

# System Management Module 2 overview

Product description and front, rear, and inside views

**Lenovo**

# System Management Module 2 overview

SMM2 uses the same ASPEED AST2520 control chip that was used in SMM, and it provides integrated systems management functions and controls the power of the DW612S enclosure. It is hot-swappable and provides both a web GUI and a CLI-based user interface for remote access. As with SMM, the web GUI default login information is as follows:

IP: 192.168.70.100

ID: USERID

Password: PASSW0RD (the sixth character is a zero)



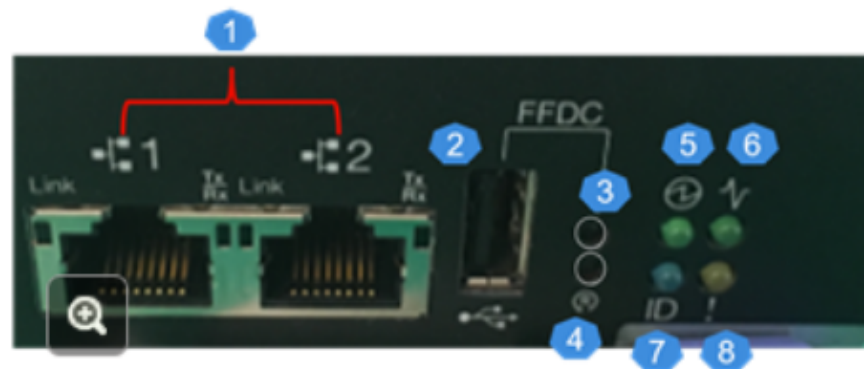
## SMM2 support list

SMM2 supports the following ThinkSystem enclosures. SMM2 uses unique platform IDs to recognize and activate the corresponding chassis configurations.

	Intel “Whitley” processor generation		Intel “EagleStream” processor generation	AMD “Genoa” processor generation
Node tray	SD630	SD650 V2 SD650-N V2	SD650 V3 SD650-I V3	SD665 V3 SD665-N V3
Enclosure	DA240	DW612S	DW612S	DW612S
Platform ID	254	253	252	252
Chassis height	2U	6U	6U	6U

## Connectors and LEDs

1. Ethernet port 1, port 2, and activity LEDs (green): When an LED is lit, it indicates that there is an active connection through the remote management and console (Ethernet) port 1 and port 2 to the management network.
2. USB connector: Insert a USB storage device into this connector and then press the USB port service mode button to collect FFDC logs. This USB port is used only for FFDC log collection.
3. USB port service mode button: Press this button to collect FFDC logs after inserting the USB storage device into the USB connector.
4. Reset pinhole: Press the button for one to four seconds to reboot SMM2. Press for over four seconds to reboot SMM2 and load to the default settings.
5. Power LED (green): When this LED is lit, it indicates that SMM2 has power.
6. Status LED (green): This LED indicates the operating status of SMM2.
7. Identification LED (blue): This LED is used to help servicers locate the enclosure location in a rack.
8. Check log LED (yellow): When this LED is lit, it indicates that a system error has occurred. Check the SMM2 event log for additional information.



## Status LED

The SMM2 status LED indicates the operating status of SMM2.

- Continuously on: SMM2 has encountered one or more problems.
- Off: When the enclosure power is on, it indicates SMM2 has encountered one or more problems.
- Flashing: SMM2 is working.
  - During the pre-boot process, the LED flashes rapidly.
  - Ten times per second: The SMM2 hardware is working and the firmware is ready to initialize.
  - Two times per second: The firmware is initializing.
  - When the pre-boot process is complete and SMM2 is working correctly, the LED flashes at a slower speed (about once every two seconds).

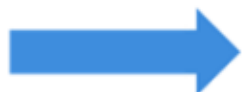
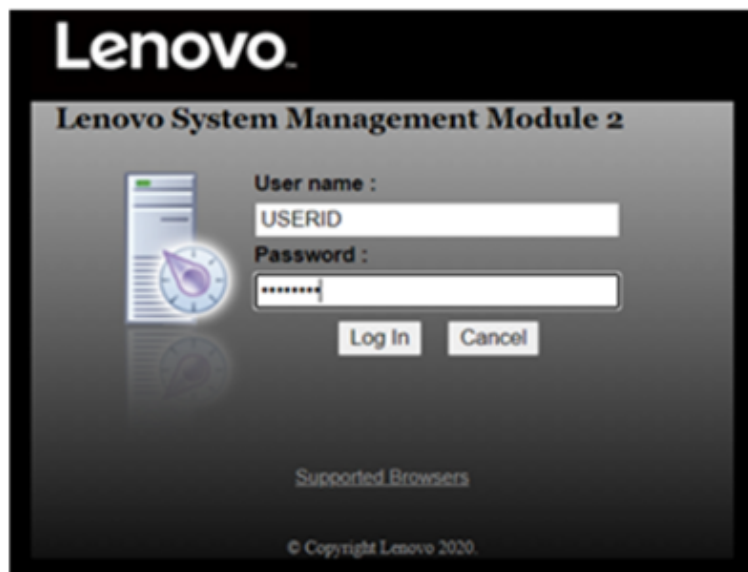


## SMM2 web GUI and supported browsers

The SMM2 web interface supports the following browsers:

- Internet Explorer 11
- Microsoft Edge 25.10586 or later
- Mozilla Firefox 48.0 or later
- Google Chrome 52.0 or later
- Safari 9.0 or later

Users are required to change their password for their first login.



### Change Password

- ① You are required to change your password. This is occurred when your account is used on the first login or when your password has expired. Fill in the form and click 'OK' to change password. Click 'Cancel' to logout without changing password.

