

# ThinkSystem HS350X V3 BMC User Guide



Machine Type: 7DE3

First Edition (March 2024)

#### © Copyright Lenovo 2024.

LIMITED AND RESTRICTED RIGHTS NOTICE: If data or software is delivered pursuant to a General Services Administration (GSA) contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.

## Contents

Contents	•	•	. i
Chapter 1. Introduction	•	•	<b>. 1</b>
1.2 Page Description			. 1
Chapter 2. WEBUI Opening and			_
Login	•	•	. 3
2.1 Login WEBUI	•	·	. 3
2.2 Left Navigation Menu	•	·	. 5
2.3 Help Icon	•	·	. 5
2.4 Error Message	·	·	. 6
Chapter 3. Dashboard	•	•	. 7
Chapter 4. Sensor			. 9
4.1 Reading of All Sensors			. 9
4.2 Sensor Details			10
Chapter 5. System Inventory			11
Chapter 6, FBU (Field Benlaced U	nit'		
Information	•		13
Chapter 7. Logs and Reports			15
7.1 IPMI System Event Log (SEL)			15
7.2 Audit Log		•	16
Chapter 8. Settings			17
8.1 Date and Time			18
8.2 External User Services			18
8.3 KVM Mouse Setting			20
8.4 Log Settings			20
8.5 TLS Settings			21
8.6 Media Redirection Settings			22

8.8 PAM Order Settings		•					•			28
8.9 Platform Event Filter		•	•	•	•	•	•		•	28
8.10 Services	•	•	•	•	•	•	•			30
8.11 SMTP Settings	·	•	•	•	•	•	•	•	•	30
8.12 SSL Settings	•	•	•	·	·	•	•	•	·	31
8.13 User Management	·	•	•	·	•	•	•	·	·	32
8.14 IPMI Interfaces	·	•	•	·	•	•	•	·	·	33
8.15 Account Lockout Policy.	·	·	•	·	·	•	·	·	·	34
Chapter 9. Remote Co	nt	tro	b		•		•		•	35
9.1 H5Viewer KVM										35
9.2 H5Viewer SOL (Serial Over	LA	N)					•			36
Chapter 10 Image Reg	dir	2	<b>ct</b>	in	n					30
Onapter 10. Inage net		C		10		•	•	•	•	03
										41
Chapter 11. Power Co	nτ	ro	1	•	•	•	•	•	•	-
Chapter 11. Power Co Chapter 12. Maintenar	nt nc	ro e	•	•	•	•	•	•	•	43
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration	nt nc	e	• •	•	•	•	•	•	•	<b>43</b>
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration .		e	•	•	•	•	•	•	•	<b>43</b> 43 44
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location	nt nc	e	• • •	•	•	•	•	•	•	<b>43</b> 43 44 44
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information.	nt nc	e	• • • •	•	•	•	•	•	•	<b>43</b> 43 44 44 45
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update		e	• • • •	•	•	•	•	•	•	<b>43</b> 43 44 44 45 47
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5.1 Update BMC FW.		e	• • • • • •	• • • • • • •	•	•	•	•	•	<b>43</b> 43 44 44 45 47 47
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5.1 Update BMC FW . 12.5.2 Update BIOS FW.		e	• • • • • • •	• • • • • • •	• • • • • •	•	• • • • • • • •	•	•	<b>43</b> 43 44 44 45 47 47 51
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5.1 Update BMC FW . 12.5.2 Update BIOS FW .	nt nc	e	• • • • • • • • • •	•	• • • • • • • • • • • • • •	• • • • •	·	• • • • • •	• • • • • • •	<b>43</b> 43 44 44 45 47 47 51
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5.1 Update BMC FW . 12.5.2 Update BIOS FW . 12.6 Preserve Configuration an Defaults	nt nc	e	• • · · · · · · ·	•	• • • • • • • • • • • • • • • • • • •	• • • • •	or	• • • • • •	• • • • • • • •	<b>43</b> 43 44 45 47 47 51 53 53
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5.1 Update BMC FW . 12.5.2 Update BIOS FW. 12.6 Preserve Configuration an Defaults 12.7 Save Server Data	ητ - - - - - - - - - - - - -	ro e	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	or	• • • • • • • • • • • • • •	•	<b>43</b> 43 44 44 45 47 51 53 54 56
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5.1 Update BMC FW . 12.5.2 Update BIOS FW . 12.6 Preserve Configuration an Defaults 12.7 Save Server Data 12.8 System Administrator .	nτ	ro e	• • · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • •	or	• • • • • •	•	<b>43</b> 43 43 44 44 45 47 51 53 54 56
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5.1 Update BMC FW. 12.5.2 Update BIOS FW. 12.6 Preserve Configuration an Defaults 12.7 Save Server Data 12.8 System Administrator .	nt nc	e	• • • • • • • •	• • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • •	or	• • • • • •	• • • • • • • • • •	<b>43</b> 43 43 44 44 45 47 47 51 53 54 56 <b>59</b>
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update 12.5 Firmware Update 12.5.1 Update BMC FW. 12.5.2 Update BIOS FW. 12.6 Preserve Configuration an Defaults 12.7 Save Server Data 12.8 System Administrator . Chapter 13. Sign Out Appendix A. Notices.		ro e	• • • • • • • • •	• • • • • • •	• • • • • • • • • • • • •	• • • • • • •	or	• • • • • •	• • • • • • • • • • •	<b>43</b> 43 43 44 44 45 47 51 53 54 56 <b>59 61</b>
Chapter 11. Power Co Chapter 12. Maintenar 12.1 Backup Configuration . 12.2 Restore Configuration . 12.3 Firmware Image Location 12.4 Firmware Information 12.5 Firmware Update . 12.5.1 Update BMC FW. 12.5.2 Update BIOS FW. 12.6 Preserve Configuration an Defaults . 12.7 Save Server Data . 12.8 System Administrator . <b>Chapter 13. Sign Out</b> <b>Appendix A. Notices.</b> Trademarks .		e	• • • • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •	or:	• • • • • • •	• • • • • • • • • •	<b>43</b> 43 43 44 44 45 47 51 53 54 56 <b>59 61</b> 62

