



Overview

This document details the procedure for upgrading the firmware in the ipIO-8 Ethernet I/O Controller. The process uses File Transfer Protocol (FTP) to upload the firmware image.bin and boot sector rom.bin files to the ipIO-8.

Before You Begin

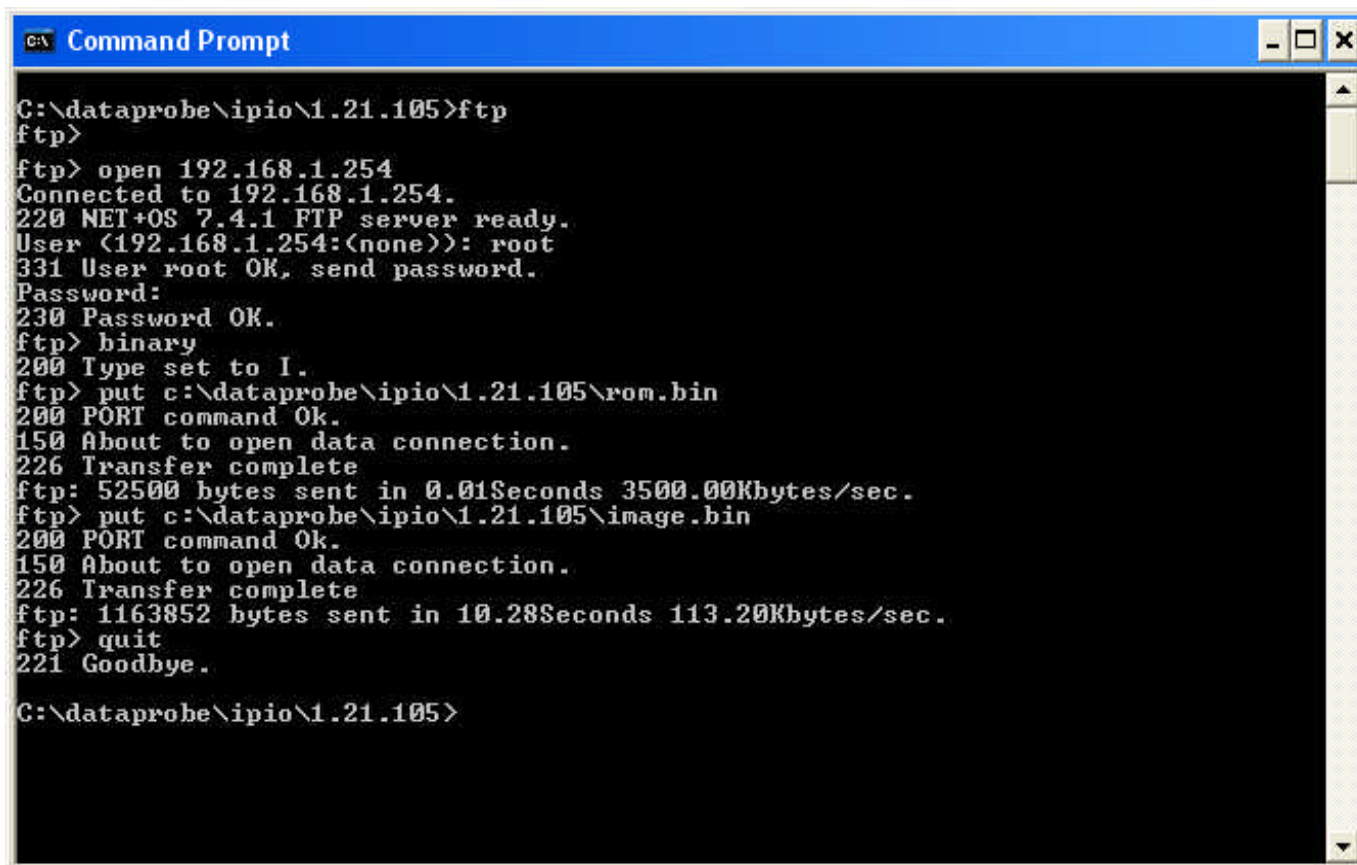
Download the desired image.bin and rom.bin files and place them in an easily accessible directory. All program files are named image.bin, so use the directory name provided, or individual directories with identifiable names. You will also need the IP address of the ipIO-8 to be upgraded.