Password Policy Check Enabled		Yes
User Name	USERID	
Original Password	<input type="password"/>	
New Password	<input type="password"/>	
Confirm New Password	<input type="password"/>	

OK Cancel

## Function tab

There are six function tabs in the SMM2 GUI menu:

- Summary
- Power
- Cooling
- System Information
- Event Log
- Configuration

Move the cursor over a function to reveal its subcategories.

Click a tab or subcategory to go directly to that function.



Summary



Power and  
Cooling



System  
Information



Event Log



Configuration

## Summary page

The Summary page displays overall enclosure status information.

There are two items on the Summary page:

- Enclosure Front overview
  - An overview of the front side of the enclosure along with status-related information.
- Enclosure Rear overview
  - SMM2 information is displayed here.



Enclosure Front

Enclosure Front  
(Shared I/O mode)

Enclosure Rear

Click the buttons to see screen captures.

# Enclosure Front screen capture

- Node: Indicates node numbering.
- Height: Node height can be 1U to 2U.
- Status:
  - Not Present: No node is installed.
  - No Permission: The node has not been granted power permission and cannot be powered on.
  - Fault: The node has a power fault and cannot be powered on.
  - Power On: The node is powered on.
  - Power Off: The node is powered off.
  - Add-on: This is an add-on tray.
- Reset/Reseat: Used to perform a virtual reset/virtual reseat.
  - Reset: Remotely reset node XClarity Controller (XCC) through SMM2.
  - Reseat: Remotely power cycle the entire node.
- Launch XCC: Use the specified IP address to access XCC from the Web.
  - Clicking on Launch XCC will direct users to the XCC website even after the SMM2 session expires.

Enclosure Front Overview



Node	Height	Status	Reset / Reseat	Node	Height	Status	Reset / Reseat
11	1 U	Power On	Reset / Reseat	12	1 U	Power On	Reset / Reseat
		192.168.70.135	Launch XCC			192.168.70.136	Launch XCC
09	1 U	Power On	Reset / Reseat	10	1 U	Power On	Reset / Reseat
		192.168.70.133	Launch XCC			192.168.70.134	Launch XCC
07	1 U	Power On	Reset / Reseat	08	1 U	Power On	Reset / Reseat
		192.168.70.131	Launch XCC			192.168.70.132	Launch XCC
05	1 U	Power On	Reset / Reseat	06	1 U	Power On	Reset / Reseat
		192.168.70.129	Launch XCC			192.168.70.130	Launch XCC
03	1 U	Power On	Reset / Reseat	04	1 U	Power On	Reset / Reseat
		192.168.70.127	Launch XCC			192.168.70.128	Launch XCC
01	1 U	Power On	Reset / Reseat	02	1 U	Power On	Reset / Reseat
		192.168.70.125	Launch XCC			192.168.70.126	Launch XCC



Please manually refresh 'Enclosure Front Overview' page 3 minutes after SMM2 or node XCC is reset to get updated node status.  
Please use the refresh button on the web, refresh via browser or F5 will cause login.  
The 'Launch XCC' buttons still are able to launch XCC websites when the SMM2 session expires.



## Enclosure Front screen capture (Shared I/O mode)

The **Enclosure Mode** description only appears when the Shared I/O mode is enabled. Only the ThinkSystem DW612 enclosure and ThinkSystem SD650 V2 node support Shared I/O mode.

### Enclosure Mode:

This enclosure is running under **Shared I/O mode**, the nodes are categorized into 6 groups, each group has one primary node and one auxiliary node. The auxiliary node will not be granted power permission until the primary node is present, is in either standby mode or powered on, and has no power faults.

Group VI	Node 11: Auxiliary	Node 12: Primary
Group V	Node 9: Auxiliary	Node 10: Primary
Group IV	Node 7: Auxiliary	Node 8: Primary
Group III	Node 5: Auxiliary	Node 6: Primary
Group II	Node 3: Auxiliary	Node 4: Primary
Group I	Node 1: Auxiliary	Node 2: Primary

# Enclosure Rear

In the Enclosure Rear overview, the major rear enclosure statuses are shown in the following sections:

- Current PSU: Indicates the status of power supplies
- Drip Sensor (DW612 Neptune DWC Enclosure only): Indicates the status of the drip sensors, as shown in the Enclosure Rear View tab – this section only applies to the DW612 Neptune DWC Enclosure.
- Management Module (SMM2 status)

Rear View

Current PSU - Redundancy Enabled, OVS Enabled, Total power bank = 14400W

PSU	Status	Rating	AC-IN	Capacity	Zero-Out	EPOW	Throttle	DC-PG
PSU1	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU2	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU3	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU4	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU5	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU6	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes

Drip Sensor	Status	Drip Sensor	Status
Drip Sensor 2	Present	Drip Sensor 1	Present

Air-cooled PSU

DWC PSU

### Management Module


Name	System Management Module 2 (SMM2)	
Power Status	<input checked="" type="checkbox"/> Normal	<div>SMM2 Reset Reset to Default</div>
Firmware Version	0.03 (UMSM02P)	
Boot-up Flash	First	
ID LED	Accept: Off	<div><input checked="" type="radio"/> Off =&gt; Accept <input type="radio"/> On <input type="radio"/> Blink</div> <div>Apply</div>
Error LED	Off	
FFDC	<div>Capture</div>	
Chassis Reseat	<div>Reseat</div>	
Open Source Licenses	<div>Download</div>	

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Rear View



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PSU	Status	Rating	AC-IN	Capability	Zero-Out	EPOW	Throttle	DC-PG
PSU1	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU2	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU3	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU4	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU5	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes
PSU6	Present	2400 W	220 V	2400 W	Disabled	Normal	Normal	Yes

Drip Sensor	Status	Drip Sensor	Status
Drip Sensor 2	Present	Drip Sensor 1	Present



Management Module

Name	System Management Module 2 (SMM2)
Power Status	<div><div><input checked="" type="checkbox"/> Normal</div><div>SMM2 Reset Reset to Default</div></div>
Firmware Version	0.03 (UMSM02P)
Boot-up Flash	First
ID LED	<div>Accept: Off</div> <div><div><input checked="" type="radio"/> Off =&gt; Accept</div><div><input type="radio"/> On</div><div><input type="radio"/> Blink</div></div> <div>Apply</div>
Error LED	Off
FFDC	<div>Capture</div>
Chassis Reseat	<div>Reseat</div>
Open Source Licenses	<div>Download</div>

## Power tab

The Power tab has five major sections.

