps (SNMP)" on page 242
- "Enable Alerts to Send PETs (Web)" on page 155
- "Enable Alerts to Send Email Alerts (Web)" on page 155
- "Display the Alert Properties (Web)" on page 125
- "Disable Alerts (Web)" on page 156

▼ Enable Alerts to Send PETs (Web)

1. **Access the Oracle ILOM web interface.**
   See "Access Oracle ILOM From the Web Interface" on page 114.
2. **Click the Configuration tab.**
3. **Click the Alert Management subtab.**
   The Alert Settings window opens.
4. **In the Alerts table, select 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.**
   The alert is enabled.

Related Information

- "Enable Alerts to Send PETs (CLI)" on page 98
- "Enable Alerts to Send PETs (SNMP)" on page 243
- "Enable Alerts to Send SNMP Traps (Web)" on page 154
- "Enable Alerts to Send Email Alerts (Web)" on page 155
- "Display the Alert Properties (Web)" on page 125

- "Disable Alerts (Web)" on page 156

▼ Enable Alerts to Send Email Alerts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the Alert Management subtab.**

   The Alert Settings window opens.

4. **In the Alerts table, select 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 to override the default value.**
10. **(Optional) Type a message prefix into the Message Prefix field.**
11. **Click Save.**

    The alert is enabled.

Related Information

- "Enable Alerts to Send Email Alerts (CLI)" on page 99
- "Enable Alerts to Send Email Alerts (SNMP)" on page 244
- "Enable Alerts to Send SNMP Traps (Web)" on page 154
- "Enable Alerts to Send PETs (Web)" on page 155
- "Display the Alert Properties (Web)" on page 125
- "Disable Alerts (Web)" on page 156

▼ Disable Alerts (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the Alert Management subtab.**

   The Alert Settings window opens.

4. **In the Alerts table, select 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.**

   The alert is disabled.

Related Information

- "Disable Alerts (CLI)" on page 100
- "Disable Alerts (SNMP)" on page 246
- "Enable Alerts to Send SNMP Traps (Web)" on page 154
- "Enable Alerts to Send PETs (Web)" on page 155
- "Enable Alerts to Send Email Alerts (Web)" on page 155
- "Display the Alert Properties (Web)" on page 125

▼ Set the CLI Session Timeout (Web)

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

2. **Click the Configuration tab.**
3. **Click the System Management Access subtab.**
4. **Click the CLI subtab.**

   The CLI Settings window opens.

5. **Check 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 101
- "Display the CLI Session Timeout (Web)" on page 127

▼ Upgrade the Gateway Firmware (Web)

1. **Acquire the firmware package.**

   See "Acquire the Gateway Firmware Package (CLI)" on page 103.

2. **Open an SSH session and connect to the management controller by specifying the controller's host name as configured with the DHCP server.**

   For example:

```
% ssh -l root nm2name
root@nm2name's password: password
#
```

   where *nm2name* is the host name of the management controller. Initially, the password is `changeme`.

3. **If the Subnet Manager is running on the management controller, disable it with the `disablesm` command.**

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

4. **Verify that there is at least 150 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.

5. **Verify that there is at least 1 MB available in the `/config` directory.**

```
# df -h /config
Filesystem            Size  Used Avail Use% Mounted on
/dev/hda2              16M  3.6M   11M  25% /config
#
```

In this example, there are 11 MB available. If not enough space is available, you must delete files from the `/config` directory.

6. **Verify that there is at least 1 MB available in the `/var/log` directory.**

```
# df -h /var/log
Filesystem            Size  Used Avail Use% Mounted on
/dev/hda3              16M  3.6M   11M  25% /var/log
#
```

In this example, there are 11 MB available. If not enough space is available, you must delete files from the `/var/log` directory.

7. **Verify the 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 `Mem:` row of the `free` column, there should be at least 150 MB free memory. In this example, there are 393 MB available. If not enough memory is available, you must exit nonessential applications that are running.

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

See "Access Oracle ILOM From the Web Interface" on page 114.

9. **Click the Maintenance tab.**

10. **Click the Firmware Upgrade subtab.**

The Firmware Upgrade window opens.

11. **Click Enter Upgrade Mode.**

A dialog box opens and asks you to confirm.

12. **Click OK.**

    The Firmware Upgrade window changes to Upgrade mode and now accepts a URL and file name of the gateway firmware package.

Note – For the specified URL, only the FTP or HTTP protocols are supported.

---

13. **Click Upload.**

    Oracle ILOM transfers the gateway 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.

14. **Click Start Upgrade.**

    A dialog box opens and asks you to confirm.

15. **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.

16. **Click OK.**

    A final status is displayed, the upgrade either:

    - Succeeded
    - Partially succeeded
    - Failed

17. **Reboot the gateway to enable the new firmware.**

    See *Gateway 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.

---

18. **If previously disabled, open an SSH session, connect to the management controller, and enable the Subnet Manager.**

```
% ssh -l root nm2name
root@nm2name's password: password
# enablesm
Starting IB Subnet Manager.                                [  OK  ]
Starting partitiond daemon.                                [  OK  ]
# exit
```

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

    See "Access Oracle ILOM From the Web Interface" on page 114.

20. **Verify the success of the firmware update.**

    See "Display the Firmware Version (Web)" on page 128.

Related Information

- "Upgrade the Gateway Firmware (CLI)" on page 105

Using the Fabric Monitor

The Fabric Monitor enables you to visually monitor the status of the gateway, the I4 switch chip, and the connectors through a web-based interface. The Fabric Monitor is accessible from the Oracle ILOM web interface.

The following topics describe how to use the fabric monitor.

Related Information

- "Understanding Oracle ILOM on the Gateway" on page 1
- "Administering Oracle ILOM (CLI)" on page 29
- "Administering Oracle ILOM (Web)" on page 111
- "Administering Oracle ILOM (SNMP)" on page 191
- "Administering Hardware (IPMI)" on page 247
- "Understanding Oracle ILOM Commands" on page 255

▼ Access the Fabric Monitor

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

   See "Access Oracle ILOM From the Web Interface" on page 114.

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 80 and "Enable the HTTPS Service (CLI)" on page 82.

2. **Click the Switch/Fabric Monitoring Tools tab.**

   The SUN DCS GW Monitor page is displayed.

3. **Click Launch SUN DCS GW Monitor.**

   The Fabric Monitor GUI is displayed.

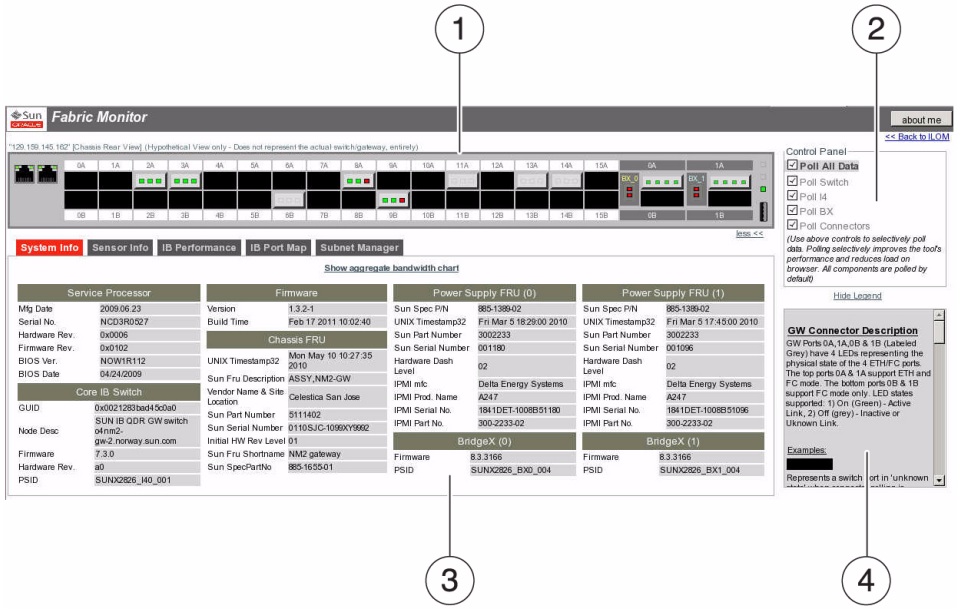
Note – To return to ILOM, click the `<<Back to ILOM` link in the upper-right corner of the Fabric Monitor.

Related Information

- "Fabric Monitor Features" on page 162
- "Accessing the Rear Panel Diagram" on page 164
- "Accessing Status Pane Information" on page 172
- "Control Panel Function" on page 179
- "Monitoring Parameters and Status" on page 180

Fabric Monitor Features

The following 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.
- **Gateway connector status** – Clicking on a gray gateway connector opens a window that displays connector FRU and port information for that connection.
- **BridgeX port status** – Clicking on a gateway BX indicator opens a window that displays port information for the interface between the I4 switch chip port and the BridgeX chip port.

These status windows are explained in depth in "Accessing the Rear Panel Diagram" on page 164.