Procedure

- 1) Open an FTP client. Windows users can use Start...Run...FTP to open the FTP client. Other users consult your FTP client documentation.
- 2) Connect to the IP address of the ipIO-8. Using the windows client:
FTP> Open xxx.xxx.xxx.xxx <enter>
Where xxx.xxx.xxx.xxx is the ip address of the ipIO-8
- 3) At the username prompt enter root <enter>
FTP> root <enter>
- 4) At the password prompt enter the administrator password <enter> * See note
FTP> admin<enter>
Note: If upgrading from versions 1.0.xx, the password is fixed at dataprobe
- 5) Change the transfer type to Binary
FTP> binary <enter>
- 6) Upload the file rom.bin with the put command
FTP> put c:\dataprobe\ipio\1.21.105\rom.bin <enter>
Where c:\dataprobe\ipio\1.21.105\ is the location of rom.bin
- 7) Upload the file image.bin with the put command
FTP> put c:\dataprobe\ipio\1.21.105\image.bin <enter>
Where c:\dataprobe\ipio\1.21.105\ is the location of image.bin
- 8) Quit the FTP Client to start the upgrade
FTP> quit<enter>
- 9) After the firmware is uploaded, the ipIO-8 will automatically restart. Wait for the blinking on the Activity LED (ACT) on the network connector to indicate that the ipIO-8 has restarted. This should take 60-90 seconds. **Do not lose power during the restart.**

REF: ipio_upgrade



A screenshot of a Windows Command Prompt window titled "C:\ Command Prompt". The window has a blue title bar and standard window controls (minimize, maximize, close) on the right. The main area is black with white text. The text shows a sequence of FTP commands and responses. The user starts at the prompt "C:\dataprobe\ipio\1.21.105>ftp", then enters "ftp>". Next, they enter "ftp> open 192.168.1.254", which results in a series of responses: "Connected to 192.168.1.254.", "220 NET+OS 7.4.1 FTP server ready.", "User (192.168.1.254:(none)): root", and "331 User root OK, send password.". The user then enters "Password:", followed by "230 Password OK.". Next, they enter "ftp> binary", resulting in "200 Type set to I.". Then, they enter "ftp> put c:\dataprobe\ipio\1.21.105\rom.bin", which results in "200 PORT command Ok.", "150 About to open data connection.", and "226 Transfer complete". The response "ftp: 52500 bytes sent in 0.01Seconds 3500.00Kbytes/sec." follows. The user then enters "ftp> put c:\dataprobe\ipio\1.21.105\image.bin", resulting in "200 PORT command Ok.", "150 About to open data connection.", "226 Transfer complete", and "ftp: 1163852 bytes sent in 10.28Seconds 113.20Kbytes/sec.". Finally, they enter "ftp> quit", which results in "221 Goodbye.". The prompt returns to "C:\dataprobe\ipio\1.21.105>".

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C:\dataprobe\ipio\1.21.105>ftp
ftp>
ftp> open 192.168.1.254
Connected to 192.168.1.254.
220 NET+OS 7.4.1 FTP server ready.
User (192.168.1.254:(none)): root
331 User root OK, send password.
Password:
230 Password OK.
ftp> binary
200 Type set to I.
ftp> put c:\dataprobe\ipio\1.21.105\rom.bin
200 PORT command Ok.
150 About to open data connection.
226 Transfer complete
ftp: 52500 bytes sent in 0.01Seconds 3500.00Kbytes/sec.
ftp> put c:\dataprobe\ipio\1.21.105\image.bin
200 PORT command Ok.
150 About to open data connection.
226 Transfer complete
ftp: 1163852 bytes sent in 10.28Seconds 113.20Kbytes/sec.
ftp> quit
221 Goodbye.

C:\dataprobe\ipio\1.21.105>
```