1. **Configure a TFTP server application and use it to recover a Digi device by reflashing the firmware.**

   Objective: Install and Configure a TFTP server to allow the recovery of a Digi device currently in the POST menu or after a failed firmware update .
   This procedure is valid for all the PortServer family devices.

   1.1 Software Requirements

   - Digi Device Discovery
   - PuTTy or any Terminal application
   - 3Com 3CDaemon or any other TFTP server application
   - Firmware image for the Digi device

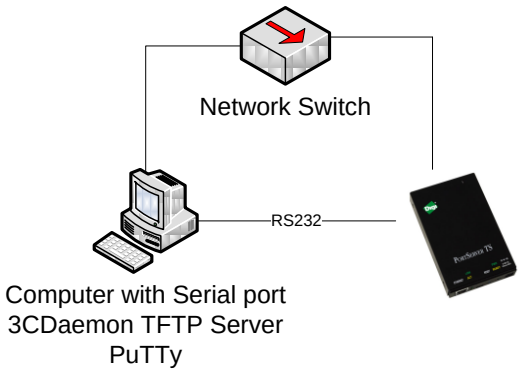
   1.2 Hardware Requirements

   - Any Digi device such as Portserver Family, Digi Connect Family.
   - Computer or Laptop with a serial port.
   - Serial Cable (Crossover, DB-9 to DB-9 or DB-9 to RJ-45 in the case of a PortServer)
   - In some case, tool to connect 2 jumper pins (Digi Connect Wan devices)

2. **Scenario**

In our example, we will recover a Digi PortServer TS using the 3CDaemon TFTP server and the latest firmware image downloaded from the Digi support web site.

