



Generic Baseboard Management Controller (BMC) User Guide

For the ASRock Rack Altra Platform Built on the OpenBMC

January 2024
Revision: 1.00

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Revision History

Revision Number	Description	Revision Date
1.00	• Initial Release	January 2024

1.0 Introduction

This user guide is written for system administrators and end-users who intend to configure the Intelligence Platform Management Interface (IPMI) settings supported by Baseboard Management Controller (BMC) with OpenBMC firmware stack, which is integrated into the mainboard.

This document provides detailed information on configuring the BMC settings supported by the BMC chipset.

Note: All screenshots in this document are provided for illustrative purposes only and may vary from the actual product due to design changes and bug fixes.

2.0 BMC Web User Interface Service

The BMC firmware provides an embedded web server that allows users to configure the BMC settings through the BMC Web User Interface (WebUI) service.

The detailed information is listed in the following sections.

2.1 WebUI Service Login URL

BMC WebUI service supports login the service by URL with either HyperText Transfer Protocol (HTTP) or HyperText Transfer Protocol Secure (HTTPS) methods. For security reasons, it is recommended that users use HTTPS to access the BMC WebUI service.

2.1.1 Configuring BMC IP Address by System BIOS

To access the BMC WebUI service by URL, users can view the current BMC IP address or configure the BMC IP address from the system BIOS setup utility.

2.1.1.1 Viewing Current BMC IP Address from BIOS Setup Utility

Users can use the BIOS setup utility to obtain current BMC IP address through the following steps:

1. Boot to the system BIOS setup utility.
2. Navigate to *BMC Network Configuration* page from **BIOS Setup Utility** → **Server Mgmt** → **BMC Network Configuration**.
3. Viewing the current BMC IP from the option either **Station IP Address** for IPv4 address or **Station IPv6 Address** for IPv6 address.

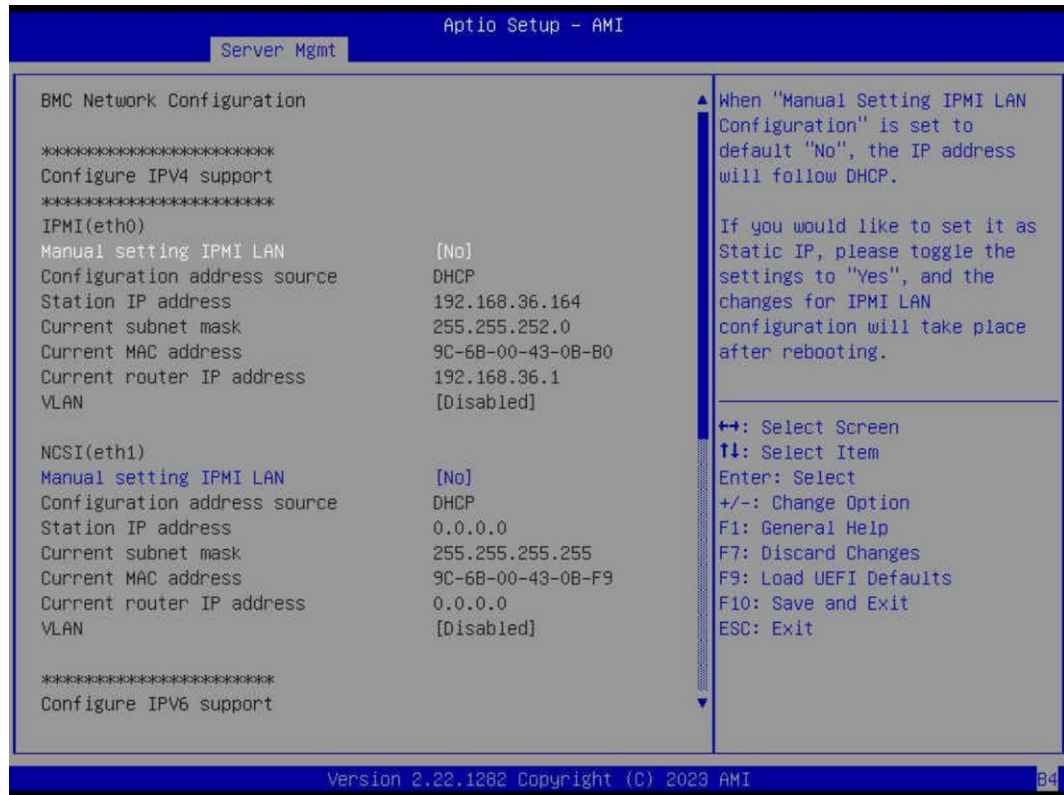


Figure 1. BMC Network Configuration on System BIOS Setup Utility

2.1.1.2 Viewing Current BMC IP Address from BIOS Logo Screen

Users can view the current BMC IP address from the system BIOS Logo Screen.

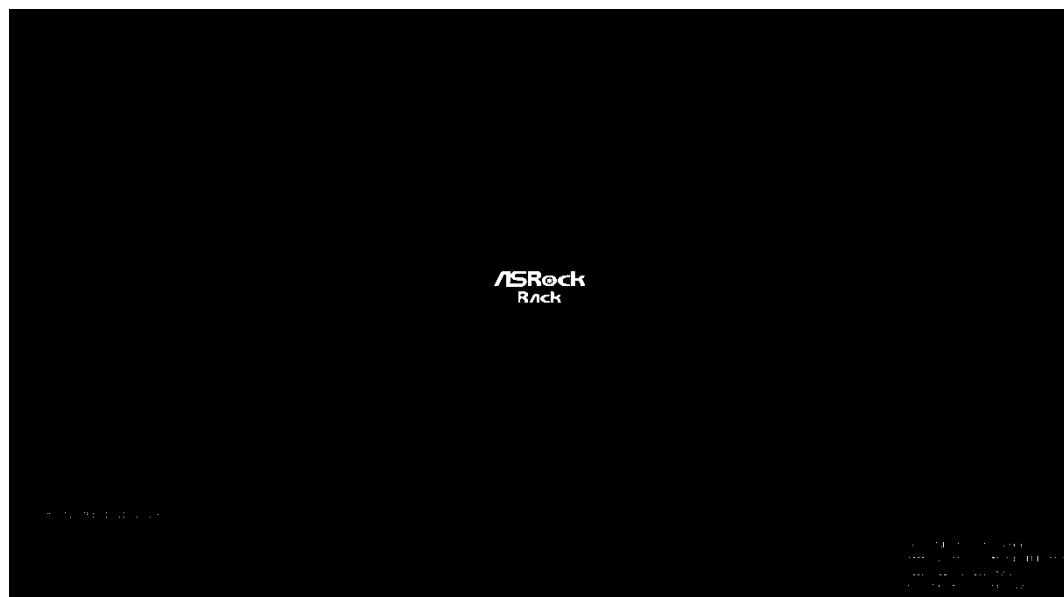


Figure 2. BMC IP Address Displayed on the BIOS POST Screen

2.1.1.3 Viewing Current BMC IP Address from BIOS POST Screen

Users can view the current BMC IP address from the system BIOS POST Screen.

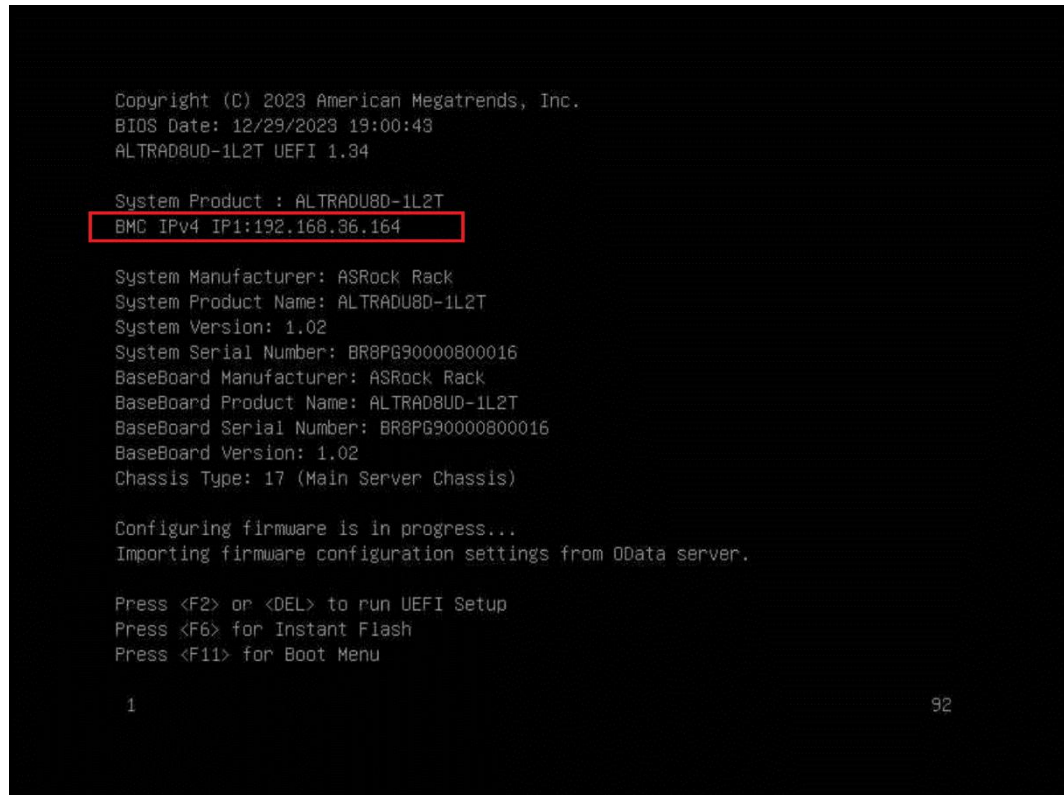


Figure 3. BMC IP Address Displayed on the BIOS POST Screen

2.1.1.4 Setting Static IPv4 IP Address for BMC from BIOS Setup Utility

Users can set the static IPv4 address for the BMC by BIOS setup utility through the following steps:

1. Boot to the system BIOS setup utility.
2. Navigate to BMC Network Configuration page from **BIOS Setup Utility → Server Mgmt → BMC Network Configuration**.
3. Set the option **Manual setting IPMI LAN** to **[YES]**.
4. Set the option **Configuration address source** to **[Static]**.
5. Configure the option **Station IP**, **Current subnet mask** and **Current router IP address** for the static IPv4 address, Subnet mask and IPv4 Gateway address respectively.
6. After configured the needed static IPv4 address settings, press the **<F10>** key to save the changes or navigate to option **Save Changes and Exit** from **BIOS Setup Utility → Exit Menu** and press **<Enter>** key, then reboot the system to effect the changes.

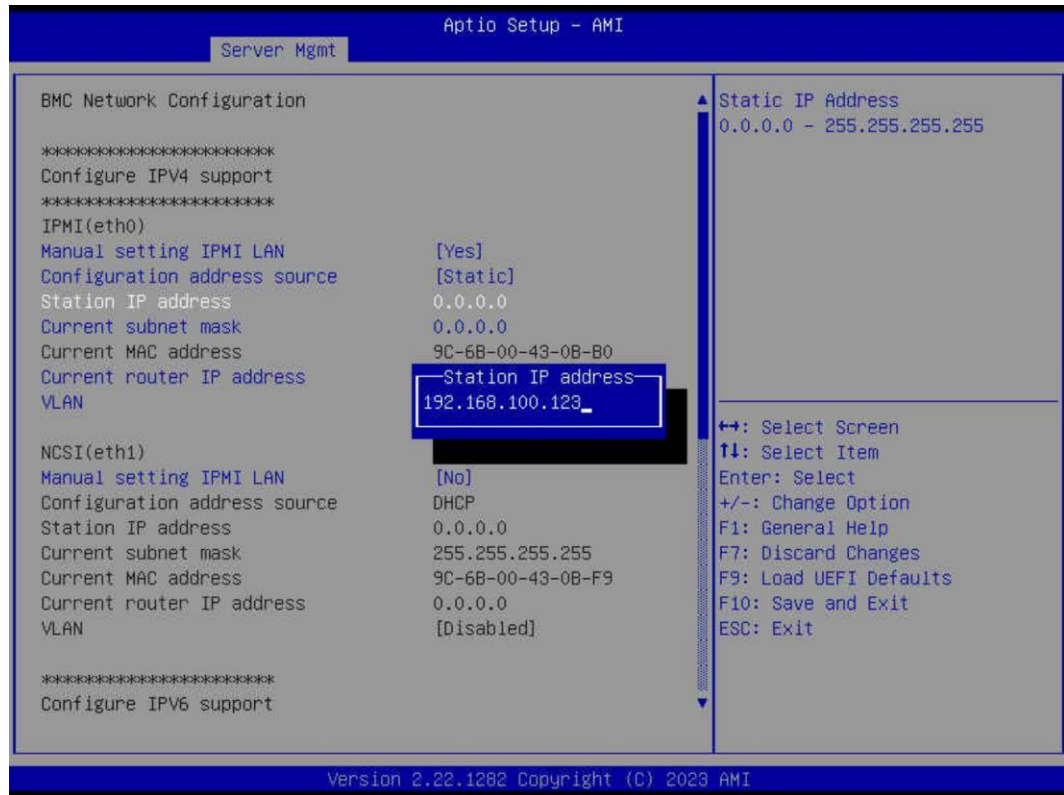


Figure 4. Settings Static IPv4 IP for BMC

2.1.1.5 Setting Static IPv6 IP Address for BMC from BIOS Setup Utility

Users can set the static IPv6 address for the BMC by BIOS setup utility through the following steps:

1. Boot to the system BIOS setup utility.
2. Navigate to BMC Network Configuration page from **BIOS Setup Utility** → **Server Mgmt** → **BMC Network Configuration**.
3. Set the option **IPv6 Support** to **[Enabled]**.
4. Set the option **Manual setting IPMI LAN(IPv6)** to **[Static]**.
5. Configure the option **Station IPv6 address**, **Prefix Length** and **IPv6 Router IP address** for the static IPv6 address, subnet prefix length and IPv6 Gateway address respectively.
6. After configured the needed static IPv6 address settings, press the **<F10>** key to save the changes or navigate to option **Save Changes and Exit** from **BIOS Setup Utility** → **Exit Menu** and press **<Enter>** key, then reboot the system to effect the changes.

