



# ThinkSystem HS350X V3 BMC User Guide



**Machine Type: 7DE3**

**First Edition (March 2024)**

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## Chapter 1. Introduction

- [“1.1 Glossary” on page 1](#)
- [“1.2 Page Description” on page 1](#)

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### 1.1 Glossary

Table 1. Glossary

| Term       | Description  |
|------------|--|
| BIOS       | Basic Input/Output System  |
| BMC        | At the heart of the IPMI architecture, there is a micro-controller called the Baseboard management controller (BMC). |
| FRU        | Field Replaceable Unit   |
| Hard Reset | A reset event in the system that initializes all components and invalidates caches.                                  |
| KVM        | Keyboard, Video, Mouse   |

---

### 1.2 Page Description

| Pages          | Sub-Functions   | Description   |
|----------------|---|---|
| Dashboard      | /   | This page displays the overall status of BMC.   |
| Sensor         | /   | The sensor readings page displays all the sensor-related information.   |
| FRU            | /   | This page displays the BMC's FRU device information. FRU page shows information like Basic Information, Chassis Information, Board Information and Product Information of the FRU device. |
| Logs & Reports | IPMI Event Log  | This page displays the list of events incurred by different sensors on this device. Click a record to see the details of that entry.  |
|                | Audit Log   | This page displays logs of audit events for this device (if the options have been configured).  |
| Settings       | Date & Time   | This page displays the settings of Time Zone, date & time, NTP.   |
|                | External User Services  | This page displays the settings of an external user.  |
|                | KVM Mouse Setting   | This page displays the settings of KVM mouse.   |
|                | TLS Settings  | This page displays the settings of TLS protocol encryption mode.  |
|                | Log Settings  | This page displays the settings of log settings.  |
|                | Media Redirection   | This page displays the settings of media redirection.   |
|                | Network Settings  | This page displays the settings of network settings.  |
|                | PAM Order   | This page is used to configure the PAM order for user authentication into the BMC. It shows the list of available PAM modules supported in the BMC.                                       |
|                | Platform Event Filters  | This page displays the settings of platform event filters.  |
| Services       | This page displays the status and other basic information about the services. |   |

| <b>Pages</b>      | <b>Sub-Functions</b>     | <b>Description</b>  |
|-------------------|--------------------------|---|
|                   | SMTP Settings            | This page displays the settings of SMTP settings.   |
|                   | SSL Settings             | This page displays the settings of SSL settings.  |
|                   | User Management          | This page displays the settings of user management.   |
|                   | IPMI Interface           | This page displays the settings of IPMI interface.  |
|                   | Account Lockout Policy   | This page displays the settings of account lockout policies.  |
| Remote Control    | /                        | This page displays the H5 KVM and java SOL.   |
| Image Redirection | /                        | This page displays the settings of remote image.  |
| Power Control     | /                        | This page displays the settings of power control.   |
| Maintenance       | Backup Configuration     | Check the configuration you want to backup and download the backup file.                              |
|                   | Firmware Image Location  | You can choose the method of uploading FW here. Usually, we use default value.                        |
|                   | Firmware Information     | This page displays the build date, build time and firmware version of the active BMC image.           |
|                   | Firmware Update          | This page allows users to update BMC firmware from web.   |
|                   | Preserve Configuration   | This page displays the configuration that needs to preserve, while the Restore Configuration is done. |
|                   | Restore Configuration    | This page allows users to restore configuration file from local host to BMC.                          |
|                   | Restore Factory Defaults | This page allows users to restore factory defaults.   |
|                   | Save Server Data         | This page is used to download server data.  |
|                   | System Administrator     | This page displays the settings of admin user in BMC.   |
| Sign Out          | /                        | This page allows users to sign out the current user.  |

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## Chapter 2. WEBUI Opening and Login

- “2.1 Login WEBUI” on page 3
- “2.2 Left Navigation Menu” on page 5
- “2.3 Help Icon” on page 5
- “2.4 Error Message” on page 6

---

### 2.1 Login WEBUI

To access the BMC web interface, please follow the steps as below:

1. Open a web browser. In the address or URL area, type in the IP address or host name of the BMC which you want to connect to.
2. Type your username and password in the Login window. If you are using the web for the first time, you can obtain your username and password from your system administrator. The Login window shows in the following figure.

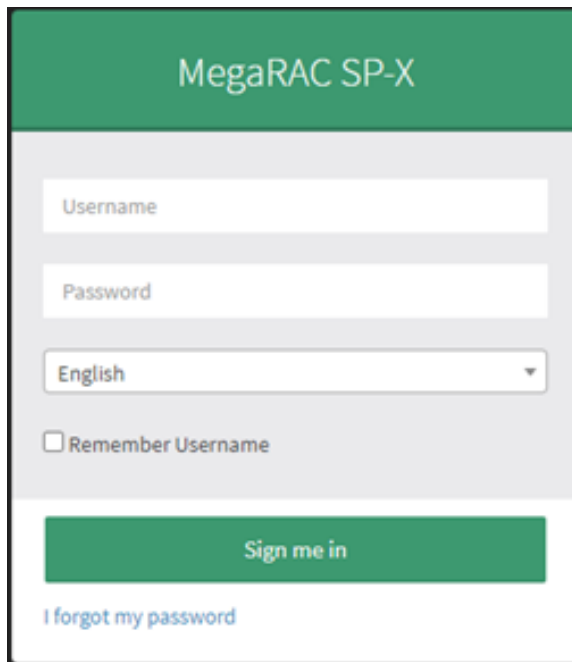
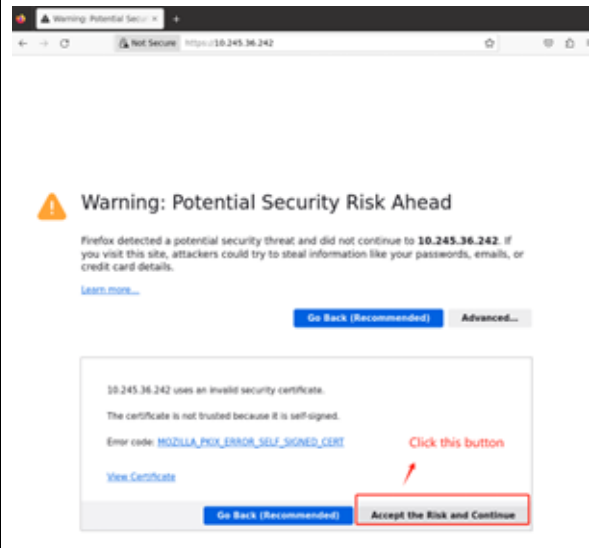
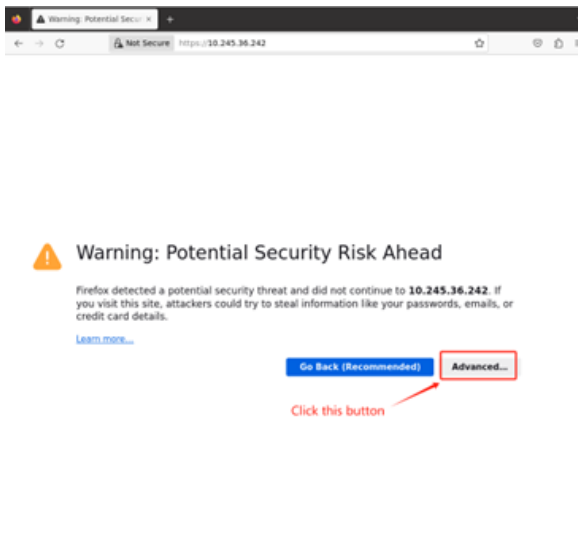


Figure 1. Login WEBUI

Table 2. Supported browser list

| Browser | Revision                |
|---------|-------------------------|
| Chrome  | 119.0.6045.106 or later |
| Firefox | 60.2.2 or later         |

3. When logging in to BMC IP for the first time, a security prompt page will appear. Select "Advanced" and "Continue to BMC IP" to proceed.



4. If it is the first time to login the BMC WEBUI, the default username and password should be:

User: admin

Password: admin

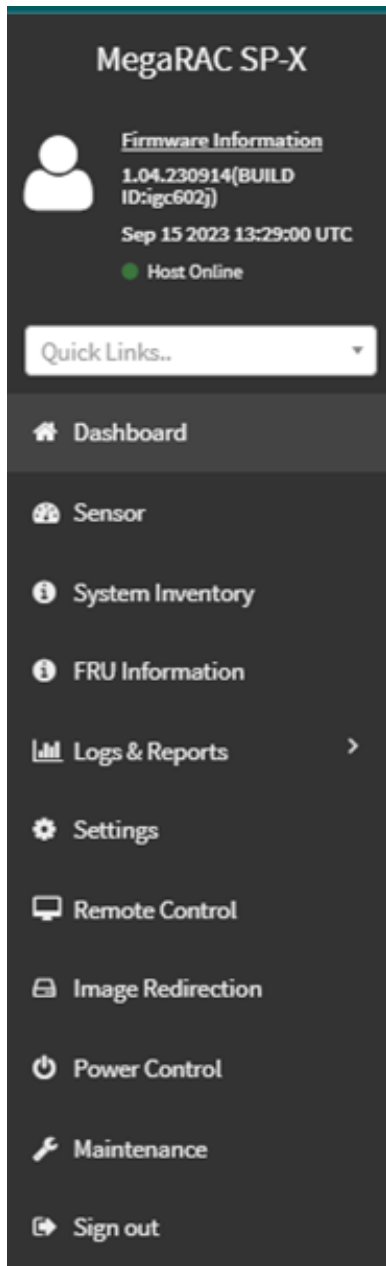
**Attention:** To follow Lenovo security rules, users must change the default password when logging in BMC WEBUI at the first time. The password rule must follow Lenovo ISG password rule, which should be at least eight bytes, including uppercase and lowercase letters and numbers.

## MegaRAC SP-X

Password should be changed for default user and should have a minimum of 8 characters.



## 2.2 Left Navigation Menu



1. Most menu items do not have sub-pages. Hover the cursor on them to show a background color. Click them to go to the selected pages. See the figure on the left.
2. The page of “Logs & Reports” has sub-pages. Click it to show the sub-menu list and the drop-down items. See the figure below.

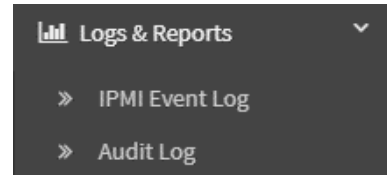
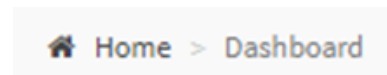


Figure 2. Logs & Reports

3. The top bar shows the following information from the left to the right: messages, notifications, sync button, refresh button, user. See the figure below.



4. The breadcrumb Navigation bar shows the previous and current path of current page. See the figure below.



## 2.3 Help Icon

There is a help icon on most pages. Click this icon and it will show the help information on each item. See the figure below:

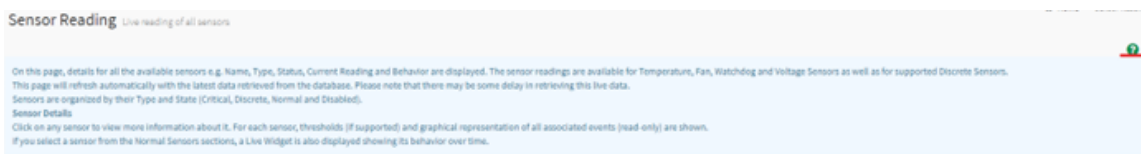


Figure 3. Help Icon

---

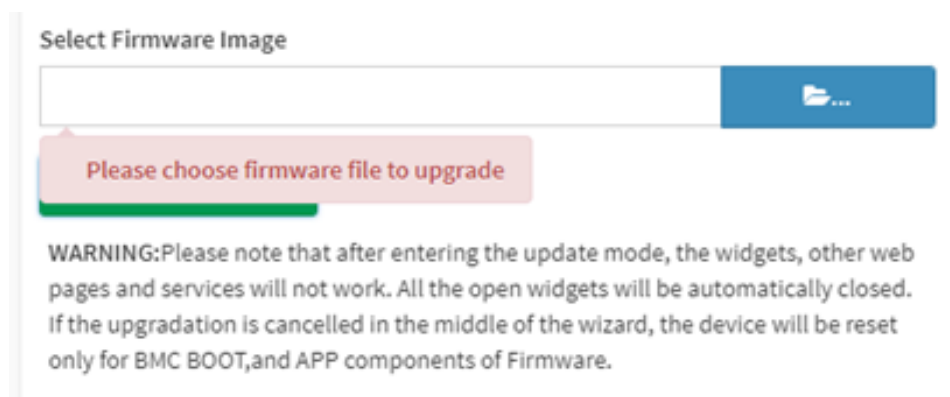
## 2.4 Error Message

This feature displays user operation failure information or system exception information. Mostly, an error shows in two styles:

1. The modal dialog pops up if the failure has specific reasons and needs user action, or the failure would impact server state/service. See the figure below:

Image Verification unsuccessful. Please check if you uploaded the correct Image. In order to try upgrading again you need to reset the device. Press OK to reset the device now.

2. Other error and Informational messages will display on the top of the error area, without blocking further user operation. See the figure below:



---

## Chapter 3. Dashboard

The dashboard page is the first display page when you log into the web. Also, it will also show this page when you click the system dashboard menu.

From the upper section of dashboard page, you can jump to [“7.2 Audit Log”](#) on page 16.

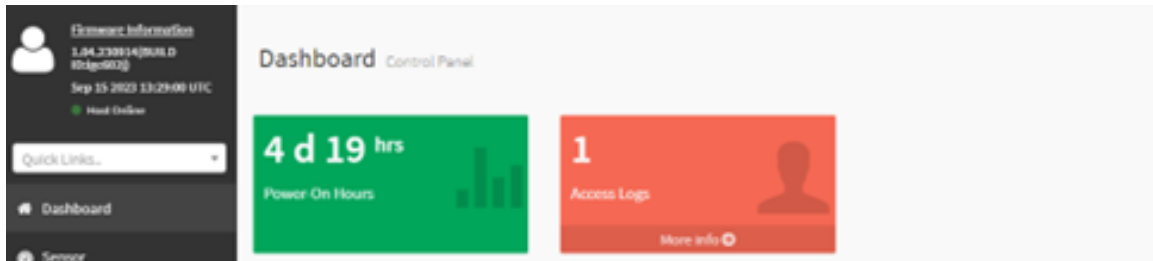


Figure 4. Dashboard



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## Chapter 4. Sensor

The sensor readings page displays all the sensor related information.

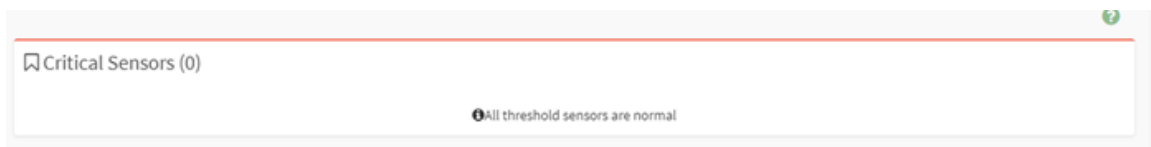
- [“4.1 Reading of All Sensors” on page 9](#)
- [“4.2 Sensor Details” on page 10](#)

---

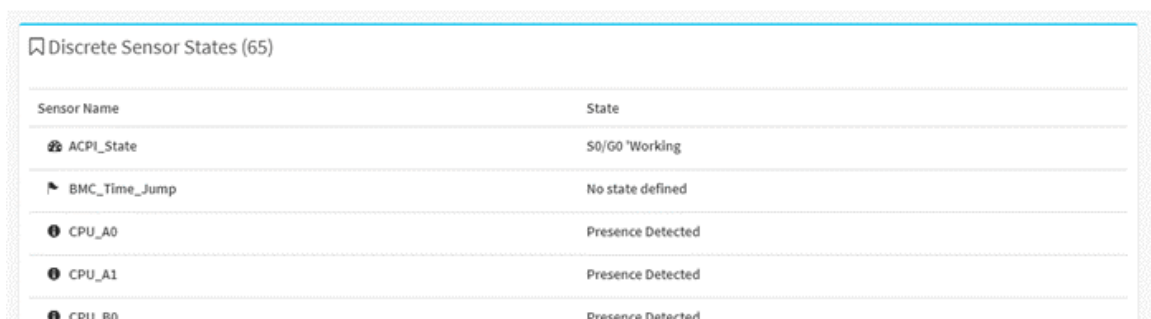
### 4.1 Reading of All Sensors

This page consists of “Critical Sensors,” “Discrete Sensor States,” “Normal Sensors” and “Disabled Sensors.” All these parts show overall sensor status grouped by the section label.