## Chapter 1. Introduction

- "1.1 Glossary" on page 1
- "1.2 Page Description" on page 1

### 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.

Pages	Sub-Functions	Description
	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.

### 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.

MegaRAC SP-X
Username
Password
English •
Sign me in I forgot my password

#### 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.

🌢 🔺 Warr	ng Potential Securi × +		🔹 🔺 Warnin	g Putertal Secur × +	
€ → C	A Not Server 1029-21824536240	0 <u>p</u> =	$\leftrightarrow \rightarrow 0$	A feet Service https://10.245.36.242	¢) (9 Å
4	Warning: Potential Security Risk Ahead Firefox detected a potential security threat and did not continue to <b>10.245.36.242</b> . If you visit this site, attackers could try to steal information like your passwords, emails, or credit card details.	56	<b>A</b>	Warning: Potential Security F Firefox detected a potential security threat and did not you visit this site, attackers could try to steal informati credit card details. Learn more	Risk Ahead continue to 10.245.36.242. If ion like your passwords, emails, or Recommended] Advanced
	Cick this button			1824534242 uses an invelid security certificate. The certificate is not trusted because it is self-signed. Error code: <u>HODULA_POX_ERROR_SELF_SIGNED_CERT</u> View.Certificate Ge Back (Recommended)	Click this button

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 us should have a minimum of 8 characters.	ser and
New Password	
Confirm Password	
Submit	

### 2.2 Left Navigation Menu

MegaRAC SP-X	<ol> <li>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.</li> <li>The page of "Logs &amp; Reports" has sub-pages. Click it to show the sub-menu list and the drop-down items. See the figure below.</li> </ol>
ID:igc602j) Sep 15 2023 13:29:00 UTC Host Online Quick Links	IPMI Event Log     Audit Log
A Dashboard	<ul> <li>Figure 2. Logs &amp; Reports</li> <li>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</li> </ul>
<ol> <li>System Inventory</li> <li>FRU Information</li> </ol>	English   BIOS  CRefresh  admin   admin
Logs & Reports	<ol> <li>The breadcrumb Navigation bar shows the previous and current path of current page. See the figure below.</li> </ol>
Remote Control     Image Redirection	n Home > Dashboard
C Power Control	
<ul> <li>Maintenance</li> <li>Sign out</li> </ul>	

#### 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:

```
Sensor Reading Live reading of all sensors

On this page, details for all the available sensors e.g. Name, Type, Status, Current Reading and Behavior are displayed. The sensor readings are available for Temperature, Fan, Watchdog and Veitage Sensors as well as for supported Discrete Sensors.

This page will infresh automatically with the latest data releaved from the database. Please nede that there may be some delay in retrieving this live data.

Sensors are operating constrained by this Type, Status, Current Reading and Behavior are displayed. The sensor readings are available for Temperature, Fan, Watchdog and Veitage Sensors as well as for supported Discrete Sensors.

Sensors are operating
Click on any persons to view more information about it. For each sensor, thresholds [If supported] and graphical representation of all associated events (read-only) are shown.

If you select a sensor from the Normal Sensors sections, a Live Widget is also deplayed showing its behavior over time.
```

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:

Select Firmware Image		
		<b>b</b>
Please choose firmware file to upgrade		
WARNING:Please note that after entering the pages and services will not work. All the open	update mode, the v widgets will be aut	widgets, other web comatically closed.
If the upgradation is cancelled in the middle of only for BMC BOOT and APP components of Fi	f the wizard, the de	vice will be reset

## 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

### 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:

Critical Sensors (0)		
	OAll threshold sensors are normal	

#### Discrete sensor states are like below:

Discrete Sensor States (65)	
Sensor Name	State
2 ACPI_State	\$0/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:

Normal Sensors (53)			
Sensor Name	Reading	Behavior	
<pre>↓ CPUDDR_VRTemp1</pre>	47 °C		
L CPUDDR_VRTemp2	59 °C		
<pre>L CPU_DTS_Temp</pre>	48 °C		
1 CPU_TControl	8 °C		
<pre>L CPU_Temp</pre>	47 °C		

Not present or no available sensors are showed like below:

Disabled Selisors (11)			
tinlet_Temp	XNVMe1_Temp	XM_2_Slot1_Temp	XM_2_Slot2_Temp
OCP_OPT_Temp	XSYS_FAN0_Speed	XSYS_FAN1_Speed	XSYS_FAN2_Speed
tSYS_FAN3_Speed	XSYS_FAN4_Speed	XSYS_FAN5_Speed	

#### **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.

Sensor detail 🛲	information about this sensor	wi Home ≻ Se	nsor Reading > Sensor d
			(
CPUDDR_VRTem	1p2 Sensor Information		
1		58 °C	
		Upper Non-Recoverable	125 °C
		Upper Critical	105 °C
		nor ation 58 °C Upper Non-Recoverable Upper Non-Critical Lower Non-Critical Lower Non-Recoverable Change Change	100 °C
8			NA
		Lower Critical	NA
		Lower Non-Recoverable	NA
0.00			Change Thresholds
	Time (HH:MM:SS)	,	

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

Upper Nep recourt	cable		
opper Non-recove	rable		
125			
Upper Critical			
105			
Upper Non-critica	ι		
100			
Lower Non-critica	ı		
NA			
Lower Critical			
NA			
Lower Non-recove	rable		
NA			

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.

