

Oracle Integrated Lights Out Manager (ILOM) 3.0

Supplement for the Sun Datacenter
InfiniBand Switch 36



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Contents

Using This Documentation xvii

Understanding Oracle ILOM on the Switch 1

 Oracle ILOM Overview 1

 Supported Features 2

 Understanding Oracle ILOM Targets 4

 Oracle ILOM Target Overview 4

 Oracle ILOM Targets and Descriptions 5

 Oracle ILOM General System Targets and Properties 9

 Oracle ILOM Fan Targets and Properties 11

 Oracle ILOM Indicator Targets and Properties 12

 Oracle ILOM Power Supply Targets and Properties 13

 Oracle ILOM Temperature Targets and Properties 15

 Oracle ILOM Voltage Targets and Properties 17

 Oracle ILOM General Targets and Properties 20

 Oracle ILOM Service Targets and Properties 22

 Oracle ILOM User and Session Targets and Properties 24

Installing the Oracle ILOM Firmware 27

 Firmware Delivery 27

 ▼ Acquire the Oracle ILOM Firmware Version 1.1.3 28

 ▼ Install the Oracle ILOM Firmware Version 1.1.3 30

Administering Oracle ILOM (CLI) 33

 CLI Overview 33

 Accessing Oracle ILOM From the CLI 34

 ▼ Access the Oracle ILOM Shell From the CLI (NET MGT Port) 34

 ▼ Access the Oracle ILOM Shell From the CLI (USB Management Port)
 35

 Switching Between the Oracle ILOM Shell and the Linux Shell 37

 /SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells 37

 ▼ Switch From the Oracle ILOM Shell to the Linux Shell 40

 ▼ Switch From the Linux Shell to the Oracle ILOM Shell 41

 Monitoring Oracle ILOM Targets (CLI) 41

 Performing Daily Tasks (CLI) 42

 ▼ Display the Date (CLI) 42

 ▼ Display Switch Status LEDs States (CLI) 43

 ▼ Display the Aggregate Sensors State (CLI) 44

 Aggregate Sensor States 45

 ▼ Display Power Supply Status (CLI) 46

 ▼ Display Board-Level Voltages (CLI) 47

 Board Level Voltages 48

 ▼ Display Internal Temperatures (CLI) 49

 Internal Temperature Sensors 50

 ▼ Display Fan Status (CLI) 50

 ▼ Display the Oracle ILOM Sessions (CLI) 52

 ▼ Display the Oracle ILOM Event Log (CLI) 53

 Checking the Status of Services (CLI) 54

 ▼ Display the HTTP Service Status (CLI) 54

 ▼ Display the HTTPS Service Status (CLI) 55

 ▼ Display the SSL Certificates (CLI) 55

 ▼ Display the SNMP Service Status (CLI) 56

▼	Display the SNMP User Accounts (CLI)	56
▼	Display the SNMP Service Communities (CLI)	57
▼	Display the IPMI Service Status (CLI)	58
▼	Display the SMTP Client Status (CLI)	58
▼	Display the NTP Servers (CLI)	59
	Verifying Other Aspects With Oracle ILOM (CLI)	60
▼	Get Help on an Oracle ILOM Command (CLI)	60
▼	Get Help on an Oracle ILOM Target Property (CLI)	61
▼	Display the Alert Properties (CLI)	62
▼	Display the Oracle ILOM User Accounts (CLI)	63
▼	Display the Remote Log Hosts (CLI)	63
▼	Display the Network Management Configuration (CLI)	64
▼	Display the CLI Session Timeout (CLI)	65
▼	Display Switch FRU ID (CLI)	65
▼	Display Power Supply FRU ID (CLI)	66
▼	Display the Firmware Version (CLI)	67
▼	Display Identification Properties (CLI)	68
	Controlling Oracle ILOM Targets (CLI)	69
	Performing General Tasks on Oracle ILOM Targets (CLI)	69
▼	Set the Date and Time (CLI)	70
▼	Enable the Locator LED (CLI)	71
▼	Disable the Locator LED (CLI)	72
▼	Clear the Oracle ILOM Event Log (CLI)	72
▼	Set the Remote Log Hosts (CLI)	73
▼	Configure the SMTP Client (CLI)	74
▼	Back Up the Configuration (CLI)	75
	Switch Configuration Information Backed Up	76
▼	Restore the Configuration (CLI)	77

▼ Create a Snapshot of the Switch State (CLI)	78
Snapshot Dataset Information (CLI)	79
▼ Set the Network Management Parameters (CLI)	80
▼ Set the Identification Properties (CLI)	82
Performing Oracle ILOM User Tasks (CLI)	83
▼ Add an Oracle ILOM User Account (CLI)	84
▼ Change an Oracle ILOM User's Password and or Role (CLI)	84
▼ Delete an Oracle ILOM User Account (CLI)	85
Managing HTTP Services (CLI)	86
▼ Enable the HTTP Service (CLI)	86
▼ Disable the HTTP Service (CLI)	87
Managing HTTPS Services (CLI)	88
▼ Enable the HTTPS Service (CLI)	88
▼ Install a Custom SSL Certificate (CLI)	89
▼ Remove the Custom SSL Certificate (CLI)	89
▼ Disable the HTTPS Service (CLI)	90
Managing SNMP Services (CLI)	91
▼ Enable the SNMP Service (CLI)	91
▼ Configure the SNMP Service (CLI)	92
▼ Add SNMP Service User Accounts (CLI)	93
▼ Modify SNMP Service User Accounts (CLI)	94
▼ Delete SNMP Service User Accounts (CLI)	95
▼ Add SNMP Service Communities (CLI)	95
▼ Modify SNMP Service Communities (CLI)	96
▼ Delete SNMP Service Communities (CLI)	96
▼ Back Up SNMP Service MIBs (CLI)	97
▼ Disable the SNMP Service (CLI)	98
Managing Other Aspects With Oracle ILOM (CLI)	98

▼	Enable Alerts to Send SNMP Traps (CLI)	99
▼	Enable Alerts to Send PETs (CLI)	100
▼	Enable Alerts to Send Email Alerts (CLI)	101
▼	Disable Alerts (CLI)	102
▼	Set the Oracle ILOM CLI Session Timeout (CLI)	103
	Upgrading the Switch Firmware Through Oracle ILOM (CLI)	104
	Firmware Overview	104
▼	Acquire the Switch Firmware Package (CLI)	105
▼	Upgrade the Switch Firmware (CLI)	107
	Administering Oracle ILOM (Web)	113
	Web Interface Overview	113
▼	Access Oracle ILOM From the Web Interface	116
	Monitoring Oracle ILOM Targets (Web)	117
	Performing Daily Tasks (Web)	117
▼	Display the Date (Web)	118
▼	Display the Switch Status LEDs States (Web)	118
▼	Display the Aggregate Sensors State (Web)	118
▼	Display Power Supply Status (Web)	119
▼	Display Board-Level Voltages (Web)	120
▼	Display Internal Temperatures (Web)	120
▼	Display Fan Status (Web)	121
▼	Display the Oracle ILOM Sessions (Web)	121
▼	Display the Oracle ILOM Event Log (Web)	122
	Checking the Status of Services (Web)	122
▼	Display the HTTP Service Status (Web)	123
▼	Display the HTTPS Service Status (Web)	123
▼	Display the SSL Certificates (Web)	124
▼	Display the SNMP Service Status (Web)	124

▼	Display the SNMP Service User Accounts (Web)	124
▼	Display the SNMP Service Communities (Web)	125
▼	Display the IPMI Service Status (Web)	125
▼	Display the SMTP Client Status (Web)	126
▼	Display the Network Time Protocol Servers (Web)	126
	Verifying Other Aspects With Oracle ILOM (Web)	127
▼	Display the Alert Properties (Web)	127
▼	Display the Oracle ILOM User Accounts (Web)	128
▼	Display the Remote Log Hosts (Web)	128
▼	Display the Network Management Configuration (Web)	129
▼	Display the CLI Session Timeout (Web)	129
▼	Display System Component FRU ID (Web)	129
▼	Display the Firmware Version (Web)	130
▼	Display Identification Properties (Web)	130
	Controlling Oracle ILOM Targets (Web)	131
	Performing General Tasks on Oracle ILOM Targets (Web)	131
▼	Set the Date and Time (Web)	132
▼	Set the Time Zone (Web)	133
▼	Enable the Locator LED (Web)	133
▼	Disable the Locator LED (Web)	134
▼	Clear the Oracle ILOM Event Log (Web)	134
▼	Set the Remote Log Hosts (Web)	135
▼	Configure the SMTP Client (Web)	135
▼	Back Up the Configuration (Web)	136
▼	Restore the Configuration (Web)	137
▼	Create a Snapshot of the Switch State (Web)	138
	Snapshot Dataset Information (Web)	139
▼	Set the Network Management Parameters (Web)	139

▼ Set the Identification Properties (Web)	140
Performing Oracle ILOM User Tasks (Web)	141
▼ Add an Oracle ILOM User Account (Web)	141
▼ Change an Oracle ILOM User's Password and or Role (Web)	142
▼ Delete an Oracle ILOM User Account (Web)	142
Managing HTTP Services (Web)	143
▼ Enable the HTTP Service (Web)	143
▼ Disable the HTTP Service (Web)	144
Managing HTTPS Services (Web)	145
▼ Enable the HTTPS Service (Web)	145
▼ Install a Custom SSL Certificate (Web)	146
▼ Remove the Custom SSL Certificate (Web)	146
▼ Disable the HTTPS Service (Web)	147
Managing SNMP Services (Web)	147
▼ Enable the SNMP Service (Web)	148
▼ Configure the SNMP Service (Web)	148
▼ Add SNMP Service User Accounts (Web)	149
▼ Modify SNMP Service User Accounts (Web)	150
▼ Delete SNMP Service User Accounts (Web)	151
▼ Add SNMP Service Communities (Web)	151
▼ Modify SNMP Service Communities (Web)	152
▼ Delete SNMP Service Communities (Web)	153
▼ Back Up SNMP Service MIBs (Web)	153
▼ Disable the SNMP Service (Web)	154
Managing Other Aspects With Oracle ILOM (Web)	154
▼ Enable Alerts to Send SNMP Traps (Web)	155
▼ Enable Alerts to Send PETs (Web)	156
▼ Enable Alerts to Send Email Alerts (Web)	156

- ▼ Disable Alerts (Web) 157
 - ▼ Set the CLI Session Timeout (Web) 158
- Upgrading the Switch Firmware Through Oracle ILOM (Web) 158
- ▼ Upgrade the Switch Firmware (Web) 159

Using the Fabric Monitor 163

- ▼ Access the Fabric Monitor 163
- Fabric Monitor Features 164
- Accessing the Rear Panel Diagram 166
- Rear Panel Diagram Overview 166
- InfiniBand Connector Status Window 167
- Accessing Status Pane Information 169
- System Info Tab 169
 - Sensor Info Tab 171
 - IB Performance Tab 172
 - IB Port Map Tab 173
 - Subnet Manager Tab 174
- Control Panel Function 175
- Monitoring Parameters and Status 176
- Chassis Parameters and Status 177
- InfiniBand Connector Parameters and Status 178
- I4 Switch Chip Port Parameters and Status 181

Administering Oracle ILOM (SNMP) 183

- SNMP Overview 183
- Understanding SNMP Commands 184
- SNMP Commands 184
- V1 and V2c Protocol Command Format 185
- V3 Protocol Command Format 186

- Monitoring Oracle ILOM Targets (SNMP) 187
 - Performing Daily Tasks (SNMP) 188
 - ▼ Display the Date and Time (SNMP) 188
 - ▼ Display the Time Zone (SNMP) 189
 - ▼ Display the Aggregate Sensors State (SNMP) 189
 - ▼ Display Power Supply Status (SNMP) 190
 - ▼ Display Board-Level Voltages (SNMP) 192
 - ▼ Display Internal Temperatures (SNMP) 196
 - ▼ Display Fan Status (SNMP) 199
 - ▼ Display the Sensor Alarm State (SNMP) 202
 - Retrieving Entity Information 203
 - ▼ Display the Entity Numbers 203
 - Entity Information by Entity Number and Oracle ILOM Target 205
 - Entity Information by Entity Description 207
 - ▼ Display Oracle ILOM Sessions (SNMP) 211
 - ▼ Display the Oracle ILOM Event Log (SNMP) 212
- Checking the Status of Services (SNMP) 214
 - ▼ Display the HTTP Service Status (SNMP) 214
 - ▼ Display the HTTPS Service Status (SNMP) 215
 - ▼ Display the SMTP Client Status (SNMP) 215
 - ▼ Display the NTP State (SNMP) 216
 - ▼ Display the NTP Servers (SNMP) 216
- Verifying Other Aspects With Oracle ILOM (SNMP) 217
 - ▼ Display the Alert Properties (SNMP) 217
 - ▼ Display Oracle ILOM User Accounts (SNMP) 219
 - ▼ Display the Remote Log Hosts (SNMP) 219
 - ▼ Display the Network Management Configuration (SNMP) 220
 - ▼ Display Switch FRU ID (SNMP) 221

- ▼ Display Power Supply FRU ID (SNMP) 222
 - ▼ Display the System Components (SNMP) 225
 - ▼ Display the Additional System Component Information (SNMP) 226
 - ▼ Display the Firmware Version (SNMP) 227
 - ▼ Display System Identifier (SNMP) 228
- Controlling Oracle ILOM Targets (SNMP) 228
- Performing General Tasks (SNMP) 228
 - ▼ Set the Date and Time (SNMP) 229
 - ▼ Set the Time Zone (SNMP) 230
 - ▼ Set the Network Time Protocol State (SNMP) 230
 - ▼ Set the Network Time Protocol Servers (SNMP) 231
 - ▼ Clear the Oracle ILOM Event Log (SNMP) 231
 - ▼ Set the Remote Log Hosts (SNMP) 232
 - ▼ Configure the SMTP Client (SNMP) 232
 - ▼ Set the Network Parameters (SNMP) 234
 - ▼ Set the System Identifier (SNMP) 235
 - Performing User Tasks (SNMP) 235
 - ▼ Add an Oracle ILOM User Account (SNMP) 236
 - ▼ Delete an Oracle ILOM User Account (SNMP) 237
 - Managing Other Aspects With Oracle ILOM (SNMP) 237
 - ▼ Set the HTTP Service State (SNMP) 238
 - ▼ Set the HTTPS Service State (SNMP) 238
 - ▼ Enable Alerts to Send SNMP Traps (SNMP) 239
 - ▼ Enable Alerts to Send PETs (SNMP) 239
 - ▼ Enable Alerts to Send Email Alerts (SNMP) 240
 - ▼ Modify Alert SNMP Version (SNMP) 241
 - ▼ Disable Alerts (SNMP) 242

Administering Hardware (IPMI) 243

- `ipmitool` Overview 243
 - ▼ Display the Sensors' State (IPMI) 244
 - ▼ Display the Sensor Information (IPMI) 245
 - ▼ Display the System Event Log (IPMI) 247
 - ▼ Display FRU ID Information (IPMI) 248
 - ▼ Display Switch Status LED States (IPMI) 249
 - ▼ Enable the Locator LED (IPMI) 250
 - ▼ Disable the Locator LED (IPMI) 250

Understanding Oracle ILOM Commands 251

- `cd` Command 252
 - Syntax 252
 - Description 252
 - Example 252
- `create` Command 253
 - Syntax 253
 - Description 254
 - Example 254
- `delete` Command 254
 - Syntax 254
 - Description 255
 - Example 255
- `dump` Command 255
 - Syntax 255
 - Description 256
 - Example 256
- `exit` Command (ILOM) 256
 - Syntax 256

Description	256
Example	257
help Command (ILOM)	257
Syntax	257
Description	257
Example	258
load Command	258
Syntax	258
Description	258
Options	259
Example	259
reset Command	259
Syntax	259
Description	260
Example	260
set Command	260
Syntax	260
Description	261
Example	261
show Command	261
Syntax	261
Description	262
Options	262
Example	262
version Command (ILOM)	263
Syntax	263
Description	263
Example	263

Index 265

Using This Documentation

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

- “Related Documentation” on page xvii
 - “Documentation, Support, and Training” on page xviii
-

Related Documentation

The documents listed as online are available at:

(<http://www.oracle.com/pls/topic/lookup?ctx=E19197-01&id=homepage>)

Application	Title	Format	Location
Getting started	<i>Sun Datacenter InfiniBand Switch 36 Getting Started Guide</i>	Printed PDF	Shipping kit Online
Last-minute information	<i>Sun Datacenter InfiniBand Switch 36 Product Notes</i>	PDF	Online
Installation, administration, and service	<i>Sun Datacenter InfiniBand Switch 36 User's Guide</i>	PDF HTML	Online

Application	Title	Format	Location
Command reference	<i>Sun Datacenter InfiniBand Switch 36 Command Reference</i>	PDF HTML	Online
Compliance	<i>Sun Datacenter InfiniBand Switch 36 Safety and Compliance Guide</i>	PDF	Online
Oracle ILOM information	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Supplement for the Sun Datacenter InfiniBand Switch 36</i>	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	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Feature Updates and Release Notes</i>	PDF HTML	Online
Getting started	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Getting Started Guide</i>	PDF HTML	Online
Overview	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Concepts Guide</i>	PDF HTML	Online
Administration from web interface	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Web Procedures Guide</i>	PDF HTML	Online
Administration from CLI interface	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 CLI Procedures Guide</i>	PDF HTML	Online
Administration from SNMP and IPMI interface	<i>Oracle Integrated Lights Out Manager (ILOM) 3.0 Management Protocols Reference Guide</i>	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 Switch

These topics provide an overview of Oracle ILOM and its implementation on the Sun Datacenter InfiniBand Switch 36.

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

Related Information

- “[Administering Oracle ILOM \(CLI\)](#)” on page 33
 - “[Administering Oracle ILOM \(Web\)](#)” on page 113
 - “[Using the Fabric Monitor](#)” on page 163
 - “[Administering Oracle ILOM \(SNMP\)](#)” on page 183
 - “[Administering Hardware \(IPMI\)](#)” on page 243
 - “[Understanding Oracle ILOM Commands](#)” on page 251
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Oracle ILOM Overview

This document provides basic Oracle ILOM 3.0 information as it pertains to the switch. 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 Sun Datacenter InfiniBand Switch 36, the SP is the Komtron management controller within the switch. Oracle ILOM enables monitoring and controlling of users, hardware, services, protocols, and configuration. You can use Oracle ILOM to perform tasks that could otherwise be accomplished with the hardware commands.

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

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

When you upgrade the management controller firmware to version 1.1.3 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 251
 - “Web Interface Overview” on page 113
 - “Accessing Oracle ILOM From the CLI” on page 34
 - “Access Oracle ILOM From the Web Interface” on page 116
 - “Upgrading the Switch Firmware Through Oracle ILOM (CLI)” on page 104
-

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**
 - **Switch-specific events** – Non-ILOM events are also logged into the Oracle ILOM event log.

- **Firmware upgrade** – I4 switch chip and management controller firmware upgrade from a single repository file.
- **Fabric Monitor** – Browser interface to monitor switch configuration, status, and activity.
- **Oracle ILOM support** – 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 33
 - “Administering Oracle ILOM (Web)” on page 113
-

Understanding Oracle ILOM Targets

These topics describe the Oracle ILOM targets and their properties.

- “Oracle ILOM Target Overview” on page 4
- “Oracle ILOM Targets and Descriptions” on page 5
- “Oracle ILOM General System Targets and Properties” on page 9
- “Oracle ILOM Fan Targets and Properties” on page 11
- “Oracle ILOM Indicator Targets and Properties” on page 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

Related Information

- “Understanding Oracle ILOM Commands” on page 251

Oracle ILOM Target Overview

Oracle ILOM targets represent all software and hardware components and services managed by Oracle ILOM. Targets are identified by a hierachal 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 261
- “[set Command](#)” on page 260
- “[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 12
- “[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 20
- “[Oracle ILOM Service Targets and Properties](#)” on page 22
- “[Oracle ILOM User and Session Targets and Properties](#)” on page 24

Oracle ILOM Targets and Descriptions

The following table lists the Oracle ILOM targets supported in the switch 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/FANx	Fan <i>x</i> information
/SYS/FANx/PRSNT	Presence of fan <i>x</i>
/SYS/FANx/TACH	Speed of fan <i>x</i>
/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_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_1.8V	Voltage of the main 1.8V source
/SYS/MB/V_1.8VOK	State of the main 1.8V source
/SYS/MB/V_2.5V	Voltage of the main 2.5V source
/SYS/MB/V_2.5VOK	State of the main 2.5V source
/SYS/MB/V_3.3VMain	Voltage of the main 3.3V source
/SYS/MB/V_3.3VMainOK	State of the main 3.3V source
/SYS/MB/V_3.3VStby	Voltage of the standby 3.3V source
/SYS/MB/V_5V	Voltage of the main 5V source
/SYS/MB/V_5VOK	State of the main 5V source
/SYS/MB/V_12V	Voltage of the main 12V source
/SYS/MB/V_BAT	Voltage of the battery
/SYS/MB/V_ECB	State of the ECB
/SYS/MB/V_I41.2V	Voltage of the I4 switch chip

Oracle ILOM Target	Description
/SYS/MB/V_I41.2VOK	State of the I4 switch chip 1.2V source
/SYS/Platform_CLI	Comprehensive Linux shell
/SYS/POWER_ATTN	Aggregate sensor – Overall power state
/SYS/POWER_REDUN	Aggregate sensor – Power redundancy state
/SYS/PSUx	Power supply <i>x</i> information
/SYS/PSUx/PRSN	Presence of power supply <i>x</i>
/SYS/PSUx/ALERT	State of power supply <i>x</i>
/SYS/PSUx/AC_PRESENT	Presence of AC input power for power supply <i>x</i>
/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
/SP/clock	Clock management
/SP/config	Configuration back up and restore settings
/SP/diag/snapshot	State of switch 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

Oracle ILOM Target	Description
/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 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

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	<ul style="list-style-type: none">• type = Host System• ipmi_name = SYS• product_name = Sun Datacenter InfiniBand Switch 36• product_part_number = 5111232• product_serial_number = 0110SJC-09463P0264• product_manufacturer = Sun Microsystems
/SYS/CABLE_ATTN	<ul style="list-style-type: none">• type = OEM• ipmi_name = CABLE_ATTN• class = Discrete Sensor• value = State Deasserted• alarm_status = cleared
/SYS/CABLE_CONN_STAT	<ul style="list-style-type: none">• type = OEM• ipmi_name = CABLE_CONN_STAT• class = Discrete Sensor• value = State Deasserted• alarm_status = cleared
/SYS/CHASSIS_STATUS	<ul style="list-style-type: none">• type = OEM• ipmi_name = CHASSIS_STATUS• class = Discrete Sensor• value = State Deasserted• alarm_status = cleared
/SYS/COOLING_ATTN	<ul style="list-style-type: none">• type = OEM• ipmi_name = COOLING_ATTN• class = Discrete Sensor• value = State Deasserted• alarm_status = cleared
/SYS/COOLING_REDUN	<ul style="list-style-type: none">• type = OEM• ipmi_name = COOLING_REDUN• class = Discrete Sensor• value = State Deasserted• alarm_status = cleared

Target and Path	Properties
/SYS/IBDEV_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = IBDEV_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB	<ul style="list-style-type: none"> • type = Motherboard • ipmi_name = MB • product_name = Sun Datacenter InfiniBand Switch 36 • product_part_number = 5111232 • product_serial_number = 0110SJC-09463P0264 • 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	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/BOOT_I4A • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/POWER_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = POWER_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/POWER_REDUN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = POWER_REDUN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/TEMP_ATTN	<ul style="list-style-type: none"> • type = OEM • ipmi_name = TEMP_ATTN • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Related Information

- “Oracle ILOM Target Overview” on page 4
- “Oracle ILOM Targets and Descriptions” on page 5
- “Oracle ILOM Fan Targets and Properties” on page 11
- “Oracle ILOM Indicator Targets and Properties” on page 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

Oracle ILOM Fan Targets and Properties

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

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

Target and Path	Properties
/SYS/FANx	<ul style="list-style-type: none">• type = Rear Fan
/SYS/FANx/PRSNT	<ul style="list-style-type: none">• type = Entity Presence• ipmi_name = FAN1/PRSNT• class = Discrete Sensor• value = Present• alarm_status = cleared
/SYS/FANx/TACH	<ul style="list-style-type: none">• 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 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

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	<ul style="list-style-type: none"> • type = Indicator • ipmi_name = I_ATTENTION • value = Off
/SYS/I_LOCATOR	<ul style="list-style-type: none"> • type = Indicator • ipmi_name = I_LOCATOR • value = Off
/SYS/I_POWER	<ul style="list-style-type: none"> • 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 20

- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

Oracle ILOM Power Supply Targets and Properties

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

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

Target and Path	Properties
/SYS/PSUx	<ul style="list-style-type: none"> • 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/PSUx/PRSNT	<ul style="list-style-type: none"> • type = Entity Presence • ipmi_name = PSU0/PRSNT • class = Discrete Sensor • value = Present • alarm_status = cleared
/SYS/PSUx/ALERT	<ul style="list-style-type: none"> • type = OEM • ipmi_name = PSU0/ALERT • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/PSUx/AC_PRESENT	<ul style="list-style-type: none"> • 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 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

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

Related Information

- “Oracle ILOM Target Overview” on page 4
- “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 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

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_1.8V	<ul style="list-style-type: none">• type = Voltage• ipmi_name = MB/V_1.8V• class = Threshold Sensor• value = 1.785 Volts• upper_nonrecov_threshold = 1.979 Volts• upper_critical_threshold = 1.940 Volts• upper_noncritical_threshold = 1.891 Volts• lower_noncritical_threshold = 1.697 Volts• lower_critical_threshold = 1.639 Volts• lower_nonrecov_threshold = 1.591 Volts• alarm_status = cleared
/SYS/MB/V_2.5V	<ul style="list-style-type: none">• type = Voltage• ipmi_name = MB/V_2.5V• class = Threshold Sensor• value = 2.480 Volts• upper_nonrecov_threshold = 2.878 Volts• upper_critical_threshold = 2.679 Volts• upper_noncritical_threshold = 2.586 Volts• lower_noncritical_threshold = 2.387 Volts• lower_critical_threshold = 2.282 Volts• lower_nonrecov_threshold = 2.083 Volts• alarm_status = cleared
/SYS/MB/V_3.3VMain	<ul style="list-style-type: none">• type = Voltage• ipmi_name = MB/V_3.3VMMain• 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

Target and Path	Properties
/SYS/MB/V_3.3VStby	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_3.3VStby • class = Threshold Sensor • value = 3.420 Volts • upper_nonrecov_threshold = 3.540 Volts • upper_critical_threshold = 3.454 Volts • upper_noncritical_threshold = 3.403 Volts • lower_noncritical_threshold = 3.112 Volts • lower_critical_threshold = 3.061 Volts • lower_nonrecov_threshold = 2.958 Volts • alarm_status = warning
/SYS/MB/V_5V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_5V • class = Threshold Sensor • value = 5.018 Volts • upper_nonrecov_threshold = 5.902 Volts • upper_critical_threshold = 5.694 Volts • upper_noncritical_threshold = 5.486 Volts • lower_noncritical_threshold = 4.498 Volts • lower_critical_threshold = 4.290 Volts • lower_nonrecov_threshold = 4.108 Volts • alarm_status = cleared
/SYS/MB/V_12V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_12V • class = Threshold Sensor • value = 11.966 Volts • upper_nonrecov_threshold = 12.710 Volts • upper_critical_threshold = 12.524 Volts • upper_noncritical_threshold = 12.338 Volts • lower_noncritical_threshold = 11.346 Volts • lower_critical_threshold = 11.160 Volts • lower_nonrecov_threshold = 10.974 Volts • alarm_status = cleared

Target and Path	Properties
/SYS/MB/V_BAT	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_BAT • class = Threshold Sensor • value = 3.120 Volts • upper_critical_threshold = 3.494 Volts • lower_noncritical_threshold = 2.746 Volts • lower_critical_threshold = 2.621 Volts • alarm_status = cleared
/SYS/MB/V_I41.2V	<ul style="list-style-type: none"> • type = Voltage • ipmi_name = MB/V_I41.2V • class = Threshold Sensor • value = 1.217 Volts • upper_nonrecov_threshold = 1.498 Volts • upper_critical_threshold = 1.462 Volts • upper_noncritical_threshold = 1.392 Volts • lower_noncritical_threshold = 1.041 Volts • lower_critical_threshold = 0.994 Volts • lower_nonrecov_threshold = 0.901 Volts • alarm_status = cleared
/SYS/MB/V_1.8VOK	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_1.8VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_2.5VOK	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_2.5VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_3.3VMain	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_3.3VMainOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
OK	

Target and Path	Properties
/SYS/MB/V_5VOK	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_5VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_ECB	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_ECB • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared
/SYS/MB/V_I41.2VOK	<ul style="list-style-type: none"> • type = OEM • ipmi_name = MB/V_I41.2VOK • class = Discrete Sensor • value = State Deasserted • alarm_status = cleared

Related Information

- “Oracle ILOM Target Overview” on page 4
- “Oracle ILOM Targets and Descriptions” on page 5
- “Oracle ILOM General System Targets and Properties” on page 9
- “Oracle ILOM Fan Targets and Properties” on page 11
- “Oracle ILOM Indicator Targets and Properties” on page 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

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	<ul style="list-style-type: none">• system_contact = (none)• system_description = Sun Datacenter InfiniBand Switch 36, ILOM v1.3.2-3, r47111• system_identifier = (none)• system_location = (none)
/SP/alertmgmt/rules/1	<ul style="list-style-type: none">• community_or_username = public• destination = 123.45.67.89• destination_port = 0• email_custom_sender = (none)• email_message_prefix = (none)• event_class_filter = (none)• event_type_filter = (none)• level = minor• snmp_version = 2c• testrule = (Cannot show property)• type = snmptrap
/SP/cli	<ul style="list-style-type: none">• timeout = 0
/SP/clients/ntp/server/1	<ul style="list-style-type: none">• address = 0.0.0.0
/SP/clients/ntp/server/2	<ul style="list-style-type: none">• address = 0.0.0.0
/SP/clients/smtp	<ul style="list-style-type: none">• address = 0.0.0.0• custom_sender = (none)• port = 25• send_test_email_to = (Cannot show property)• state = disabled
/SP/clients/syslog/1	<ul style="list-style-type: none">• address = 0.0.0.0
/SP/clients/syslog/2	<ul style="list-style-type: none">• address = 0.0.0.0
/SP/clock	<ul style="list-style-type: none">• datetime = Thu Oct 15 02:54:28 2009• timezone = UTC• usentpserver = disabled
/SP/config	<ul style="list-style-type: none">• dump_uri = (Cannot show property)• load_uri = (Cannot show property)• passphrase = none

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

Related Information

- “Oracle ILOM Target Overview” on page 4
- “Oracle ILOM Targets and Descriptions” on page 5
- “Oracle ILOM General System Targets and Properties” on page 9
- “Oracle ILOM Fan Targets and Properties” on page 11
- “Oracle ILOM Indicator Targets and Properties” on page 12
- “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 22
- “Oracle ILOM User and Session Targets and Properties” on page 24

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	<ul style="list-style-type: none">• port = 80• secureredirect = enabled• servicestate = disabled
/SP/services/https	<ul style="list-style-type: none">• port = 443• servicestate = enabled
/SP/services/https/ssl	<ul style="list-style-type: none">• cert_status = Using Default (No custom certificate or private key loaded)
/SP/services/https/ssl/custom_cert	<ul style="list-style-type: none">• clear_action = (Cannot show property)• issuer = (none)• load_uri = (Cannot show property)• subject = (none)• valid_from = (none)• valid_until = (none)
/SP/services/https/ssl/custom_key	<ul style="list-style-type: none">• clear_action = (Cannot show property)• key_present = false• load_uri = (Cannot show property)
/SP/services/https/ssl/default_cert	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• servicestate = enabled
/SP/services/servicetag	<ul style="list-style-type: none">• passphrase = none• state = enabled
/SP/services/snmp	<ul style="list-style-type: none">• engineid = (none)• port = 161• servicestate = disabled• sets = disabled• v1 = disabled• v2c = disabled• v3 = enabled
/SP/services/snmp/communities/private	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none"> <li data-bbox="620 283 1260 317">• authenticationpassword = (Cannot show property) <li data-bbox="620 317 1260 352">• authenticationprotocol = MD5 <li data-bbox="620 352 1260 387">• permission = ro <li data-bbox="620 387 1260 421">• privacypassword = (Cannot show property) <li data-bbox="620 421 1260 456">• 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 12
- “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 20
- “Oracle ILOM User and Session Targets and Properties” on page 24

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	<ul style="list-style-type: none">• username = ilom-admin• role = aucro• starttime = Thu Oct 15 02:36:11 2009• type = shell• mode = normal
/SP/users/ilom-admin	<ul style="list-style-type: none">• role = aucro• password = *****
/SP/users/ilom-operator	<ul style="list-style-type: none">• role = o• password = *****

Related Information

- “Oracle ILOM Target Overview” on page 4
- “Oracle ILOM Targets and Descriptions” on page 5
- “Oracle ILOM General System Targets and Properties” on page 9
- “Oracle ILOM Fan Targets and Properties” on page 11
- “Oracle ILOM Indicator Targets and Properties” on page 12
- “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 20
- “Oracle ILOM Service Targets and Properties” on page 22

Installing the Oracle ILOM Firmware

Firmware version 1.1.3 enabled Oracle ILOM 3.0 support on the switch. If your firmware version is less than 1.1.3, you must first install the 1.1.3 firmware, and then upgrade to the latest firmware using the procedure described in [“Upgrading the Switch Firmware Through Oracle ILOM \(CLI\)” on page 104](#).

If the management controller firmware has not been upgraded to Oracle ILOM support, the following topics assist you with upgrading the management controller firmware to version 1.1.3:

- [“Firmware Delivery” on page 27](#)
- [“Acquire the Oracle ILOM Firmware Version 1.1.3” on page 28](#)
- [“Install the Oracle ILOM Firmware Version 1.1.3” on page 30](#)

Related Information

- [“Upgrading the Switch Firmware Through Oracle ILOM \(CLI\)” on page 104](#)
-

Firmware Delivery

The firmware upgrade is performed by a script running on the management controller. The script accesses a web server hosting a directory that contains the firmware upgrade. The firmware is provided as a compressed .tar file. The file name contains the version number and is in the format of:

`SUN_DCS_nm2_version.tar.gz`

where:

- *nm2* is either 36p or 72p, indicating whether the firmware is for the Sun Datacenter InfiniBand Switch 36 or Sun Datacenter InfiniBand Switch 72.
- *version* is the version of the firmware.

For example, SUN_DCS_36p_1.1.3.tar.gz.

Within the .tar file are the upgrade script and necessary .rpm packages in a smaller .tar file.

Related Information

- “Acquire the Oracle ILOM Firmware Version 1.1.3” on page 28
 - “Install the Oracle ILOM Firmware Version 1.1.3” on page 30
-

▼ Acquire the Oracle ILOM Firmware Version 1.1.3

Note – See the *Switch Product Notes* for the most up-to-date method of acquiring the firmware.

1. Open a web browser on a host that is on the same Ethernet network as the management controller to receive the firmware update.
2. Go to this URL:
[\(http://support.oracle.com\)](http://support.oracle.com)
Oracle's My Oracle Support page is displayed.
3. Sign in if you already have an account.
If you do not have an account, you must register.
The Dashboard page is displayed.
4. Click the Patches & Updates tab.
The Patches & Updates page is displayed.
5. In the Patch Search window, click Product or Family (Advanced Search).
The Patch Search window updates.
6. In the Product is drop-down menu, select Sun Datacenter InfiniBand Switch 36.
7. In the Release is drop-down menu, select Sun Datacenter InfiniBand Switch 36 1.1.3.
8. Click Close.

9. Click Search.

The Patch Search window expands with the search results.

10. In the Patch Name column, click the patch 10364281 link.

The Patch Search window reformats.

11. Click Download.

The File Download window opens.

12. Click the p10364281_113_Generic.zip link to initiate the download.

13. Indicate where the file should be saved.

The file is downloaded and saved.

14. In the File Download window, click Close.

15. In your receiving directory, decompress the .zip file.

The firmware is in the SUN_DCS_36p_1.1.3.tar.gz file.

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

16. In your download directory, unpack the .gz file:

```
# gunzip SUN_DCS_36p_1.1.3.tar.gz  
#
```

17. Untar the file:

```
# tar xvf SUN_DCS_36p_1.1.3.tar
```

The extracted files are displayed.

18. Read the README files for information about installing the firmware.

19. Securely copy the upgrade script to the /tmp directory of the management controller file system.

```
$ scp spfw_upgrade_1.1.3.sh root@nm2name:/tmp
```

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

Note – You might need to provide the root password. The default root password is changeme.

20. Install the Oracle ILOM firmware.

See “Install the Oracle ILOM Firmware Version 1.1.3” on page 30.

Related Information

- “Firmware Delivery” on page 27
 - “Install the Oracle ILOM Firmware Version 1.1.3” on page 30
-

▼ Install the Oracle ILOM Firmware Version 1.1.3

Note – This procedure brings the management controller offline until after the upgrade is completed.

1. (Optional) Back up any files on the management controller that you want to keep.



Caution – The firmware upgrade completely erases the management controller’s file system.

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. On the management controller, change to the `/tmp` directory and run the upgrade script:

```
# cd /tmp
# sh spfw_upgrade_1.1.3.sh http://URL_to_directory
#
```

where `URL_to_directory` is a URL that points to the directory on the web server that contains the unpacked `.rpm` files from the `SUN_DCS_36p_1.1.3.tar` file.

The upgrade begins.

4. If the upgrade script requests a restart, reboot the switch:

```
# reboot
```

5. After reboot, verify the firmware upgrade:

```
# version
SUN DCS 36p version: 1.1.3
Build time: Mar 25 2010 10:00:23
SP board info:
Manufacturing Date: 2009.02.19
Serial Number: "NCD2S0133"
Hardware Revision: 0x0100
Firmware Revision: 0x0102
BIOS version: NOW1R112
BIOS date: 04/24/2009
#
```

6. If previously disabled, enable the Subnet Manager.

```
# enablesm
Starting IB Subnet Manager. [ OK ]
Starting partitiond daemon. [ OK ]
#
```

7. After installing the firmware with Oracle ILOM support, you can now upgrade the firmware through the Oracle ILOM interface.

See “[Upgrading the Switch Firmware Through Oracle ILOM \(CLI\)](#)” on page 104 or “[Upgrading the Switch Firmware Through Oracle ILOM \(Web\)](#)” on page 158.

Related Information

- [“Firmware Delivery” on page 27](#)
- [“Acquire the Oracle ILOM Firmware Version 1.1.3” on page 28](#)

Administering Oracle ILOM (CLI)

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

- “[CLI Overview](#)” on page 33
- “[Accessing Oracle ILOM From the CLI](#)” on page 34
- “[Switching Between the Oracle ILOM Shell and the Linux Shell](#)” on page 37
- “[Monitoring Oracle ILOM Targets \(CLI\)](#)” on page 41
- “[Controlling Oracle ILOM Targets \(CLI\)](#)” on page 69
- “[Upgrading the Switch Firmware Through Oracle ILOM \(CLI\)](#)” on page 104

Related Information

- “[Administering Oracle ILOM \(Web\)](#)” on page 113
 - “[Using the Fabric Monitor](#)” on page 163
 - “[Administering Oracle ILOM \(SNMP\)](#)” on page 183
 - “[Administering Hardware \(IPMI\)](#)” on page 243
 - “[Understanding Oracle ILOM Commands](#)” on page 251
-

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 251.

Related Information

- [“Understanding Oracle ILOM Targets” on page 4](#)
-

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 34](#)
- [“Access the Oracle ILOM Shell From the CLI \(USB Management Port\)” on page 35](#)

Related Information

- [Switch Installation](#), accessing the management controller
- [“Access Oracle ILOM From the Web Interface” on page 116](#)
- [“Monitoring Oracle ILOM Targets \(CLI\)” on page 41](#)
- [“Controlling Oracle ILOM Targets \(CLI\)” on page 69](#)
- [“Switching Between the Oracle ILOM Shell and the Linux Shell” on page 37](#)

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

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

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

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

For example:

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

where *nm2name* is the host name of the management controller. The name might be the word `hostname`. 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 84 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 35

▼ 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. The name might be the word `hostname`.

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 84 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 34

Switching Between the Oracle ILOM Shell and the Linux Shell

If you have 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 have accessed the management controller as an Oracle ILOM user within the Oracle ILOM shell, you can switch to the Linux shell through the `/SYS/Switch_Diag` or `/SYS/Fabric_Mgmt` target.

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

- “[/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells](#)” on page 37
- “[Switch From the Oracle ILOM Shell to the Linux Shell](#)” on page 40
- “[Switch From the Linux Shell to the Oracle ILOM Shell](#)” on page 41

Related Information

- “[Accessing Oracle ILOM From the CLI](#)” on page 34

/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells

Using the `show` command on the Oracle ILOM `/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 Oracle ILOM `/SYS/Fabric_Mgmt` target opens a different restricted Linux shell that enables the `ilom-admin` user and users with similar permissions to run both diagnostic and fabric management commands.

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

The following table lists the commands and their availability from the respective targets.

Note – Linux shell commands that are not listed are unavailable from the /SYS/Switch_Diag or /SYS/Fabric_Mgmt targets. You can list the commands that are available by typing the help command at the shell prompt.

Command	/SYS/Switch_Diag	/SYS/Fabric_Mgmt
checkboot	Available	Available
checkguidfilesftree		Available
checkpower	Available	Available
checktopomax		Available
checkvoltages	Available	Available
connector	Available	Available
dcsport	Available	Available
disablecablelog		Available
disablelinklog		Available
disablesm		Available
disableswitchport		Available
enablecablelog		Available
enablelinklog		Available
enablesm		Available
enableswitchport		Available
env_test	Available	Available
exit	Available	Available
generatetopology		Available
getfanspeed	Available	Available
getmaster	Available	Available
getportstatus	Available	Available
help	Available	Available
ibdiagnet		Available
ibhosts	Available	Available
ibnetstatus	Available	Available
ibnodes	Available	Available
ibportstate	Available	Available

Command	/SYS/Switch_Diag	/SYS/Fabric_Mgmt
ibroute	Available	Available
ibrouters	Available	Available
ibstat	Available	Available
ibswitches	Available	Available
ibtracert	Available	Available
listlinkup	Available	Available
matchtopology		Available
perfquery	Available	Available
saquery		Available
setcontrolledhandover		Available
setsmpriority		Available
setsubnetprefix		Available
showfruinfo	Available	Available
showpsufru	Available	Available
showsmlog	Available	Available
showtemps	Available	Available
showtopology	Available	Available
showunhealthy	Available	Available
smconfigtest		Available
smpquery	Available	Available
version	Available	Available

Related Information

- “[show Command](#)” on page 261
- “[Switch From the Oracle ILOM Shell to the Linux Shell](#)” on page 40
- “[Switch From the Linux Shell to the Oracle ILOM Shell](#)” on page 41

▼ 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 34.

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

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

Related Information

- “[“show Command” on page 261](#)

- “exit Command (ILOM)” on page 256
- “/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells” on page 37
- “Switch From the Linux Shell to the Oracle ILOM Shell” on page 41

▼ Switch From the Linux Shell to the Oracle ILOM Shell

1. Access the management controller.

See the *Sun Datacenter InfiniBand Switch 36 User’s Guide*, part number 820-7746.

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 256
 - “/SYS/Switch_Diag and /SYS/Fabric_Mgmt Linux Shells” on page 37
 - “Switch From the Oracle ILOM Shell to the Linux Shell” on page 40
-

Monitoring Oracle ILOM Targets (CLI)

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

- “Performing Daily Tasks (CLI)” on page 42
- “Checking the Status of Services (CLI)” on page 54
- “Verifying Other Aspects With Oracle ILOM (CLI)” on page 60

Related Information

- “Accessing Oracle ILOM From the CLI” on page 34

- “Controlling Oracle ILOM Targets (CLI)” on page 69
- “Monitoring Oracle ILOM Targets (Web)” on page 117
- “Understanding Oracle ILOM Targets” on page 4

Performing Daily Tasks (CLI)

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

- “Display the Date (CLI)” on page 42
- “Display Switch Status LEDs States (CLI)” on page 43
- “Display the Aggregate Sensors State (CLI)” on page 44
- “Aggregate Sensor States” on page 45
- “Display Power Supply Status (CLI)” on page 46
- “Display Board-Level Voltages (CLI)” on page 47
- “Board Level Voltages” on page 48
- “Display Internal Temperatures (CLI)” on page 49
- “Internal Temperature Sensors” on page 50
- “Display Fan Status (CLI)” on page 50
- “Display the Oracle ILOM Sessions (CLI)” on page 52
- “Display the Oracle ILOM Event Log (CLI)” on page 53

Related Information

- “Performing Daily Tasks (Web)” on page 117
- “Checking the Status of Services (CLI)” on page 54
- “Verifying Other Aspects With Oracle ILOM (CLI)” on page 60

▼ Display the Date (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 Oct  9 03:12:02 2009
  timezone = UTC
  usntpserver = disabled
->
```

Related Information

- “[show Command](#)” on page 261
- “[Display the Date \(Web\)](#)” on page 118
- “[Display the Date and Time \(SNMP\)](#)” on page 188

▼ Display Switch Status LEDs States (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “[Display the Switch Status LEDs States \(Web\)](#)” on page 118
- “[Display Switch Status LED States \(IPMI\)](#)” on page 249
- “[Enable the Locator LED \(CLI\)](#)” on page 71
- “[Disable the Locator LED \(CLI\)](#)” on page 72

▼ **Display the Aggregate Sensors State (CLI)**

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 45](#).

For example, to display the overall switch 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 261](#)
- “[Display the Aggregate Sensors State \(Web\)](#)” on [page 118](#)
- “[Display the Aggregate Sensors State \(SNMP\)](#)” on [page 189](#)
- “[Display the Sensors’ State \(IPMI\)](#)” on [page 244](#)
- “[Aggregate Sensor States](#)” on [page 45](#)

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

Related Information

- “Display the Aggregate Sensors State (CLI)” on page 44
- “Display the Aggregate Sensors State (Web)” on page 118
- “Retrieving Entity Information” on page 203

▼ Display Power Supply Status (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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/PSU $x$ /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/PSU $x$ /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 261
- “[Display Power Supply Status \(Web\)](#)” on page 119
- “[Display Power Supply Status \(SNMP\)](#)” on page 190

▼ Display Board-Level Voltages (CLI)

There are sensor targets which 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 34.

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 48.

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 261
- “[Display Board-Level Voltages \(Web\)](#)” on page 120
- “[Display Board-Level Voltages \(SNMP\)](#)” on page 192
- “[Board Level Voltages](#)” on page 48

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 1.8V 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

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

Related Information

- “Display Board-Level Voltages (CLI)” on page 47
- “Display Board-Level Voltages (Web)” on page 120
- “Retrieving Entity Information” on page 203

▼ Display Internal Temperatures (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 50.

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 261
- “[Display Internal Temperatures \(Web\)](#)” on page 120
- “[Display Internal Temperatures \(SNMP\)](#)” on page 196
- “[Internal Temperature Sensors](#)” on page 50

Internal Temperature Sensors

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

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

Related Information

- “[Display Internal Temperatures \(CLI\)](#)” on page 49
- “[Display Internal Temperatures \(Web\)](#)” on page 120
- “[Retrieving Entity Information](#)” on page 203

▼ Display Fan Status (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “Display Fan Status (Web)” on page 121
- “Display Fan Status (SNMP)” on page 199

▼ Display the Oracle ILOM Sessions (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “[Display the Oracle ILOM Sessions \(Web\)](#)” on page 121
- “[Display Oracle ILOM Sessions \(SNMP\)](#)” on page 211

▼ 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. For example, 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 34.

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 261
- “[Display the Oracle ILOM Event Log \(Web\)](#)” on page 122
- “[Display the Oracle ILOM Event Log \(SNMP\)](#)” on page 212
- “[Display the System Event Log \(IPMI\)](#)” on page 247

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 54
- “Display the HTTPS Service Status (CLI)” on page 55
- “Display the SSL Certificates (CLI)” on page 55
- “Display the SNMP Service Status (CLI)” on page 56
- “Display the SNMP User Accounts (CLI)” on page 56
- “Display the SNMP Service Communities (CLI)” on page 57
- “Display the IPMI Service Status (CLI)” on page 58
- “Display the SMTP Client Status (CLI)” on page 58
- “Display the NTP Servers (CLI)” on page 59

Related Information

- “Checking the Status of Services (Web)” on page 122
- “Performing Daily Tasks (CLI)” on page 42
- “Verifying Other Aspects With Oracle ILOM (CLI)” on page 60

▼ Display the HTTP Service Status (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 261
- “Display the HTTP Service Status (Web)” on page 123
- “Display the HTTP Service Status (SNMP)” on page 214

▼ Display the HTTPS Service Status (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261](#)
- [“Display the HTTPS Service Status \(Web\)” on page 123](#)
- [“Display the HTTPS Service Status \(SNMP\)” on page 215](#)

▼ Display the SSL Certificates (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “[Display the SSL Certificates \(Web\)](#)” on page 124

▼ **Display the SNMP Service Status (CLI)**

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

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “[Display the SNMP Service Status \(Web\)](#)” on page 124

▼ **Display the SNMP User Accounts (CLI)**

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

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. **Display the SNMP users:**

```
-> show -d targets /SP/services/snmp/users
/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 261
- “[Display the SNMP Service User Accounts \(Web\)](#)” on page 124

▼ Display the SNMP Service Communities (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “[Display the SNMP Service Communities \(Web\)](#)” on page 125

▼ **Display the IPMI Service Status (CLI)**

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Display the IPMI status:

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

Related Information

- “[show Command](#)” on page 261
- “[Display the IPMI Service Status \(Web\)](#)” on page 125

▼ **Display the SMTP Client Status (CLI)**

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “[Display the SMTP Client Status \(Web\)](#)” on page 126
- “[Display the SMTP Client Status \(SNMP\)](#)” on page 215
- “[Configure the SMTP Client \(CLI\)](#)” on page 74

▼ **Display the NTP Servers (CLI)**

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261

- “Display the Network Time Protocol Servers (Web)” on page 126
- “Display the NTP State (SNMP)” on page 216
- “Display the NTP Servers (SNMP)” on page 216
- “Set the Date and Time (CLI)” on page 70

Verifying Other Aspects With Oracle ILOM (CLI)

These tasks display the status of aspects of Oracle ILOM not included in “Performing Daily Tasks (CLI)” on page 42 or “Checking the Status of Services (CLI)” on page 54.

