Info

* Janus Linux account
  + user=root pass=pmcsp
* available service in Janus Linux
  + sshd server: remote login, remote file copy
* MLNX NIC10G driver
  + download from: http://www.mellanox.com/page/software\_overview\_eth
  + install is required if using help\_host with Windows OS
  + install may not be required if using help\_host with recent Linux distribution

Requirement

* a Janus runs healthy firmware and Linux
  + with BCM NIC1G or MLNX NIC10G installed
* a help\_host runs either Linux(Recommended) or Windows
  + with NIC1G or MLNX NIC10G installed for connecting with Janus
* a network connection (1G or 10G) between Janus and help\_host
  + on Janus
    - use network interface eth0, confirm by checking the serial console output during re-plugging the NIC cable
  + on help\_host
    - Linux: supposed to use network interface eth0
    - Windows: supposed to use network interface NIC1
* required help\_host software
  + a favorite serial terminal to access firmware serial console
    - Linux example: minicom
    - Windows example: putty, teraterm
  + a favorite scp client to transfer firmware image
    - Linux example: scp command
    - Windows example: winscp
* required files: flash\_block.data, install\_mod.cpio
  + release package containing the files
    - \\diqing\shareddocs\engineering\ESD\Projects\Janus\firmware\build\sp-sdk-0.06.01.24\internal\\_internal-sp-sdk-binary-0.06.01.24.tar.bz2
  + path to store the files in help\_host
    - Linux: /host/path/to/
    - Windows: c:\host\path\to\

Configure

* configure the network interface
  + on Janus
    - not nessary, driver is built in or auto detectable for suggested NIC
* configure the network IP address
  + on Janus
    - run configure command in Janus serial console
      * ifconfig eth0 192.168.44.11 netmask 255.255.255.0 mtu 1500 up
  + on help\_host
    - Linux: run configure command in Linux console
      * ifconfig eth0 192.168.44.22 netmask 255.255.255.0 mtu 1500 up
    - Windows: configure the NIC1 with following parameters
      * ip=192.168.44.22
      * netmask=255.255.255.0
      * mtu=1500 (change this in device manager)

Step

* bootup Janus and help\_host
* login from Janus serial console
* in serial console
  + create directory by command
    - mkdir -p /target/path/to/
* in help\_host
  + Linux console: copy the flash\_block.data, install\_mod.cpio to Janus path by dd command
    - scp /host/path/to/\* root@192.168.44.11:/target/path/to/
  + Windows GUI: use winscp to copy the flash\_block.data, install\_mod.cpio
    - connect to 192.168.44.11with SCP protocol and login using root
    - navigate on host panel for directory c:\host\path\to\
    - navigate on target panel for directory /target/path/to/
    - drag the file flash\_block.data, install\_mod.cpio from host panel to target panel
* in serial console
  + update the firmware into flash by command
    - ATTENTION
      * SLOW step it is, please wait at most 5 minutes until command completes
      * if execution failed, please retry the dd command before reboot
    - dd if=/target/path/to/flash\_block.data of=/dev/mtdblock0
  + update the corresponding kernel module into root file system by command
    - cd / && cpio -id < /target/path/to/install\_mod.cpio