Related Information

- "Access the Fabric Monitor" on page 161
- "Accessing the Rear Panel Diagram" on page 164
- "Accessing Status Pane Information" on page 172
- "Control Panel Function" on page 179
- "Monitoring Parameters and Status" on page 180

Accessing the Rear Panel Diagram

The rear panel diagram provides a visual representation of the gateway's connector and link status. Aspects of the diagram are discussed in the following topics:

- "Rear Panel Diagram Overview" on page 164
- "InfiniBand Connector Status Window" on page 165
- "Gateway Connector Status Window" on page 168
- "BridgeX Port Status Window" on page 170

Related Information

- "Access the Fabric Monitor" on page 161
- "Fabric Monitor Features" on page 162
- "Accessing Status Pane Information" on page 172
- "Control Panel Function" on page 179
- "Monitoring Parameters and Status" on page 180

Rear Panel Diagram Overview

The following figure provides an example of the rear panel diagram.

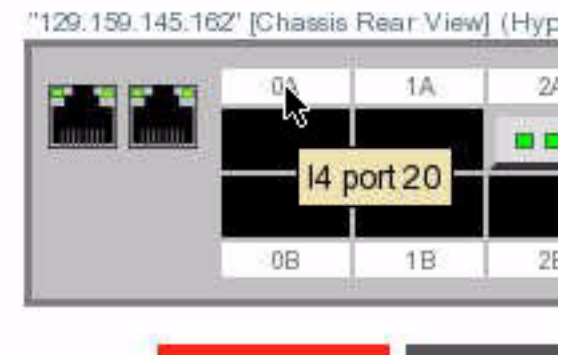
The rear panel diagram displays the presence of connectors and their status within a mockup of the gateway rear panel. The diagram displays the management controller's IP address, and the connector receptacles and their respective connector names. When a cable is attached to a receptacle, a connection 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 165
- "Gateway Connector Status Window" on page 168
- "BridgeX Port Status Window" on page 170

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. The following 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.

The following table describes the three indicators of the InfiniBand connection rectangle.

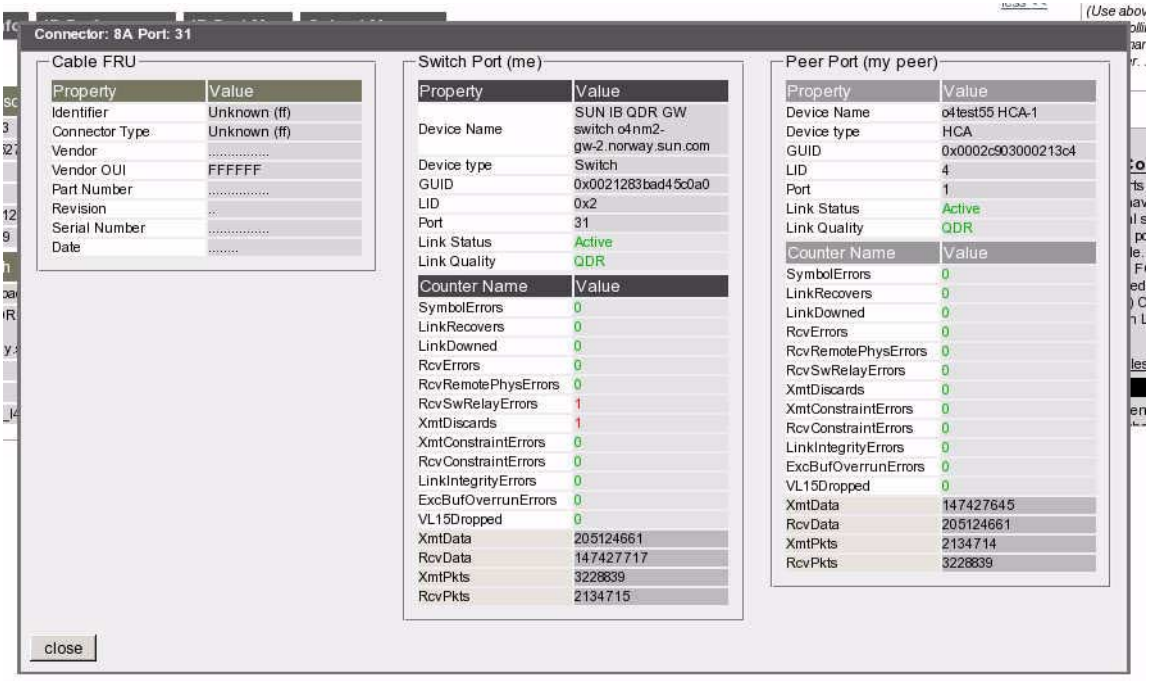
Object	Left Indicator	Center Indicator	Right Indicator
Description	Physical link	InfiniBand link quality	InfiniBand link errors
Color	• Gray – No link • Green – Link established	• Gray – No activity • Green – QDR • Orange – DDR, SDR	• Gray – No activity • Green – No errors • Red – Errors

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 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.

The following figures provide an example of moving the mouse cursor over the red right indicator for connection 8A.

Clicking on the connection opens the InfiniBand connector status window for that connector. The following figure provides an example of an InfiniBand connector status window.



At the top of the window are the connector name and the respective I4 switch chip port. There are three sets of information in the window, the cable FRU ID information, 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 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 164
- "Gateway Connector Status Window" on page 168
- "BridgeX Port Status Window" on page 170

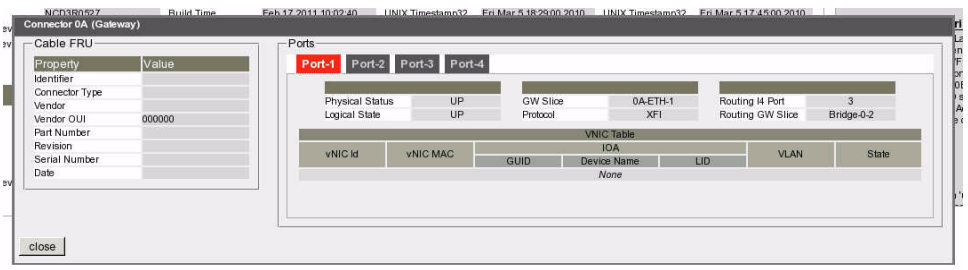
Gateway Connector Status Window

The rear panel diagram displays four gateway receptacles, labeled 0A, 1A, 0B, and 1B. When a connector is physically present in a gateway receptacle, the receptacle changes from a black rectangle to a gray rectangle with four indicators. Each indicator represents one of the four possible ports available at the connection.

The following table describes the four indicators of the gateway connection rectangle.

Object	Left Indicator	Left Center Indicator	Right Center Indicator	Right Indicator
Name	Port 1	Port 2	Port 3	Port 4
Description	Physical link 1	Physical link 2	Physical link 3	Physical link 4
Color	• Gray – No link • Green – Link established	• Gray – No link • Green – Link established	• Gray – No link • Green – Link established	• Gray – No link • Green – Link established

Clicking on the connection opens the gateway connector status window for that connector. The following figure provides an example of a gateway connector status window.



At the top of the window is the connector name. There are two parts of the window, the cable FRU ID information on the left and a smaller status pane for the ports on the right.

The cable FRU ID information includes:

- Identifier
- Connector type
- Vendor
- Vendor OUI
- Part number
- Revision
- Serial number
- Date of manufacture

The smaller status pane has tabs for each of the four ports. Clicking on a tab displays that port's information. How the connector has been configured, for Ethernet or Fibre Channel, determines what information is displayed for each port. Typically, the information includes:

- Physical status and logical state
- Gateway slice (connector) and protocol (speed)
- I4 switch chip routing port and gateway routing slice

Additionally, a table provides information about configured VNICs:

- ID and MAC address
- GUID, device name, and LID
- VLAN attachment
- State

Clicking Close dismisses the gateway connector status window.

Related Information

- "Rear Panel Diagram Overview" on page 164
- "InfiniBand Connector Status Window" on page 165
- "BridgeX Port Status Window" on page 170

BridgeX Port Status Window

Left of the gateway connection rectangles are the BX indicators, which display the status of the BridgeX chip to I4 switch chip connection.

Note – Clicking on the gateway connector name, 0A, 1A, 0B, 1B, either hides or reveals the respective BX indicators. If the BX indicators are not displayed, click on a gateway connector name.

The indicators are labeled BX_0 for connectors 0A and 0B, and BX_1 for connectors 1A and 1B.

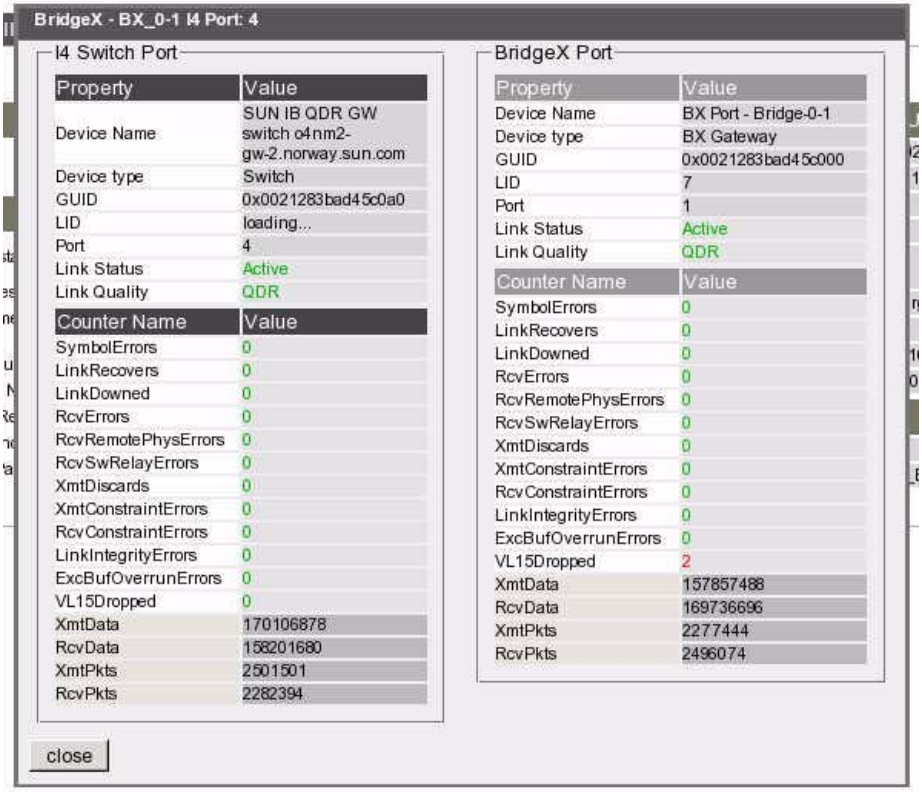
The following table describes the BX indicators.