	-														
MegaR	WC SP-X	=											English = 08/05	C Refresh	1 admin -
Little	en Information REIN(DURLD REIN) 2004 REI-482.51 UT	Systen	n Inventor	У										if there is	System insertiory
Quick Links.		System	Processor	Nenory Controller East	eboard Power	Thermal	POEDevice	POE function St	orage						
· Dashboard		Syster	m info												
Servor		Name	Description	Model	IndicatorLED	Manufacturer	PowerState	SerialNumber	PartNumber	System7ype	AssetTag	BiosVersion	UUID		State
O System Inv	entory	System	System Self	ThinkSystem #5350KV3	off	Lenovo	05	H5350013-ENG8	1000000000001	Physical		ehclila_2.0	4.0 20202020-2020-2020-2020-2020	020202020	Enabled
O FRUinform	ation														
🗶 Loga & Rep	ots	•													
<ul> <li>Settings</li> </ul>															
Remete Co	artrol														
Syste	m Inver	ntory												d Home -	System inventory
System	Process	sor Nemory C	ontroller I	laselicard Power	Thermal PC	DE Device P	CIE Function	Storage							
Proc	essor Info	D						_							_
м	Name M	tanufacturer	MaxSpee	dMHz Model					ProcessorArchite	cture Proce	ssorType	Socket t	flectiveFamily	TotalCores	State
CPUD	CPU0 Ir	ntel(R) Corporation	4000	Intel(R) Xeon(R) P	fatinum 8450Y+,	2000 Mhz, 40 Cor	e(s), 80 Logical	Processor(s)	886	CPU		CPU0 I	ntel(R) Xeon(R) Platinum 8460Y+	40	Enabled
-															

## 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.

FRU Device ID		0	~	]		
		0		1		
FRU Device Name		1		μ		
		2		L		
		3		ľ		
		4		H		
Chassis Information						
		6		L		
		7		ŀ		
Chassis Information	1	8		L		
Area Format Version		9		L		
		10		ŀ		
Chassis Type	Rack Moun	11		si		
		12		ŀ		
Chassis Part Number	000000000	13		L		
		14		ŀ		
Chassis Serial Number	012345678	15		5		
	234567890	16		h		
		17		ŀ		
Chassis Extra		18		I		
		19	÷	l		

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

Figure 5. Available FRU Devices

Detailed FRU shows static manufacture or vendor data as below:

FRU Device ID	0 🗸				
FRU Device Name	MB FRU				
Chassis Information	on	Board Informatio	n	Product Information	
Chassis Information Area Format Version	1	Board Information Area Format Version	1	Product Information Area Format Version	1
Chassis Type	Rack Mount Chassis	Language	English	Language	English
Chassis Part Number	00000000001	Manufacture Date	Mon Jan 1 00:00:00 1996	Product Manufacturer	Lenovo
Chassis Serial Number	0123456789012345678901 234567890123456789	Time 123456789012345678901 34567890123456789 Board Manufacturer		Product Name	ThinkSystem HS350X V3
Chassis Extra		Board Product Name	System Board	Product Part Number	000000000000000
		Board Serial Number	01234567890123456789012	Product Version	FFFFFFFFF

### 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:

Filter by type	All Events	<ul> <li>All Sensors</li> </ul>
	All Events System Event Records	
	OEM Event Records	Download Event Logs
	BIOS Generated Events	
	SMI Handler Events	
	System Management Software Events	ries
	System Software - OEM Events	
•	Remote Console Software Events	
	Terminal Mode Remote Console software 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.

Filter by	Date     Start Date     O
	Audit Log: 3 out of 3 event entries
Decembe	r 2023
0	ID: 2 December 26th 2023, 4:52:45 pm HS350XV3-ENG8 adviserd: adviserd [2751: 2928 INFO]kvm Login from IP:10.119.174.242 user: admin -
0	ID: 1 December 26th 2023, 4:52:25 pm HS350XV3-ENG8 spx_restservice: spx_restservice [3766 : 3766 INFO]https Login from IP:10.119.174.242 user:admin -
May 2018	
0	ID: 3 May 5th 2018, 6:02:00 pm HS350XV3-ENG8 spx_restservice: spx_restservice [3766 : 3766 INFO] https Login from IP:10.119.178.241 user:admin -
0	

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

Filter by Date	11/07/2023 11:42 AM	0	11/0	7/2023	11:42	AM	0		
			<		Nove	mber 2	2023		>
			Su	Мо	Tu	We	Th	Fr	Sa
Ð			29	30	31	1	2	3	4
			5	6	7,	8	9	10	11
			12	13	14	15	16	17	18
			19	20	21	22	23	24	25
			26	27	28	29	30	1	2
			3	4	5	6	7	8	9
						©			

