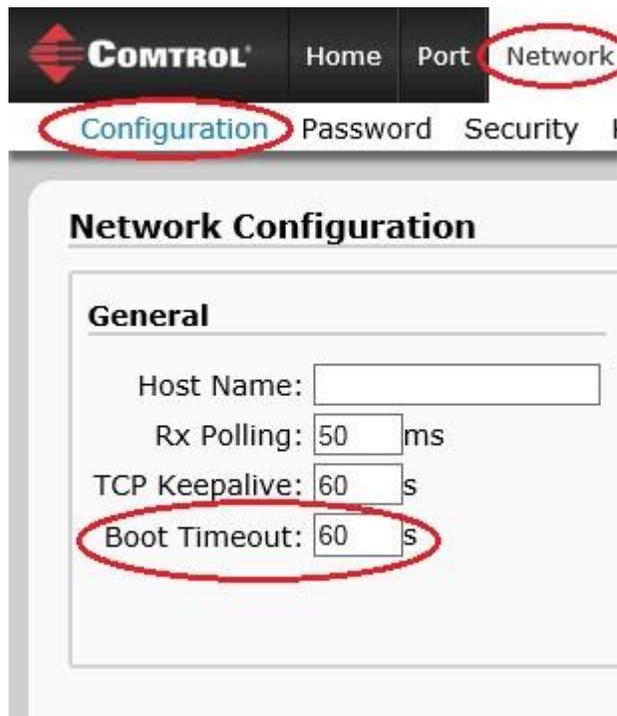


DeviceMaster Firmware upload Troubleshooting

Problems uploading firmware to the DeviceMaster

There are a few causes for the firmware being unable to upload.

1. Bootloader timeout is set to less than 45 seconds.
 - a. The Bootloader timeout can also be obtained by going to the DeviceMaster's webpage. Example: <http://192.168.250.250> (Your Device Master's webpage may have a different IP Address)
 - b. For firmware version 11.x, on the webpage, go to the Network tab -> Configuration sub-tab -> Boot Timeout. Change the value to 45 to 60 seconds. Click the 'Apply' button



For firmware version 10.x and earlier, open the webpage and go to the Network tab. At the bottom of the page is the timeout setting. Set this to 45 to 60 seconds.



Server Status

Network

Security

E-Mail

RFC1006

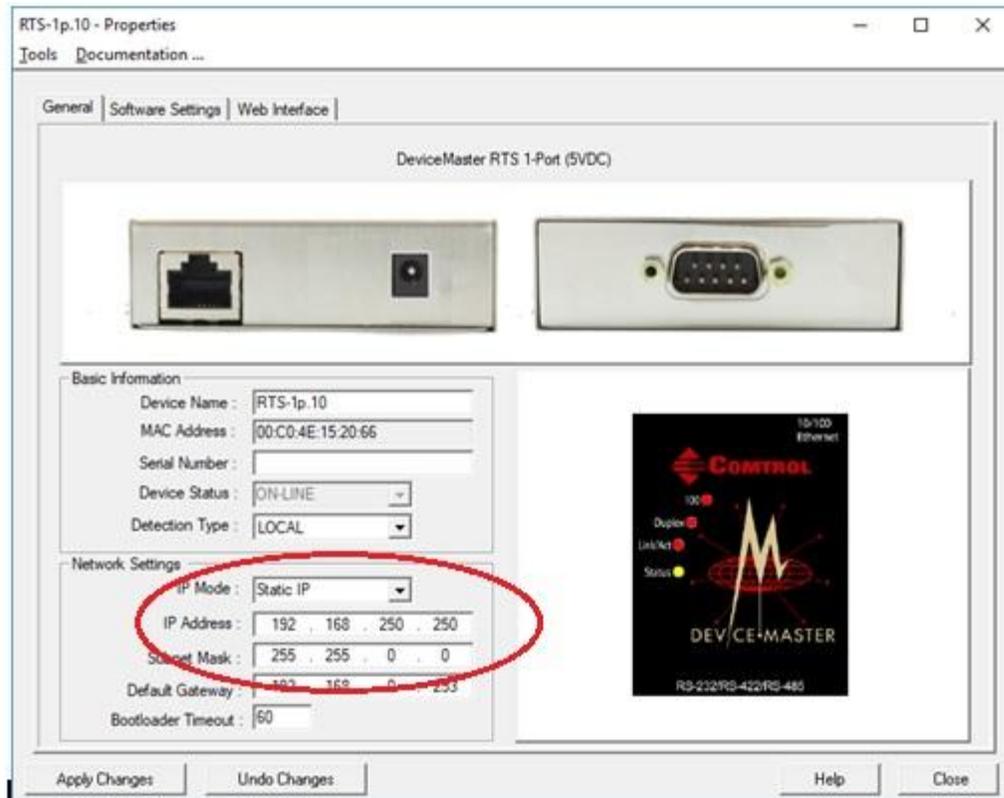
Network Configuration

Host Name:	<input type="text"/>
IPv4 Configuration:	<input type="radio"/> Use DHCP <input type="radio"/> Disable IPv4 networking <input checked="" type="radio"/> Use static configuration below:
IPv4 Address:	<input type="text" value="192.168.13.11"/>
IPv4 Netmask:	<input type="text" value="255.255.0.0"/>
IPv4 Gateway:	<input type="text" value="192.168.0.253"/>
IPv6 Configuration:	<input type="radio"/> Use DHCP <input checked="" type="radio"/> Disable IPv6 networking <input type="radio"/> Use static configuration below:
IPv6 Address:	<input type="text" value="::"/>
IPv6 Prefix Length:	<input type="text" value="0"/>
IPv6 Gateway:	<input type="text" value="::"/>
TCP Keepalive Timeout:	<input type="text" value="60"/>
Rx Polling Period:	<input type="text" value="50"/>
Bootloader Timeout:	<input type="text" value="45"/> x

