



PRIMERGY CUSTOMER INFORMATION BULLETIN

Number/Revision:

PY-CIB065-00

Issue Date:

March 08, 2021

Title:

Intel X710 based NIC Link-up may fail due to LAN card firmware issue

Applies to:

- PRIMERGY Models
 - PRIMERGY CX2550 M2/M4/M5
 - PRIMERGY CX2560 M4/M5
 - PRIMERGY CX2570 M2/M4/M5

 - PRIMERGY RX1330 M3/M4
 - PRIMERGY RX2520 M1/M4/M5
 - PRIMERGY RX2530 M2/M4/M5
 - PRIMERGY RX2540 M2/M4/M5
 - PRIMERGY RX4770 M3/M4/M5/M6

 - PRIMERGY TX1320 M3/M4
 - PRIMERGY TX1330 M3/M4
 - PRIMERGY TX2540 M1
 - PRIMERGY TX2550 M4/M5
 - PRIMERGY TX2560 M2

Effective Duration:

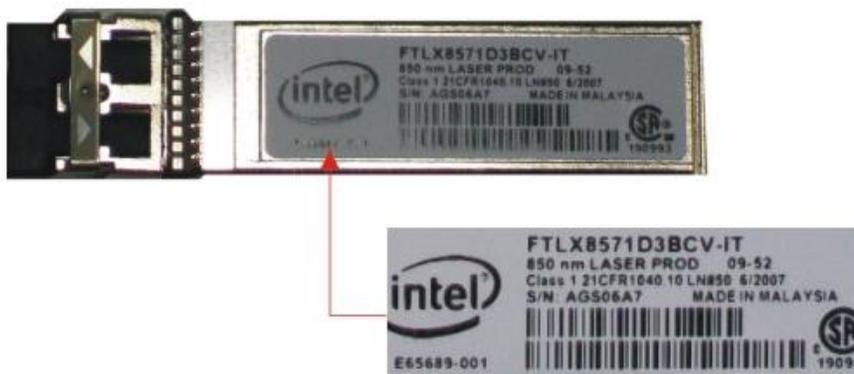
Permanent

PRIMERGY CUSTOMER INFORMATION BULLETIN

Problem:

Systems meeting the below criteria may fail to restore the network link after a reboot of the connected switch. **All of the following conditions** are required for this problem to exist:

1. Affected unit listed in the “Applies to” field above.
2. One of the following Intel X710 based LAN cards is installed:
 - S26361-F3640-L502 - PLAN EP X710-DA2 2X10GB SFP
 - including S26361-F3640-E2 / S26361-F3640-E202
 - S26361-F3640-L504 - PLAN EP X710-DA4 4X10GB SFP
 - Including S26361-F3640-E4 / S26361-F3640-E204
3. LAN card firmware version 6.01 installed.
4. Intel Dual Rate 10G/1G SFP installed :
 - S26361-F3986-L5 or S26361-F3986-E5
SFP Part number: FTLX8571D3BCV-IT



Cause:

LAN card firmware 6.01 link up process incorrectly negotiates the link speed for the 1GBASE-SX and 10GBASE-SX connections.

How to confirm LAN card firmware version

- 1) For VMware ESXi:

Confirm the firmware version using the command: “*esxcli network nic get*”
e.g.: # *esxcli network nic get -n <VMNIC name>*

```
..  
Firmware Version: 6.01 0x80003483
```



PRIMERGY CUSTOMER INFORMATION BULLETIN

- 2) For Windows:
- a) Using Intel PROSet:
Select the target device on “Device Manager”, right-click on the menu, and select “Properties”.
From the Properties window, select [Link Speed] tab > click [Identify Adapter] > confirm [NVM version] value.

NVM version: 6.01

- b) Not using Intel PROSet:
Use the update tool to confirm the LAN card firmware version.

Download the firmware update tool at the below URL:

<https://support.ts.fujitsu.com/IndexDownload.asp?SoftwareGuid=D9B3C6E7-5827-4F92-831D-16FBD0E41B3B>

Refer to the documentation in the download archive for directions.

- 3) For Linux:
Confirm the firmware version using the ethtool command.
e.g.: # *ethtool -l eno**

```
..  
Firmware-version: 6.01 0x80003483
```

Solution:

Update the LAN card firmware to Version 7.00 or later. When updating the LAN card firmware, update the LAN driver as well per the release documentation.

Obtain the firmware and driver from the Fujitsu PRIMERGY download site. Search for the product model and OS then select [Driver] > [LAN] category at the below URL:

<https://support.ts.fujitsu.com/IndexDownload.asp?lng=com>

The firmware file is “NVM Update Package for Intel® X710 Series”.



PRIMERGY CUSTOMER INFORMATION BULLETIN

Temporary Workaround:

If unable to update the LAN card firmware, a temporary workaround is to set the communication speed of the LAN port to a “Fixed” setting for either 1Gb or 10Gb as described below:

For Windows:

1. For systems using Intel PROSet:
 - Select the target device on “Device Manager”, right-click on the menu, and select “Properties”.
 - From the Properties window, select [Link Speed] tab, in [Speed and Duplex] change the value to the speed of your environment.
 - o For 10Gbps, change to [10 Gbps Full Duplex]
 - o For 1Gbps, change to [1.0 Gbps Full Duplex]
2. For systems not using Intel PROSet:
 - Select the target device on “Device Manager”, right-click on the menu, and select “Properties”.
 - From the Properties window, select [Advanced] tab, in [Speed & Duplex] change the value to the speed of your environment.
 - o For 10Gbps, change to [10 Gbps Full Duplex]
 - o For 1Gbps, change to [1.0 Gbps Full Duplex]

For Linux:

1. Check cable type
Using the below command, check [Advertised link modes:] item:
`# ethtool eno*`

```
..  
Advertised link modes: 1000baseX/Full  
10000baseSR/Full
```

(Supplement)

Depending on the OS, value of [Advertised link modes:] may be indicated as baseT as shown below. If so, it is required to use the [baseT] value for step 2.

```
Advertised link modes: 1000baseT/Full  
10000baseT/Full
```



PRIMERGY CUSTOMER INFORMATION BULLETIN

2. For each port, set the speed setting to Fixed with the below command.
Execute the command on each port as needed.

```
# ethtool -s <NIC> advertise <specified value>
```

Specified value depends on the speed set value listed below.

10000baseSR/Full	0x80000000000
10000baseT/Full	0x1000
1000baseX/Full	0x20000000000
1000baseT/Full	0x020

e.g. Current environment is 10G, step 1 indicates 10000baseSR/Full, use the following command:

```
# ethtool -s eno1 advertise 0x80000000000
```

(Supplement)

After executing the above command, the corresponding port will perform a link down / up operation. The setting made by this command is reset when the server OS is restarted.

To make this command persistent through a restart:

1. Add the command to the “/etc/rc.d/rc.local” file.
2. Set the execute permission on “/etc/rc.d/rc.local” file.
3. Restart OS and confirm the values are set correctly.

How to recover after problem occurrence

Recover the link using one of the steps below:

- Shutdown and restart the OS
- Remove the SFP module then reinsert it. (This can be done in a power on state)

Revision History:

REVISION	DATE	CHANGE SUMMARY
00	March 08, 2021	Initial Release