### 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.

	3 11							1	
	and the second sec		<		Nove	ember 2	2023		>
			50	Mo	Tu	we	Th	Fr	51
			- 29	30	31	1	2	1	4
Asia/Brunel *			5	6	Τ.		9	20	1
Asia/Thimphu	and a little of the second sec		12	13	14	15	26	17	1
Asia/Shanghai			2 19	20	21	22	23	24	2
Asia/Urumoji			26	27	28	29	30	1	2
Asia/Nicosia			- 1	4	5	0	7		
Asia/Tblisi						0			
Asia/Shanghai *	Nov 7, 2023 4:05:47 AM	(GMT-03:00 -03) - Antarctica/Rothera	_	-					1

2. Time automatic configuration

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

	Automatic NTP Date & Time								
Primary NTP Server		Secondary	NTP Server						
poolntp.org		timé.nia	Lgov						

Configure the PTP settings is as below:

Automatic NTP Dute & Time	
PTP Interface	PTP Preset
PP Transport Tpv4 v	PTP Igenode Unicast
PTP Unicast IP PTP Unicast IP	PTP Delay Mechanism E2E v
PTP inboard Latency 0	PTP Outbound Latency 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PTP Max Master capacity 5
Panic Mode	PTP-Log request delay
	E See

#### 8.2 External User Services

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

External User Services		
	AN .	C.
LDAP/E-directory Settings	Active Directory Settings	RADIUS Settings

Users can set general LDAP configuration and check active directory.

P/E-directory Settings		Active directory Settings	
General Settings	Role Groups	General Settings	Role Groups
General LDAP Settings		General Active Directory Settings	
Enable LDAP/E-Directory Authentication  Encryption Type No Encryption SSL StartTLS  Common Name Type P Address FQDN  Server Address	Ø	Enable Active directory Authentication Secret Username Secret Password	Q
Port 389		User Domain Name	
Bind DN E.g., cn=admin,ou=login,dc=domain,dc=com Password		Domain Controller Server Address 1	
Whitespace not allowed Search Base E.g., ou=login,dc=domain,dc=com		Domain Controller Server Address 2	
Attribute of User Login cn	~	Domain Controller Server Address 3	
	🖺 Save		🖺 Save

BMC also supports RADIUS based on user's scenarios.

	RADIUS Settings		
	General RADIUS Settings	Advanced RADIUS Settings	
General RADIUS Settings		Advanced RADIUS Settings	
	0	RADIUS Authorization	0
Enable RADIUS Authentication		Radius configuration is not enabled.	
		Administrator	
Port 1812		Operator	
Secret		User	
Enable KVM Access			
Enable VMedia Access		No Access	
	🖺 Save		🖺 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.

Ø
🖺 Save

#### 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

	0
✓ System Log	
✓ Local Log	
Remote Log	
Port Type 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.



#### 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

	0
Click here to go to LocalMedia or Remote Media.	
<ul> <li>NOTE:</li> <li>When the multiple image redirection feature is enabled, the mount CD/DVD and Harddisk check will be enabled only on the success of the mount status of CD/DVD and Harddisk.</li> <li>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.</li> <li>When the Local Media or Remote Media License is expired, the Local Media or Remote Media checkbox will be in disabled state.</li> </ul>	box
Local Media Support	
<ul> <li>Remote Media Support</li> </ul>	
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 onfs 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
-----------------	----------

	0
CD/DVD device instances	
0	v
Hard disk instances	
0	Ŷ
Remote KVM CD/DVD device instances	
0	¥
Remote KVM Hard disk instances	
0	*
Power Save Mode	

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

emote Session	
	Ø
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.

letwork IP Settings	
	0
✓ Enable LAN	
LAN Interface	
eth0	~
MAC Address	
90:2E:16:05:A7:F1	
✓ Enable IPv4	
Enable IPv4 DHCP	
IPv4 Address	
10.245.36.107	
IPv4 Subnet	
255.255.255.0	
IPv4 Gateway	
10.245.36.1	
Circle Enable IPv6	
✓ Enable IPv6 DHCP	
IPv6 Index	
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

	Ø
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.

	C
AN Interface	
eth0	
<ul> <li>Auto Negotiation</li> </ul>	
.ink Speed	
LOOD Mbps	
Duplex Mode	
ULL Duplex	
ICSI Interface	
Disabled	

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

### **DNS** Configuration

	0
VINS Enabled	
mDNS Enabled	
Host Name Setting           Automatic         Manual	
Host Name	
H\$350XV3-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)

	Ø
NCSI Mode	
Auto Failover Mode Manual Switch Mode	
NCSI Interface	
eth1	v
Package ID	
0 (active)	v
Channel Number	
0 (package 0)(active)	v

### 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.

Platform Event Filters		
•	¢	P-
Event Filters	Alert Policies	LAN Destinations

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.