Critical sensor states are like below:



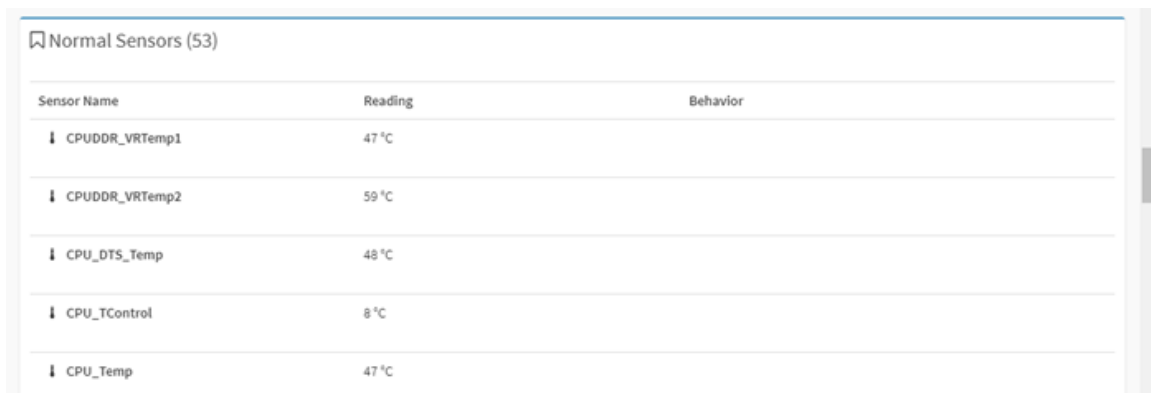
Discrete sensor states are like below:



The screenshot shows a section titled "Discrete Sensor States (65)". Below the title, there is a table with the following data:

| Sensor Name   | State             |
|---------------|-------------------|
| ACPI_State    | S0/G0 Working     |
| BMC_Time_Jump | No state defined  |
| CPU_A0        | Presence Detected |
| CPU_A1        | Presence Detected |
| CPU_B0        | Presence Detected |

Threshold sensor states are like below:



The screenshot shows a section titled "Normal Sensors (53)". Below the title, there is a table with the following data:

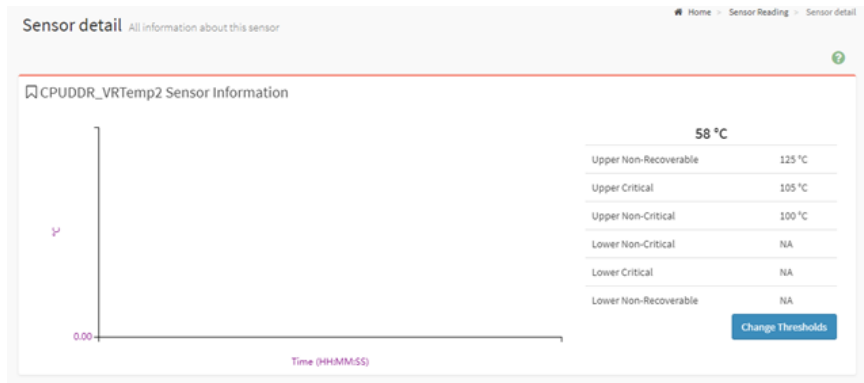
| Sensor Name    | Reading | Behavior |
|----------------|---------|----------|
| CPUDDR_VRTemp1 | 47 °C   |          |
| CPUDDR_VRTemp2 | 59 °C   |          |
| CPU_DTS_Temp   | 48 °C   |          |
| CPU_TControl   | 8 °C    |          |
| CPU_Temp       | 47 °C   |          |

Not present or no available sensors are showed like below:



## 4.2 Sensor Details

Select a particular sensor from the Critical Sensor or Normal Sensor lists. The Sensor Information, such as Live Widget and Thresholds for the selected sensor will display.

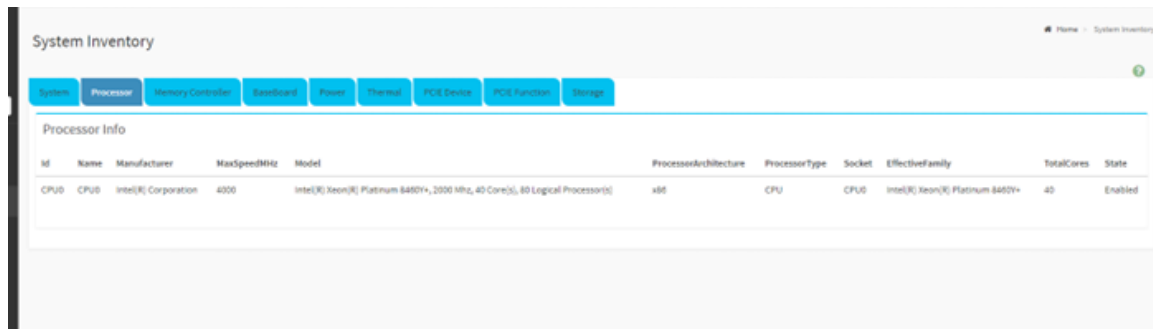
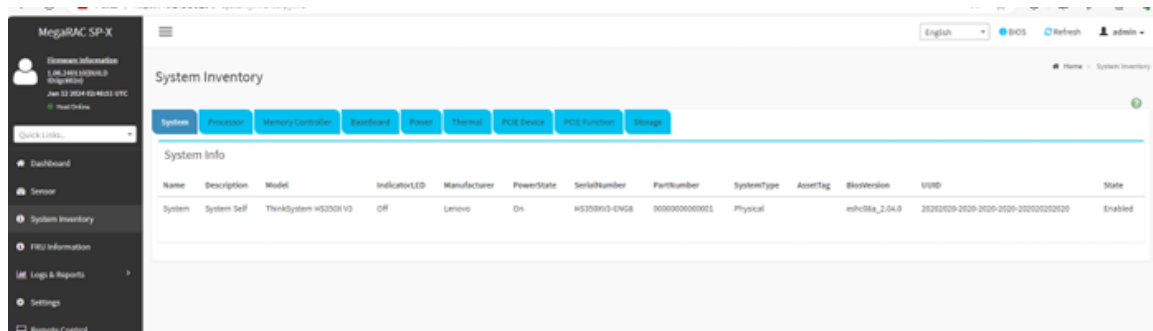


User can change the sensor threshold by clicking “Change Threshold” button. This option support for linear sensors.

Besides, the event logs related to this sensor will display on this page.

## Chapter 5. System Inventory

This page displays the hardware and software information of the platform. You can directly view the current hardware of the machine in this interface, or view some status information of the current machine by category.







## Chapter 6. FRU (Field Replaced Unit) Information

This Page displays the BMC's FRU device information. FRU page shows information like Basic Information, Chassis Information, Board Information and Product Information of the FRU device.

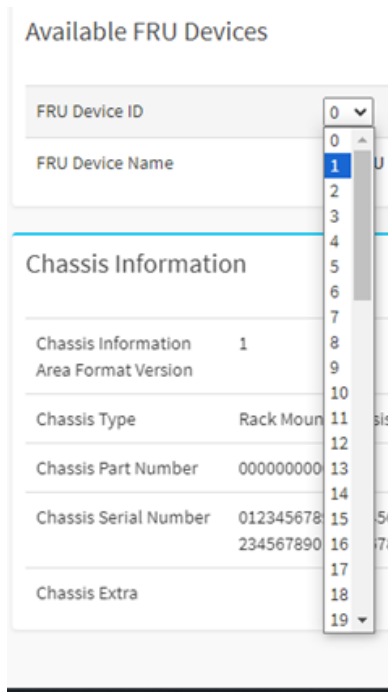
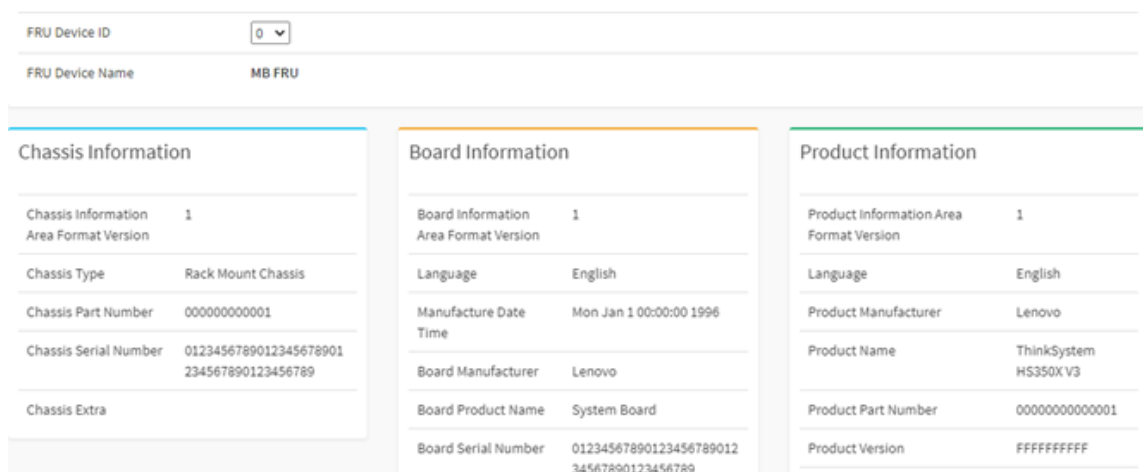


Figure 5. Available FRU Devices

FRU Device ID allows users to select FRU Device ID from the drop-down lists to view the details FRU data of the selected device, including:

- Mother board information
- DC-SCM information
- Backplane information
- Riser information
- CPU information
- DIMM information
- PCIE card information
- HDD information
- PSU information
- OCP information

Detailed FRU shows static manufacture or vendor data as below:





---

## Chapter 7. Logs and Reports

- “7.1 IPMI System Event Log (SEL)” on page 15
- “7.2 Audit Log” on page 16

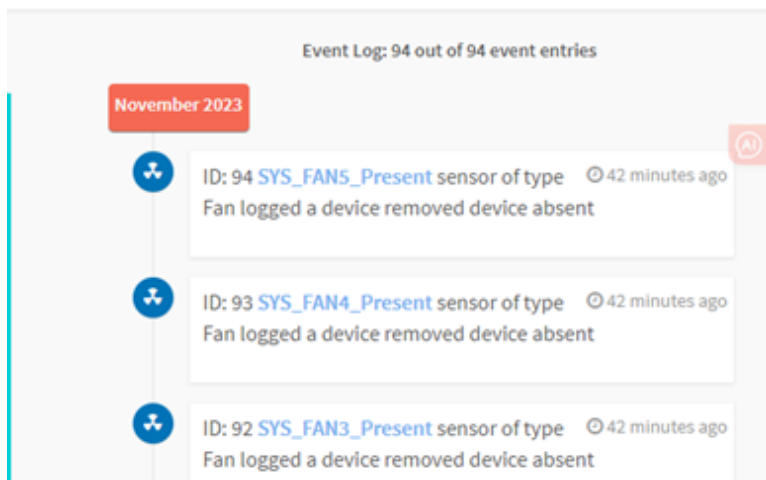
---

### 7.1 IPMI System Event Log (SEL)

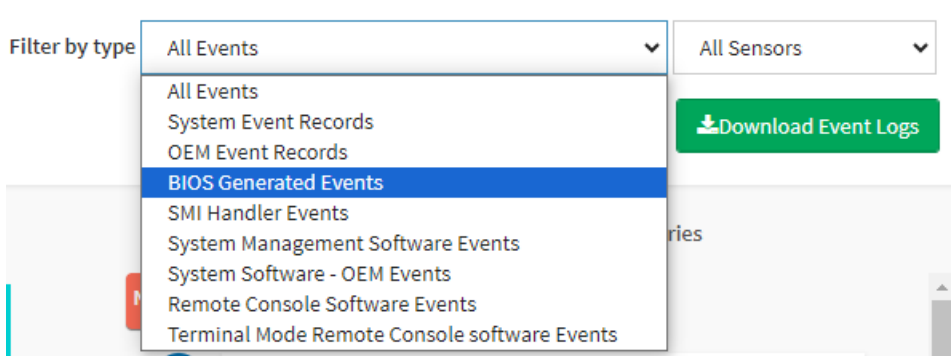
This page displays the list of events incurred by different sensors on this device. All the logs are completely matched with command lines:

```
ipmitool sel list
```

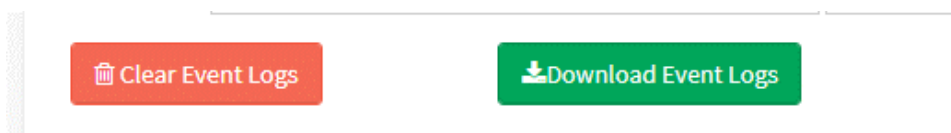
The log record entries are as below:



1. Users can filter events by sensor type or sensor name in current BMC device, to view all the specific events:

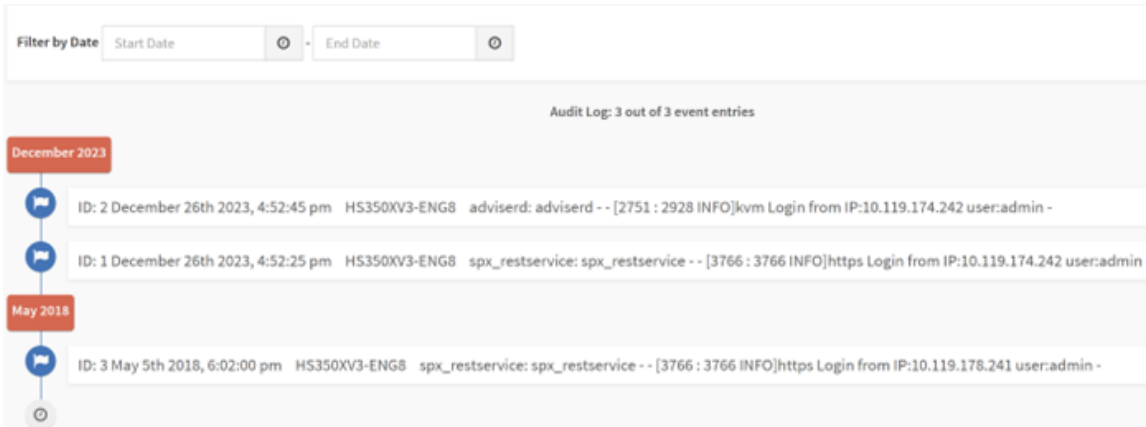


2. Users can click “Clear Event Logs” button to delete all existing records, also can click “Download Event Logs” button to download all the events in the text file format.

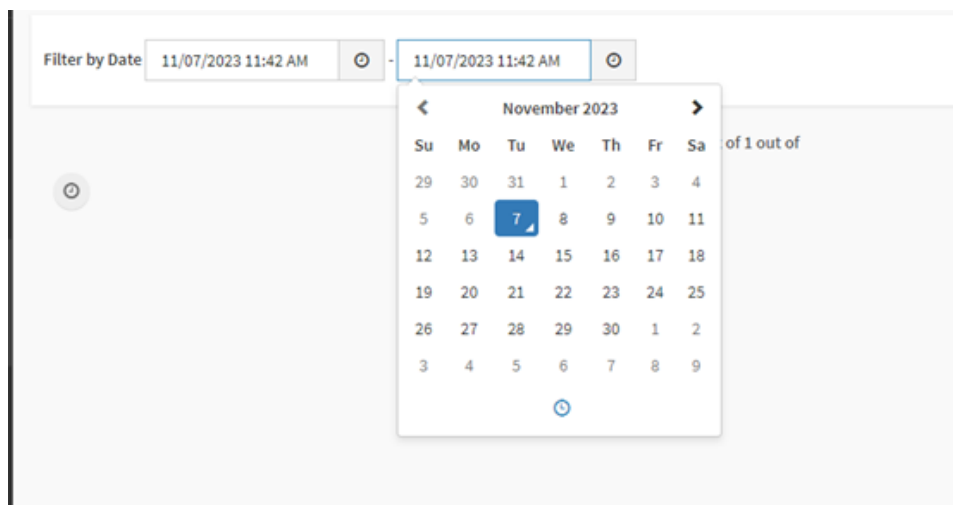


## 7.2 Audit Log

This page displays all users' operational logs, such as power on/off, KVM login, WEBUI login, Firmware update and other operational logs.



Also, users can filter all the audit logs by choosing the date.