- Power Overview: Displays the enclosure-level power consumption, the node-level power consumption, and the power consumption of subsystems, which includes the power subsystem (power supplies) and the thermal subsystem (system fans for the DA240 Enclosure or drip sensors for the DW612 Neptune DWC Enclosure)
- PSU Configuration: Allows users to set the redundancy mode and zero output for power supplies
- Power Cap: Allows users to set power capping and saving
- Voltage Overview: Monitors the voltage rail on SMM2
- Power Restore Policy: Allows users to enable the power restore policy



Click the buttons to see more information.

# Power Overview

This tab displays enclosure power consumption, node power consumption, and the power consumption of power supply subsystems.

# Power Overview

## Enclosure Power (30 seconds average)

Min. (W)	Avg. (W)	Max. (W)
8000	12000	14000

## Total PSU Power (30 seconds average)

Min. (W)	Avg. (W)	Max. (W)
200	400	600

## Node Power Consumption (GPU / Node, W<sub>dc</sub>)

Node	Min. (W)	Avg. (W)	Max. (W)	Node	Min. (W)	Avg. (W)	Max. (W)
11	600	800	1000	12	600	800	1000
09	600	800	1000	10	600	800	1000
07	600	800	1000	08	600	800	1000
05	600	800	1000	06	600	800	1000
03	600	800	1000	04	600	800	1000
01	600	800	1000	02	600	800	1000



# PSU Configuration

This tab allows users to set the redundancy mode and zero output for power supplies.

## PSU Configuration

### Redundancy Mode

Redundancy Mode	<div>N + 1</div>
Oversubscription Mode	<div>OVS On</div>

Apply

PSU Status

### Zero Output

Zero Output	<div>Disable (default)</div>
-------------	------------------------------

Apply



# Power Cap

Users can choose the following two cap types through power cap configurations:

- Enclosure Power Cap
- Node Power Cap

Power Cap Policy

Choose a power cap type : 

Enclosure Power Cap ▾

Enclosure Power Cap / Power Save

Enclosure	Power Cap
All	<input type="checkbox"/> Enable <input type="text"/> W (Range: 7200 W ~ 14400 W)
	Power Save
	<input checked="" type="radio"/> Disable <input type="radio"/> Enable

Apply

# Voltage Overview

The Voltage Overview table provides the status of the SMM2 board (12 V, 5 V, 3.3 V, 2.5 V, 1.2 V, 1.15 V) and battery voltage. An error log will be asserted if the critical threshold is reached. The Voltage Overview page is automatically refreshed every 30 seconds.

Voltage Overview								
General Settings								
Auto Refresh Interval Every 30 Seconds								
Probe List								
Status	Probe Name	Reading	Lower Non-Critical	Upper Non-Critical	Lower Critical	Upper Critical	Lower Non-Recoverable	Upper Non-Recoverable
✓	SMM2 Brd 1.15V	1.1410 V	1.0360 V	1.2390 V	0.9170 V	1.2740 V	N/A	N/A
✓	SMM2 Brd 1.2V	1.1900 V	1.0850 V	1.2950 V	0.9590V	1.3230 V	N/A	N/A
✓	SMM2 Brd 2.5V	2.4957 V	2.2419 V	2.6931 V	1.9881 V	2.7495 V	N/A	N/A
✓	SMM2 Brd 3.3V	3.2886 V	2.9754 V	3.5670 V	2.6448 V	3.6366 V	N/A	N/A
✓	SMM2 Brd 5V	5.0162 V	4.5028 V	5.4088 V	4.0196 V	5.4994 V	N/A	N/A
✓	SMM2 Brd 12V	11.884 V	11.686 V	12.676 V	10.564 V	13.204 V	N/A	N/A
✓	SMM2 Brd VBAT	3.0104 V	N/A	N/A	2.2472 V	N/A	N/A	N/A



## Power Restore Policy

The policy setting determines the mode of operation after a loss of power.

- Always off: The node remains off after the restoration of power
- Restore: The node is restored to the previous state before the power failure

### Power Restore Policy

<input checked="" type="checkbox"/>	Node	Status	<input checked="" type="checkbox"/>	Node	Status
<input checked="" type="checkbox"/>	11	Restore	<input checked="" type="checkbox"/>	12	Restore
<input checked="" type="checkbox"/>	09	Restore	<input checked="" type="checkbox"/>	10	Restore
<input checked="" type="checkbox"/>	07	Restore	<input checked="" type="checkbox"/>	08	Restore
<input checked="" type="checkbox"/>	05	Restore	<input checked="" type="checkbox"/>	06	Restore
<input checked="" type="checkbox"/>	03	Restore	<input checked="" type="checkbox"/>	04	Restore
<input checked="" type="checkbox"/>	01	Restore	<input checked="" type="checkbox"/>	02	Restore

Apply

Power Restore Policy: Determines the mode of operation after loss of power  
Always off: Node remains off upon power restore  
Restore: Node restores to the state it was before power failed

## Cooling page

The Cooling page displays the status of power supply fans.