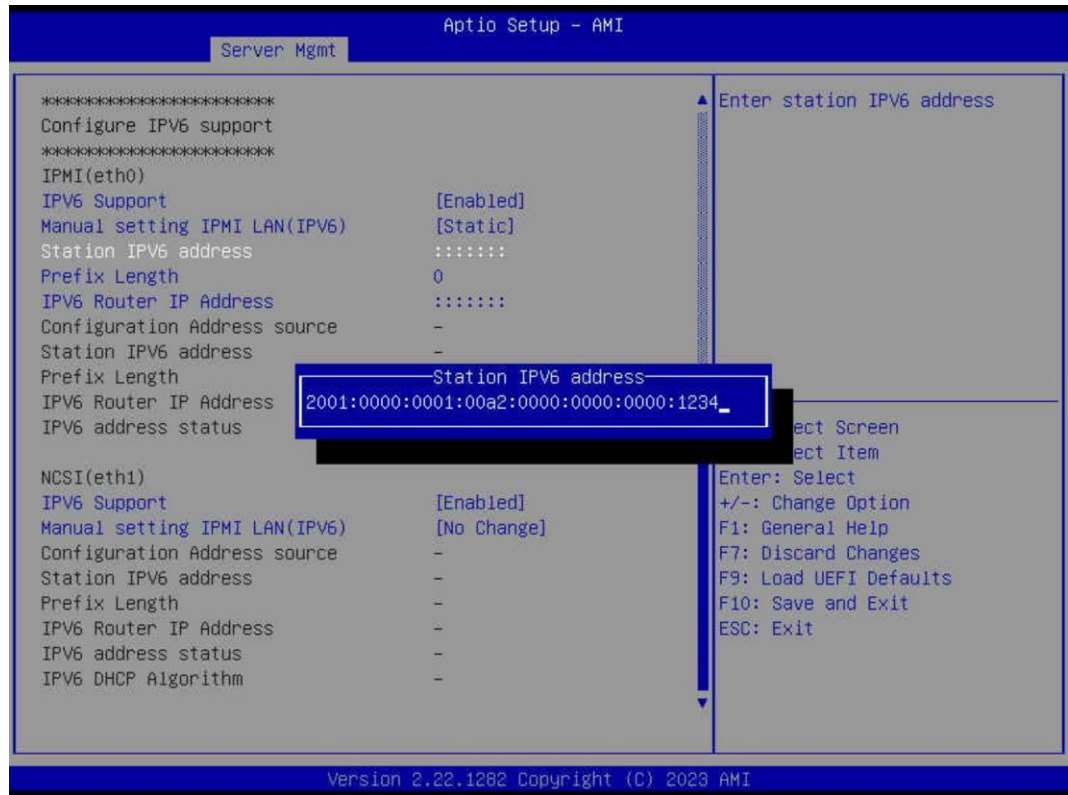


Figure 5. Settings Static IPv6 IP for BMC

2.2 Username and Password

Once access the BMC WebUI services through the browser, the WebUI login page will be first appears on the browser.

The BMC default username and password are as follows:

Username: root
Password: OpenBmc

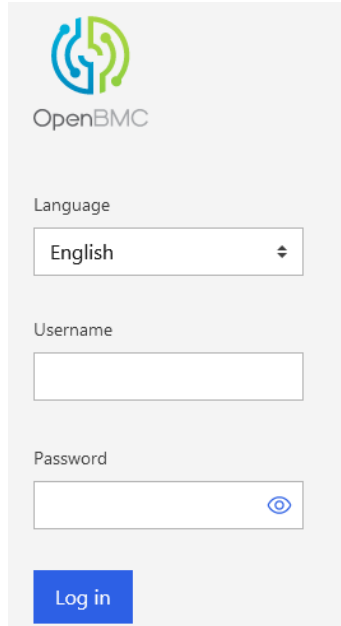
The image shows the OpenBMC WebUI login page. At the top is the OpenBMC logo, which consists of a stylized 'G' and 'B' in blue and green. Below the logo is the text 'OpenBMC'. Underneath is a 'Language' dropdown menu currently set to 'English'. Below that is a 'Username' text input field. Below the username field is a 'Password' text input field with a blue eye icon to its right for toggling visibility. At the bottom is a blue 'Log in' button.

Figure 6. WebUI Service Login Page

The field descriptions are as follows:

- **Language:** Selects the supported language.
- **Username:** Enter the User Identifier (UID) of the account that who wants to sign in.
- **Password:** Enter the password of account that who wants to sign in.
- **Log in:** After enter the required credentials, click the **Log in** button to sign in the BMC WebUI service.

2.3 Accessing BMC WebUI Service

The BMC WebUI service consisted of various components, including menus, graphics, tables, options, and configuration. The details are is listed in the following subsections.

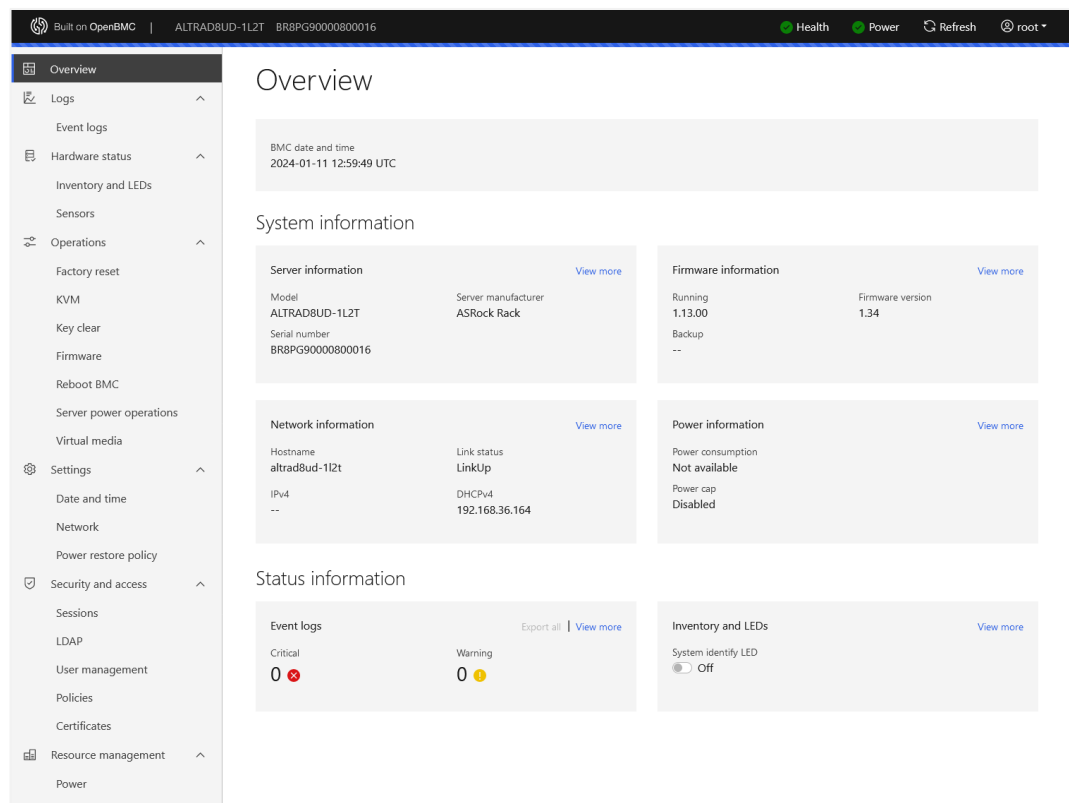


Figure 7. WebUI Service Main Page

2.3.1 Navigation Bar

The Navigation Bar provides a set of functional feature tabs to facilitate users to quickly find the required function.

The Navigation Bar is located in the left side of BMC WebUI.

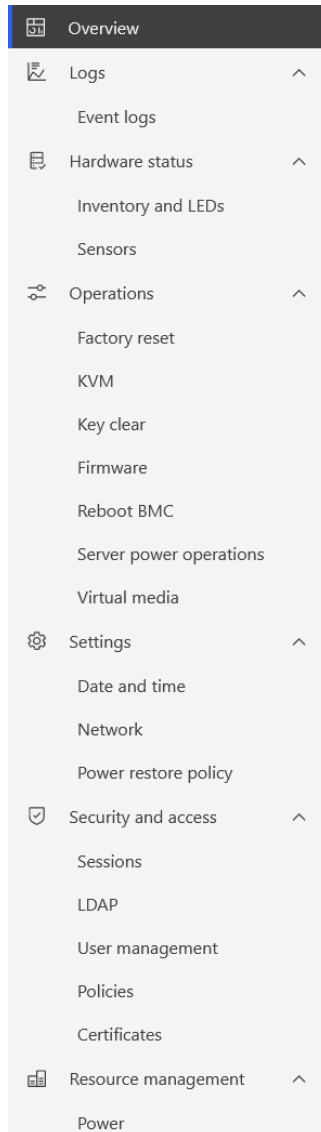


Figure 8. Navigation Bar

The supported feature tabs are as follows:

- **Overview**
- **Logs**
 - **Event logs**
- **Hardware status**
 - **Inventory and LEDs**
 - **Sensors**
- **Operations**
 - **Factory reset**
 - **KVM**
 - **Key clear**
 - **Firmware**
 - **Reboot BMC**
 - **Server power operations**
 - **Virtual media**

- **Settings**
 - **Date and time**
 - **Network**
 - **Power restore policy**
- **Security and access**
 - **Sessions**
 - **LDAP**
 - **User management**
 - **Policies**
 - **Certificates**
- **Resource management**
 - **Power**

2.3.2 Quick Link and User Information

The Quick Link and User Information are located in upper right corner of BMC WebUI. These components provide the specific functional link for users to quickly view the information or change configuration.

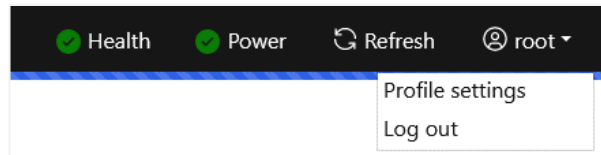


Figure 9. Quick Link and User Information

2.3.2.1 Quick Link

The supported Quick Link and action description are as follows:

- **Health:** Click **Health** () quick link and navigate to Event Log page to view the received event logs.
- **Power:** Click **Power** () quick link and navigate to Server power operations page to configure the power operations.
- **Refresh:** Click **Refresh** () button to update the information of current page.

2.3.2.2 User Information

The User Information displays the logged-in user information.

Click the **User Information** () button will display more action buttons for currently logged in user.

Click the **Profile settings** () item and navigate to Profile settings page of current user.

Click the **Log out** () item to log out WebUI service.

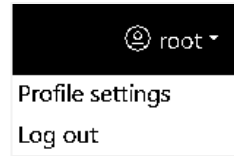


Figure 10. User Information

2.3.2.3 User Privilege

BMC WebUI service provides four privilege levels for the administrator to manage the user account privilege:

- **ReadOnly:** Users only have read access and can't change any behavior of the system.
- **Operator:** Users are allowed to view and control basic operations. This includes reboot of the host, etc. But users are not allowed to change other configuration like user, network, etc.
- **Administrator:** Users are allowed to configure all BMC services (including user-management, network and all configurations). Users will have full administrative access.
- **HostinterfaceAdministrator:** Specific administrator privilege for the host interface, the privilege is same as the *Administrator*.

2.4 Overview

The Overview page provides the brief information for users to quickly view current status and settings of BMC and system. The items displayed on the Overview page are described in the following sections.

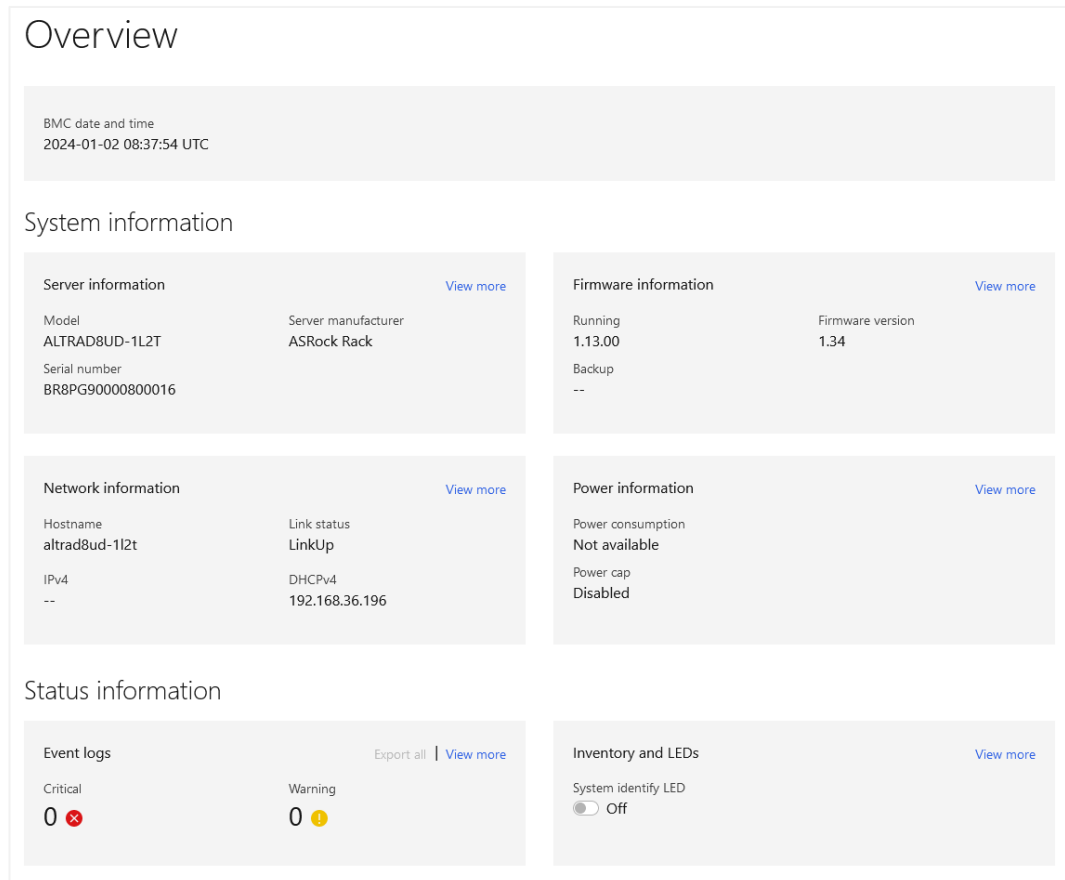


Figure 11. Overview

2.4.1 BMC Date and Time

It displays current date and time on the BMC firmware.

2.4.2 System Information

It displays the various information block for uses to view BMC and system information, including

- **Server Information**
- **Firmware Information**
- **Network Information**
- **Power Information**

Click the “**View more**” ([View more](#)) quick link on the information block that navigate to related page to view more information.

2.4.2.1 Server Information

It displays the brief server information includes

- **Model Name:** The name of the product.
- **Server Manufacture:** The name of the product manufacture.
- **Serial Number:** The serial number of the product.