---

## Chapter 8. Settings

This page includes all configurations for BMC, such as:

- Date & Time
- External User Services
- KVM Mouse Setting
- Log Settings
- TLS Settings
- SSL Settings
- Media Redirection Settings
- Network Settings
- PAM Order Settings
- Platform Event Filter
- Services
- SMTP Settings
- User Management
- IPMI Interfaces
- Account Lockout Policy

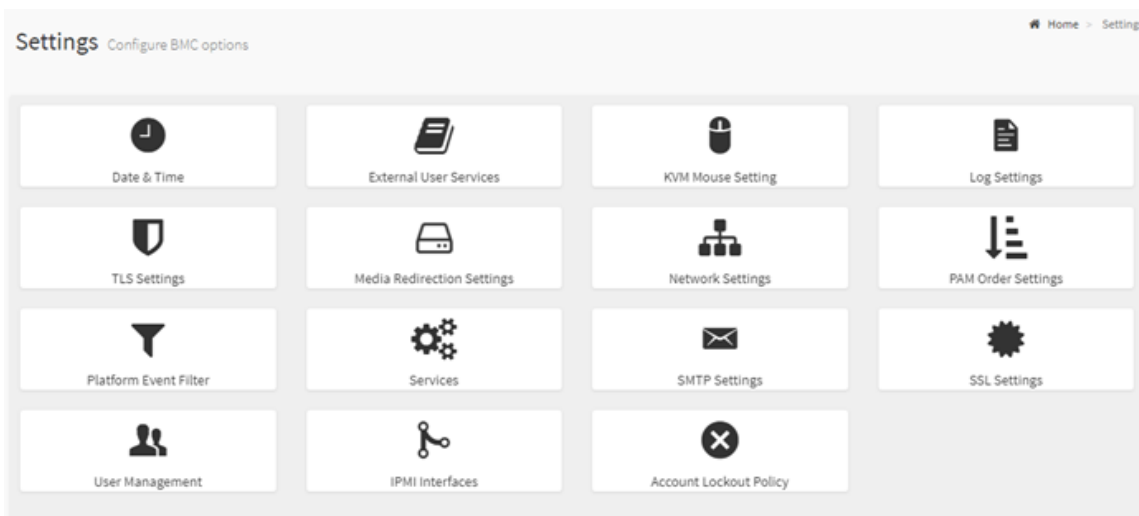


Figure 6. Settings

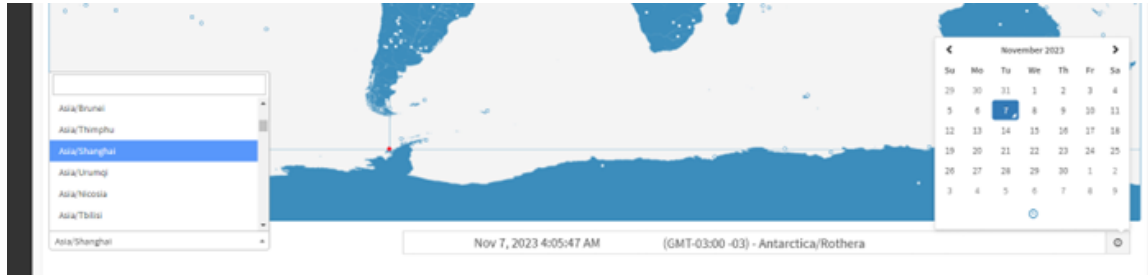
- [“8.1 Date and Time” on page 18](#)
- [“8.2 External User Services” on page 18](#)
- [“8.3 KVM Mouse Setting” on page 20](#)
- [“8.4 Log Settings” on page 20](#)
- [“8.5 TLS Settings” on page 21](#)
- [“8.6 Media Redirection Settings” on page 22](#)
- [“8.7 Network Settings” on page 25](#)
- [“8.8 PAM Order Settings” on page 28](#)
- [“8.9 Platform Event Filter” on page 28](#)
- [“8.10 Services” on page 30](#)
- [“8.11 SMTP Settings” on page 30](#)

- “8.12 SSL Settings” on page 31
- “8.13 User Management” on page 32
- “8.14 IPMI Interfaces” on page 33
- “8.15 Account Lockout Policy” on page 34

## 8.1 Date and Time

### 1. Date configuration

Select time zone either using the drop-down menu or map. Set the date and time on the BMC.



### 2. Time automatic configuration

BMC support automatic configure time. There are 2 ways to set time, NTP and PTP.



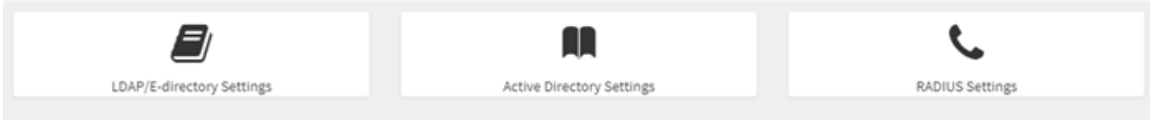
Configure the PTP settings is as below:



## 8.2 External User Services

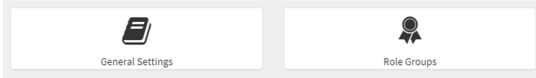
BMC can set user configuration services, such as LDAP/E-directory, active directory, or RADIUS.

## External User Services



Users can set general LDAP configuration and check active directory.

### LDAP/E-directory Settings



#### General LDAP Settings

Enable LDAP/E-Directory Authentication

Encryption Type  
 No Encryption  SSL  StartTLS

Common Name Type  
 IP Address  FQDN

Server Address

Port

Bind DN

Password

Search Base

Attribute of User Login

[Save](#)

### Active directory Settings



#### General Active Directory Settings

Enable Active directory Authentication

Secret Username

Secret Password

User Domain Name

Domain Controller Server Address 1

Domain Controller Server Address 2

Domain Controller Server Address 3

[Save](#)

BMC also supports RADIUS based on user's scenarios.

### RADIUS Settings



#### General RADIUS Settings

Enable RADIUS Authentication

Server Address

Port

Secret

Enable KVM Access

Enable VMedia Access

[Save](#)

#### Advanced RADIUS Settings

RADIUS Authorization

**RADIUS configuration is not enabled.**

Administrator

Operator

User

No Access

[Save](#)

---

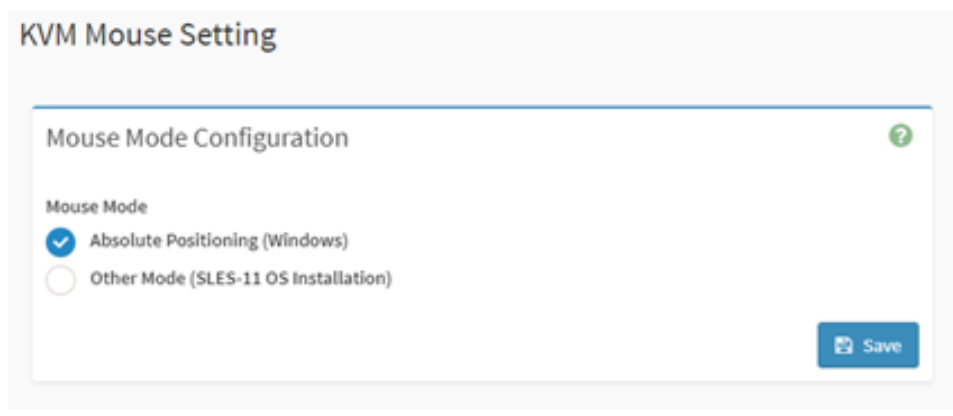
## 8.3 KVM Mouse Setting

The Redirection Console oversees mouse emulation from local window to remote screen using any of the two methods. 'Administrator' is only able to configure this option.

- Absolute Mouse mode
- Other Mouse mode

“Absolute Mouse mode” sends the absolute position of the local mouse to the server. To select this mode, select the 'Set mode to Absolute' option. Recommended for Windows or later Linux releases.

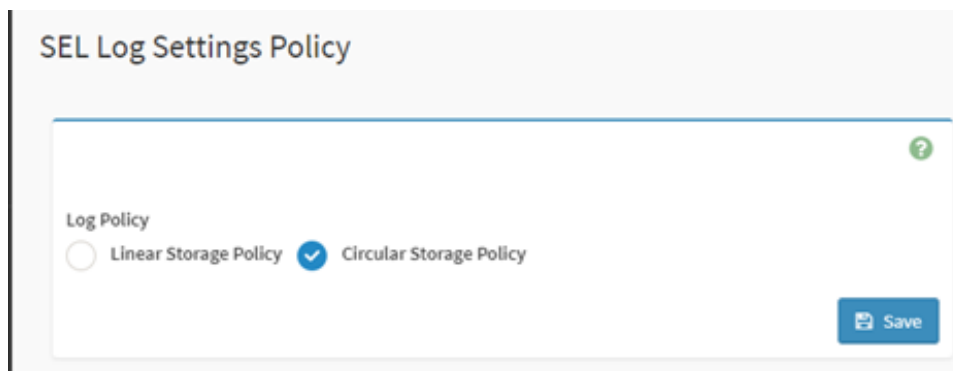
When the user selects other modes, the mouse cursor will change to the default cursor of the server after entering the KVM screen. After leaving the KVM screen range, restore to the default cursor state of the current host.



---

## 8.4 Log Settings

This field is used to configure the log policy for the event log.



Select “Enable System Log” to view all system events. Entries can be filtered based on their classification levels.



### Advanced Log Settings

System Log

Local Log

Remote Log

Port Type

UDP  TCP

File Size

50000

Rotate Count

0

Remote Log Server

Server IP or Hostname

Remote Server Port

0

Enable Audit Log

Save

---

## 8.5 TLS Settings

This page is for TLS protocol encryption mode setting, users can configure it by following its requirement.

**TLS Settings** tls\_settings:tag

**TLS Settings**

**TLS Protocol Options**

TLS 1.3 only

TLS 1.3 and TLS 1.2 only

**Cryptographic Mode Options**

High Security

Compatible

---

## 8.6 Media Redirection Settings

1. To enable or disable Remote Media support, check or un-check the check box respectively. If selected, then following remote media types will display.
  - CD/DVD
  - Floppy
  - Hard disk

On selecting the individual media types, their respective configurations will display. Users can configure different settings for different remote media types.

## General Settings



Click here to go to [LocalMedia](#) or [Remote Media](#).

### NOTE:

- When the multiple image redirection feature is enabled, the mount CD/DVD and Harddisk checkbox will be enabled only on the success of the mount status of CD/DVD and Harddisk.
- When the multiple image redirection features are disabled, the mount CD/DVD and Harddisk checkbox will be enabled only when the user starts media redirection successfully.
- When the Local Media or Remote Media License is expired, the Local Media or Remote Media checkbox will be in disabled state.

Local Media Support

Remote Media Support

Mount CD/DVD

Server Address for CD/DVD Images

Server IP or Host name

Path in server

eg. /opt/bmc/nfs

Share Type for CD/DVD

nfs  cifs  encrypted nfs

Same settings for Harddisk Images

Mount Harddisk

Server Address for Harddisk Images

2. Select the number of floppy CD/DVD and hard disk devices for Virtual Media redirection.

## VMedia Instance Settings

[?](#)

CD/DVD device instances

0

Hard disk instances

0

Remote KVM CD/DVD device instances

0

Remote KVM Hard disk instances

0

Power Save Mode

[Save](#)

3. Check this option to enable Single Port Application support in BMC when using H5Viewer.

## Remote Session

[?](#)

[Click here to go to Remote Control.](#)

KVM Single Port Application

Keyboard Language

Auto Detect (AD)

Retry Count

3

Retry Time Interval(Seconds)

10

Server Monitor OFF Feature Status

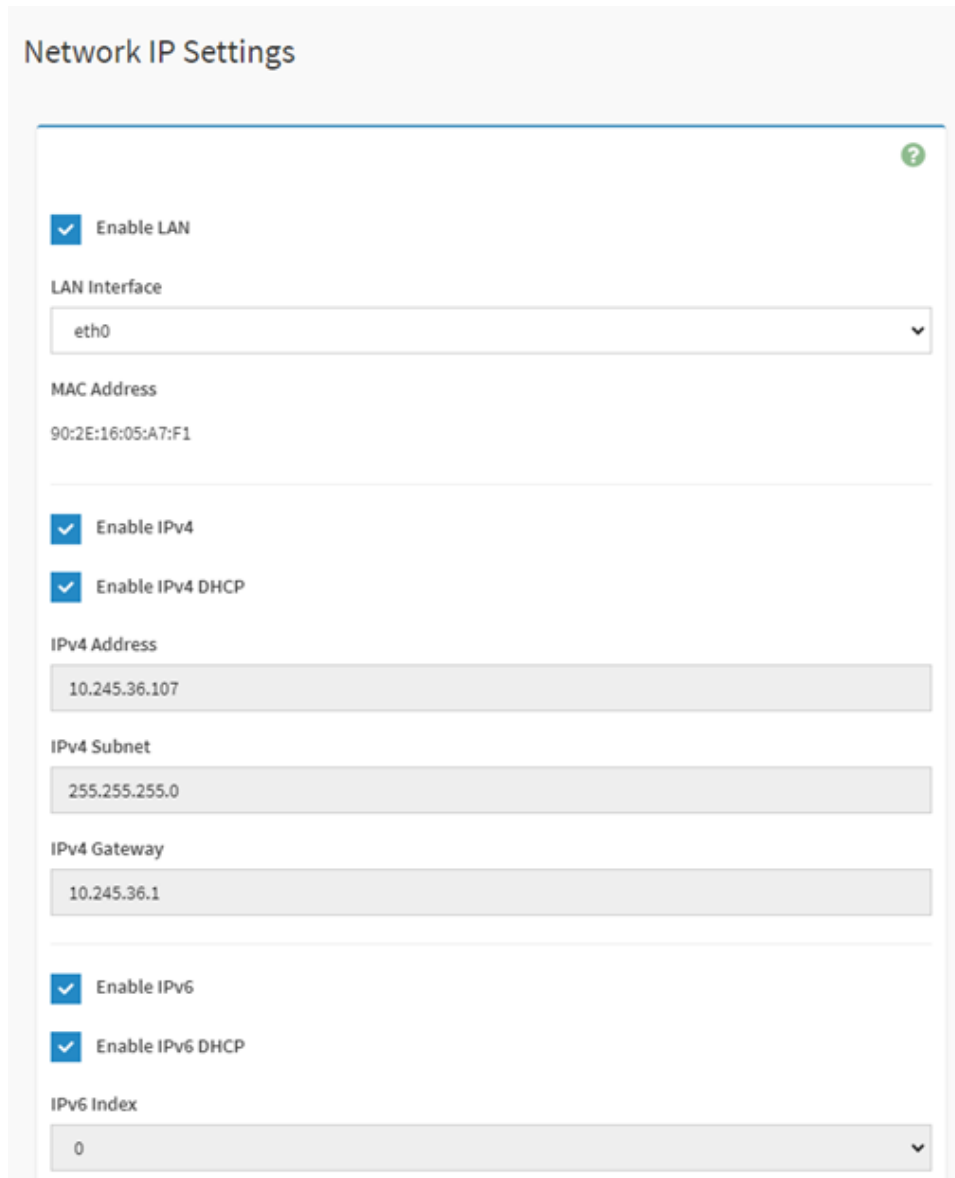
Automatically OFF Server Monitor, When KVM Launches

[Save](#)

## 8.7 Network Settings

On this page, users can check and set all LAN interface configuration.

1. Check BMC IP and settings: User can set all BMC network info here, such as IP address, IPv4 or IPv6 enablement, DHCP or static IP and VLAN.



The screenshot shows the 'Network IP Settings' configuration page. It features a title bar with a question mark icon. The settings are organized into sections: 'Enable LAN' (checked), 'LAN Interface' (dropdown menu showing 'eth0'), 'MAC Address' (90:2E:16:05:A7:F1), 'Enable IPv4' (checked), 'Enable IPv4 DHCP' (checked), 'IPv4 Address' (10.245.36.107), 'IPv4 Subnet' (255.255.255.0), 'IPv4 Gateway' (10.245.36.1), 'Enable IPv6' (checked), 'Enable IPv6 DHCP' (checked), and 'IPv6 Index' (dropdown menu showing '0').

2. Select network binding configuration. Users can set bond mode here with both dedicate management LAN and OCP NIC share LAN.

