



ThinkAgile MX – UEFI Update Instructions for V2 Servers

Due to changes in UEFI firmware for Lenovo SR630 V2 and SR650 V2, it is possible that updating the UEFI firmware to the version shown in the latest ThinkAgile MX Best Recipe will cause a PCIe bus re-enumeration when the system is rebooted. A side effect of this re-enumeration is that existing network interface names associated with Mellanox ConnectX-6 network adapters might be changed, causing issues with existing network interface teams and virtual network interfaces, including Hyper-V virtual switch(es).

This situation applies only to Lenovo ThinkAgile MX solutions that use SR630 V2 or SR650 V2 servers that were originally shipped with UEFI firmware versions below v1.30 and have Mellanox ConnectX-6 network adapters installed. Systems that were shipped with UEFI firmware v1.30 and above are not impacted by this issue. The following ThinkAgile MX solutions require an additional step to update UEFI firmware if the current UEFI firmware is below version 1.30:

- ThinkAgile MX3330 (machine type 7D19)
- ThinkAgile MX3331 (machine type 7D67)
- ThinkAgile MX3530 (machine type 7D6B)
- ThinkAgile MX3531 (machine type 7D66)

We recommend using the Lenovo LXCI Extension for Windows Admin Center (WAC) to perform firmware and device driver updates based on the currently published [ThinkAgile MX Best Recipe](#). LXCI v4.2.5 will perform the UEFI firmware update discussed in this document and will take automated steps to remediate the issues mentioned above. However, if you prefer a different method to keep the firmware and device drivers on your cluster nodes up to date, follow the steps outlined here to resolve the issue.

If LXCI is **not** used to update system firmware and device drivers on ThinkAgile MX nodes, the Lenovo XClarity Essentials OneCLI tool must be downloaded from the following URL:

<https://support.lenovo.com/us/en/solutions/ht116433>

After downloading the OneCLI tool, the manual steps to update SR630 V2 or SR650 V2 UEFI firmware from any version prior to v1.30 (Build AFE118I) to a later version are as follows:

1. Check the network interface names are as expected using the following PowerShell command:

Get-NetAdapter

Output will be similar to the following example. The network interface names of the Mellanox NIC ports will be checked again after the update is complete to ensure they have not changed.

```
PS C:\Users\Administrator> Get-NetAdapter
```

Name	InterfaceDescription	ifIndex	Status	MacAddress	LinkSpeed
vSMB1	Hyper-V Virtual Ethernet Adapter #2	15	Up	00-15-5D-0B-15-03	25 Gbps
vSMB2	Hyper-V Virtual Ethernet Adapter #3	16	Up	00-15-5D-0B-15-04	25 Gbps
Mellanox Port 1	Mellanox ConnectX-6 Lx 2x25GbE PCIe ...	10	Up	24-8A-07-4B-C5-3C	25 Gbps
Mellanox Port 2	Mellanox ConnectX-6 Lx 2x25GbE PCI...#2	7	Up	24-8A-07-4B-C5-3D	25 Gbps
Ethernet	IBM USB Remote NDIS Network Device	8	Not Present	7E-D3-0A-DE-3B-9F	0 bps
vEthernet (Management)	Hyper-V Virtual Ethernet Adapter	6	Up	00-15-5D-0B-15-00	10 Gbps

2. Drain the cluster node to be updated.

3. Update the firmware and device drivers to the versions shown in ThinkAgile MX Best Recipe MXBR2301 using your preferred method.
4. Reboot the node.
5. Execute the following command, replacing the **bracketed items** with appropriate parameters:

```
OneCli.exe config set DevicesandIOPorts.ACPI_UIDFix Disabled --override --bmc  
<UserID>:<Password>@<IPAddress>
```

The bracketed items are the credentials and IP address of the XCC for the node being updated. OneCLI can be run on any system that has connectivity to the XCC IP subnet.

6. Reboot the node.
7. Verify the network interface names of the Mellanox NIC ports have not changed using the following PowerShell command:

```
Get-NetAdapter
```

Output should be the same as in Step 1 above.

8. Resume the node.
9. Wait for storage rebalance jobs to finish using the following PowerShell command:

```
Get-StorageJob
```

A null response indicates that no jobs are running and it is safe to move to the next node.

10. Repeat the above for each remaining node in the cluster.