- Speed: Power supply fan speed is displayed in RPM and is normally between 4000 and 23000 RPM.
- Duty (% of Max.): 100% is 23000 (25300, or 110%, is the limit)
- Status:
  - Normal: The PSU fan is running in a healthy condition
  - Not Present: No power supply is installed
  - Fault: Fan speed is lower than the 3000 RPM threshold

PSU	Fan 1 Speed (RPM)	Fan 1 Duty (% of Max.)	Fan 2 Speed (RPM)	Fan 2 Duty (% of Max.)	Status
PSU1	4464	17%	5320	20%	Normal
PSU2	0	0%	0	0%	Not Present
PSU3	0	0%	0	0%	Not Present
PSU4	0	0%	0	0%	Not Present
PSU5	0	0%	0	0%	Not Present
PSU6	0	0%	0	0%	Not Present

## System information

The following sections of the System Information tab provide fixed Vital Product Data (VPD).

- Enclosure VPD
- Midplane VPD
- SMM2 VPD
- PSU VPD

**Enclosure  
VPD**

**Midplane VPD**

**SMM2 VPD**

**PSU VPD**

Click the buttons to see screen captures.

# Enclosure VPD

- Backup: Save the current enclosure name on a USB storage device for future migration
- Restore: Load the enclosure name from previously saved data on a USB storage device
- Edit: Modify the enclosure name based on the following rules:
  - Enclosure Name can be up to 64 characters using alphanumeric characters a-z, A-Z, and 0-9, - (hyphen), \_ (underscore), and space
  - Enclosure Serial Number can be up to 10 characters using alphanumeric characters a-z, A-Z, and 0-9

### Enclosure VPD

BackupRestore

Name	Value
Enclosure Name	Lenovo ThinkSystem DW612 Neptune DWC Enclosure
Enclosure Machine Type/Model	7D1LCT01WW
Enclosure Serial Number	719001K123
Enclosure UUID	1234567890ABCDEF1234567890ABCDEF
Enclosure Hardware Version	Pass 5

Edit

Note:  
The storage device can be a USB device

## Midplane VPD

- Backup: Save the current card serial number, card UUID, hardware version, and FRU part number on a USB storage device for future migration
- Restore: Load the previously saved card serial number, card UUID, hardware version, and FRU part number data from a USB storage device
- Edit: Use the following rule to modify the card UUID based on user preferences:  
The card UUID must have 32 alphanumeric characters (A-Z, 0-9) – no spaces or other characters are allowed
- Card UUID: Randomly generated ID number of the enclosure
- Card Hardware Version: Hardware version

### Midplane VPD

BackupRestore

Name	Value
Card UUID	8858078C5B584DF9A9E0BF40E01F97C5
Card Hardware Version	Pass 5

Edit

## SMM2 VPD

- Card Serial Number: The last 11 digits of the 8S barcode label on the SMM2 – for example, if the barcode is 8SXXXXXXXXXXAAAABBBCCCC, the card serial number would be AAAABBBCCCC
- Card UUID: Randomly generated ID number of the SMM2
- Card Hardware Version: Hardware version
- Card FRU Serial Number: The first seven digits after “8S” on the 8S barcode label on the SMM2 – for example, if the barcode is 8SXXXXXXXXXXAAAABBBCCCC, the card FRU serial number would be XXXXXXX

### SMM2 VPD

Name	Value
Card Serial Number	XXXX9CW300N
Card UUID	8858078C5B584DF9A9E0BF40E01F97C5
Card Hardware Version	Pass 5
Card FRU Serial Number	02JK469

# PSU VPD

- MFR Revision: Assembly revision
- Type: CFF Power Supplies v4 PSU Type
- Part Number: Lenovo part number
- FRU Number: Lenovo FRU number
- Serial Number: The last 11 digits of the 8S barcode label on the PSU
- Header Code: Lenovo header code
- Vendor Name: Vendor name
- MFR Date: Manufacturing date code (week/year)
- Primary FW Revision: Primary firmware revision
- Secondary FW Revision: Secondary firmware revision
- MFR Model: Vendor part number
- MFR Location: Manufacturer location
- PSU FRU Number: For example, 01GV270
- Barcode: Lenovo barcode

PSU1 VPD

Name	Value
MFR Revision	04
Type	CFF v4 2400W PT
Part Number	SP57A14715
FRU Number	01PF081
Serial Number	D1DG03P003B
Header Code	D1DG
Vendor Name	DETA
MFR Date	13(week) / 20(year)
Primary FW Revision	7.13
Secondary FW Revision	7.14
MFR Model	IPS2400DB A
MFR Location	DG
Barcode	8SSP57A14715D1DG03P003B




## Event Log

The Event Log tab allows users to check the System Event Log (SEL). The SEL records enclosure-level information, warnings, and errors so that users can learn what has happened in the enclosure. A maximum number of 4090 event entries can be logged.

Click [HERE](#) to see an Event Log screenshot.

By default, the latest entry is on the first page because events are sorted from most to least recent.

Click **Date/Time** to reverse the order.

- Refresh: SEL is never automatically refreshed – click **Refresh** to acquire the latest entries
- Save Log: SEL data will be exported and saved as a CSV file
- Clear Log: SEL data will be cleared
- Severity: SEL data entries will be listed by order of severity
-  : Indicates Informational events
-  : Indicates Warning events
-  : Indicates Error events – the **Check Log** LED will be lit when critical events occur

**Note:** At present, new events cannot be written into the log when the log is full. Manually clear the log to allow the latest events to be recorded.



## Event Log

[Refresh](#)[Save Log](#)[Clear Log](#)

### Event Log

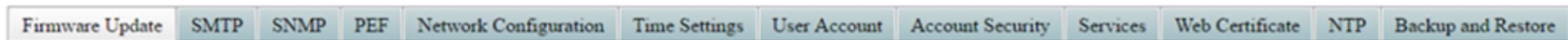
To sort system event logs, click the 'Date/Time'.