### Network Bond Configuration

Enable Bonding

Auto Configuration

Bond Interface

eth0

Bond Mode

active-backup

Save

3. Select the network interface from the list for which the Link speed and duplex mode are to configure.

### Network Link Configuration

LAN Interface

eth0

Auto Negotiation

Link Speed

1000 Mbps

Duplex Mode

FULL Duplex

NCSI Interface

Disabled

Save

4. Check this box to enable all DNS services and multicast DNS.

## DNS Configuration

DNS Enabled

mDNS Enabled

---

Host Name Setting

Automatic  Manual

Host Name

HS350XV3-ENG8

---

BMC Registration Settings

BMC Interface:

eth0

Register BMC

Registration method:

Nsupdate  DHCP Client FQDN  Hostname

BMC Interface:

eth1

Register BMC

Registration method:

Nsupdate  DHCP Client FQDN  Hostname

5. Select this radio button to change NCSI Mode to Auto Failover Mode or Manual Switch Mode.

### Sideband Interface (NC-SI)

NCSI Mode  
 Auto Failover Mode  Manual Switch Mode

NCSI Interface  
 eth1

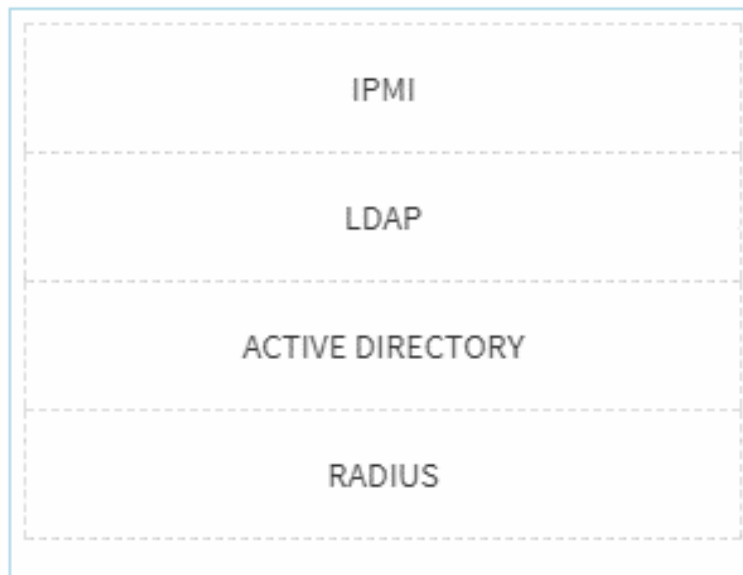
Package ID  
 0 (active)

Channel Number  
 0 (package 0)(active)

## 8.8 PAM Order Settings

This page is to configure the PAM order for user authentication into the BMC. It shows the list of available PAM modules supported in the BMC. Click and drag the required PAM module to change its order.

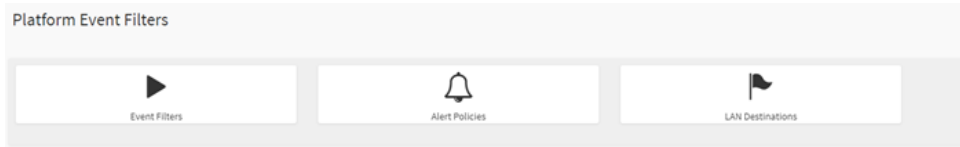
### PAM Authentication Order



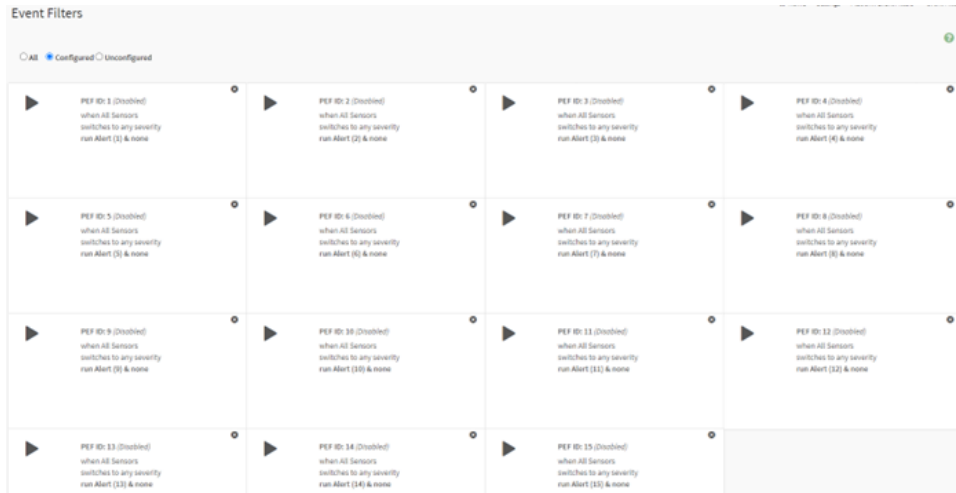
## 8.9 Platform Event Filter

BMC supports IPMI platform Event Filter (PEF) feature, which can set actions policies when some events occurred or received event logs (SEL), such as power action, SNMP trap (PET) or other actions.

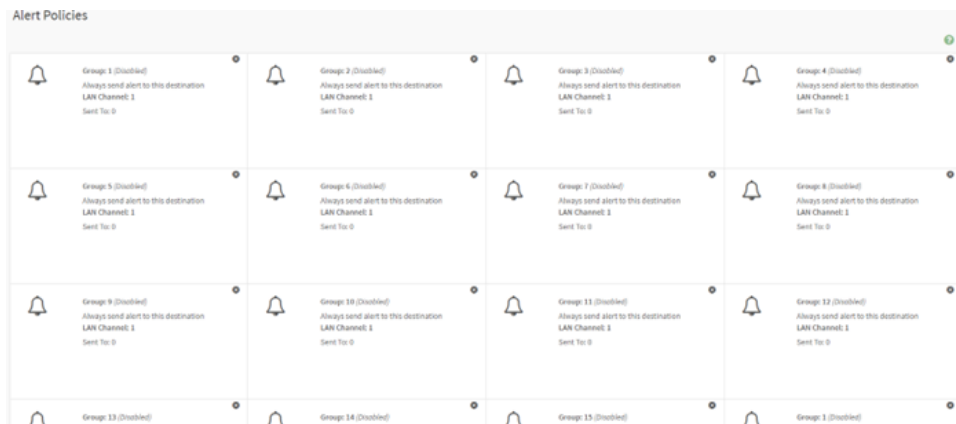




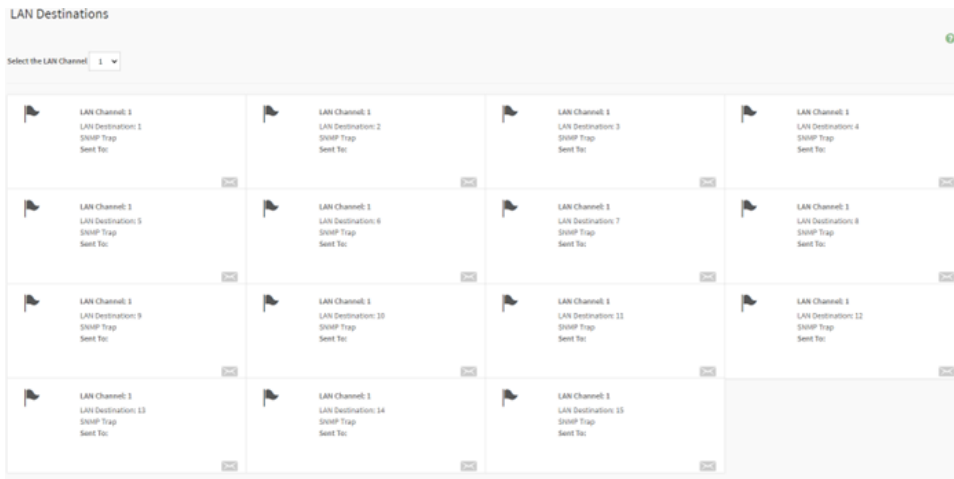
1. It shows all configured event filters and available slots. You can modify or add new event filter entry from here. There are 15 tabs available for users to use in this interface.



2. It shows all configured Alert policies and available slots. You can modify or add new alert policy entry from here. A maximum of 60 slots are available.













3. It shows all configured LAN destinations and available slots. You can modify or add new LAN destination entry from here. A maximum of 15 slots are available.



## 8.10 Services

Below is a list of services running on the BMC. It shows status and other basic information about the services. To modify a service, a user must be an administrator.

| Service  | Status | Interfaces | Secure Port | Timeout | Maximum Sessions |   |
|----------|--------|------------|-------------|---------|------------------|---|
| web      | Active | both       | 443         | 1800    | 20               |       |
| kms      | Active | both       | 443         | 1800    | 4                |     |
| cd-media | Active | both       | 443         | N/A     | 0                |   |
| hd-media | Active | both       | 443         | N/A     | 0                |   |
| ssh      | Active | N/A        | 22          | 600     | 5                |   |

## 8.11 SMTP Settings

BMC supports SMTP, which can send emails when events occurred. Users can enable it and set SMTP configuration on this page.

## SMTP Settings

?

LAN Interface

eth0

Sender Email ID

---

Primary SMTP Support

Primary Server Name

Primary Server IP

Primary SMTP port

25

Primary Secure SMTP port

465

Primary SMTP Authentication

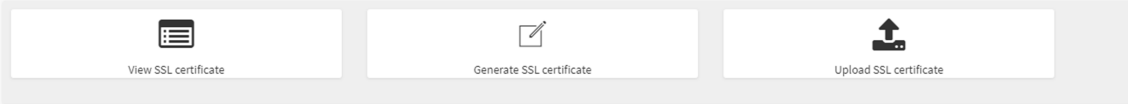
Primary Username

Primary Password

### 8.12 SSL Settings

1. View SSL Certificate: It displays the basic information about the uploaded SSL certificate. It displays the following fields.
2. Generate SSL Certificate: Common name, organization name, organization section unit and city or locality for which the certificate will generate.
3. Upload SSL Certificate: This page allows users to upload and change new certificate and it will also show uploaded date/time.

## SSL Settings



### View SSL Certificate

#### Current Certificate Information

**Certificate Version**

3

**Serial Number**

2F207A612C8FA0C722F8633108D11974944C2EA6

**Signature Algorithm**

sha256WithRSAEncryption

**Public Key**

(2048 bit)

**Issuer Common Name (CN)**

HS350X V3

**Issuer Organization (O)**

Lenovo

**Issuer Organization Unit (OU)**

Service Processors

**Issuer City or Locality (L)**

Morrisville

**Issuer State or Province (ST)**

North Carolina

**Issuer Country (C)**

### Generate SSL Certificate

**Common Name (CN)**

**Organization (O)**

**Organization Unit (OU)**

**City or Locality (L)**

**State or Province (ST)**

**Country (C)**

**Email Address**

**Valid for**

**Key Length**

### Upload SSL Certificate

**Current Certificate**

Sat Jan 1 00:00:24 2022

**New Certificate**

**Current Private Key**

Sat Jan 1 00:00:23 2022

**New Private Key**

**Trusted CA Support**

**Current trusted CA certificate**

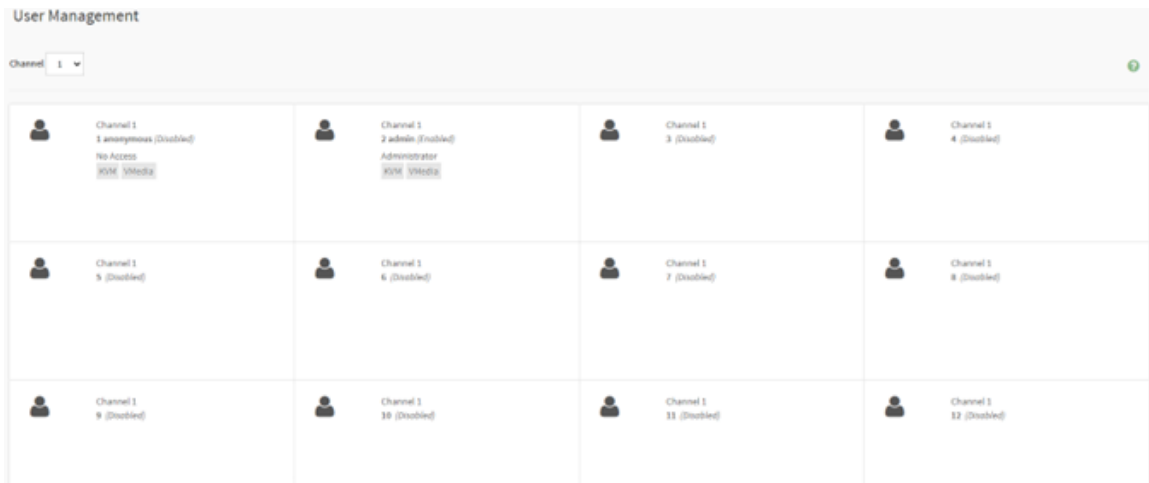
Sat Jan 1 00:00:24 2022

**Trusted CA Certificates**

Save

## 8.13 User Management

It shows all the users and user privilege in current BMC.



When clicking into a user entrance, all the user configurations could be modified, such as password, access channel, privilege, and other access authority.

**Note:** If users change the password, they must follow strong password rules for security concern.

Enter the name of the new user.

- Name must be a string of 1 to 16 alpha-numeric characters.
- It must start with an alphabetical character.
- It is case-sensitive.
- Special characters '-'(hyphen), '\_'(underscore), '@'(at sign) are allowed.

Username

admin

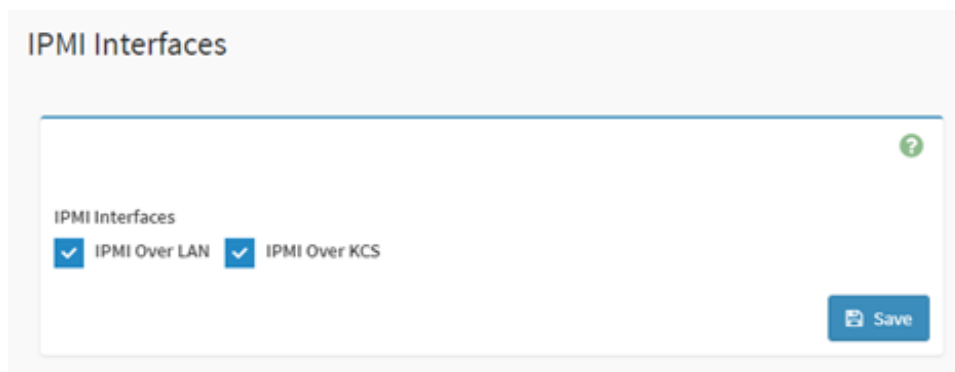
Logged-In Password field is mandatory for modifying user information and should have a minimum of 8 characters.

Logged-In Password

## 8.14 IPMI Interfaces

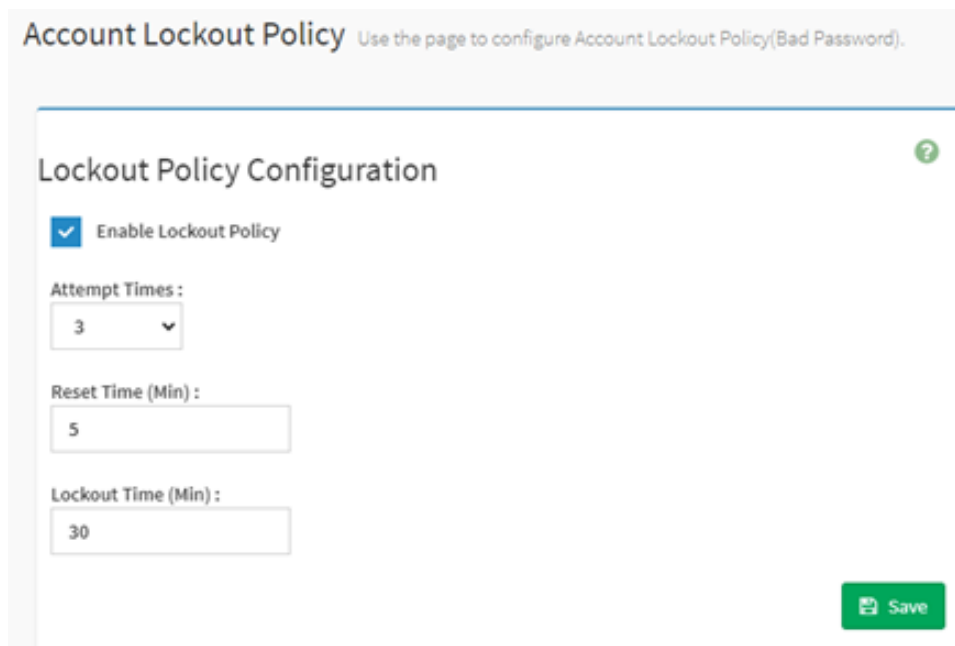
IPMI usage setting mode.

IPMI over LAN feature is disabled by default when delivered from factory because of security policy, users can enable it by OEM IPMI command.



## 8.15 Account Lockout Policy

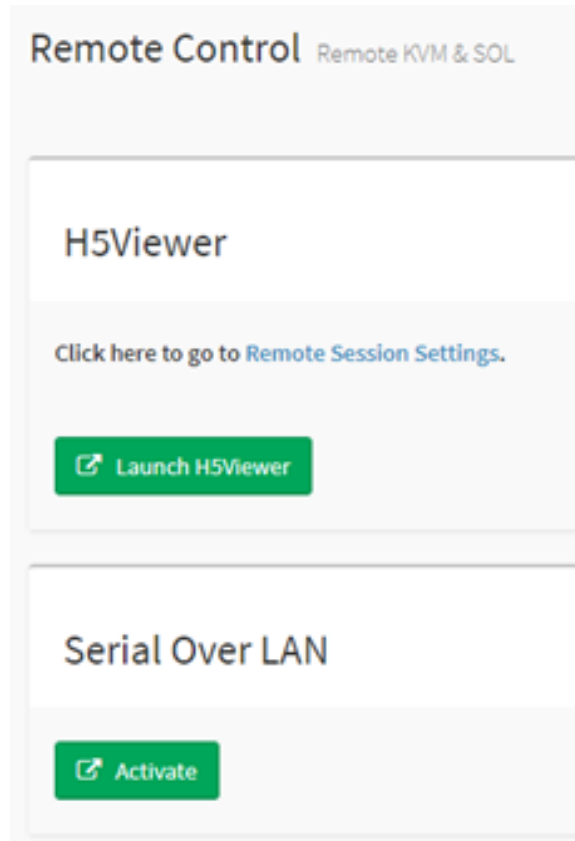
This page is for security reason to lock or unlock user status. Use the page to configure account lockout policy (when inputting bad passwords).



