Managing the Server

- System Information, on page 1
- Monitoring and Diagnostics, on page 9
- General Settings, on page 14
- Power Management, on page 15
- Configuration Management, on page 16

System Information

Viewing System Inventory

Procedure

Step 1 From the **Navigation Pane**, click **System Inventory**.

Step 2 You can view the following inventories:

Table 1: System Tab

Name	Description
Name column	The designated name of the server.
Description column	A brief explanation or summary of the server.
Model column	The model identifier of the server hardware.
IndicatorLED column	The current status of the indicator LED on the server.
Manufacturer column	The name of the company that manufactured the server.
PowerState column	The current power status of the server.
SerialNumber column	A unique alphanumeric identifier for the server unit.
PartNumber column	The manufacturer part number for the server.

Name	Description
SystemType column	The type or category of the server.
AssetTag column	A user-defined tag for the server.
BiosVersion column	The version of the BIOS firmware installed on the server.
UUID column	The Universal Unique Identifier for the server.
State column	The current operational state or health status of the server.

Table 2: Processor Tab

Name	Description
Id column	A unique identifier for the processor.
Manufacturer column	The name of the company that manufactured the processor.
MaxSpeedMHz column	The maximum clock speed of the processor, measured in megahertz (MHz).
ProcessorArchitecture column	The architecture of the processor.
ProcessorType column	The type or model of the processor.
Socket column	The physical socket on the motherboard where the processor is installed.
EffectiveFamily column	The effective family code of the processor, used for identification.
TotalCores column	The total number of processing cores within the processor.
State column	The current operational state or health status of the processor.

Table 3: Memory Controller Tab

Name	Description
Socket column	The physical socket on the motherboard associated with the memory controller.
MemCtrl column	The identifier for the specific memory controller.
Channel column	The memory channel to which the memory module is connected.
Slot column	The physical slot number where the memory module is installed.
Id column	A unique identifier for the memory module.

Name	Description
Capacity MiB column	The total capacity of the memory module, measured in mebibytes (MiB).
Manufacturer column	The name of the company that manufactured the memory module.
Serial Number column	A unique serial number for the memory module.
Part Number column	The manufacturer's part number for the memory module.
State column	The current operational state or health status of the memory module.
OperatingSpeed Mhz column	The current operating speed of the memory module, measured in megahertz (MHz).
Memory Type column	The type of memory technology used (e.g., DDR4, DDR5).
AllowedSpeed MHz column	The maximum supported speed of the memory module, measured in megahertz (MHz).

Table 4: Baseboard Tab

Name	Description
Name column	The designated name of the baseboard.
Description column	A brief explanation or summary of the baseboard.
FirmwareVersion column	The version of the firmware installed on the baseboard.
Model column	The model identifier of the baseboard.
State column	The current operational state or health status of the baseboard.
PowerState column	The current power status of the baseboard.

Table 5: Power Tab

Name	Description
Power Control Info	
Name column	The designated name for the power consumption metric.
AvgConsumedWatts column	The average power consumed, measured in watts.
MaxConsumedWatts column	The maximum power consumed, measured in watts.
MinConsumedWatts column	The minimum power consumed, measured in watts.

Name	Description
IntervalInMinutes column	The time interval, in minutes, over which power consumption is measured.
Voltage Info	
Name column	The designated name of the power-related component or sensor.
LUN column	The Logical Unit Number associated with the power component.
SensorId column	A unique identifier for the power sensor.
State column	The current operational state or health status of the power component.
MinReadingRange column	The minimum value of the normal operating range for the sensor reading.
MaxReadingRange column	The maximum value of the normal operating range for the sensor reading.
UNR column	Upper Non-Recoverable threshold for the sensor reading.
UCR column	Upper Critical threshold for the sensor reading.
UNC column	Upper Non-Critical threshold for the sensor reading.
LNC column	Lower Non-Critical threshold for the sensor reading.
LCR column	Lower Critical threshold for the sensor reading.
LNR column	Lower Non-Recoverable threshold for the sensor reading.