Event Filters							
All Configured Unconfigured							Θ
PER ID: 1 (bashind) when Al Sensors suitches to any severity run Alert (1) & none	° ►	PEF 80:2 (Decoline) when All Sensors switches to any sevenity run Alert (2) & none	* ▶	PEF RP: 3 (Drobhed) when All Sansers seniththe to any servicity run Alart (2) & none	* ►	PEF RD: 4 (Orabino) when AD Sensors switches to any sewrity run Alert (4) & none	0
PER R0.5 (Dashind) which Al Sensors suitches to any severity run Alert (5) & none	° ►	PEF BD: 6 (Dozbied) when All Sensors switches to any severity run Alert (6) & none	° ►	PEF ID: 7 (Doubled) when All Sanacrs anithus to any saverity run Alart (7) & none	* ►	PEF KD: 8 (Disabled) when All Sensors switches to any severity nun Alert (K) & none	0
PEFRO: 9 (Doobind) which All Sensors subthat to any sewithy run Allet (b) & none	° •	PGF 80:39 (Drobled) when Al Sensors switchet to any severity run Alert (10) & none	° ►	PEF ID: 11 (Doubled) when All Sansors settches to any severity run Alert (11) & none	° ►	PEF Ro: 12 (Doobled) when All Sensors suntches to any sevenity run Alert (12) & none	0
PEF ID: 13 (Disabled) when AE sensors soliticities to any severity run Alert (13) & none	° ►	PEF ID: 14 (Drobled) when All Sensors switches to any severity run Mert (14) & none	° 🕨	PEF ID: 15 (Doubled) when All Sensors switches to any severity run Allert (15) & none	۰		

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.

LAN Dest	inations							
Select the LAN C	Dannel 1 ¥							0
•	LAN Channel; 1 LAN Destination: 1 SNMP Trap Sent Tec	*	LAN Channel: 1 LAN Destination: 2 SWMP Trap Sent To:	4	LAN Channell 1 LAN Destination: 3 Shift Trap Sent To:	•	LAN Channell; 1 LAN Crettination: 4 SNAP Trap Sent To:	
•	LAN Channel: 1 LAN Destination: 5 SNMP Trap Sent To:	4	LAN Channel: 1 LAN Destination: 6 Snoth Trap Sent Yo:	4	LAN Channel: 1 LAN Destination; 7 South Trap Sent To:	4	LAN Channel: 1 LAN Dustination: 8 SNMP Trap Sent To:	
•	LAN Channel: 1 LAN Destination: 9 SNNP Trap Sent To:	4	LAN Channell 1 LAN Destination: 10 SNMP Trap Sent Te:	4	LAN Channel: 1 LAN Destination: 11 SHAR Frap Sent To:	•	LAN Channell: 1 LAN Destination: 12 SNMP Trap Sent To:	
•	LAN Channel: 1 LAN Destination: 13 SNMP Trap Sant To:	4	LAN Channel: 1 LAN Costination: 14 Snuth Trap Sent To:	4	LAN Channel: 1 LAN Destination: 15 SateP Trap Sent To:			

### 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 Ф         Status Ф         Intenfaces Φ         Secure Port Φ         Timeout Φ         Maximum Sessions Φ           web         Active         both         443         1800         20	-
Service *     Storage *     Interfaces *     Secure Purit *     Tameout *     Haammun Secures *       web     Active     both     443     1800     20     #       kees     Active     both     443     1800     4     #	
web         Active         both         443         1800         20         Image: Comparison of the comparison of	
keen Active both 443 1800 4 =	
og media Active both 44,0 hun 0 =	
hd-mešla Active both 443 NA 0 = 🖌	
sah Active NA 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

	0
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	Generate SSL certificate	
iew SSL Certificate	Generate SSL Certificate	
Current Certificate Information Certificate Version 3 Serial Number 2F207A612C8FA0C722F8633108D11974944C2EA6 Signature Algorithm sha256WithRSAEncryption	Common Name (CN)  Organization (O)  Organization Unit (OU)  City or Locality (L)	
Public Key (2048 bit)	State or Province (ST) Upload SSL Certificate Country (C)	
Issuer Common Name (CN) HS350X V3 Issuer Organization (O) Lenovo Issuer Organization Unit (OU) Service Processors	Email Addres     Current Certificate       Sat Jan 1 00:00:24 2022       Valid for       in days       Key Length       2048 bits       New Private Key       New Private Key	<b>6</b>
Issuer City or Locality (L) Morrisville Issuer State or Province (ST) North Carolina	Trusted CA Support Current trusted CA certificate Sat Jan 1 00:00:24 2022 Trusted CA Certificates	<b>b</b>
Iceuar Country (C)		<b>≥</b> ₿ Sa

### 8.13 User Management

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

User Management			
Channel 1 ¥			0
Channel 1 1 anerymous (Disblied) No Access NOM: SMedia	Channel 1 2 admini (Frotiled) Administrator IOM (Meeta)	Channel 1 3 (Disobline)	Channel 1 * (Disabled)
Channel1 S (Destine)	Channel 1 6 (Databled)	Channel 1 2 (Doubline)	Channel 1 8 (Doubled)
Channel 1 9 (Doubled)	Channel 1 36 (Doublind)	Charoné I 31 (Drobled)	Channel 1 12 (Doubled)

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.

	Ø	<ul> <li>Enter the name of the new user.</li> <li>Name must be a string of 1 to 16 alpha-numeric characters.</li> <li>It must start with an alphabetical character.</li> <li>It is case-sensitive.</li> <li>Special characters '-'(hyphen), '_'(underscore), '@'(at sign) are allowed the structure of the structure of</li></ul>
Username		
admin		Username
Logged-In Password		admin
Change Password		Logged-In Password field is mandatory for modifying user information and should have a minimum of 8 characters.
Password Size		Logged-In Password
16 bytes	~	
Password		
Confirm 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.