---

## Chapter 9. Remote Control

BMC supports remote control with LAN interface. Remote control includes KVM and SOL:



- [“9.1 H5Viewer KVM”](#) on page 35
- [“9.2 H5Viewer SOL \(Serial Over LAN\)”](#) on page 36

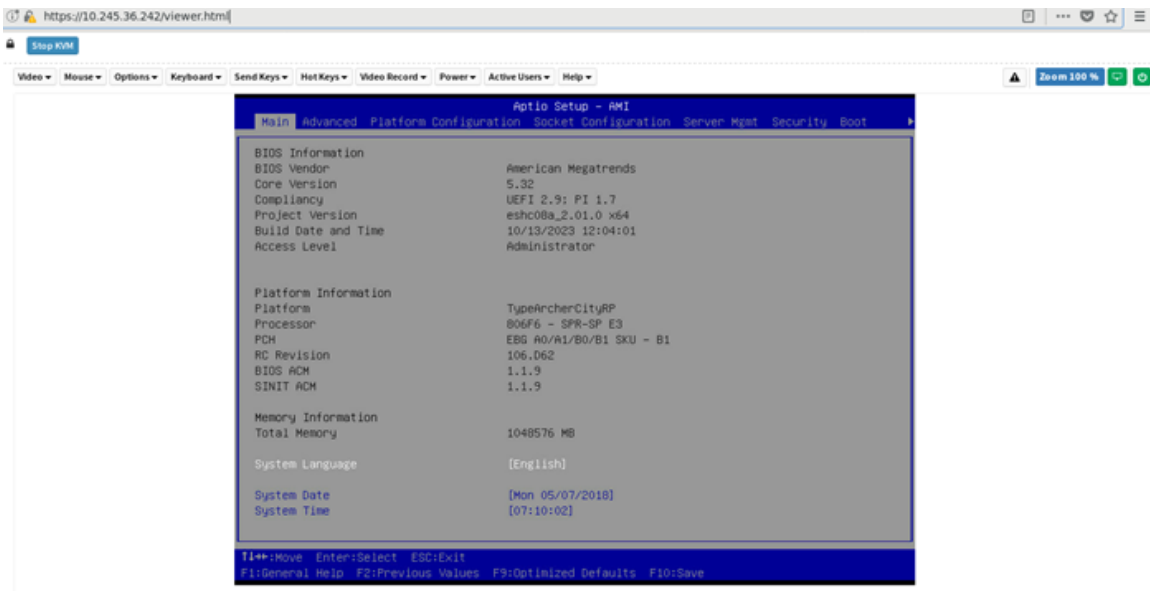
---

### 9.1 H5Viewer KVM

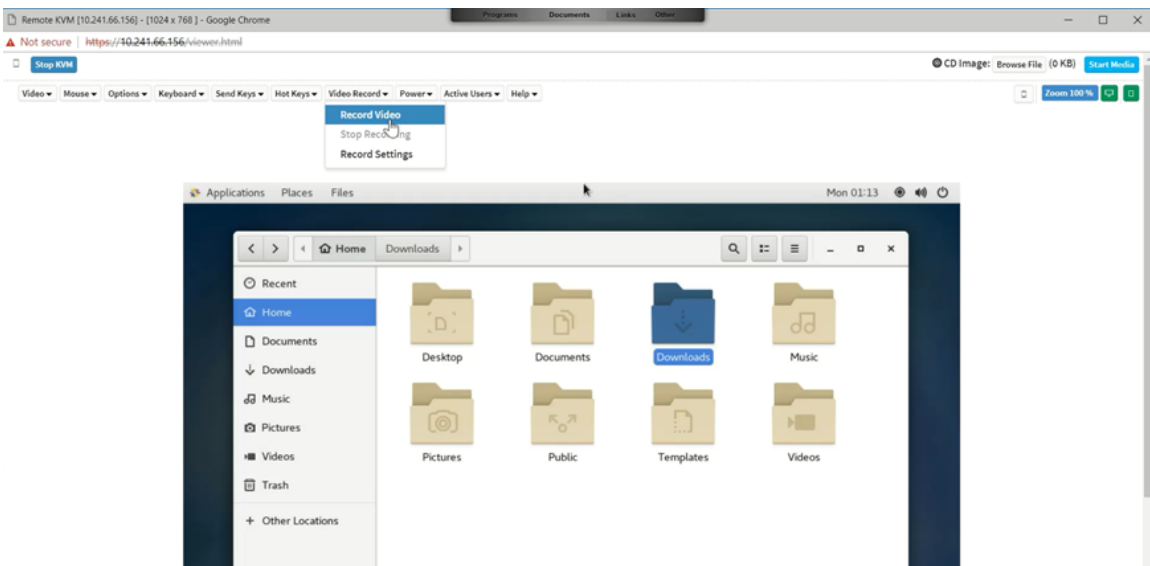
Click Launch KVM button to start html5 KVM. In KVM, there are some operations can be implemented, such as:

- Starting & stopping video.
- Changing mouse and keyboard settings.
- Sending & setting hot keys.
- Recording video.
- Power control.
- Check active users.
- Mounting and unmounting virtual media.

KVM starting:



Record Video:



**Note:** Since the larger server OS resolution would need the larger data traffic bandwidth and CPU processing time, when recording a video, we suggest the resolution is better under 1024x768 to avoid a “video drop frame”.

## 9.2 H5Viewer SOL (Serial Over LAN)

Users can launch serial over LAN to remotely debug system from WEBUI.

SOL Launch:



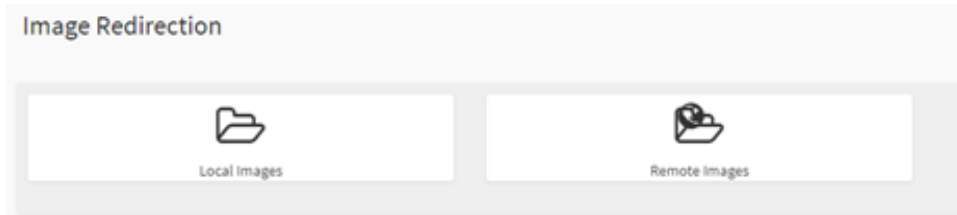
```
Deactivate Columns 80 Rows 25
Variable MTRR[00]: Base=00000000FE800006 Mask=00003FFFFFFE00800
Variable MTRR[01]: Base=00000000FFC00005 Mask=00003FFFFFFC00800
Variable MTRR[02]: Base=00000000FFB80005 Mask=00003FFFFFF80800
Variable MTRR[03]: Base=00000000FFA50005 Mask=00003FFFFFFF0800

Memory Ranges:
=====
UC:0000000000000000-00000000FE7FFFFF
WB:00000000FE800000-00000000FE9FFFFF
UC:00000000FEA00000-00000000FFA4FFFF
WP:00000000FFA50000-00000000FFA5FFFF
UC:00000000FFA60000-00000000FFB7FFFF
WP:00000000FFB80000-00000000FFFFFFFF
UC:0000000100000000-00003FFFFFFFFF
Processor supports Boot Guard.
FitEntryPoint = FFA51100
KmStructureSize = 365
BpmStructureSize = 489
[BootGuardPei.c] : ACM_TPMSuccess : EFI_UNSUPPORTED

System Information:
Platform Name: TypeArcherCityRP, AMI Core: 5.31, Intel RC: 370.P03
BIOS Version: eshc02o-1.04.0, Build Date: "10/16/2023"
0x31 : Memory Initialization Complete
```



## Chapter 10. Image Redirection



### 1. Local images:

BMC supports to emulate CD/DVD/HDD images within the BMC to host as media. This feature will use BMC internal media to store media.

If enable this feature, it needs to use BMC own store space such as SPI flash, confirm if the free space is enough to restore your media.

All available images stored in BMC are listed here:

Local Media Emulate CD/DVD/HDD images within the BMC to host as media

[Click here to go to Media General Settings or Remote Media.](#)

[Refresh Image List](#) [Sync Image Status](#)

| Media Type | Media Instance | Image Name | Redirection Status | Connected Server Session Index |
|------------|----------------|------------|--------------------|--------------------------------|
|------------|----------------|------------|--------------------|--------------------------------|

### 2. Remote images:

BMC supports to mount CD/DVD/HDD images from remote host as media BMC LAN interface. For more information, see ["8.6 Media Redirection Settings" on page 22.](#)

Here will list all available images from remote host.

Remote Media Emulate CD/DVD/HDD images in the network to host as media through BMC

[Click here to go to Media General Settings or Local Media.](#)

[Sync Image Status](#)

| Media Type | Media Instance | Image Name | Redirection Status | Connected Server Session Index |
|------------|----------------|------------|--------------------|--------------------------------|
|------------|----------------|------------|--------------------|--------------------------------|

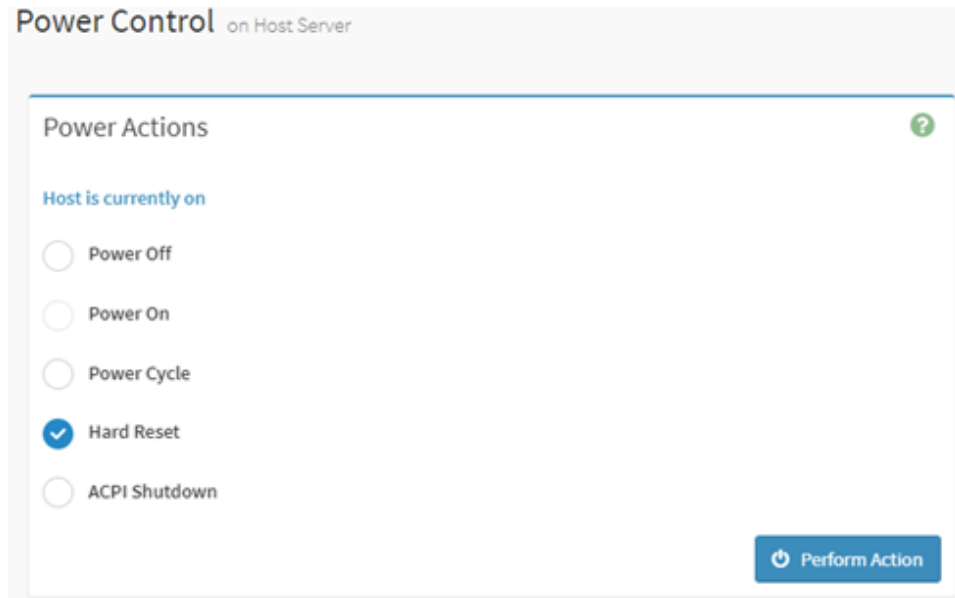


---

## Chapter 11. Power Control

This page shows the current host power status. And users can control the host power in this page:

- Power Off.
- Power On.
- Power Cycle.
- Hard Reset.
- ACPI Shutdown



Power Control on Host Server

Power Actions ?

Host is currently on

Power Off

Power On

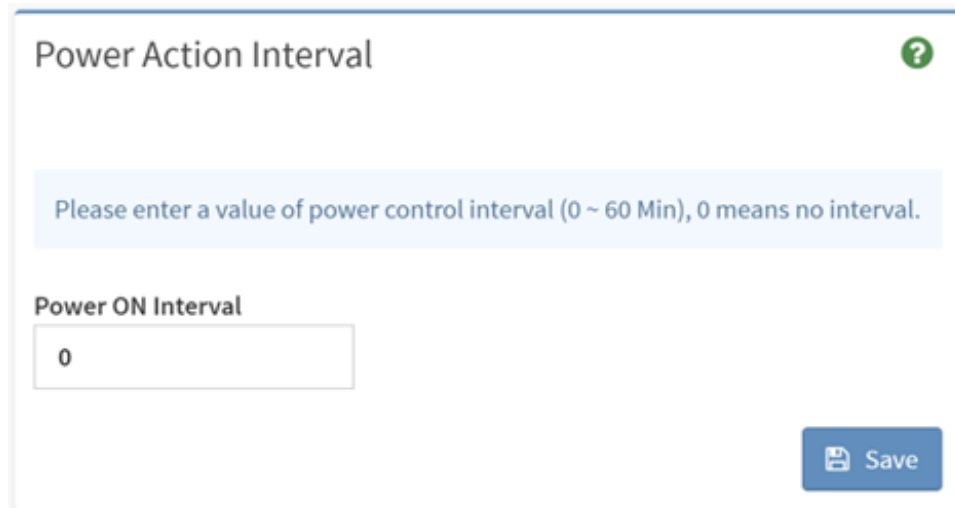
Power Cycle

Hard Reset

ACPI Shutdown

Perform Action

Also, users can set the power interval to avoid performing power actions too frequently. The interval value scope is from 0 to 60 minutes.



Power Action Interval ?

Please enter a value of power control interval (0 ~ 60 Min), 0 means no interval.

Power ON Interval

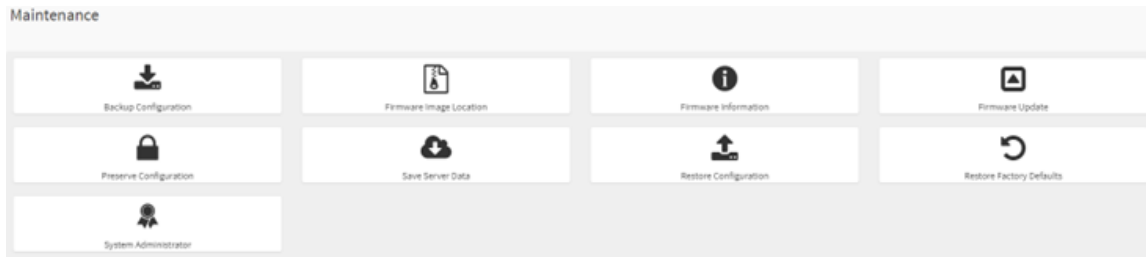
Save



---

## Chapter 12. Maintenance

This part is for BMC maintenance, users can choose needed function to maintain BMC system on this page.

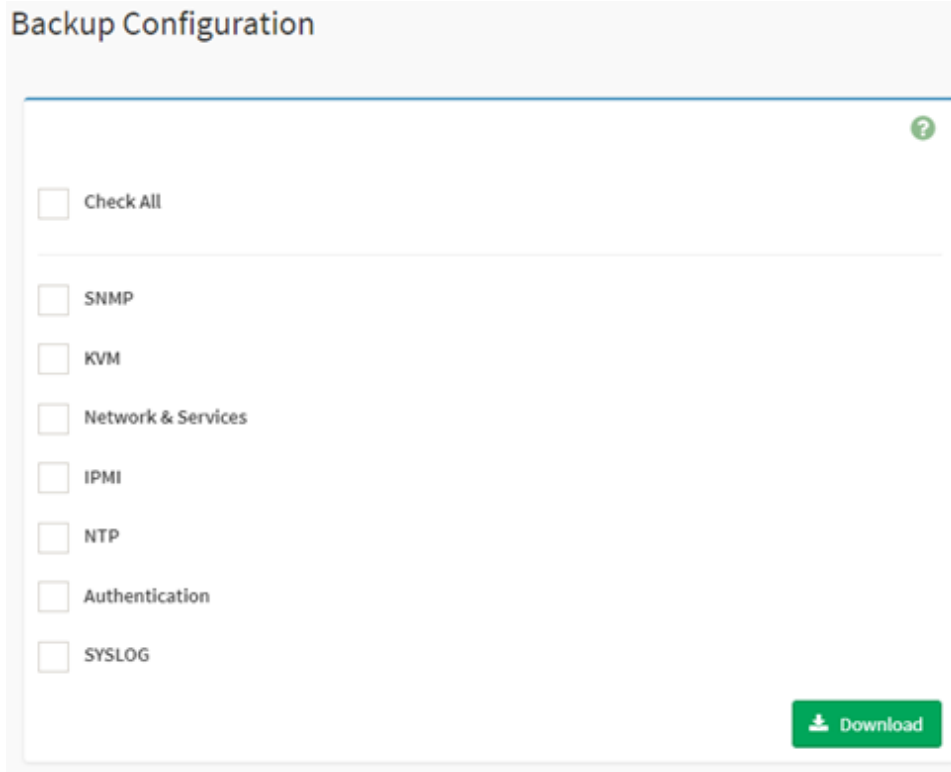


- [“12.1 Backup Configuration” on page 43](#)
- [“12.2 Restore Configuration” on page 44](#)
- [“12.3 Firmware Image Location” on page 44](#)
- [“12.4 Firmware Information” on page 45](#)
- [“12.5 Firmware Update” on page 47](#)
  - [“12.5.1 Update BMC FW” on page 47](#)
  - [“12.5.2 Update BIOS FW” on page 51](#)
- [“12.6 Preserve Configuration and Restore Factory Defaults” on page 53](#)
- [“12.7 Save Server Data” on page 54](#)
- [“12.8 System Administrator” on page 56](#)

---

### 12.1 Backup Configuration

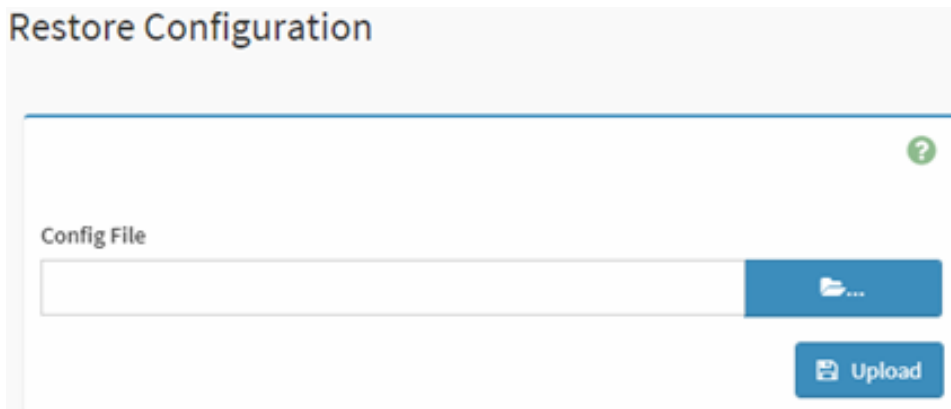
This page is for downloading BMC backup configuration, users can check needed items to backup configuration and download the backup file.