- “Get Help on an Oracle ILOM Command (CLI)” on page 60
- “Get Help on an Oracle ILOM Target Property (CLI)” on page 61
- “Display the Alert Properties (CLI)” on page 62
- “Display the Oracle ILOM User Accounts (CLI)” on page 63
- “Display the Remote Log Hosts (CLI)” on page 63
- “Display the Network Management Configuration (CLI)” on page 64
- “Display the CLI Session Timeout (CLI)” on page 65
- “Display Switch FRU ID (CLI)” on page 65
- “Display Power Supply FRU ID (CLI)” on page 66
- “Display the Firmware Version (CLI)” on page 67
- “Display Identification Properties (CLI)” on page 68

Related Information

- “Verifying Other Aspects With Oracle ILOM (Web)” on page 127
- “Performing Daily Tasks (CLI)” on page 42
- “Checking the Status of Services (CLI)” on page 54

▼ Get Help on an Oracle ILOM Command (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 257
- “[Get Help on an Oracle ILOM Target Property \(CLI\)](#)” on page 61

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

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 257
- “[Get Help on an Oracle ILOM Command \(CLI\)](#)” on page 60

▼ **Display the Alert Properties (CLI)**

Alerts can provide advance notice of a system failure. The Oracle ILOM implementation in the management controller supports 15 alert rules, which configure alert properties. Supported alert types are SNMP trap, IPMI PET, 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 34.

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 261

- “Display the Alert Properties (Web)” on page 127
- “Display the Alert Properties (SNMP)” on page 217
- “Enable Alerts to Send SNMP Traps (CLI)” on page 99
- “Enable Alerts to Send PETs (CLI)” on page 100
- “Enable Alerts to Send Email Alerts (CLI)” on page 101
- “Disable Alerts (CLI)” on page 102

▼ Display the Oracle ILOM User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 261
- “Display the Oracle ILOM User Accounts (Web)” on page 128
- “Display Oracle ILOM User Accounts (SNMP)” on page 219

▼ Display the Remote Log Hosts (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 261
- “Display the Remote Log Hosts (Web)” on page 128
- “Display the Remote Log Hosts (SNMP)” on page 219
- “Set the Remote Log Hosts (CLI)” on page 73

▼ Display the Network Management Configuration (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 261
- “[Display the Network Management Configuration \(Web\)](#)” on page 129
- “[Display the Network Management Configuration \(SNMP\)](#)” on page 220

▼ Display the CLI Session Timeout (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Display the CLI session timeout:

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

Related Information

- “[show Command](#)” on page 261
- “[Display the CLI Session Timeout \(Web\)](#)” on page 129
- “[Set the Oracle ILOM CLI Session Timeout \(CLI\)](#)” on page 103

▼ Display Switch FRU ID (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Display the switch FRU information:

```
-> show -d properties /SYS/MB
/SYS/MB
Properties:
  type = Motherboard
  ipmi_name = MB
  product_name = Sun Datacenter InfiniBand Switch 36
  product_part_number = 5413495
  product_serial_number = 0110SJC-09183P0022
  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 - NCD2T0271
  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 261
- “Display System Component FRU ID (Web)” on page 129
- “Display Switch FRU ID (SNMP)” on page 221
- “Display FRU ID Information (IPMI)” on page 248

▼ 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 34.

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 = 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
->
```

Related Information

- “[show Command](#)” on page 261
- “[Display System Component FRU ID \(Web\)](#)” on page 129
- “[Display Power Supply FRU ID \(SNMP\)](#)” on page 222
- “[Display FRU ID Information \(IPMI\)](#)” on page 248

▼ Display the Firmware Version (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Display the firmware version:

```
-> version
```

For example:

```
-> 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

- “[version Command \(ILOM\)](#)” on page 263
- “[Display the Firmware Version \(Web\)](#)” on page 130
- “[Display the Firmware Version \(SNMP\)](#)” on page 227

▼ Display Identification Properties (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Display the identification properties:

```
-> show -d properties /SP
/SP/cli
Properties:
  system_contact = (none)
  system_description = Sun Datacenter InfiniBand Switch 36, ILOM v1.3.2-3,
r47111
  system_identifier = (none)
  system_location = (none)
->
```

Related Information

- “[Display Identification Properties \(Web\)](#)” on page 130
- “[Display System Identifier \(SNMP\)](#)” on page 228
- “[Set the Identification Properties \(CLI\)](#)” on page 82

Controlling Oracle ILOM Targets (CLI)

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

- “Performing General Tasks on Oracle ILOM Targets (CLI)” on page 69
- “Performing Oracle ILOM User Tasks (CLI)” on page 83
- “Managing HTTP Services (CLI)” on page 86
- “Managing HTTPS Services (CLI)” on page 88
- “Managing SNMP Services (CLI)” on page 91
- “Managing Other Aspects With Oracle ILOM (CLI)” on page 98

Related Information

- “Accessing Oracle ILOM From the CLI” on page 34
- “Controlling Oracle ILOM Targets (Web)” on page 131
- “Monitoring Oracle ILOM Targets (CLI)” on page 41
- “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.

- “Set the Date and Time (CLI)” on page 70
- “Enable the Locator LED (CLI)” on page 71
- “Disable the Locator LED (CLI)” on page 72
- “Clear the Oracle ILOM Event Log (CLI)” on page 72
- “Set the Remote Log Hosts (CLI)” on page 73
- “Configure the SMTP Client (CLI)” on page 74
- “Back Up the Configuration (CLI)” on page 75
- “Switch Configuration Information Backed Up” on page 76
- “Restore the Configuration (CLI)” on page 77
- “Create a Snapshot of the Switch State (CLI)” on page 78
- “Snapshot Dataset Information (CLI)” on page 79
- “Set the Network Management Parameters (CLI)” on page 80

- “Set the Identification Properties (CLI)” on page 82

Related Information

- “Performing General Tasks on Oracle ILOM Targets (Web)” on page 131
- “Performing Oracle ILOM User Tasks (CLI)” on page 83

▼ Set the Date and Time (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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
    usntpserver = 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 260
- “[Set the Date and Time \(Web\)](#)” on page 132
- “[Set the Date and Time \(SNMP\)](#)” on page 229

▼ Enable the Locator LED (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 260
- “Enable the Locator LED (Web)” on page 133
- “Enable the Locator LED (IPMI)” on page 250
- “Disable the Locator LED (CLI)” on page 72
- “Display Switch Status LEDs States (CLI)” on page 43

▼ Disable the Locator LED (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 260
- “Disable the Locator LED (Web)” on page 134
- “Disable the Locator LED (IPMI)” on page 250
- “Enable the Locator LED (CLI)” on page 71
- “Display Switch Status LEDs States (CLI)” on page 43

▼ Clear the Oracle ILOM Event Log (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 260
- “[Clear the Oracle ILOM Event Log \(Web\)](#)” on page 134
- “[Clear the Oracle ILOM Event Log \(SNMP\)](#)” on page 231
- “[Display the Oracle ILOM Event Log \(CLI\)](#)” on page 53
- “[Set the Remote Log Hosts \(CLI\)](#)” on page 73

▼ 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 34.

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 260
- “[Set the Remote Log Hosts \(Web\)](#)” on page 135
- “[Set the Remote Log Hosts \(SNMP\)](#)” on page 232
- “[Display the Remote Log Hosts \(CLI\)](#)” on page 63

▼ 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 34.

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 from email address. For example: *ilom-36pl@hostname*
- *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-36pl@magnus
state=enabled
Set 'address' to '123.45.67.89'
Set 'custom_sender' to 'ilom-36pl@magnus'
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 260
- “Configure the SMTP Client (Web)” on page 135
- “Configure the SMTP Client (SNMP)” on page 232
- “Display the SMTP Client Status (CLI)” on page 58

▼ Back Up the Configuration (CLI)

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

Note – See “[Switch Configuration Information Backed Up](#)” on page 76 for what switch configuration information is backed up.

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 260
- “[Switch Configuration Information Backed Up](#)” on page 76
- “[Back Up the Configuration \(Web\)](#)” on page 136
- “[Restore the Configuration \(CLI\)](#)” on page 77

Switch Configuration Information Backed Up

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

- Switch hardware configuration
- Subnet manager configuration
- Environment daemon configuration
- List of disabled ports
- SNMP InfiniBand configuration

Related Information

- “[Back Up the Configuration \(CLI\)](#)” on page 75
- “[Back Up the Configuration \(Web\)](#)” on page 136

▼ 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 34.

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 260
- “[Restore the Configuration \(Web\)](#)” on page 137
- “[Back Up the Configuration \(CLI\)](#)” on page 75

▼ Create a Snapshot of the Switch State (CLI)

The snapshot utility collects log files, executes various commands and collects their output, and sends the data collected to a user-defined location. The dataset property of the /SP/diag/snapshot target defines the data that is collected. See “[Snapshot Dataset Information \(CLI\)](#)” on page 79.

The snapshot describes the state of the switch at a particular moment in time. This can be used for fault diagnosis. The snapshot utility requires administrator privileges.

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Create a snapshot of the switch state:

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

where:

- *value* is the type of dataset, as described in the table in “[Snapshot Dataset Information \(CLI\)](#)” on page 79.
- *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 260
- “[show Command](#)” on page 261
- “[Snapshot Dataset Information \(CLI\)](#)” on page 79
- “[Create a Snapshot of the Switch State \(Web\)](#)” on page 138

Snapshot Dataset Information (CLI)

The `dataset` property of the `/SP/diag/snapshot` target determines what data is to be 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 switch hardware data.

Dataset Value	Description
normal-logonly	Contains only log entries that pertain to Oracle ILOM data, basic operating system data, and switch 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, switch 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, switch 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:

magnus_123.45.67.89_2011-01-07T14-43-15.zip

Related Information

- “Create a Snapshot of the Switch State (CLI)” on page 78

▼ 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 34.

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 to 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 34.

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

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

5. Display the new IP address:

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

Related Information

- “[set Command](#)” on page 260
- “[show Command](#)” on page 261
- “[Set the Network Management Parameters \(Web\)](#)” on page 139
- “[Set the Network Parameters \(SNMP\)](#)” on page 234

▼ Set the Identification Properties (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 36, ILOM v1.3.3-1,  
r47111  
    system_identifier = white house  
    system_location = washington  
->
```

Related Information

- “Set the Identification Properties (Web)” on page 140
- “Set the System Identifier (SNMP)” on page 235
- “Display Identification Properties (CLI)” on page 68

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 84
- “Change an Oracle ILOM User’s Password and or Role (CLI)” on page 84
- “Delete an Oracle ILOM User Account (CLI)” on page 85

Related Information

- “Performing Oracle ILOM User Tasks (Web)” on page 141
- “Performing General Tasks on Oracle ILOM Targets (CLI)” on page 69

▼ Add an Oracle ILOM User Account (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 253](#)
- [“Add an Oracle ILOM User Account \(Web\)” on page 141](#)
- [“Add an Oracle ILOM User Account \(SNMP\)” on page 236](#)
- [“Delete an Oracle ILOM User Account \(CLI\)” on page 85](#)

▼ 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 34.

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=knoockknock
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 260
- “[Change an Oracle ILOM User’s Password and or Role \(Web\)](#)” on page 142

▼ Delete an Oracle ILOM User Account (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 254
- “[Delete an Oracle ILOM User Account \(Web\)](#)” on page 142
- “[Delete an Oracle ILOM User Account \(SNMP\)](#)” on page 237
- “[Add an Oracle ILOM User Account \(CLI\)](#)” on page 84

Managing HTTP Services (CLI)

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

- “[Enable the HTTP Service \(CLI\)](#)” on page 86
- “[Disable the HTTP Service \(CLI\)](#)” on page 87

Related Information

- “[Managing HTTP Services \(Web\)](#)” on page 143
- “[Managing HTTPS Services \(CLI\)](#)” on page 88
- “[Managing SNMP Services \(CLI\)](#)” on page 91

▼ 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 34.

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 260
- “[Enable the HTTP Service \(Web\)](#)” on page 143
- “[Set the HTTP Service State \(SNMP\)](#)” on page 238
- “[Disable the HTTP Service \(CLI\)](#)” on page 87

▼ **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 34.

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 260
- “[Disable the HTTP Service \(Web\)](#)” on page 144
- “[Set the HTTP Service State \(SNMP\)](#)” on page 238
- “[Enable the HTTP Service \(CLI\)](#)” on page 86

Managing HTTPS Services (CLI)

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

- “[Enable the HTTPS Service \(CLI\)](#)” on page 88
- “[Install a Custom SSL Certificate \(CLI\)](#)” on page 89
- “[Remove the Custom SSL Certificate \(CLI\)](#)” on page 89
- “[Disable the HTTPS Service \(CLI\)](#)” on page 90

Related Information

- “[Managing HTTPS Services \(Web\)](#)” on page 145
- “[Managing HTTP Services \(CLI\)](#)” on page 86
- “[Managing SNMP Services \(CLI\)](#)” on page 91

▼ 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 34.

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 260
- “[Enable the HTTPS Service \(Web\)](#)” on page 145

- “Set the HTTPS Service State (SNMP)” on page 238
- “Disable the HTTPS Service (CLI)” on page 90

▼ Install a Custom SSL Certificate (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 258
- “Install a Custom SSL Certificate (Web)” on page 146
- “Remove the Custom SSL Certificate (CLI)” on page 89

▼ Remove the Custom SSL Certificate (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 259
- “[Remove the Custom SSL Certificate \(Web\)](#)” on page 146
- “[Install a Custom SSL Certificate \(CLI\)](#)” on page 89

▼ 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 34.

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 260
- “[Disable the HTTPS Service \(Web\)](#)” on page 147
- “[Set the HTTPS Service State \(SNMP\)](#)” on page 238

- “Enable the HTTPS Service (CLI)” on page 88

Managing SNMP Services (CLI)

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

- “Enable the SNMP Service (CLI)” on page 91
- “Configure the SNMP Service (CLI)” on page 92
- “Add SNMP Service User Accounts (CLI)” on page 93
- “Modify SNMP Service User Accounts (CLI)” on page 94
- “Delete SNMP Service User Accounts (CLI)” on page 95
- “Add SNMP Service Communities (CLI)” on page 95
- “Modify SNMP Service Communities (CLI)” on page 96
- “Delete SNMP Service Communities (CLI)” on page 96
- “Back Up SNMP Service MIBs (CLI)” on page 97
- “Disable the SNMP Service (CLI)” on page 98

Related Information

- “Managing SNMP Services (Web)” on page 147
- “Managing HTTP Services (CLI)” on page 86
- “Managing HTTPS Services (CLI)” on page 88

▼ 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 34.

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 260
- “[Enable the SNMP Service \(Web\)](#)” on page 148
- “[Disable the SNMP Service \(CLI\)](#)” on page 98

▼ Configure the SNMP Service (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Configure the SNMP parameters:

```
-> set /SP/services/snmp 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:

- **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 260
- “[Configure the SNMP Service \(Web\)](#)” on page 148

▼ Add SNMP Service User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 a 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 258](#)

- “[set Command](#)” on page 260
- “[Add SNMP Service User Accounts \(Web\)](#)” on page 149
- “[Delete SNMP Service User Accounts \(CLI\)](#)” on page 95

▼ [Modify SNMP Service User Accounts \(CLI\)](#)

1. [Access the Oracle ILOM CLI](#).

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. [Modify a 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 260
- “[Modify SNMP Service User Accounts \(Web\)](#)” on page 150

▼ Delete SNMP Service User Accounts (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

2. Delete a 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 254
- “[Delete SNMP Service User Accounts \(Web\)](#)” on page 151
- “[Add SNMP Service User Accounts \(CLI\)](#)” on page 93

▼ Add SNMP Service Communities (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

2. Add a 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 253
- “[Add SNMP Service Communities \(Web\)](#)” on page 151
- “[Delete SNMP Service Communities \(CLI\)](#)” on page 96

▼ **Modify SNMP Service Communities (CLI)**

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 260
- “[Modify SNMP Service Communities \(Web\)](#)” on page 152

▼ **Delete SNMP Service Communities (CLI)**

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

2. Delete a 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 254
- “[Delete SNMP Service Communities \(Web\)](#)” on page 153
- “[Add SNMP Service Communities \(CLI\)](#)” on page 95

▼ Back Up SNMP Service MIBs (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 255

- “Back Up SNMP Service MIBs (Web)” on page 153

▼ Disable the SNMP Service (CLI)

1. Access the Oracle ILOM CLI.

See “Accessing Oracle ILOM From the CLI” on page 34.

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 260
- “Disable the SNMP Service (Web)” on page 154
- “Enable the SNMP Service (CLI)” on page 91

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 99
- “Enable Alerts to Send PETs (CLI)” on page 100
- “Enable Alerts to Send Email Alerts (CLI)” on page 101
- “Disable Alerts (CLI)” on page 102
- “Set the Oracle ILOM CLI Session Timeout (CLI)” on page 103

Related Information

- “Managing Other Aspects With Oracle ILOM (Web)” on page 154
- “Managing Other Aspects With Oracle ILOM (SNMP)” on page 237
- “Performing General Tasks on Oracle ILOM Targets (CLI)” on page 69

▼ Enable Alerts to Send SNMP Traps (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 a SNMP v2c trap of when the aggregate sensor is in the state of Asserted:

```
Sep 12 13:12:38 nsn-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 36", 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 switch and the component raising the trap is /SYS/CHASSIS_STATUS or the aggregate sensor. The sensor is State Asserted.

Related Information

- “[set Command](#)” on page 260
- “[Enable Alerts to Send SNMP Traps \(Web\)](#)” on page 155
- “[Enable Alerts to Send SNMP Traps \(SNMP\)](#)” on page 239
- “[Enable Alerts to Send PETs \(CLI\)](#)” on page 100
- “[Enable Alerts to Send Email Alerts \(CLI\)](#)” on page 101
- “[Display the Alert Properties \(CLI\)](#)” on page 62
- “[Disable Alerts \(CLI\)](#)” on page 102

▼ Enable Alerts to Send PETs (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 nsn-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
8E 00 28 4B E0 00
Sep 12 13:12:38 nsn-blr-2 02 00 A0 EB C1 07 FF FF 20 20 02 20 01 00 00 01
Sep 12 13:12:38 nsn-blr-2 FF FF 00 00 00 00 00 19 2A 00 00 00 30 30 80 0F
Sep 12 13:12:38 nsn-blr-2 03 43 48 41 53 53 49 53 5F 53 54 41 54 55 53 00
Sep 12 13:12:38 nsn-blr-2 80 26 03 53 75 6E 54 4D 20 44 61 74 61 63 65 6E
Sep 12 13:12:38 nsn-blr-2 74 65 72 20 49 6E 66 69 6E 69 42 61 6E 64 20 53
Sep 12 13:12:38 nsn-blr-2 77 69 74 63 68 20 33 36 00 C1 00 00 00 00
```

Related Information

- “[set Command](#)” on page 260
- “[Enable Alerts to Send PETs \(Web\)](#)” on page 156
- “[Enable Alerts to Send PETs \(SNMP\)](#)” on page 239
- “[Enable Alerts to Send SNMP Traps \(CLI\)](#)” on page 99
- “[Enable Alerts to Send Email Alerts \(CLI\)](#)” on page 101
- “[Display the Alert Properties \(CLI\)](#)” on page 62
- “[Disable Alerts \(CLI\)](#)” on page 102

▼ Enable Alerts to Send Email Alerts (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 from email address. For example: *ilom-36pl-*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-36pl-magnum level=major  
Set 'destination' to 'user@headsup.com'  
Set 'type' to 'email'  
Set 'email_custom_sender' to 'ilom-36pl-magnum'  
Set 'level' to 'major'  
->
```

Note – The email received has the domain name of the SMTP server, not the management controller.

Related Information

- “[set Command](#)” on page 260
- “[Enable Alerts to Send Email Alerts \(Web\)](#)” on page 156
- “[Enable Alerts to Send Email Alerts \(SNMP\)](#)” on page 240
- “[Enable Alerts to Send SNMP Traps \(CLI\)](#)” on page 99
- “[Enable Alerts to Send PETs \(CLI\)](#)” on page 100
- “[Display the Alert Properties \(CLI\)](#)” on page 62
- “[Disable Alerts \(CLI\)](#)” on page 102

▼ Disable Alerts (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 260
- “[Disable Alerts \(Web\)](#)” on page 157
- “[Disable Alerts \(SNMP\)](#)” on page 242
- “[Display the Alert Properties \(CLI\)](#)” on page 62
- “[Enable Alerts to Send SNMP Traps \(CLI\)](#)” on page 99
- “[Enable Alerts to Send PETs \(CLI\)](#)” on page 100
- “[Enable Alerts to Send Email Alerts \(CLI\)](#)” on page 101

▼ Set the Oracle ILOM CLI Session Timeout (CLI)

1. Access the Oracle ILOM CLI.

See “[Accessing Oracle ILOM From the CLI](#)” on page 34.

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 260
 - “[Set the CLI Session Timeout \(Web\)](#)” on page 158
-

Upgrading the Switch Firmware Through Oracle ILOM (CLI)

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

Note – Your management controller must be at least firmware version 1.1.3 to utilize these features. If your firmware is less than version 1.1.3, you must install firmware 1.1.3. See “[Installing the Oracle ILOM Firmware](#)” on page 27.

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

- “[Firmware Overview](#)” on page 104
- “[Acquire the Switch Firmware Package \(CLI\)](#)” on page 105
- “[Upgrade the Switch Firmware \(CLI\)](#)” on page 107

Related Information

- “[Upgrading the Switch Firmware Through Oracle ILOM \(Web\)](#)” on page 158
- “[Installing the Oracle ILOM Firmware](#)” on page 27

Firmware Overview

The management controller has firmware that represents the following:

- Basic I/O system for initial startup of the controller.

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

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

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

Related Information

- “[Acquire the Switch Firmware Package \(CLI\)](#)” on page 105
- “[Upgrade the Switch Firmware \(CLI\)](#)” on page 107

▼ Acquire the Switch Firmware Package (CLI)

Note – See the *Sun Datacenter InfiniBand Switch 36 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 1.3.3_1 version of the firmware, $x=1$, $y=3$, $z=3$, and $w=1$. See the *Sun Datacenter InfiniBand Switch 36 Product Notes* for the most current version numbers.

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

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

4. Click the Patches & Updates tab.

The Patches & Updates page is displayed.

5. In the Patch Search window, click Product or Family (Advanced Search).

The Patch Search window updates.

6. In the Product is drop-down menu, select Sun Datacenter InfiniBand Switch 36.

**7. In the Release is drop-down menu, select Sun Datacenter InfiniBand Switch 36
x.y.z.**

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

8. Click Close.

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, 11891229. The Patch Search window reformats.

11. Click Download.

The File Download window opens.

12. Click the *filename.zip* link to initiate the download.

For example, p11891229_133_Generic.zip.

13. Indicate where the file should be saved.

The file is downloaded and saved.

14. In the File Download window, click Close.

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

The firmware is in the SUN_DCS_36p_x.y.z.tar.gz file.

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

16. Unpack the .gz file:

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

The extracted files are displayed.

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

18. Upgrade the switch firmware.

See “[Upgrade the Switch Firmware \(CLI\)](#)” on page 107 or “[Upgrade the Switch Firmware \(Web\)](#)” on page 159.

Related Information

- “Acquire the Oracle ILOM Firmware Version 1.1.3” on page 28

▼ Upgrade the Switch Firmware (CLI)

1. Open an SSH session as user `root` 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. The name might be the word `hostname`. 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 80 MB available in the `/` filesystem.

```
# df -h /
Filesystem           Size  Used Avail Use% Mounted on
/dev/hda2            471M  287M 161M  65% /
#
#
```

In this example, there are 161 MB available. If not enough space is available, you must delete or move files from the `/` filesystem.