Table 6: Thermal Tab

Name	Description
Fan Info	
Name column	The designated name of the fan.
MemberId column	A unique identifier for the fan within its group.
PhysicalContext column	Describes the physical location or context of the fan.
State column	The current operational state or health status of the fan.
Reading(RPM) column	The current rotational speed of the fan, measured in revolutions per minute (RPM).
MinReadingRange column	The minimum value of the normal operating range for the fan speed.

Name	Description
MaxReadingRange column	The maximum value of the normal operating range for the fan speed.
UF column	Upper Fatal threshold for the fan speed.
UC column	Upper Critical threshold for the fan speed.
UNC column	Upper Non-Critical threshold for the fan speed.
LNC column	Lower Non-Critical threshold for the fan speed.
LC column	Lower Critical threshold for the fan speed.
LF column	Lower Fatal threshold for the fan speed.
Temperature Info	
Name column	The designated name of the temperature sensor.
MemberId column	A unique identifier for the temperature sensor within its group.
PhysicalContext column	Describes the physical location or context of the temperature sensor.
State column	The current operational state or health status of the temperature sensor.
Reading(Celsius) column	The current temperature reading, measured in Celsius.
UF column	Upper Fatal threshold for the temperature reading.
UC column	Upper Critical threshold for the temperature reading.
UNC column	Upper Non-Critical threshold for the temperature reading.
LNC column	Lower Non-Critical threshold for the temperature reading.
LC column	Lower Critical threshold for the temperature reading.
LF column	Lower Fatal threshold for the temperature reading.

The PCIE Function tab displays a hierarchical tree view of Peripheral Component Interconnect Express (PCIe) devices and their functions installed in the server. Each entry in the tree represents a PCIe device or bridge, identified by its bus: device, function address and a descriptive type.

Click on a device entry in the tree to reveal a drop-down menu containing detailed information about that specific PCIe function:

Table 7: PCIe Function Details

Name	Description
Id	A unique identifier for the PCIe function.

Name	Description
Vendor Id	The hexadecimal identifier for the manufacturer of the PCIe device.
Device Id	The hexadecimal identifier for the specific device model from the vendor.
Class Code	A hexadecimal code indicating the generic function of the device.
Revision Id	The revision number of the device.
Sub System Vendor Id	The hexadecimal identifier for the sub-system vendor.
Sub System Id	The hexadecimal identifier for the sub-system device.
State	The current operational state of the PCIe function.

Table 8: Storage Tab

Name	Description
Name column	The designated name of the storage device.
SerialNumber column	A unique alphanumeric identifier for the storage device.
Manufacturer column	The name of the company that manufactured the storage device.
Location column	The physical location or slot of the storage device within the server.
Protocol column	The communication protocol used by the storage device.
Model column	The model identifier of the storage device.
Revision column	The firmware or hardware revision of the storage device.
EncryptionStatus column	Indicates whether data encryption is enabled or disabled on the storage device.
MediaType column	The type of storage medium (e.g., HDD, SSD, NVMe).
State column	The current operational state or health status of the storage device.

Table 9: Network Tab

Name	Description
Name column	The designated name of the Network Interface Controller.
Model column	The model identifier of the Network Interface Controller.

Name	Description
MAC Address column	The unique Media Access Control address of the Network Interface Controller.
BDF column	The Bus, Device, Function address of the Network Interface Controller.

Viewing FRU Information

This task describes how to view detailed information about Field Replaceable Units (FRUs) installed in the server. FRU information includes identification details for various hardware components, which is useful for inventory management, troubleshooting, and ordering replacement parts.

Procedure

Step 1 From the **Navigation Pane**, click **FRU Information**.

Step 2 In the **Available FRU Devices** section, select a FRU device from the **FRU Device ID** drop-down list.

The **FRU Device Name** field automatically updates to display the name of the selected device.

Detailed information about the selected FRU device is displayed in two sections: **Board Information** and **Product Information**.