---

## 12.2 Restore Configuration

This page is used to restore configuration file saved from “Backup Configuration” page. Users can upload the download backup file to restore the configuration in this file.



---

## 12.3 Firmware Image Location


User can choose the method of uploading FW here. Usually, we use the default value.



### Firmware Image Location

Image Location Type

Web Upload during flash  TFTP Server  SFTP Server

 Save

---

## 12.4 Firmware Information

On this page, it will list all available firmware versions, such as:

- BMC FW version info, including Build Date, Build time, and firmware version.
- BMC primary and secondary image version.
- BIOS primary and secondary image version.
- CPLD FW version: including MB CPLD and DC-SCM CPLD.
- Backplane FW version: including front BP and rear BP.
- PSU0 primary and secondary FW version.
- PSU1 primary and secondary FW version.
- ME FW version.

## Firmware Information

### Active Firmware ?

**Active Image ID**

1

**Build Date**

Sep 15 2023

**Build Time**

13:29:00 UTC

**Primary BMC Firmware version**

1.04.230914(BUILD ID:igc602j)

**Secondary BMC Version**

0.13.221206

**BIOS Version**

1.04.0

**BIOS Backup Image Version**

N/A

**MB CPLD Version**

2.02.01

**DC-SCM CPLD Version**

0.04.01

**FBP1 CPLD Version**

06

**FBP2 CPLD Version**

|                           |       |
|---------------------------|-------|
| FBP2 CPLD Version         | 06    |
| FBP3 CPLD Version         | 06    |
| RBP CPLD Version          | 12    |
| PSU0 primary fw version   | 0.01  |
| PSU0 secondary fw version | 0.01  |
| PSU1 primary fw version   | 0.01  |
| PSU1 secondary fw version | 0.01  |
| ME fw version             | 06.14 |

## 12.5 Firmware Update

This is BMC firmware update interface. Users can choose whether to preserve configurations, choose the image and then click “Start firmware update” to upgrade current BMC firmware and BIOS firmware. There will be a progress bar to show the status.

### Firmware Update

**Note:**  
Following are the Firmware update methods and components supported in this page.

- Dual Firmware update.
- BIOS Firmware update

Select Firmware Image

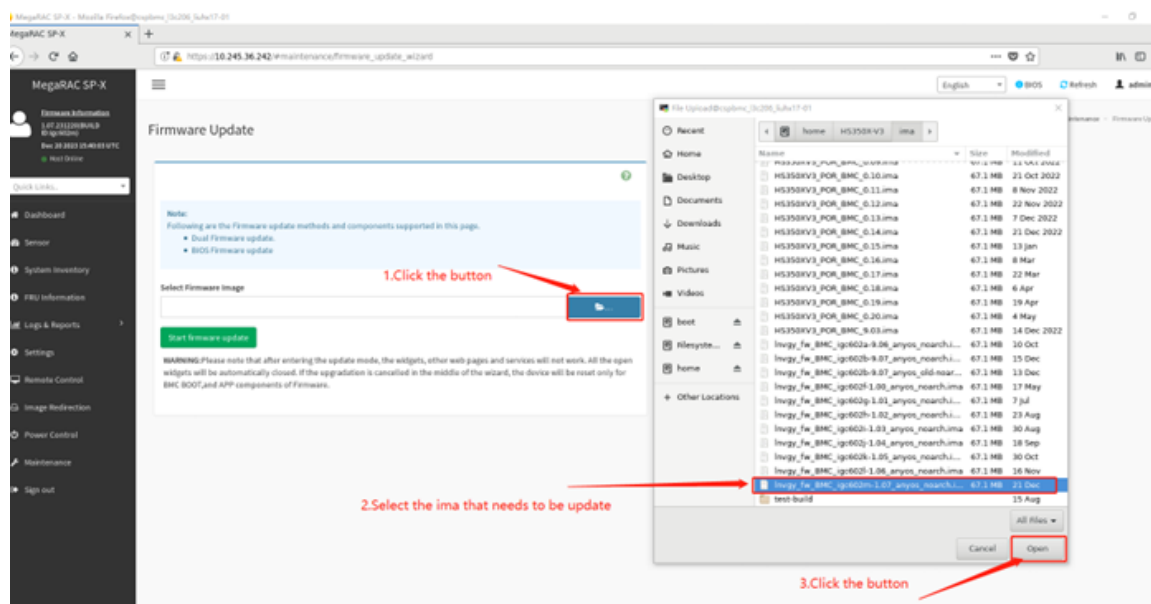
...

Start firmware update

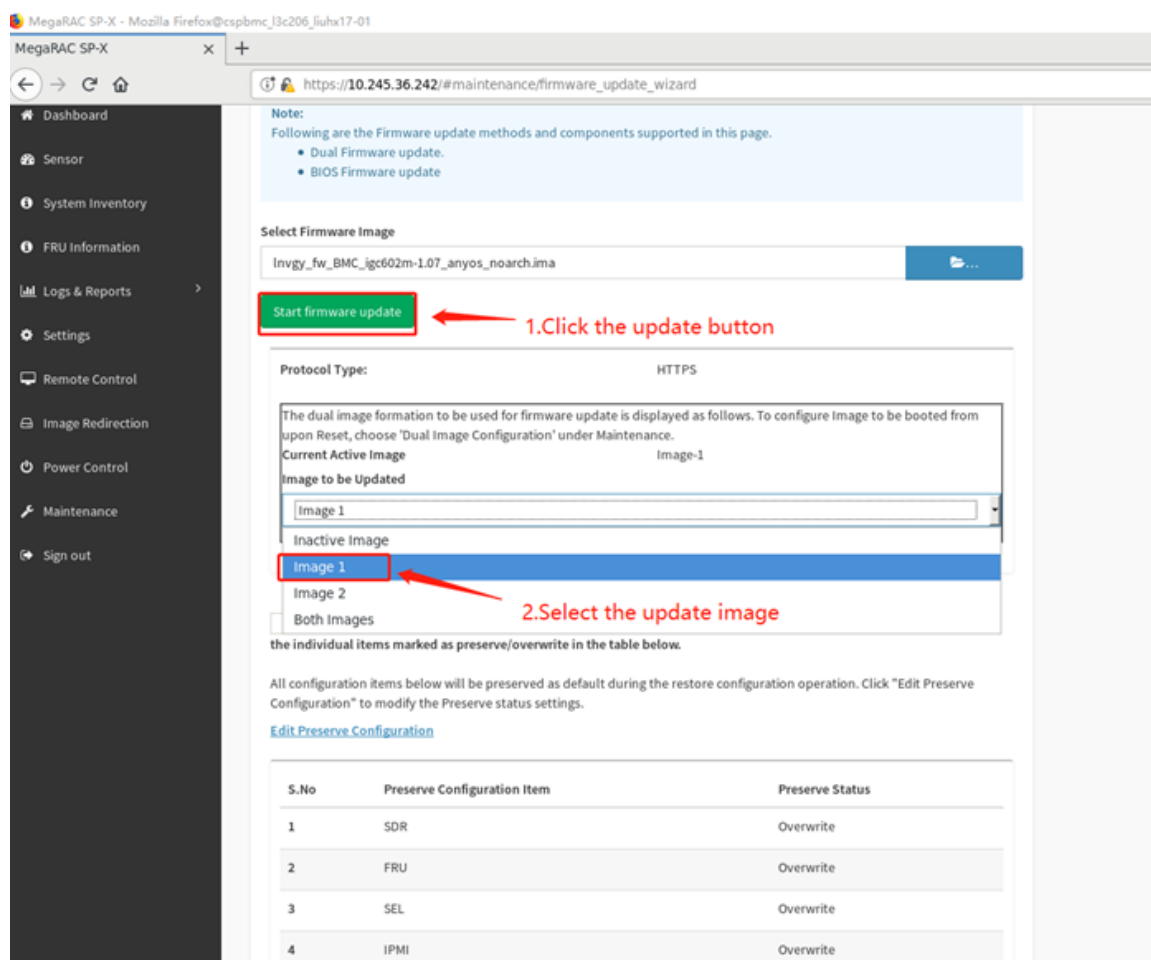
**WARNING:**Please note that after entering the update mode, the widgets, other web pages and services will not work. All the open widgets will be automatically closed. If the upgradation is cancelled in the middle of the wizard, the device will be reset only for BMC BOOT, and APP components of Firmware.

### 12.5.1 Update BMC FW

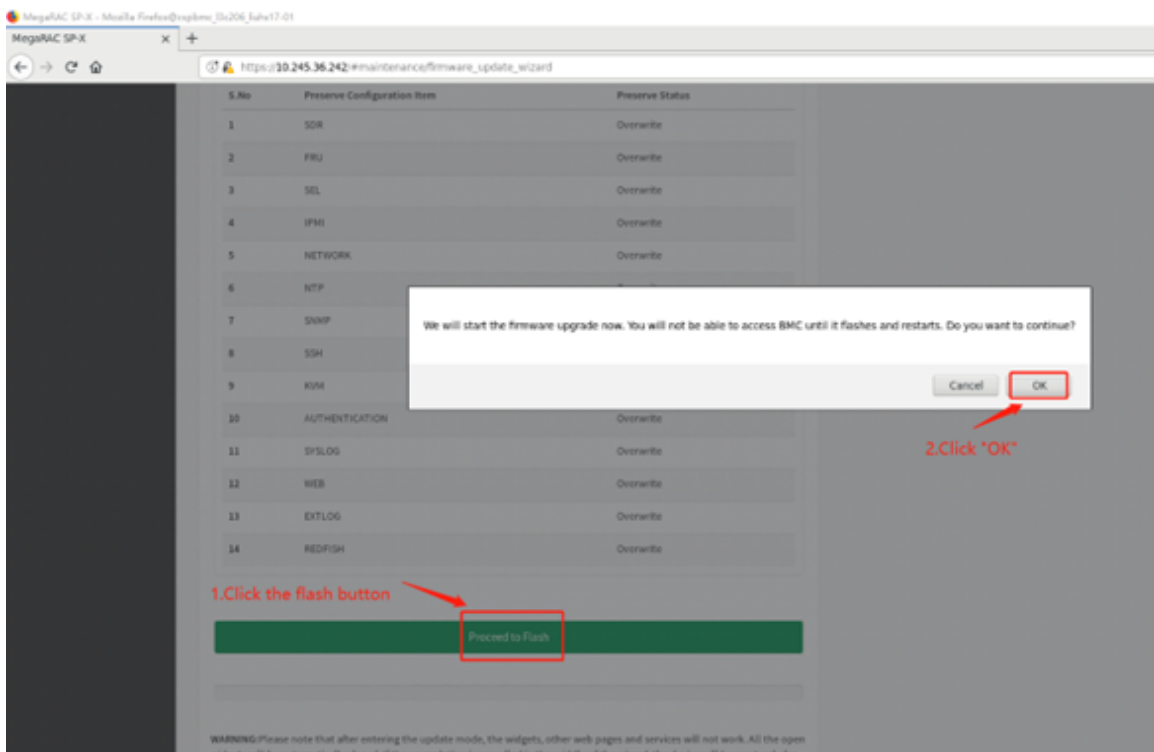
1. Select the BMC image that needs to be updated:



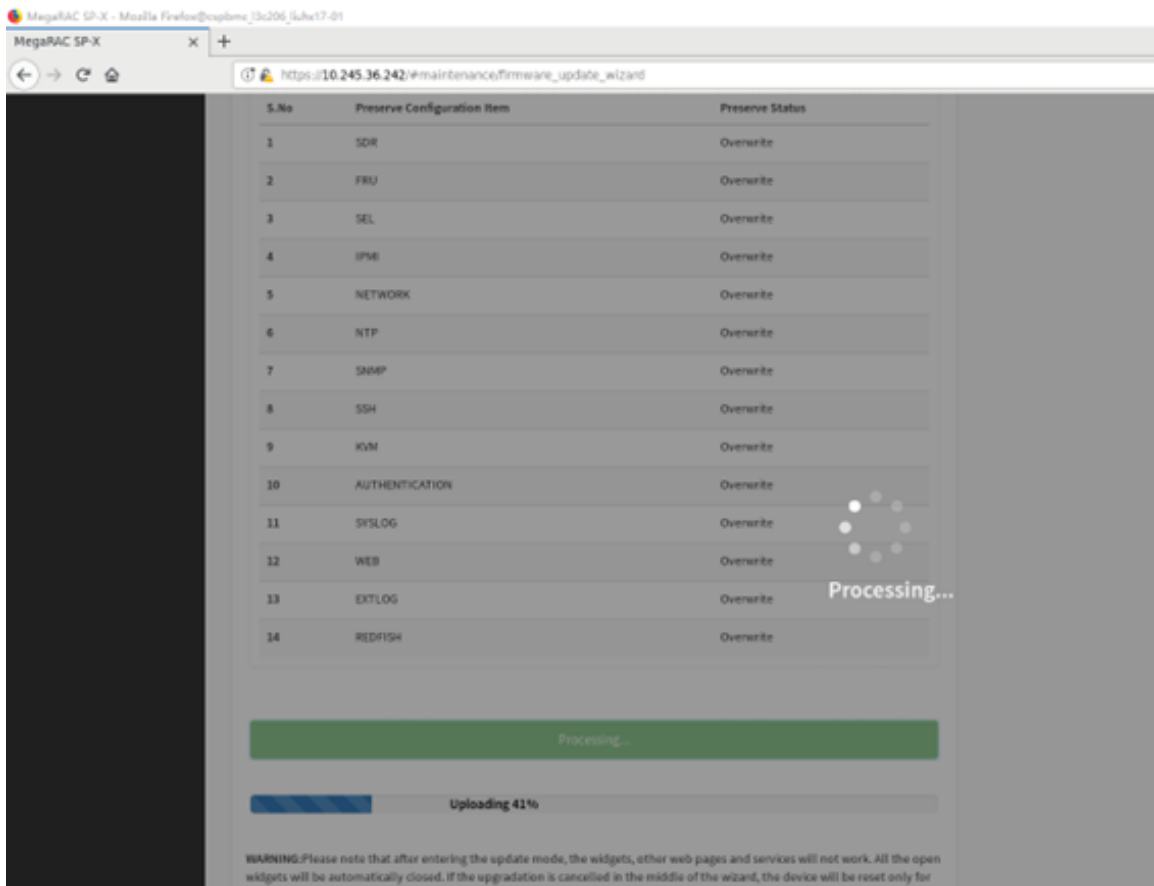
2. Select the BMC rom that needs to update, where you can choose to upgrade it separately with BMC rom1, BMC rom2, or both BMC ROMS together.