2.4.2.2 Firmware Information

It displays the firmware information includes

- **Running:** Indicates the firmware version of active BMC firmware
- **Backup:** Indicates the firmware version of backup BMC firmware.
- **Firmware Version:** Indicates the system BIOS firmware version.

2.4.2.3 Network Information

It displays the network information includes

- **Hostname:** Indicates the hostname of the BMC.
- **Link status:** indicates the link status of ethernet port.
- **IPv4:** Indicates the static IPv4 address.
- **DHCPv4:** Indicates the DHCP IPv4 address.

2.4.2.4 Power Information

It displays the power information includes

- **Power consumption:** Indicates current power consumption.
- **Power cap:** Indicates the power cap settings.

2.4.3 Status Information

It displays the various information block for uses to view system status, including

- **Event logs**
- **Inventory and LEDs**

Click the “**View more**” ([View more](#)) quick link on the information block that navigate to related page to view more information.

2.4.3.1 Event Logs

It displays the number of current received event logs that within either critical or warning severity.

Click the “**Export all**” ([Export all](#)) quick link on the Event Logs information block that download all event logs in JSON file.

2.4.3.2 Inventory and LEDs

It displays a toggle switch for users to turn on or turn off the system UID LED.

2.5 Event Logs

The Event Logs page provides the information of event logs generated by different sensors for users to view system status. The items displayed on the Event Logs page are described in the following sections.

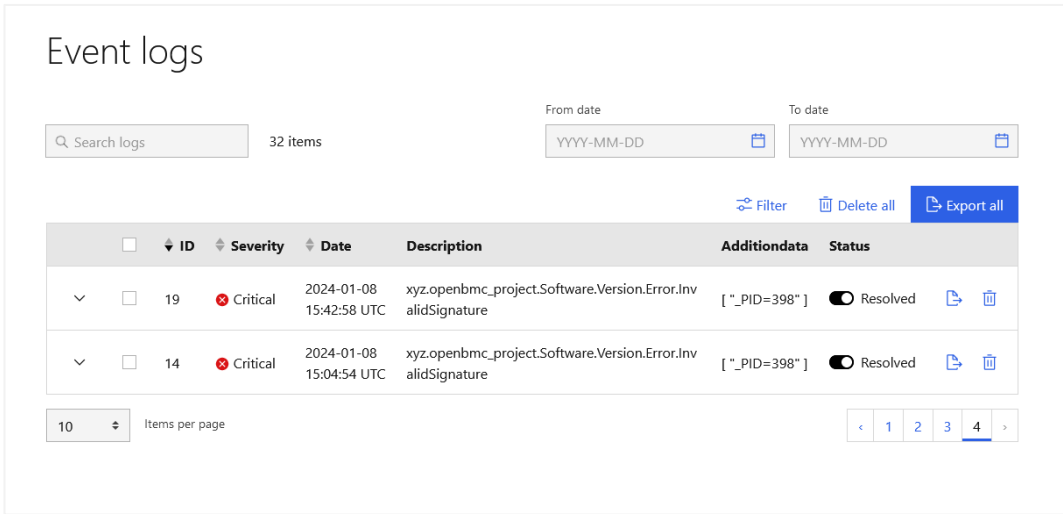


Figure 12. Event Logs

2.5.1 Event Logs Search Bar

Enter the keyword to search specific event logs.

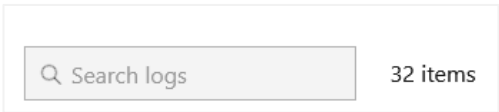


Figure 13. Event Logs Search Bar

2.5.2 From Data/To Date

Specify a date in From Date/To Date, then the event log page will list the generated date of log is after/before the specific date.

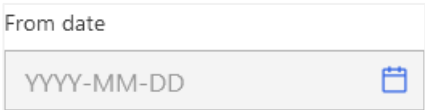


Figure 14. From Data

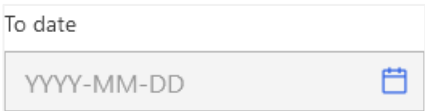


Figure 15. To Data

Click the **Calendar** (📅) icon in the From Date/To Date, then will displays a calendar window under From Date/To Date.

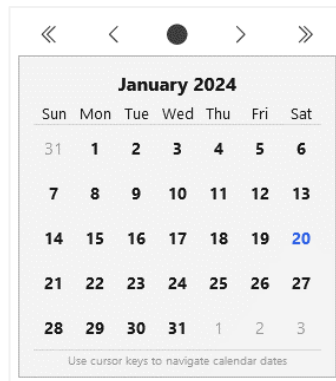


Figure 16. Calendar Window

2.5.3 Filter

Click the **Filter** (🔍) button to select the specific condition for only list the event logs with the filter conditions. Click the **"Clear All"** to remove all checked conditions.

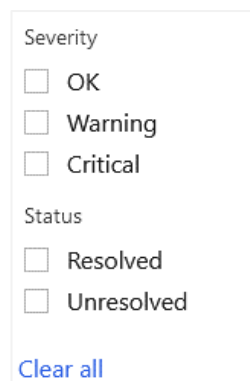


Figure 17. Filter Conditions

2.5.4 Delete All

Click the **Delete All** (🗑️) button to delete all the event logs.

2.5.5 Export All

Click the **Export All** (📄) button to export all the event logs and save in a JSON file.

2.5.6 Pagination

Click the **Pagination** (10 items per page) selector to select how many items displayed on the event logs page.

Click the **Page** (1 2 3 4) button to select which page to be displayed on the event logs page.

2.5.7 Event Logs Table

The all the event logs are displayed on the table. Users can view or configure event log from here.

☐	ID	Severity	Date	Description	Additiondata	Status
▼ ☐	77	OK	2024-01-17 02:29:25 UTC	ChassisIntrusionSensor : Normal	["Status = De-assert"]	☐ Unresolved Export Delete
▼ ☐	76	OK	2024-01-12 11:27:58 UTC	ChassisIntrusionSensor : Normal	["Status = De-assert"]	☐ Unresolved Export Delete
▼ ☐	73	OK	2024-01-12 11:07:13 UTC	xyz.openbmc_project.Logging.SELError.Created	["EVENT_DIR=1", "EVENT_TYPE=0", "GENERATOR_ID=32", "RECORD_TYPE=2", "SENSOR_DATA=52015A", "SENSOR_NUM=240", "SENSOR_PATH=/xyz/openbmc_project/sensors/voltage/OV75_PCP_CPU", "SENSOR_TYPE=0", "_PID=297"]	☐ Unresolved Export Delete
▼ ☐	19	Critical	2024-01-08 15:42:58 UTC	xyz.openbmc_project.Software.Version.Error.InvalidSignature	["_PID=398"]	☐ Unresolved Export Delete
▼ ☐	14	Critical	2024-01-08 15:04:54 UTC	xyz.openbmc_project.Software.Version.Error.InvalidSignature	["_PID=398"]	☐ Unresolved Export Delete

Figure 18. Event Logs Table

- **ID:** Indicates the ID number of this event log. Click the **ID** to sort the event logs in ascending or descending order.
- **Severity:** Indicates severity for this event log. Click the **Severity** to sort the event logs in ascending or descending order.
- **Date:** Indicates the generated date of this event log. Click the **Date** to sort the event logs in ascending or descending order.
- **Description:** Indicates the description for this event log.
- **Additiondata:** Indicates the addition data for this event log.
- **Status:** Indicates the status of this event log. Users can turn on/off the status toggle switch to tag the situation whether resolve or not for this event log.
- **Export:** Click the **Export** ([Export](#)) button to export this event log and save in a JSON file.
- **Delete:** Click the **Delete** ([Delete](#)) button to delete this event log.
- **Checkbox:** Click the **Check Box** (☐) to select the specific event log. After mark one or more event logs, the toolbox will appear on the event logs table, and users can select one of the actions to apply on the marked event logs.

1 Selected	Resolve	Unresolve	Export	Delete	Cancel
------------	---------	-----------	--------	--------	--------

Figure 19. Event Log Toolbox

2.6 Inventory and LEDs

The Inventory and LEDs page provides various hardware-related information for users to view the system hardware configuration and status. The items displayed on the Inventory and LEDs page are described in the following sections.

Inventory and LEDs

LED light control

Power status
On

System identify LED
☐ Off

Quick links to hardware components

[System](#)
[BMC manager](#)
[Chassis](#)

[DIMM slot](#)
[Fans](#)
[Power supplies](#)

[Processors](#)
[Assemblies](#)

System

ID	Hardware type	Health	Location number	Identify LED
▼ system	system	OK	--	☐ Off

BMC manager

ID	Health	Location number	Identify LED
▼ bmc	OK	--	--

Figure 20. Inventory and LEDs

2.6.1 LED Light Control

The LED light control provides two functions for users. The Power Status used to indicate current host power state. The System identify LED toggle switch for users to turn on/off LED.

LED light control

Power status
On

System identify LED
☐ Off

Figure 21. LED Light Control

2.6.2 Quick Links to Hardware Components

The Quick Links to Hardware Components provides various quick link for users to quickly navigate to specific information block.

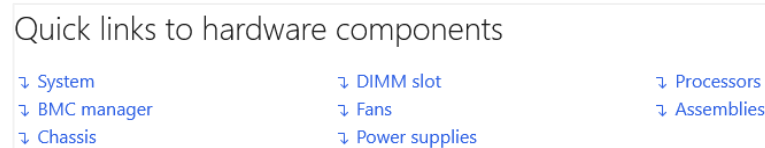


Figure 22. Quick Links to Hardware Components

2.6.3 System

It displays system configuration summary information for users to view.

System				
ID	Hardware type	Health	Location number	Identify LED
^ system	system	OK	--	Off
Serial number: BR8PG90000800016 Model: ALTRAD8UD-1L2T Asset tag: -- Manufacturer: ASRock Rack Description: Computer System Sub model: -- System type: Physical Memory summary Status (State): Enabled Power: On Health rollup: OK Processor summary Status (State): Disabled Health: OK Health rollup: OK Count: 1 Core count: 80				

Figure 23. Quick Links to Hardware Components

- **ID:** Indicates the ID number of this system.
- **Hardware Type:** Indicates the hardware type of this system.
- **Health:** Indicates the health status of this system.
- **Location Number:** Indicates the location of this system.
- **Identify LED:** Indicates the state of identify LED of this system, users can configure the LED state by turn on/off the toggle switch.
- **Serial Number:** Indicates the serial number of this system.
- **Model:** The product name for this system,
- **Asset Tag:** Indicates the asset tag information of this system.
- **Manufacturer:** Indicates the manufacturer of this system.
- **Description:** The description for this system.
- **Sub Model:** Indicates the sub-model of this system.
- **System Type:** Indicates the type of this system.
- **Total System Memory:** Indicates the total configured memory in this system.
- **Count:** Indicates the number of physical processors in the system.

- **Core Count:** Indicates the number of processor cores in the system.
- **Status (State):** The known state of this component.
- **Power:** Indicates the current power state of this system.
- **Health:** The health state of this resource in the absence of its dependent resources.
- **Health Rollup:** The overall health state from the view of this resource.

2.6.4 BMC Manager

It displays BMC information for users to view.

BMC manager			
ID	Health	Location number	Identify LED
^ bmc	OK	--	--
Name: OpenBmc Manager Part number: -- Serial number: -- Spare part number: -- Model: OpenBmc UUID: 9943594e-ed5b-4fc2-b1cf-11fef832c831 Service entry point UUID: ae542e49-9084-4b75-b5a0-3c11821e7920		Status (State): Enabled Power: On Health rollup: OK BMC date and time: 2024-01-22 03:10:11 UTC Last reset time: 2024-01-22 02:17:18 UTC	
Manufacturer: -- Description: Baseboard Management Controller Manager type: BMC		Firmware version: 1.13.03 Graphical console Connect types supported: KVMIP Max concurrent sessions: 4 Service enabled: true Serial console Connect types supported: IPMI, SSH Max concurrent sessions: 15 Service enabled: true	

Figure 24. BMC Manager

- **ID:** Indicates the ID number of this BMC.
- **Health:** Indicates the health status of this BMC.
- **Location Number:** Indicates the location of this BMC.
- **Identify LED:** Indicates the state of identify LED of this system, users can configure the LED state by turn on/off the toggle switch.
- **Name:** The name of this BMC.
- **Part Number:** Indicates the part number of this BMC.
- **Serial Number:** Indicates the serial number of this BMC.
- **Spare Part Number:** Indicates the spare part number of this BMC.
- **Model:** Indicates the model information of this BMC.
- **UUID:** Indicates the UUID for this BMC.
- **Service entry point UUID:** Indicates the UUID of the Redfish service that is hosted by this BMC.
- **BMC Date and Time:** Indicates the current date and time with UTC off set of this BMC.
- **Last Reset Time:** Indicates the date and time when the BMC was last reset or rebooted.
- **Manufacturer:** Indicates the manufacturer of this BMC.
- **Description:** The description for this BMC.
- **Manager Type:** Indicates the type of this BMC.

- **Firmware Version:** Indicates the firmware version of this BMC.
- **Connect Types Supported:** Indicates the connect types supported by this component.
- **Max Concurrent Sessions:** Indicates the maximum number of service sessions, regardless of protocol, that this BMC can support.
- **Service Enabled:** An indication of whether the service is enabled for this component.
- **Status (State):** The known state of this component.
- **Power:** Indicates the current power state of this BMC.
- **Health:** The health state of this resource in the absence of its dependent resources.
- **Health Rollup:** The overall health state from the view of this resource.

2.6.5 Chassis

It displays Chassis information for users to view.

Chassis			
ID	Health	Location number	Identify LED
^ ALTRAD8UD_1L2T	OK	--	--
Name: ALTRAD8UD_1L2T Part number: \$PRODUCT_PART_NUMBER Serial number: BR8PG90000800016 Model: ALTRAD8UD-1L2T Asset tag: --		Status (State): Enabled Power: -- Health rollup: OK	
Manufacturer: ASRock Rack Chassis type: RackMount		Min power watts: -- Max power watts: --	

Figure 25. Chassis

- **ID:** Indicates the ID number of this chassis.
- **Health:** Indicates the health status of this chassis.
- **Location Number:** Indicates the location of this chassis.
- **Identify LED:** Indicates the state of identify LED of this chassis, users can configure the LED state by turn on/off the toggle switch.
- **Name:** The name of this chassis.
- **Part Number:** Indicates the part number of this chassis.
- **Serial Number:** Indicates the serial number of this chassis.
- **Model:** Indicates the model information of this chassis.
- **Asset Tag:** Indicates the asset tag information of this chassis.
- **Manufacturer:** Indicates the manufacturer of this chassis.
- **Chassis Type:** Indicates the type of this chassis.
- **Min Power Watts:** Indicates the lower bound of the total power consumed by the chassis.
- **Max Power Watts:** Indicates the upper bound of the total power consumed by the chassis.
- **Status (State):** The known state of this component.
- **Power:** Indicates the current power state of this chassis.
- **Health Rollup:** The overall health state from the view of this resource.