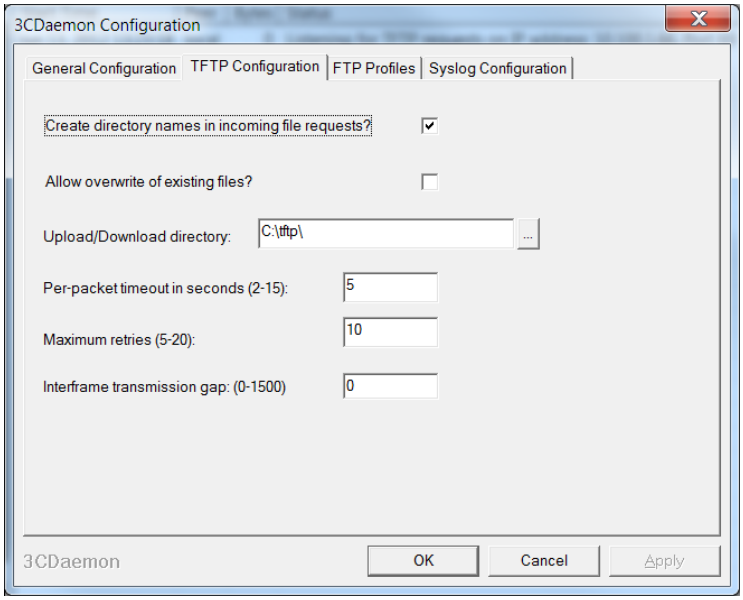
3. **Sample diagram.**



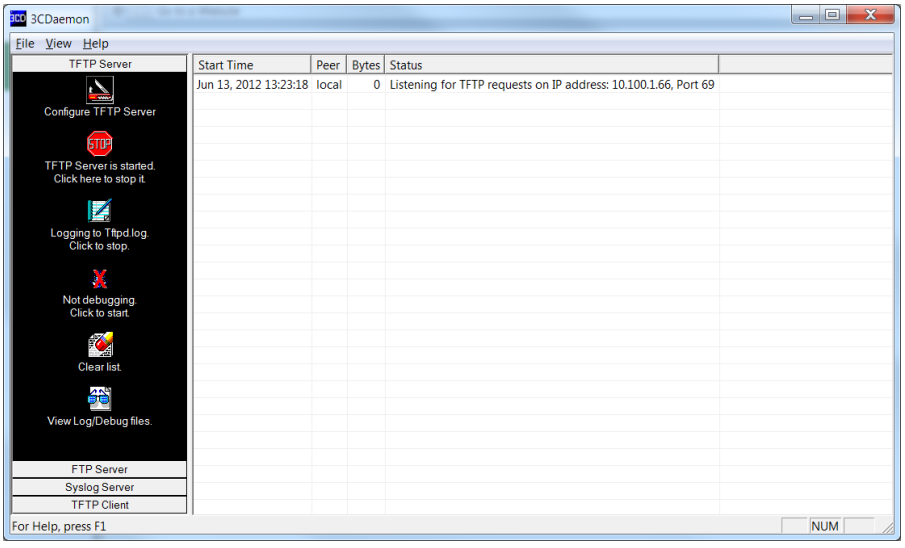
4. Step by step instructions

a. Configure and prepare the TFTP server

a) Go to the Digi Support web site and download the latest firmware for your device, in this case, the PortServer TS4 which file name is : 82000747_V1.bin (note the file name as it will be asked during the TFTP configuration of the device) Save the file to a directory on your computer : c:\tftp.
b) Start your TFTP server application, in this case 3CDaemon, click on "**Configure TFTP Server**"
c) In the TFTP Configuration tab, change the "**Upload/Download Directory**" to the one where the image file was saved : **c:\tftp** click **OK**.

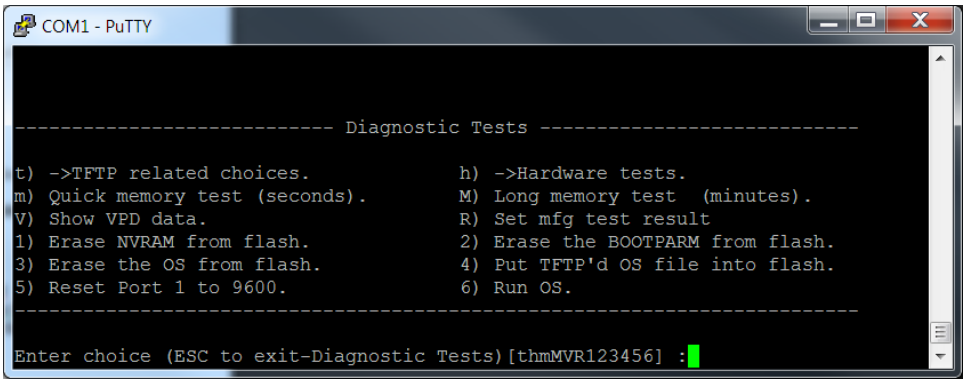


d) The 3CDaemon window should now show the status "**Listening for TFTP requests on IP address : xx.xx.xx.xx, port 69**" where xx.xx.xx.xx is the local IP address of the computer.



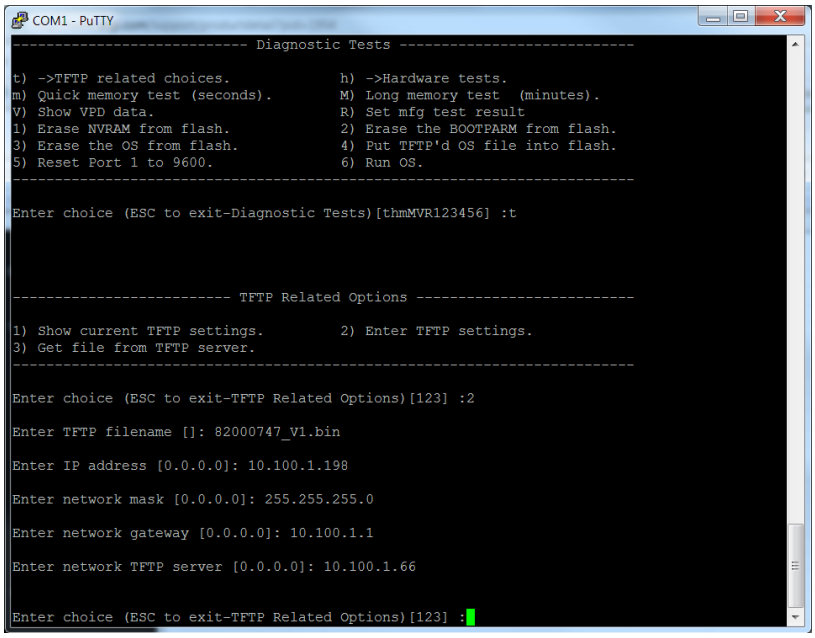
b. Setting the device in "Recovery mode" or in POST menu.

a) Connect the serial cable to the computer and to the PortServer's serial port **1**. Also connect the PortServer to the network switch.
b) Open PuTTy or any terminal application on your computer with the settings: **9600 8-N-1** and **NO** flow control.
c) To have the unit boot to the POST menu, it is required to do the following :
   1. Locate the reset button on the unit and press it
   2. While holding the reset button, power on the PortServer
   3. While still holding the reset button, press the letter V on the keyboard until the Diagnostic menu appears (POST), and release the reset button.