IF	IPMI Interfaces				
(		0			
	IPMI Interfaces IPMI Over LAN IPMI Over KCS				
		🖹 Save			

### 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).

ockout Policy Configuration	Ø
Enable Lockout Policy	
Attempt Times :	
Reset Time (Min) : 5	
Lockout Time (Min) :	
30	

## Chapter 9. Remote Control

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

Remote Control Remote KVM & SOL
H5Viewer
Click here to go to Remote Session Settings.
C Launch H5Viewer
Serial Over LAN
C Activate

- "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 MTRI Variable MTRI Variable MTRI Variable MTRI Memory Range:	R[00]: Ba R[01]: Ba R[02]: Ba R[03]: Ba s:	ase=0000000005E80 ase=0000000005FC0 ase=0000000005FB8 ase=0000000005FB8	00006 M 00005 M 30005 M 50005 M	lask=00003FFFFFE lask=00003FFFFFC lask=00003FFFFFF lask=00003FFFFFF	00800 00800 80800 70800		
C:000000000000000000000000000000000000							
BpmStructures [BootGuardPe:	Size = 4	39 CM_TPMSuccess :	EFI_UN	ISUPPORTED			
System Inform Platform Name BIOS Version 0x31 : Memory	mation: e: TypeAn : eshc020 y Initia	ccherCityRP, AMI -1.04.0, Build lization Complet	[ Core: Date: Ce	5.31, Intel RC "10/16/2023"	: 370.₽03		

### Chapter 10. Image Redirection

Image Redirection	
Þ	

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 Emulas	ocal Media Emulana CD/DHD/HDD Imagas within the BMC to host as media						
Click here to go to Hedia Gene	eral Settings or Remote Media.						
					O 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			
					0
Click here to go to Hedia Go	eneral Settings or Local Media.				
					C 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

ower Control on Host Server	
Power Actions	0
Host is currently on	
Power Off	
Power On	
Power Cycle	
Hard Reset	
ACPI Shutdown	
	O 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	0
Please enter a value of power control interval (0 ~ 60 Min), 0 means no interv	ral.
0 Power ON Interval	
🖺 Sa	ve

### 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.

ackup Configuration		
		0
Check All		
SNMP		
KVM		
Network & Services		
IPMI		
NTP		
Authentication		
SYSLOG		
		📥 Download

### **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.

Restore Configuratio	n
	0
Config File	►
	🗎 Upload

#### 12.3 Firmware Image Location

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

Firmware Image Location	
	Ø
Image Location Type           Image Location Type	
	🖹 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

0

FBP2 CPLD Version
06
FBP3 CPLD Version
06
R8P CPLD Version
12
PSU0 primary fw version
0.01
PSU0 secondary fw version
0.01
PSUI 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.

mware Update	
Note:	
<ul> <li>Following are the Firmware update methods and components supported in this page.</li> <li>Dual Firmware update.</li> <li>BIOS Firmware update</li> </ul>	
elect Firmware Image	
	<b>b</b>
Start firmware update	
WARNING:Please note that after entering the update mode, the widgets, other web pages and services will n	ot work. All the open

### 12.5.1 Update BMC FW

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

e) → @ @	07 & https://10.245.36.242/#maintenancofirmware_spdate_wizard			• •		In D
MegaRAC SP-X	- 		English	• 8105	C Refresh	L stain -
Elemans.https://www.bitemation     Lorg.section     Proc.20122010040.b     Proc.20120101040.b     Proc.20120101040.b     Proc.2012010	irmware Update	file Upicad@copberc.     file Upicad@copberc.     file Upicad@copberc.     file Upicad@copberc.     file Upicad@copberc.	0-2015,5-8-17-01	Size Modified		<ul> <li>Remaine Updi</li> </ul>
Quick Links. * A Dashboard Sensor	Note: Note: 1 University are the Firmware update methods and components supported in this page.	Desktop Documents Downloads	HISBORY, POR, BMC, 010 HIS HISBORY, POR, BMC, 011 HIM HISBORY, POR, BMC, 012 HIM HISBORY, POR, BMC, 013 HIM HISBORY, POR, BMC, 013 HIM HISBORY, POR, BMC, 013 HIM	67.1 MB 21 Cct 2022 67.1 MB 8 Nov 2022 67.1 MB 22 Nov 2022 67.1 MB 22 Nov 2022 67.1 MB 7 Dec 2022 67.1 MB 21 Dec 2022 67.1 MB 13 Jan	2	
System inventory     FRU Information	Select Firmware Inage	Pictures	HS350KV3_POR_BMC_0.16.ma HS350KV3_POR_BMC_0.17.ma HS350KV3_POR_BMC_0.18.ma HS350KV3_POR_BMC_0.18.ma	67.1 MB 8 Mar 67.1 MB 22 Mar 67.1 MB 6 Apr 67.1 MB 19 Apr 67.1 MB 19 Apr		
ing Lags & Haports → © Settings □ Romote Control G Image Redirection	Start linease update WHENE Place not 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 upgradates is cancelled in the middle of the wized, the device will be reset only for EVEC BOOT, and APP components of Primares.	B boot ≜ B Riesyste ≜ B home ≜ + OtherLocations	History (-Onjime, c.200ma     History (-Onjime, c.200ma     History (-Onjime, c.200ma     History (-Onjime, c.200ma     History (-N, BAC, 190602+8.07, anyoo, nearchill,     Inagy (-N, BAC, 190602+8.07, anyoo, nearchill,     Inagy (-N, BAC, 190602+8.07, anyoo, c.200maz,     Inagy (-N, BAC, 190602+8.07, anyoo, nearchill,     Inagy (-N, BAC, 190602+8.07, anyoo, nearchill,     Inagy (-N, BAC, 190602+8.07, anyoo, nearchill,     Inagy (-N, BAC, 190602+8.07, anyoo, nearchill)     Inagy (-N, BAC, 190602+8.07, anyoo, nearchill)	67.1 MB 4 May 67.1 MB 14 Dec 2022 67.1 MB 14 Dec 2022 67.1 MB 10 Oct 67.1 MB 15 Dec 67.1 MB 13 Dec 67.1 MB 17 May 67.1 MB 7 Jul	2	
🕹 Power Central			Integy (#_1866_igo00211.00_anyos_noarchima Integy (#_1866_igo00211.03_anyos_noarchima Integy (#_1866_igo0021.104_anyos_noarchima Integy (#_1866_igo0021.105_anyos_noarchima	67.1 MB 30 Aug 67.1 MB 30 Aug 67.1 MB 18 Sep 67.1 MB 30 Oct 67.1 MB 16 Nov		
0+ Sign out	2.Select the ima that needs to be update		Energy and any second s	Cancel Open		