2.6.6 DIMM Slot

It displays system DIMM Slot information for users to view.

DIMM slot			
Search		8 items	
ID	Health	Location number	Identify LED
^ dimm0	OK	Bank 1 DDR4_A1	--
Part number: 36ASF8G72PZ-3G2E1 Serial number: 26C85AA5 Spare part number: -- Model: -- Memory size: -- KB Status (State): Enabled Enabled: -- Description: -- Memory type: DRAM Base module type: RDIMM Capacity MiB: 65536 Bus width bits: 0 Data width bits: 64 Operating speed Mhz: 3200 MHz			
∨ dimm1	OK	Bank 2 DDR4_B1	--
∨ dimm2	OK	Bank 3 DDR4_C1	--
∨ dimm3	OK	Bank 4 DDR4_D1	--
∨ dimm4	OK	Bank 5 DDR4_E1	--
∨ dimm5	OK	Bank 6 DDR4_F1	--
∨ dimm6	OK	Bank 7 DDR4_G1	--
∨ dimm7	OK	Bank 8 DDR4_H1	--

Figure 26. DIMM Slot

- **Search Bar** (): Enter the keyword to search specific DIMM device.
- **ID**: Indicates the ID number of this DIMM.
- **Health**: Indicates the health status of this DIMM.
- **Location Number**: Indicates the location of this DIMM.
- **Identify LED**: Indicates the state of identify LED of this DIMM, users can configure the LED state by turn on/off the toggle switch.
- **Name**: The name of this DIMM.
- **Part Number**: Indicates the part number of this DIMM.
- **Serial Number**: Indicates the serial number of this DIMM.
- **Model**: Indicates the model information of this DIMM.
- **Memory Size**: Indicates the memory size in KB of this DIMM.
- **Description**: The description for this DIMM.
- **Memory Type**: Indicates the type of this DIMM.
- **Base Module Type**: Indicates the base module type of the memory device.
- **Capacity MiB**: Indicates the memory capacity in mebibytes (MiB) of this DIMM.

- **Bus Width Bits:** Indicates the bus width in bits of this DIMM.
- **Data Width Bits:** Indicates the data width in bits of this DIMM.
- **Operating Speed Mhz:** Indicates the operating speed of the memory device in MHz or MT/s as appropriate.
- **Status (State):** The known state of this component.
- **Enabled:** An indication of whether this memory is enabled.

2.6.7 Fans

It displays system Fans information for users to view.

Fans			
Search		10 items	
ID	Health	Part number	Serial number
^ FAN1	 OK	--	--
Name: FAN1 Serial number: -- Part number: -- Fan speed: 2301 RPM Status (State): Enabled Status (Health rollup): --			
v FAN1_1	 OK	--	--
v FAN2	 OK	--	--
v FAN2_1	 OK	--	--
v FAN3	 OK	--	--
v FAN3_1	 OK	--	--
v FAN4	 OK	--	--
v FAN4_1	 OK	--	--
v FAN5	 OK	--	--
v FAN5_1	 OK	--	--

Figure 27. Fans

- **Search Bar ():** Enter the keyword to search specific DIMM device.
- **ID:** Indicates the ID number of this fan.
- **Health:** Indicates the health status of this fan.
- **Part Number:** Indicates the part number of this fan.
- **Serial Number:** Indicates the serial number of this fan.
- **Name:** The name of this fan.
- **Fan Speed:** Indicates the speed of this fan.
- **Status (State):** The known state of this component.
- **Status (Health rollup):** The overall health state from the view of this resource.

2.6.8 Power Supplies

It displays system Power Supplies information for users to view.

Power supplies			
Search		1 items	
ID	Health	Location number	Identify LED
Delta_DPS_Series_PSU1	OK	--	--
Name: Delta DPS Series PSU1 Part number: ANAD1529000020 Serial number: -- Spare part number: DPS-1600EB D Model: DELTA Status (State): Enabled Status (Health rollup): -- Efficiency percent: 90 Power input watts: 49.75 Firmware version: --			

Figure 28. Power Supplies

- **Search Bar** (): Enter the keyword to search specific power supply.
- **ID**: Indicates the ID number of this power supply.
- **Health**: Indicates the health status of this power supply.
- **Location Number**: Indicates the location of this power supply.
- **Identify LED**: Indicates the state of identify LED of this power supply, users can configure the LED state by turn on/off the toggle switch.
- **Name**: The name of this power supply.
- **Part Number**: Indicates the part number of this power supply.
- **Serial Number**: Indicates the serial number of this power supply.
- **Spare Part Number**: Indicates the spare part number of this power supply.
- **Model**: Indicates the model information of this power supply.
- **Manufacturer**: Indicates the manufacturer of this power supply.
- **Efficiency Percent**: Indicates the measured efficiency of this power supply as a per centage.
- **Power Input Watts**: Indicates the measured input power of this power supply.
- **Firmware Version**: Indicates the firmware version for this power supply.

2.6.9 Processors

It displays system Processors information for users to view.

Processors			
Search		1 items	
ID	Health	Location number	Identify LED
cpu0	OK	CPU 0	--
Name: Processor Part number: Q80-30 Serial number: 0000000000000000080420806033B00E0 Spare part number: -- Model: -- Asset tag: -- Status (State): Enabled Health rollup: -- Manufacturer: Ampere(R) Processor type: CPU Processor architecture: -- Instruction set: -- Version: Ampere(R) Altra(R) Processor Min speed MHz: -- Max speed MHz: 3000 Total cores: 80 Total threads: 80			

Figure 29. Processors

- **Search Bar ()**: Enter the keyword to search specific processor.
- **ID**: Indicates the ID number of this processor.
- **Health**: Indicates the health status of this processor.
- **Location Number**: Indicates the location of this processor.
- **Identify LED**: Indicates the state of identify LED of this processor, users can configure the LED state by turn on/off the toggle switch.
- **Name**: The name of this processor.
- **Part Number**: Indicates the part number of this processor.
- **Serial Number**: Indicates the serial number of this processor.
- **Spare Part Number**: Indicates the spare part number of this processor.
- **Model**: Indicates the model information of this processor.
- **Asset Tag**: Indicates the asset tag information of this processor.
- **Manufacturer**: Indicates the manufacturer of this processor.
- **Processor Type**: Indicates the type of this processor.
- **Processor Architecture**: Indicates the architecture of the processor.
- **Instruction Set**: Indicates the instruction set of the processor.
- **Version**: Indicates the hardware version of the processor.
- **Min Speed MHz**: Indicates the minimum clock speed in MHz of this processor.
- **Max Speed MHz**: Indicates the maximum clock speed in MHz of this processor.
- **Total Cores**: Indicates the total number of cores that this processor contains.
- **Total Threads**: Indicates the total number of execution threads that this processor supports.
- **Status (State)**: The known state of this component.
- **Health Rollup**: The overall health state from the view of this resource.

2.6.10 Assemblies

It displays the Assemblies information for users to view.

Assemblies			
⚡ ID	⚡ Part number	⚡ Location number	Identify LED
^	ALTRADU8D-1L2T	--	--
Name: ALTRADU8D-1L2T Serial number: BR8PG90000800016		Model ALTRADU8D-1L2T Spare Part Number --	
^	DPS-1600EB D	--	--
Name: DPS-1600EB D Serial number: ANAD1529000020		Model DPS-1600EB D Spare Part Number --	

Figure 30. Assemblies

- **ID:** Indicates the ID number of this component.
- **Part Number:** Indicates the part number of this component.
- **Location Number:** Indicates the location of this component.
- **Identify LED:** Indicates the state of identify LED of this component, users can configure the LED state by turn on/off the toggle switch.
- **Name:** The name of this component.
- **Serial Number:** Indicates the serial number of this component.
- **Model:** Indicates the model information of this component.
- **Spare Part Number:** Indicates the spare part number of this component.

2.7 Sensors

The Sensors page provides the sensor list for users to view the information of all sensors on the system.

Search for sensors		58 items	Filter				
☐	Name	Status	Lower critical	Lower warning	Current value	Upper warning	Upper critical
☐	0V6_VTT0123	OK	0.51 V	-- V	0.597 V	-- V	0.69 V
☐	0V6_VTT4567	OK	0.51 V	-- V	0.594 V	-- V	0.69 V
☐	0V75_PCP_CPU	OK	0.637 V	-- V	0.994 V	-- V	1.265 V
☐	0V85_VDDC_RCA	OK	0.723 V	-- V	0.898 V	-- V	0.978 V
☐	0V8_VDDC_SOC	OK	0.63 V	-- V	0.75 V	-- V	1.08 V
☐	12V	OK	10.2 V	10.8 V	11.975 V	13.2 V	13.8 V
☐	1V2_VDDQ0123	OK	1.02 V	-- V	1.195 V	-- V	1.38 V
☐	1V2_VDDQ4567	OK	1.02 V	-- V	1.193 V	-- V	1.38 V
☐	1V5_VDDH	OK	1.275 V	-- V	1.482 V	-- V	1.725 V
☐	1V8_PCP	OK	1.53 V	-- V	1.784 V	-- V	2.07 V
☐	1V8_VDDH	OK	1.53 V	-- V	1.778 V	-- V	2.07 V
☐	3V3	OK	2.88 V	3.06 V	3.337 V	3.74 V	3.9 V
☐	3V3_SOC	OK	2.805 V	-- V	3.333 V	-- V	3.795 V
☐	5V	OK	4.26 V	4.5 V	5.101 V	5.49 V	5.76 V
☐	5VSB	OK	4.26 V	4.5 V	5.049 V	5.49 V	5.76 V
☐	BAT	OK	2 V	2.7 V	3.063 V	3.4 V	3.56 V
☐	PSU1_VINPUT	OK	-- V	-- V	122.625 V	-- V	-- V
☐	FAN1	OK	100 RPM	-- RPM	2290 RPM	-- RPM	0 RPM

Figure 31. Sensors

- **Search Bar ()**: Enter the keyword to search specific sensor.
- **Name**: The name of this sensor.
- **Status**: The known state of this sensor.
- **Lower Critical**: Indicates the value at which the reading is below normal range but not yet fatal.
- **Lower Warning**: Indicates the value at which the reading is below normal range.
- **Current Value**: Indicates the sensor reading value.
- **Upper Warning**: Indicates the value at which the reading is above normal range.
- **Upper Critical**: Indicates The value at which the reading is above normal range but not yet fatal.

- **Filter:** Click the **Filter** () button to select the specific condition for only list the sensor with the filter conditions. Click the "**Clear All**" to remove all checked conditions.

Status

☐ OK

☐ Warning

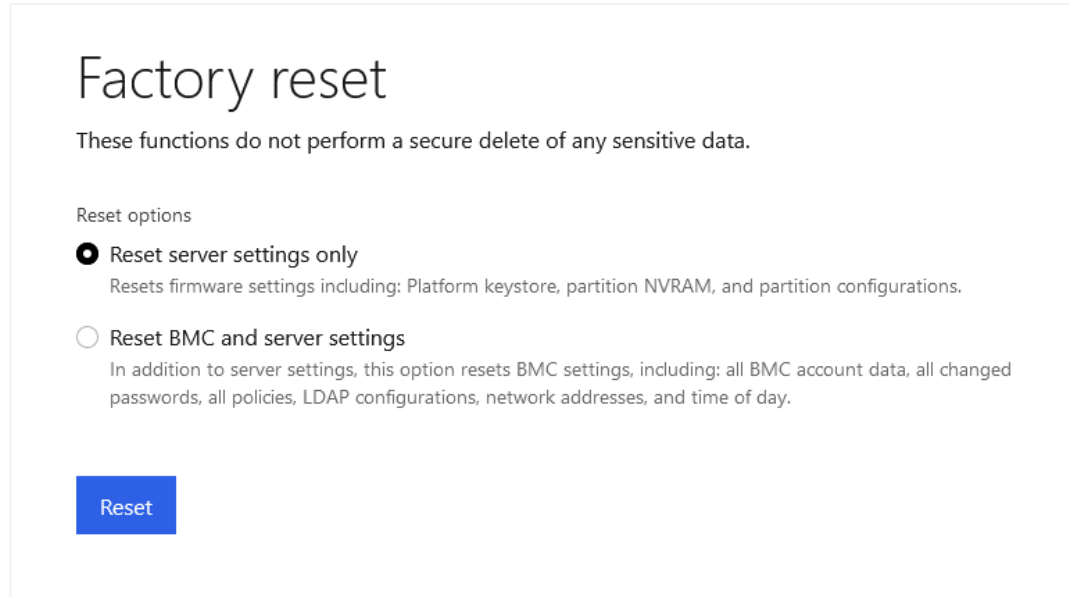
☐ Critical

[Clear all](#)

Figure 32. Sensor Filter Conditions

2.8 Factory Reset

The Factory Reset page provides the feature that allows users to reset the settings of BMC firmware.



Factory reset

These functions do not perform a secure delete of any sensitive data.

Reset options

☒ **Reset server settings only**
Resets firmware settings including: Platform keystore, partition NVRAM, and partition configurations.

☐ **Reset BMC and server settings**
In addition to server settings, this option resets BMC settings, including: all BMC account data, all changed passwords, all policies, LDAP configurations, network addresses, and time of day.

Reset

Figure 33. Factory Reset

- **Reset Server Settings Only:** Resets firmware settings including: Platform keystore, partition NVRAM, and partition configurations.
- **Reset BMC and Server Settings:** In addition to server settings, this option resets BMC settings, including: all BMC account data, all changed passwords, all policies, LDAP configurations, network addresses, and time of day.
- **Reset:** Click the **Reset** () button to perform the BMC reset process.

After clicking the **Reset** button, the WebUI will display a warning window for users to confirm the operation. The warning window may vary based on user selections.

Click the **Reset Server Settings** button or **Reset BMC and Server Settings** button to perform the process, or click the **Cancel** button to terminate the process.