12 / 4090


Event ID	Severity	Date/Time ↓	Description
0x21080113	✓	2020-11-13 15:45:05 (UTC+0000)	Node 4: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x21080112	✓	2020-11-13 15:45:05 (UTC+0000)	Node 3: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x21080111	✓	2020-11-13 15:45:05 (UTC+0000)	Node 2: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x21080110	✓	2020-11-13 15:45:05 (UTC+0000)	Node 1: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x180708fd	✓	2020-11-13 15:45:04 (UTC+0000)	SMM2 Reset: Chassis sensor, Informational was asserted
0x180708f2	✓	2020-11-13 15:44:24 (UTC+0000)	Encl Vtl Reseat: Chassis sensor, Informational was asserted
0x21080113	✓	2020-11-13 15:43:22 (UTC+0000)	Node 4: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x21080112	✓	2020-11-13 15:43:22 (UTC+0000)	Node 3: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x21080111	✓	2020-11-13 15:43:22 (UTC+0000)	Node 2: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x21080110	✓	2020-11-13 15:43:22 (UTC+0000)	Node 1: Slot Or Connector sensor, Device Inserted / Device Present was asserted
0x180708fc	✓	2020-11-13 15:43:22 (UTC+0000)	SMM2 Power On: Chassis sensor, Informational was asserted
0x106f0201	✓	2020-11-13 15:43:21 (UTC+0000)	EvtLogDisabled: Event Logging Disabled sensor, Log Area Reset/Cleared was asserted

# Configuration

Configuration settings are used to manage the SMM2 module. There are twelve sections:



- Firmware Update
- SMTP
- SNMP
- PEF
- Network Configuration
- Time Setting
- User Account
- Account Security
- Services
- Web Certificate
- NTP
- Backup and Restore



Click the buttons to see more information.

# Firmware Update

There are two phases of the firmware update process. During the firmware upload stage, users can choose the location where the firmware image will be stored. SMM2 will check the image header information for validation.

SMM2 and PSU firmware can be updated on this page.

### Firmware Update

**Upload**  
Select an image file and click upload. The upload process will terminate all other sessions.  
After the upload process is started, any attempt to refresh, logout or navigate away from the update page will restart the System.

Firmware File Path

Choose File

lavyvy\_fw\_x\_norflash.rom

Upload

**Firmware Image**

Current Version	New Version	Preserve Settings	Recover Primary Bank Firmware	Secure Rollback
0.03 (UMSMA02P)	0.03 (UMSMA02Q)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Upload is completed. Please click 'Update' to proceed firmware update or click 'Cancel' to terminate the update.  
System will be rebooted after Update Cancel process.

Update

Cancel

### Firmware Update

**Upload**  
Select an image file and click upload. The upload process will terminate all other sessions.  
After the upload process is started, any attempt to refresh, logout or navigate away from the update page will restart the System.

Firmware File Path

Choose File

lavyvy\_fw\_x\_norflash.rom

Upload

**PSU Firmware Image**

Type	Vendor	Version
OPFut (SMM2 PT)	ARTS	8.01

**PSU Firmware Update Information**

Update PSU	PSU No	Type	Vendor	PSU	Current Version
<input type="checkbox"/>	1	OPFut (SMM2 PT)	ARTS	N/A	8.01
<input type="checkbox"/>	2	N/A	N/A	N/A	N/A
<input type="checkbox"/>	3	N/A	N/A	N/A	N/A
<input type="checkbox"/>	4	N/A	N/A	N/A	N/A
<input type="checkbox"/>	5	N/A	N/A	N/A	N/A
<input type="checkbox"/>	6	N/A	N/A	N/A	N/A

Upload is completed. Please select PSU and click 'Update' to proceed PSU firmware update or click 'Cancel' to terminate the update.  
Please make sure the system power is off or the system is configured with power release mode.

Update

Cancel

# SMTP

Configured SMTP and SNMP traps allow users to monitor the enclosure for selected events. SMTP/SNMP trap event types can be set on the Platform Event Filter (PEF) page.

### SMTP

Before sending alert, please make sure changes to Sender Information, target Destination Email Address, SMTP (email) Server Settings, and SMTP Authentication have been saved by clicking Apply Changes.

#### Sender Information

From:

#### Destination Email Addresses

	Enable	Destination Email Address	Email Description	Test
Email Alert 1	<input type="checkbox"/>	<input type="text"/>	<input type="text" value="000 email alert"/>	<input type="button" value="Send Alert 1"/>
Email Alert 2	<input type="checkbox"/>	<input type="text"/>	<input type="text" value="000 email alert"/>	<input type="button" value="Send Alert 2"/>
Email Alert 3	<input type="checkbox"/>	<input type="text"/>	<input type="text" value="000 email alert"/>	<input type="button" value="Send Alert 3"/>
Email Alert 4	<input type="checkbox"/>	<input type="text"/>	<input type="text" value="000 email alert"/>	<input type="button" value="Send Alert 4"/>

#### SMTP (email) Server Settings

SMTP IP Address:   
SMTP Port Number:

#### SMTP Authentication

Enable: ☐ Anonymous account will be used when authentication is disabled.  
Username:   
Password:   
SMTP Mode:   
SNMP Mode:

# SNMP

Configured SMTP and SNMP traps allow users to monitor the enclosure for selected events. SMTP/SNMP trap event types can be set on the Platform Event Filter (PEF) page.

## SNMP

Before sending test trap, please make sure changes to the target Destination and Community String have been saved by clicking Apply Changes.

