Factory Software and Firmware Upgrade Procedure for Dell® PTM

User Manual

Rev 1.1

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Contents

List of Figures

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1 Introduction

This manual explains the use of the embedded software management of the Dell PTM. It explains how to connect to the PTM and to the CMC, and how to update the module's device SW and FW using a single ".pfw" file.

NOTE: This procedure requires bootloader version 1.0.034 or above.

2 Connecting to the PTM using an SSH Client

You will need an SSH client that supports ZModem file transfer. This Example uses Secure CommNet v2.35.

After you download this software, there is some initial configuration that is necessary before you start using the program.

Figure 1: Setup Menu
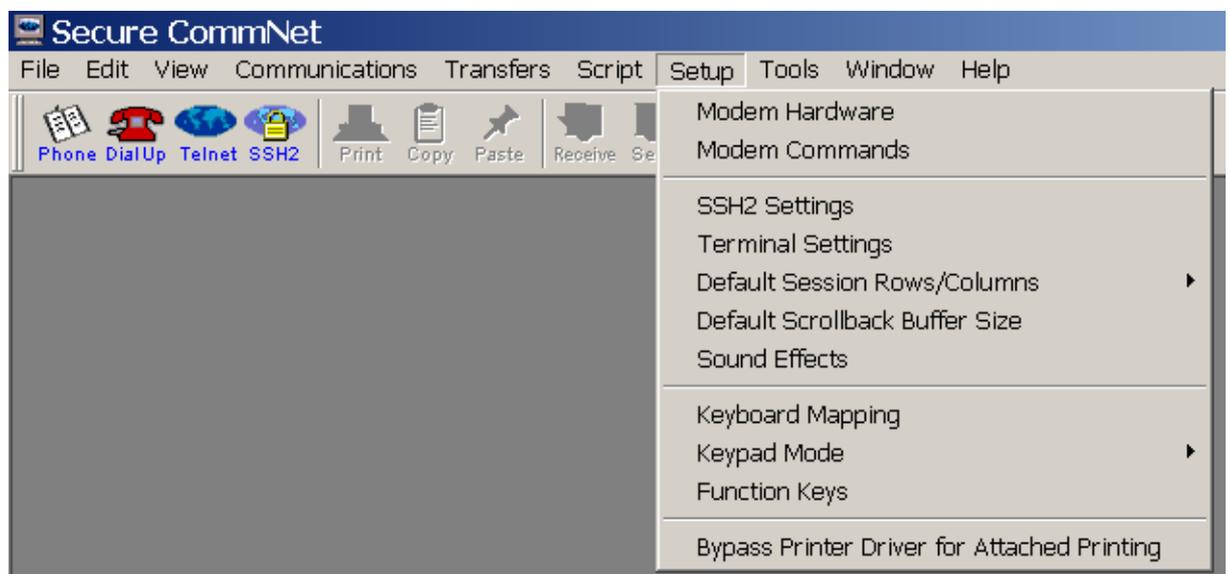
Step 1: Go to Setup => SSH2 Settings, and set the compression to none. See Figure 2Figure 2: Compression Setting.

Figure 2: Compression Setting
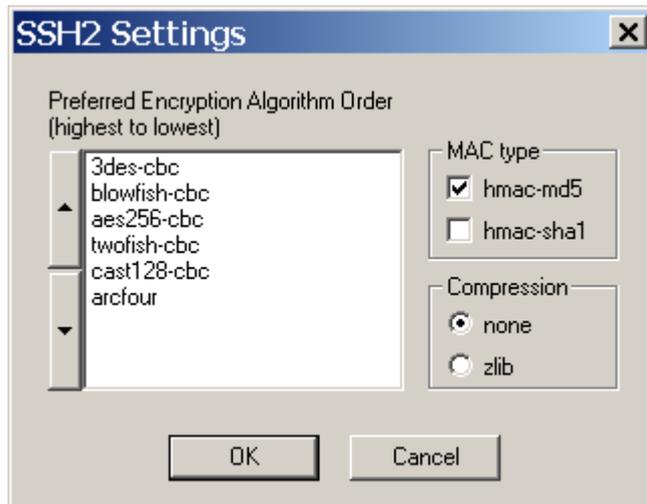
Step 2: Go to Setup => Terminal Settings and set Emulation type => SCOANSI/ANSI, and Backspace Character => Control-H.