Object	Upper Indicator	Lower Indicator
Description	Physical link 0 connector	Physical link 1 connector
Color	• Gray – No link • Green – Link established • Red – Link fault	• Gray – No link • Green – Link established • Red – Link fault

Moving the mouse cursor over a BX indicator opens a small window that provides information about the BridgeX port. If the indicator is red, then the window displays a reason for the respective state.

The following figure provides an example of moving the mouse cursor over the red upper indicator for port BX_0.

Clicking on a BX indicator opens the BridgeX port status window for that BridgeX port. The following figure provides an example of a BridgeX port status window.



At the top of the window are the BridgeX chip name, the respective BridgeX port, and the attached I4 switch chip port. There are two sets of information in the window, one set for the I4 switch chip port, and another set for the BridgeX port. Each set provides the following information about the respective port:

- 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 BridgeX port status window.

Related Information

- "Rear Panel Diagram Overview" on page 164

- "InfiniBand Connector Status Window" on page 165
- "Gateway Connector Status Window" on page 168

Accessing Status Pane Information

At the center of the FM is the status pane, which displays the majority of information regarding the gateway. The status pane has five tabs:

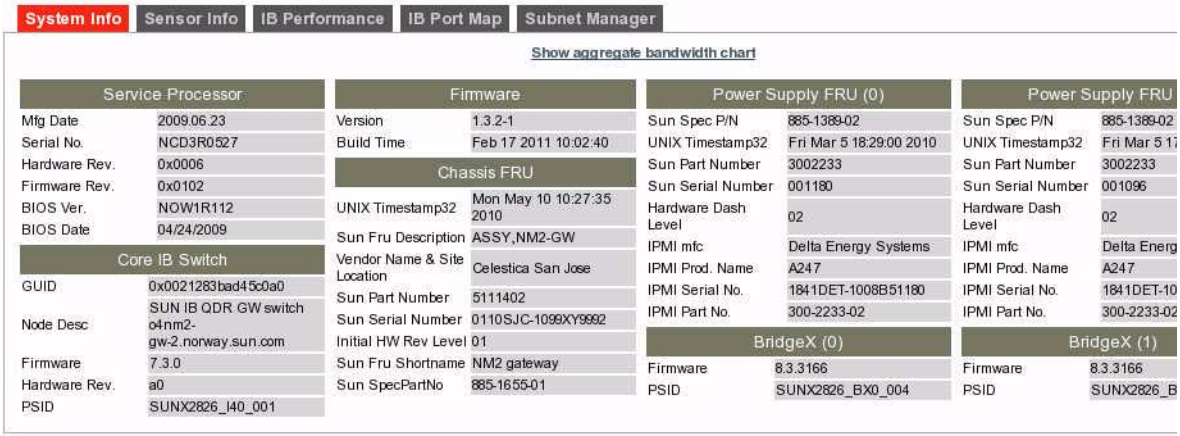
- "System Info Tab" on page 173
- "Sensor Info Tab" on page 174
- "IB Performance Tab" on page 175
- "IB Port Map Tab" on page 177
- "Subnet Manager Tab" on page 178

Related Information

- "Access the Fabric Monitor" on page 161
- "Fabric Monitor Features" on page 162
- "Accessing the Rear Panel Diagram" on page 164
- "Control Panel Function" on page 179
- "Monitoring Parameters and Status" on page 180

System Info Tab

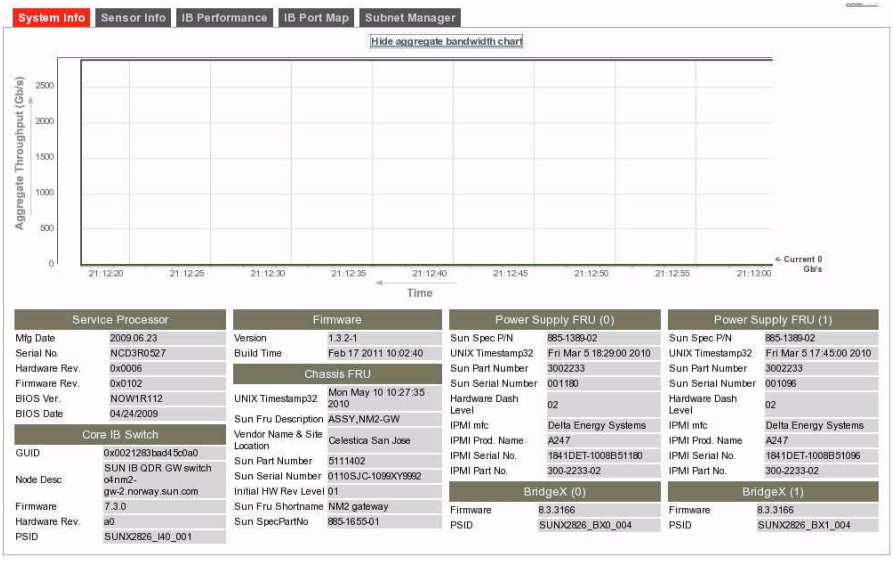
The following figure provides an example of the System Info tab.



The System Info tab displays status information regarding the gateway hardware. The information is categorized in the following 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
- **BridgeX (0)** – Firmware information about BridgeX chip 0
- **BridgeX (1)** – Firmware information about BridgeX chip 1

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. The following 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.

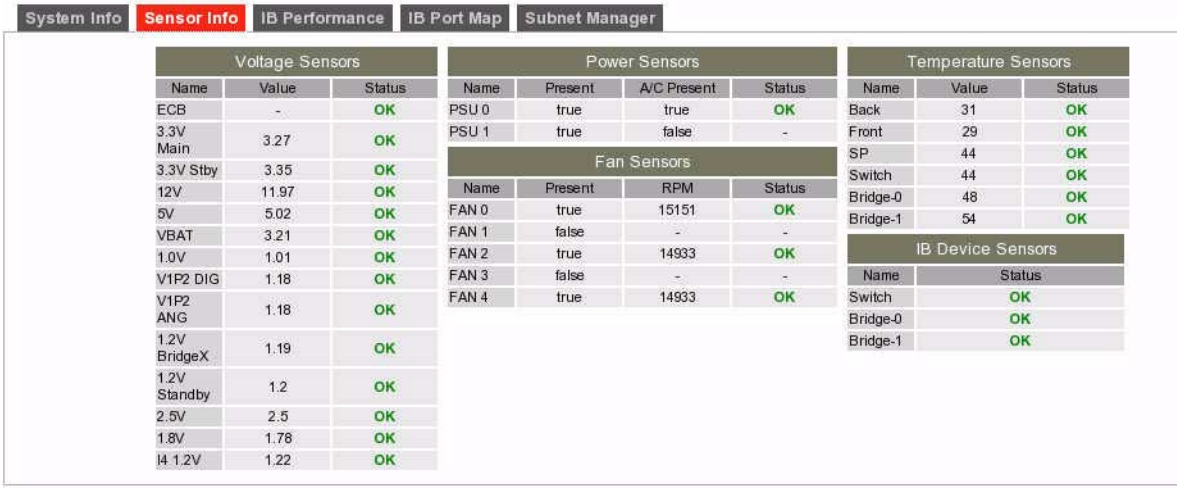
Clicking `Hide aggregate bandwidth chart` removes the bandwidth chart.

Related Information

- "Sensor Info Tab" on page 174
- "IB Performance Tab" on page 175
- "IB Port Map Tab" on page 177
- "Subnet Manager Tab" on page 178

Sensor Info Tab

The following figure provides an example of the Sensor Info tab.