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

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

In the Mem: row of the free column, there should be at least 120 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.

6. Launch the 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 ILOM shell.

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

7. Begin the upgrade process:

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

where:

URI is the uniform resource indicator for the host where the switch firmware package is located. The FTP and HTTP protocols are supported.

pkgname is the name of the firmware package in the transfer directory.

For example, using the FTP protocol:

```
-> load -source  
ftp://root:changeme@123.45.67.99//tmp/sundcs_36p_repository_1.3.3_1.pkg  
Downloading firmware image. This will take a few minutes.
```

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

NOTE: Firmware upgrade will upgrade the SUN DCS 36p firmware.

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

Are you sure you want to load the specified file (y/n) ?

8. Answer **y** to the prompt to commit to the upgrade.

The upgrade begins.

```
Setting up environment for firmware upgrade. This will take approximately 2  
minutes.
```

```
Starting SUN DCS 36p FW update
```

```
=====
```

```
Performing operation: I4 A
```

```
=====
```

```
I4 fw upgrade from 7.2.0(INI:1) to 7.2.300(INI:1):
```

```
Upgrade started...
```

```
Upgrade completed.
```

```
INFO: I4 fw upgrade from 7.2.0(INI:1) to 7.2.300(INI:1) succeeded
```

```
=====
```

```
Summary of Firmware update
```

```
=====
```

```
I4 status : FW UPDATE - SUCCESS
```

```
I4 update succeeded on : A
```

```
I4 already up-to-date on : none
```

```
I4 update failed on      : none  
=====  
Performing operation: SUN DCS 36p firmware update  
=====  
SUN DCS 36p fw upgrade from 1.1.3-2 to 1.3.3-1:  
Upgrade started...  
Upgrade completed.  
INFO: SUN DCS 36p fw upgrade from 1.1.3-2 to 1.3.3-1 succeeded  
  
Firmware update is complete.  
->
```

9. Exit the Oracle ILOM CLI shell:

```
-> exit  
exit  
#
```

10. Reboot the switch to enable the new firmware.

See *Switch Administration*, restarting the entire switch.

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

11. 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    ]  
#
```

12. Verify the firmware version:

```
# version
SUN DCS 36p version: 1.3.3-1
Build time: Jan 13 2011 16:41:58
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 36p version $x.y.z-w$, where $x.y.z-w$ is the version of the firmware upgraded (or downgraded). For example, 1.3.3-1.

Related Information

- “Install the Oracle ILOM Firmware Version 1.1.3” on page 30
- “Upgrade the Switch Firmware (Web)” on page 159

Administering Oracle ILOM (Web)

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

- “[Web Interface Overview](#)” on page 113
- “[Access Oracle ILOM From the Web Interface](#)” on page 116
- “[Monitoring Oracle ILOM Targets \(Web\)](#)” on page 117
- “[Controlling Oracle ILOM Targets \(Web\)](#)” on page 131
- “[Upgrading the Switch Firmware Through Oracle ILOM \(Web\)](#)” on page 158

Related Information

- “[Administering Oracle ILOM \(CLI\)](#)” on page 33
 - “[Using the Fabric Monitor](#)” on page 163
 - “[Administering Oracle ILOM \(SNMP\)](#)” on page 183
 - “[Administering Hardware \(IPMI\)](#)” on page 243
 - “[Understanding Oracle ILOM Commands](#)” on page 251
-

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 34 to enable Oracle ILOM shell - Linux shell toggling.

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

User: ilom-admin Role: auco SP Hostname: NM2-36-50

Oracle® Integrated Lights Out Manager

System Information System Monitoring Configuration User Management Maintenance Switch/Fabric Monit

Versions Session Time-Out Components Identification Information

Versions

View the version of ILOM firmware currently in use.

Version Information

Property	Value
SP Firmware Version	ILOM 3.0
SP Firmware Build Number	47111
SP Firmware Date	Sat May 1 16:39:51 IST 2010
SP Filesystem Version	0.1.22

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

Tab	Subtabs	Description
System Information	Versions	Displays versions of gateway firmware.
	Session Time-Out	Sets inactivity timeout for autologout.
	Components	Displays component status.
	Identification Information	Displays switch identification information.
System Monitoring	Sensor Readings	Displays sensor values.
	Indicators	Displays switch status LED state.
	Event Logs	Displays event log.

Tab	Subtabs	Description
Configuration	System Management Access	Subtabs for: <ul style="list-style-type: none">• 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.
User Management	SMTP Client	Configures SMTP client for email alerts. Has email test.
	User Accounts	Configures user accounts.
Maintenance	Active Sessions	Displays active sessions.
	Firmware Upgrade	Enables firmware upgrade.
	Back Up/Restore	Configures system back up and restore.
Switch/Fabric Monitoring Tools	Snapshot	Configures and takes a snapshot of the switch state.
	SUN DCS 36p Monitor	Enables the Fabric Monitor interactive GUI.

Related Information

- “Oracle ILOM Targets and Descriptions” on page 5

▼ Access Oracle ILOM From the Web Interface

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

The Oracle ILOM login page is displayed.

Note – If the login page is not displayed or a 404 error is displayed, verify that the web interface is enabled. See “[Enable the HTTP Service \(CLI\)](#)” on page 86 and “[Enable the HTTPS Service \(CLI\)](#)” on page 88 to enable the web interface from the CLI.

2. Type `ilom-admin` in to 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 142 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 34
- “[Web Interface Overview](#)” on page 113
- “[Monitoring Oracle ILOM Targets \(Web\)](#)” on page 117
- “[Controlling Oracle ILOM Targets \(Web\)](#)” on page 131

Monitoring Oracle ILOM Targets (Web)

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

- “[Performing Daily Tasks \(Web\)](#)” on page 117
- “[Checking the Status of Services \(Web\)](#)” on page 122
- “[Verifying Other Aspects With Oracle ILOM \(Web\)](#)” on page 127

Related Information

- “[Access Oracle ILOM From the Web Interface](#)” on page 116
- “[Monitoring Oracle ILOM Targets \(CLI\)](#)” on page 41

- “Controlling Oracle ILOM Targets (Web)” on page 131

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 118
- “Display the Switch Status LEDs States (Web)” on page 118
- “Display the Aggregate Sensors State (Web)” on page 118
- “Display Power Supply Status (Web)” on page 119
- “Display Board-Level Voltages (Web)” on page 120
- “Display Internal Temperatures (Web)” on page 120
- “Display Fan Status (Web)” on page 121
- “Display the Oracle ILOM Sessions (Web)” on page 121
- “Display the Oracle ILOM Event Log (Web)” on page 122

Related Information

- “Performing Daily Tasks (Web)” on page 117
- “Checking the Status of Services (Web)” on page 122
- “Verifying Other Aspects With Oracle ILOM (Web)” on page 127

▼ Display the Date (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 Switch Status LEDs States (CLI)” on page 43
- “Display the Date and Time (SNMP)” on page 188

▼ Display the Switch Status LEDs States (Web)

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 Switch Status LEDs States \(CLI\)](#)” on page 43
- “[Display Switch Status LED States \(IPMI\)](#)” on page 249
- “[Enable the Locator LED \(Web\)](#)” on page 133
- “[Disable the Locator LED \(Web\)](#)” on page 134

▼ Display the Aggregate Sensors State (Web)

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 45 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 45
- “[Display the Aggregate Sensors State \(CLI\)](#)” on page 44
- “[Display the Aggregate Sensors State \(SNMP\)](#)” on page 189
- “[Display the Sensor Alarm State \(SNMP\)](#)” on page 202
- “[Display the Sensors’ State \(IPMI\)](#)” on page 244

▼ Display Power Supply Status (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 46
- “Display Power Supply Status (SNMP)” on page 190

▼ Display Board-Level Voltages (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 48 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 48
- “Display Board-Level Voltages (CLI)” on page 47
- “Display Board-Level Voltages (SNMP)” on page 192

▼ Display Internal Temperatures (Web)

The following table lists internal temperature sensor locations and their respective sensor targets.

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

- 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 50 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 50
- “[Display Internal Temperatures \(CLI\)](#)” on page 49
- “[Display Internal Temperatures \(SNMP\)](#)” on page 196

▼ Display Fan Status (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

- 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 50
- “Display Fan Status (SNMP)” on page 199

▼ Display the Oracle ILOM Sessions (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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, their role, the session start time, and the session type and mode are displayed.

Related Information

- “Display the Oracle ILOM Sessions (CLI)” on page 52
- “Display Oracle ILOM Sessions (SNMP)” on page 211

▼ Display the Oracle ILOM Event Log (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 53
- “Display the Oracle ILOM Event Log (SNMP)” on page 212
- “Display the System Event Log (IPMI)” on page 247
- “Clear the Oracle ILOM Event Log (Web)” on page 134

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 123
- “Display the HTTPS Service Status (Web)” on page 123
- “Display the SSL Certificates (Web)” on page 124
- “Display the SNMP Service Status (Web)” on page 124
- “Display the SNMP Service User Accounts (Web)” on page 124
- “Display the SNMP Service Communities (Web)” on page 125
- “Display the IPMI Service Status (Web)” on page 125
- “Display the SMTP Client Status (Web)” on page 126
- “Display the Network Time Protocol Servers (Web)” on page 126

Related Information

- “Checking the Status of Services (CLI)” on page 54
- “Performing Daily Tasks (Web)” on page 117
- “Verifying Other Aspects With Oracle ILOM (Web)” on page 127

▼ Display the HTTP Service Status (Web)

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 54
- “Display the HTTP Service Status (SNMP)” on page 214

▼ Display the HTTPS Service Status (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 55
- “Display the HTTP Service Status (SNMP)” on page 214

▼ Display the SSL Certificates (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 55

▼ Display the SNMP Service Status (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 56](#)

▼ **Display the SNMP Service User Accounts (Web)**

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).

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 protocol, permissions, and privacy protocol are displayed.

Related Information

- [“Display the SNMP User Accounts \(CLI\)” on page 56](#)

▼ **Display the SNMP Service Communities (Web)**

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).

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 57

▼ Display the IPMI Service Status (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 58

▼ Display the SMTP Client Status (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 58
- “[Display the SMTP Client Status \(SNMP\)](#)” on page 215
- “[Configure the SMTP Client \(Web\)](#)” on page 135

▼ Display the Network Time Protocol Servers (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 59
- “Display the NTP State (SNMP)” on page 216
- “Display the NTP Servers (SNMP)” on page 216
- “Set the Date and Time (Web)” on page 132

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 117 or “Checking the Status of Services (Web)” on page 122.

- “Display the Alert Properties (Web)” on page 127
- “Display the Oracle ILOM User Accounts (Web)” on page 128
- “Display the Remote Log Hosts (Web)” on page 128
- “Display the Network Management Configuration (Web)” on page 129
- “Display the CLI Session Timeout (Web)” on page 129
- “Display System Component FRU ID (Web)” on page 129
- “Display the Firmware Version (Web)” on page 130
- “Display Identification Properties (Web)” on page 130

Related Information

- “Verifying Other Aspects With Oracle ILOM (CLI)” on page 60
- “Performing Daily Tasks (Web)” on page 117
- “Checking the Status of Services (Web)” on page 122

▼ 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 trap, IPMI PET, 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 116.

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 62
- “[Display the Alert Properties \(SNMP\)](#)” on page 217
- “[Enable Alerts to Send SNMP Traps \(Web\)](#)” on page 155
- “[Enable Alerts to Send PETs \(Web\)](#)” on page 156
- “[Enable Alerts to Send Email Alerts \(Web\)](#)” on page 156
- “[Disable Alerts \(Web\)](#)” on page 157

▼ **Display the Oracle ILOM User Accounts (Web)**

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 63
- “[Display Oracle ILOM User Accounts \(SNMP\)](#)” on page 219

▼ **Display the Remote Log Hosts (Web)**

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 63
- “[Display the Remote Log Hosts \(SNMP\)](#)” on page 219
- “[Set the Remote Log Hosts \(Web\)](#)” on page 135

▼ **Display the Network Management Configuration (Web)**

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 64
- “[Display the Network Management Configuration \(SNMP\)](#)” on page 220

▼ **Display the CLI Session Timeout (Web)**

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 65
- “[Set the CLI Session Timeout \(Web\)](#)” on page 158

▼ [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 116.

- 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 Switch FRU ID \(CLI\)](#)” on page 65
- “[Display Power Supply FRU ID \(CLI\)](#)” on page 66
- “[Display Switch FRU ID \(SNMP\)](#)” on page 221
- “[Display Power Supply FRU ID \(SNMP\)](#)” on page 222
- “[Display FRU ID Information \(IPMI\)](#)” on page 248

▼ [Display the Firmware Version \(Web\)](#)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

- 2. Click the System Information tab.**

3. Click the 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 67
- “Display the Firmware Version (SNMP)” on page 227

▼ Display Identification Properties (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 68
 - “Display System Identifier (SNMP)” on page 228
 - “Set the Identification Properties (Web)” on page 140
-

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 131
- “Performing Oracle ILOM User Tasks (Web)” on page 141
- “Managing HTTP Services (Web)” on page 143
- “Managing HTTPS Services (Web)” on page 145
- “Managing SNMP Services (Web)” on page 147
- “Managing Other Aspects With Oracle ILOM (Web)” on page 154

Related Information

- “Access Oracle ILOM From the Web Interface” on page 116
- “Controlling Oracle ILOM Targets (CLI)” on page 69
- “Monitoring Oracle ILOM Targets (Web)” on page 117
- “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.

- “Set the Date and Time (Web)” on page 132
- “Set the Time Zone (Web)” on page 133
- “Enable the Locator LED (Web)” on page 133
- “Disable the Locator LED (Web)” on page 134
- “Clear the Oracle ILOM Event Log (Web)” on page 134
- “Set the Remote Log Hosts (Web)” on page 135
- “Configure the SMTP Client (Web)” on page 135
- “Back Up the Configuration (Web)” on page 136
- “Restore the Configuration (Web)” on page 137
- “Create a Snapshot of the Switch State (Web)” on page 138
- “Snapshot Dataset Information (Web)” on page 139
- “Set the Network Management Parameters (Web)” on page 139
- “Set the Identification Properties (Web)” on page 140

Related Information

- “Performing General Tasks on Oracle ILOM Targets (CLI)” on page 69
- “Performing Oracle ILOM User Tasks (Web)” on page 141

▼ Set the Date and Time (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 70](#)
- [“Set the Date and Time \(SNMP\)” on page 229](#)

▼ Set the Time Zone (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).

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 70](#)
- [“Set the Time Zone \(SNMP\)” on page 230](#)

▼ Enable the Locator LED (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).

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 circle 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 71
- “[Enable the Locator LED \(IPMI\)](#)” on page 250
- “[Disable the Locator LED \(Web\)](#)” on page 134
- “[Display the Switch Status LEDs States \(Web\)](#)” on page 118

▼ Disable the Locator LED (Web)

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 circle 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 72
- “[Disable the Locator LED \(IPMI\)](#)” on page 250
- “[Enable the Locator LED \(Web\)](#)” on page 133
- “[Display the Switch Status LEDs States \(Web\)](#)” on page 118

▼ Clear the Oracle ILOM Event Log (Web)

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 72
- “[Clear the Oracle ILOM Event Log \(SNMP\)](#)” on page 231
- “[Display the Oracle ILOM Event Log \(Web\)](#)” on page 122
- “[Set the Remote Log Hosts \(Web\)](#)” on page 135

▼ 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 116.

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 73
- “Set the Remote Log Hosts (SNMP)” on page 232
- “Display the Remote Log Hosts (Web)” on page 128

▼ Configure the SMTP Client (Web)

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

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

- 2. Click the Configuration tab.**

- 3. Click the SMTP Client subtab.**

The SMTP Client Settings window opens.

- 4. Check the Enabled box 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 74
- “[Configure the SMTP Client \(SNMP\)](#)” on page 232
- “[Display the SMTP Client Status \(Web\)](#)” on page 126

▼ Back Up the Configuration (Web)

Note – See “[Switch Configuration Information Backed Up](#)” on page 76 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 116.

- 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, provide 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

- “Switch Configuration Information Backed Up” on page 76
- “Back Up the Configuration (CLI)” on page 75
- “Restore the Configuration (Web)” on page 137

▼ Restore the Configuration (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.
- 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, provide 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 77
- “[Back Up the Configuration \(Web\)](#)” on page 136

▼ Create a Snapshot of the Switch State (Web)

The snapshot utility collects log files, executes various commands and collects their output, and sends the data collected to a user-defined location as a .zip file. The data set selected determines what data is to be included in the snapshot. See “[Snapshot Dataset Information \(Web\)](#)” on page 139.

The snapshot describes the state of the switch 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 116.

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 139.

5. If you chose the Custom data set, check the data that you want to include in the snapshot.

Note – Selecting the Full data set or checking the Diagnostic Data checkbox might reset the host during the snapshot process.

6. If you want only log files, check the Enabled box to the right of Collect Only Log Files From Data Set.

7. Select the transfer protocol from the Transfer Method drop-down menu.

8. Provide 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 139
- “Create a Snapshot of the Switch State (CLI)” on page 78

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 switch hardware data.
FRUID	Contains normal dataset information, with additional FRUID data.
Full	Contains normal dataset information, with additional FRUID data and diagnostic data.
Custom	Contains the user’s choice of Oracle ILOM data, basic operating system data, switch hardware data, additional FRUID data, and diagnostic data.

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

hostname_IP_address_year-month-dayThour-minute-second.zip

For example:

magnus_123.45.67.89_2011-01-07T14-43-15.zip

Related Information

- “Create a Snapshot of the Switch State (Web)” on page 138

▼ Set the Network Management Parameters (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 116.

Related Information

- “[Set the Network Management Parameters \(CLI\)](#)” on page 80
- “[Set the Network Parameters \(SNMP\)](#)” on page 234

▼ Set the Identification Properties (Web)

Note – You cannot set the system description from the web interface. See “[Set the Identification Properties \(CLI\)](#)” on page 82.

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 82

- “Set the System Identifier (SNMP)” on page 235
- “Display Identification Properties (Web)” on page 130

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 141
- “Change an Oracle ILOM User’s Password and or Role (Web)” on page 142
- “Delete an Oracle ILOM User Account (Web)” on page 142

Related Information

- “Performing Oracle ILOM User Tasks (CLI)” on page 83
- “Performing General Tasks on Oracle ILOM Targets (Web)” on page 131

▼ Add an Oracle ILOM User Account (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 in the User Name field.

7. Select the abilities of the new user from the Roles drop-down menu.

If a check box 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 84
- “[Add an Oracle ILOM User Account \(SNMP\)](#)” on page 236
- “[Delete an Oracle ILOM User Account \(Web\)](#)” on page 142

▼ 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 116.

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 check box 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 84

▼ Delete an Oracle ILOM User Account (Web)

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 85
- “Delete an Oracle ILOM User Account (SNMP)” on page 237
- “Add an Oracle ILOM User Account (Web)” on page 141

Managing HTTP Services (Web)

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

- “Enable the HTTP Service (Web)” on page 143
- “Disable the HTTP Service (Web)” on page 144

Related Information

- “Managing HTTP Services (CLI)” on page 86
- “Managing HTTPS Services (Web)” on page 145
- “Managing SNMP Services (Web)” on page 147

▼ 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 116.

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 86
- “[Set the HTTP Service State \(SNMP\)](#)” on page 238
- “[Disable the HTTP Service \(Web\)](#)” on page 144

▼ 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 116.
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 87
- “[Set the HTTP Service State \(SNMP\)](#)” on page 238
- “[Enable the HTTP Service \(Web\)](#)” on page 143

Managing HTTPS Services (Web)

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

- “[Enable the HTTPS Service \(Web\)](#)” on page 145
- “[Install a Custom SSL Certificate \(Web\)](#)” on page 146
- “[Remove the Custom SSL Certificate \(Web\)](#)” on page 146
- “[Disable the HTTPS Service \(Web\)](#)” on page 147

Related Information

- “[Managing HTTPS Services \(CLI\)](#)” on page 88
- “[Managing HTTP Services \(Web\)](#)” on page 143
- “[Managing SNMP Services \(Web\)](#)” on page 147

▼ 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 116.

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 88
- “[Set the HTTPS Service State \(SNMP\)](#)” on page 238

- “Disable the HTTPS Service (Web)” on page 147

▼ Install a Custom SSL Certificate (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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, provide 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 89
- “Remove the Custom SSL Certificate (Web)” on page 146

▼ Remove the Custom SSL Certificate (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 89
- “[Install a Custom SSL Certificate \(Web\)](#)” on page 146

▼ 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 116.

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. Uncheck the Enabled box for the HTTPS web server.

6. Click Save.

Related Information

- “[Disable the HTTPS Service \(CLI\)](#)” on page 90
- “[Set the HTTPS Service State \(SNMP\)](#)” on page 238
- “[Enable the HTTPS Service \(Web\)](#)” on page 145

Managing SNMP Services (Web)

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

- “[Enable the SNMP Service \(Web\)](#)” on page 148
- “[Configure the SNMP Service \(Web\)](#)” on page 148
- “[Add SNMP Service User Accounts \(Web\)](#)” on page 149
- “[Modify SNMP Service User Accounts \(Web\)](#)” on page 150
- “[Delete SNMP Service User Accounts \(Web\)](#)” on page 151

- “Add SNMP Service Communities (Web)” on page 151
- “Modify SNMP Service Communities (Web)” on page 152
- “Delete SNMP Service Communities (Web)” on page 153
- “Back Up SNMP Service MIBs (Web)” on page 153
- “Disable the SNMP Service (Web)” on page 154

Related Information

- “Managing SNMP Services (CLI)” on page 91
- “Managing HTTP Services (Web)” on page 143
- “Managing HTTPS Services (Web)” on page 145

▼ 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 116.

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, check the Enabled box for State.**

6. **Click Save.**

The SNMP server is enabled.

Related Information

- “[Enable the SNMP Service \(CLI\)](#)” on page 91
- “[Disable the SNMP Service \(Web\)](#)” on page 154

▼ Configure the SNMP Service (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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. Check the Enabled box for Set Requests to enable set requests.
7. Check the boxes for the protocols you want to enable.
8. Click Save.

Related Information

- [“Configure the SNMP Service \(CLI\)” on page 92](#)

▼ Add SNMP Service User Accounts (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).
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 93
- “[Delete SNMP Service User Accounts \(Web\)](#)” on page 151

▼ Modify SNMP Service User Accounts (Web)

1. Access the Oracle ILOM web interface.
See “[Access Oracle ILOM From the Web Interface](#)” on page 116.
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 94](#)

▼ Delete SNMP Service User Accounts (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).

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 95](#)
- [“Add SNMP Service User Accounts \(Web\)” on page 149](#)

▼ Add SNMP Service Communities (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).

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 95](#)
- [“Delete SNMP Service Communities \(Web\)” on page 153](#)

▼ Modify SNMP Service Communities (Web)

1. Access the Oracle ILOM web interface.

See [“Access Oracle ILOM From the Web Interface” on page 116](#).

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 created and the window closes.

Related Information

- [“Modify SNMP Service Communities \(CLI\)” on page 96](#)

▼ Delete SNMP Service Communities (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 96](#)
- [“Add SNMP Service Communities \(Web\)” on page 151](#)

▼ 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 116.

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 upon 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 97

▼ Disable the SNMP Service (Web)

1. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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, uncheck the Enabled box for State.

6. Click Save.

The SNMP server is disabled.

Related Information

- “[Disable the SNMP Service \(CLI\)](#)” on page 98
- “[Enable the SNMP Service \(Web\)](#)” on page 148

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 155
- “[Enable Alerts to Send PETs \(Web\)](#)” on page 156
- “[Enable Alerts to Send Email Alerts \(Web\)](#)” on page 156
- “[Disable Alerts \(Web\)](#)” on page 157

- “Set the CLI Session Timeout (Web)” on page 158

Related Information

- “Managing Other Aspects With Oracle ILOM (CLI)” on page 98
- “Managing Other Aspects With Oracle ILOM (SNMP)” on page 237
- “Performing General Tasks on Oracle ILOM Targets (Web)” on page 131

▼ Enable Alerts to Send SNMP Traps (Web)

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

See “Access Oracle ILOM From the Web Interface” on page 116.