### IP Destination List

Destination	Enable	IPv4/IPv6	IP Address	Test
IP Destination 1	<input checked="" type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>
IP Destination 2	<input type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>
IP Destination 3	<input type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>
IP Destination 4	<input type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>
IP Destination 5	<input type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>
IP Destination 6	<input type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>
IP Destination 7	<input type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>
IP Destination 8	<input type="checkbox"/>	* <input type="radio"/>	<input type="text" value="0.0.0.0"/>	<input type="button" value="Send Test Trap"/>

### Community String

# PEF

Configured SMTP and SNMP traps allow users to monitor the enclosure for selected events. SMTP/SNMP trap event types can be set on the Platform Event Filter (PEF) page.

## PEF

### Platform Event Filters (PEF) List

☒ Global Alerting Enable    Note: This enables/disables both PEF and email alerts.

Filter Name	Generate PET
All Type, Voltage Critical Filter	<input type="checkbox"/>
All Type, Power Supply Critical Filter	<input type="checkbox"/>
All Type, Event Logging Disabled Critical Filter	<input type="checkbox"/>
All Type, Module Or Board Critical Filter	<input type="checkbox"/>
All Type, Chassis Critical Filter	<input type="checkbox"/>
All Type, Slot Or Connector Critical Filter	<input type="checkbox"/>
Generic Type, Discrete Chassis (GPUWaterLoop Chk) Informational Filter	<input checked="" type="checkbox"/>



Apply

# Network Configuration

Users can modify the network parameters in Network Configuration.

## Network Configuration

[Refresh](#)

### General Settings

To change the Network settings may change IP address settings.  
Each change to settings may cause a loss in connectivity and the termination of all sessions.  
Changes may not take effect immediately.

Host Name

SMM2-7C8AE1C7D87A

DNS Domain Name

lenovo.com

### Advance Settings

Please click on [eth0](#) below to further configure SMM2 network settings.

Name	IPv4 Enabled	IPv4 Address	IPv6 Enabled	IPv6 Address
<a href="#">eth0</a>	Enabled	192.168.70.100	Enabled	1999::11/64

[Apply](#)

# Time Setting

This page is used to configure system time.

## Time Settings

Refresh

### Data and Time Settings

Date and Time:

November 2020

<< < Now > >>

Su	Mo	Tu	We	Th	Fr	Sa
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

Time

Hour

0	1	2	3	4	5
6	7	8	9	10	11
12	13	14	15	16	17
18	19	20	21	22	23

Minute

:00	:05	:10	:15	:20	:25
:30	:35	:40	:45	:50	:55

Exact minutes: 42

Second

:00	:05	:10	:15	:20	:25
:30	:35	:40	:45	:50	:55

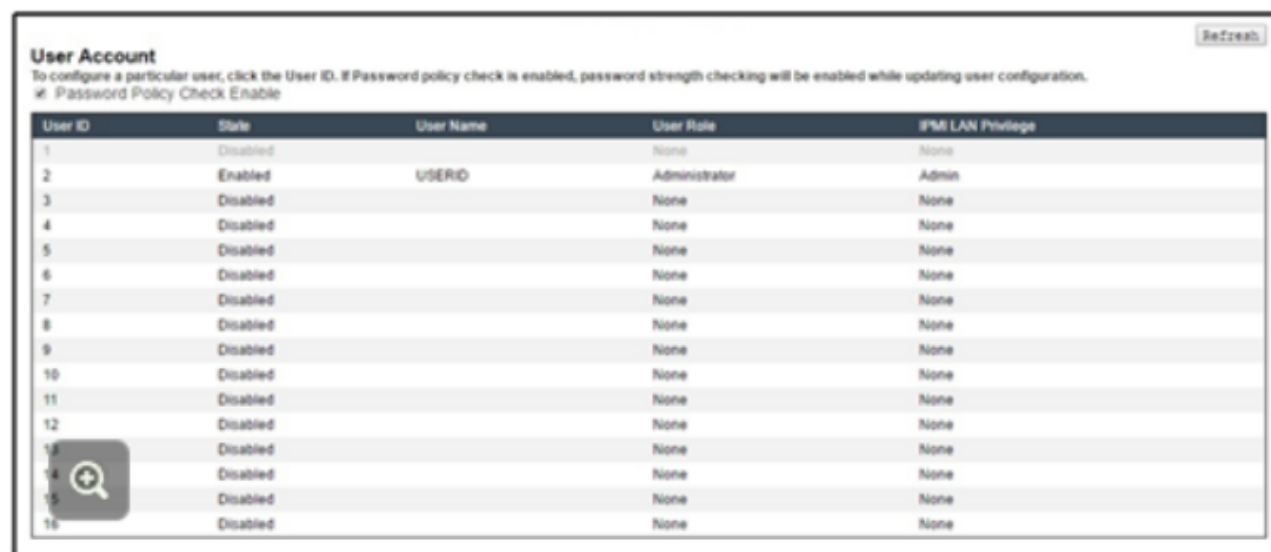
Exact seconds: 48

Select Date and Time

# User Account

This page allows for the management of the three types of user roles:

- Administrator: Full access to all the web pages and authorization to modify all the settings and configurations
- Operator: Full access to all the web pages except for the User Account page – an Operator can only see their own account on the User Account page, and no modification of the account page is allowed
- User: Full access to all the web pages except the SMM2 Reset button on the Enclosure Rear Overview page – modification is prohibited on the following pages in the Configuration tab: SMTP, SNMP, PEF, Network Configuration, User Account, and Web Service



User ID	State	User Name	User Role	IPMI LAN Privilege
1	Disabled		None	None
2	Enabled	USERID	Administrator	Admin
3	Disabled		None	None
4	Disabled		None	None
5	Disabled		None	None
6	Disabled		None	None
7	Disabled		None	None
8	Disabled		None	None
9	Disabled		None	None
10	Disabled		None	None
11	Disabled		None	None
12	Disabled		None	None
13	Disabled		None	None
14	Disabled		None	None
15	Disabled		None	None
16	Disabled		None	None

# Account Security

Advanced account security settings allow you to set different values based on the following rules.