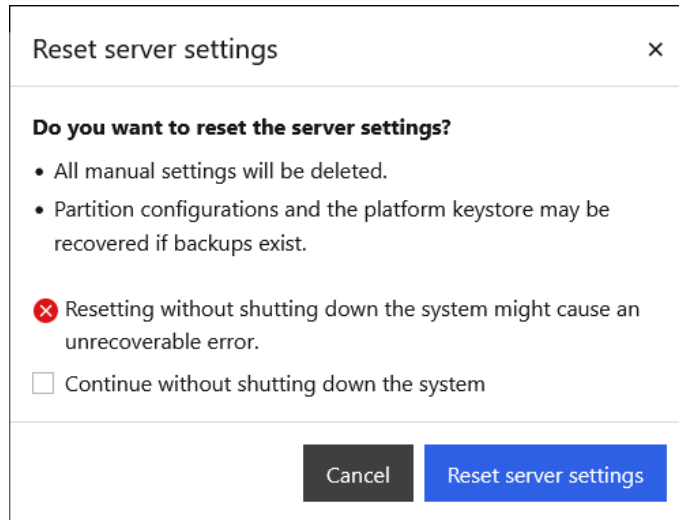


Figure 34. Warning Window with Reset Server Settings Only

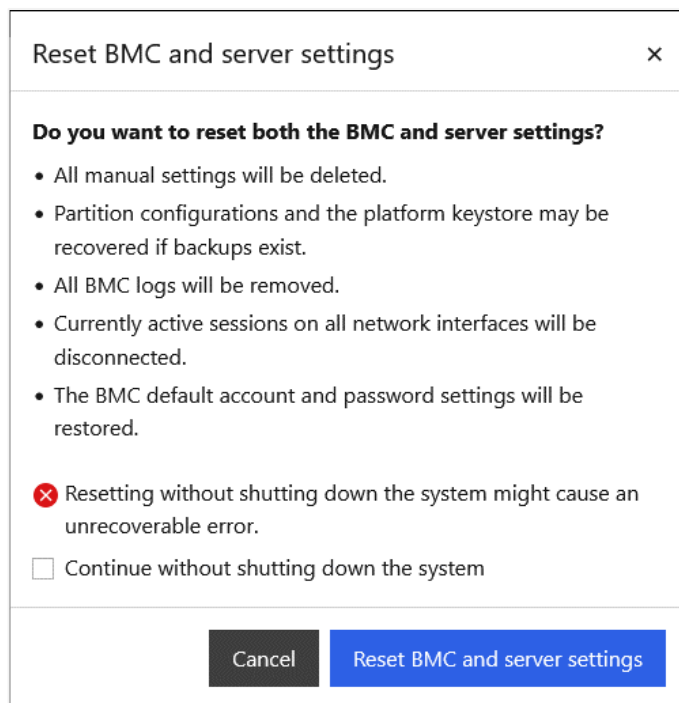


Figure 35. Warning Window with Reset BMC and Server Settings

2.9 KVM

The KVM page provides the feature that allows users to remote controlling the host through WebUI service.

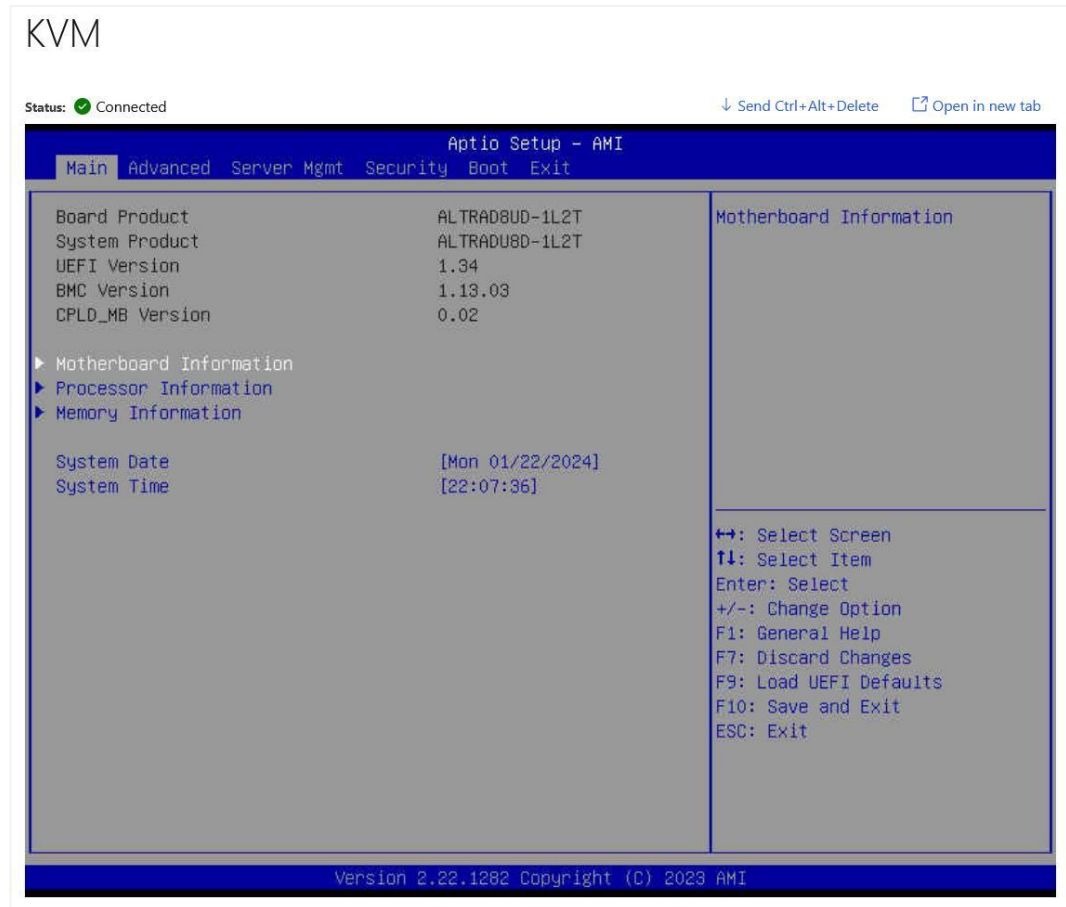
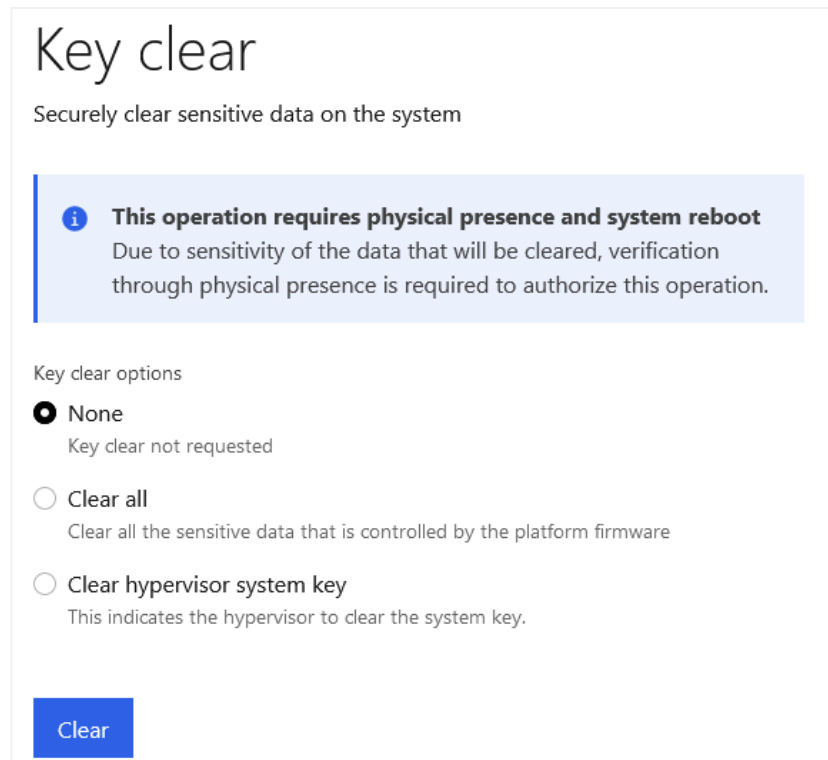


Figure 36. KVM

- **Status:** Indicates the status of KVM session connection.
- **Send Ctrl+Alt+Delete:** Click **Send Ctrl+Alt+Delete** () button to send the "Control-Alt-Delete" command to the host.
- **Open in New Tab:** Click **Open in New Tab** () button that the WebUI will open a new browser window to displays the KVM screen.

2.10 Key Clear

The Key Clear page provides the feature for users to delete the sensitive data on the system.



The screenshot shows a web interface titled "Key clear" with the subtitle "Securely clear sensitive data on the system". Below the title is a blue information box with a white 'i' icon and the text: "This operation requires physical presence and system reboot. Due to sensitivity of the data that will be cleared, verification through physical presence is required to authorize this operation." Underneath this box, the text "Key clear options" is followed by three radio button options: "None" (selected), "Clear all", and "Clear hypervisor system key". Each option has a descriptive line of text below it. At the bottom left of the form is a blue "Clear" button.

Key clear

Securely clear sensitive data on the system

i **This operation requires physical presence and system reboot**
Due to sensitivity of the data that will be cleared, verification through physical presence is required to authorize this operation.

Key clear options

☒ **None**
Key clear not requested

☐ **Clear all**
Clear all the sensitive data that is controlled by the platform firmware

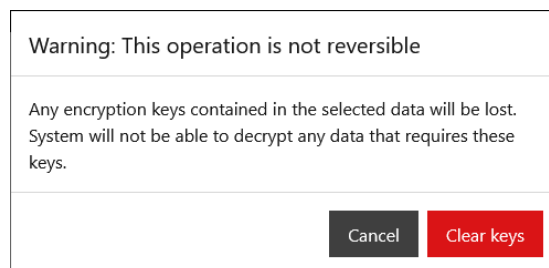
☐ **Clear hypervisor system key**
This indicates the hypervisor to clear the system key.

Clear

Figure 37. Key Clear

- **None:** Key clear not requested
- **Clear All:** Clear all the sensitive data that is controlled by the platform firmware.
- **Clear Hypervisor System Key:** This indicates the hypervisor to clear the system key.
- **Clear:** Click the **Clear** (Clear) button to perform the key clear process.

After clicking the **Clear** button, the WebUI will display a warning window for users to confirm the operation. Click the **Clear keys** button to perform the process or click the **Cancel** button to terminate the process.



The screenshot shows a warning dialog box with a title bar. The text inside reads: "Warning: This operation is not reversible" followed by "Any encryption keys contained in the selected data will be lost. System will not be able to decrypt any data that requires these keys." At the bottom right are two buttons: "Cancel" and "Clear keys".

Warning: This operation is not reversible

Any encryption keys contained in the selected data will be lost.
System will not be able to decrypt any data that requires these keys.

Cancel Clear keys

Figure 38. Warning Window for Key Clear Process

2.11 Firmware

The Firmware page provides the users with the ability to view the current and backup firmware versions of the BMC or BIOS. This page also provides firmware update functionality.

The screenshot shows the 'Firmware' page with the following sections:

- BMC**
 - Running image**

Version
1.13.03
 - Backup image**

Version
--
↔ Switch to running
- Host**
 - Running image**

Version
1.34
 - Backup image**

Version
--
- Update firmware**

Image file

[Add file](#)

[Start update](#)

Figure 39. Warning Window for Key Clear Process

2.11.1 BMC

It displays the BMC firmware related information.

- **Running image**
 - **Version:** Indicates the activate firmware of BMC.
- **Backup image**
 - **Version:** Indicates the backup firmware of BMC if supported.
- **Switch to Running:** Switch the activate firmware from running image to the backup image.
- **Add File:** Click **Add File** ([Add file](#)) button to select the updated firmware file.
- **Start Update:** Click **Start Update** ([Start update](#)) button to perform the firmware update process.

2.11.2 Host

It displays the Host BIOS firmware related information.

- **Running image**
 - **Version:** Indicates the activate firmware of BIOS.
- **Backup image**
 - **Version:** Indicates the backup firmware of BIOS if supported.

2.11.3 Update Firmware

It provides the feature buttons for users to select updated firmware image and perform the firmware update process.

- **Add File:** Click **Add File** (Add file) button to select the updated firmware file.
- **Delete:** Click **Delete** (X) button to clear selected file.
- **Start Update:** Click **Start Update** (Start update) button to perform the firmware update process.

2.11.4 Firmware Update Procedure

This section provides the procedure for users to upgrade the BMC or BIOS firmware.

1. Click the **Add File** button to select the updated firmware file and upload to the BMC through the File Upload window.

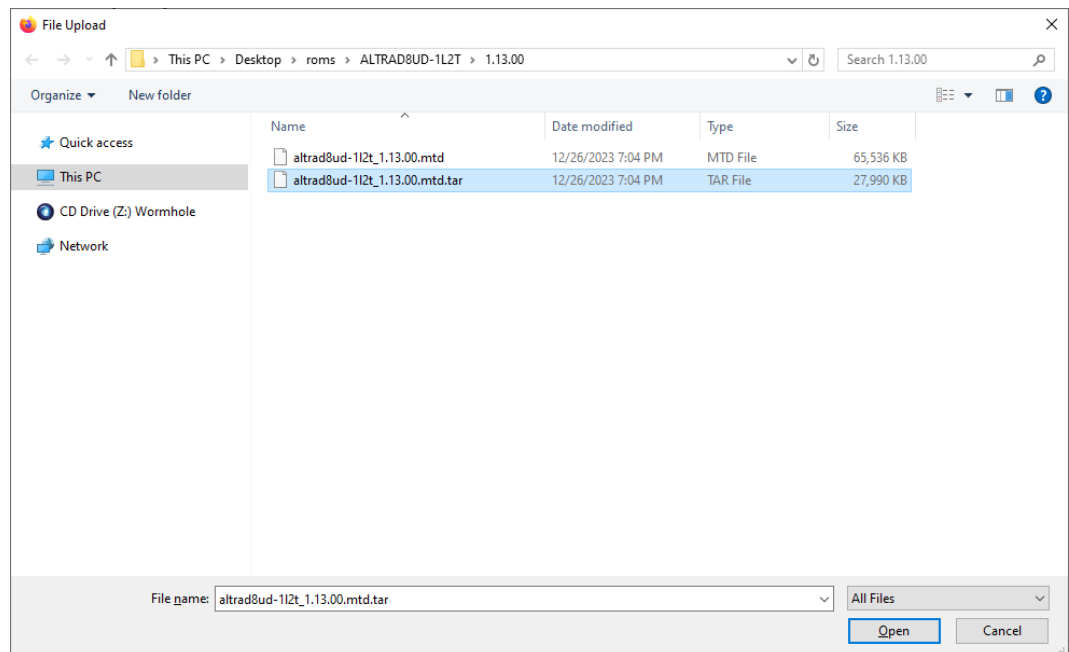


Figure 40. Select the Updated Firmware File

2. Select the updated file and click **Open** button on the File Upload window.
3. After selecting the file, the Update Firmware Information block will display the selected firmware file as below.