The Sensor Info tab displays status information regarding the gateway sensors. The information is categorized in the following groups:

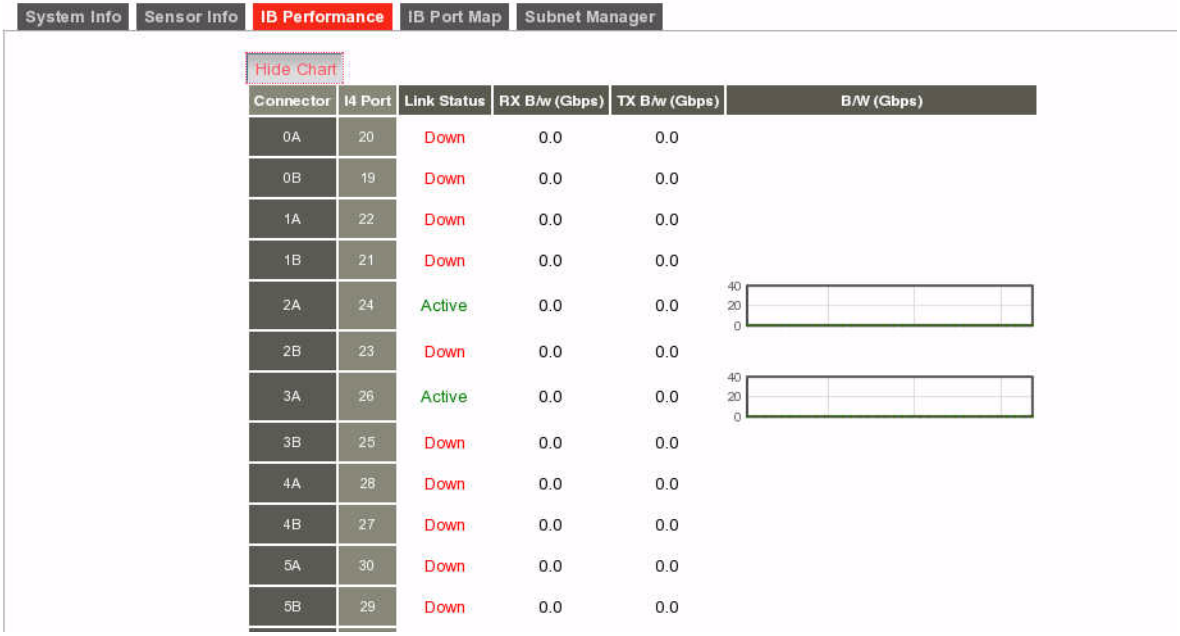
- **Voltage Sensors** – Assorted voltages on the main board
- Power Sensors – Presence, AC presence, and status for both power supply slots
- **Fan Sensors** – Presence, RPM, and status for each fan slot
- **Temperature Sensors –** Back, front, management controller, I4 switch chip, and BridgeX chips
- **IB Device Sensors** – I4 switch chip and BridgeX chips status

Related Information

- "System Info Tab" on page 173
- "IB Performance Tab" on page 175
- "IB Port Map Tab" on page 177
- "Subnet Manager Tab" on page 178

IB Performance Tab

The following figure provides an example of the IB Performance tab.



The IB Performance tab displays the status of the I4 switch chip ports. A table describes the following 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 (red) 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 173
- "Sensor Info Tab" on page 174
- "IB Port Map Tab" on page 177
- "Subnet Manager Tab" on page 178

IB Port Map Tab

The following 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			0x0000000000000000	-	-
1B	21			0x0000000000000000	-	-
2A	24	Switch	SUN IB QDR GW switch o4nm2-gw-2.norway.sun.com	0x0021283bad45c0a0	2	26
2B	23			0x0000000000000000	-	-
3A	26	Switch	SUN IB QDR GW switch o4nm2-gw-2.norway.sun.com	0x0021283bad45c0a0	2	24
3B	25			0x0000000000000000	-	-
4A	28			0x0000000000000000	-	-
4B	27			0x0000000000000000	-	-
5A	30			0x0000000000000000	-	-
5B	29			0x0000000000000000	-	-
6A	35			0x0000000000000000	-	-
6B	36			0x0000000000000000	-	-

The IB Port Map tab displays information about peer devices attached to the gateway. A table describes the following 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 173
- "Sensor Info Tab" on page 174
- "IB Performance Tab" on page 175
- "Subnet Manager Tab" on page 178

Subnet Manager Tab

The following figure provides an example of the Subnet Manager tab.

The Subnet Manager tab displays information about the Subnet Manager within the gateway. Information displayed is categorized into the following groups:

- **Active SM Info** – Information about the active Subnet Manager, LID, GUID, activity, priority, and state
- **Embedded OpenSM Settings** – Information about the management controller's Subnet Manager's configuration, read from the `/opensm/opensm.conf` file

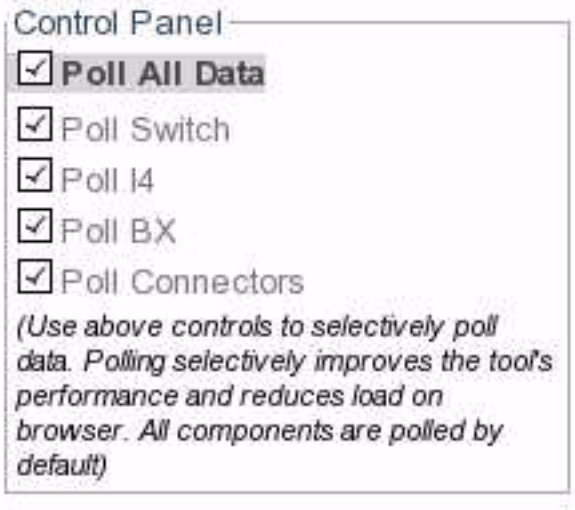
The active Subnet Manager might not be the embedded Subnet Manager within the management controller.

Related Information

- "System Info Tab" on page 173
- "Sensor Info Tab" on page 174
- "IB Performance Tab" on page 175
- "IB Port Map Tab" on page 177

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. The following figure provides an example of the control panel.



The control panel has five checkboxes that enable you to select what aspect of the gateway 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 gateway 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 BX** – Selecting this checkbox enables you to monitor the status of the BridgeX chips and the connections from its ports. You must also select the Poll Connectors checkbox to view the status of the BridgeX chips.
- **Poll Connectors** – Selecting this checkbox enables you to monitor the status of the connectors on the gateway 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 161
- "Fabric Monitor Features" on page 162
- "Accessing the Rear Panel Diagram" on page 164
- "Accessing Status Pane Information" on page 172
- "Monitoring Parameters and Status" on page 180

Monitoring Parameters and Status

The following tables help you quickly find a gateway parameter or status value using the FM.

- "Chassis Parameters and Status" on page 181
- "InfiniBand Connector Parameters and Status" on page 184

- "Gateway Connector Parameters and Status" on page 186
- "I4 to Gateway Interface Parameters and Status" on page 187
- "I4 Switch Chip Port Parameters and Status" on page 189

Related Information

- "Access the Fabric Monitor" on page 161
- "Fabric Monitor Features" on page 162
- "Accessing the Rear Panel Diagram" on page 164
- "Accessing Status Pane Information" on page 172
- "Control Panel Function" on page 179

Chassis Parameters and Status

Use the following 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.
BridgeX chip voltage.	Click Sensor Info tab.	Look in the first column, Voltage Sensors, in the lower middle.
BridgeX chip 0 firmware version.	Click System Info tab.	Look in the third column, BridgeX (0), at the top.
BridgeX chip 0 PSID.	Click System Info tab.	Look in the third column, BridgeX (0), at the bottom.
BridgeX chip 0 status.	Click Sensor Info tab.	Look in the third column, IB Device Sensors, in the middle.
BridgeX chip 0 temperature.	Click Sensor Info tab.	Look in the third column, Temperature Sensors, at the bottom.
BridgeX chip 1 firmware version.	Click System Info tab.	Look in the fourth column, BridgeX (1), at the top.
BridgeX chip 1 PSID.	Click System Info tab.	Look in the fourth column, BridgeX (1), at the bottom.
BridgeX chip 1 status.	Click Sensor Info tab.	Look in the third column, IB Device Sensors, at the bottom.
BridgeX chip 1 temperature.	Click Sensor Info tab.	Look in the third column, Temperature Sensors, at the bottom.

Parameter or Status to Monitor	Action in Status Pane	Information Location
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, Embedded OpenSM 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.
Power supply presence.	Click Sensor Info tab.	Look in the second column, Power Sensors, second column.

Parameter or Status to Monitor	Action in Status Pane	Information Location
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, Embedded OpenSM 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, Embedded OpenSM Settings, in the middle.
Subnet Manager routing algorithm.	Click Subnet Manager tab.	Look in the second column, Embedded OpenSM 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, Embedded OpenSM Settings, at the top.
Subnet Manager subnet prefix.	Click Subnet Manager tab.	Look in the second column, Embedded OpenSM Settings, at the bottom.

Related Information

- "InfiniBand Connector Parameters and Status" on page 184
- "Gateway Connector Parameters and Status" on page 186
- "I4 to Gateway Interface Parameters and Status" on page 187
- "I4 Switch Chip Port Parameters and Status" on page 189

InfiniBand Connector Parameters and Status

Use the following 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 the following 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 181

Gateway Connector Parameters and Status

Use the following table to determine gateway 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 - VNIC ID and MAC.	Check rear panel diagram, right side. Click connection rectangle. Port status pane, click port.	Look in VNIC Table. Look in the first column, VNIC ID. Look in the second column, VNIC MAC.
Individual connector port - VNIC ID and associated VLAN and status.	Check rear panel diagram, right side. Click connection rectangle. Port status pane, click port.	Look in VNIC Table. Look in the first column, VNIC ID. Look in the sixth column, VLAN. Look in the seventh column, State.
Individual connector port - VNIC ID mapping to GUID and LID.	Check rear panel diagram, right side. Click connection rectangle. Port status pane, click port.	Look in VNIC Table. Look in the first column, VNIC ID. Look in the third column, GUID. Look in the fifth column, LID.