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 99
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 239
- “Enable Alerts to Send PETs (Web)” on page 156
- “Enable Alerts to Send Email Alerts (Web)” on page 156
- “Display the Alert Properties (Web)” on page 127
- “Disable Alerts (Web)” on page 157

▼ Enable Alerts to Send PETs (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 100
- “Enable Alerts to Send PETs (SNMP)” on page 239
- “Enable Alerts to Send SNMP Traps (Web)” on page 155
- “Enable Alerts to Send Email Alerts (Web)” on page 156
- “Display the Alert Properties (Web)” on page 127
- “Disable Alerts (Web)” on page 157

▼ Enable Alerts to Send Email Alerts (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 101
- “Enable Alerts to Send Email Alerts (SNMP)” on page 240
- “Enable Alerts to Send SNMP Traps (Web)” on page 155
- “Enable Alerts to Send PETs (Web)” on page 156
- “Display the Alert Properties (Web)” on page 127
- “Disable Alerts (Web)” on page 157

▼ Disable Alerts (Web)

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 102
- “Disable Alerts (SNMP)” on page 242

- “Enable Alerts to Send SNMP Traps (Web)” on page 155
- “Enable Alerts to Send PETs (Web)” on page 156
- “Enable Alerts to Send Email Alerts (Web)” on page 156
- “Display the Alert Properties (Web)” on page 127

▼ Set the CLI Session Timeout (Web)

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

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 103
- “[Display the CLI Session Timeout \(Web\)](#)” on page 129

Upgrading the Switch Firmware Through Oracle ILOM (Web)

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.

Note – Your management controller must be at least firmware version 1.1.3 to utilize these features. If your firmware is less than version 1.1.3, you must install firmware 1.1.3. See “[Installing the Oracle ILOM Firmware](#)” on page 27.

These topics enable you to upgrade the switch firmware through the Oracle ILOM web interface.

- “Upgrade the Switch Firmware (Web)” on page 159

Related Information

- “Upgrading the Switch Firmware Through Oracle ILOM (CLI)” on page 104

▼ Upgrade the Switch Firmware (Web)

Note – If the switch firmware package is located on the host administering the management controller, then you will perform a local file upload and have additional considerations.

1. Acquire the firmware package.

See “[Acquire the Switch Firmware Package \(CLI\)](#)” on page 105.

2. Open a 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. The name might be the word `hostname`. 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 80 MB available in the / filesystem.

```
# df -m /
Filesystem      1M-blocks   Used Available Use% Mounted on
/dev/hda2          471       287       161    65%   /
#
```

In this example, there are 161 MB available. If not enough space is available, you must delete or move files from the / filesystem.

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

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

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

6. If you will perform a local file upload, perform these steps.

Otherwise, go to [Step 7](#).

a. Verify that there is at least 120 MB available in the /dev/shm directory.

```
# df -h /dev/shm
Filesystem      Size  Used Avail Use% Mounted on
tmpfs           250M  16K  250M  1%   /dev/shm
#
#
```

In this example, there are 250 MB available. If not enough space is available, you must delete or move files from the /dev/shm directory.

b. Verify 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 240 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.

c. Go to Step 8.

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 120 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.

8. Access the Oracle ILOM web interface.

See “[Access Oracle ILOM From the Web Interface](#)” on page 116.

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 either a local file path and file name, or a URL and file name of the switch firmware package.

13. Consider your next step:

- If you are performing a local file upload, click Browse and locate the file.
- If the switch firmware package is located remotely, click Specify URL and type the fully qualified URL for the package.

Note – Clicking Specify URL also changes the button to Local File Upload. Clicking Local File Upload changes the button back to Specify URL.

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

14. Click Upload.

Oracle ILOM transfers the switch firmware package to the management controller. Oracle ILOM verifies the package integrity and displays the current versions of the firmware and versions in the package.

15. Click Start Upgrade.

A dialog box opens and asks you to confirm.

16. 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.

17. Click OK.

A final status is displayed, the upgrade either:

- Succeeded
- Partially succeeded
- Failed

18. Click Home.

The Versions window opens.

19. Reboot the switch to enable the new firmware.

See *Switch Administration*, restarting the entire switch.

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

20. If previously disabled, open a 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
```

Related Information

- “[Upgrade the Switch Firmware \(CLI\)](#)” on page 107

Using the Fabric Monitor

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

The following topics describe how to use the fabric monitor.

- “Access the Fabric Monitor” on page 163
- “Fabric Monitor Features” on page 164
- “Accessing the Rear Panel Diagram” on page 166
- “Accessing Status Pane Information” on page 169
- “Control Panel Function” on page 175
- “Monitoring Parameters and Status” on page 176

Related Information

- “Administering Oracle ILOM (CLI)” on page 33
 - “Administering Oracle ILOM (Web)” on page 113
 - “Administering Oracle ILOM (SNMP)” on page 183
 - “Administering Hardware (IPMI)” on page 243
 - “Understanding Oracle ILOM Commands” on page 251
-

▼ Access the Fabric Monitor

1. Access the Oracle ILOM web interface.

See “Access Oracle ILOM From the Web Interface” on page 116.

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 86 and “Enable the HTTPS Service (CLI)” on page 88.

2. Click the Switch/Fabric Monitoring Tools tab.

The SUN DCS Monitor page is displayed.

3. Click Launch SUN DCS Monitor.

The Fabric Monitor GUI is displayed.

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

Related Information

- “Fabric Monitor Features” on page 164
 - “Accessing the Rear Panel Diagram” on page 166
 - “Accessing Status Pane Information” on page 169
 - “Control Panel Function” on page 175
 - “Monitoring Parameters and Status” on page 176
-

Fabric Monitor Features

The following figure displays the basic aspects of the FM interface.

FIGURE: Fabric Monitor

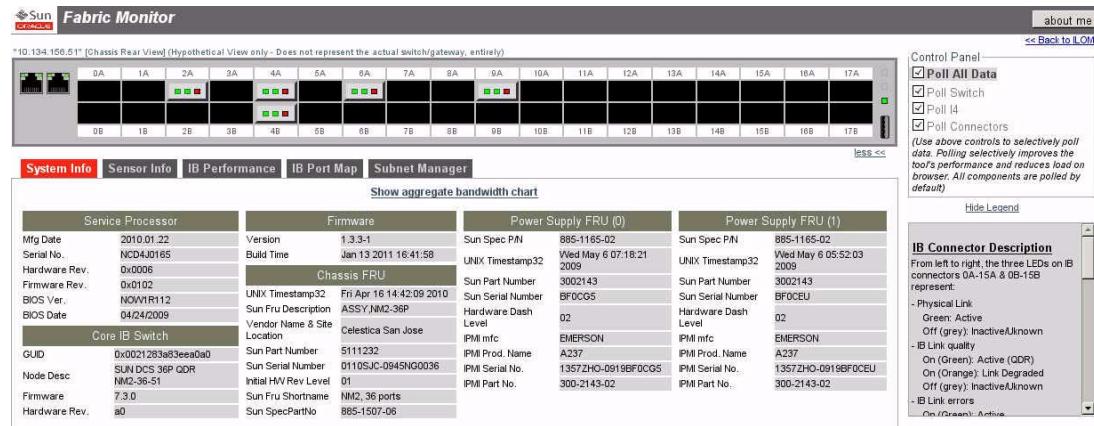


Figure Legend

- 1 Rear panel diagram
- 2 Control panel
- 3 Status pane
- 4 Legend

Note – Both the control panel and legend are hidden by default. Clicking the [more>>](#) link makes them visible.

The FM also has status windows for:

- **Connector indicators** – Moving the mouse cursor over an indicator that is orange or red opens a small window that provides the reason for the respective state.
- **InfiniBand connector status** – Clicking on a gray InfiniBand connector opens a window that displays connector FRU, port state, error, and statistical information for that connection.

These status windows are explained in depth in “Accessing the Rear Panel Diagram” on page 166.

Related Information

- [“Access the Fabric Monitor” on page 163](#)
- [“Accessing the Rear Panel Diagram” on page 166](#)
- [“Accessing Status Pane Information” on page 169](#)
- [“Control Panel Function” on page 175](#)

- “Monitoring Parameters and Status” on page 176
-

Accessing the Rear Panel Diagram

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

- “Rear Panel Diagram Overview” on page 166
- “InfiniBand Connector Status Window” on page 167

Related Information

- “Access the Fabric Monitor” on page 163
- “Fabric Monitor Features” on page 164
- “Accessing Status Pane Information” on page 169
- “Control Panel Function” on page 175
- “Monitoring Parameters and Status” on page 176

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 mock-up of the switch rear panel. The diagram displays the management controller’s IP address, and the connector receptacles and their respective connector names. When a cable is attached to a receptacle, a connection is made. That connection is displayed in the diagram as a gray rectangle, with three 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 167

InfiniBand Connector Status Window

In the rear panel diagram, there are 36 InfiniBand receptacles displayed, labeled 0A to 17A and 0B to 17B. When a connector is physically present in an InfiniBand receptacle, the receptacle changes from a black rectangle to a gray rectangle with three indicators.

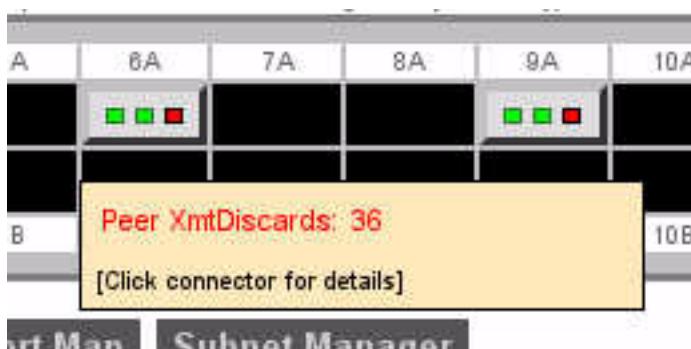
The following table describes the three indicators of the InfiniBand connection rectangle.

Object	Left Indicator	Center Indicator	Right Indicator
Description	Physical link	InfiniBand link quality	InfiniBand link errors
Color	<ul style="list-style-type: none">• Gray – No link• Green – Link established	<ul style="list-style-type: none">• Gray – No activity• Green – QDR• Orange – DDR, SDR	<ul style="list-style-type: none">• Gray – No activity• Green – No errors• Red – Errors

Moving the mouse cursor over an indicator that is orange or red opens a small window that states the reason for the respective state:

- A 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 6A.



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.

Connector: 6A Port: 35	
Cable FRU	
Property	Value
Identifier	QSFP
Connector Type	Copper pigtail
Vendor	LEONI
Vendor OUI	000000
Part Number	S30-4415-01
Revision	3
Serial Number	L45593-D102-C30
Date	
Switch Port (me)	
Property	Value
Device Name	SUN DCS 3SP QDR NM2-36-51
Device type	Switch
GUID	0x0021283a83eea0a0
LID	0x1
Port	35
Link Status	Active
Link Quality	QDR
Peer Port (my peer)	
Property	Value
Device Name	SUN IB QDR GvVswitch NM2-GW-81
Device type	Switch
GUID	0x002128b81684c0a0
LID	47
Port	35
Link Status	Active
Link Quality	QDR
Counter Name	
Counter Name	Value
SymbolErrors	0
LinkRecoveries	0
LinkDowned	0
RcvErrors	0
RcvRemotePhysErrors	0
RcvSwRelayErrors	0
XmtDiscards	0
XmtConstraintErrors	0
RcvConstraintErrors	0
LinkIntegrityErrors	0
LinkOverrunErrors	0
VLANDropped	0
XmtData	1887533927
RcvData	1875468424
XmtPkts	26749436
RcvPkts	26381788
XmtData	3116942132
RcvData	3135692333
XmtPkts	43857690
RcvPkts	44451896

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
- 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 on Close dismisses the InfiniBand connector status window.

Related Information

- “Rear Panel Diagram Overview” on page 166

Accessing Status Pane Information

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

- “System Info Tab” on page 169
- “Sensor Info Tab” on page 171
- “IB Performance Tab” on page 172
- “IB Port Map Tab” on page 173
- “Subnet Manager Tab” on page 174

Related Information

- “Access the Fabric Monitor” on page 163
- “Fabric Monitor Features” on page 164
- “Accessing the Rear Panel Diagram” on page 166
- “Control Panel Function” on page 175
- “Monitoring Parameters and Status” on page 176

System Info Tab

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

Service Processor		Firmware	Power Supply FRU (0)	Power Supply FRU (1)
Mfg Date	2010.01.22	Version 1.3.3-1	Sun Spec P/N 885-1165-02	Sun Spec P/N 885-1165-02
Serial No.	NCD4J0165	Build Time Jan 13 2011 16:41:58	UNIX Timestamp32 2009	UNIX Timestamp32 2009
Hardware Rev.	0x0006	Chassis FRU		Sun Part Number 3002143
Firmware Rev.	0x0102	UNIX Timestamp32 Fri Apr 16 14:42:09 2010	Sun Serial Number BF0CG5	Sun Serial Number BF0CEU
BIOS Ver.	NDW/R112	Sun Fru Description ASYS/NM2-36P	Hardware Dash Level 02	Hardware Dash Level 02
BIOS Date	04/24/2009	Vendor Name & Site Celestica San Jose	IPMI mfc EMERSON	IPMI mfc EMERSON
Core IB Switch		Location	IPMI Prod. Name A237	IPMI Prod. Name A237
GUID	0x0021283e83eeaa0	Sun Part Number 5111232	IPMI Serial No. 1357ZHO-0919BF0CG5	IPMI Serial No. 1357ZHO-0919BF0CEU
Node Desc	SUN DCS 36P QDR NMC-36-51	Sun Serial Number 01105JC-0945NG0036	IPMI Part No. 300-2143-02	IPMI Part No. 300-2143-02
Firmware	7.3.0	Initial HV Rev Level 01		
Hardware Rev.	a0	Sun Fru Shortname NM2_36 ports		
		Sun SpecPartNo 885-1507-06		

The System Info tab displays status information regarding the switch 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
- **Voltage Sensor Data** – Measured voltages on the main board
- **Power Sensor Data** – Status of the power supplies
- **Temperature Sensor Data** – Main board and I4 switch chip temperatures
- **Fan Sensor Data** – Fan presence and speed
- **Chassis FRU Info** – Codes, versions, dates, and part numbers for the switch chassis

If the Poll I4 checkbox in the control panel is selected (default), then you can click Show Aggregate Bandwidth 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 171
- “IB Performance Tab” on page 172
- “IB Port Map Tab” on page 173
- “Subnet Manager Tab” on page 174

Sensor Info Tab

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

The screenshot shows the Sensor Info tab of a management interface. At the top, there are tabs for System Info, Sensor Info (which is selected and highlighted in red), IB Performance, IB Port Map, and Subnet Manager. Below the tabs is a horizontal header bar with icons for power, network, and storage. The main area contains five tables under the following sections:

- Power Sensors:** Shows PSU 0 and PSU 1 with their present status and AC present status. PSU 0 is present and AC present, while PSU 1 is present and AC absent, indicated by a red 'OK' status.
- Voltage Sensors:** Lists various voltages: ECB (3.3V Main, 3.3V Stby), 12V, 5V, VBAT, 2.5V, 1.8V, and 4.12V, all showing values and OK status.
- Temperature Sensors:** Lists Back, Front, SP, and Switch temperatures (29, 28, 40, 36 degrees Celsius) with OK status.
- IB Device Sensors:** Shows a single entry for the Switch with an OK status.
- Fan Sensors:** Lists FAN 0 through FAN 4 with their presence, RPM, and status. FAN 0 is absent and has a dash for RPM, while others are present with OK status.

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

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

Related Information

- “System Info Tab” on page 169
- “IB Performance Tab” on page 172
- “IB Port Map Tab” on page 173
- “Subnet Manager Tab” on page 174

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 169
- “[Sensor Info Tab](#)” on page 171

- “IB Port Map Tab” on page 173
- “Subnet Manager Tab” on page 174

IB Port Map Tab

The following figure provides an example of the IB Port Map tab.



The screenshot shows a software interface with a navigation bar at the top containing tabs: System Info, Sensor Info, IB Performance, IB Port Map (which is highlighted in red), and Subnet Manager. Below the navigation bar is a table titled "Peer Device". The table has two main sections: "Switch Port" and "Peer Device". The "Switch Port" section contains columns for Connector (values 0A through 3A) and I4 Port (values 20 through 26). The "Peer Device" section contains columns for Type (all listed as Switch), Name (all listed as SUN IB QDR GW switch nsn34-97), GUID (all listed as 0x00212856cd22c0a0), LID (values 6, 20, 21, 22, 19, 23, 24, 25), and Port (values 20, 21, 22, 19, 23, 24, 25, 26). The entire table is set against a light green background.

Switch Port		Peer Device				
Connector	I4 Port	Type	Name	GUID	LID	Port
0A	20	Switch	SUN IB QDR GW switch nsn34-97	0x00212856cd22c0a0	6	20
0B	19	Switch	SUN IB QDR GW switch nsn34-97	0x00212856cd22c0a0	6	21
1A	22	Switch	SUN IB QDR GW switch nsn34-97	0x00212856cd22c0a0	6	22
1B	21	Switch	SUN IB QDR GW switch nsn34-97	0x00212856cd22c0a0	6	19
2A	24	Switch	SUN IB QDR GW switch nsn34-97	0x00212856cd22c0a0	6	23
2B	23	Switch	SUN IB QDR GW switch nsn34-97	0x00212856cd22c0a0	6	24
3A	26	-	-	-	-	-

The IB Port Map tab displays information about peer devices attached to the switch. 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** – Global unique identifier (GUID) of the peer device
- **LID** – Local identifier (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 169
- “Sensor Info Tab” on page 171

- “IB Performance Tab” on page 172
- “Subnet Manager Tab” on page 174

Subnet Manager Tab

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

The screenshot shows a tabbed interface with the "Subnet Manager" tab selected. Below the tabs is a horizontal bar with several status indicators. The main area contains two tables:

Active SM Info		Embedded OpenSM Settings	
SM Lid	16	Enabled	true
SM GUID	0x212856c6e2c0a0	Status	running
SM Activity Count	10196	State	MASTER
SM Priority	0	Routing Engine	tree
SM State	SMINFO_MASTER	Priority	0
SM Node Description	SUN IB GDR GW switch ran34_08	Controlled Handover	false
SM Detected Time	Mon Aug 23 12:10:29 PDT 2010	Polling Timeout	1000
		Polling Retry	5
		Log Max Size	4
		Subnet Prefix	0xfe80000000000000

The Subnet Manager tab displays information about the Subnet Manager within the switch. Information displayed is categorized into 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

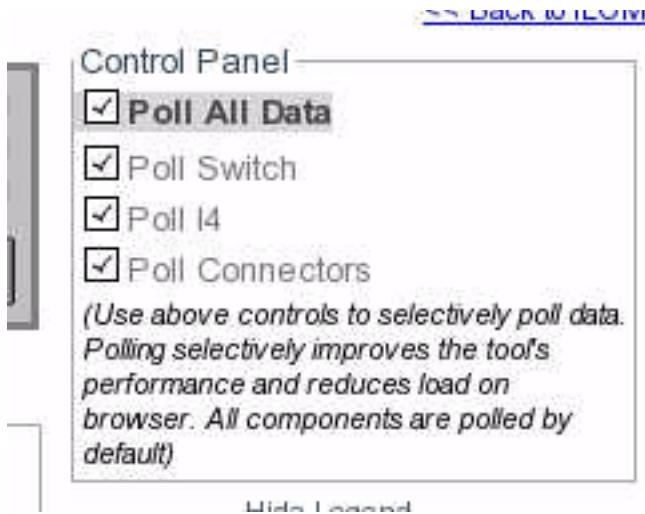
The active Subnet Manager might not be the embedded Subnet Manager within the management controller.

Related Information

- “System Info Tab” on page 169
- “Sensor Info Tab” on page 171
- “IB Performance Tab” on page 172
- “IB Port Map Tab” on page 173

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 four checkboxes that enable you to select what aspect of the switch is to be monitored. You can select to monitor:

Note – All checkboxes are enabled by default. By unchecking the boxes that are not necessary for your monitoring needs, you reduce the load on the interface and optimize the operation of the FM.

- **Poll All Data** – Selecting this checkbox enables all polling. Consequently, all checkboxes are selected. When all checkboxes are selected, the added resource demand on the management controller slows its ability to display the information.
- **Poll Switch** – Selecting this checkbox enables you to monitor the status of the switch hardware and the Subnet Manager. By checking this box, the System Info, Sensor Info, and Subnet Manager tabs of the status pane become active and are populated with information.
- **Poll I4** – Selecting this checkbox enables you to monitor the status of the I4 switch chip and the links its ports negotiate. By checking this box, the IB Performance and IB Port Map tabs of the status pane become active and are populated with information. Additionally, the Show Aggregate Bandwidth Chart link under the System Info tab becomes active.
- **Poll Connectors** – Selecting this checkbox enables you to monitor the status of the connectors on the switch rear panel. By checking this box, the rear panel diagram becomes active and displays present connectors and their condition.

Related Information

- “Access the Fabric Monitor” on page 163
- “Fabric Monitor Features” on page 164

-
- “Accessing the Rear Panel Diagram” on page 166
 - “Accessing Status Pane Information” on page 169
 - “Monitoring Parameters and Status” on page 176
-

Monitoring Parameters and Status

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

- “Chassis Parameters and Status” on page 177
- “InfiniBand Connector Parameters and Status” on page 178
- “I4 Switch Chip Port Parameters and Status” on page 181

Related Information

- “Access the Fabric Monitor” on page 163
- “Fabric Monitor Features” on page 164
- “Accessing the Rear Panel Diagram” on page 166
- “Accessing Status Pane Information” on page 169
- “Control Panel Function” on page 175

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 second column, Voltage Sensors, in the middle.
Chassis FRU description.	Click System Info tab.	Look in the second column, Chassis FRU, at the top.
Chassis part number.	Click System Info tab.	Look in the second column, Chassis FRU, in the middle.
Chassis serial number.	Click System Info tab.	Look in the second column, Chassis FRU, in the middle.
Chassis temperatures.	Click Sensor Info tab.	Look in the third column, Temperature Sensors.

Parameter or Status to Monitor	Action in Status Pane	Information Location
Controlled handover state.	Click Subnet Manager tab.	Look in the second column, Embedded OpenSM Settings, in the middle.
Fan speed.	Click Sensor Info tab.	Look in the first column, Fan Sensors.
Fan status.	Click Sensor Info tab.	Look in the first column, Fan Sensors.
I4 switch chip firmware version.	Click System Info tab.	Look in the first column, Core IB Switch, at the bottom.
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 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 second column, Voltage Sensors, at the bottom.
Main board voltages.	Click Sensor Info tab.	Look in the second 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 status.	Click Sensor Info tab.	Look in the first column, Power Sensors.
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.

Related Information

- “InfiniBand Connector Parameters and Status” on page 178
- “T4 Switch Chip Port Parameters and Status” on page 181

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.

Parameter or Status to Monitor	Action at Rear Panel Diagram or Status Pane	Information Location
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.

Parameter or Status to Monitor	Action at Rear Panel Diagram or Status Pane	Information Location
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 177
- “I4 Switch Chip Port Parameters and Status” on page 181

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

Parameter or Status to Monitor	Action at Status Pane	Information Location
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 177
- “[InfiniBand Connector Parameters and Status](#)” on page 178

Administering Oracle ILOM (SNMP)

These topics describe how to administer Oracle ILOM through the Simple Network Management Protocol (SNMP).

- “[SNMP Overview](#)” on page 183
- “[Understanding SNMP Commands](#)” on page 184
- “[Monitoring Oracle ILOM Targets \(SNMP\)](#)” on page 187
- “[Controlling Oracle ILOM Targets \(SNMP\)](#)” on page 228

Related Information

- “[Administering Oracle ILOM \(CLI\)](#)” on page 33
 - “[Administering Oracle ILOM \(Web\)](#)” on page 113
 - “[Using the Fabric Monitor](#)” on page 163
 - “[Administering Hardware \(IPMI\)](#)” on page 243
 - “[Understanding Oracle ILOM Commands](#)” on page 251
-

SNMP Overview

The Oracle ILOM implementation on the management controller within the switch can communicate the state of and enable remote management of Oracle ILOM through the Simple Network Management Protocol (SNMP).

An SNMP client is required to interface with the Oracle ILOM SNMP agent on the management controller. The SNMP client must have the appropriate Oracle ILOM MIBs installed. These MIBs are included in the `SUN_DCS_36p_x.y.z_w.tar.gz` file, the Oracle ILOM firmware package that you downloaded. See “[Installing the Oracle ILOM Firmware](#)” on page 27.

The MIBs are also available using the CLI or web interface. See “[Back Up SNMP Service MIBs \(CLI\)](#)” on page 97 or “[Back Up SNMP Service MIBs \(Web\)](#)” on page 153.

Using the SNMP protocol, the client sends requests in the form of object identifiers (OIDs) to the server on the management controller. The tables in *Switch Reference*, understanding MIB OIDs, provide a listing of object identifiers.

For more information about and use of SNMP with Oracle ILOM, refer to the *Oracle Integrated Lights Out Manager (ILOM) 3.0 Management Protocols Reference Guide*, available online at:

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

Related Information

- “[Understanding SNMP Commands](#)” on page 184
 - “[Monitoring Oracle ILOM Targets \(SNMP\)](#)” on page 187
 - “[Controlling Oracle ILOM Targets \(SNMP\)](#)” on page 228
-

Understanding SNMP Commands

The following topics describe how the SNMP command format is affected by the specified SNMP protocol:

- “[SNMP Commands](#)” on page 184
- “[V1 and V2c Protocol Command Format](#)” on page 185
- “[V3 Protocol Command Format](#)” on page 186

Related Information

- “[SNMP Overview](#)” on page 183
- “[Monitoring Oracle ILOM Targets \(SNMP\)](#)” on page 187
- “[Controlling Oracle ILOM Targets \(SNMP\)](#)” on page 228
- “[Understanding Oracle ILOM Commands](#)” on page 251

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 185
- “[V3 Protocol Command Format](#)” on page 186

V1 and V2c Protocol Command Format

The majority of SNMP command examples provided in this domain use the V2c protocol for ease of demonstration. For the user to perform the examples, it is assumed that the v2c protocol and sets properties are enabled in the Oracle ILOM SNMP service and that the SNMP community `public` has `rw` permission. See the following tasks for instructions how to configure these parameters:

- “[Configure the SNMP Service \(CLI\)](#)” on page 92
- “[Configure the SNMP Service \(Web\)](#)” on page 148
- “[Add SNMP Service Communities \(CLI\)](#)” on page 95
- “[Add SNMP Service Communities \(Web\)](#)” on page 151

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 184.
- *mc_IP* is the IP address of the management controller.
- *MIB_name* is the name of the MIB.
- *object_id* is the object identifier.
- *argument* is a combination of options and variables that support the object identifier.

Note – When the SNMP command example uses the V2c protocol, the management controller IP address variable *mc_IP* is not defined, as this is different for each switch installation.

For example:

\$ <code>snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlTImezone.0 s "GMT"</code>

While simple in execution, the command and returned information is not encrypted or secure.

Related Information

- “SNMP Commands” on page 184
- “V3 Protocol Command Format” on page 186

V3 Protocol Command Format

In real world 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 and 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 184.
- *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 a SNMP command example uses the V3 protocol, the *snmp_user*, *security_level*, *authentication_protocol*, *authentication_password*, and *privacy_password* variables are identified as *usersnmp*, *authPriv*, *MD5*, *authpass*, and *privpass* respectively. You must use unique values for *snmp_user*, *authentication_password*, and *privacy_password* variables, specific to the SNMP users of your switch. Additionally, the management controller IP address variable *mc_IP* is not defined, as this is different for each switch installation.

For example:

