8260 Nways(*) Multiprotocol Switching Hub

Installation Instructions

for

Microcode Upgrade Field B/M

of Token-Ring Media Modules:

Dual Fiber Repeater operational v1.50,

Active Port-Switching operational v1.50,

Active Module-Switching operational v1.50,

and

Passive Module-Switching operational v1.50

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Softerm Custom Softronics, Inc.

Before Installation

Purpose

The purpose of this document is to provide the instructions to update the software microcode (flash EEPROM) of the 8260 Nways(*) Multiprotocol Switching Hub Token Ring Media Modules, using material provided in the field B/M P/N 02L2481.

Machines Affected

These Installation Instructions, part number P/N 02L2481, EC level E46611, apply to 8260 Nways(*) Multiprotocol Switching Hub:

Feature code 3010 (Token-Ring Dual Fiber Repeater Module),

Feature code 3018 (Token-Ring Active Port-Switching Module),

Feature code 3118 (Token-Ring Active Module-Switching Module),

Feature code 3020 (Token-Ring Passive Module).

Important Note

1. These instructions allow you to upgrade the 8260 Nways(*) Multiprotocol Switching Hub Token Ring Media Modules to the respective following Boot and Operational code levels:

Token-Ring Dual Fiber Repeater (T10R-F):

- Boot Code Version v1.00,
- Operational Code Version v1.50,

Token-Ring Active Port-Switching (T18PSA):

Boot Code Version v1.00,

- Operational Code Version v1.50,

Token-Ring Active Module-Switching (T18MSA):

- Boot Code Version v1.00,
- Operational Code Version v1.50,

Token-Ring Passive Module-Switching (T20MS):

- Boot Code Version v1.00,
- Operational Code Version v1.50.
- 2. Make certain all Token Ring Media Modules in the 8260 are running the Boot and Operational code versions listed above.

Requirements

For download Out-of-Band method.

Updating software microcode using the download Out-of-Band method requires a Work-station with emulated ASCII terminal and the support of XMODEM protocol for file transfer. The Workstation is connected to the console port of the Management Module either locally, using a null modem, or remotely.

ASCII terminal emulation and XMODEM protocol are offered by many products such as:

DOS platform

- FTTERM
- ProComm Plus for DOS
- ProComm(**) for DOS

Note: This product is the one IBM provides in its Universal Code Download Kit (UCDK), part number 80G3150. Refer to *Installation Instructions for IBM Universal Code Download Kit*, part number 80G3152.

Windows(**) Platform

- ProComm Plus for Windows
- Windows Terminal function

OS/2(*) Platform

Softerm Custom(**)

AIX(*) Platform

Asynchronous Terminal Emulation (ATE)

The above list is not exhaustive, and, whatever the product one may use, the emulated ASCII terminal line settings should be set to the factory defaults for the first connection:

Baud rate: 9600 bps

Parity: None
Data bits: 8
Stop bits: 1

The communication parameters should be setup as follows:

Terminal emulation: VT100 (preferred)

Duplex: Full

Flow Control: None

For download In-Band method.

The DMM provides a download In-Band feature that allows you to update your DMM or modules operational or boot EPROMs using TFTP (Trivial File Transfer Protocol).

You must check the following prerequisites prior to initiating the download:

Have a TFTP server on the network to perform download In-Bands.

Connect DMMs to be updated to the same network as the TFTP server.

Verify IP connectivity from the TFTP server to the DMM.

Important -

If your TFTP server is running in a DOS environment:

Check that the current directory of your PC is the one containing the binary file you want to download when you start the server.

If your TFTP server is running in an OS/2 environment:

If the TFTP server has been started in foreground session, check that you gave restricted access to the directory where the binary file resides (in opposition with the TFTP server started by INETD super server).

If your TFTP server is running in an **AIX** environment:

Ensure the binary file may be read by everyone. If a file 'tftpaccess.ctl' exists in /etc, be sure that at least one 'allow' line is provided to allow access to the path where the file resides.

For more on that, see below the details in the section Download In-Band.

Installation

Upgrade all the modules using one of the download methods available.

Distribution Diskette

There is one diskette (P/N 02L2483) provided with that Field B/M (P/N 02L2481), containing:

dfrv100.bt: Boot Software of the Token-Ring Dual Fiber Repeater (T10R-F).

dfrboot.cmd: Related ProComm DOS command file.

dfrv150.op: Operational Software of the Token-Ring Dual Fiber Repeater (T10R-F).

dfroper.cmd: Related ProComm DOS command file.

appv100.bt: Boot Software of the Token-Ring Active Port-Switching (T18PSA).

appboot.cmd: Related ProComm DOS command file.

appv150.op: Operational Software of the Token-Ring Active Port-Switching (T18PSA).

appoper.cmd: Related ProComm DOS command file.

apmv100.bt: Boot Software of the Token-Ring Active Module-Switching (T18MSA).

apmboot.cmd: Related ProComm DOS command file.

apmv150.op: Operational Software of the Token-Ring Active Module-Switching (T18MSA).

apmoper.cmd: Related ProComm DOS command file.

ppmv100.bt: Boot Software of the Token-Ring Passive Module-Switching (T20MS).

ppmboot.cmd: Related ProComm DOS command file.

ppmv150.op: Operational Software of the Token-Ring Passive Module-Switching (T20MS).

ppmoper.cmd: Related ProComm DOS command file.

install.doc: These Installation Instructions, in ASCII format.