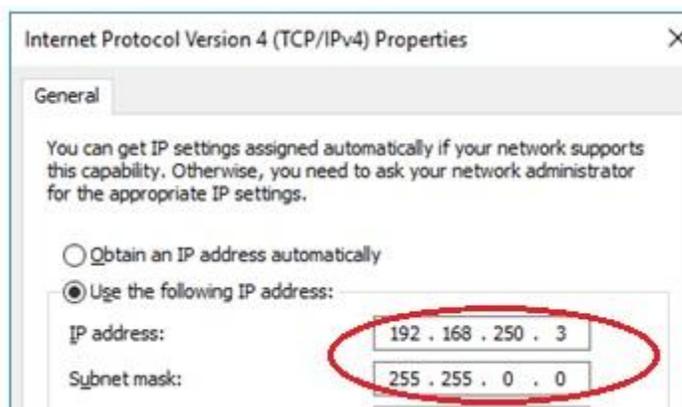
2. Trying to upload over a wireless network
 - a. Please don't do this. Use a hardwired network connection.

3. Too many switches and/or routers between computer and DeviceMaster
 - a. Direct connect an Ethernet Cable to the DeviceMaster's down port (if there is one), or its regular Ethernet port from the DeviceMaster to your computer. You will need to set your computer's IP Address within the IP range of the DeviceMaster and have the same Subnet. For instance, if the Device Master's IP Address is 192.168.250.250 with a Subnet Mask of 255.255.0.0, then you will want your computer to be in the range of 192.168.250.x where 'x' is from 1-249 or 251-254. See the below screenshots (below) for further detail. In the example below, the computer IP Address is 192.168.250.3 with a Netmask of 255.255.0.0

DeviceMaster IP Configuration:



Laptop IP Configuration connected to DeviceMaster.



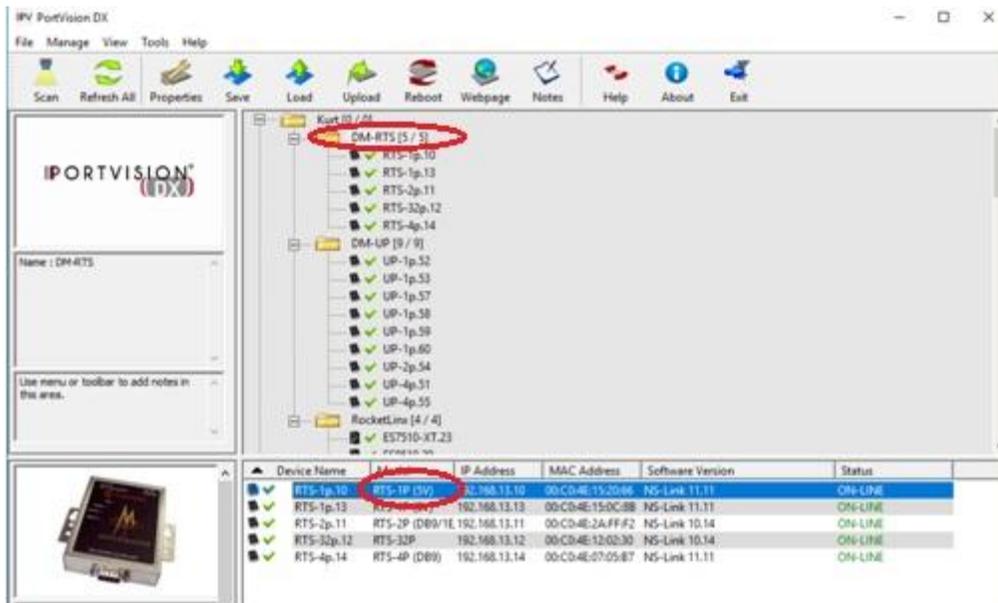
4. Corrupted firmware

- a. Try re-downloading the firmware. If using ftp, be sure to download in 'binary' mode.