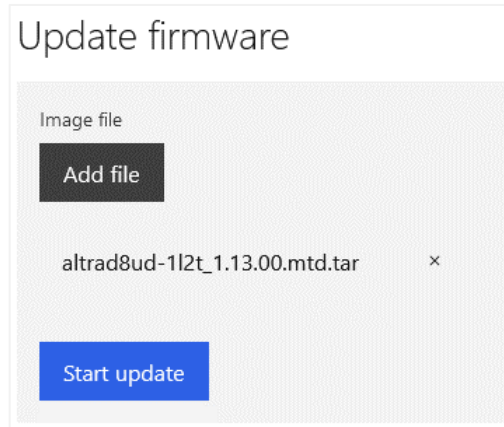


Figure 41. Selected Updated Firmware File Information

4. Click the **Start Update** button on the Update Firmware information block that to perform the firmware upgrade process or click the **Delete** button to clear selected file.
5. After clicking **Start Update** button, WebUI will displays a confirm window for users to confirm the process. Click the Start Update button on the confirm window to perform the update firmware process.

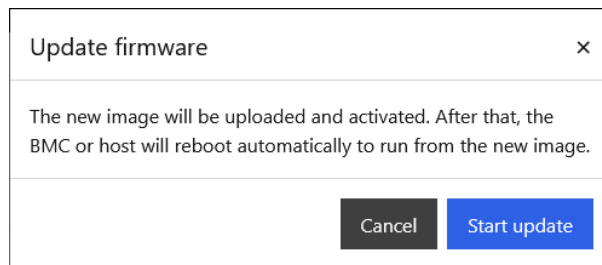


Figure 42. Confirm Window for Firmware Update

6. After confirming the firmware update process, the WebUI will display a notify window on the upper of right corner on the WebUI screen to notifies users that the update process is started.

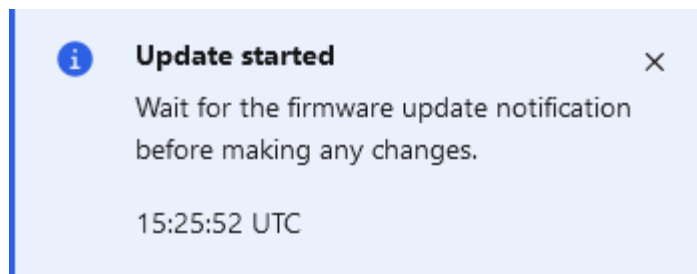


Figure 43. Firmware Update Started

7. Wait a moment for firmware update. Once the process was done then the WebUI will display a Verify Update window to notifies users that the firmware update process is completed.

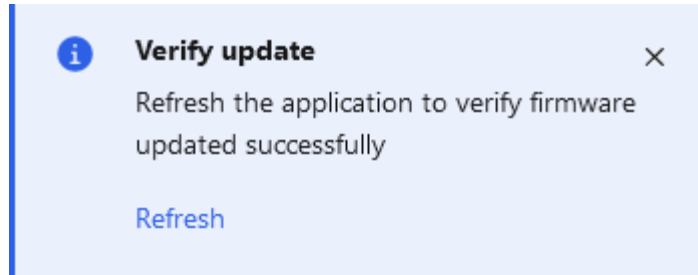


Figure 44. Verify Update

8. Click the **Refresh** link on the notify window to refresh the Firmware page, then check the version of running image whether is same as selected updated firmware version.

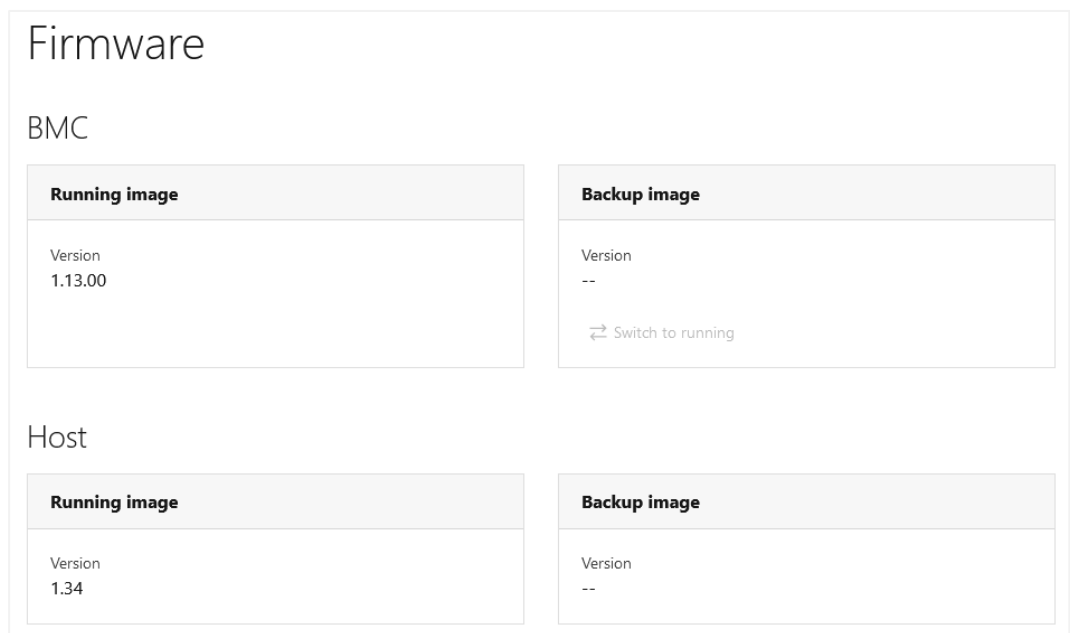


Figure 45. Check Running Image Version After Update Firmware

2.12 Reboot BMC

The Reboot BMC page provides the feature that allow users to reboot the BMC through the WebUI service.

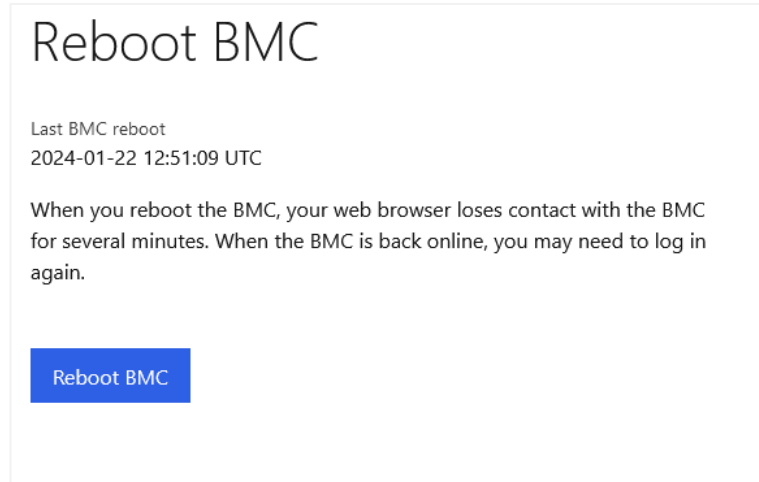


Figure 46. Reboot BMC

- **Reboot BMC:** Click the Reboot BMC () button to perform the process.

After clicking the **Reboot BMC** button, the WebUI will display a confirm window for users to confirm the operation. Click the **Comfirm** button to perform the process or click the **Cancel** button to terminate the process.

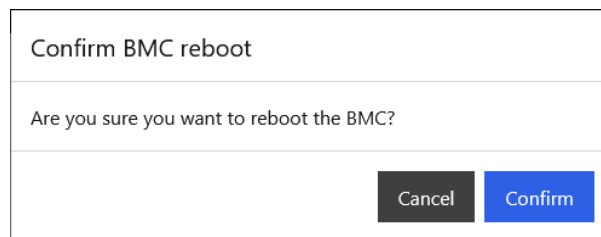


Figure 47. Confirm Window for Reboot BMC Process

2.13 Server Power Operations

The Server Power Operations page provides various features for users to configure the system power state and boot settings.

The screenshot displays the 'Server power operations' interface. It is divided into three main sections: 'Current status', 'Boot settings', and 'Operations'.
The 'Current status' section shows the 'Server status' as 'On' and the 'Last power operation' as '1970-01-01 00:00:00 UTC'.
The 'Boot settings' section includes a 'Boot settings override' dropdown menu set to 'None', an unchecked checkbox for 'Enable one time boot', and a 'TPM required policy' section with an unchecked checkbox for 'Enabled'. A blue 'Save' button is at the bottom.
The 'Operations' section contains two sections: 'Reboot server' and 'Shutdown server'. Each has radio button options for 'Orderly' (selected) and 'Immediate'. Below the 'Reboot server' options is a blue 'Reboot' button. Below the 'Shutdown server' options is a blue 'Shut down' button.

Figure 48. Server Power Operations

2.13.1 Current Status

It provides the server power state related information.

- **Server Status:** Indicates the current power state of this server.
- **Last power operation:** Indicates the date and time when the last boot state was updated.

2.13.2 Boot Settings

It provides the Boot Settings options that allows users to configure the boot options.

- **Boot Settings Override:** Select the boot device for the next system boot from.
- **Enable One Time Boot:** Enable to perform a one-time boot override for selected boot device on next system boot.
- **TPM Required Policy**
 - **Enabled:** Enable to ensure the system only boots when the TPM is functional.
- **Save:** Click the **Save** (Save) button to save the changes of boot settings.

2.13.3 Operations

It provides the Operations that allows users to configure the server power state through the WebUI.

- **Power On:** Click **Power On** () button to perform the power on system. This button appears when system is powered off.
- **Reboot Server**
 - **Orderly:** Operating system shuts down, then server reboots.
 - **Immediate:** Server reboots without operating system shutting down; may cause data corruption.
 - **Reboot:** Click **Reboot** () button to perform the system reboot with selected action above.
- **Shutdown Server**
 - **Orderly:** Operating system shuts down, then server shuts down.
 - **Immediate:** Server shuts down without operating system shutting down; may cause data corruption.
 - **Shut Down:** Click **Shut Down** () button to perform the system shut down with selected action above.

2.14 Virtual Media

The Virtual Media page provides feature that allow users to remotely mount a media to the host through WebUI virtual media service.

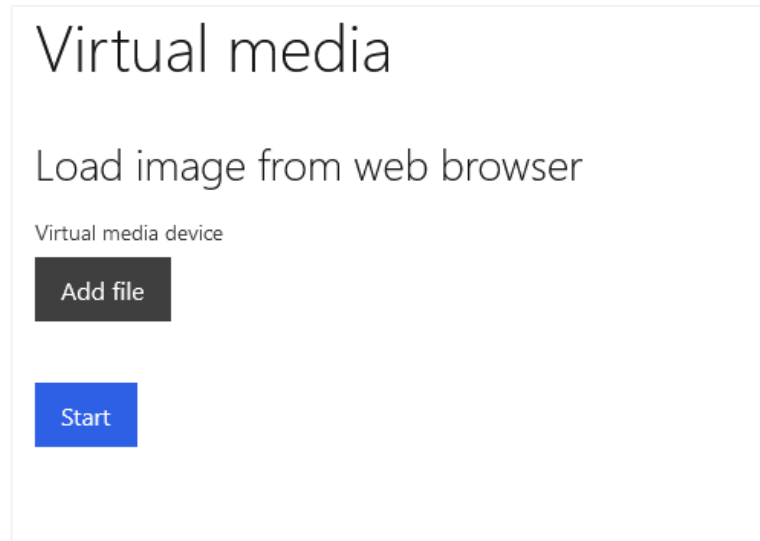


Figure 49. Virtual Media

- **Add File:** Click the **Add File** (Add file) button to select and add the mounted file.
- **Delete:** Click the **Delete** (Delete) button to remove selected file
- **Start:** Click the **Start** (Start) button to start the virtual media service.
- **Stop:** Click the **Stop** (Stop) button to stop the virtual media service.

2.14.1 Mount Media Procedure

1. Click **Add File** button to open the file upload window, then select the uploaded file and click the **Open** button.

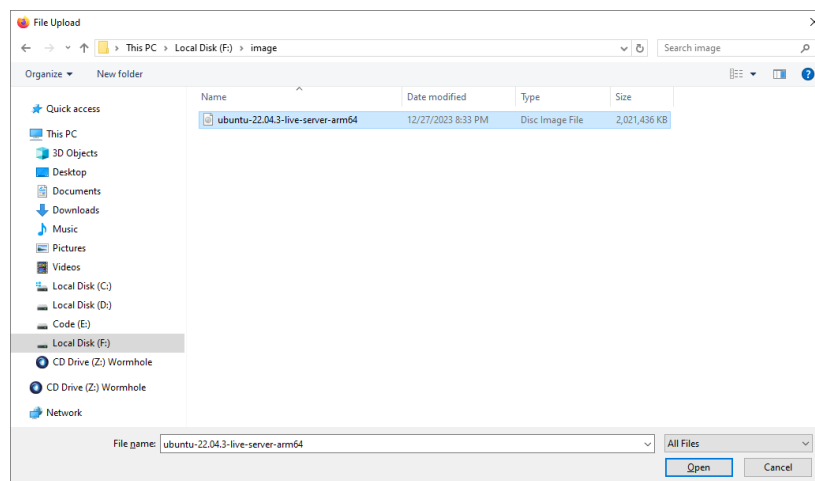


Figure 50. Select Mounted File

2. After uploading the image file, virtual media page will display the selected file. Users can click **Delete** button to clear selected file or click **Start** button to start the virtual media service.

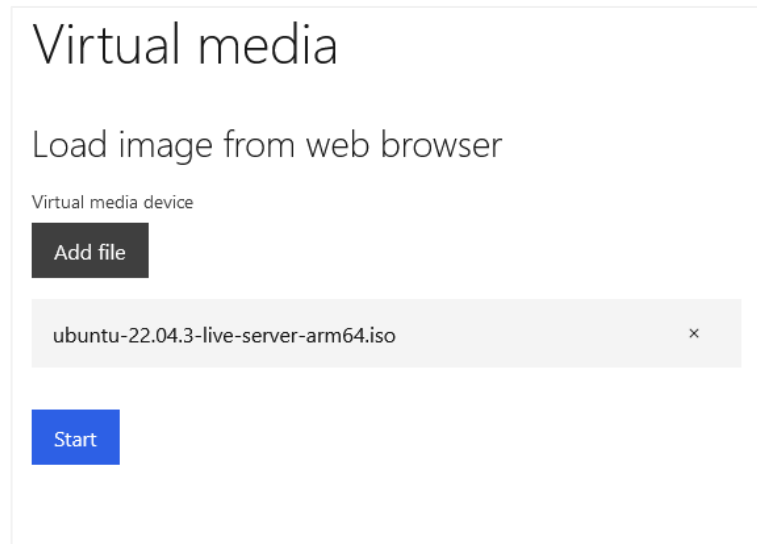


Figure 51. Upload Mounted File

3. After clicking **Start** button on the Virtual Media page, WebUI will display a notification window to notify users the service is started.