```
$ snmpset -v3 -u usersnmp -l authPriv -a MD5 -A authpass -x DES -X privpass mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 s "GMT"
```

Note – See “[Add SNMP Service User Accounts \(CLI\)](#)” on page 93 or “[Add SNMP Service User Accounts \(Web\)](#)” on page 149 for instructions to configure an SNMP user and their authentication and privacy passwords.

Related Information

- [“SNMP Commands” on page 184](#)
 - [“V1 and V2c Protocol Command Format” on page 185](#)
-

Monitoring Oracle ILOM Targets (SNMP)

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

- [“Performing Daily Tasks \(SNMP\)” on page 188](#)
- [“Checking the Status of Services \(SNMP\)” on page 214](#)
- [“Verifying Other Aspects With Oracle ILOM \(SNMP\)” on page 217](#)

Related Information

- [“Monitoring Oracle ILOM Targets \(CLI\)” on page 41](#)
- [“Monitoring Oracle ILOM Targets \(Web\)” on page 117](#)
- [“Controlling Oracle ILOM Targets \(SNMP\)” on page 228](#)

Performing Daily Tasks (SNMP)

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

- “Display the Date and Time (SNMP)” on page 188
- “Display the Time Zone (SNMP)” on page 189
- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display Power Supply Status (SNMP)” on page 190
- “Display Board-Level Voltages (SNMP)” on page 192
- “Display Internal Temperatures (SNMP)” on page 196
- “Display Fan Status (SNMP)” on page 199
- “Display the Sensor Alarm State (SNMP)” on page 202
- “Retrieving Entity Information” on page 203
- “Display Oracle ILOM Sessions (SNMP)” on page 211
- “Display the Oracle ILOM Event Log (SNMP)” on page 212

Related Information

- “Checking the Status of Services (SNMP)” on page 214
- “Verifying Other Aspects With Oracle ILOM (SNMP)” on page 217

▼ 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 Date (CLI)” on page 42
- “Display the Date (Web)” on page 118

- “Display the Time Zone (SNMP)” on page 189

▼ 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 42
- “Display the Date (Web)” on page 118
- “Display the Date and Time (SNMP)” on page 188
- “Set the Time Zone (SNMP)” on page 230

▼ Display the Aggregate Sensors State (SNMP)

1. Determine the entity number of the aggregate sensor.

See “Retrieving Entity Information” on page 203.

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.

To determine the overall switch state, use entity number 25. For example:

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.25  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.25 = 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 44
- “Display the Aggregate Sensors State (Web)” on page 118
- “Display Power Supply Status (SNMP)” on page 190
- “Display Board-Level Voltages (SNMP)” on page 192
- “Display Internal Temperatures (SNMP)” on page 196
- “Display Fan Status (SNMP)” on page 199
- “Display the Sensor Alarm State (SNMP)” on page 202
- “Display the Sensors’ State (IPMI)” on page 244
- “Retrieving Entity Information” on page 203

▼ Display Power Supply Status (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration. For more information about entity numbers, see “[Retrieving Entity Information](#)” on [page 203](#).

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 35 for the left power supply, or 39 for the right power supply. For example:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.35  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.35 = 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 37 for the left power supply, or 41 for the right power supply. For example

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.37  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.37 = 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 36 for the left power supply, or 40 for the right power supply. For example

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.36  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.37 = 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 46
- “Display Power Supply Status (Web)” on page 119
- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display Board-Level Voltages (SNMP)” on page 192
- “Display Internal Temperatures (SNMP)” on page 196
- “Display Fan Status (SNMP)” on page 199
- “Display the Sensor Alarm State (SNMP)” on page 202
- “Retrieving Entity Information” on page 203

▼ Display Board-Level Voltages (SNMP)

Note – The voltage values displayed for this procedure are in millivolts.

1. Determine the entity number of the voltage sensor.

See “Retrieving Entity Information” on page 203.

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. To display the current 3.3 VDC voltage, use 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: 3249
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.6 = INTEGER: 3402
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.7 = INTEGER: 11965
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.8 = INTEGER: 5044
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.10 = INTEGER: 3213
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.11 = INTEGER: 2527
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.13 = INTEGER: 1784
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.15 = INTEGER: 1216
.
.
.
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.

For example, 4, 6, 7, 8, 10, 11, 13, and 15.

You can also filter the output of the `snmpwalk` command for a specific entity number, according to your operating system. For example:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
|grep -F '.number ='
```

where *number* is the entity number. To display comprehensive information about the 3.3 VDC source, use entity number 4. For example:

```
$ 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: 3249  
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 47
- “Display Board-Level Voltages (Web)” on page 120
- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display Power Supply Status (SNMP)” on page 190
- “Display Internal Temperatures (SNMP)” on page 196
- “Display Fan Status (SNMP)” on page 199

- “Display the Sensor Alarm State (SNMP)” on page 202
- “Retrieving Entity Information” on page 203

▼ Display Internal Temperatures (SNMP)

Note – The temperature values displayed for this procedure are in degrees centigrade.

1. Determine the entity number of the temperature sensor.

See “Retrieving Entity Information” on page 203.

2. Display the basic temperature data:

```
$ snmpget -v2c -c public mc_IP  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.number
```

where *number* is the entity number. To display the current I4 switch chip temperature, use entity number 21.

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.21 = INTEGER: 36  
$
```

The I4 switch chip temperature displayed in the output of the example is 36 degrees centigrade.

Note – Temperature readings can vary and are influenced by the switch environment and loading.

3. Display comprehensive temperature information:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.4 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.6 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.7 = INTEGER: volts(6)  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.8 = INTEGER: volts(6)  
  
. . .  
SUN-PLATFORM-MIB::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.17 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.18 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.19 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.21 = INTEGER: 0
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.17 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.18 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.19 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.21 = INTEGER: none(1)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.17 = INTEGER: 31
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.18 = INTEGER: 29
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.19 = INTEGER: 41
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.21 = INTEGER: 31
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.17 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.18 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.19 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.21 = INTEGER:
reset(1)
.
.
.
$
```

4. Look through the output for the entity numbers respective to the temperature sensors.

For example, 17, 18, 19, and 21.

You can also filter the output of the snmpwalk command for a specific entity number, according to your operating system. For example:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
|grep -F '.number ='
```

where *number* is the entity number. To display comprehensive information about the I4 switch chip temperature, use entity number 21. For example:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
|grep -F '.21 ='  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.21 = INTEGER: degC(3)  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.21 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.21 = INTEGER: none(1)  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.21 = INTEGER: 36  
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMin.21 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMax.21 = INTEGER: 255  
SUN-PLATFORM-MIB::sunPlatNumericSensorAccuracy.21 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdNonCritical.21 = INTEGER:  
0  
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdNonCritical.21 = INTEGER:  
0  
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdCritical.21 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdCritical.21 = INTEGER: 70  
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdFatal.21 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdFatal.21 = INTEGER: 100  
SUN-PLATFORM-MIB::sunPlatNumericSensorHysteresis.21 = Gauge32: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorEnabledThresholds.21 = BITS: 14  
upperThresholdCritical(3) upperThresholdFatal(5)  
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.21 = INTEGER:  
reset(1)  
$
```

Related Information

- “Display Internal Temperatures (CLI)” on page 49
- “Display Internal Temperatures (Web)” on page 120
- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display Power Supply Status (SNMP)” on page 190
- “Display Board-Level Voltages (SNMP)” on page 192
- “Display Fan Status (SNMP)” on page 199
- “Display the Sensor Alarm State (SNMP)” on page 202

- “Retrieving Entity Information” on page 203

▼ Display Fan Status (SNMP)

Note – The entity numbers used in this procedure are for example only. Your entity numbers might differ, depending on the switch firmware and configuration. For more information about entity numbers, see “[Retrieving Entity Information](#)” on page 203.

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 43 for the left fan (FAN1), 46 for the center fan (FAN2), or 49 for the right fan (FAN3). For example:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.43  
SUN-PLATFORM-MIB::sunPlatDiscreteSensorCurrent.43 = 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 44 for the left fan (FAN1), 47 for the center fan (FAN2), or 50 for the right fan (FAN3). For example:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.44  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.44 = INTEGER: 12099  
$
```

The FAN1 speed displayed in the output of the example is 12099 RPM.

Note – Fan speed readings can vary and are influenced by the switch environment and loading.

3. 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.44 = INTEGER: rpm(20)
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.47 = INTEGER: rpm(20)
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.50 = INTEGER: rpm(20)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.44 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.47 = INTEGER: 0
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.50 = INTEGER: 0
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.44 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.47 = INTEGER: none(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.50 = INTEGER: none(1)
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.44 = INTEGER: 12208
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.47 = INTEGER: 11772
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.50 = INTEGER: 12099
.
.
.
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.44 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.47 = INTEGER:
reset(1)
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.50 = INTEGER:
reset(1)
$
```

4. Look though the output for the entity numbers respective to the fans.

For example, 44, 47, and 50.

You can also filter the output of the `snmpwalk` command for a specific entity number, according to your operating system. For example:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
|grep -F '.number ='
```

where *number* is the entity number. To display comprehensive information about the left fan (FAN1), use entity number 44. For example:

```
$ snmpwalk -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatNumericSensorTable  
|grep -F '.44 ='  
SUN-PLATFORM-MIB::sunPlatNumericSensorBaseUnits.44 = INTEGER: rpm(20)  
SUN-PLATFORM-MIB::sunPlatNumericSensorExponent.44 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorRateUnits.44 = INTEGER: none(1)  
SUN-PLATFORM-MIB::sunPlatNumericSensorCurrent.44 = INTEGER: 12208  
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMin.44 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorNormalMax.44 = INTEGER: 255  
SUN-PLATFORM-MIB::sunPlatNumericSensorAccuracy.44 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdNonCritical.44 = INTEGER:  
6322  
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdNonCritical.44 = INTEGER:  
0  
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdCritical.44 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdCritical.44 = INTEGER:  
26705  
SUN-PLATFORM-MIB::sunPlatNumericSensorLowerThresholdFatal.44 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorUpperThresholdFatal.44 = INTEGER: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorHysteresis.44 = Gauge32: 0  
SUN-PLATFORM-MIB::sunPlatNumericSensorEnabledThresholds.44 = BITS: 90  
lowerThresholdNonCritical(0) upperThresholdCritical(3)  
SUN-PLATFORM-MIB::sunPlatNumericSensorRestoreDefaultThresholds.44 = INTEGER:  
reset(1)  
$
```

Related Information

- “Display Fan Status (CLI)” on page 50
- “Display Fan Status (Web)” on page 121
- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display Power Supply Status (SNMP)” on page 190
- “Display Board-Level Voltages (SNMP)” on page 192
- “Display Internal Temperatures (SNMP)” on page 196
- “Display Fan Status (SNMP)” on page 199

- “Display the Sensor Alarm State (SNMP)” on page 202
- “Retrieving Entity Information” on page 203

▼ Display the Sensor Alarm State (SNMP)

1. Determine the entity number of the sensor.

See “Retrieving Entity Information” on page 203.

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.

To determine the overall switch alarm state, use entity number 25. For example:

```
$ snmpget -v2c -c public mc_IP SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.25  
SUN-PLATFORM-MIB::sunPlatEquipmentAlarmStatus.25 = 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 44
- “Display the Aggregate Sensors State (Web)” on page 118
- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display Power Supply Status (SNMP)” on page 190
- “Display Board-Level Voltages (SNMP)” on page 192
- “Display Internal Temperatures (SNMP)” on page 196
- “Display Fan Status (SNMP)” on page 199
- “Display the Sensors’ State (IPMI)” on page 244
- “Retrieving Entity Information” on page 203

Retrieving Entity Information

Many tasks require that you know the entity number of an entity, to determine information about it. The following topics determine the relationship of an entity number to an entity, and provide more information about that entity.

- “[Display the Entity Numbers](#)” on page 203
- “[Entity Information by Entity Number and Oracle ILOM Target](#)” on page 205
- “[Entity Information by Entity Description](#)” on page 207

Related Information

- “[Display the Aggregate Sensors State \(SNMP\)](#)” on page 189
- “[Display Power Supply Status \(SNMP\)](#)” on page 190
- “[Display Board-Level Voltages \(SNMP\)](#)” on page 192
- “[Display Internal Temperatures \(SNMP\)](#)” on page 196
- “[Display Fan Status \(SNMP\)](#)” on page 199
- “[Display the Sensor Alarm State \(SNMP\)](#)” on page 202
- “[Display Switch FRU ID \(SNMP\)](#)” on page 221
- “[Display Power Supply FRU ID \(SNMP\)](#)” on page 222
- “[Display the System Components \(SNMP\)](#)” on page 225

▼ [Display the Entity Numbers](#)

This procedure outputs the entity numbers and their respective Oracle ILOM targets.

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.51 = STRING: /SYS/I_POWER
ENTITY-MIB::entPhysicalName.52 = STRING: /SYS/I_ATTENTION
ENTITY-MIB::entPhysicalName.53 = 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, according to your operating system. For example:

```
$ 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
.
.
.
51 /SYS/I_POWER
52 /SYS/I_ATTENTION
53 /SYS/I_LOCATOR
$
```

2. Compare the output with the entity information tables.

See:

- “Entity Information by Entity Number and Oracle ILOM Target” on page 205
- “Entity Information by Entity Description” on page 207

3. Use the entity numbers for daily tasks.

See:

- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display Power Supply Status (SNMP)” on page 190

- “Display Board-Level Voltages (SNMP)” on page 192
- “Display Internal Temperatures (SNMP)” on page 196
- “Display Fan Status (SNMP)” on page 199
- “Display the Sensor Alarm State (SNMP)” on page 202

Related Information

- “Entity Information by Entity Number and Oracle ILOM Target” on page 205
- “Entity Information by Entity Description” on page 207

Entity Information by Entity Number and Oracle ILOM Target

In the following table, the entity information is sorted by the entity number and Oracle ILOM target. Use this table when you want information about a specific entity number or Oracle ILOM target.

Note – The entity numbers and their respective Oracle ILOM targets change with firmware revision releases and switch configurations. The entity numbers provided in the following table are for the 1.3.0_1 version of the firmware and a standard configuration of the switch.

Note – Because the load put upon the switch varies within each installation, the temperatures and fan speeds vary with the load. The values provided are for a switch with minimal loading and serve only as a guideline.

Entity No.	Oracle ILOM Target	Entity Description	Target Type	Typical Value
1	/SYS	Switch container	Sun Datacenter InfiniBand Switch 36	N/A
2	/SYS/MB	Motherboard container	Motherboard	N/A
3	/SYS/MB/V_ECB	ECB voltage state	Aggregate Sensor	1 (Deasserted)
4	/SYS/MB/V_3VMain	3.3 VDC main voltage	Voltage Sensor	3300
5	/SYS/MB/V_3VMainOK	3.3 VDC state	Aggregate Sensor	1 (Deasserted)
6	/SYS/MB/V_3VStby	3.3 VDC standby voltage	Voltage Sensor	3300
7	/SYS/MB/V_12V	12 VDC voltage	Voltage Sensor	12000
8	/SYS/MB/V_5V	5 VDC voltage	Voltage Sensor	5000
9	/SYS/MB/V_5VOK	5 VDC state	Aggregate Sensor	1 (Deasserted)
10	/SYS/MB/V_BAT	Battery voltage	Voltage Sensor	3300

Entity No.	Oracle ILOM Target	Entity Description	Target Type	Typical Value
11	/SYS/MB/V_2.5V	2.5 VDC voltage	Voltage Sensor	2500
12	/SYS/MB/V_2.5VOK	2.5 VDC state	Aggregate Sensor	1 (Deasserted)
13	/SYS/MB/V_1.8V	1.8 VDC voltage	Voltage Sensor	1800
14	/SYS/MB/V_1.8VOK	1.8 VDC state	Aggregate Sensor	1 (Deasserted)
15	/SYS/MB/V_I41.2V	I4 1.2 VDC voltage	Voltage Sensor	1200
16	/SYS/MB/V_I41.2VOK	I4 1.2 VDC state	Aggregate Sensor	1 (Deasserted)
17	/SYS/MB/T_BACK	Rear temperatures	Temperature Sensor	30
18	/SYS/MB/T_FRONT	Front temperature	Temperature Sensor	28
19	/SYS/MB/T_SP	SP temperature	Temperature Sensor	40
20	/SYS/MB/BOOT_I4A	I4 boot state	Fault Sensor	1 (Deasserted)
21	/SYS/MB/T_I4A	I4 temperature	Temperature Sensor	38
22	/SYS/Switch_Diag	Monitoring Linux shell	Container	N/A
23	/SYS/Fabric_Mgmt	Administrative Linux shell	Container	N/A
24	/SYS/Platform_CLI	Comprehensive Linux shell	Container	N/A
25	/SYS/CHASSIS_STATUS	Overall switch state	Aggregate Sensor	1 (Deasserted)
26	/SYS/POWER_ATTN	Overall power state	Aggregate Sensor	1 (Deasserted)
27	/SYS/TEMP_ATTN	Overall temperature state	Aggregate Sensor	1 (Deasserted)
28	/SYS/COOLING_ATTN	Overall cooling state	Aggregate Sensor	1 (Deasserted)
29	/SYS/IBDEV_ATTN	Overall I4 state	Aggregate Sensor	1 (Deasserted)
30	/SYS/CABLE_ATTN	Overall cable connectivity state	Aggregate Sensor	1 (Deasserted)
31	/SYS/POWER_REDUN	Power redundancy state	Aggregate Sensor	1 (Deasserted)
32	/SYS/COOLING_REDUN	Cooling redundancy state	Aggregate Sensor	1 (Deasserted)
33	/SYS/CABLE_CONN_STAT	Change in cable connectivity state	Aggregate Sensor	1 (Deasserted)
34	/SYS/PSU0	Power supply 0 container	Power Supply FRU	N/A
35	/SYS/PSU0/PRSNT	Power supply 0 present	Presence Sensor	2 (Asserted)
36	/SYS/PSU0/ALERT	Power supply 0 fault	Fault Sensor	1 (Deasserted)
37	/SYS/PSU0/AC_PRESENT	Power supply 0 AC present	Fault Sensor	2 (Asserted)

Entity No.	Oracle ILOM Target	Entity Description	Target Type	Typical Value
38	/SYS/PSU1	Power supply 1 container	Power Supply FRU	N/A
39	/SYS/PSU1/PRSNT	Power supply 1 present	Presence Sensor	2 (Asserted)
40	/SYS/PSU1/ALERT	Power supply 1 fault	Fault Sensor	1 (Deasserted)
41	/SYS/PSU1/AC_PRESENT	Power supply 1 AC present	Fault Sensor	2 (Asserted)
42	/SYS/FAN1	Fan 1 container	Rear Fan Module	N/A
43	/SYS/FAN1/PRSNT	Fan 1 present	Presence Sensor	2 (Asserted)
44	/SYS/FAN1/TACH	Fan 1 speed	Speed Sensor	12200
45	/SYS/FAN2	Fan 2 container	Rear Fan Module	N/A
46	/SYS/FAN2/PRSNT	Fan 2 present	Presence Sensor	2 (Asserted)
47	/SYS/FAN2/TACH	fan 2 speed	Speed Sensor	12200
48	/SYS/FAN3	Fan 3 container	Rear Fan Module	N/A
49	/SYS/FAN3/PRSNT	Fan 3 present	Presence Sensor	2 (Asserted)
50	/SYS/FAN3/TACH	Fan 3 speed	Speed Sensor	12200
51	/SYS/I_POWER	Power LED	Indicator	On
52	/SYS/I_ATTENTION	Attention LED	Indicator	Off
53	/SYS/I_LOCATOR	Locator LED	Indicator	Off

Related Information

- “Display the Entity Numbers” on page 203
- “Entity Information by Entity Description” on page 207

Entity Information by Entity Description

In the following table, the entity information is sorted by the entity description. Use this table when you want information about a specific entity.

Note – The Oracle ILOM targets and their respective entity numbers change from firmware revision releases and switch configurations. The entity numbers provided in the following table are for the 1.3.0_1 version of the firmware and a standard configuration of the switch.

Note – Because the load put upon the switch varies within each installation, the temperatures and fan speeds vary with the load. The values provided are for a switch with minimal loading and serve only as a guideline.

Entity Description	Oracle ILOM Target	Entity No.	Target Type	Typical Value
1.8 VDC state	/SYS/MB/V_1.8VOK	14	Aggregate Sensor	1 (Deasserted)
1.8 VDC voltage	/SYS/MB/V_1.8V	13	Voltage Sensor	1784
12 VDC voltage	/SYS/MB/V_12V	7	Voltage Sensor	11965
2.5 VDC state	/SYS/MB/V_2.5VOK	12	Aggregate Sensor	1 (Deasserted)
2.5 VDC voltage	/SYS/MB/V_2.5V	11	Voltage Sensor	2527
3.3 VDC main voltage	/SYS/MB/V_3.3VMain	4	Voltage Sensor	3249
3.3 VDC standby voltage	/SYS/MB/V_3.3VStby	6	Voltage Sensor	3385
3.3 VDC state	/SYS/MB/V_3.3VMainOK	5	Aggregate Sensor	1 (Deasserted)
5 VDC state	/SYS/MB/V_5VOK	9	Aggregate Sensor	1 (Deasserted)
5 VDC voltage	/SYS/MB/V_5V	8	Voltage Sensor	5044
Administrative Linux shell	/SYS/Fabric_Mgmt	23	Container	N/A
Attention LED	/SYS/I_ATTENTION	52	Indicator	Off
Battery voltage	/SYS/MB/V_BAT	10	Voltage Sensor	3213
Change in cable connectivity state	/SYS/CABLE_CONN_STAT	33	Aggregate Sensor	1 (Deasserted)
Comprehensive Linux shell	/SYS/Platform_CLI	24	Container	N/A
Cooling redundancy state	/SYS/COOLING_REDUN	32	Aggregate Sensor	1 (Deasserted)
ECB voltage state	/SYS/MB/V_ECB	3	Aggregate Sensor	1 (Deasserted)
Fan 1 container	/SYS/FAN1	42	Rear Fan Module	N/A
Fan 1 present	/SYS/FAN1/PRSNT	43	Presence Sensor	2 (Asserted)
Fan 1 speed	/SYS/FAN1/TACH	44	Speed Sensor	12208
Fan 2 container	/SYS/FAN2	45	Rear Fan Module	N/A
Fan 2 present	/SYS/FAN2/PRSNT	46	Presence Sensor	2 (Asserted)
Fan 2 speed	/SYS/FAN2/TACH	47	Speed Sensor	11881
Fan 3 container	/SYS/FAN3	48	Rear Fan Module	N/A
Fan 3 present	/SYS/FAN3/PRSNT	49	Presence Sensor	2 (Asserted)

Entity Description	Oracle ILOM Target	Entity No.	Target Type	Typical Value
Fan 3 speed	/SYS/FAN3/TACH	50	Speed Sensor	12099
Front temperature	/SYS/MB/T_FRONT	18	Temperature Sensor	28
I4 1.2 VDC state	/SYS/MB/V_I41.2VOK	16	Aggregate Sensor	1 (Deasserted)
I4 1.2 VDC voltage	/SYS/MB/V_I41.2V	15	Voltage Sensor	1216
I4 boot state	/SYS/MB/BOOT_I4A	20	Fault Sensor	1 (Deasserted)
I4 temperature	/SYS/MB/T_I4A	21	Temperature Sensor	37
Locator LED	/SYS/I_LOCATOR	53	Indicator	Off
Monitoring Linux shell	/SYS/Switch_Diag	22	Container	N/A
Motherboard container	/SYS/MB	2	Motherboard	N/A
Overall cable connectivity state	/SYS/CABLE_ATTN	30	Aggregate Sensor	1 (Deasserted)
Overall cooling state	/SYS/COOLING_ATTN	28	Aggregate Sensor	1 (Deasserted)
Overall I4 state	/SYS/IBDEV_ATTN	29	Aggregate Sensor	1 (Deasserted)
Overall power state	/SYS/POWER_ATTN	26	Aggregate Sensor	1 (Deasserted)
Overall switch state	/SYS/CHASSIS_STATUS	25	Aggregate Sensor	1 (Deasserted)
Overall temperature state	/SYS/TEMP_ATTN	27	Aggregate Sensor	1 (Deasserted)
Power LED	/SYS/I_POWER	51	Indicator	On
Power redundancy state	/SYS/POWER_REDUN	31	Aggregate Sensor	1 (Deasserted)
Power supply 0 AC present	/SYS/PSU0/AC_PRESENT	37	Fault Sensor	2 (Asserted)
Power supply 0 container	/SYS/PSU0	34	Power Supply FRU	N/A
Power supply 0 fault	/SYS/PSU0/ALERT	36	Fault Sensor	1 (Deasserted)
Power supply 0 present	/SYS/PSU0/PRSNT	35	Presence Sensor	2 (Asserted)
Power supply 1 AC present	/SYS/PSU1/AC_PRESENT	41	Fault Sensor	2 (Asserted)
Power supply 1 container	/SYS/PSU1	38	Power Supply FRU	N/A
Power supply 1 fault	/SYS/PSU1/ALERT	40	Fault Sensor	1 (Deasserted)
Power supply 1 present	/SYS/PSU1/PRSNT	39	Presence Sensor	2 (Asserted)

Entity Description	Oracle ILOM Target	Entity No.	Target Type	Typical Value
Rear temperatures	/SYS/MB/T_BACK	17	Temperature Sensor	30
SP temperature	/SYS/MB/T_SP	19	Temperature Sensor	40
Switch container	/SYS	1	Sun Datacenter InfiniBand Switch 36	N/A

Related Information

- “Display the Entity Numbers” on page 203
- “Entity Information by Entity Number and Oracle ILOM Target” on page 205

▼ 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 52
- “Display the Oracle ILOM Sessions (Web)” on page 121
- “Display Oracle ILOM User Accounts (SNMP)” on page 219

▼ 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 53
- “Display the Oracle ILOM Event Log (Web)” on page 122
- “Display the System Event Log (IPMI)” on page 247
- “Clear the Oracle ILOM Event Log (SNMP)” on page 231
- “Set the Remote Log Hosts (SNMP)” on page 232

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 214
- “Display the HTTPS Service Status (SNMP)” on page 215
- “Display the SMTP Client Status (SNMP)” on page 215
- “Display the NTP State (SNMP)” on page 216
- “Display the NTP Servers (SNMP)” on page 216

Related Information

- “Performing Daily Tasks (SNMP)” on page 188
- “Verifying Other Aspects With Oracle ILOM (SNMP)” on page 217

▼ 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 54
- “Display the HTTP Service Status (Web)” on page 123
- “Display the HTTPS Service Status (SNMP)” on page 215
- “Set the HTTP Service State (SNMP)” on page 238

▼ 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 55
- “Display the HTTPS Service Status (Web)” on page 123
- “Display the HTTP Service Status (SNMP)” on page 214

▼ 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 58
- “Display the SMTP Client Status (Web)” on page 126
- “Configure the SMTP Client (SNMP)” on page 232

▼ 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 59
- “Display the Network Time Protocol Servers (Web)” on page 126
- “Display the NTP Servers (SNMP)” on page 216
- “Set the Network Time Protocol State (SNMP)” on page 230

▼ 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 59
- “Display the Network Time Protocol Servers (Web)” on page 126
- “Display the NTP State (SNMP)” on page 216
- “Set the Network Time Protocol Servers (SNMP)” on page 231

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 188 or “[Checking the Status of Services \(SNMP\)](#)” on page 214.

- “Display the Alert Properties (SNMP)” on page 217
- “Display Oracle ILOM User Accounts (SNMP)” on page 219
- “Display the Remote Log Hosts (SNMP)” on page 219
- “Display the Network Management Configuration (SNMP)” on page 220
- “Display the System Components (SNMP)” on page 225
- “Display the Additional System Component Information (SNMP)” on page 226
- “Display System Identifier (SNMP)” on page 228

Related Information

- “[Performing Daily Tasks \(SNMP\)](#)” on page 188
- “[Checking the Status of Services \(SNMP\)](#)” on page 214

▼ 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 62
- “Display the Alert Properties (Web)” on page 127
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 239
- “Modify Alert SNMP Version (SNMP)” on page 241
- “Disable Alerts (SNMP)” on page 242

▼ 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 six users. Of them, users root and user1 have an administrative role.

Related Information

- “Display the Oracle ILOM User Accounts (CLI)” on page 63
- “Display the Oracle ILOM User Accounts (Web)” on page 128
- “Add an Oracle ILOM User Account (SNMP)” on page 236
- “Delete an Oracle ILOM User Account (SNMP)” on page 237

▼ Display the Remote Log Hosts (SNMP)

- From the SNMP client, type:

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest1.0
SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest1.0 = IpAddress: 123.45.67.89
```

```
$ snmpget -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest2.0  
SUN-ILOM-CONTROL-MIB::ilomCtrlRemoteSyslogDest2.0 = IpAddress: 0.0.0.0  
$
```