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.

MegaRAC SP-X - Mozilla Firefo	ox@cspbmc_l3c206_liuhx17	-01			
MegaRAC SP-X	× +				
-) → ൙ <b>û</b>	🗊 🐔 https://	0.245.36.242/#maintenance/firmware_up	date_wizard		
Dashboard	Note:				
Sensor	<ul> <li>Following are</li> <li>Dual Fi</li> <li>BIOS Fi</li> </ul>	the Firmware update methods and compone mware update. mware update	nts supported in this page.		
System Inventory					
	Select Firmware	Image			
FRU Information	Invgy_fw_BM	C_igc602m-1.07_anyos_noarch.ima		s	
Logs & Reports					
Settings	Start firmware	1.Click th	e update button		
Remote Control	Protocol Typ	96:	HTTPS		
image Redirection	The dual im upon Reset,	age formation to be used for firmware update choose 'Dual Image Configuration' under Mai	is displayed as follows. To config ntenance.	ure Image to be booted from	
Power Control	Image to be	ve image Updated	Image-1		
Maintenance	Image 1			•	
Sign out	Inactive I Image 1	mage			
	Image 2 Both Ima	ges 2.Select th	he update image		
	the individual All configurati Configuration Edit Preserve	items marked as preserve/overwrite in the ta on items below will be preserved as default d ' to modify the Preserve status settings. Configuration	able below.	eration. Click "Edit Preserve	
	S.No	Preserve Configuration Item	Prese	rve Status	
	1	SDR	Overw	rrite	
	2	FRU	Overv	rrite	
	3	SEL	Overw	rrite	
	4	IPMI	Overw	rrite	

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

୯ ଜ	C 👸 https://	10.245.36.242:#maintenance/firmw	are_update_wizard	
	5.No	Preserve Configuration Item	Preserve Status	
	1	SOR	Overwrite	
	2	FRU	Overwrite	
		SEL	Overwrite	
	4	17941	Overavite	
	5	NETWORK.	Overwrite	
		NTP		
	7	SNMP We will	I start the firmware upgrade now. You will not be able to access BMC	until it flashes and restarts. Do you want to continue?
	1.0	SSH		
		RUNH		Cancel OK
	30	AUTHENTICATION	Overwrite	
	11	\$Y\$L06	Overanite	2.Click *OK*
	12	WEB .	Overanite	
	10	EXTL06	Overwrite	
	34	REDFISH	Overwrite	
	10844	a Back button		
	TACHER U	ie hash button		
			Proceed to Flash	
	and the second second			

4. Then image upload action will be processing.

×	( +			
	🗊 🚨 https://d	10.245.36.242/#maintenance/firmware_update_w	rizand	
	5.No	Preserve Configuration Item	Preserve Status	
	1	SDR	Overwrite	
	2	FRU	Overwrite	
	3	SEL.	Overarite	
	4	1754	Overwrite	
	5	NETWORK	Overwrite	
	6	NTP	Overarite	
	7	9MP	Overwrite	
		554	Overwrite	
		KAM	Overwrite	
	10	AUTHENTICATION	Overwrite	
	11	SVSLOG	Overwrite	
	12	WES	Overwrite	
	13	EX7L05	Overwrite	Processing
	34	REDFISH	Overwrite	
				_
	_	Uning disc		
		upicading 41%		

5. 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.

PX X	+			
۵	🗇 🐔 Nitpest	10.245.36.242.9 maintenance	frmware_update_wizard	
	3	50.	Overwrite	
	4	1958	Overwrite	
	5	NETWORK	Overwrite	
		NTP	Overwrite	
	7	par	Overwrite	
		554	Oversente	
		KM	Ficking VM* will start the actual upgrade operation, where the storage is a	withen with the new formulae image
	10	AUTHENTICATION	It is essential that the upgrade operation is not interrupted once it starts. Do you wish to proceed?	niteri wichtere new inninane mage.
	11	\$156.06		
	12	WEB		Cancel OK
	13	EUTLOG	Overwrite	
	14	REDIFISH	Overwrite	3.Click ok
	Firmmare Up Current Imag New Image V	date prVersion 1.07.231220 version 1.07.231220		
	The fermular	rimage has been verified. The upl	oaded image appears to be the same as the existing device firmware.	
			1.Select the Full Flash	
			Place to Proceed	
	-		2.Click the Flash to Proceed	
	WARNING FL	are note that after extering the u	of the mode the without, other web pages and services will not work All the page	