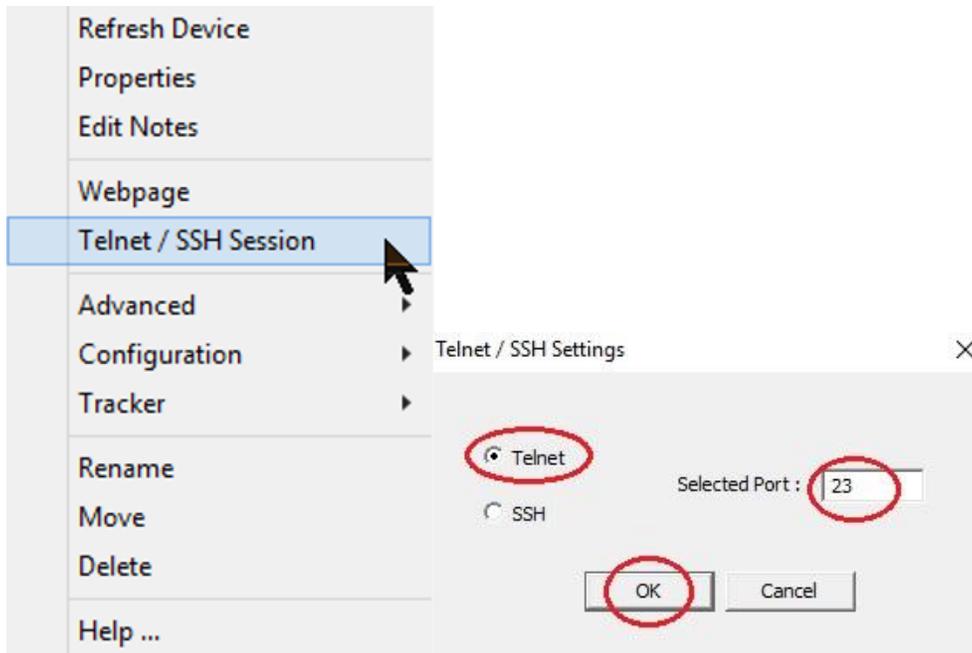
5. Computer and DeviceMaster are using either different IP Ranges or Subnet configurations.
 - a. See step 3 (above).
6. Another procedure to change the Bootloader timeout is to do a 'Putty' telnet session into the DeviceMaster. Putty can be downloaded here-
7. <https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

Or, if you have PortVision DX installed use the following procedures.

- a. Open PortVision
- b. Highlight the folder in the top right of the PortVision GUI where the DeviceMaster resides. It may be named 'Scan Results' or another custom name if given. Ensure the DeviceMaster is displayed in the bottom right of the GUI.
- c.

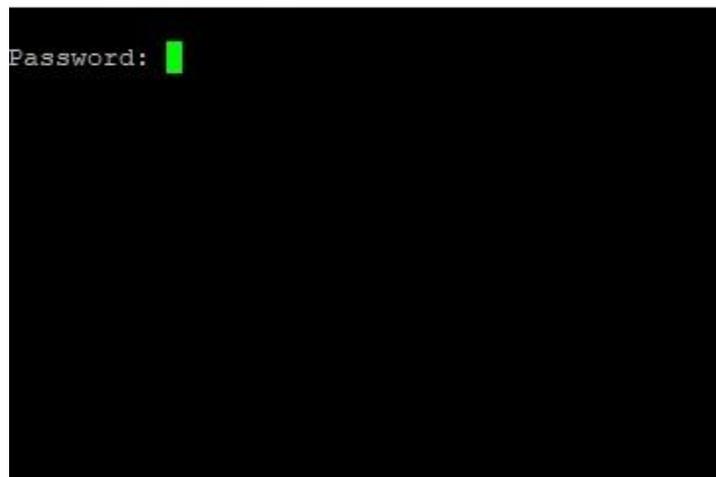


- d. Right-click on the Device Master in the lower pane and select 'Telnet / SSH Session'. Select the defaults of 'Telnet' and 'Port 23' and select 'OK'. See screenshot below.



- e. At the 'Password' prompt, depress the keyboard's 'Enter' key

192.168.13.13 - PuTTY



- f. At the >dm prompt, type 'timeout 45' and depress the 'Enter' key
- g. The response should say 'timeout 45 seconds'

192.168.13.10 - PuTTY

```
Password:
Control DeviceMaster ModelID: 5002280
NS-Link 11.11
Built: Tue Dec 6 12:36:18 CST 2016
IP Addr: 192.168.13.10, Mask: 255.255.0.0, Gateway: 192.168.0.253
MAC Addr: 00:c0:4e:15:20:66
dm> timeout 45
Timeout 45 seconds
dm>
```

8. Retry the firmware upload procedure according to documentation. Please see PortVision_DX_User_Guide.pdf, starting at page 99, for further details:
9. http://downloads.control.com/dev_mstr/portvision_dx/Docs/PortVision_DX_User_Guide.pdf
10. As a last resort, you can use TFTP to upload the firmware to the Device Master. Please see the tftp firmware update instructions cmtl v2.pdf instructions at this location - http://downloads.control.com/contribs/devicemaster/help_files/
11. Also note, Windows will often change ".cmtl" files to a ".zip" file as the .cmtl file is also compressed. If the firmware fails to upload, take a look at the extension of the file and ensure it is NOT .zip. You can configure Windows Explorer to show extensions of known file types to make this easier. The DeviceMaster expects to get a .cmtl extension. Do not try and individually upload the .bin or .nxbn files within the compressed directory. Doing so can "brick" the DeviceMaster.