Parameter or Status to Monitor	Action at Rear Panel Diagram or Status Pane	Information Location
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.
Individual connector port - gateway slice and protocol.	Check rear panel diagram, right side. Click connection rectangle. Port status pane, click port.	Look in the center column.
Individual connector port - routing I4 port and routing gateway slice.	Check rear panel diagram, right side. Click connection rectangle. Port status pane, click port.	Look in the right column.

Related Information

- "Chassis Parameters and Status" on page 181
- "InfiniBand Connector Parameters and Status" on page 184
- "I4 to Gateway Interface Parameters and Status" on page 187
- "I4 Switch Chip Port Parameters and Status" on page 189

I4 to Gateway Interface Parameters and Status

Use the following table to determine I4 to BX interface 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 I4 to BX interface - link status.	Check rear panel diagram, right side.	If indicator gray, no activity. If indicator green, QDR and insignificant errors. If indicator red, less than QDR or significant errors.
I4 to BX interface - BX data throughput.	Check rear panel diagram, right side. Click BX indicator.	Look in the second column, BridgeX Port. Look under Counter Name, at the bottom.
I4 to BX interface - BX GUID and port.	Check rear panel diagram, right side. Click BX indicator.	Look in the second column, BridgeX Port. Look under Property, in the middle.
I4 to BX interface - BX LID and port.	Check rear panel diagram, right side. Click BX indicator.	Look in the second column, BridgeX Port. Look under Property, in the middle.

Parameter or Status to Monitor	Action at Rear Panel Diagram or Status Pane	Information Location
I4 to BX interface - BX link status and link quality.	Check rear panel diagram, right side. Click BX indicator.	Look in the second column, BridgeX Port. Look under Property, at the bottom.
I4 to BX interface - BX name and type.	Check rear panel diagram, right side. Click BX indicator.	Look in the second column, BridgeX Port. Look under Property, at the top.
I4 to BX interface - BX symbol and recovery errors.	Check rear panel diagram, right side. Click BX indicator.	Look in the second column, BridgeX Port. Look under Counter Name, at the top.
I4 to BX interface - I4 data throughput.	Check rear panel diagram, right side. Click BX indicator.	Look in the first column, I4 Switch Port. Look under Counter Name, at the bottom.
I4 to BX interface - I4 GUID and port.	Check rear panel diagram, right side. Click BX indicator.	Look in the first column, I4 Switch Port. Look under Property, in the middle.
I4 to BX interface - I4 LID and port.	Check rear panel diagram, right side. Click BX indicator.	Look in the first column, I4 Switch Port. Look under Property, in the middle.
I4 to BX interface - I4 link status and link quality.	Check rear panel diagram, right side. Click BX indicator.	Look in the first column, I4 Switch Port. Look under Property, at the bottom.
I4 to BX interface - I4 name and type.	Check rear panel diagram, right side. Click BX indicator.	Look in the first column, I4 Switch Port. Look under Property, at the top.
I4 to BX interface - I4 symbol and recovery errors.	Check rear panel diagram, right side. Click BX indicator.	Look in the first column, I4 Switch Port. Look under Counter Name, at the top.

Related Information

- "Chassis Parameters and Status" on page 181
- "InfiniBand Connector Parameters and Status" on page 184
- "Gateway Connector Parameters and Status" on page 186
- "I4 Switch Chip Port Parameters and Status" on page 189

I4 Switch Chip Port Parameters and Status

Use the following 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 181
- "InfiniBand Connector Parameters and Status" on page 184
- "Gateway Connector Parameters and Status" on page 186
- "I4 to Gateway Interface Parameters and Status" on page 187

Administering Oracle ILOM (SNMP)

These topics describe how to administer Oracle ILOM through the Simple Network Management Protocol (SNMP).

Related Information

- "Administering Oracle ILOM (CLI)" on page 29
- "Administering Oracle ILOM (Web)" on page 111
- "Using the Fabric Monitor" on page 161
- "Administering Hardware (IPMI)" on page 247
- "Understanding Oracle ILOM Commands" on page 255

SNMP Overview

The Oracle ILOM implementation on the management controller within the gateway 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_gw_x.y.z_w.tar.gz file, the Oracle ILOM firmware package that you downloaded. See "Acquire the Gateway Firmware Package (CLI)" on page 103.

The MIBs are also available using the CLI or web interface. See "Back Up SNMP Service MIBs (CLI)" on page 95 or "Back Up SNMP Service MIBs (Web)" on page 152.

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 *Gateway 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 192
- "Monitoring Oracle ILOM Targets (SNMP)" on page 195
- "Controlling Oracle ILOM Targets (SNMP)" on page 231

Understanding SNMP Commands

The following topics describe how the SNMP command format is affected by the specified SNMP protocol:

- "SNMP Commands" on page 192
- "V1 and V2c Protocol Command Format" on page 193
- "V3 Protocol Command Format" on page 194

Related Information

- "SNMP Overview" on page 191
- "Monitoring Oracle ILOM Targets (SNMP)" on page 195
- "Controlling Oracle ILOM Targets (SNMP)" on page 231
- "Understanding Oracle ILOM Commands" on page 255

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 193
- "V3 Protocol Command Format" on page 194

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 the following tasks for instructions on how to configure these parameters:

- "Configure the SNMP Service (CLI)" on page 89
- "Configure the SNMP Service (Web)" on page 147
- "Add SNMP Service Communities (CLI)" on page 93
- "Add SNMP Service Communities (Web)" on page 150

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 192.
- *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 gateway 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 192
- "V3 Protocol Command Format" on page 194

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 192.
- *snmp_user* is a configured user of the SNMP services.
- *security_level* is:
  - `noAuthNoPriv` – There is no authentication or privacy.
  - `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 gateway 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 90 or "Add SNMP Service User Accounts (Web)" on page 148 for instructions to configure an SNMP user and their authentication and privacy passwords.

Related Information

- "SNMP Commands" on page 192
- "V1 and V2c Protocol Command Format" on page 193

Monitoring Oracle ILOM Targets (SNMP)

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

- "Performing Daily Tasks (SNMP)" on page 196
- "Checking the Status of Services (SNMP)" on page 217
- "Verifying Other Aspects With Oracle ILOM (SNMP)" on page 220

Related Information

- "Monitoring Oracle ILOM Targets (CLI)" on page 39
- "Monitoring Oracle ILOM Targets (Web)" on page 115
- "Controlling Oracle ILOM Targets (SNMP)" on page 231

Performing Daily Tasks (SNMP)

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

Related Information

▼ 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: 2010-1-20,12:19:19.0
$
```

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: 2010-1-20,12:19:19.0
$
```

Related Information

- "Display the Time Zone (SNMP)" on page 197

▼ 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 40
- "Display the Date (Web)" on page 116
- "Display the Date and Time (SNMP)" on page 196
- "Set the Time Zone (SNMP)" on page 233

▼ 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 gateway firmware and configuration.

1. **Determine the entity number of the aggregate sensor.**

   See "Display the Entity Numbers" on page 212.

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 gateway state, use the entity number respective to the `/SYS/CHASSIS_STATUS` aggregate sensor target. The following example uses entity number 35:

```
$ snmpget -v2c -c public mc_IP
SUN-PLATFORM-MIB::SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.35
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.35 = 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 41
- "Display the Aggregate Sensors State (Web)" on page 116
- "Display Power Supply Status (SNMP)" on page 198
- "Display Board-Level Voltages (SNMP)" on page 200
- "Display Internal Temperatures (SNMP)" on page 204
- "Display Fan Status (SNMP)" on page 207
- "Display the Sensor Alarm State (SNMP)" on page 211
- "Display the Sensor States (IPMI)" on page 248
- "Display the Entity Numbers" on page 212

▼ 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 gateway firmware and configuration. For more information about entity numbers, see "Display the Entity Numbers" on page 212.

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 is the entity number for the `/SYS/PSUx/PRSNT` presence sensor target for the respective power supply. The following example uses entity number 45 for the left power supply:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.45
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.45 = 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 is the entity number for the `/SYS/PSUx/AC_PRESENT` fault sensor target for the respective power supply. The following example uses entity number 47 for the left power supply:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.47
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.47 = 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 is the entity number for the `/SYS/PSUx/ALERT` fault sensor target for the respective power supply. The following example uses entity number 46 for the left power supply:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.46
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.46 = 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 43
- "Display Power Supply Status (Web)" on page 117
- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display Board-Level Voltages (SNMP)" on page 200
- "Display Internal Temperatures (SNMP)" on page 204
- "Display Fan Status (SNMP)" on page 207
- "Display the Sensor Alarm State (SNMP)" on page 211
- "Display the Entity Numbers" on page 212

▼ 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 gateway 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 212.

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. The following 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. The following 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. The following 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 118

- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display Power Supply Status (SNMP)" on page 198
- "Display Internal Temperatures (SNMP)" on page 204
- "Display Fan Status (SNMP)" on page 207
- "Display the Sensor Alarm State (SNMP)" on page 211
- "Display the Entity Numbers" on page 212

▼ Display Internal Temperatures (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the gateway 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 212.

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. The following example uses entity number 27.

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.27
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.27 = 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 gateway 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::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.24 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.25 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.26 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.27 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.28 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.29 = INTEGER: 0
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.24 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.25 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.26 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.27 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.28 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.29 = INTEGER: none(1)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.24 = INTEGER: 31
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.25 = INTEGER: 29
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.26 = INTEGER: 45
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.27 = INTEGER: 44
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.28 = INTEGER: 49
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.29 = INTEGER: 55
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.24 = INTEGER:
reset(1)
```

```
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.25 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.26 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.27 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.28 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.29 = 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. The following 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. The following filtering example uses entity number 27:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.27 ='
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.27 = INTEGER: degC(3)
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.27 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.27 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.27 = INTEGER: 36
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMin.27 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMax.27 = INTEGER: 255
SUN-PLATFORM-MIB::sunPlatNumericSensorAccuracy.27 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdNonCritical.27 = INTEGER:
0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdNonCritical.27 = INTEGER:
0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdCritical.27 = INTEGER: 0
```

```
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdCritical.27 = INTEGER: 70
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdFatal.27 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdFatal.27 = INTEGER: 100
SUN-PLATFORM-MIB::sunPlatNumericSensorHysteresis.27 = Gauge32: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorEnabledThresholds.27 = BITS: 14
upperThresholdCritical(3) upperThresholdFatal(5)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.27 = INTEGER:
reset(1)
$
```