Related Information

- “Display the Remote Log Hosts (CLI)” on page 63
- “Display the Remote Log Hosts (Web)” on page 128
- “Set the Remote Log Hosts (SNMP)” on page 232

▼ Display the Network Management Configuration (SNMP)

- From the SNMP client, type:

```
$ snmpwalk -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlNetwork  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkMacAddress."SP/network" = STRING:  
46:46:41:39:00:FF  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpDiscovery."SP/network" = INTEGER:  
static(1)  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpAddress."SP/network" = IpAddress:  
123.45.67.89  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpGateway."SP/network" = IpAddress:  
123.45.67.5  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkIpNetmask."SP/network" = IpAddress:  
255.255.255.0  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpDiscovery."SP/network" =  
INTEGER: static(1)  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpAddress."SP/network" =  
IpAddress: 123.45.67.89  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpGateway."SP/network" =  
IpAddress: 123.45.67.5  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkPendingIpNetmask."SP/network" =  
IpAddress: 255.255.255.0  
SUN-ILOM-CONTROL-MIB::ilomCtrlNetworkCommitPending."SP/network" = INTEGER:  
false(2)  
$
```

Related Information

- “Display the Network Management Configuration (CLI)” on page 64
- “Display the Network Management Configuration (Web)” on page 129
- “Set the Network Parameters (SNMP)” on page 234

▼ Display Switch FRU ID (SNMP)

Note – The entity number for the switch might change with different firmware releases or switch configurations. Verify the switch entity number (1) with the procedure and tables in “[Retrieving Entity Information](#)” on page 203.

1. From the SNMP client, type:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36
ENTITY-MIB::entPhysicalDescr.2 = STRING: Motherboard
ENTITY-MIB::entPhysicalDescr.3 = STRING: Fault Sensor
ENTITY-MIB::entPhysicalDescr.4 = STRING: Voltage Sensor
ENTITY-MIB::entPhysicalDescr.5 = STRING: Fault Sensor
.
.
.
ENTITY-MIB::entPhysicalVendorType.1 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalContainedIn.1 = INTEGER: 0
.
.
.
ENTITY-MIB::entPhysicalClass.1 = INTEGER: chassis(3)
.
.
.
ENTITY-MIB::entPhysicalParentRelPos.1 = INTEGER: -1
.
.
.
ENTITY-MIB::entPhysicalName.1 = STRING: /SYS
.
.
.
ENTITY-MIB::entPhysicalHardwareRev.1 = STRING:
.
.
.
ENTITY-MIB::entPhysicalFirmwareRev.1 = STRING: 1.3.3-1
.
.
.
$
```

2. Look through the output for entity number 1.

You can also filter the output of the `snmpwalk` command for entity number 1, according to your operating system. For example:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable | grep -F '.1 ='  
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36  
ENTITY-MIB::entPhysicalVendorType.1 = OID: SNMPv2-SMI::zeroDotZero  
ENTITY-MIB::entPhysicalContainedIn.1 = INTEGER: 0  
ENTITY-MIB::entPhysicalClass.1 = INTEGER: chassis(3)  
ENTITY-MIB::entPhysicalParentRelPos.1 = INTEGER: -1  
ENTITY-MIB::entPhysicalName.1 = STRING: /SYS  
ENTITY-MIB::entPhysicalHardwareRev.1 = STRING:  
ENTITY-MIB::entPhysicalFirmwareRev.1 = STRING: 1.3.3-1  
ENTITY-MIB::entPhysicalSoftwareRev.1 = STRING:  
ENTITY-MIB::entPhysicalSerialNum.1 = STRING: 0110SJC-0945NG0036  
ENTITY-MIB::entPhysicalMfgName.1 = STRING: Sun Microsystems, Inc.  
ENTITY-MIB::entPhysicalModelName.1 = STRING: 5111232  
ENTITY-MIB::entPhysicalAlias.1 = STRING:  
ENTITY-MIB::entPhysicalAssetID.1 = STRING:  
ENTITY-MIB::entPhysicalIsFRU.1 = INTEGER: true(1)  
$
```

Related Information

- “Display Switch FRU ID (CLI)” on page 65
- “Display System Component FRU ID (Web)” on page 129
- “Display FRU ID Information (IPMI)” on page 248
- “Retrieving Entity Information” on page 203

▼ Display Power Supply FRU ID (SNMP)

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

Note – The entity number for the power supplies might change with different firmware releases or switch configurations. Verify the power supply entity numbers (34, 38) with the procedure and tables in “Retrieving Entity Information” on page 203.

1. From the SNMP client, type:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36
ENTITY-MIB::entPhysicalDescr.2 = STRING: Motherboard
ENTITY-MIB::entPhysicalDescr.3 = STRING: Fault Sensor
ENTITY-MIB::entPhysicalDescr.4 = STRING: Voltage Sensor
ENTITY-MIB::entPhysicalDescr.5 = STRING: Fault Sensor
.
.
.
ENTITY-MIB::entPhysicalDescr.34 = STRING: Power Supply FRU
.
.
.
ENTITY-MIB::entPhysicalVendorType.34 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalVendorType.38 = OID: SNMPv2-SMI::zeroDotZero
.
.
.
ENTITY-MIB::entPhysicalContainedIn.34 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalContainedIn.38 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalClass.34 = INTEGER: powerSupply(6)
.
.
.
ENTITY-MIB::entPhysicalClass.38 = INTEGER: powerSupply(6)
.
.
.
ENTITY-MIB::entPhysicalParentRelPos.34 = INTEGER: 1
.
.
.
ENTITY-MIB::entPhysicalParentRelPos.38 = INTEGER: 2
```

```
.  
. .  
ENTITY-MIB::entPhysicalName.34 = STRING: /SYS/PSU0  
. .  
. .  
ENTITY-MIB::entPhysicalName.38 = STRING: /SYS/PSU1  
. .  
. .  
$
```

2. Look though the output for the entity numbers respective to the power supplies.

For example, 34 and 38.

You can also filter the output of the snmpwalk command for a specific entity number, according to your operating system. For example:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable | grep -F '.number ='
```

where *number* is 34 for the left power supply (PSU0) and 38 for the right power supply (PSU1). For example, for power supply 0:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalTable | grep -F '.34 ='  
ENTITY-MIB::entPhysicalDescr.34 = STRING: Power Supply FRU  
ENTITY-MIB::entPhysicalVendorType.34 = OID: SNMPv2-SMI::zeroDotZero  
ENTITY-MIB::entPhysicalContainedIn.34 = INTEGER: 1  
ENTITY-MIB::entPhysicalClass.34 = INTEGER: powerSupply(6)  
ENTITY-MIB::entPhysicalParentRelPos.34 = INTEGER: 1  
ENTITY-MIB::entPhysicalName.34 = STRING: /SYS/PSU0  
ENTITY-MIB::entPhysicalHardwareRev.34 = STRING:  
ENTITY-MIB::entPhysicalFirmwareRev.34 = STRING:  
ENTITY-MIB::entPhysicalSoftwareRev.34 = STRING: 02  
ENTITY-MIB::entPhysicalSerialNum.34 = STRING: BF0CG5  
ENTITY-MIB::entPhysicalMfgName.34 = STRING: EMERSON  
ENTITY-MIB::entPhysicalModelName.34 = STRING: 3002143  
ENTITY-MIB::entPhysicalAlias.34 = STRING: A237  
ENTITY-MIB::entPhysicalAssetID.34 = STRING:  
ENTITY-MIB::entPhysicalIsFRU.34 = INTEGER: true(1)  
$
```

Related Information

- “Display Power Supply FRU ID (CLI)” on page 66
- “Display System Component FRU ID (Web)” on page 129

- “Display FRU ID Information (IPMI)” on page 248
- “Retrieving Entity Information” on page 203

▼ 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.51 = STRING: /SYS/I_POWER
ENTITY-MIB::entPhysicalName.52 = STRING: /SYS/I_ATTENTION
ENTITY-MIB::entPhysicalName.53 = STRING: /SYS/I_LOCATOR
$
```

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

2. Display the physical entity descriptions:

```
$ snmpwalk -v2c -c public mc_IP ENTITY-MIB::entPhysicalDescr
ENTITY-MIB::entPhysicalDescr.1 = STRING: Sun Datacenter InfiniBand Switch 36
ENTITY-MIB::entPhysicalDescr.2 = STRING: Motherboard
ENTITY-MIB::entPhysicalDescr.3 = STRING: Fault Sensor
ENTITY-MIB::entPhysicalDescr.4 = STRING: Voltage Sensor
ENTITY-MIB::entPhysicalDescr.5 = STRING: Fault Sensor
ENTITY-MIB::entPhysicalDescr.6 = STRING: Voltage Sensor
ENTITY-MIB::entPhysicalDescr.7 = STRING: Voltage Sensor
.
.
.
ENTITY-MIB::entPhysicalDescr.51 = STRING: Indicator
ENTITY-MIB::entPhysicalDescr.52 = STRING: Indicator
ENTITY-MIB::entPhysicalDescr.53 = 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.51 = INTEGER: other(1)
ENTITY-MIB::entPhysicalClass.52 = INTEGER: other(1)
ENTITY-MIB::entPhysicalClass.53 = INTEGER: other(1)
$
```

Related Information

- “Display System Component FRU ID (Web)” on page 129
- “Display the Additional System Component Information (SNMP)” on page 226
- “Retrieving Entity Information” on page 203

▼ 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 225](#)

▼ 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: 1.3.3-1
$
```

Related Information

- [“Display the Firmware Version \(CLI\)” on page 67](#)
- [“Display the Firmware Version \(Web\)” on page 130](#)
- [“Retrieving Entity Information” on page 203](#)

▼ 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: 36p-1  
$
```

Related Information

- “Display Identification Properties (CLI)” on page 68
- “Display Identification Properties (Web)” on page 130
- “Set the System Identifier (SNMP)” on page 235

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 228
- “Performing User Tasks (SNMP)” on page 235
- “Managing Other Aspects With Oracle ILOM (SNMP)” on page 237

Related Information

- “Controlling Oracle ILOM Targets (CLI)” on page 69
- “Controlling Oracle ILOM Targets (Web)” on page 131
- “Monitoring Oracle ILOM Targets (SNMP)” on page 187

Performing General Tasks (SNMP)

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

- “Set the Date and Time (SNMP)” on page 229
- “Set the Time Zone (SNMP)” on page 230
- “Set the Network Time Protocol State (SNMP)” on page 230
- “Set the Network Time Protocol Servers (SNMP)” on page 231

- “Clear the Oracle ILOM Event Log (SNMP)” on page 231
- “Set the Remote Log Hosts (SNMP)” on page 232
- “Configure the SMTP Client (SNMP)” on page 232
- “Set the Network Parameters (SNMP)” on page 234
- “Set the System Identifier (SNMP)” on page 235

Related Information

- “Performing User Tasks (SNMP)” on page 235
- “Managing Other Aspects With Oracle ILOM (SNMP)” on page 237

▼ 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 70
- “Set the Date and Time (Web)” on page 132
- “Display the Date and Time (SNMP)” on page 188

▼ Set the Time Zone (SNMP)

- From the SNMP client, type:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 s "timezone"
```

where *timezone* is the time zone. For example, to set for Greenwich Mean Time:

```
$ snmpset -v2c -c public mc_IP SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 s "GMT"  
SUN-ILOM-CONTROL-MIB::ilomCtrlTimezone.0 = STRING: GMT  
$
```

Related Information

- “Set the Date and Time (CLI)” on page 70
- “Set the Time Zone (Web)” on page 133
- “Display the Time Zone (SNMP)” on page 189

▼ 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 231
- “Display the NTP State (SNMP)” on page 216

▼ Set the Network Time Protocol Servers (SNMP)

- From the SNMP client, type:

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServernumberIP.0 = "IP_address"
```

where:

- *number* is the string for the number of the server, either One or Two.
- *IP_address* is the IP address of the NTP server.

For example, to set the NTP server One to the address of 123.45.67.90:

```
$ snmpset -v2c -c public mc_IP  
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerOneIP.0 = "123.45.67.90"  
SUN-ILOM-CONTROL-MIB::ilomCtrlDeviceNTPServerOneIP.0 = ipAddress: 123.45.67.90  
$
```

Note – Setting the NTP server IP address parameter to 0.0.0.0 effectively disables that parameter.

Related Information

- “Set the Date and Time (CLI)” on page 70
- “Set the Date and Time (Web)” on page 132
- “Set the Network Time Protocol State (SNMP)” on page 230
- “Display the NTP Servers (SNMP)” on page 216

▼ 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 72
- “Clear the Oracle ILOM Event Log (Web)” on page 134
- “Display the Oracle ILOM Event Log (SNMP)” on page 212

- “Set the Remote Log Hosts (SNMP)” on page 232

▼ 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 73
- “Set the Remote Log Hosts (Web)” on page 135
- “Display the Remote Log Hosts (SNMP)” on page 219

▼ Configure the SMTP Client (SNMP)

To enable email alerts, Oracle ILOM must be configured 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 74
- “Configure the SMTP Client (Web)” on page 135
- “Display the SMTP Client Status (SNMP)” on page 215

▼ 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\\\" a "value"
```

where:

- *parameter* is the network parameter to configure:
 - Discovery – The IP address discovery method, static or dhcp.
 - Address – The IP address of the management controller, should static discovery be configured.
 - Gateway – The IP address of the subnet gateway.
 - Netmask – The netmask for the subnet.
- *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 80
- “Set the Network Management Parameters (Web)” on page 139
- “Display the Network Management Configuration (SNMP)” on page 220

▼ 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-03-36p-1"  
SUN-ILOM-CONTROL-MIB::ilomCtrlSystemIdentifier.0 = STRING: blr-03-36p-1  
$
```

Related Information

- “Set the Identification Properties (CLI)” on page 82
- “Set the Identification Properties (Web)” on page 140
- “Display System Identifier (SNMP)” on page 228

Performing User Tasks (SNMP)

These tasks enable you to add and delete Oracle ILOM users.

- “Add an Oracle ILOM User Account (SNMP)” on page 236
- “Delete an Oracle ILOM User Account (SNMP)” on page 237

Related Information

- “Performing General Tasks (SNMP)” on page 228
- “Managing Other Aspects With Oracle ILOM (SNMP)” on page 237

▼ 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 84
- “Add an Oracle ILOM User Account (Web)” on page 141
- “Delete an Oracle ILOM User Account (SNMP)” on page 237
- “Display Oracle ILOM User Accounts (SNMP)” on page 219

▼ 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 85
- “Delete an Oracle ILOM User Account (Web)” on page 142
- “Add an Oracle ILOM User Account (SNMP)” on page 236
- “Display Oracle ILOM User Accounts (SNMP)” on page 219

Managing Other Aspects With Oracle ILOM (SNMP)

These tasks help you manage the Oracle ILOM services.

- “Set the HTTP Service State (SNMP)” on page 238
- “Set the HTTPS Service State (SNMP)” on page 238
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 239
- “Enable Alerts to Send PETs (SNMP)” on page 239
- “Enable Alerts to Send Email Alerts (SNMP)” on page 240
- “Modify Alert SNMP Version (SNMP)” on page 241
- “Disable Alerts (SNMP)” on page 242

Related Information

- “Managing Other Aspects With Oracle ILOM (CLI)” on page 98
- “Managing Other Aspects With Oracle ILOM (Web)” on page 154
- “Performing General Tasks (SNMP)” on page 228

▼ 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 86
- “Disable the HTTP Service (CLI)” on page 87
- “Enable the HTTP Service (Web)” on page 143
- “Disable the HTTP Service (Web)” on page 144
- “Display the HTTP Service Status (SNMP)” on page 214

▼ 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 88
- “Disable the HTTPS Service (CLI)” on page 90
- “Enable the HTTPS Service (Web)” on page 145
- “Disable the HTTPS Service (Web)” on page 147
- “Display the HTTPS Service Status (SNMP)” on page 215

▼ 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"
```

where:

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

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 99
- “Enable Alerts to Send SNMP Traps (Web)” on page 155
- “Enable Alerts to Send PETs (SNMP)” on page 239
- “Enable Alerts to Send Email Alerts (SNMP)” on page 240
- “Display the Alert Properties (SNMP)” on page 217
- “Disable Alerts (SNMP)” on page 242

▼ 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"
```

where:

- *number* is the number of the alert.

- *IP_address* is the IP address of the host to receive the trap.

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::ilomCtrlAlertDestinationPort.2 = 162
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = 4
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = 3
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)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = INTEGER: ipmipet(3)
$
```

Related Information

- “Enable Alerts to Send PETs (CLI)” on page 100
- “Enable Alerts to Send PETs (Web)” on page 156
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 239
- “Enable Alerts to Send Email Alerts (SNMP)” on page 240
- “Display the Alert Properties (SNMP)” on page 217
- “Disable Alerts (SNMP)” on page 242

▼ 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"
```

where:

- *number* is the number of the alert.
- *email_address* is the fully qualified email address to receive the trap.

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::ilomCtrlAlertSeverity.2 = 4
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertEmailCustomSender.2 = "ilom-36pl-hostname"
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertDestinationEmail.2 = STRING: user@yahoo.com
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertType.2 = INTEGER: email(1)
```

```
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSeverity.2 = INTEGER: minor(4)
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertEmailCustomSender.2 = STRING:
    ilom-36pl-hostname
$
```

Related Information

- “Enable Alerts to Send Email Alerts (CLI)” on page 101
- “Enable Alerts to Send Email Alerts (Web)” on page 156
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 239
- “Enable Alerts to Send PETs (SNMP)” on page 239
- “Display the Alert Properties (SNMP)” on page 217
- “Disable Alerts (SNMP)” on page 242

▼ Modify Alert SNMP Version (SNMP)

- From the SNMP client, type:

```
$ snmpset -v2c -c public mc_IP
SUN-ILOM-CONTROL-MIB::ilomCtrlAlertSNMPVersion.number = 2
```

where *number* is the number of the alert. For example, to modify alert 2:

```
$ 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 Management Protocols Guide*, 820-6413, for more information.

Related Information

- “Enable Alerts to Send SNMP Traps (SNMP)” on page 239
- “Enable Alerts to Send PETs (SNMP)” on page 239
- “Enable Alerts to Send Email Alerts (SNMP)” on page 240
- “Display the Alert Properties (SNMP)” on page 217
- “Disable Alerts (SNMP)” on page 242

▼ 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 102
- “Disable Alerts (Web)” on page 157
- “Display the Alert Properties (SNMP)” on page 217
- “Enable Alerts to Send SNMP Traps (SNMP)” on page 239
- “Enable Alerts to Send PETs (SNMP)” on page 239
- “Enable Alerts to Send Email Alerts (SNMP)” on page 240
- “Modify Alert SNMP Version (SNMP)” on page 241

Administering Hardware (IPMI)

These topics describe how to administer the hardware of Oracle's Sun Datacenter InfiniBand Switch 36 using the `ipmitool` utility.

