



Overview

This document details the procedure for upgrading the firmware in the Version 2 iPIO-2,8 or 16 Ethernet I/O Controller from the initial release version 2.00.082 to the 2.10.105 release.

The process uses File Transfer Protocol (FTP) to upload the firmware image.bin file to the iPIO unit.

Before You Begin

If you have an iPIO-2 or and iPIO-16, it can only be version 2 hardware.

If you have an iPIO-8, confirm your iPIO-8 unit is version 2 hardware by examining the serial number.

The 15 digit serial number will have the version number in position 9. As an example...

SN 1340070 020 xxxxx is an iPIO-8 that is version 2, and can be upgraded.

SN 1340070 009 xxxxx is an iPIO-8 that is **not** version 2 and can **not** be upgraded.

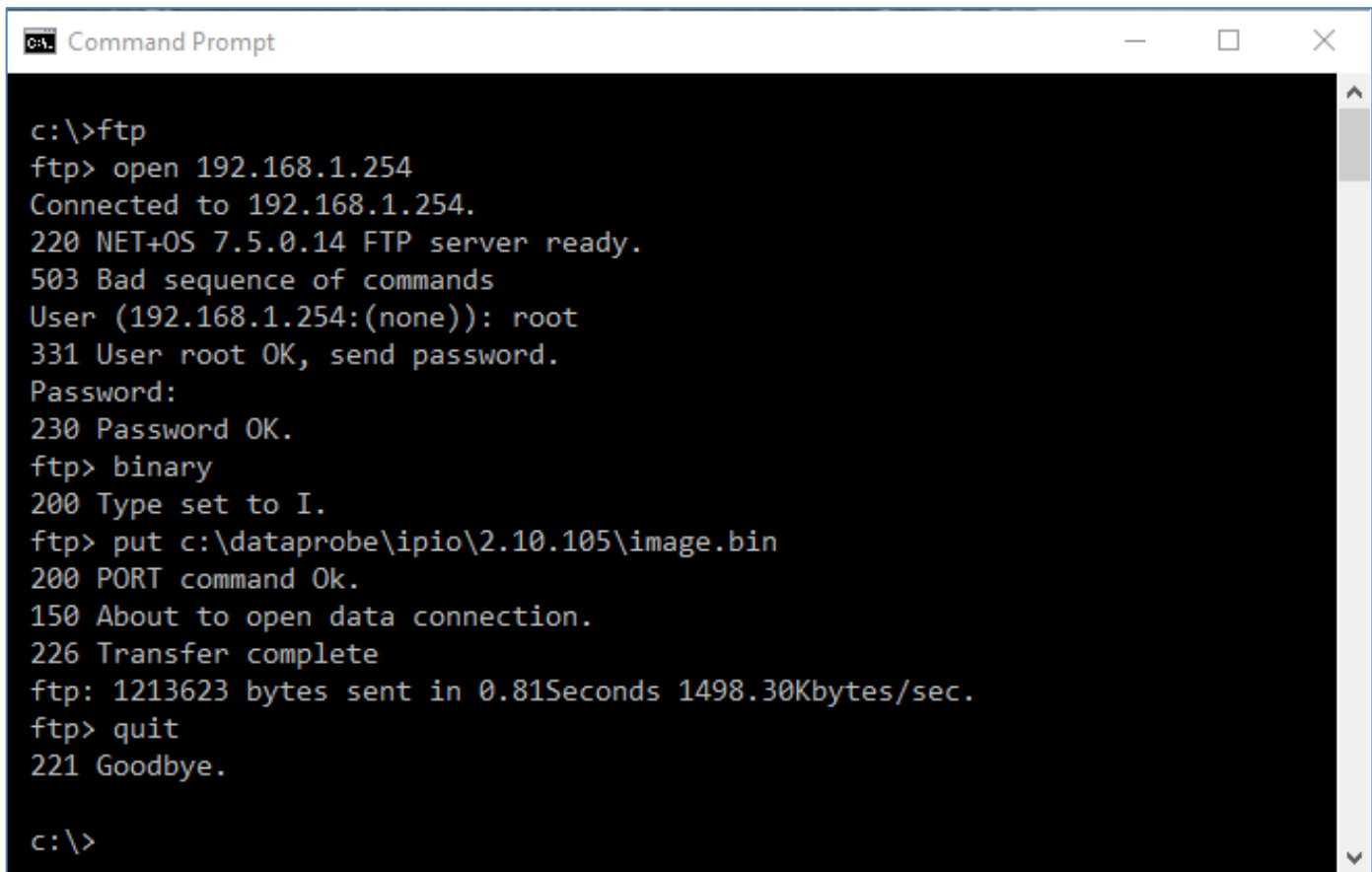
Download the 2.10.105 image.bin file and place it in an easily accessible directory. All program files must be named image.bin, so use the directory name provided, or individual directories with identifiable names. You will also need the IP address of the iPIO unit to be upgraded.

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. Using the windows client:
FTP> Open xxx.xxx.xxx.xxx <enter>
Where xxx.xxx.xxx.xxx is the ip address of the iPIO
- 3) At the username prompt enter root <enter>
FTP> root <enter>
- 4) At the password prompt enter the administrator password <enter>
FTP> admin<enter>
- 5) Change the transfer type to Binary
FTP> binary <enter>
- 6) Upload the file image.bin with the put command
FTP> put c:\dataprobe\ipio\2.10.105\image.bin <enter>
Where c:\dataprobe\ipio\2.10.105\ is the location of image.bin
- 7) Quit the FTP Client to start the upgrade
FTP> quit<enter>
Be patient, the image file is being loaded internally after quit has been executed.
- 8) After the firmware is loaded, the iPIO will automatically restart. Wait for the blinking on the Activity LED (ACT) on the network connector to indicate that the ipio has restarted. This should take 60-90 seconds. **Do not lose power during the restart.**

REF: ipio-2-8-16_upgrade_211015w



A screenshot of a Windows Command Prompt window titled "Command Prompt". The window has a black background with white text. The text shows an FTP session starting from the C:\ prompt. The user enters 'ftp', then 'open 192.168.1.254'. The server responds with 'Connected to 192.168.1.254.', '220 NET+OS 7.5.0.14 FTP server ready.', and '503 Bad sequence of commands'. The user then enters 'User (192.168.1.254:(none)): root', and the server responds with '331 User root OK, send password.'. The user enters 'Password:', and the server responds with '230 Password OK.'. The user then enters 'ftp> binary', and the server responds with '200 Type set to I.'. The user then enters 'ftp> put c:\dataprobe\ipio\2.10.105\image.bin', and the server responds with '200 PORT command Ok.', '150 About to open data connection.', and '226 Transfer complete'. The user then enters 'ftp> quit', and the server responds with 'ftp: 1213623 bytes sent in 0.81Seconds 1498.30Kbytes/sec.' and '221 Goodbye.'. The prompt returns to 'c:\>'.

```
c:\>ftp
ftp> open 192.168.1.254
Connected to 192.168.1.254.
220 NET+OS 7.5.0.14 FTP server ready.
503 Bad sequence of commands
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\2.10.105\image.bin
200 PORT command Ok.
150 About to open data connection.
226 Transfer complete
ftp: 1213623 bytes sent in 0.81Seconds 1498.30Kbytes/sec.
ftp> quit
221 Goodbye.

c:\>
```