

Reflashing HP 4100 switches

Campus network design workshop

April 17, 2012

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1 Connect

Power up the switch.

Connect your USB-serial adaptor to your PC, and use the male-female DB9 adaptor

to connect to the Console port on the switch. Start your terminal program (e.g. putty for Windows) with a 9600 bps serial speed.

Note: In the vast majority of cases, the default speed on device serial ports is 9600 bps. In this particular HP model, the switch is able to detect the speed setting in your terminal emulator, so you could technically use higher speeds if you wanted to.

1.1 Linux Users

If you are a Linux user, a simple terminal program is picocom:

```
# apt-get install picocom
# picocom /dev/ttyUSB0
```

Type `^A ^Q` to exit (`ctrl-A ctrl-Q`).

An alternative is `minicom`, which has better terminal emulation but requires a bit more configuration.

Press Enter two or three times to enable the switch to detect the serial speed. You should see the following prompt:

```
HP ProCurve Switch 4104GL#
```

If you see a different prompt, the switch may still have some configuration left over from its previous owner. You can reset the configuration to default settings with the following commands:

```
# erase startup-config
# reload
```

With the default configuration the switch will pick up a management IP address via DHCP.

Connect the switch to the temporary backbone network (hp4000 switch in each group).

Use the following commands to check that the switch has picked up an IP address/default route via DHCP, and to check that the classroom TFTP server is reachable.

```
# show ip
# ping 10.10.0.254
```

2 Check firmware

Check which firmware image is currently running, and which two versions (primary and secondary) are available in the device's flash memory:

```
# show version
# show flash
```

3 Upgrade

Perform the upgrade as follows. Note that the filename is case-sensitive,

```
# copy tftp flash 10.10.0.254 G_07_109.swi primary
The Primary OS Image will be deleted, continue [y/n]? y
...
Validating and Writing System Software to FLASH...
```

When that is done, reboot with the new image:

```
# boot system flash primary
Device will be rebooted, do you want to continue [y/n]? y
Rebooting the System
```

Your upgrade is complete, and you can disconnect the switch.

```
# sh flash
```

Note: The firmware came from the HP website (www.procurve.com). Click on ‘Support’ then do a search on the product code, in this case J8152A.

For the classroom we set up a TFTP server under Ubuntu Linux:

```
# sudo apt-get install tftpd-hpa
```

and unzipped the firmware file under the `/var/lib/tftpboot` directory. However there are TFTP servers for Windows available too.