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

SP-X X +					
C @	🗇 🔒 https://10.245.36.242/#maintenance/firmware_update_wizard				
	3	50.	Overwrite		
	4				
	5	NETWORK			
	7				
		80M			
			Firmware reset has been called. Close the current session, and open a new session after a couple of minutes.		
	ы				
	34				
	Firmware Upd	late .			
	Current Image New Image Ve				
			Pull Flack		
	-		RANG PERMIT AND		

### 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:

🕒 MegaRAC SP-X - Mooila Firefox	Besphme_1142661, july17-01
MegaRAC SP-X X	+
€ → ଫ ଇ	Of A https://30.245.36.242/#maintenance/firmware_update_wizard
Quick Links.	
# Dashboard	Note: Following are the Firmware update methods and components supported in this page.
📾 Seroor	Deal Firmaire opdate.     BOS Firmaire opdate
O System Inventory	
0 FRU Information	Select Firmware Image 1.Click the button
🕍 Logs & Reports 🔷 🦻	
O Settings	Are you sure you want to flashin
🖵 Remote Control	
Gi Image Redirection	Cancel CX
O Power Control	BIOS Fit Position
₽ Haintenance	C BIOS ROME C BIOS ROME 4. Click ok
2. Select th	BIOS Image Flash Region
BIOS rom t	hat Of Hash BIOS And Preserve State
needs to o	BIGS Update Mode
	Real-time Mode: Flash BIOS Immediately
	O belay Mode: Flash BIOS Automatically, after Server Power OFF
	Proced
	3. Click the button
	WARRING: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 cleased, if the upgradation is cancelled in the middle of the wizard, the device will be reset only for BIAC BOOT, and APP components of Firmware.

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.

here to go to Firmware Update or Restore Factory Defaults	The following checked configurations will be preserved through the restore operation. You can make
	changes to the list in the preserve configuration page.
Check All	
	SOR
son	FRU
FRU	SEL
SEL	17M
1741	Network
Network	NTP
NTP	SIMP
SAMP	
SSM	334
K01M	1011
Authentication	Authentication
Systop	Syslog
Web	Web
Field	Extlog
runk.	

I

**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.

<ul> <li>C ▲ 782   ■</li> </ul>	an./ 1024636.007/Provintemence/Intel/PDC		R 0	0 0	D th (	69-
MegaRAC SP-X	=		Explot		Ølahash	A state +
Ensue Mendes La Josephines By Bill Distance	Save Server Data			<b>#</b> 1999	National	- Seet Server Data
Quebunke. *	Save Server Data					
· Dushboard	Click the botton, and BNC starts to collect data. After collection, data will be downloaded automatically.					
a second	A Making for Ready.					
System Investory						
• Hitchemation						
Mit Logi & Reports						
• Interp						
Remote Control		·				
(). Image finderection		Processing				
Presc Control						
₽ Maintenance						
· Signal						

2. Check the package name, it should be mini\_ffdc\_[date].tar.

× +		~
C & https://10.245.36.242/#maintenance/miniFFDC	\$ © ±	@ එ =
=	mini_fide_2023_12_28_16_49_43.tar	1 admin -
Save Server Data	Show all downloads	Save Server Data
	1	
Save Server Data		
Click the button, and BHC starts to collect data. After collection, data will be downloaded automatically.		
🛓 Download Server Data		

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

Extract +	mini_ffdc_202	3_12_28_16	_ <b>49</b> Q	= - • 😣
$\widehat{\mathbf{O}} (\cdot, \cdot)$	Location: 🗅 /			
Name	Ŧ	Size	Туре	Modified
<b>-</b> .		437.0 kB	Folder	
eonf conf		5.5 MB	Folder	28 十二月 2023, 16:49
extlog 💼		5.2 kB	Folder	28 十二月 2023, 16:02
info 💼		59.6 kB	Folder	20 十二月 2023, 23:39

#### **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

	Ø
Username	
sysadmin	
Enable User Access	
Change Password	
Password	
Confirm Password	
	🖺 Save

## Chapter 13. Sign Out

This function is used to logout current user.

MegaRAC SP-X	× +			Ý			
$\leftarrow \rightarrow G$	O A ↔ https://10.245.36.242/#dashboard		\$	© ĝ ≡			
MegaRAC SP-X	=	English * 0 BIOS	C Statush	1 admin -			
Dashboard Contro # Harre - Dashboard	I Panel	1. Click BMC User	admin - Admin	) istrator			
2 d 1 hr Power-On Hours		15 Access Legs More	Profile	Sign out			
		2. Click Sign out button					
MegaRAC SP-X	× +			~			
← → 0	0 & - https://10.245.36.242/#logout		Ŷ	ම ĝ ≡			
MegaRAC SP-X	=	English • 0 BIOS		1 admin -			
Dashboard Contro Theme - Datitioned	sl Panel						
2 d 1 hr		15					
Power On Hours		Access Logs					
		No					
	⊕ 20.245.36.242     Weuld you like to Sign out of this Sign out of the	ession? If yes, click Ok else click Cancel OX Ogin interface					

### 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.

Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document is not an offer and does not provide a license under any patents or patent applications. You can send inquiries in writing to the following:

Lenovo (United States), Inc. 8001 Development Drive Morrisville, NC 27560 U.S.A. Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

### Trademarks

LENOVO and LENOVO logo are trademarks of Lenovo.

All other trademarks are the property of their respective owners. © 2023 Lenovo