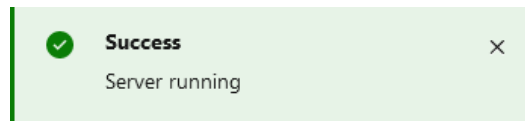


Figure 52. Virtual Media Service Running Success

4. After clicking Stop button on the Virtual Media page, WebUI will display a notification window to notify users the service is closed.

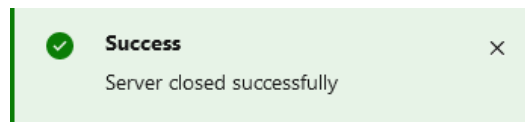


Figure 53. Virtual Media Service Closed Success

2.15 Date and Time

The Date and Time page provides features that allows users to configure the date and time value or NTP server settings in the BMC.

Date and time

To change how date and time are displayed (either UTC or browser offset) throughout the application, visit [Profile Settings](#)

Date
2024-01-23

24-hour time
12:25:05 UTC

Configure settings

☐ Manual

Date
YYYY-MM-DD
2024-01-23

24-hour time (UTC)
HH:MM
12:25

☒ NTP

Server 1

Server 2

Server 3

Save settings

Figure 54. Date and Time

- **Date:** Indicates the date value that configured in the BMC.
- **24-Hour Time:** Indicates the 24-hour time value that configured in the BMC.

2.15.1 Configure Settings

The Configure Settings information block that allow users to configure the date and time manually, or configure the NTP server settings to obtain date and time value from NTP server.

- **Manual**
 - **Date:** Configures the date for the BMC.
 - **24-hour time (UTC):** Configures the time value in 24-hore format for the BMC.
- **NTP**
 - **Server 1:** Configures the address for the NTP server 1.
 - **Server 2:** Configures the address for the NTP server 2.
 - **Server 3:** Configures the address for the NTP server 3.
- **Save Settings:** Click the **Save Settings** ([Save settings](#)) button to save the changes.

2.16 Network

The Network page provides the feature that allows users to configure the network settings of BMC.

Network

Configure BMC network settings

Network settings

Hostname [↗](#)
altrad8ud-112t

Use domain name
☐ Disabled

Use DNS servers
☐ Disabled

Use NTP servers
☐ Disabled

eth0eth1usb0

Link status
LinkUp

Speed (mbps)
1000

Interface settings

FQDN
altrad8ud-112t

MAC address [↗](#)
9c:6b:00:43:0b:b0

IPv4

IPv4 addresses

[+ Add static IPv4 address](#)

IP address	Gateway	Subnet mask	Address origin
No items available			

Static DNS

[+ Add IP address](#)

IP address
No items available

Figure 55. Network

2.16.1 Network Settings

It displays various options that allow users to configure the network settings.

Network settings

Hostname [↗](#)
altrad8ud-112t

Use domain name
☐ Disabled

Use DNS servers
☐ Disabled

Use NTP servers
☐ Disabled

Figure 56. Network Settings

- **Hostname:** Indicates the hostname of BMC. Click the **Edit** ([🔗](#)) button to edit the hostname
- **Use Domain Name:** Enabled/Disabled use domain name feature by turn on/off the toggle switch.
- **Use DNS Servers:** Enabled/Disabled use DNS servers feature by turn on/off the toggle switch.
- **Use NTP Servers:** Enabled/Disabled use NTP servers feature by turn on/off the toggle switch.

2.16.2 Network Device

It displays the supported network devices and related information.

eth0	eth1	usb0
Link status	Speed (mbps)	
LinkUp	1000	

Figure 57. Network Device

- **Eth0, Eth1, USB0:** Indicates the name of supported device.
- **Link Status:** Indicates the connection status of this device.
- **Speed (mbps):** Indicates the current connection speed of this device.

2.16.3 Interface Settings

It displays the interface settings options for supported network devices.

Interface settings	
FQDN	MAC address 🔗
altrad8ud-1l2t	9c:6b:00:43:0b:b0

Figure 58. Interface Settings

- **FQDN:** Indicates the Fully Qualified Domain Name (FQDN) of this device.
- **MAC Address:** Indicates the MAC address of this device. Click the **Edit** ([🔗](#)) button to edit the MAC address.

2.16.4 IPv4

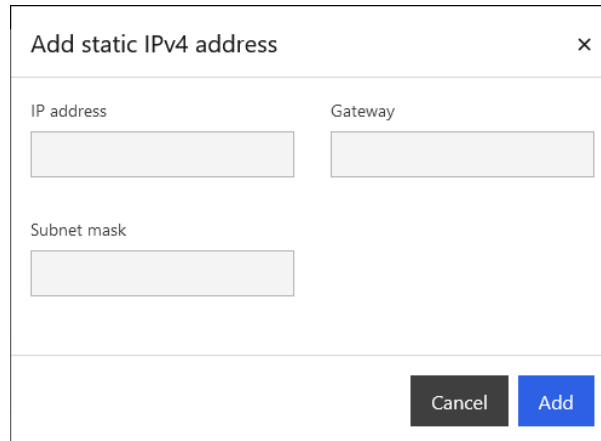
It displays the IPv4 information of supported network device.

IPv4			
IPv4 addresses			+ Add static IPv4 address
IP address	Gateway	Subnet mask	Address origin
192.168.36.215	192.168.36.1	255.255.252.0	DHCP 🗑

Figure 59. IPv4

- **IP Address:** Indicates the IPv4 address of this device.

- **Gateway:** Indicates the IPv4 gateway address of this device.
- **Subnet Mask:** indicates the subnet mask value of this device.
- **Address Origin:** Indicates how the address was determined.
- **Delete:** Click **Delete** (🗑️) button to delete this instance.
- **Add Static IPv4 Address:** Click the **Add Static IPv4 Address** (➕ Add static IPv4 address) button to add a static IPv4 configuration for this device.



A dialog box titled "Add static IPv4 address" with a close button (X) in the top right corner. It contains three input fields: "IP address", "Gateway", and "Subnet mask". At the bottom right, there are two buttons: "Cancel" and "Add".

Figure 60. Add Static IPv4 Address

2.16.5 Static DNS

It displays the Static DNS related information for supported network device.



A panel titled "Static DNS". In the top right corner, there is a blue button with a plus icon and the text "Add IP address". Below this, there is a table with a header row "IP address". The first row of the table contains the IP address "192.168.36.254" and a delete icon (🗑️) in the right column.

Figure 61. Static DNS

- **IP Address:** Indicates the IP address for the static DNS.
- **Delete:** Click Delete (🗑️) button to delete the configured DNS address.
- **Add IPv4 Address:** Click the **Add IPv4 Address** (➕ Add IP address) button to add a static IPv4 configuration for this device.

Add IP address

Static DNS

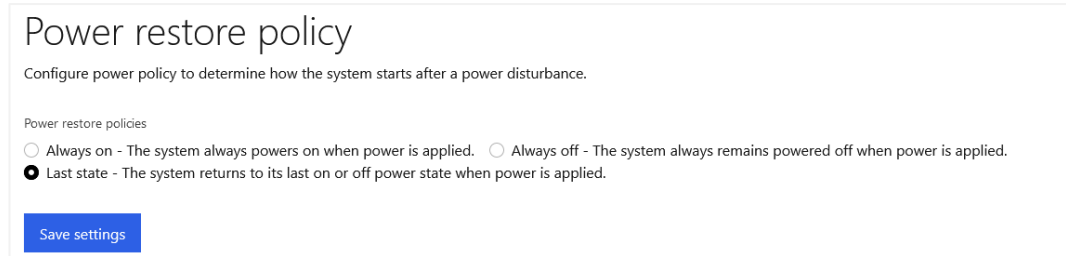
Cancel

Add

Figure 62. Add Static DNS IP Address

2.17 Power Restore Policy

The Power Restore Policy page provides various options for users to configure the power policy to determine how the system starts after a power disturbance.



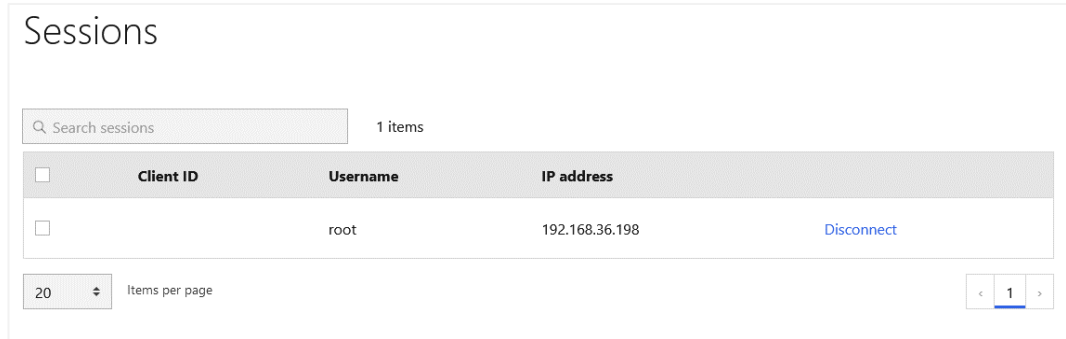
The screenshot shows a web interface for configuring the power restore policy. At the top, the title "Power restore policy" is displayed. Below it, a subtitle reads "Configure power policy to determine how the system starts after a power disturbance." Underneath, the section "Power restore policies" contains three radio button options: "Always on - The system always powers on when power is applied.", "Always off - The system always remains powered off when power is applied.", and "Last state - The system returns to its last on or off power state when power is applied." The "Last state" option is selected. At the bottom left, there is a blue button labeled "Save settings".

Figure 63. Power Restore Policy

- **Always On:** The system always powers on when power is applied.
- **Always Off:** The system always remains powered off when power is applied.
- **Last State:** The system returns to its last on or off power state when power is applied.
- **Save Settings:** Click the Save Settings () button to save the changes.

2.18 Sessions

The Sessions page provides BMC session related information for users to monitor the session connection status.



The screenshot shows the 'Sessions' page interface. At the top, there is a search bar labeled 'Search sessions' and a count of '1 items'. Below this is a table with the following structure:

☐	Client ID	Username	IP address	
☐		root	192.168.36.198	Disconnect

At the bottom of the table, there is a pagination control showing '20' items per page and a page indicator showing '1'.

Figure 64. Sessions

- **Search Bar** (1 items): Enter the keyword to search specific session.
- **Client ID**: Indicates an additional ID string sent from the client
- **Username**: Indicates who connects this session.
- **IP Address**: Indicates where the session is connected from.
- **Disconnect**: Click the **Disconnect** ([Disconnect](#)) button to disconnect this session.

2.19

LDAP

The LDAP page provides the feature for users to configure LDAP settings and manage role groups

LDAP

Configure LDAP settings and manage role groups

Settings

LDAP authentication

☒ Enable

Secure LDAP using SSL

A CA certificate and an LDAP certificate are required to enable secure LDAP

☐ Enable

CA Certificate valid until

2032-06-28

LDAP Certificate valid until

2025-01-24

[Manage SSL certificates](#)

Service type

☒ OpenLDAP

☐ Active Directory

Server URI

ldap://

Bind DN

Bind password

Base DN

User ID attribute - optional

Group ID attribute - optional

Save settings

Role groups

LDAP authentication must be enabled to modify role groups.

Group name

Group privilege

No items available

Add role group

Figure 65. LDAP

2.19.1 Settings

It displays the options for users to configure the LDAP settings.

Settings

LDAP authentication

☒ Enable

Secure LDAP using SSL

A CA certificate and an LDAP certificate are required to enable secure LDAP

☐ Enable

CA Certificate valid until
2032-06-28

LDAP Certificate valid until
2025-01-24

[Manage SSL certificates](#)

Service type

☒ OpenLDAP
☐ Active Directory

Server URI [?](#)

ldaps://

Bind DN

Bind password [?](#)

Base DN

User ID attribute - optional

Group ID attribute - optional

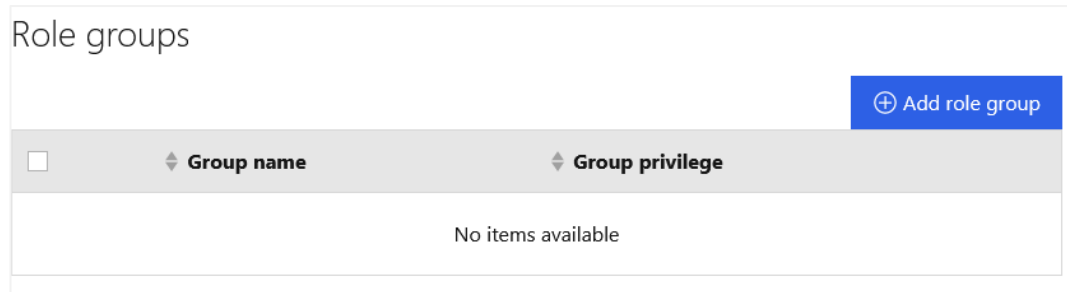
[Save settings](#)

Figure 66. LDAP Settings

- **LDAP authentication**
 - **Enable:** Check this checkbox to Enabled/Disabled LDAP authentication feature.
- **Secure LDAP using SSL**
 - **Enable:** Check this checkbox to Enabled/Disabled Secure LDAP feature.
- **Service Type**
 - **OpenLDAP:** Checked if users want to use the LDAP service with OpenLDAP.
 - **Active Directory:** Checked if users want to use the LDAP service with Active Directory.
- **Server URI:** To fill the LDAP server URI information.
- **Bind DN:** The user name for the service.
- **Bind Password:** The password for this service.
- **Base DN:** The base distinguished names to use to search an external LDAP service.
- **User ID Attribute (Optional):** The attribute name that contains the LDAP user name entry.
- **Group ID Attribute (Optional):** The attribute name that contains the groups for a user on the LDAP user entry.
- **Save Settings:** Click **Save Settings** ([Save settings](#)) button to save the changes.

2.19.2 Role Groups

It displays the role group name and privilege information.



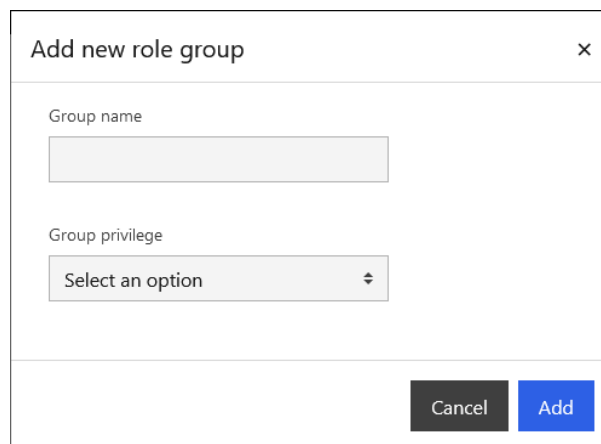
Role groups

[+ Add role group](#)

☐	Group name	Group privilege
No items available		

Figure 67. Role Groups

- **Group Name:** Indicates the name of this group.
- **Group Privilege:** Indicates the privilege of this group.
- **Edit:** Click the **Edit** () button to edit the privilege of selected group.
- **Delete:** Click the **Delete** () button to delete selected group.
- **Add Role Group:** Click **Add Role Group** () button to add new role group for the LDAP service.