Figure 3: Set Emulation Type and Backspace Character
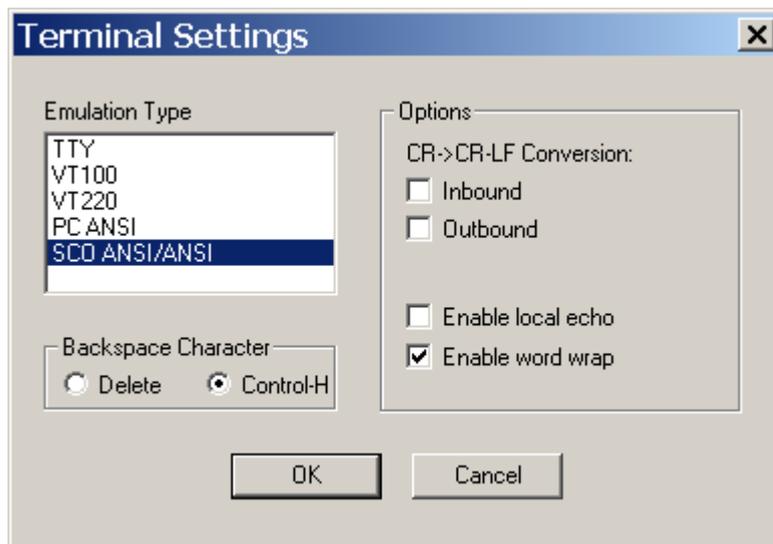
Step 3: Go to Communications =>Open SSH2 connection. This will open the SSH2 Connection dialog box.

Step 4: Fill in the hostname or IP address of the PTM, the user name and password. Then click OK to open the SSH connection. The prompt will be a $.

Step 5: List the devices in the chassis. Run the command:

```
$ racadm getioinfo
```

NOTE: The Pass-Through module is identified by 10GE PT KR.

Figure 4: getioinfo Output

3   Management CPU Software and Firmware Update

Step 1:   From the CMC command line, connect to the PTM command line interface (CLI). Enter:

> **NOTE:** At least 20 seconds must have passed since the last power cycle of the Pass-Through module before running the following connect command.
>
> ```
> $ connect switch-<n>
> ```
>
> Where <n> is the number of the switch -- 2 in our example.
>
> The prompt should change to #.

Step 2:   To start the upgrade process, run the command:

```
# copy image from-file
```

The system will now wait for a ".pfw" file to be transferred from the SSH client.

Step 3:   In your SSH client, initiate file transfer by pulling down the Transfers menu and clicking Send Files. Provide the path to the ".pfw" file and send it.

Figure 5: pfw File Transfer
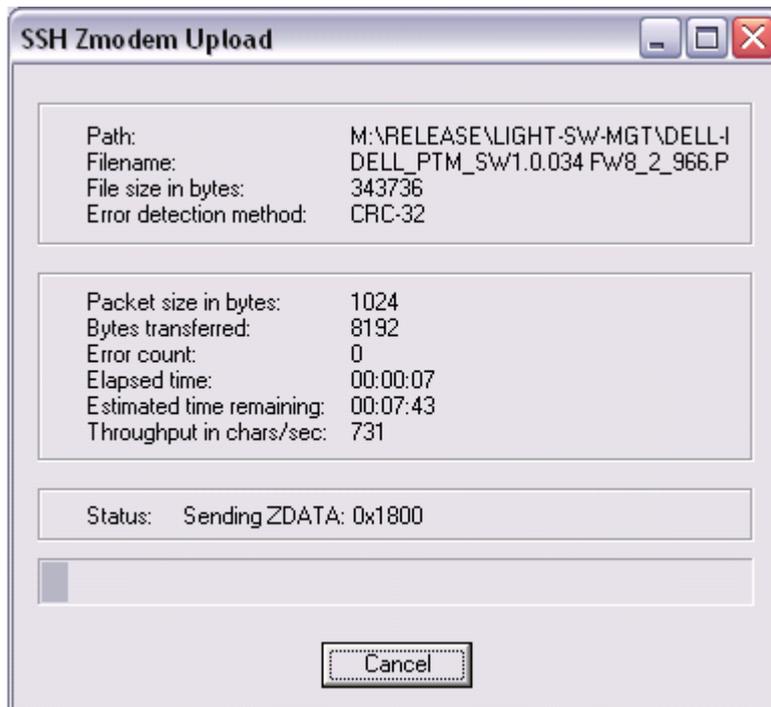
After loading the .pfw file, both the software and firmware will be programmed onto the Pass-Through module.

> **NOTE:** The update process takes a few minutes.
>
> At the end, the following message will be displayed at the prompt:
>
> # Received update image successfully. Changes will take effect after next reboot.

Step 4: Exit the PTM command line to the CMC command line. Run:

```
# exit
```

Step 5: Power cycle the PTM for the firmware to take effect. From the CMC command line type the following command:

```
$ racadm chassisaction -m switch-<n> powercycle
```

Step 6: Wait for 20 seconds, and then connect to the PTM. Run:

```
 $ connect switch-<n>
```

You will be able to view the progress of the SW/FW update.

Step 7: At the end of a successful update process, the following message will be displayed (the firmware version is only an example):

```
FW updated successfully!
Welcome to the Dell IOM Management Console firmware
1.0.034-201005141703-67
#
```

Step 8: Login to the PTM command line interface. Run:

```
# login admin
```

Step 9: To confirm that all Mellanox PhyX® chips have the same firmware version, run the command:

```
& show image ver
Software image version: 1.0.034-201005141703-67
Component #1 FW version: 8.2.966
Component #2 FW version: 8.2.966
Component #3 FW version: 8.2.966
&
```

> **NOTE:** The software and firmware versions are displayed as an example.