

iConverter[®]
Managed Fiber Media Converter
Product Family

iConverter Management:
Updating Modules via FTP

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UPDATING THE FIRMWARE OF THE MANAGEMENT MODULE VIA FTP

The firmware of a Management Module can be updated via FTP. Management Modules include the *iConverter* Network Management Module (NMM) and any *iConverter* module with integrated management, such as the 10/100M and GX/TM. To update the firmware of a Management Module using an FTP application, upload the new firmware into the FTP root directory of the management module. When the file transfer is complete, the module verifies the file, programs the flash memory and automatically restarts with the newly loaded firmware.

An example “ftp” script is shown below. Bold lettering indicates information to be entered.

```
> ftp 192.168.1.220 (module's IP address)
Connected to 192.168.1.220
220 FTP server ready
User (192.168.1.220:(none)): admin (user login name)
331 Password required
Password: <enter ftp password>
230 User logged in
ftp> send <location and filename of the firmware>
```

UPDATING THE FIRMWARE OF NON-MANAGEMENT MODULES VIA FTP:

An *iConverter* Management Module configured as the master management module in the chassis can update the firmware of the other *iConverter* modules with FLASH memory through the FTP server of the Management Module. This procedure requires an FTP application that supports the ‘quote’ command (the ability to send literal commands to the FTP server).

Log into the FTP server of the Management Module using the FTP application. Type the ‘quote’ command to input the chassis number and slot number of the installed *iConverter* module(s) selected for firmware update. The chassis and module selection command uses the following syntax:

```
quote chassis=<RANGE1> module=<RANGE2>
```

Where <RANGE1> defines the target chassis in one of the following methods:

- a) To select a single chassis managed by the Management Module, input the assigned chassis number of the chassis. Valid chassis number ranges from 1 to 19. e.g. `chassis=7`
- b) To select a range of chassis managed by the Management Module, input a range of chassis numbers. The range starts with the lowest chassis number in the range, follows by a hyphen “-” symbol and then ends with the highest chassis number in the range. e.g. `chassis=4-15`
- c) To select all the chassis managed by the Management Module, input ALL for the value.
e.g. `chassis=ALL`

Where <RANGE2> defines the target module(s) in one of the following methods:

- a) To select a single slot in the selected chassis, input the slot number of the module. Valid slot number ranges from 1 to 19. e.g. `module=7`

- b) To select a range of slots in the selected chassis, input a range of slot numbers. The range starts with the lowest slot number in the range, followed by a hyphen “-” symbol and then ends with the highest slot number in the range. e.g. `module=4-15`
- c) To select all the slots in the selected chassis, input ALL for the value. e.g. `module=ALL`.

Here are some examples of valid chassis and module selection command inputs:

```
quote chassis=1 module=3  
quote chassis=ALL module=2-19  
quote chassis=4-10 module=ALL
```

Inputting a valid chassis and module selection command will return the text response ‘Command Accepted’ from the FTP server. Note that some FTP applications do not display the text response from an FTP server by default.

Modules selected that are not compatible with the new firmware are automatically skipped during the update process.

After inputting the chassis and module selection command, type the ‘quote’ command to input the flashstatus command. The flashstatus command uses the following syntax:

```
quote flashstatus
```

After inputting the flashstatus command, the FTP server should return ‘Transfer the codefile now’ or return ‘Waiting for file to transfer’, indicating the Management Module is ready to receive the new firmware. If the FTP server does not return the expected replies, try inputting the flashstatus command again.

Make sure the local directory of the FTP application is where the firmware file is located. Type the ‘put’ command followed by the firmware file name (or use the ‘upload’ function in a graphical FTP application) to upload the firmware file from the local directory to the FTP server’s root directory. The following is an example of uploading the *iConverter* 10/100VT version 3.2 firmware file:

```
put 10-100VT.32
```

When the file transfer is complete, the Management Module automatically installs the new firmware on the *iConverter* 10/100VT module. An *iConverter* module being updated blinks its LEDs in a sequential strobe pattern.

When using the flashstatus command to check on the progress of the firmware update, the FTP server on the Management Module will return one of the following responses:

The response ‘File download in process’ is returned when the FTP server on the Management Module is receiving the firmware file from the FTP client or when the Management Module is installing the received firmware on the *iConverter* module. The response also reports the progress of the firmware installation of the current module.

The response ‘Module programmed successfully’ is returned when the Management Module has finished the firmware installation of the *iConverter* module, along with the status of each module.

The response ‘No programming in process’ is returned when no module has been selected by the

chassis and slot selection commands.

The response 'No modules to program in chassis' is returned when no modules in the selected range can be programmed with the file sent.

The status 'Slot# 100 Percent Complete' indicates the Management Module has successfully installed the firmware of the selected module in the slot number.

The status 'Slot# Module file type error' indicates the received firmware is incompatible with the selected module in the slot number and the module was skipped during the installation.

The status 'Slot# Module program failure' indicates the Management Module was not able to complete the installation of the firmware of the selected module in the slot number.

Once the new firmware installation is successfully completed, the selected *iConverter* modules will restart with the newly installed firmware.

Note that the firmware of *iConverter* Management Modules, such as the 10/100M and the NMM, can only be updated by directly accessing their own FTP server or through their own Serial Console Port.