Step 3 Review the **Board Information** table for details about the board:

Table 10: Board Information

Name	Description
Board Information Area Format Version	The format version of the board information area.
Language	The language code used for the board information.
Manufacture Date Time	The date and time when the board was manufactured.
Board Manufacturer	The name of the company that manufactured the board.
Board Product Name	The product name of the board.
Board Serial Number	A unique serial number for the board.
Board Part Number	The part number for the board.
FRU File ID	The identifier for the FRU file associated with the board.
Board Extra	Additional information or notes about the board.

Step 4 Review the **Product Information** table for details about the overall server product:

Table 11: Product Information

Name	Description
Product Information Area Format Version	The format version of the product information area.
Language	The language code used for the product information.
Product Manufacturer	The name of the company that manufactured the product.
Product Name	The product name of the server.
Product Part Number	The part number for the product.
Product Version	The version of the product.
Product Serial Number	A unique serial number for the product.
Asset Tag	A customizable tag for asset tracking.
FRU File ID	The identifier for the FRU file associated with the product.
Product Extra	Additional information or notes about the product.

What to do next

Use the displayed FRU information for hardware identification, inventory management, or troubleshooting purposes.

Viewing GPU Information

This task describes how to view detailed information about Graphics Processing Units (GPUs) installed in the server. This information includes summary details for available graphic boards and individual specifications for each GPU.

Procedure

Step 1 From the **Navigation Pane**, click **FRU Information**.

Step 2 Review the **Available Graphic Boards** table for summary information:

Table 12: Available Graphic Boards Summary

Name	Description
Part Number column	Identifies the part number for the graphic board.
Serial Number column	A unique serial number assigned to the graphic board for identification.

Name	Description
Total GPU column	Indicates the total number of Graphics Processing Units present on the board.
Available GPU column	Shows the number of Graphics Processing Units currently available for use or allocation.

Step 3 Review the individual GPU information sections for detailed specifications:

The page displays multiple sections, each representing a specific GPU. Each section provides the following details:

Table 13: Individual GPU Details

Name	Description
GPU Marketing Name	The commercial name of the Graphics Processing Unit.
GPU PCI VID	The PCI Vendor ID of the Graphics Processing Unit.
GPU PCI DID	The PCI Device ID of the Graphics Processing Unit.
GPU GUID	A globally unique identifier for the Graphics Processing Unit.
VBIOS Version	The version of the Video BIOS installed on the Graphics Processing Unit.
Inforom Version	The version of the Inforom firmware on the Graphics Processing Unit.
GPU Require Reset	Indicates whether the Graphics Processing Unit requires a reset for certain operations or changes.

What to do next

Use the displayed GPU information for hardware identification, inventory management, or performance monitoring.

Monitoring and Diagnostics

Viewing Critical Sensor Status

This task describes how to view the detailed status of individual critical sensors, including their live readings, graphs, and threshold information, particularly for critical sensors.

Procedure

Step 1 From the **Navigation Pane**, click **Sensor**.

Step 2 Under the **Critical Sensors** section, click on a specific sensor icon.

A new page opens, displaying detailed information for the selected sensor.

Step 3 You can review the sensor details on the opened page.

The left section displays a graphical representation of live sensor readings over time. The Y-axis represents the sensor value and the X-axis represents time.

The right section presents a table with detailed threshold information for the sensor:

Table 14: Sensor Thresholds

Name	Description
Upper Non-recoverable	The threshold above which the sensor reading indicates a non-recoverable critical condition.
Upper Critical	The threshold above which the sensor reading indicates a critical condition.
Upper Non-critical	The threshold above which the sensor reading indicates a non-critical warning condition.
Lower Non-critical	The threshold below which the sensor reading indicates a non-critical warning condition.
Lower Critical	The threshold below which the sensor reading indicates a critical condition.
Lower Non-recoverable	The threshold below which the sensor reading indicates a non-recoverable critical condition.
Change Threshold Values button	Click to modify the predefined thresholds for the sensor, allowing adjustment of critical, non-critical, and non-recoverable limits. See .

What to do next

Monitor sensor readings and thresholds for potential issues or performance anomalies.