Safety

Since this update is to be performed with machine powered on, review the **Safety Notices** delivered with the shipping group.

References

Installation Instructions for IBM Universal Code Download Kit, part number 80G3152.

8260 DMM Commands Guide, form number SA33-0275.

8260 DMM User's Guide, form number SA33-0259.

ProComm Reference Manual.

8260 Microcode Upgrade Field B/M Release Note, part number P/N 02L2482.

Upgrading the 8260 Nways(*) Multiprotocol Switching Hub Microcode Upgrade Field B/M

Download Out-of-Band

General Scenario

- 1. Establish the connection between your Workstation and the Management Module. Refer to the appropriate *Installation and Operations Guide* or *User's Guide*.
- 2. Start the ASCII Terminal Emulator.
- 3. Start the download Out-of-Band procedure that pertains to the Management Module the terminal is connected to.
- 4. When the Management Module is expecting the file to be sent, start the send file procedure

Scenario for UCDK Users

- 1. Establish the connection between your DOS station and the Management Module. Refer to the appropriate *Installation and Operations Guide* or *User's Guide*.
- 2. Start the ProComm software.
- 3. After the terminal screen is displayed, press the 'Alt-B' keys to specify the diskette unit where the distribution diskette will be mounted (in the 'PATH' input field).
- 4. Insert the IBM Distribution Diskette P/N 02L2483.
- 5. Start the download Out-of-Band procedure that pertains to the Management Module the terminal is connected to, i. e.:

Enter the command **download out_of_band module <slot.subslot> operational** to initiate the download of Operational code to the Token Ring module specified by slot and subslot information.

When the Management Module is expecting the file to be sent (you may see the 'Please initiate file transfer' prompt message):

- a. Press the 'Alt-F5' key.
- b. You must select the proper **cmd** file in order to initiate the download you need, e. g.:
 - The **dfrboot.cmd** file to initiate the download of the Boot Code Version v1.00 on the Token-Ring Dual Fiber Repeater (T10R-F).
 - The **dfroper.cmd** file to initiate the download of the Operational Code Version v1.50 on the Token-Ring Dual Fiber Repeater (T10R-F).
 - The appboot.cmd file to initiate the download of the Boot Code Version v1.00 on the Token-Ring Active Port-Switching (T18PSA).
 - The appoper.cmd file to initiate the download of the Operational Code Version v1.50 on the Token-Ring Active Port-Switching (T18PSA).
 - The apmboot.cmd file to initiate the download of the Boot Code Version v1.00 on the Token-Ring Active Module-Switching (T18MSA).
 - The apmoper.cmd file to initiate the download of the Operational Code Version v1.50 on the Token-Ring Active Module-Switching (T18MSA).
 - The ppmboot.cmd file to initiate the download of the Boot Code Version v1.00 on the Token-Ring Passive Module-Switching (T20MS).
 - The **ppmoper.cmd** file to initiate the download of the Operational Code Version v1.50 on the Token-Ring Passive Module-Switching (T20MS).
- c. File transfer progress will be indicated on the terminal until completion.

Download In-Band

The DMM provides a download In-Band feature that allows you to update 8260 modules using TFTP (Trivial File Transfer Protocol).

Use the following procedure to perform a download In-Band:

- 1. Verify that the TFTP server is able to PING the DMM.
- 2. Be sure to have running TFTP Daemon on your server.
- 3. Copy the Operational Code files on a directory of your TFTP server.
- 4. Configure the TFTP parameters in the DMM by issuing the following management commands as shown below:
 - a. > set tftp file_name < name of the file> (you may need a path)
 - b. > set tftp server_ip_address <ip address of your TFTP server>
 - c. > clear tftp result
 - d. > save tftp

Note: This can be accomplished either by TELNETing to the DMM, or by direct attachment to the DMM front panel serial port via a RS-232 connection.

- 5. Issue the **show tftp** command to verify the TFTP parameters previously set.
 - > show tftp
- 6. Issue the appropriate **download in band** command, as shown below, to begin the download:

download in_band module <slot.subslot> boot

to initiate the download of Boot code to the module specified by slot and subslot information.

download in_band module <slot.subslot> operational

to initiate the download of Operational code to the module specified by slot and subslot information.

7. Once the download process begins, do no press any keys or interfere with the process. You will have messages prompted to you.

IBM INSTALLATION INSTRUCTIONS 8. Verify, with a show module <slot>.all verbose command, that the code is now the updated version.

After Installation

Labelling

After the upgrade of the microcode, you may change from current P/Ns to the new P/Ns as follow:

New Part Number for Token-Ring Dual Fiber Repeater (T10R-F) is P/N 02L2452.

New Part Number for Token-Ring Active Port-Switching (T18PSA) is P/N 02L2480.

New Part Number for Token-Ring Active Module-Switching (T18MSA) is P/N 02L2478.

New Part Number for Token-Ring Passive Module-Switching (T20MS) is P/N 02L2479.

Publication Update

Insert the companion Release Note, part number P/N 02L2482, in your publications binder.

Parts Disposition

Not applicable.

End of Document