Add new role group ×

Group name

Group privilege

Select an option 

[Cancel](#) [Add](#)

Figure 68. Add New Role Group

2.20 User Management

The User Management page provides the various features that allow users to add, delete or modify the user account.

User management

[Account policy settings](#)[+ Add user](#)

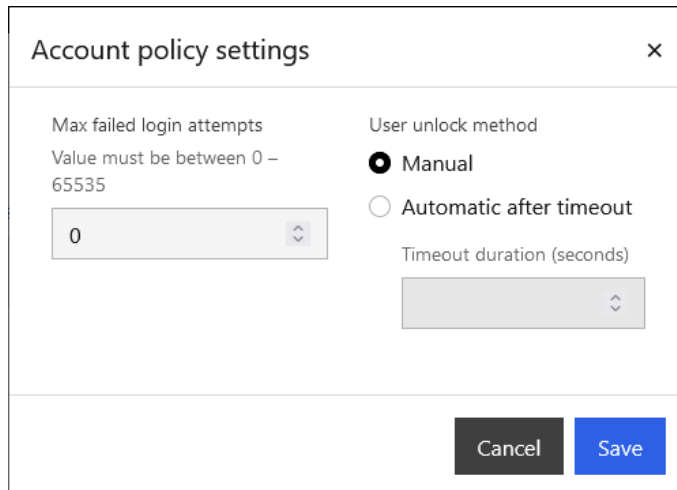
☐	Username	Privilege	Status	
☐	admins01	Administrator	Enabled	Edit Delete
☐	root	Administrator	Enabled	Edit Delete

[^ View privilege role descriptions](#)

Privilege	Administrator	Operator	ReadOnly	NoAccess
Configure components managed by this service	✓	✓		
Configure manager resources	✓			
Update password for current user account	✓	✓	✓	
Configure users and their accounts	✓			
Log in to the service and read resources	✓	✓	✓	

Figure 69. User Management

- **Username:** Indicates the username of this account.
- **Privilege:** Indicates the privilege of this account.
- **Status:** Indicates the activate status of this account.
- **Edit:** Click the **Edit** ([Edit](#)) button to edit selected account.
- **Delete:** Click the **Delete** ([Delete](#)) button to delete selected account.
- **Account Policy Settings:** Click the Account Policy Settings ([Account policy settings](#)) button to edit the account locked policy and locked time.



Account policy settings [X]

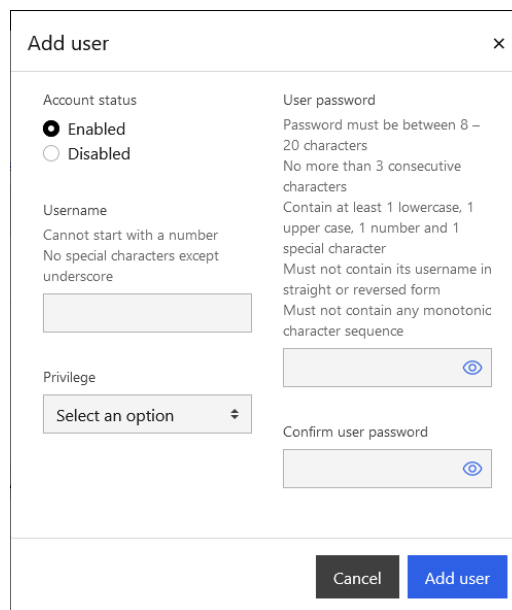
Max failed login attempts
Value must be between 0 – 65535
0

User unlock method
☒ Manual
☐ Automatic after timeout
 Timeout duration (seconds)

Cancel Save

Figure 70. Account Policy Settings

- **Add User:** Click **Add User** () button to add a new user account.



Add user [X]

Account status
☒ Enabled
☐ Disabled

Username
 Cannot start with a number
 No special characters except underscore

Privilege
 Select an option

User password
 Password must be between 8 – 20 characters
 No more than 3 consecutive characters
 Contain at least 1 lowercase, 1 upper case, 1 number and 1 special character
 Must not contain its username in straight or reversed form
 Must not contain any monotonic character sequence

Confirm user password

Cancel Add user

Figure 71. Add User Account

- **Account Status:** Checked the **Enabled/Disabled** to activate/block this account.
- **Username:** To fill the username for this account.
- **User Password:** To fill the password for this account.
- **Confirm User Password:** To fill the same password again to confirm the user password.
- **Privilege:** Selects the privilege for this account.

2.21 Policies

The Policies page provides various options for users to enable or disable the features which are supported on the BMC.

Policies

BMC shell (via SSH) Allow access to shell sessions via SSH, through port 22 on the BMC.	☒ Enabled
Network IPMI (out-of-band IPMI) Allow remote management of the platform via IPMI. Tools such as ipmitool require this setting to be enabled.	☒ Enabled
VirtualTPM Enabling vTPM makes a TPM available to the guest operating system.	☐ Disabled
RTAD This option enables or disables the Remote Trusted Attestation Daemon for host firmware	☐ Disabled

Figure 72. Policies

- **BMC shell (via SSH):** Turns on/off the toggle switch to enabled/disabled BMC shell feature.
- **Network IPMI (out-of-band IPMI):** Turns on/off the toggle switch to enabled/disabled Network IPMI feature.
- **VirtualTPM:** Turns on/off the toggle switch to enabled/disabled VirtualTPM feature.
- **RTAD:** Turns on/off the toggle switch to enabled/disabled Remote Trusted Attestation Daemon (RTAD) feature.

2.22 Certificates

The Certificates page provides feature that allow users to configure the certificates on the BMC.

Certificates					+ Generate CSR	+ Add new certificate
Certificate	Issued by	Issued to	Valid from	Valid until		
CA Certificate	BMC	BMC	2022-07-01	2032-06-28	↺	🗑
LDAP Certificate	fw.asrockrack.com	ldap.asrockrack.com	2024-01-25	2025-01-24	↺	🗑
HTTPS Certificate	BMC	BMC	2022-07-01	2032-06-28	↺	🗑

Figure 73. Certificates

- **Certificate:** Indicates the purpose of this certificate.
- **Issued by:** Indicates the organization of certificate issuer.
- **Issued to:** Indicates the organization certified by the certificate.
- **Valid from:** Indicates the valid date of this certificate started from.
- **Valid until:** Indicates the valid date of this certificate ends on.
- **Replace:** Click **Replace** ([↺](#)) button to replace the selected certificate.
- **Delete:** Click **Delete** ([🗑](#)) button to delete the selected certificate.
- **Generate CSR:** Click the **Generate CSR** ([+ generate CSR](#)) button to create a certificate CSR data.

Generate a Certificate Signing Request (CSR)

Certificate type

Select an option

Country/Region

Select an option

Private key

Key pair algorithm

Select an option

State

City

Company name

Company unit

Common name

Challenge password - optional

Contact person - optional

Email address - optional

Alternate name - optional

Add multiple alternate names separated by space

Cancel

Generate CSR

Figure 74. Generate a Certificate Signing Request (CSR)

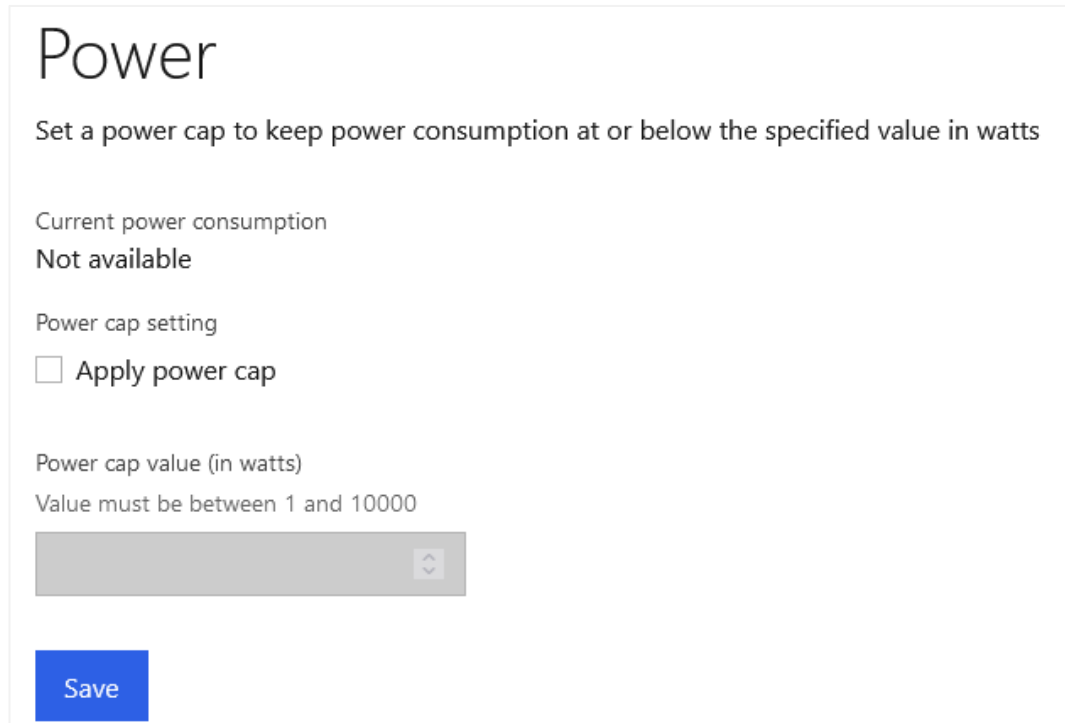
- **Add New Certificate:** Click the **Add New Certificate** (Add new certificate) button to add a new certificate into the BMC.
 - **Certificate Type:** Select the purpose type of this certificate.
 - **Add File:** Click **Add File** (Add file) button to select uploaded certificate file.

The screenshot shows a modal dialog titled "Add new certificate". Inside the dialog, there is a "Certificate type" label followed by a dropdown menu currently showing "LDAP Certificate". Below this is a "Certificate file" label, followed by a dark "Add file" button and a text input field containing "ldap.pem". At the bottom right of the dialog are two buttons: "Cancel" and "Add".

Figure 75. Add New Certificate

2.23 Power

The Power page provides feature that allow users to view the value of power consumption and configure the power capping settings.



Power

Set a power cap to keep power consumption at or below the specified value in watts

Current power consumption
Not available

Power cap setting
☐ Apply power cap

Power cap value (in watts)
Value must be between 1 and 10000

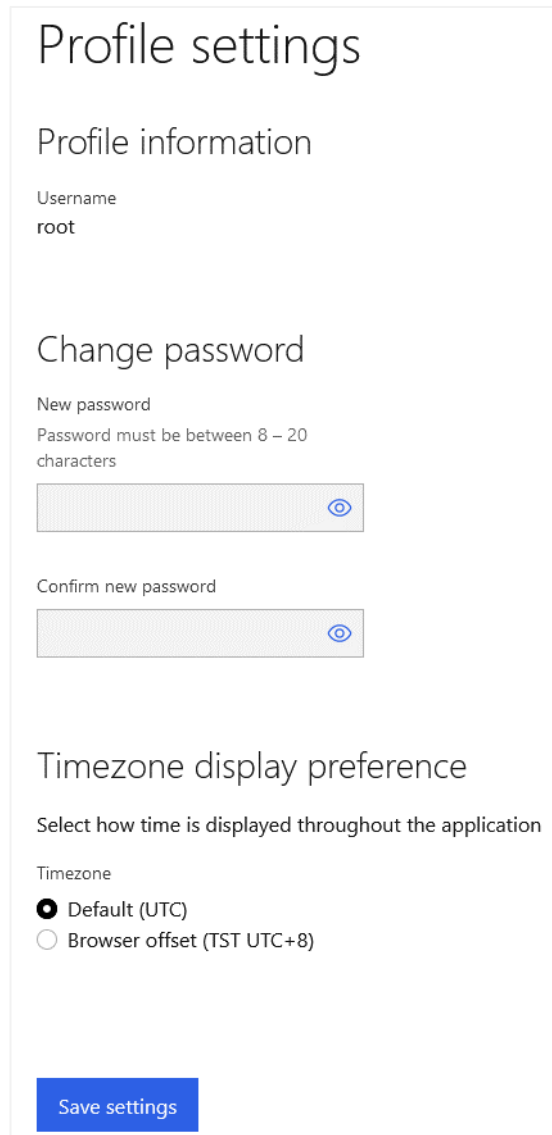
Save

Figure 76. Power

- **Current Power Consumption:** Indicates the current power consumption value of this system.
- **Power Cap Settings**
 - **Apply Power Cap:** Check this option to enables power cap feature.
- **Power Cap Value (in watts):** To fill the value for power cap feature.
- **Save:** Click the **Save** () button to save the changes.

2.24 Profile Settings

The Profile Settings page provides feature that allow users to change the password and adjust the time zone.

The screenshot shows a web interface for 'Profile settings'. It is divided into three main sections. The first section, 'Profile information', shows the 'Username' as 'root'. The second section, 'Change password', has a 'New password' field with a hint 'Password must be between 8 – 20 characters' and a 'Confirm new password' field. Both password fields have a blue eye icon for toggling visibility. The third section, 'Timezone display preference', asks the user to 'Select how time is displayed throughout the application'. It has two radio button options: 'Default (UTC)' which is selected, and 'Browser offset (TST UTC+8)'. At the bottom of the form is a blue 'Save settings' button.

Profile settings

Profile information

Username
root

Change password

New password
Password must be between 8 – 20 characters

Confirm new password

Timezone display preference

Select how time is displayed throughout the application

Timezone

☒ Default (UTC)

☐ Browser offset (TST UTC+8)

Save settings

Figure 77. Profile Settings

2.24.1 Profile Information

It displays user profile information of this account.

- **Username:** Indicates the name of this account.

2.24.2 Change Password

It provides the options for users to changes the password of this account.

- **New password:** To fill the new password for this account.

- **Confirm New Password:** To fill the new password for this account again.

2.24.3 Timezone Display Preference

It provides the options for users to Select how time is displayed throughout the application.

- **Default:** Check this option that user the default settings.
- **Browser Offset:** Check this options that use the browser time zone settings.