Viewing Discrete Sensor States

This task describes how to view the status of discrete sensors, which report specific states rather than continuous readings. Monitoring these states helps in understanding the operational status of various server components.

Procedure

Step 1 From the **Navigation Pane**, click **Sensor**.

Step 2 Under the **Discrete Sensor States** section, you can view the following details.

Table 15: Discrete Sensor States

Name	Description
Sensor Name column	The name of the discrete sensor.
State column	The current state reported by the sensor.

Step 3 Click a specific sensor name in the table.

A new page is displayed, showing detailed information for the selected discrete sensor.

The page includes two sections:

- **[Sensor Name] Sensor Information**—Displays general information about the sensor, including its **Sensor State Reading**.
- **[Sensor Name] Sensor Events**—Displays a list of events associated with the sensor.

What to do next

Use discrete sensor state information to diagnose specific component conditions or track changes in system status.

Viewing Normal Sensors

This task describes how to view the status of normal sensors, which report continuous readings and operate within their expected parameters. Monitoring these readings helps in assessing the ongoing health and performance of various server components.

Procedure

Step 1 From the **Navigation Pane**, click **Sensor**.

Step 2 Under the **Normal Sensors** section, you can view the following details.

Table 16: Normal Sensor States

Name	Reading	Behavior
Sensor Name column	**Reading** column	**Behavior** column

Name	Reading	Behavior
The name of the normal sensor.	The current measurement reported by the sensor.	The operational behavior or status of the sensor.

Step 3 Click a specific sensor name in the table.

A new page is displayed, showing detailed information for the selected normal sensor.

The left section displays a graphical representation of live sensor readings over time. The Y-axis represents the sensor value, and the X-axis represents time.

The right section presents a table with detailed threshold information for the sensor:

Table 17: Sensor Thresholds

Name	Description
Upper Non-recoverable	The threshold above which the sensor reading indicates a non-recoverable critical condition.
Upper Critical	The threshold above which the sensor reading indicates a critical condition.
Upper Non-critical	The threshold above which the sensor reading indicates a non-critical warning condition.
Lower Non-critical	The threshold below which the sensor reading indicates a non-critical warning condition.
Lower Critical	The threshold below which the sensor reading indicates a critical condition.
Lower Non-recoverable	The threshold below which the sensor reading indicates a non-recoverable critical condition.
Change Threshold Values button	Click to modify the predefined thresholds for the sensor, allowing adjustment of critical, non-critical, and non-recoverable limits. See .

A is available to modify these settings.

What to do next

Monitor normal sensor readings and thresholds to assess system performance and detect potential issues.

Viewing Disabled Sensors

This task describes how to view a list of sensors that are currently disabled and not reporting data. Monitoring disabled sensors helps in identifying components that are intentionally or unintentionally inactive.

Procedure

Step 1 From the **Navigation Pane**, click **Sensor**.

Step 2 Under the **Disabled Sensors** section, a list is displayed showing the names of all currently disabled sensors.

What to do next

Determine if any listed disabled sensors require re-enabling or further investigation.

Configuring Sensor Threshold Values

This task describes how to modify predefined thresholds for both critical and normal sensors. Adjusting these values allows for customization of critical, non-critical, and non-recoverable limits based on specific operational requirements.

Before you begin

Ensure the server is in a state where sensor threshold modifications are permitted.

Procedure

Step 1 From the **Navigation Pane**, click **Sensor**.

Step 2 Click on the icon or name for the specific sensor whose threshold values require modification. The sensor can be located in either the **Critical Sensors** section or the **Normal Sensors** section.

A new page is displayed, showing detailed information for the selected sensor.

Step 3 Click **Change Threshold Values**.

The **Sensor Thresholds** page is displayed.

Table 18: Change Threshold Values

Name	Description
Sensor Name	Name of the sensor.
Upper Non-recoverable field	The threshold above which a sensor reading indicates a non-recoverable critical condition.
Upper Critical field	The threshold above which a sensor reading indicates a critical condition.
Upper Non-critical field	The threshold above which a sensor reading indicates a non-critical warning condition.

