

# Add on pages for ThinkSystem V3 tools course

Impact on PD and FRU Replacement

The Lenovo logo is positioned in the top right corner of the slide. It consists of the word "Lenovo" in white, sans-serif font, oriented vertically. The text is set against a rectangular background with a vertical color gradient that transitions from green at the top to blue at the bottom.

Lenovo

## Identifying a failed SD card

The ThinkSystem V3 platform supports an optional SD card (Micro SD format) installed on the system I/O board to provide additional storage for the XCC2 controller. The main purposes of the SD card for XCC2 are:

1. Firmware rollback to the previously saved bundle
2. Expansion of Remote Disc on Card (RDOC) space to 4 G

As the Micro SD card cannot be seen in the XCC inventory, servicers should look for the following two conditions to identify a failed SD card:

1. The backup firmware bundle or configuration cannot be read
2. Files larger than 50 MB cannot be uploaded through RDOC (the default space of RDOC is 50 MB, but it can be extended to 4 G with an SD card)

**Note:** When replacing a Micro SD card, the firmware historical data and user data uploaded through RDOC will be lost.

Use XCC to roll back firmware versions when the card is not installed.

After a new Micro SD card has been installed, subsequent firmware update history records will be saved to the new card.

# System board replacement actions

A summary of field service actions

Board (BD)	Code/Configuration	Action
System BD (Processor BD)	VPD	Update VPD after a board replacement
System BD (Processor BD)	FPGA	No action: XCC will automatically check the FPGA on reboot
I/O board	No configuration or code on board	If an SD card is installed, move it to the new board
Firmware RoT module	UEFI/XCC firmware	Board replacement requires flashing of XCC and UEFI
Firmware RoT module	UEFI/XCC configuration	Board replacement requires an XCC and UEFI configuration update – use the customer's backup or the add/change option in OneCLI scripts or XCC and F1 settings

## NVMe drive inventory in XCC2

Examples of NVMe drive inventory in XCC2. Click the buttons to see the screen captures.

**Inventory device**

**Storage details**

**Creating a  
virtual disk**

**Virtual disk  
created**

# NVMe drive inventory in XCC2

Inventory device inventory in XCC2. Click the buttons to see the screen captures.



Name	Type	Serial Number	Part Number	FRU Number
Drive 0	1.92TB NVMe SSD (SED)	213331D18EA1		
Product Name	Micron_7400_MTFD	Manufacturer	NVMe	
Temperature	39 °C	Firmware Version	231W	
Media Error Count	0	State	Online	
PFA Count	0	Health Status	Normal	
Other Error Count	0	Enclosure ID	0x00FC	
FDE Capable	Yes	Remaining Life	100%	
Secured	No			
Drive 2	1.00TB NVMe SSD	PHLJ915600R91P0FGN		
Product Name	SSDPE2KX010T8L	Manufacturer	NVMe	
Temperature	36 °C	Firmware Version	LY37	
Media Error Count	0	State	Online	
PFA Count	0	Health Status	Normal	
Other Error Count	0	Enclosure ID	0x00FC	
FDE Capable	No	Remaining Life	100%	
Secured	No			

# NVMe drive inventory in XCC2

## Storage details



Controller 1: ThinkSystem RAID 940-16i 8GB Flash PCIe Gen4 12Gb Adapter (PCI Slot 1)

Location	Manufacturer	Product	Status	Capacity	Interface	Media	Form Factor	Miscellaneous	
Bay 0	NVMe	Micron_7400_MTFD	✔ Normal	1920 GB	NVMe	SSD	2.5"	100% Remaining Life	▼
<div><div>Serial No</div><div>213331D18EA1</div><div>Firmware Version</div><div>231W</div><div>Part Number</div><div></div><div>Temperature</div><div>39 °C</div><div>FRU Number</div><div></div><div>Media Error Count</div><div>0</div><div>PFA Count</div><div>0</div><div>Other Error Count</div><div>0</div><div>Enclosure ID</div><div>0x00FC</div><div>FDE Capable</div><div>Yes</div><div>Remaining Life</div><div>100%</div><div>Secured</div><div>No</div><div>Power On Hours</div><div>N/A</div><div>Processed Bytes</div><div>N/A</div><div>Write Bytes</div><div>N/A</div><div>Read Bytes</div><div>N/A</div></div>									
Bay 2	NVMe	SSDPE2KX010T8L	✔ Normal	1000 GB	NVMe	SSD	2.5"	100% Remaining Life	▼
<div><div>Serial No</div><div>PHLJ915600R91P0FGN</div><div>Firmware Version</div><div>LY37</div><div>Part Number</div><div></div><div>Temperature</div><div>36 °C</div><div>FRU Number</div><div></div><div>Media Error Count</div><div>0</div><div>PFA Count</div><div>0</div><div>Other Error Count</div><div>0</div><div>Enclosure ID</div><div>0x00FC</div><div>FDE Capable</div><div>No</div><div>Remaining Life</div><div>100%</div><div>Secured</div><div>No</div><div>Power On Hours</div><div>N/A</div><div>Processed Bytes</div><div>N/A</div><div>Write Bytes</div><div>N/A</div><div>Read Bytes</div><div>N/A</div></div>									

# NVMe drive inventory in XCC2

Creating a virtual disk in XCC2. Click the buttons to see the screen captures.



XClarity Controller 2

Home

Events

Inventory

Utilization

Storage

Detail

RAID Setup

Remote Console

Firmware Update

Server Configuration

BMC Configuration

Neighbor Group

ThinkSystem SR650 V3 MB,EGS,DDR5...

System name: test

Service Log

USERID

3:11 AM

1 Select Disk Drive/Disk Array

2 Create Virtual Disk

3 Summary

By default 1 virtual disk will be created with all the available capacity. You can change the capacity if it needs creating multiple virtual disks.

Virtual Disk Name	Capacity	Strip Size	RAID Level	Actions
VD_0	1860.78 GiB	256 K	RAID 0	<div><div></div><div></div></div>

Edit Virtual Disk

Virtual Disk Name:

VD\_0

Capacity:

1860.78

GiB

Strip Size:

256 K

Read Policy:

No Read Ahead

Default Write Policy:

Write Back

I/O Policy:

Direct

Access Policy:

Read Write

Drive Cache:

Disabled

Default Initialization:

No

Apply

Cancel

< Back

Next >

Cancel

# NVMe drive inventory in XCC2

## Virtual disk created



Virtual Disk 1 (Disk Array 0 , RAID 0)

Virtual Disk Name:

VD\_0

Capacity:

1860.781 GB

Read Policy:

No Read Ahead

Default Write Policy:

Write Back

Current Write Policy:

Write Through

I/O Policy:

Direct

Strip Size:

256 K

Access Policy:

Read Write

Drive Cache:

Disabled

Background Initialization:

Enabled

Close