Related Information

- "Display Internal Temperatures (CLI)" on page 46
- "Display Internal Temperatures (Web)" on page 118
- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display Power Supply Status (SNMP)" on page 198
- "Display Board-Level Voltages (SNMP)" on page 200
- "Display Fan Status (SNMP)" on page 207
- "Display the Sensor Alarm State (SNMP)" on page 211
- "Display the Entity Numbers" on page 212

▼ Display Fan Status (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the gateway firmware and configuration. For more information about entity numbers, see "Display the Entity Numbers" on page 212.

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 is the entity number for the /SYS/FAN*x*/PRSNT presence sensor target for the respective fan. The following example uses entity number 53 for the left fan (FAN1):

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.53
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.53 = 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 is the entity number for the /SYS/FAN*x*/TACH speed sensor target for the respective fan. The following example uses entity number 54 for the left fan (FAN1):

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.54
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.54 = 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 gateway environment and loading.

---

3. **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.54 = INTEGER: rpm(20)
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.57 = INTEGER: rpm(20)
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.60 = INTEGER: rpm(20)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.54 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.57 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.60 = INTEGER: 0
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.54 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.57 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.60 = INTEGER: none(1)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.54 = INTEGER: 12208
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.57 = INTEGER: 11772
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.60 = INTEGER: 12099
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.54 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.57 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.60 = INTEGER:
reset(1)
$
```

4. **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. The following 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. The following filtering example uses entity number 54:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable
|grep -F '.54 ='
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.54 = INTEGER: rpm(20)
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.54 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.54 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.54 = INTEGER: 12208
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMin.54 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMax.54 = INTEGER: 255
SUN-PLATFORM-MIB::sunPlatNumericSensorAccuracy.54 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdNonCritical.54 = INTEGER:
6322
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdNonCritical.54 = INTEGER:
0
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdCritical.54 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdCritical.54 = INTEGER:
26705
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdFatal.54 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdFatal.54 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorHysteresis.54 = Gauge32: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorEnabledThresholds.54 = BITS: 90
lowerThresholdNonCritical(0) upperThresholdCritical(3)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.54 = INTEGER:
reset(1)
$
```

Related Information

- "Display Fan Status (CLI)" on page 48
- "Display Fan Status (Web)" on page 119
- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display Power Supply Status (SNMP)" on page 198
- "Display Board-Level Voltages (SNMP)" on page 200
- "Display Internal Temperatures (SNMP)" on page 204
- "Display Fan Status (SNMP)" on page 207
- "Display the Sensor Alarm State (SNMP)" on page 211
- "Display the Entity Numbers" on page 212

▼ 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 gateway firmware and configuration.

1. **Determine the entity number of the sensor.**

   See "Display the Entity Numbers" on page 212.

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 gateway alarm state, use the entity number respective to the `/SYS/CHASSIS_STATUS` aggregate sensor target. The following example uses entity number 35:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.35
SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.35 = INTEGER: cleared(7)
$
```

In the output, the `INTEGER: cleared(7)` indicates the alarm state for the sensor is clear. The following 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 41
- "Display the Aggregate Sensors State (Web)" on page 116
- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display Power Supply Status (SNMP)" on page 198
- "Display Board-Level Voltages (SNMP)" on page 200
- "Display Internal Temperatures (SNMP)" on page 204
- "Display Fan Status (SNMP)" on page 207

- "Display the Sensor States (IPMI)" on page 248
- "Display the Entity Numbers" on page 212

▼ 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 gateway 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.61 = STRING: /SYS/I_POWER
ENTITY-MIB::entPhysicalName.62 = STRING: /SYS/I_ATTENTION
ENTITY-MIB::entPhysicalName.63 = 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. The following 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
.
.
```

```
.
61 /SYS/I_POWER
62 /SYS/I_ATTENTION
63 /SYS/I_LOCATOR
$
```

2. **Use the entity numbers for daily tasks.**

   See:

   - "Display the Aggregate Sensors State (SNMP)" on page 197
   - "Display Power Supply Status (SNMP)" on page 198
   - "Display Board-Level Voltages (SNMP)" on page 200
   - "Display Internal Temperatures (SNMP)" on page 204
   - "Display Fan Status (SNMP)" on page 207
   - "Display the Sensor Alarm State (SNMP)" on page 211

Related Information

- "Display Gateway FRU ID (SNMP)" on page 224
- "Display Power Supply FRU ID (SNMP)" on page 225
- "Display the System Components (SNMP)" on page 228

▼ 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:
2010-1-20,12:14:27.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.119 = STRING:
2010-1-20,12:17:40.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.126 = STRING:
2010-1-20,12:27:4.0
$
```

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:
2010-1-20,12:14:27.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.119 = STRING:
2010-1-20,12:17:40.0
SUN-ILOM-CONTROL-MIB::ilomCtrlSessionsLoginTime.126 = STRING:
2010-1-20,12:27:4.0
$
```

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 119
- "Display Oracle ILOM User Accounts (SNMP)" on page 222

▼ 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:
2010-1-20,10:22:28.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.2 = STRING:
2010-1-20,10:22:50.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.3 = STRING:
2010-1-20,10:22:56.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.4 = STRING:
2010-1-20,10:23:20.0
SUN-ILOM-CONTROL-MIB::ilomCtrlEventLogTimestamp.5 = STRING:
2010-1-20,10:23:20.0
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: user1 : 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 120
- "Display the System Event Log (IPMI)" on page 251
- "Clear the Oracle ILOM Event Log (SNMP)" on page 235
- "Set the Remote Log Hosts (SNMP)" on page 235

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 217
- "Display the HTTPS Service Status (SNMP)" on page 218
- "Display the SMTP Client Status (SNMP)" on page 218
- "Display the NTP State (SNMP)" on page 219
- "Display the NTP Servers (SNMP)" on page 219

Related Information

- "Performing Daily Tasks (SNMP)" on page 196
- "Verifying Other Aspects With Oracle ILOM (SNMP)" on page 220

▼ 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 51
- "Display the HTTP Service Status (Web)" on page 121
- "Display the HTTPS Service Status (SNMP)" on page 218
- "Set the HTTP Service State (SNMP)" on page 241

▼ 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 52
- "Display the HTTPS Service Status (Web)" on page 121
- "Display the HTTP Service Status (SNMP)" on page 217

▼ Display the SMTP Client Status (SNMP)

1. **From the SNMP client, display the state of the SMTP client:**

Note – The following 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 56
- "Display the SMTP Client Status (Web)" on page 123
- "Configure the SMTP Client (SNMP)" on page 236

▼ 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 56
- "Display the Network Time Protocol Servers (Web)" on page 124
- "Display the NTP Servers (SNMP)" on page 219
- "Set the Network Time Protocol State (SNMP)" on page 234

▼ 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 56
- "Display the Network Time Protocol Servers (Web)" on page 124
- "Display the NTP State (SNMP)" on page 219
- "Set the Network Time Protocol Servers (SNMP)" on page 234

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 196 or "Checking the Status of Services (SNMP)" on page 217.

- "Display the Alert Properties (SNMP)" on page 221
- "Display Oracle ILOM User Accounts (SNMP)" on page 222
- "Display the Remote Log Hosts (SNMP)" on page 222
- "Display the Network Management Configuration (SNMP)" on page 223
- "Display Gateway FRU ID (SNMP)" on page 224
- "Display Power Supply FRU ID (SNMP)" on page 225
- "Display the System Components (SNMP)" on page 228
- "Display the Additional System Component Information (SNMP)" on page 230
- "Display the Firmware Version (SNMP)" on page 231
- "Display System Identifier (SNMP)" on page 231

Related Information

- "Performing Daily Tasks (SNMP)" on page 196
- "Checking the Status of Services (SNMP)" on page 217

▼ 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 59
- "Display the Alert Properties (Web)" on page 125
- "Enable Alerts to Send SNMP Traps (SNMP)" on page 242
- "Modify Alert SNMP Version (SNMP)" on page 245
- "Disable Alerts (SNMP)" on page 246

▼ 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 60
- "Display the Oracle ILOM User Accounts (Web)" on page 126
- "Add an Oracle ILOM User Account (SNMP)" on page 239
- "Delete an Oracle ILOM User Account (SNMP)" on page 240

▼ 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 61
- "Display the Remote Log Hosts (Web)" on page 126
- "Set the Remote Log Hosts (SNMP)" on page 235

▼ 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 62
- "Display the Network Management Configuration (Web)" on page 126
- "Set the Network Parameters (SNMP)" on page 237

▼ Display Gateway FRU ID (SNMP)

Note – The entity number for the `/SYS` gateway container target might change with different firmware releases or gateway configurations. Verify the gateway entity number (1) with the procedure in "Display the Entity Numbers" on page 212.