Name	Description
Lower Non-critical field	The threshold below which a sensor reading indicates a non-critical warning condition.
Lower Critical field	The threshold below which a sensor reading indicates a critical condition.
Lower Non-recoverable field	The threshold below which a sensor reading indicates a non-recoverable critical condition.
Retain Threshold Values check-box	Select this checkbox to retain configured threshold values even after a system reset or firmware update.

Step 4 Enter desired values for each threshold.

Step 5 Click **Save** to apply the changes.

What to do next

Verify new threshold values are correctly displayed on the sensor details page.

General Settings

Configuring Time Zone

This task describes how to configure date, time, and time zone settings for the server, either manually or through automatic synchronization using NTP or PTP.

Before you begin

Ensure network connectivity if configuring NTP or PTP for automatic date and time synchronization.

Procedure

Step 1 From the **Navigation Pane**, click **Settings**.

Step 2 Click **Date and Time**.

The **Date and Time** page is displayed.

Step 3 Configure the time zone using one of the following methods:

a) Use the interactive world map to select a time zone.

Click on a region on the map to automatically select the corresponding time zone.

b) Select a time zone from the **Select Time Zone** drop-down list.

Step 4 Configure date and time synchronization:

a) To use NTP for automatic synchronization, select the **Automatic NTP Date Time** check-box.

Enter the address for the primary NTP server in the **Primary NTP Server** field.

Optionally, enter the address for a secondary NTP server in the **Secondary NTP Server** field.

b) To use PTP for automatic synchronization, select the **Automatic PTP Date Time** check-box.

If both NTP and PTP are enabled, PTP takes precedence for time synchronization.

c) If not using automatic synchronization, manually update the date and time in the **Date/Time** field.

Step 5 Click **Save**.

The date, time, and time zone settings are applied to the server.

What to do next

Verify that date, time, and time zone settings are correctly set on the server.

Power Management

Configuring Chassis Identify LED

This task describes how to control the physical Identify LED on the server chassis. This LED helps visually locate a specific server in a rack or data center environment.

Procedure

Step 1 From the **Navigation Pane**, click **Chassis ID LED Control**.

Step 2 Under **LED Actions**, select the desired LED action:

- **LED Off**—Turns off the chassis Identify LED.
- **LED Solid ON**—Sets the chassis Identify LED to remain continuously lit.
- **LED Blinking ON**—Sets the chassis Identify LED to blink.

Step 3 If **LED Blinking ON** is selected, enter the desired duration in seconds in the **Identify interval in seconds** field.

Step 4 Click **Perform Action**.

The selected LED action is executed on the server chassis.

What to do next

Verify the LED behavior on the physical server chassis.

Managing Host Server Power

This task describes how to control the power state of the host server. Various power actions are available, from graceful shutdowns to immediate power cycles.

Before you begin

Ensure that performing power actions on the host server is safe and does not interrupt critical operations.

Procedure

Step 1 From the **Navigation Pane**, click **Power Control**.

Step 2 Click **Power Control on Host Server**.

The **Power Control on Host Server** page is displayed, showing the current power status.

Step 3 Under **Power Actions**, select the desired power action:

- **Force Off**—Immediately powers off the server without a graceful shutdown process.
- **Force Restart**—Immediately restarts the server without a graceful shutdown process.
- **Graceful Restart**—Initiates a controlled restart of the server, allowing the operating system to shut down properly.
- **Graceful Shutdown**—Initiates a controlled shutdown of the server, allowing the operating system to shut down properly.
- **On**—Powers on the server.
- **Power Cycle**—Performs a complete power off and then power on sequence for the server.

Step 4 Click **Perform Action**.

The selected power action is executed on the host server.

What to do next

Verify the new power state of the host server.

Configuration Management

Managing Backup Configuration

This task describes how to back up server configuration settings. A configuration backup allows for restoration of settings in case of data loss or system misconfiguration.

