

NCS5500 RP-E Bring Up Procedure

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1. RP-E USB Boot Procedure using BIOS Menu

Please note, this procedure is applicable from release 6.3.1 onwards (where RP-E support was introduced).

This is not specific to any chassis type, but is relevant to RP-E specific chassis, for example, any modular chassis like 5504, 5508, 5516 with RP-E.

Also, not applicable for fixed platforms.

Step 1: Prepare the USB with image using this [procedure](#)

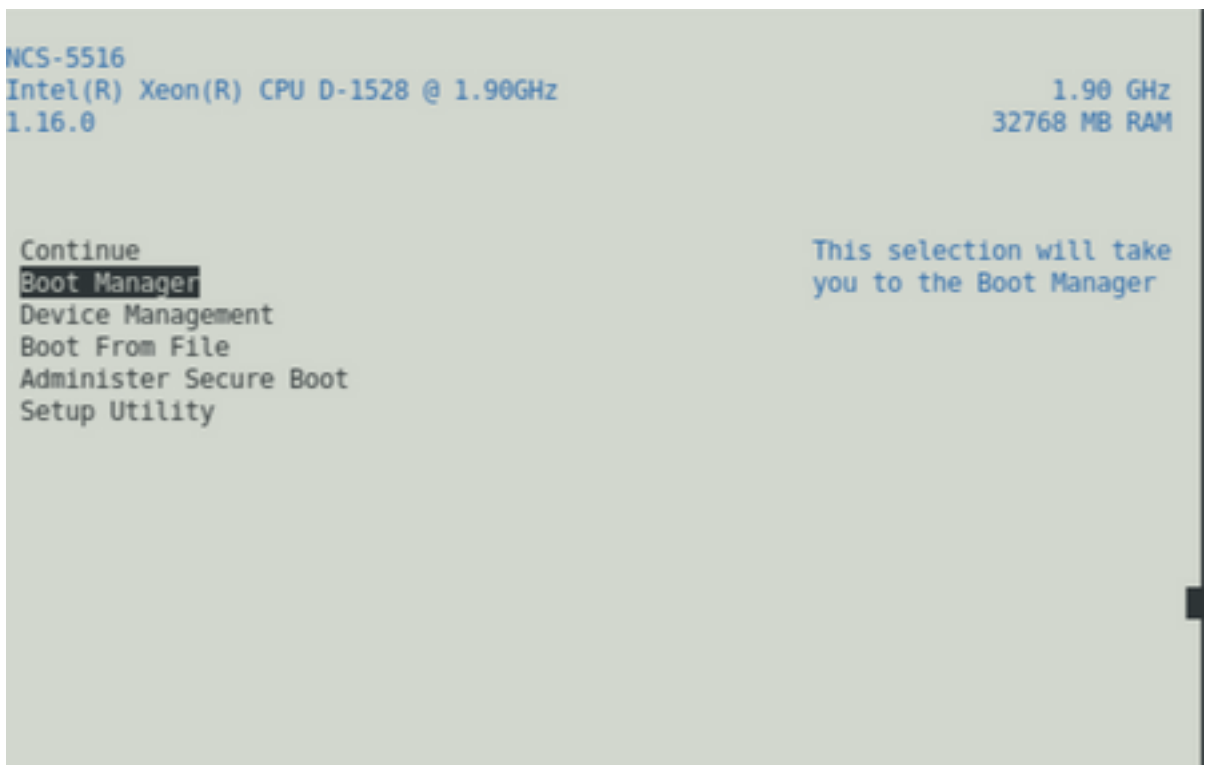
Step 2: Also verify the MD5 of the files to make sure the contents are the same.

Step 3: In a single RP system which has the USB inserted, perform a power cycle.