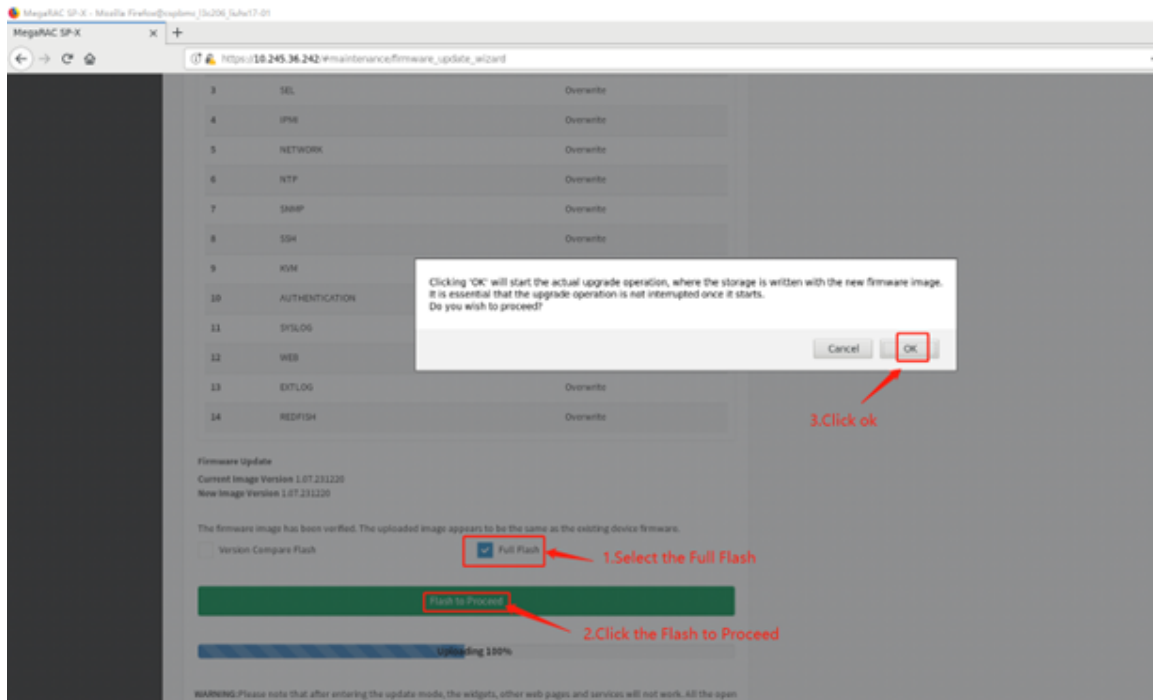
3. Click 'Process to Flash' to start refreshing. A prompt will appear here, confirm to proceed.



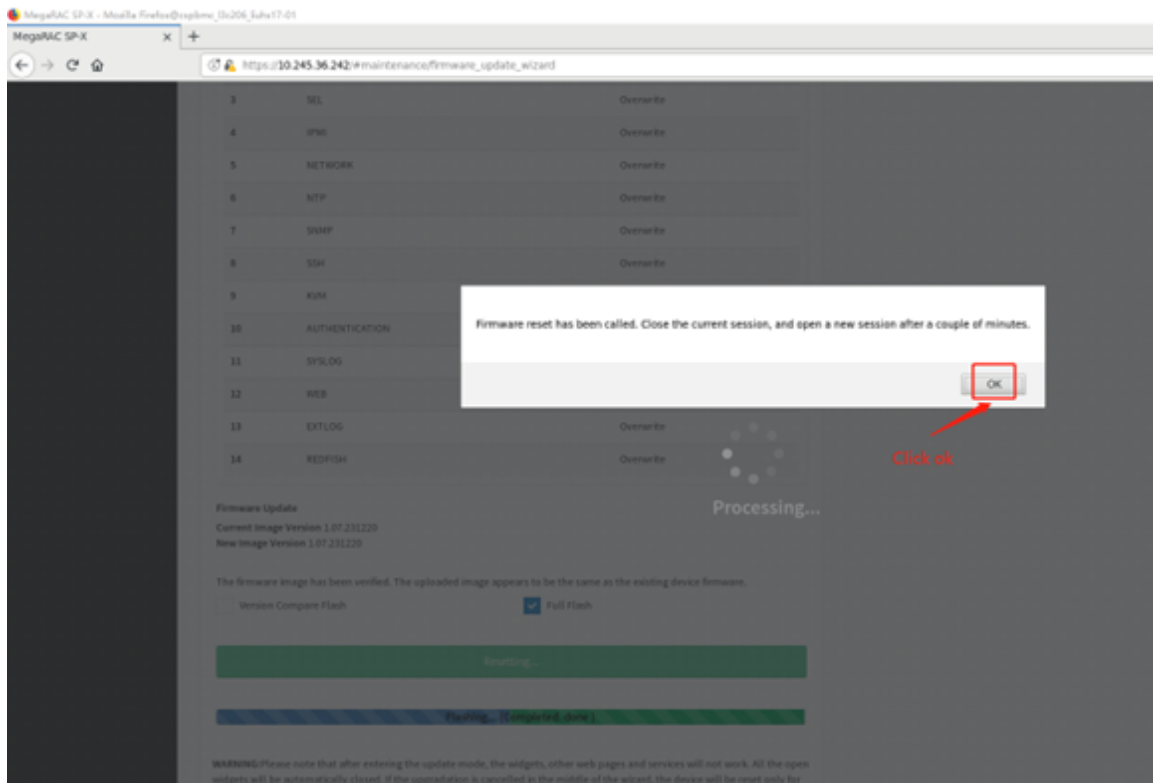
4. Then image upload action will be processing.



- The update flash selection will appear here, select "Full Flash", and then click "Flash to Process". A prompt message will appear, and you can confirm.

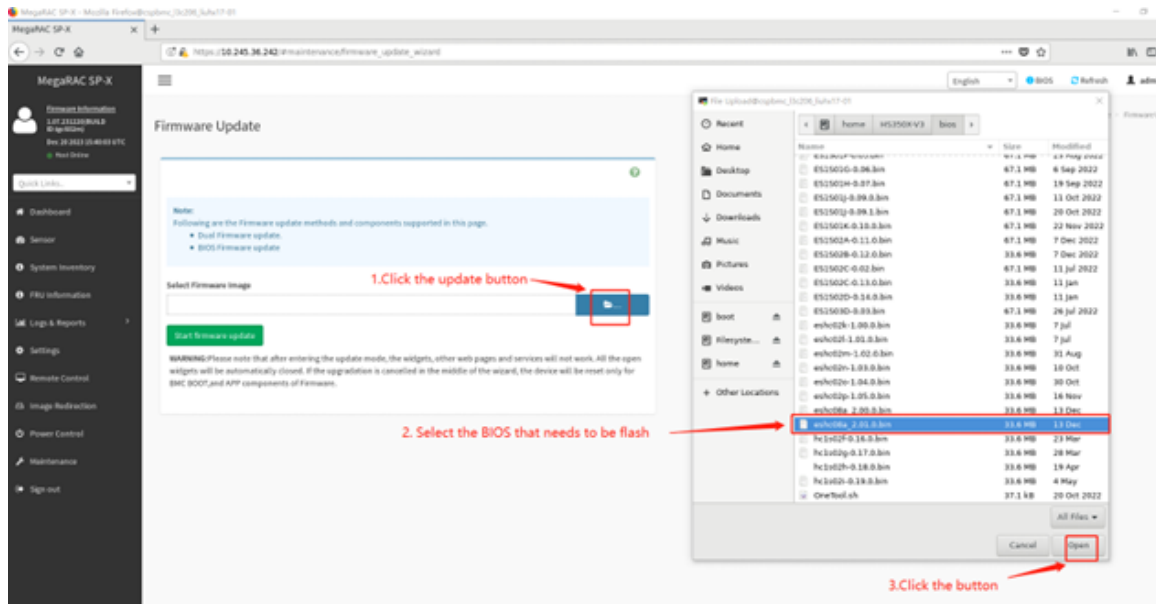


- Once the update flash is completed, BMC will automatically restart:

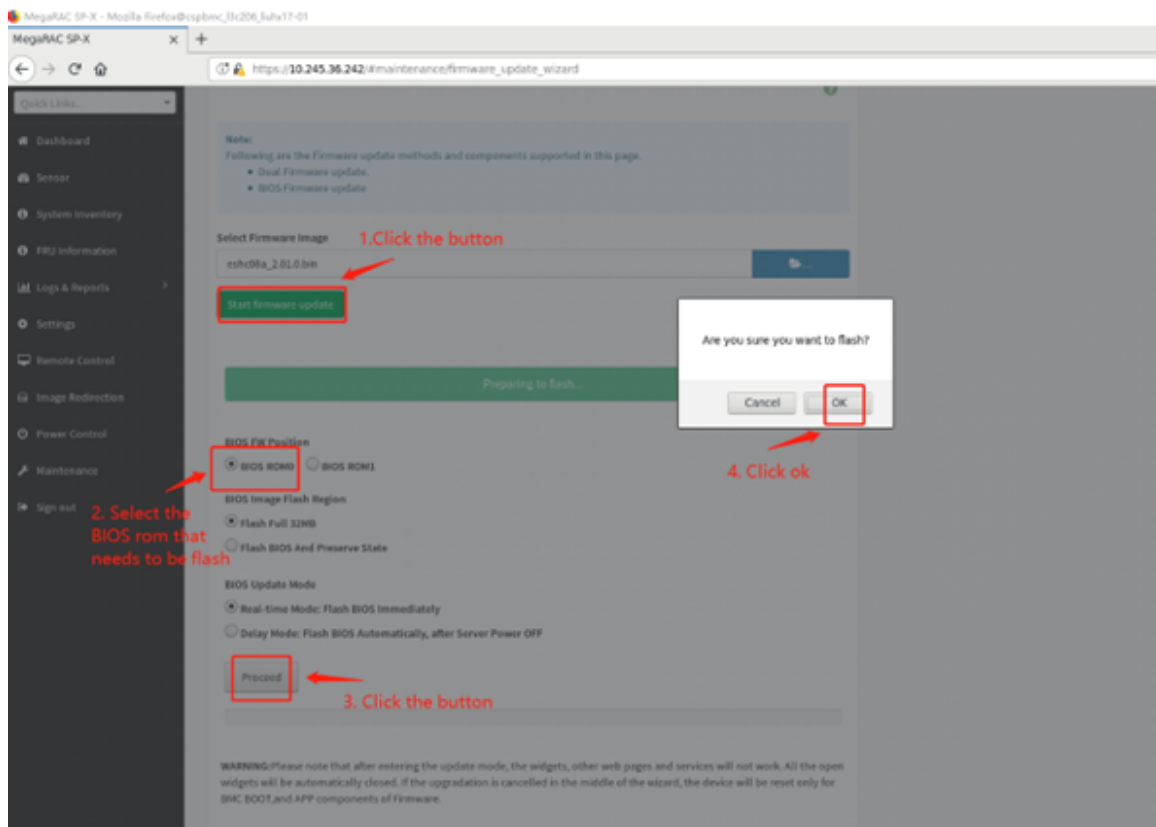


## 12.5.2 Update BIOS FW

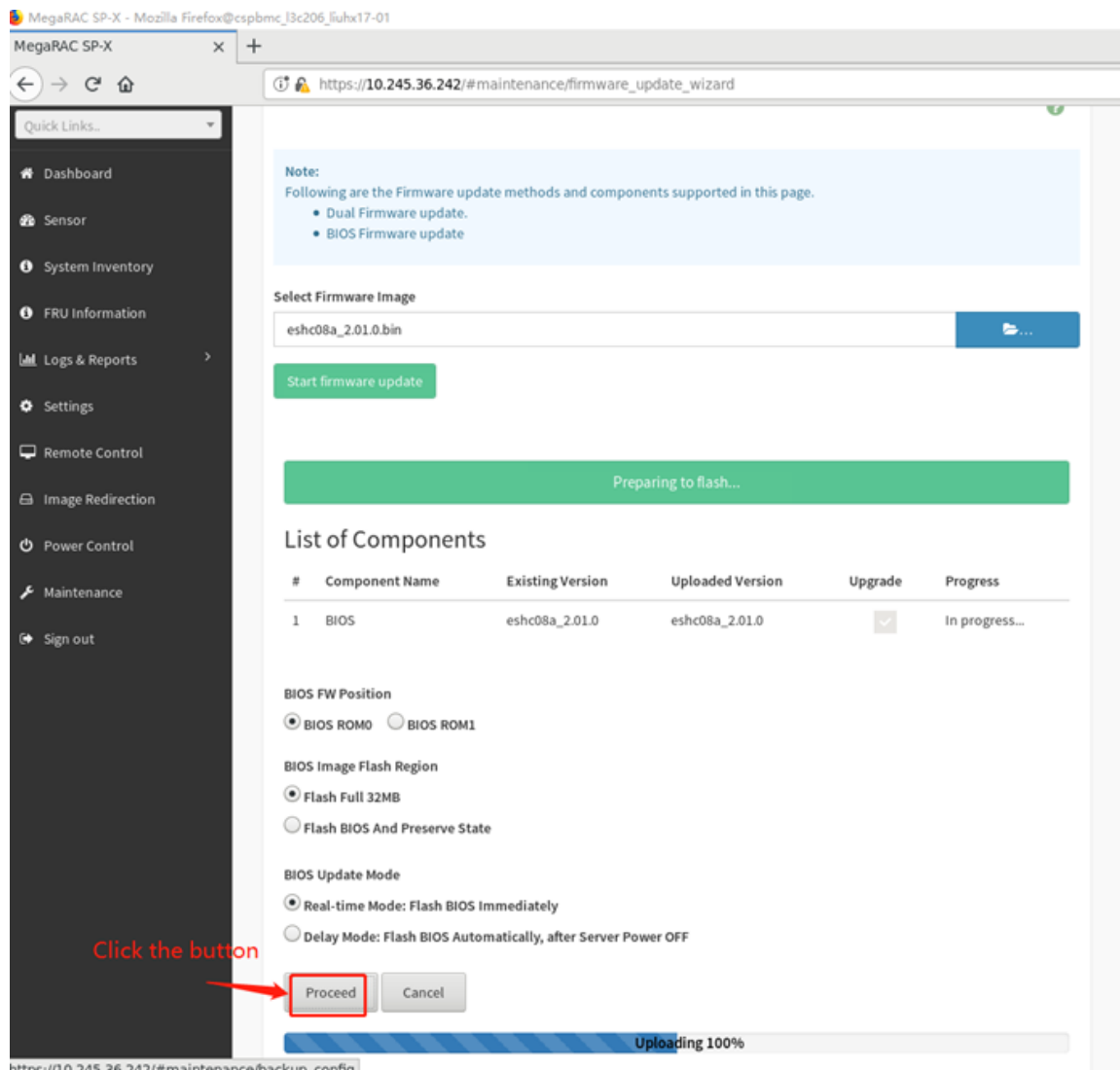
1. Select the BIOS version that needs to update:



2. Select the BIOS rom that needs to update. The BIOS rom can update separately here:

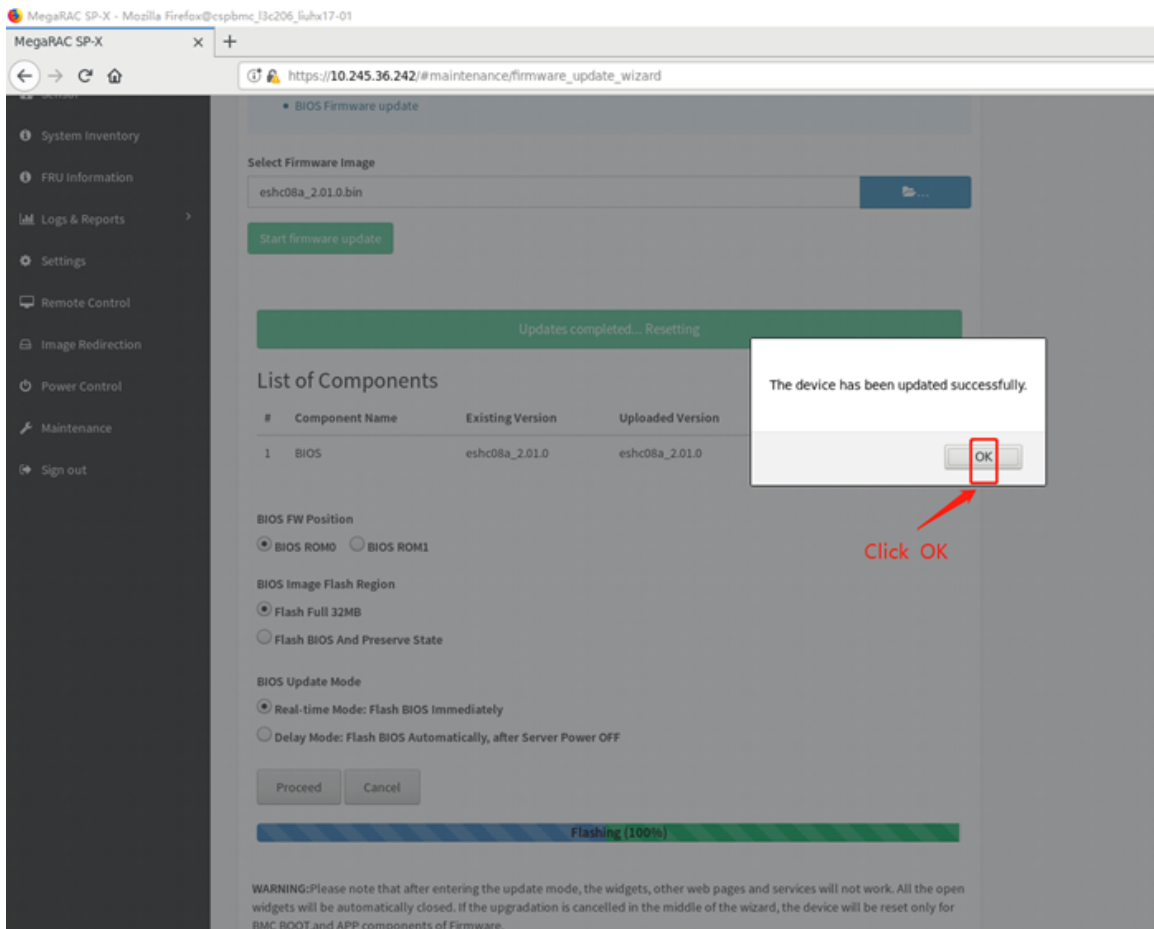


3. After uploading the BIOS information, you need to confirm the refresh again and click proceed.



4. After the upgrade FW action completed, you need to confirm whether the BIOS information is correct after restarting the OS action.