## Account Security

### Account security setting

Rule	Value
Minimum password length	<input type="text" value="0"/> 8 
Force user to change password on first access	<input type="checkbox"/> Enable
Password expiration period (in days)	<input type="text" value="0"/> 0 
Password expiration warning period (in days)	<input type="text" value="0"/> 0 
Minimum password change interval (in hours)	<input type="text" value="0"/> 0 
Minimum password reuse cycle	<input type="text" value="0"/> 0 
Maximum number of login failures	<input type="text" value="0"/> 0 
Lockout period after maximum login failures (in minutes)	<input type="text" value="0"/> 0 
Web inactivity session timeout (in minutes). Take effect from next login.	<input type="text" value="0"/> 0 
IP address blocked for 300 seconds after 10 login failures	<input type="checkbox"/> Enable



Apply

# Services

On the Services page, you can configure different HTTPS ports for connection and also enable or disable the IPMI service state.

## Services

### Web Server

HTTPS Port Number	<input type="text" value="443"/>
Max Sessions	32
Active Sessions	1

### IPMI

Enabled	<input type="checkbox"/>
---------	--------------------------



# Web Certificate

The Web Certificate page displays current certificate information. There are three buttons for user actions: Generate CSR (Certificate Signing Request), Import Certificate, and Generate Self-signed Certificate.

**Generate CSR**

**Import Certificate**

**Generate self-signed  
Certificated**

Click the buttons to see screenshots.

## Web Certificate

Generate CSRImport CertificateGenerate Self Signed Certificate

### Current Certificate

Serial Number	: 1A265D4518576914EAD8EA0F7AE9FDSF05A5641D
Subject Information:	
Country Code (CC)	: US
State (S)	: NC
Locality (L)	: RTP
Organization (O)	: ThinkServer
Common Name (CN)	: www.lenovo.com
Issuer Information:	
Country Code (CC)	: US
State (S)	: NC
Locality (L)	: RTP
Organization (O)	: ThinkServer
Common Name (CN)	: www.lenovo.com
Valid From	: 01 Jan 2017, 00:00:48 (UTC+0000)
Valid To	: 30 Dec 2026, 00:00:48 (UTC+0000)

# NTP



Users can configure the network time protocol (NTP) and time zone settings on the NTP Time Settings page.

## NTP Time Settings

Sync Time NowApply ChangesRefresh

Use this page to configure the Network Time Protocol and Time Zone settings.

### Network Time Protocol

Operation ModeDisabled

NTP Server 1

NTP Server 2

NTP Server 3

Requested Mode's Update Frequency (minutes)3

Time Synchronization Method☒ Step Mode☐ Slew Mode

### Time Zone Setting

The Client Time Zone can be changed from modify the time zone of client operating system.

Use Server or Client Time Zone☒ Server Time Zone☐ Client Time Zone

Server Time ZoneUTC

Select...

Set to UTC

# Backup and Restore

Configurations are automatically saved when they are set or modified. Users can back up or restore the configurations to or from a local device.

If a storage device is inserted and detected, it can be used for SMM2 to preserve and migrate SEL and user configurations. SMM2 only keeps the latest configuration file in the storage device for backup and restoration.

### Backup and Restore Configuration

Latest Network backup file time: N/A

Backup Configuration from Network

Restore from Network Backup Configuration

Choose File

No file chosen

Apply

Apply

Latest storage device backup file time: N/A

Backup Configuration to storage device

Restore Configuration from storage device

+

+

+

The storage device can be a USB device

Apply

Apply

**Note:** USB storage devices with a capacity of at least 1 GB can be used. The support file system is FAT32.

## SMM2 new features

SMM2 has the following new features to support the DW612S enclosure:

**Enclosure virtual  
reset**

**Network interface**

**Service Location  
Protocol**

**Power policy**

Click the buttons to see more information.

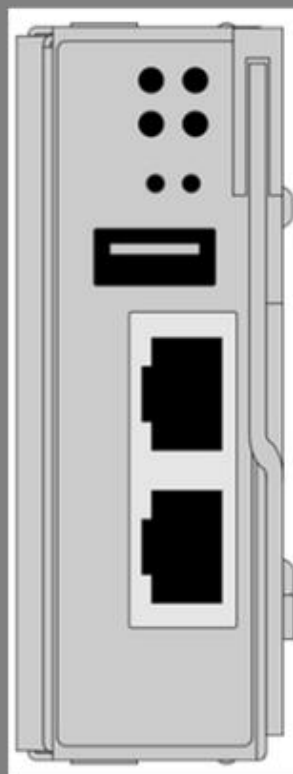
# Enclosure Virtual Reseat

This feature leverages the CFFv4 Virtual Reseat function.

SMM2 can perform an enclosure-level virtual reseat in two different ways:

- With an SMM2 OEM IPMI command
  - Enter `ipmitool raw 0x32 0xF5`
- Through the SMM2 web GUI
  - Select **Chassis Reseat**

The enclosure will be powered off immediately and then powered back on after 10 seconds.



Management Module		
Name	System Management Module 2 (SMM2)	
Power Status	<input checked="" type="checkbox"/> Normal	<div>SMM2 Reset</div> <div>Reset to Default</div>
Firmware Version	0.03 (UMSM02P)	
Boot-up Flash	First	
ID LED	Accept: Off	<div><input checked="" type="radio"/> Off =&gt; Accept</div> <div><input type="radio"/> On</div> <div><input type="radio"/> Blink</div> <div>Apply</div>
Error LED	Off	
FFDC	<div>Capture</div>	
Chassis Reseat	<div>Reseat</div>	
Open Source Licenses	<div>Download</div>	

# Network interface



In the ThinkSystem D2 enclosure, the SMM network interface is disabled by default.