- “[ipmitool Overview](#)” on page 243
- “[Display the Sensors' State \(IPMI\)](#)” on page 244
- “[Display the Sensor Information \(IPMI\)](#)” on page 245
- “[Display the System Event Log \(IPMI\)](#)” on page 247
- “[Display FRU ID Information \(IPMI\)](#)” on page 248

Related Information

- “[Administering Oracle ILOM \(CLI\)](#)” on page 33
 - “[Administering Oracle ILOM \(Web\)](#)” on page 113
 - “[Using the Fabric Monitor](#)” on page 163
 - “[Administering Oracle ILOM \(SNMP\)](#)” on page 183
 - “[Understanding Oracle ILOM Commands](#)” on page 251
-

ipmitool Overview

The Oracle ILOM implementation on the management controller within the switch provides an IPMI server, which can communicate the state of the switch hardware through the Intelligent Platform Management Interface.

An IPMI client is required to interface with the Oracle ILOM IPMI stack on the management controller. You must have administrator privileges to interface with the stack.

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 Management Protocols Guide*, 820-6413, available online at:

(<http://docs.sun.com/app/docs/prod/int.lights.mgr30>)

▼ Display the Sensors' State (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 44
- “Display the Aggregate Sensors State (Web)” on page 118
- “Display the Aggregate Sensors State (SNMP)” on page 189
- “Display the Sensor Alarm State (SNMP)” on page 202
- “Display the Sensor Information (IPMI)” on page 245

▼ 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 Sensors’ State (IPMI)” on page 244
- “Display the Sensor Alarm State (SNMP)” on page 202

▼ 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 53
- “Display the Oracle ILOM Event Log (Web)” on page 122
- “Display the Oracle ILOM Event Log (SNMP)” on page 212

▼ 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        : 1.3.3-1

FRU Device Description : SYS (ID 4)
Product Manufacturer   : Sun Microsystems
Product Name           : Sun Datacenter InfiniBand Switch 36
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 36
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) – The Oracle ILOM firmware
- SYS (ID 4) – The management controller
- PSU0 (ID 5) – Power supply 0

- PSU1 (ID 6) – Power supply 1
- MB (ID 7) – The motherboard

Related Information

- “Display Switch FRU ID (CLI)” on page 65
- “Display Power Supply FRU ID (CLI)” on page 66
- “Display System Component FRU ID (Web)” on page 129
- “Display Switch FRU ID (SNMP)” on page 221
- “Display Power Supply FRU ID (SNMP)” on page 222

▼ Display Switch Status LED States (IPMI)

- From the IPMI client, type:

```
$ ipmitool -v -I lan -H mc_IP -U ilom-admin sunoem sbled get  
Password: password  
I_POWER | ON  
I_ATTENTION | OFF  
I_LOCATOR | OFF  
$
```

In the output, the Power LED is on, the Attention and Locator LEDs are off.

Related Information

- “Display Switch Status LEDs States (CLI)” on page 43
- “Display the Switch Status LEDs States (Web)” on page 118
- “Enable the Locator LED (IPMI)” on page 250
- “Disable the Locator LED (IPMI)” on page 250

▼ 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 71
- “Enable the Locator LED (Web)” on page 133
- “Disable the Locator LED (IPMI)” on page 250
- “Display Switch Status LED States (IPMI)” on page 249

▼ 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 72
- “Disable the Locator LED (Web)” on page 134
- “Enable the Locator LED (IPMI)” on page 250
- “Display Switch Status LED States (IPMI)” on page 249

Understanding Oracle ILOM Commands

Only the `ilom-admin` user of the Oracle ILOM shell can run all of the Oracle ILOM commands. The format of the Oracle ILOM commands is typically as follows:

`-> command [option] [target] [property=value] ...`

where:

- *command* is the command being issued.
- *option* is any option to that command.
- *target* is the target and path to act upon.
- *property* is the property of the target to change.
- *value* is what to change the property to.

Command Syntax	Links
<code>cd [-default] [target]</code>	“cd Command” on page 252
<code>create [target] [property=value property=value ...]</code>	“create Command” on page 253
<code>delete [-script] [target]</code>	“delete Command” on page 254
<code>dump [-destination URI] [target]</code>	“dump Command” on page 255
<code>exit</code>	“exit Command (ILOM)” on page 256
<code>help [-o terse verbose] [command legal targets target target property]</code>	“help Command (ILOM)” on page 257
<code>load [-o verbose] [-script]-source URI[target]</code>	“load Command” on page 258
<code>reset [-script] [target]</code>	“reset Command” on page 259
<code>set [target]property=value [property=value...]</code>	“set Command” on page 260
<code>show [-d targets properties commands all][-l 1 2 3...255 all] [-o table] [target] [property property...]</code>	“show Command” on page 261
<code>version</code>	“version Command (ILOM)” on page 263

Related Information

- *Switch Command Reference*
 - “Administering Oracle ILOM (CLI)” on page 33
 - “Administering Oracle ILOM (Web)” on page 113
 - “Using the Fabric Monitor” on page 163
 - “Administering Oracle ILOM (SNMP)” on page 183
 - “Administering Hardware (IPMI)” on page 243
-

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 254

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 253

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 258

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

- *Switch 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

- *Switch 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
<code>-o</code>	Enables verbose output.
<code>-script</code>	Skips confirmation of the action and proceeds as if <code>y</code> 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 255

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 260](#)
-

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 261
 - “[reset Command](#)” on page 259
-

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. <ul style="list-style-type: none">• 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 260

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

- *Switch Reference*, `version` command

Index

A

accessing
 ILOM
 from CLI, 34
 from web, 116
 NET MGT port, 34
 SER MGT port, 35
acquiring firmware
 ILOM, 28
 switch, 105
adding
 from CLI
 ILOM user, 84
 SNMP communities, 95
 SNMP users, 93
 from SNMP
 ILOM user, 236
from web
 ILOM user, 141
 SNMP communities, 151
 SNMP users, 149
administering
 hardware from IPMI, 243
 ILOM
 from CLI, 33
 from SNMP, 183
 from web, 113
aggregate sensor states, 45
alerts
 from CLI
 disabling, 102
 displaying, 62
 send emails, 101
 send PETs, 100
 send traps, 99
 from SNMP
 disabling, 242

displaying, 217
send emails, 240
send PETs, 239
send traps, 239
SNMP version, 241
from web
 disabling, 157
 displaying, 127
 send emails, 156
 send PETs, 156
 send traps, 155

B

backing up
 configuration information, 76
from CLI
 configuration, 75
 SNMP MIBs, 97
from web
 configuration, 136
 SNMP MIBs, 153
board level voltages, 48

C

cd command, 252
changing password
 ILOM user
 from CLI, 84
 from web, 142
chassis
 monitoring, 177
clear
 ILOM event log
 from CLI, 72
 from SNMP, 231
 from web, 134
CLI

acquiring switch firmware, 105
adding
 ILOM user, 84
 SNMP communities, 95
 SNMP users, 93
backing up
 configuration, 75
 SNMP MIBs, 97
changing ILOM password, 84
clearing ILOM event log, 72
configuring
 SMTP client, 74
creating
 snapshot, 78
deleting
 ILOM user, 85
 SNMP communities, 96
 SNMP users, 95
disabling
 alerts, 102
 HTTP, 87
 HTTPS, 90
 log hosts, 73
 SNMP, 98
displaying
 aggregate sensors state, 44
 alerts, 62
 board voltages, 47
 CLI timeout, 65
 date, 42
 fan speed, 50
 fan status, 50
 help, 60
 HTTP status, 54
 HTTPS status, 55
 ILOM event log, 53
 ILOM sessions, 52
 ILOM users, 63
 ILOM version, 67
 internal temperatures, 49
 IPMI status, 58
 log hosts, 63
 network management configuration, 64
 NTP servers, 59
 other aspects, 60
 power supply FRU ID, 66
 power supply status, 46
 service status, 54
 SMTP client status, 58, 215
 SNMP communities, 57
 SNMP status, 56
 SNMP users, 56
 SSL certificates, 55
 switch FRU ID, 65
 switch status LEDs, 43
 system identity, 68
 target properties, 61
enabling
 alerts send emails, 101
 alerts send PETs, 100
 alerts send traps, 99
 HTTP, 86
 HTTPS, 88
 log hosts, 73
 SNMP, 91
interface overview, 33
managing
 HTTP, 86
 HTTPS, 88
 other aspects, 98
 SNMP, 91
modifying
 SNMP communities, 96
 SNMP users, 94
performing
 daily tasks, 42
 general tasks, 69
 ILOM user tasks, 83
restoring configuration, 77
setting
 CLI timeout, 103
 date, 70
 log hosts, 73
 network management configuration, 80
 NTP servers, 70
 SNMP configuration, 92
 system identity, 82
snapshot dataset information, 79
SSL certificate
 installing, 89
 removing, 89
upgrading switch firmware, 104, 107
command
 create, 84, 93, 95
 delete, 85, 95, 96
 dump, 97
 help, 60, 61
 ILOM

cd, 252
create, 253
delete, 254
dump, 255
exit, 256
help, 257
load, 258
reset, 259
set, 260
show, 261
version, 263
load, 89, 107
SNMP, 184
version, 30, 67

configuring SMTP client
from CLI, 74
from SNMP, 232
from web, 135

connector
status window
InfiniBand, 167

controlling
ILOM targets
from CLI, 69
from SNMP, 228
from web, 131

create command, 84, 93, 95, 253

creating
snapshot
from CLI, 78
from web, 138

D

date
displaying
from CLI, 42
from web, 118
setting
from CLI, 70
from SNMP, 229
from web, 132

delete command, 85, 95, 96, 254

deleting
from CLI
ILOM user, 85
SNMP communities, 96
SNMP users, 95

from web

ILOM user, 142
SNMP communities, 153
SNMP users, 151

disabling
from CLI
alerts, 102
HTTP, 87
HTTPS, 90
log hosts, 73
SNMP, 98

from SNMP
alerts, 242
HTTP, 238
HTTPS, 238
log hosts, 232
NTP, 230

from web
alerts, 157
HTTP, 144
HTTPS, 147
log hosts, 135
SNMP, 154

Locator LED
from CLI, 72
from IPMI, 250
from web, 134

displaying
entity numbers, 203

firmware
ILOM, 67, 130

from CLI
aggregate sensors state, 44
alerts, 62
board voltages, 47
CLI timeout, 65
date, 42
fan speed, 50
fan status, 50
help, 60
HTTP status, 54
HTTPS status, 55
ILOM event log, 53
ILOM sessions, 52
ILOM users, 63
ILOM version, 67
internal temperatures, 49
IPMI status, 58
log hosts, 63
network management configuration, 64

NTP servers, 59
other aspects, 60
power supply FRU ID, 66
power supply status, 46
service status, 54
SMTP client status, 58, 215
SNMP communities, 57
SNMP status, 56
SNMP users, 56
SSL certificates, 55
switch FRU ID, 65
switch status LEDs, 43
system identity, 68
target properties, 61

from IPMI
aggregate sensor information, 245
aggregate sensor state, 244
FRU ID, 248
switch status LEDs, 249
system event log, 247

from SNMP
aggregate sensor state, 189, 202
alerts, 217
board voltages, 192
date and time, 188
fan speed, 199
fan status, 199
HTTP status, 214
HTTPS status, 215
ILOM event log, 212
ILOM sessions, 211
ILOM users, 219
ILOM version, 227
internal temperatures, 196
log hosts, 219
network management configuration, 220
NTP servers, 216
NTP state, 216
other aspects, 217
physical entities, 225
physical entity classes, 225
physical entity descriptions, 225
physical entity information, 226
power supply FRU ID, 222
power supply status, 190
switch FRU ID, 221
system components, 225
system identity, 228
time zone, 189

from web
aggregate sensor, 118
alerts, 127
board voltages, 120
CLI timeout, 129
component FRU ID, 129
date, 118
fan speed, 121
fan status, 121
HTTP status, 123
HTTPS status, 123
ILOM event log, 122
ILOM sessions, 121
ILOM users, 128
ILOM version, 130
internal temperatures, 120
IPMI status, 125
log hosts, 128
network management configuration, 129
NTP servers, 126
other aspects, 127
power supply status, 119
service status, 122
SMTP client status, 126
SNMP communities, 125
SNMP status, 124
SNMP users, 124
SSL certificates, 124
system identity, 130

displaying from Fabric Monitor
all connectors
bandwidth, 178
I4 mapping, 178
link status, 178
peer information, 178
presence, 178
battery voltage, 177
chassis
FRU ID, 177
part number, 177
serial number, 177
temperature, 177
connector
errors, 178
FRU ID, 178
GUID, 178
LID, 178
link status, 178
name and type, 178

peer information, 178
throughput, 178
fan
 speed, 177
 status, 177
I4
 bandwidth, 177, 181
 firmware, 177
 GUID, 177
 LID, 177
 link status, 181
 mapping, 181
 peer information, 181
 temperature, 177
 voltage, 177
main board voltage, 177
management controller
 BIOS, 177
 firmware, 177
 serial number, 177
power supply status, 177
Subnet Manager
 algorithm, 177
 GUID, 177
 LID, 177
 priority, 177
 status, 177
dump command, 97, 255

E

email
 from CLI, 101
 from SNMP, 240
 from web, 156
enabling
 from CLI
 alerts send emails, 101
 alerts send PETs, 100
 alerts send traps, 99
 HTTP, 86
 HTTPS, 88
 log hosts, 73
 SNMP, 91
 from SNMP
 alerts send emails, 240
 alerts send PETs, 239
 alerts send traps, 239
 HTTP, 238

HTTPS, 238
log hosts, 232
NTP, 230
from web
 alerts send emails, 156
 alerts send PETs, 156
 alerts send traps, 155
 HTTP, 143
 HTTPS, 145
 log hosts, 135
 SNMP, 148
Locator LED
 from CLI, 71
 from IPMI, 250
 from web, 133
entity information, 203
entity numbers, 203
 descriptions, 207
 displaying, 203
 Oracle ILOM targets, 205
exit command, 256

F

Fabric Monitor
 accessing, 163
all connectors
 bandwidth, 178
 I4 mapping, 178
 link status, 178
 peer information, 178
 presence, 178
battery voltage, 177
chassis
 FRU ID, 177
 part number, 177
 serial number, 177
 temperature, 177
connector
 errors, 178
 FRU ID, 178
 GUID, 178
 LID, 178
 link status, 178
 name and type, 178
 peer information, 178
 throughput, 178
control panel, 175
fan

speed, 177
status, 177
features, 164

I4
bandwidth, 177, 181
firmware, 177
GUID, 177
LID, 177
link status, 181
mapping, 181
peer information, 181
temperature, 177
voltage, 177

main board voltage, 177

management controller
BIOS, 177
firmware, 177
serial number, 177

monitoring
chassis, 177
InfiniBand, 178
switch chip, 181

power supply status, 177

Subnet Manager
algorithm, 177
GUID, 177
LID, 177
priority, 177
status, 177
using, 163

firmware
acquiring, 28
management controller
delivery, 27
installing, 30
overview, 104

FRU ID
component, 129, 248
power supply, 66, 222, 248
switch, 65, 221, 248

H

help command, 60, 61, 257

HTTP
from CLI
disabling, 87
enabling, 86
managing, 86

from web
disabling, 144
enabling, 143
managing, 143

HTTPS
from CLI
disabling, 90
enabling, 88
managing, 88

from web
disabling, 147
enabling, 145
managing, 145

I

identity
displaying
from CLI, 68
from SNMP, 228
from web, 130

setting
from CLI, 82
from SNMP, 235
from web, 140

ILOM
accessing
from CLI, 34
from web, 116
NET MGT port, 34
SER MGT port, 35

BUI, 113

CLI, 33

command
help, 60
reference, 251

displaying from CLI
event log, 53
sessions, 52
users, 63
version, 67

displaying from SNMP
event log, 212
sessions, 211
users, 219
version, 227

displaying from web
event log, 122
sessions, 121

users, 128
version, 130

firmware
acquiring, 28
installing, 27, 30

from CLI
adding user, 84
administering, 33
changing password, 84
controlling targets, 69
deleting user, 85
event log clearing, 72
interface, 33
user tasks, 83

from SNMP
adding user, 236
administering, 183
controlling, 228
deleting user, 237
event log clearing, 231
interface, 183
monitoring, 187
user tasks, 235

from web
adding user, 141
administering, 113
changing password, 142
controlling targets, 131
deleting user, 142
event log clearing, 134
interface, 113
user tasks, 141

overview, 1

properties
fan, 11
general, 20
general system, 9
indicator, 12
power supply, 13
service, 22
temperature, 15
user, 24
voltage, 17

supported features, 2

switching
between shells, 37
from Linux, 41
to Linux, 40

targets

description, 5
overview, 4
understanding, 4
understanding, 1

InfiniBand
connector status, 167
monitoring, 178

installing
ILOM firmware, 27, 30
SSL certificate
from CLI, 89
from web, 146

internal temperature sensor, 50

IPMI, 243
displaying
aggregate sensor information, 245
aggregate sensor state, 244
FRU ID, 248
switch status LEDs, 249
system event log, 247

interface, 243
overview, 243

`ipmitool` utility, 243, 244, 245, 247, 248

L

load command, 89, 107, 258

Locator LED

disabling
from CLI, 72
from IPMI, 250
from web, 134

enabling
from CLI, 71
from IPMI, 250
from web, 133

M

management controller

firmware
delivery, 27
installing, 30

managing

from CLI
HTTP, 86
HTTPS, 88
other aspects, 98
SNMP, 91

from SNMP
 other aspects, 237
from web
 HTTP, 143
 HTTPS, 145
 other aspects, 154
 SNMP, 147
modifying
 from CLI
 SNMP communities, 96
 SNMP users, 94
 from SNMP
 alerts, 241
 from web
 SNMP communities, 152
 SNMP users, 150
monitoring
 chassis, 177
 ILOM targets
 from CLI, 41
 from SNMP, 187
 from web, 117
 InfiniBand, 178
parameters and status, 176
switch chip, 181

N

network management configuration
 displaying
 from CLI, 64
 from SNMP, 220
 from web, 129
 setting
 from CLI, 80
 from web, 139
NTP servers
 displaying
 from CLI, 59
 from SNMP, 216
 from web, 126
 setting
 from CLI, 70
 from SNMP, 231
 from web, 132

O

overview
 CLI, 33

firmware, 104
ILOM, 1
 commands, 33
 SNMP interface, 183
 targets, 4
IPMI, 243
web interface, 113

P

password, 84, 142
performing
 from CLI
 daily tasks, 42
 general tasks, 69
 ILOM user tasks, 83
 from SNMP
 daily tasks, 188
 general tasks, 228
 ILOM user tasks, 235
 from web
 daily tasks, 117
 general tasks, 131
 ILOM user tasks, 141
PET
 from CLI, 100
 from SNMP, 239
 from web, 156

R

rear panel diagram, 166
removing
 SSL certificate
 from CLI, 89
 from web, 146
reset command, 89, 259
restoring configuration
 from CLI, 77
 from web, 137

S

set command, 260
setting
 from CLI
 CLI timeout, 103
 date, 70
 log hosts, 73
 network management configuration, 80

NTP servers, 70
SNMP configuration, 92
system identity, 82
from SNMP
 date, 229
 HTTP state, 238
 HTTPS state, 238
 log hosts, 232
 network parameters, 234
 NTP servers, 231
 NTP state, 230
 system identity, 235
 time zone, 230
from web
 CLI timeout, 158
 date, 132
 log hosts, 135
 network management configuration, 139
 NTP servers, 132
 SNMP configuration, 148
 system identity, 140
 time zone, 133
show command, 261
SMTP client
 configuring
 from CLI, 74
 from SNMP, 232
 from web, 135
 displaying status, 215
snapshot dataset information
 CLI, 79
 web, 139
SNMP
 administering ILOM, 183
 checking services, 214
 clearing ILOM event log, 231
 commands, 184
 understanding, 184
 V1 format, 185
 V2c format, 185
 V3 format, 186
 configuring
 SMTP client, 232
 disabling
 alerts, 242
 HTTP, 238
 HTTPS, 238
 log hosts, 232
 enabling
 aggregate sensor state, 189, 202
 alarms, 217
 board voltages, 192
 date and time, 188
 fan speed, 199
 fan status, 199
 HTTP status, 214
 HTTPS status, 215
 ILOM event log, 212
 ILOM sessions, 211
 ILOM users, 219
 ILOM version, 227
 internal temperatures, 196
 log hosts, 219
 network management configuration, 220
 NTP servers, 216
 NTP state, 216
 other aspects, 217
 physical entities, 225
 physical entity classes, 225
 physical entity descriptions, 225
 physical entity information, 226
 power supply FRU ID, 222
 power supply status, 190
 switch FRU ID, 221
 system components, 225
 system identity, 228
 time zone, 189
 from CLI
 adding communities, 95
 adding users, 93
 backing up MIBs, 97
 deleting communities, 96
 deleting users, 95
 disabling, 98
 enabling, 91
 managing, 91
 modifying communities, 96
 modifying users, 94

setting configuration, 92
from web
 adding communities, 151
 adding users, 149
 backing up MIBs, 153
 deleting communities, 153
 deleting users, 151
 disabling, 154
 enabling, 148
 managing, 147
 modifying communities, 152
 modifying users, 150
 setting configuration, 148

ILOM
 controlling, 228
 monitoring, 187

ILOM user
 adding, 236
 deleting, 237

managing other aspects, 237

modify alerts, 241

overview, 183

performing
 daily tasks, 188
 general tasks, 228
 user tasks, 235

setting
 date, 229
 HTTP state, 238
 HTTPS state, 238
 log hosts, 232
 network parameters, 234
 NTP servers, 231
 NTP state, 230
 system identity, 235
 time zone, 230

SSL certificate
from CLI
 installing, 89
 removing, 89
from web
 installing, 146
 removing, 146

switch
from CLI
 configuration back up, 75
 configuration restore, 77
from web
 configuration back up, 136

 configuration restore, 137
LEDs
 from CLI, 43
 from IPMI, 249

switch chip
 monitoring, 181

switching
 between shells, 37
 ILOM to Linux, 40
 Linux to ILOM, 41

T

tab

 IB Performance, 172
 IB Port Map, 173
 Sensor Info, 171
 Subnet Manager, 174
 System Info, 169

targets, 5

 controlling
 from CLI, 69
 from SNMP, 228
 from web, 131

 monitoring
 from CLI, 41
 from SNMP, 187
 from web, 117

 properties
 displaying, 61
 fan, 11
 general, 20
 general system, 9
 indicator, 12
 power supply, 13
 service, 22
 temperature, 15
 user, 24
 voltage, 17

trap

 from CLI, 99
 from SNMP, 239
 from web, 155

U

understanding
 ILOM, 1
 commands, 251
 targets, 4

SNMP commands, 184

upgrading

switch firmware

from CLI, 104, 107

from web, 158, 159

V

version command, 30, 67, 263

W

web

adding

ILOM user, 141

SNMP communities, 151

SNMP users, 149

backing up

configuration, 136

SNMP MIBs, 153

changing ILOM password, 142

clearing ILOM event log, 134

configuring

SMTP client, 135

creating

snapshot, 138

deleting

ILOM user, 142

SNMP communities, 153

SNMP users, 151

disabling

alerts, 157

HTTP, 144

HTTPS, 147

log hosts, 135

SNMP, 154

displaying

aggregate sensor, 118

alerts, 127

board voltages, 120

CLI timeout, 129

component FRU ID, 129

date, 118

fan speed, 121

fan status, 121

HTTP status, 123

HTTPS status, 123

ILOM event log, 122

ILOM sessions, 121

ILOM users, 128

ILOM version, 130

internal temperatures, 120

IPMI status, 125

log hosts, 128

network management configuration, 129

NTP servers, 126

other aspects, 127

power supply status, 119

service status, 122

SMTP client status, 126

SNMP communities, 125

SNMP status, 124

SNMP users, 124

SSL certificates, 124

system identity, 130

enabling

alerts send emails, 156

alerts send PETs, 156

alerts send traps, 155

HTTP, 143

HTTPS, 145

log hosts, 135

SNMP, 148

interface overview, 113

managing

HTTP, 143

HTTPS, 145

other aspects, 154

SNMP, 147

modifying

SNMP communities, 152

SNMP users, 150

performing

daily tasks, 117

general tasks, 131

ILOM user tasks, 141

restoring configuration, 137

setting

CLI timeout, 158

date, 132

log hosts, 135

network management configuration, 139

NTP servers, 132

SNMP configuration, 148

system identity, 140

time zone, 133

snapshot dataset information, 139

SSL certificate

installing, 146

removing, 146
upgrading switch firmware, 158, 159