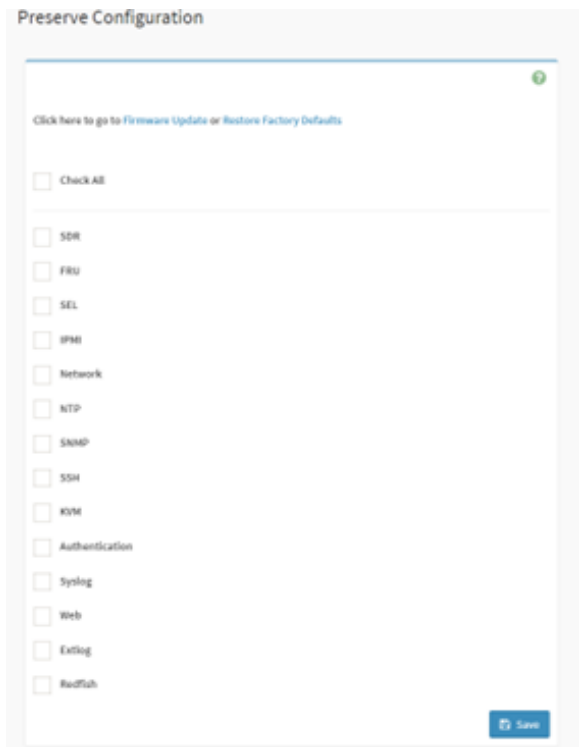




## 12.6 Preserve Configuration and Restore Factory Defaults

On preserve configuration page, it is used to check the configuration that needs to preserve when users upgrade BMC FW or load default BMC. You can either check/uncheck a check box to preserve/overwrite the configuration of BMC.

On restore factory default page, it is used to preserve any existing configuration data. Go to preserve configuration page and select them.

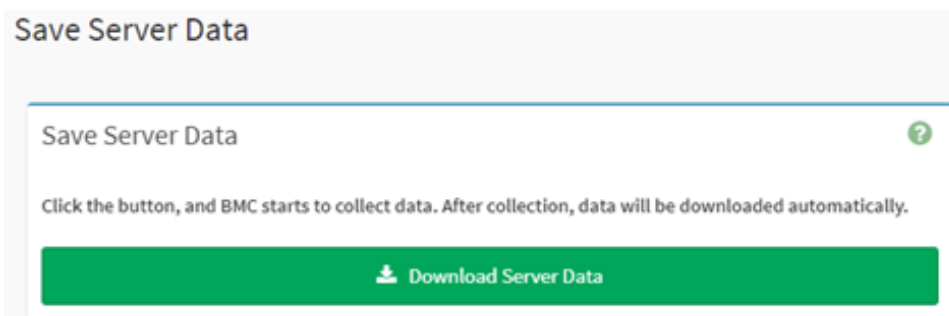


**Note:** On restore factory default page, if you do not select any item and click “Save”, BMC will load default and reset automatically.

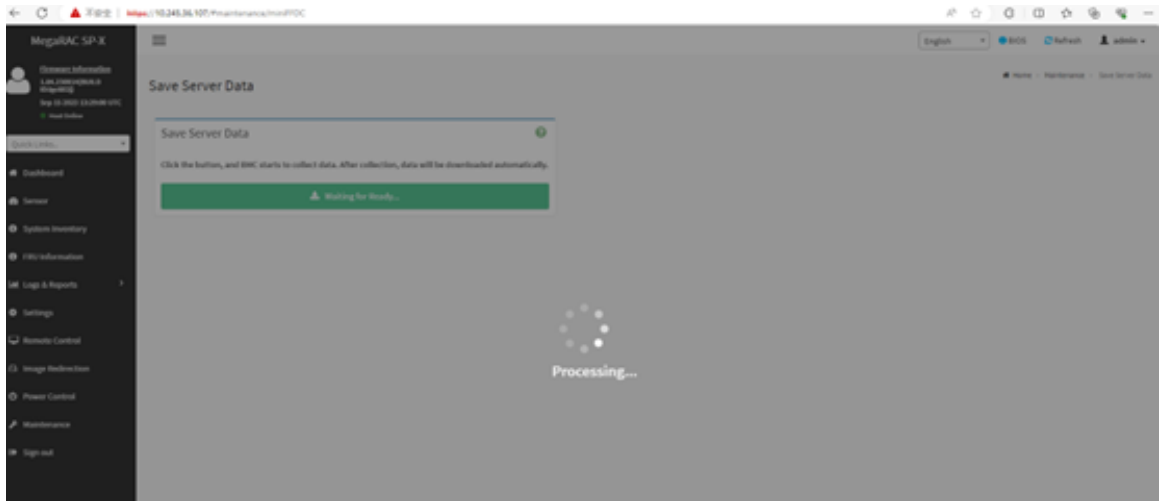
---

## 12.7 Save Server Data

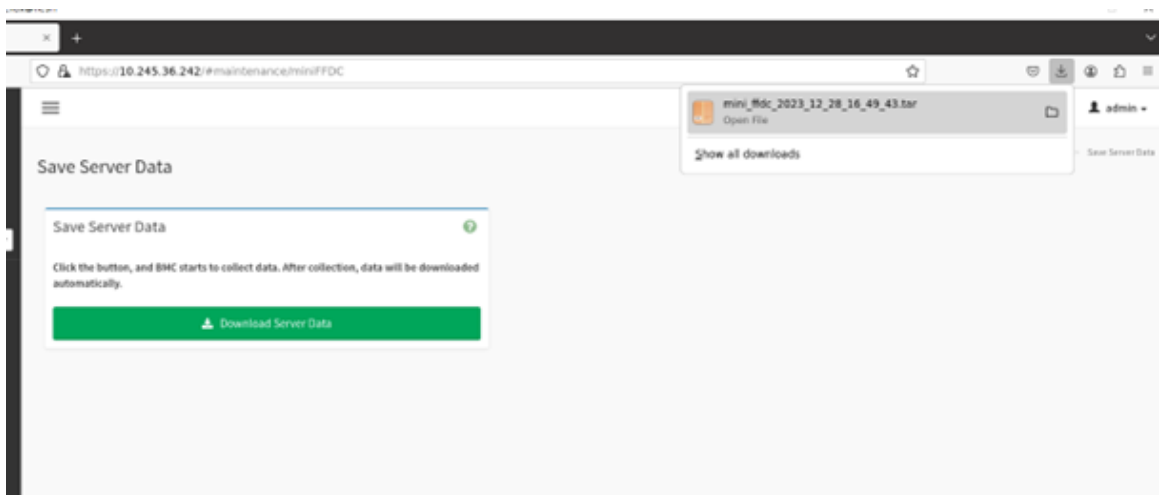
Click the button, and BMC starts to collect data. After collection, data will be downloaded automatically.



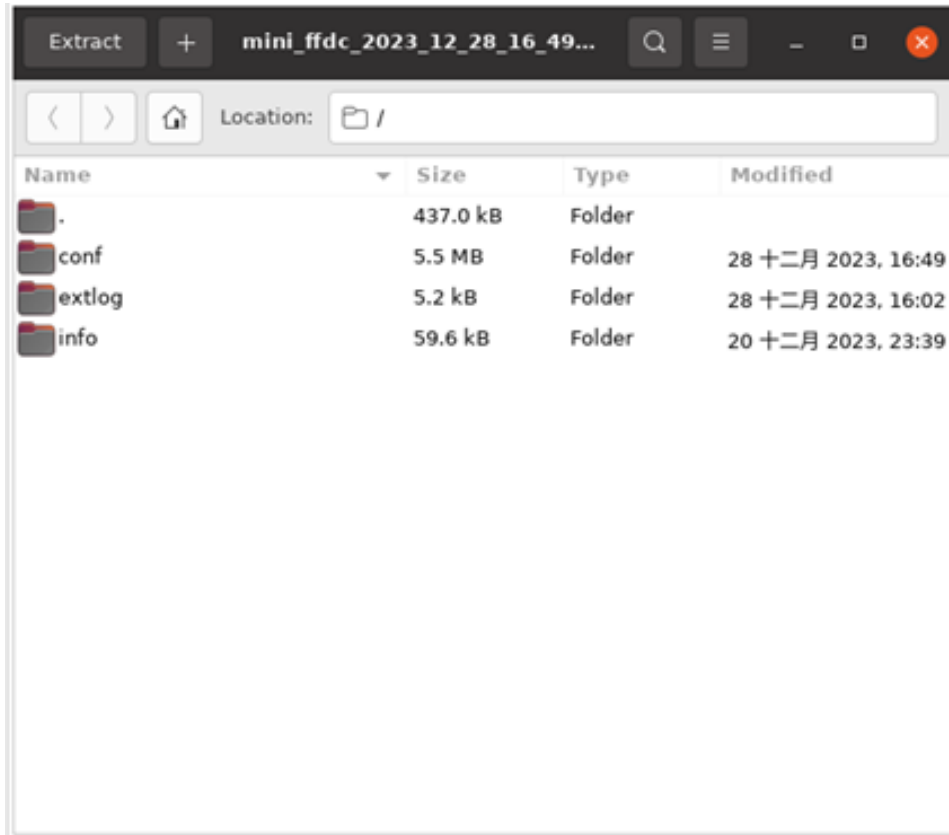
1. Click the “Download Server Data” button, then wait for FFDC package download completely.



2. Check the package name, it should be `mini_ffdc_[date].tar`.



3. The download FFDC file and its path structure is as below:



---

## 12.8 System Administrator

This page is used to display the username of System Administrator. Check the option of “Enable User Access” to enable user access for system administrator. Check the option of “Change Password” to change the existing password. This will enable the password fields.

## System Administrator

?  

Username

sysadmin

Enable User Access

Change Password

Password

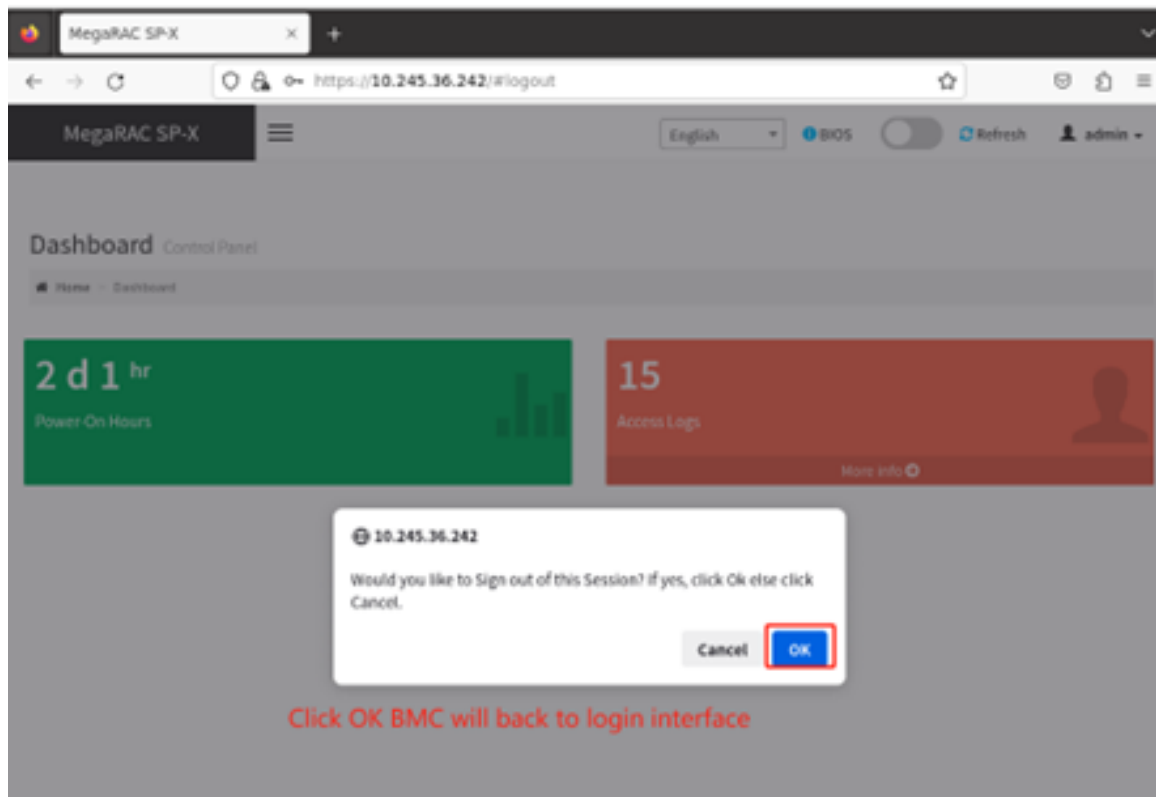
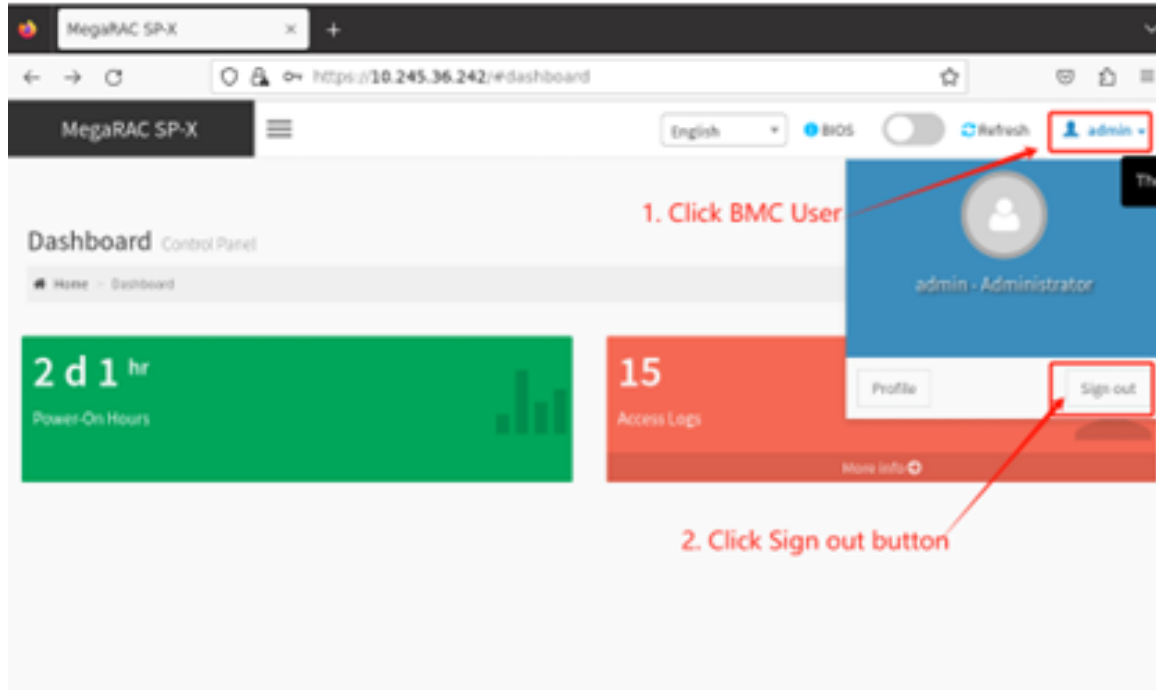
  

Confirm Password



## Chapter 13. Sign Out

This function is used to logout current user.







---

## Appendix A. Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area.

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