In the DW612S enclosure, the SMM2 network interface is enabled by default, but IPMI is disabled for security concerns.

Two methods can be used to enable the IPMI interface on SMM2:

- From XCC with an IPMI command
  - Enter `ipmitool -I lanplus -H $XCC_IP -U $USERID -P PASSWD raw 0x3A 0xF1 0x04`
  - Note that the XCC IP, USERID, and PASSWD will vary based on the user's environment.
- From the SMM2 web GUI
  - Go to **Services**, select the **IPMI Enabled** check box, and then select **Apply**

The screenshot shows the 'Services' configuration page in the SMM2 web GUI. It has two main sections: 'Web Server' and 'IPMI'. The 'Web Server' section contains three rows: 'HTTPS Port Number' with a value of 443, 'Max Sessions' with a value of 32, and 'Active Sessions' with a value of 1. The 'IPMI' section contains a single row with the label 'Enabled' and an unchecked checkbox. A red box highlights the checkbox. At the bottom of the page, there is an 'Apply' button, also highlighted with a red box.

Services	
<b>Web Server</b>	
HTTPS Port Number	443
Max Sessions	32
Active Sessions	1
<b>IPMI</b>	
Enabled	<input type="checkbox"/>
<input type="button" value="Apply"/>	

# Service Location Protocol



Service Location Protocol (SLP) makes it easier for users to query the SMM2 IP address in a neighboring network. Users can enter the example command set out below through slptool, which is a command-line tool to query and register SLP services:

```
slptool findsrvs service:lenovo-smm2
```

# Power policy

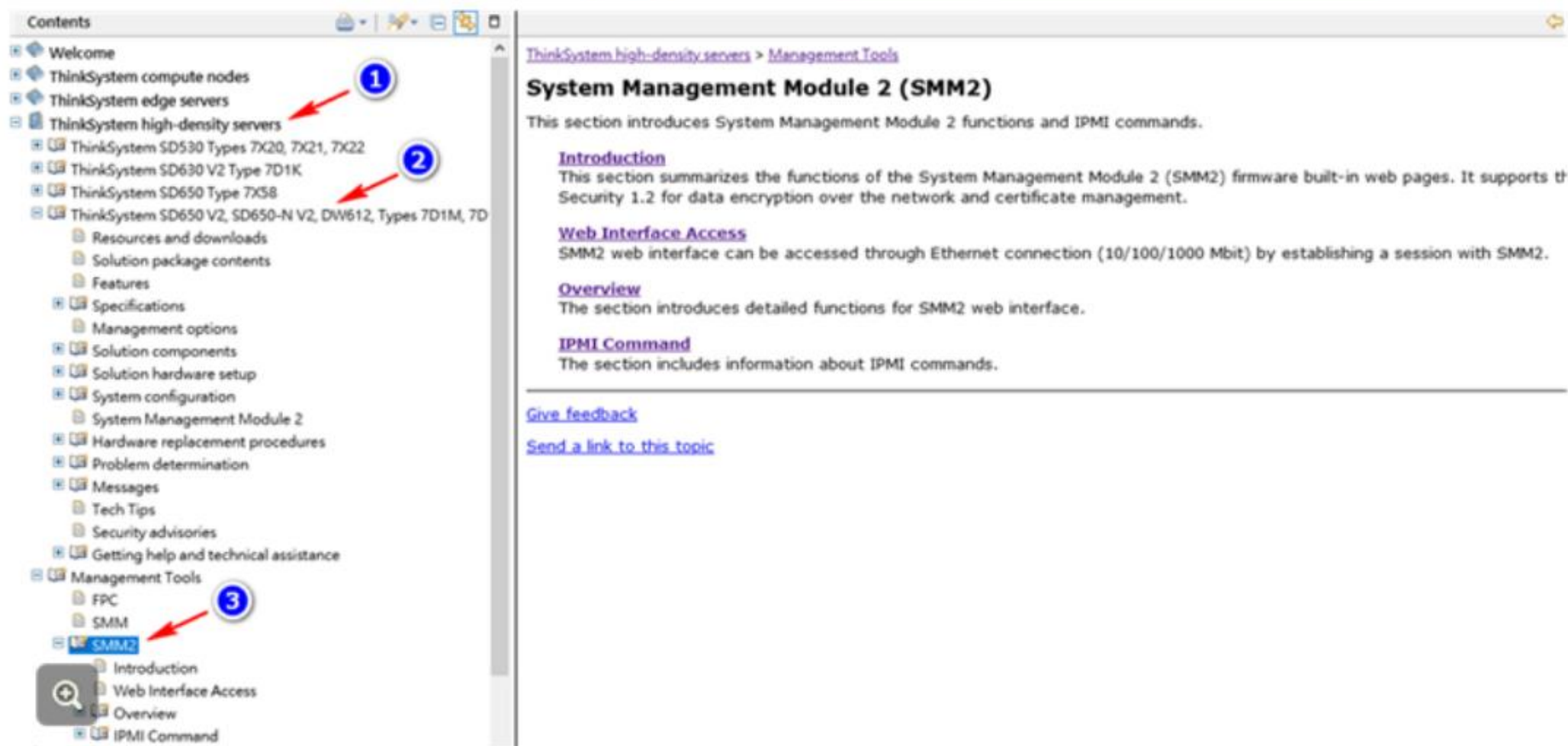


SMM2 supports the following power policies:

- None-Redundancy
- One-Redundancy without OVS
- One-Redundancy with OVS

# SMM2 documentation

For more information about SMM2 features and operations, refer to the technical documents on the [Lenovo Support](#) website or the [ThinkSystem Documentation](#) website. The following figure shows how you can find SMM2 pages on the [ThinkSystem Documentation](#) website.



# SMM2 block diagram