1. From the SNMP client, type:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch GW
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: 1.3.2-1
.
.
.
$
```

2. **Look through the output for entity number** `1`.

   You can also filter the output of the `snmpwalk` command for entity number `1`. The following 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 GW
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: 1.3.2-1
ENTITY-MIB::entPhysicalSoftwareRev.1 = STRING:
ENTITY-MIB::entPhysicalSerialNum.1 = STRING: 0110SJC-1099XY9992
ENTITY-MIB::entPhysicalMfgName.1 = STRING: Sun Microsystems, Inc.
ENTITY-MIB::entPhysicalModelName.1 = STRING: 5111402
ENTITY-MIB::entPhysicalAlias.1 = STRING:
ENTITY-MIB::entPhysicalAssetID.1 = STRING:
ENTITY-MIB::entPhysicalIsFRU.1 = INTEGER: true(1)
$
```

Related Information

- "Display Gateway FRU ID (CLI)" on page 63
- "Display System Component FRU ID (Web)" on page 127
- "Display FRU ID Information (IPMI)" on page 252
- "Display the Entity Numbers" on page 212

▼ 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/PSU`*x* power supply FRU targets might change with different firmware releases or gateway configurations. Verify the power supply entity numbers with the procedure in "Display the Entity Numbers" on page 212.

1. From the SNMP client, type:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch GW
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.44 = STRING: Power Supply FRU
.
.
.
ENTITY-MIB::entPhysicalDescr.48 = STRING: Power Supply FRU
.
.
.
ENTITY-MIB::entPhysicalVendorType.44 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalVendorType.48 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalContainedIn.44 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalContainedIn.48 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalClass.44 = INTEGER: powerSupply(6)
.
.
.
ENTITY-MIB::entPhysicalClass.48 = INTEGER: powerSupply(6)
.
.
```

```
.
ENTITY-MIB::entPhysicalParentRelPos.44 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalParentRelPos.48 = INTEGER: 2
.
.
.
ENTITY-MIB::entPhysicalName.44 = STRING: /SYS/PSU0
.
.
.
ENTITY-MIB::entPhysicalName.48 = 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. The following 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. The following filtering example uses entity number 44:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable | grep -F '.44 ='
ENTITY-MIB::entPhysicalDescr.44 = STRING: Power Supply FRU
ENTITY-MIB::entPhysicalVendorType.44 = OID: SNMPv2-SMI::zeroDotZero
ENTITY-MIB::entPhysicalContainedIn.44 = INTEGER: 1
ENTITY-MIB::entPhysicalClass.44 = INTEGER: powerSupply(6)
ENTITY-MIB::entPhysicalParentRelPos.44 = INTEGER: 1
ENTITY-MIB::entPhysicalName.44 = STRING: /SYS/PSU0
ENTITY-MIB::entPhysicalHardwareRev.44 = STRING:
ENTITY-MIB::entPhysicalFirmwareRev.44 = STRING:
ENTITY-MIB::entPhysicalSoftwareRev.44 = STRING: 02
ENTITY-MIB::entPhysicalSerialNum.44 = STRING: 001180
```

```
ENTITY-MIB::entPhysicalMfgName.44 = STRING: Delta Energy Systems
ENTITY-MIB::entPhysicalModelName.44 = STRING: 3002233
ENTITY-MIB::entPhysicalAlias.44 = STRING: A247
ENTITY-MIB::entPhysicalAssetID.44 = STRING:
ENTITY-MIB::entPhysicalIsFRU.44 = INTEGER: true(1)
$
```

Related Information

- "Display Power Supply FRU ID (CLI)" on page 64
- "Display System Component FRU ID (Web)" on page 127
- "Display FRU ID Information (IPMI)" on page 252
- "Display the Entity Numbers" on page 212

▼ 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.61 = STRING: /SYS/I_POWER
ENTITY-MIB::entPhysicalName.62 = STRING: /SYS/I_ATTENTION
ENTITY-MIB::entPhysicalName.63 = 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 GW
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.61 = STRING: Indicator
ENTITY-MIB::entPhysicalDescr.62 = STRING: Indicator
ENTITY-MIB::entPhysicalDescr.63 = 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.61 = INTEGER: other(1)
ENTITY-MIB::entPhysicalClass.62 = INTEGER: other(1)
ENTITY-MIB::entPhysicalClass.63 = INTEGER: other(1)
$
```

Related Information

- "Display System Component FRU ID (Web)" on page 127
- "Display the Additional System Component Information (SNMP)" on page 230
- "Display the Entity Numbers" on page 212

▼ 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 228

▼ 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: 1.3.2-1
$
```

Related Information

- "Display the Firmware Version (CLI)" on page 65
- "Display the Oracle ILOM Version (Web)" on page 128
- "Display the Entity Numbers" on page 212

▼ Display System Identifier (SNMP)

- **From the SNMP client, 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 Identification Properties (CLI)" on page 65
- "Display Identification Properties (Web)" on page 129
- "Set the System Identifier (SNMP)" on page 238

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 232
- "Performing User Tasks (SNMP)" on page 239
- "Managing Other Aspects With Oracle ILOM (SNMP)" on page 240

Related Information

- "Controlling Oracle ILOM Targets (CLI)" on page 66
- "Controlling Oracle ILOM Targets (Web)" on page 129
- "Monitoring Oracle ILOM Targets (SNMP)" on page 195

Performing General Tasks (SNMP)

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

- "Set the Date and Time (SNMP)" on page 233
- "Set the Time Zone (SNMP)" on page 233
- "Set the Network Time Protocol State (SNMP)" on page 234
- "Set the Network Time Protocol Servers (SNMP)" on page 234
- "Clear the Oracle ILOM Event Log (SNMP)" on page 235
- "Set the Remote Log Hosts (SNMP)" on page 235
- "Configure the SMTP Client (SNMP)" on page 236
- "Set the Network Parameters (SNMP)" on page 237
- "Set the System Identifier (SNMP)" on page 238

Related Information

- "Performing User Tasks (SNMP)" on page 239
- "Managing Other Aspects With Oracle ILOM (SNMP)" on page 240

▼ 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
"2010-1-28,13:24:31.0"
SUN-ILOM-CONTROL-MIB::ilomCtrlDateAndTime.0 = STRING: 2010-1-28,13:24:31.0
$
```

Related Information

- "Set the Date and Time (CLI)" on page 68
- "Set the Date and Time (Web)" on page 131
- "Display the Date and Time (SNMP)" on page 196

▼ 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 68
- "Set the Time Zone (Web)" on page 132
- "Display the Time Zone (SNMP)" on page 197

▼ 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 234
- "Display the NTP State (SNMP)" on page 219

▼ 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 68
- "Set the Date and Time (Web)" on page 131

- "Set the Network Time Protocol State (SNMP)" on page 234
- "Display the NTP Servers (SNMP)" on page 219

▼ 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 70
- "Clear the Oracle ILOM Event Log (Web)" on page 133
- "Display the Oracle ILOM Event Log (SNMP)" on page 215
- "Set the Remote Log Hosts (SNMP)" on page 235

▼ 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 71
- "Set the Remote Log Hosts (Web)" on page 134
- "Display the Remote Log Hosts (SNMP)" on page 222

▼ Configure the SMTP Client (SNMP)

To enable email alerts, you must configre 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 72
- "Configure the SMTP Client (Web)" on page 134
- "Display the SMTP Client Status (SNMP)" on page 218

▼ 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 78
- "Set the Network Management Parameters (Web)" on page 138
- "Display the Network Management Configuration (SNMP)" on page 223

▼ Set the System Identifier (SNMP)