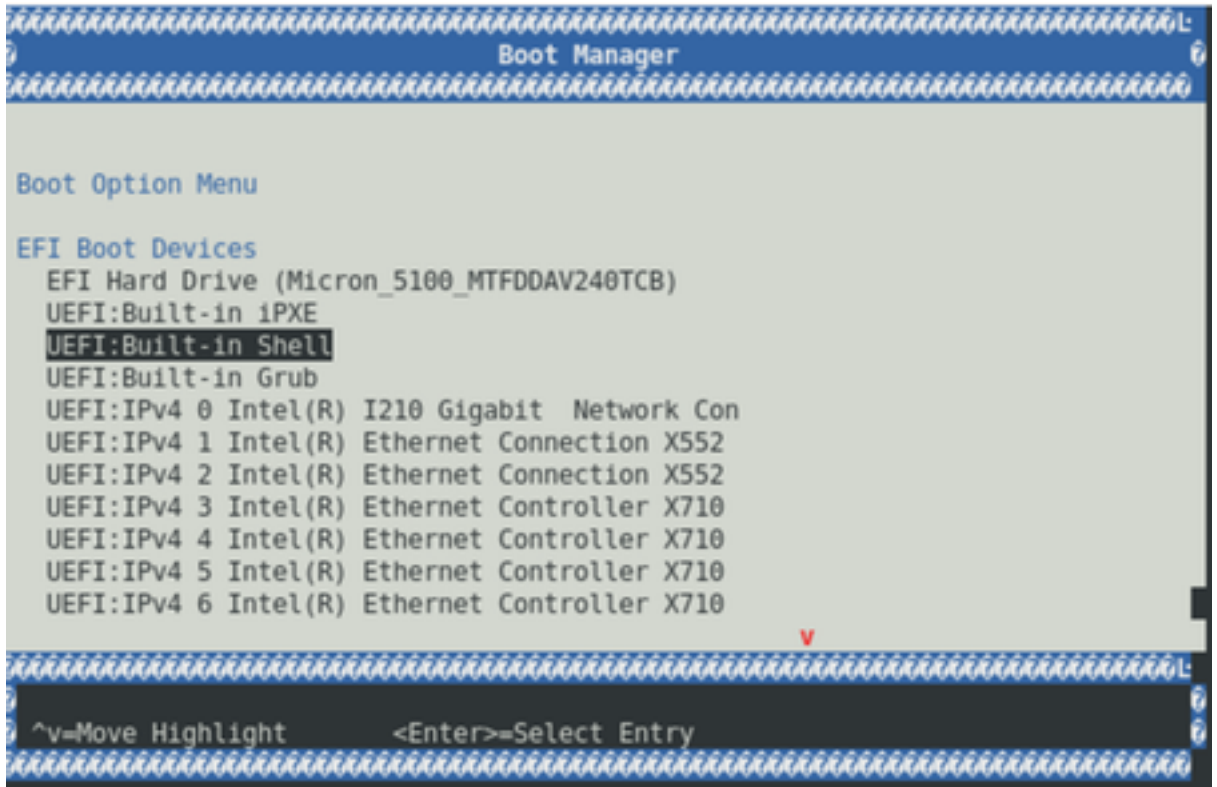
Step 4: Press Escape to break into the BIOS menu. We should see something like below.



Step 5: Select “Boot Manager” option and press Enter.



Step 6: Select UEFI: Built-in Shell option from the below Menu



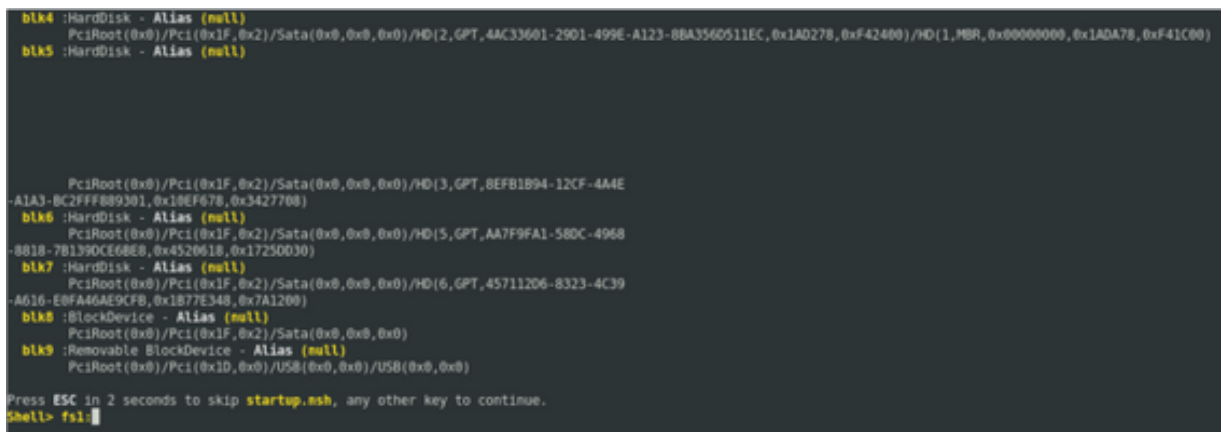
Step 7: Either press any key to drop to the Shell> prompt or by default, the console will drop to the Shell prompt.

