

1. Digi ConnectPort X2 Smart Energy Troubleshooting How-To documentation

Objective: Update firmware of a ConnectPort X2 SE via command line, restore factory settings, configure iDigi server and verify connectivity then upgrade XBee module firmware via iDigi Manager Pro.

1.1 Software Requirements

- Digi Device Discovery
- PuTTy
- TFTP Server
- Firmware Update files

1.2 Hardware Requirements

- Digi ConnectPort X2 Smart Energy Gateway

Scenario

Customer needs factory restore a ConnectPort X2, upgrade the gateway and XBee firmware to the latest version and connect the unit back to iDigi.



2. Step by Step instructions

2.1 Upgrade Firmware via command line

1) Download the latest firmware update file for the ConnectPort X2 SE from the Digi.com website and save it on your computer, for example: c:\tftp

2) Start your TFTP Client, go to the options and select the folder location where you saved the firmware update file. For Example using 3CDaemon, click on "**Configure TFTP Server**" and specify the directory in the "**Upload/Download directory**" field.

3CD 3CDaemon			_ • ×
File View Help			
TFTP Server	Start Time	Peer Bytes Status	
Configure TFTP Server	Jun 17, 2011 13:37:26 Jun 17, 2011 13:37:26 3CDaemon	local 0 Listening for TFTP requests on IP address: 192.168.0.1, Port 69 local 0 Listening for TFTP requests on IP address: 10.100.1.69, Port 69 Configuration XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
	General Co	onfiguration TFTP Configuration FTP Profiles Syslog Configuration	
TFTP Server is started. Click here to stop it.	Create d	rectory names in incoming file requests?	
	Allow ov	erwrite of existing files?	
Logging to Tftpd.log. Click to stop.	Upload/[Jownload directory:	
*	Per-pack	et timeout in seconds (2-15): 5	
Not debugging. Click to start.	Maximum	retries (5-20): 10	
Clear list.	Interfram	e transmission gap: 0	
View Log/Debug files.			
	3CDaemi	OK Cancel Apply	
FTP Server			
Syslog Server			
TFTP Client			
For Help, press F1			NUM

3) Open a telnet application (such as PuTTY) to the ip address of the ConnectPort X2. In the command window, type the following :

boot load=10.100.1.10:X2firmware.bin

Syntax explanations:

boot load = (host IP):(filename) {downloads new firmware}

host: IP Address of the computer running the TFTP Server. filename: firmware file downloaded from the digi.com website.



4) Wait for a successful message, and then send the following command in order to first reboot the unit:

boot action=r

5) Once rebooted, factory reset the unit by sending the following command:

boot action=f

2.2 Configure connection to the iDigi Server

1) Open a telnet connection to the ConnectPort X2 and send the following command in order to configure the address of the iDigi server :

set mgmtconnection conntype=client svraddr1="en://my.idigi.com"

Syntax details:

set: enter configuration mode

mgmtconnection: configuration parameter used to specify iDigi server connection information

conntype: specify the connection type to the server, here is client, the ConnectPort X2 will initiate connection to the iDigi Server

svraddr1: this is the iDigi server address



2) Press enter and verify that the connection to the iDigi Server is established by typing :

who

3) an "iDigi TCP" connection should be listed like on the screenshot :

ß	10.100.1.99 - PuTTY			_ 0 ×
#>	who			
ID	From	То	Protocol	Sessions
23456#>	10.100.1.99:52646 10.100.1.69	67.202.39.63:3197 local shell	idigi tcp Python: main.py telnet Python thread Python thread Python thread	



2.2 Upgrade XBee Firmware via iDigi Manager Pro

1) Open a web browser and go to iDigi Manager pro (http://my.idigi.com) and log-in with your account

2) Go to "**Management** > **Devices**" and in the search field, type the last digit of your gateway's device ID

Devices								
Search: 3D70C6								
	MAC Address	Device ID	IP Address	Device Type				
	00409D:3D70C6	00409DFF-FF3D70C8	10.100.1.99	ConnectPort X2				

3) Verify the firmware version currently installed on your module by double clicking on your device and navigating to "**System Information** > **Gateway XBee**" and locate the "

state:zigbee_state/1/firmware_version: 0x3123 ", the second part of information is the firmware version, for example in this case : 0x3123

3)Right click on your device and select "**Firmware > Update Gateway XBee Radio Firmware**", click the browser button to select the desire .ebl file to update your module's firmware and click OK. When back to the previous window, click on the "**Update Firmware**"

5) The process will take a few minutes, once completed a successful message will appear.

6) Navigate back to the "**System Information** > **Gateway XBee**" section to verify that the firmware was upgraded.