- **From the SNMP client, 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-03-gw-1"
SUN-ILOM-CONTROL-MIB::ilomCtrlSystemIdentifier.0 = STRING: blr-03-gw-1
$
```

Related Information

- "Set the Identification Properties (CLI)" on page 80
- "Set the Identification Properties (Web)" on page 139
- "Display System Identifier (SNMP)" on page 231

Performing User Tasks (SNMP)

These tasks enable you to add and delete Oracle ILOM users.

- "Add an Oracle ILOM User Account (SNMP)" on page 239
- "Delete an Oracle ILOM User Account (SNMP)" on page 240

Related Information

- "Performing General Tasks (SNMP)" on page 232
- "Managing Other Aspects With Oracle ILOM (SNMP)" on page 240

▼ 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 81
- "Add an Oracle ILOM User Account (Web)" on page 140
- "Delete an Oracle ILOM User Account (SNMP)" on page 240
- "Display Oracle ILOM User Accounts (SNMP)" on page 222

▼ 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 83
- "Delete an Oracle ILOM User Account (Web)" on page 141
- "Add an Oracle ILOM User Account (SNMP)" on page 239
- "Display Oracle ILOM User Accounts (SNMP)" on page 222

Managing Other Aspects With Oracle ILOM (SNMP)

These tasks help you manage the Oracle ILOM services.

- "Set the HTTP Service State (SNMP)" on page 241
- "Set the HTTPS Service State (SNMP)" on page 242
- "Enable Alerts to Send SNMP Traps (SNMP)" on page 242
- "Enable Alerts to Send PETs (SNMP)" on page 243
- "Enable Alerts to Send Email Alerts (SNMP)" on page 244
- "Modify Alert SNMP Version (SNMP)" on page 245
- "Disable Alerts (SNMP)" on page 246

Related Information

- "Managing Other Aspects With Oracle ILOM (CLI)" on page 96
- "Managing Other Aspects With Oracle ILOM (Web)" on page 153
- "Performing General Tasks (SNMP)" on page 232

▼ 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 84
- "Disable the HTTP Service (CLI)" on page 84
- "Enable the HTTP Service (Web)" on page 142
- "Disable the HTTP Service (Web)" on page 143
- "Display the HTTP Service Status (SNMP)" on page 217

▼ 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 85
- "Disable the HTTPS Service (CLI)" on page 88
- "Enable the HTTPS Service (Web)" on page 144
- "Disable the HTTPS Service (Web)" on page 146
- "Display the HTTPS Service Status (SNMP)" on page 218

▼ 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 97
- "Enable Alerts to Send SNMP Traps (Web)" on page 154
- "Enable Alerts to Send PETs (SNMP)" on page 243
- "Enable Alerts to Send Email Alerts (SNMP)" on page 244
- "Display the Alert Properties (SNMP)" on page 221
- "Disable Alerts (SNMP)" on page 246

▼ 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 98
- "Enable Alerts to Send PETs (Web)" on page 155
- "Enable Alerts to Send SNMP Traps (SNMP)" on page 242
- "Enable Alerts to Send Email Alerts (SNMP)" on page 244
- "Display the Alert Properties (SNMP)" on page 221
- "Disable Alerts (SNMP)" on page 246

▼ 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-gwl-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-gwl-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-gwl-hostname
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = INTEGER: minor(4)
$
```

Related Information

- "Enable Alerts to Send Email Alerts (CLI)" on page 99
- "Enable Alerts to Send Email Alerts (Web)" on page 155
- "Enable Alerts to Send SNMP Traps (SNMP)" on page 242
- "Enable Alerts to Send PETs (SNMP)" on page 243
- "Display the Alert Properties (SNMP)" on page 221
- "Disable Alerts (SNMP)" on page 246

▼ 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 242
- "Enable Alerts to Send PETs (SNMP)" on page 243
- "Enable Alerts to Send Email Alerts (SNMP)" on page 244
- "Display the Alert Properties (SNMP)" on page 221
- "Disable Alerts (SNMP)" on page 246

▼ 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 100
- "Disable Alerts (Web)" on page 156
- "Display the Alert Properties (SNMP)" on page 221
- "Enable Alerts to Send SNMP Traps (SNMP)" on page 242
- "Enable Alerts to Send PETs (SNMP)" on page 243
- "Enable Alerts to Send Email Alerts (SNMP)" on page 244
- "Modify Alert SNMP Version (SNMP)" on page 245

Administering Hardware (IPMI)

These topics describe how to administer the hardware of the gateway using the `ipmitool` utility.

Related Information

- "Administering Oracle ILOM (CLI)" on page 29
- "Administering Oracle ILOM (Web)" on page 111
- "Using the Fabric Monitor" on page 161
- "Administering Oracle ILOM (SNMP)" on page 191
- "Understanding Oracle ILOM Commands" on page 255

`ipmitool` Overview

The Oracle ILOM implementation on the management controller within the gateway provides an IPMI server, which can communicate the state of the gateway 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.

The `ipmitool` utility is the IPMI client used in these topics and has the following 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 – The following 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 41
- "Display the Aggregate Sensors State (Web)" on page 116
- "Display the Aggregate Sensors State (SNMP)" on page 197
- "Display the Sensor Alarm State (SNMP)" on page 211
- "Display the Sensor Information (IPMI)" on page 249

▼ Display the Sensor Information (IPMI)

- **From the IPMI client, type:**

Note – The following 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 248
- "Display the Sensor Alarm State (SNMP)" on page 211

▼ 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             : 01/19/2010 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             : 01/20/2010 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 120
- "Display the Oracle ILOM Event Log (SNMP)" on page 215

▼ 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       : 1.3.2-1

FRU Device Description : SYS (ID 4)
 Product Manufacturer  : Sun Microsystems
 Product Name          : Sun Datacenter InfiniBand Switch GW
 Product Part Number   : 5413495
 Product Serial        : 0110SJC-09183P0022

FRU Device Description : PSU0 (ID 5)
 Board Mfg             : Delta Energy Systems
 Board Product         : A236
 Board Serial          : 006541
 Board Part Number     : 3002234
 Board Extra           : sun_spec_part_number - 885-1390-01

FRU Device Description : PSU1 (ID 6)
 Board Mfg             : Delta Energy Systems
 Board Product         : A236
 Board Serial          : 006653
 Board Part Number     : 3002234
 Board Extra           : sun_spec_part_number - 885-1390-01

FRU Device Description : MB (ID 7)
 Board Extra           : ComEx: manufacturing_date - 2009.02.20
 Product Manufacturer  : Sun Microsystems
 Product Name          : Sun Datacenter InfiniBand Switch GW
 Product Part Number   : 5413495
 Product Serial        : 0110SJC-09183P0022
 Product Extra         : ComEx: serial_number - NCD2T0271
$
```

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 Gateway FRU ID (CLI)" on page 63
- "Display Power Supply FRU ID (CLI)" on page 64
- "Display System Component FRU ID (Web)" on page 127
- "Display Gateway FRU ID (SNMP)" on page 224
- "Display Power Supply FRU ID (SNMP)" on page 225

▼ Display Gateway 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 Gateway Status LEDs States (CLI)" on page 40
- "Display the Gateway Status LEDs States (Web)" on page 116
- "Enable the Locator LED (IPMI)" on page 254
- "Disable the Locator LED (IPMI)" on page 254

▼ 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 69
- "Enable the Locator LED (Web)" on page 132
- "Disable the Locator LED (IPMI)" on page 254
- "Display Gateway Status LED States (IPMI)" on page 253

▼ 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 70
- "Disable the Locator LED (Web)" on page 133
- "Enable the Locator LED (IPMI)" on page 254
- "Display Gateway Status LED States (IPMI)" on page 253

Understanding Oracle ILOM Commands

Only the `ilom-admin` user of the Oracle ILOM shell can run all of the Oracle ILOM commands on the Sun Network QDR InfiniBand Gateway 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
`cd [-default][`*target*`]`	"cd Command" on page 256
`create [`*target*`][`*property*`=`*value* *property*`=`*value* `...]`	"create Command" on page 257
`delete [-script][`*target*`]`	"delete Command" on page 258
`dump [-destination` *URI*`][`*target*`]`	"dump Command" on page 259
`exit`	"exit Command (ILOM)" on page 260
`help [-o terse|verbose][`*command*`|legal|targets|`*target*`|` *target property*`]`	"help Command (ILOM)" on page 261
`load [-o verbose][-script]-source` *URI*`[`*target*`]`	"load Command" on page 262
`reset [-script][`*target*`]`	"reset Command" on page 263
`set [`*target*`]`*property*`=`*value*`[`*property*`=`*value*`...]`	"set Command" on page 264
`show [-d targets|properties|commands|all][-l 1|2|3...255|all][-o table][`*target*`][`*property* *property*`...]`	"show Command" on page 265
`version`	"version Command (ILOM)" on page 267

Related Information

- *Gateway Command Reference*
- "Administering Oracle ILOM (CLI)" on page 29
- "Administering Oracle ILOM (Web)" on page 111
- "Using the Fabric Monitor" on page 161
- "Administering Oracle ILOM (SNMP)" on page 191
- "Administering Hardware (IPMI)" on page 247

`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

The following 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

The following 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 258

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

The following 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 257

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

The following 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 262

`exit` Command (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

The following example shows how to exit the Oracle ILOM session using the `exit` command.

```
-> exit
#
```

Related Information

- *Gateway Reference*, `exit` command

`help` Command (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

The following 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

- *Gateway Reference*, `help` command

`load` Command

Transfers a file from a remote location to update a target.

Syntax

`load [-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

The following table describes the options to the `load` command and their purposes:

Option	Purpose
`-o`	Enables verbose output.
`-script`	Skips confirmation of the action and proceeds as if `y` was specified.

Example

The following 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 259

`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 resetable *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

The following 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 264

`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

The following 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 265
- "reset Command" on page 263

`show` Command

Display information about targets, properties, and commands.

Syntax

`show [-d targets|properties|commands|all]|[-l 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

The following table describes the options to the `show` command and their purposes:

Option	Purpose
`-d`	Specifies what information to display. • `targets` – The subtargets of the target. • `properties` – The properties of the target. • `commands` – The supported commands of the target. • `all` – 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

The following 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 264

`version` Command (ILOM)

Displays version information.

Syntax

```
version
```

Description

This Oracle ILOM command displays the version information within the management controller.

Example

The following example shows how to display the version information with the `version` command.

```
-> version
SP firmware 1.3
SP firmware build number: 47111
SP firmware date: Wed Nov 11 18:21:29 IST 2009
SP filesystem version: 0.1.22
->
```

Related Information

- *Gateway Reference*, `version` command

Index

D

E

F

G

H

L

M

N

O

T

U

V

W