** Please note that delete/backspace doesn't work here. If anything incorrect is typed, do not hesitate to press Enter, since it doesn't impact the current procedure.

Step 8: Type "fs1:" and press Enter

** Please pay attention to which slot the USB is inserted in, based on which, the below file system could vary - between fs0 and fs1) **

In this example, the USB is inserted in slot1.



Step 9: Type "ls" to list the contents of "boot" and "EFI" (Entire snapshot is provided below)

Step 10: cd EFI

Step 11: ls

Step12: cd boot

```
Press ESC in 2 seconds to skip startup.nsh, any other key to continue.
Shell> fs1:

fs1:\> ls
Directory of: fs1:\

    10/03/18  04:05p <DIR>          16,384  boot
    10/03/18  04:05p <DIR>          16,384  EFI
           0 File(s)                0 bytes
           2 Dir(s)

fs1:\> cd EFI

fs1:\EFI> ls
Directory of: fs1:\EFI

    08/28/18  02:43p <DIR>          16,384  .
    10/03/18  04:05p <DIR>           0      ..
    10/03/18  04:12p <DIR>          16,384  boot
           0 File(s)                0 bytes
           3 Dir(s)

fs1:\EFI> cd boot
```

Step 13: Upon listing the contents, we should be seeing grub.cfg and bootx64.efi

Step 14: Type "bootx64.efi" and press enter. (Tab works to auto complete)

```
0 File(s)          0 bytes
3 Dir(s)

fsl:\EFI> cd boot

fsl:\EFI\boot> ls
Directory of: fsl:\EFI\boot

10/03/18  04:12p <DIR>          16,384  .
10/03/18  04:12p <DIR>          16,384  ..
08/28/18  02:43p                1,061  grub.cfg
08/28/18  02:43p           915,486  bootx64.efi
          2 File(s)      916,547 bytes
          2 Dir(s)

fsl:\EFI\boot> boot boot
'boot' is not recognized as an internal or external command, operable program, o
r batch file

fsl:\EFI\boot> bootx64.efi

Image Name = \EFI\BOOT\BOOTX64.EFI
Image Size = 915486 Bytes

-----Cisco Secure Boot: Verifying-----
Image verified successfully. Booting..

-----Cisco Secure Boot: End -----

GNU GRUB version 2.00
Press F2 to goto grub Menu..
Booting from USB..
Loading Kernel..
Kernel Secure Boot Validation Result: PASSED
Loading initrd..
```

Step 15: Based on the above log, RP-E is booting from the USB.

Step 16: Once the RP comes up, configure the username/password and follow the remaining steps.

2. Standby RP-E Bringup

Step 1: Insert the standby RP-E into the system (In this example, RP1 has been inserted)

Step 2: This step depends on the state of the standby RP-E. Please follow whichever is applicable.

Note: Spare RP will be shipped with the latest image by default, if there is no image picked by placing the order.

In order to sync it with the active RP-E, execute the below command from RP0 sysadmin, once the standby is detected in the inventory.

Execute the below command from RP0 sysadmin to bring up the standby RP.

sysadmin-vm:0_RP0# hw-module location 0/RP1 bootmedia network reload

One can monitor the console of RP1 to make sure internal PXE has triggered. This should bring up the standby RP.

Note: If image is corrupted/deleted from Standby RP-E it syncs with Active RP or may use USB booting according to "RP-E USB boot Procedure using BIOS Menu" above

3. LC Bringup (if required)

Step 1: Execute the below command from RP0 sysadmin to bring up any line card. (0/0 for example)

sysadmin-vm:0_RP0# hw-module location 0/0 bootmedia network reload