Before you begin

If encrypting the backup file, ensure an AES key is uploaded. See Backing Up or Restoring Key Upload.

Procedure

Step 1 From the **Navigation Pane**, click **Maintenance**.

Step 2 Click **Backup Configuration**.

The **Backup Configuration** page is displayed.

If an AES key is not present, a message **AES Key does not exist. Click here to upload the Backup key** is displayed. Click the link to upload a key if encryption is desired.

Step 3 Select the configuration components to include in the backup by checking the corresponding check-boxes:

- **Check All**
- **SNMP**
- **KVM**
- **Network & Services**
- **IPMI**
- **NTP**
- **Authentication**
- **SYSLOG**

Step 4 Click **Download**.

The selected configuration components are backed up and downloaded as a file to a local system.

What to do next

Store the downloaded backup file in a secure location for future restoration if needed.

Preserving a Configuration

This task describes how to select specific configuration settings to be preserved across system events, such as firmware updates or restoration to factory defaults. Preserving configurations ensures continuity of essential settings.

Procedure

Step 1 From the **Navigation Pane**, click **Maintenance**.

Step 2 Click **Preserve Configuration**.

The **Preserve Configuration** page is displayed.

A link **Click here to go to Firmware Update or Restore Factory Defaults** is available for related actions.

Step 3 Select the configuration components to preserve by checking the corresponding check-boxes:

- **Check All**—Selects all available configuration components for preservation.

- **SDR**—Preserves Sensor Data Record settings.
- **FRU**—Preserves Field Replaceable Unit information.
- **SEL**—Preserves System Event Log settings.
- **IPMI**—Preserves Intelligent Platform Management Interface settings.
- **Network**—Preserves network interface configurations.
- **NTP**—Preserves Network Time Protocol settings.
- **SNMP**—Preserves Simple Network Management Protocol settings.
- **SSH**—Preserves Secure Shell settings.
- **KVM**—Preserves Keyboard, Video, Mouse settings.
- **Authentication**—Preserves user authentication settings.
- **Syslog**—Preserves system logging configurations.
- **Web**—Preserves web interface settings.
- **Extlog**—Preserves external logging configurations.
- **Redfish**—Preserves Redfish API settings.

Step 4 Click **Save**.

The selected configuration settings are marked for preservation.

What to do next

Proceed with system operations with the assurance that selected configurations are retained.

Restoring Factory Defaults

This task describes how to restore server configuration to original factory default settings. This action resets most configurations, but allows selection of specific settings for preservation.

Before you begin

Back up any critical configuration settings before proceeding, as restoring factory defaults erases most current configurations.

Procedure

Step 1 From the **Navigation Pane**, click **Maintenance**.

Step 2 Click **Restore Factory Defaults**.

The **Restore Factory Defaults** page is displayed.

A message **The following checked configurations will be preserved through the restore operation. You can make changes to the list in the preserve configuration page.** is displayed, indicating which settings are exempt from the reset. See Preserving a Configuration, on page 17.

Step 3 Select the configuration components to preserve during the factory reset. Checked items are preserved; unchecked items are reset to factory defaults:

- **SDR**—Preserves Sensor Data Record settings.
- **FRU**—Preserves Field Replaceable Unit information.
- **SEL**—Preserves System Event Log settings.
- **IPMI**—Preserves Intelligent Platform Management Interface settings.
- **Network**—Preserves network interface configurations.
- **NTP**—Preserves Network Time Protocol settings.
- **SNMP**—Preserves Simple Network Management Protocol settings.
- **SSH**—Preserves Secure Shell settings.
- **KVM**—Preserves Keyboard, Video, Mouse settings.
- **Authentication**—Preserves user authentication settings.
- **Syslog**—Preserves system logging configurations.
- **Web**—Preserves web interface settings.
- **Extlog**—Preserves external logging configurations.
- **Redfish**—Preserves Redfish API settings.

Step 4 Click **Save**.

The configuration is reset to factory defaults, with the selected settings preserved.

What to do next

Reconfigure any necessary settings that were not preserved during the factory reset.