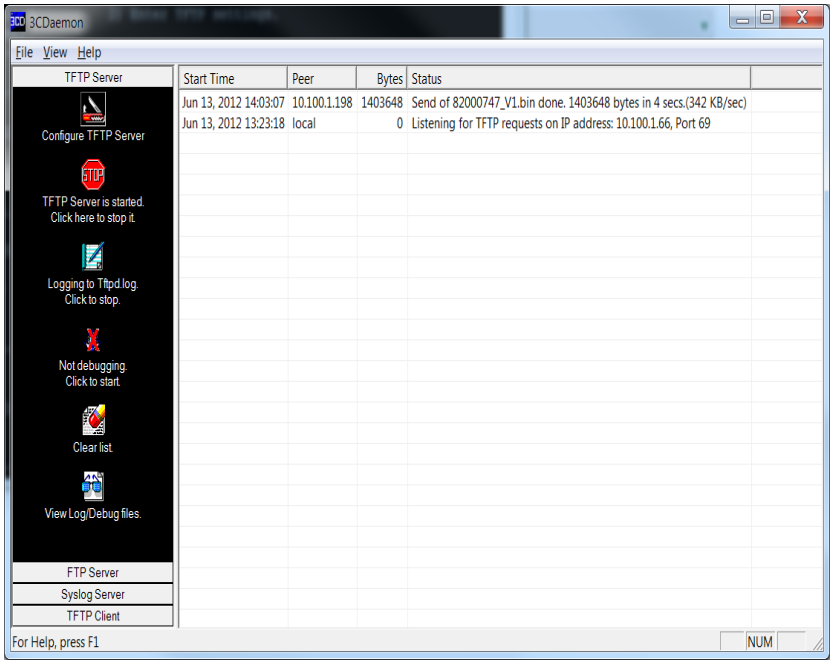


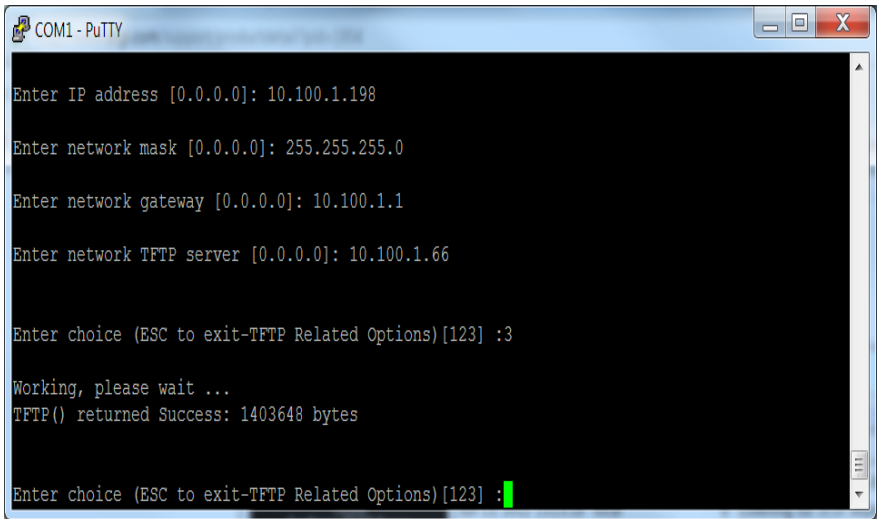
c. Configuring recovery settings and re-flashing the device.

a) Press **"T**" for TFTP menu
b) On the next screen, press 2 for "**TFTP settings**", the following information will be prompted :
   a. Enter TFTP filename : **82000747_V1.bin** (file previously downloaded)
   b. Enter IP address : **10.100.1.192** (this is the PortServer IP address to be used, which should be in the same IP range as the computer)
   c. Enter network mask : **255.255.255.0**
   d. Enter network gateway : **10.100.1.1** (not needed if not available)
   e. Enter network TFTP server : **10.100.1.66** (this is the computer IP address, the one showed in the 3CDaemon TFTP server window)
c) The menu will go back to the previous TFTP choices :



d) Press 3 to proceed with download of the firmware image file to the device and reflashing, at this time, the TFTP server window will show a connection with the peer IP address (PortServer) and the status. The TFTP server window will show "**Done**" if the file transfert completed successfully and the Diagnostic menu will report success :





e) Press the "**Escape**" key to leave the TFTP menu
f) Press "**6**" to Run the OS. The device will reboot and start the newly flashed image.
g) Start Digi Device Discovery to discover the unit and access the web interface for configuration.