Advantech Product FAQ

NMC-4005 NVM upgrade from V5.05 to V6.01

Applicable model list	NMC-4005 series
Model name version	N/A
NVM Version	V5.05　(0x80002B40)

Description:

1. The API version of NMC-4005 NVM is 1.5 , API needs >=1.7 to support reading SFP DDM function

> [8.930948] i40e 0000:1a:00.0: fw 5.0.40043 api **1.5** nvm **5.05** 0x80002b40 0.0.0

2. Following step is upgradingNMC-4005 NVM from V5.05 (0x80002B40) to V6.01 (0x800035D5) by Intel nvmupdate utility (Linux Version).

Flashing step:

1. We recommend customer to execute NMC-4005 NVM upgrading in CentOS 7(Kernel 3.10.0)
2. Please decompress NMC-4005_V601.tar.gz in Linux and into NMC-4005_V601 folder
3. Please key-in following command to check NMC-4005 NVM version,
   Attention: "NMC-4005_V601.tar.gz" only supports NVM V5.05 (0x80002B40) to V6.01 (0x800035D5), if showing NVM version is not V5.05 (0x80019AA), please don't execute this utility.

```
# ethtool –i "NMC-4005 network device name"
Ex:
# ethtool –i b01p0
driver: i40e
version: 2.4.10
firmware-version: 5.05 0x80002b40 0.0.0
expansion-rom-version:
bus-info: 0000:1a:00.0
supports-statistics: yes
supports-test: yes
supports-eeprom-access: yes
supports-register-dump: yes
supports-priv-flags: yes
```

4. Please key-in following command to check NMC-4005 NVM version, and refer following command instruction to execute nvmupdate utility..

```
# ./nvmupdate64e -l NMC-4005_6p01.log


Intel(R) Ethernet NVM Update Tool
NVMUpdate version 1.30.22.3
Copyright (C) 2013 - 2017 Intel Corporation.



WARNING: To avoid damage to your device, do not stop the update or reboot or power off the system
during this update.
Inventory in progress. Please wait [****-.....]



Num Description                                  Ver. DevId S:B    Status
=== ==================================== ===== ===== ====== ===============
01) Intel(R) I210 Gigabit Network Connection  3.37  1533 00:001 Update not
                                                                available
02) Intel(R) I210 Gigabit Network Connection  3.37  1533 00:002 Update not
                                                                available
03) Intel(R) Ethernet Converged Network       5.05  1572 00:026 Update
    Adapter X710                                                available

Options: Adapter Index List (comma-separated), [A]ll, e[X]it
Enter selection:03
Would you like to back up the NVM images? [Y]es/[N]o: Y
Update in progress. This operation may take several minutes.
[....+*****]
Power Cycle is required to complete the update process.


Tool execution completed with the following status: All operations completed successfully
Press any key to exit.
```

5. When utility reports "**All operations completed successfully**", it means successful to upgrade NVM, please press any key to exit, and power off system.

6. If it reports error message during NVM flashing, please send "NMC-4005_6p01.log" to Advantech NCG TSE team (ss.chang@advantech.com.tw) .

7. Please power on system and login Linux, and key-in following command to check NMC-4005 NVN version again, the NVM version will show 6.01(0x800035D5) after upgrade NVM

```
# ethtool -i "NMC-4005 network device name"
Ex:
# ethtool -i b1ap0
driver: i40e
version: 2.4.10
firmware-version: 6.01 0x800035d5 0.0.0
expansion-rom-version:
bus-info: 0000:1a:00.0
supports-statistics: yes
supports-test: yes
supports-eeprom-access: yes
supports-register-dump: yes
supports-priv-flags: yes
```