

If duplicate UUIDs are confirmed to exist at client site, use the following procedure to update the EN4091 and generate new UUID.

The following procedure should be performed only by qualified IBM personnel and service providers.

Steps to update UUID on EN4091:

1. Perform necessary modifications to the lower, front panel of the EN4091 to provide access to the module's hidden console port. This will require the cutting and removal of a small portion of the front panel covering to expose and provide access to the console port.



This will require removal of the EN4091 from the Chassis so precautions to remove I/O from the module(s) should be taken to ensure there's no user impact.

During this process there will be multiple restarts of the EN4091.

A micro-USB console cable will be required to establish console access. The UUID cannot be modified without establishing console access to the EN4091 console port.

See attached photo that provides location of the console port and appropriate cable (Field Replaceable Unit (FRU) 43X0510).



2. Download IBM Network Operating System (NOS) 2.0.4.0 for EN4091:

http://www.ibm.com/support/fixcentral/systemx/doSelectFixes?options.selectedFixes=ibm_fw_scsw_en4091-2.0.4.0_anyos_noarch&continue=1

Install firmware image to the EN4091 through the CMM GUI or CMM CLI.

GUI method (recommended): After logging into the CMM, select the Input/Output module (IOM) that needs updating, select the 'Hardware' tab and take note of the current UUID.

Then from the 'Chassis Management' drop down menu, select 'I/O modules' --> 'I/O Module X' --> 'Firmware' tab.

Highlight 'Main Application', then select 'Update', and follow prompts and provide the target path for the 2.0.4.0 image file. After firmware is updated, observe the 2.0.4.0 version in the Main Application field in the Firmware tab. The UUID will remain unchanged.

CLI method: Secure Shell (SSH) to CMM, after successful login, change to the target IOM bay location.

example: `system> env -T system:switch[4] <-- EN4091 located in IOM bay 4 for this example.`

From the target location, issue 'info' command to view the current Vital Product Data (VPD) information. This will also provide session record of existing UUID.

Then issue the following 'update' command to copy and install 2.0.4.0 from source location to the EN4091.

example:

```
system:switch[4]> update -u tftp://10.34.0.70/snd/ibm_fw_flsw_ptmsscse-2.0.4.0_anyos_noarch.img
Starting flash packet preparation.
Update of Pass-thru Module 4 firmware was successful.
```

From the CMM CLI, issue the 'info' command to view the firmware version, take note of version to ensure update was successful. UUID will remain unchanged.

3. After the IBM NOS 2.0.4.0 firmware has been confirmed to have been successfully installed on the EN4091, it will be necessary to complete the UUID update process from the EN4091 Diagnostics menu available only from the console port.

a. From terminal session application, configure the serial parameters as follows:

```
Speed: 9600
Data bits: 8
Stop bits: 1
Parity: None
Flow control: XON/XOFF
```

Logging of the session for verification purposes is recommended.

b. When console access has been established, the following prompt should be observed:

```
10Gb Pass-Thru#
```

c. After the above prompt is confirmed, it will be necessary to restart the EN4091, and as it is starting up, enter 'shift' and 't' from the keyboard after the first hash mark '#' is displayed:

example:

```
10Gb Pass-Thru# Check for downloaded image....
Enter 'B' for image download
....#..
```

d. If successful, the normal boot process will be interrupted and the Diagnostic boot will begin and display the following:

```
Welcome to Procyon
```

```
Initializing Diagnostics Mode (0.2.0.4) ...
(Output truncated)
```

e. At the password prompt, enter 'root'.

f. From the Diagnostics menu, enter '/vdp/show UUID' to display the current UUID, compare with UUID collected from CMM to ensure they are identical. The output should be similar the to command output below and the UUID begins at characters '27':

```
Diagnostics# /vdp/show UUID
Show VPD field data values ..... STARTED
VM_UUID          0 :
0x00000009f 27 c1 b1 b7 6d 3e b3 11 e1 59 00 00 00 00 00 '...m>...Y.....
V3_SecureIOMUUIDMM 0 :
<zeroes>
Show VPD field data values ..... DONE
```

g. After the EN4091 UUID is confirmed to be identical to the UUID collected from the CMM CLI, it will be necessary to reset the UUID on the EN4091 by entering '/vpd/uuid' and a new UUID will be generated immediately after confirming:

```
VPD API# /vpd/uuid
Confirm Resetting UUID [y/n]: y
Updating CRC
```

CRC 0x671029c9 (0x36daa366) [0x03fc bytes] Updating.

h. Enter the '/vpd/show UUID' to view the new UUID. In the example below, new UUID begins at characters '33' and ends with no trailing zeroes.

```
VPD API# /vpd/show UUID
Show VPD field data values ..... STARTED
VM_UUID          0 :
0x00000009f 33 c0 b1 b7 6d 3e b3 11 b9 ff f1 8f b0 79 69 99 3...m>.....yi.
V3_SecureIOMUUIDMM 0 :
<zeroes>
Show VPD field data values ..... DONE
```

VPD API#

4. After the above EN4091 console configurations are confirmed to be successfully completed, return to the CMM CLI session and enter 'info' command again to confirm the UUID remains unchanged:

```
system:switch[4]> info
UUID: 27C1 B1B7 6D3E B311 E159 0000 0000 0000
(output truncated)
```

a. At this point it will be necessary to issue a 'virtual reseal' of the EN4091 from the CMM CLI by entering the 'service -vr -T system:switch[X]' command (X = I/O bay location) so its UUID is refreshed on the CMM.

```
system:switch[4]> service -vr -T system:switch[4]
OK
```

b. After a couple of minutes, the new UUID for the EN4091 should be displayed in the CMM CLI and GUI.

```
system:switch[4]> info
UUID: 33C0 B1B7 6D3E B311 B9FF F18F B079 6999
Manufacturer: IBM (Not Available)
Manufacturer ID: 20301
Product ID: 369
Mach type/model: Not Available
Mach serial number: Not Available
Manuf date: 1912
Hardware rev: 0.0
Part no.: 88Y6045
FRU no.: 88Y6046
FRU serial no.: Y250VT254005
CLEI: Not Available
Boot ROM
    Rel date:      04/23/2014
    Version:      0.0.0.8
    Status:       Active
```

Main Application

Rel date: 04/23/2014
Version: 2.0.4.0
Status: Active

MAC Address: 00:00:00:00:00:00

Product Name: IBM Flex System EN4091 10Gb Ethernet Pass-thru

Device Description: EN4091 10Gb Pass-thru

Slots: 4

Asset ID: Not Available

Product version: Not Available

Type: I/O Module

c. After the above process is confirmed to have updated the EN4091 UUID to a truly 'unique' value, the procedure is considered completed. Disconnect from the EN4091 console port and log out of the CMM.