

1.0. Introduction

Roving Networks adds FTP client capability to its standard firmware which enables the WiFly module to get and put files to the FTP server. Earlier, FTP was used by the WiFly modules to update firmware only. Now, with the release of firmware version 2.22, it is possible to get and put files to a FTP server in addition to upgrading the module firmware.

2.0. Setting up the WiFly module to connect to FTP server

For this document, we assume that the FTP server is correctly set up and configured. The WiFly module is configured to associate to the wireless network.

By default, the WiFly module is configured to get the latest firmware from the Roving Networks' FTP server. To configure the WiFly module to connect to your own FTP server, certain parameters need to be changed. These parameters are described below:

```
set ftp address <IP address> // sets the IP address of your FTP server. Default is Roving FTP server
set ftp dir <string> // sets the directory in the FTP server. Default is public
set ftp user <string> //sets the user name of FTP server
set ftp pass <string> //sets the pass phrase of the FTP server
save
reboot
```

The above commands set up the WiFly module to connect to the FTP server.

3.0. Creating and retrieving files form FTP server using the WiFly module

3.1. Creating files on FTP server

Once the module is configured to connect to the FTP server as described in section 2.0, it can create files on the FTP server and retrieve files from the FTP server.

To create a file on the FTP server, the command is:

```
ftp put <filename>
```

This will create a file on the FTP server with the filename and print the open string on the uart. By default the open string is *OPEN*. Once you see the *OPEN* on the uart, you can start writing data in to the file.

There are two options to close the file. A file can be closed either by sending the close string. By default the close string is *CLOS*. The second method to close the file is by using the FTP close timer (set ftp timer <value>). Once you finish writing to the file, this timer will start counting down and close the file when the timer counts down to zero. The timer is 1/8th of the actual value. For example, to set a timer of 5 seconds, the command is

```
set ftp timer 40
```

The open and close strings are configurable using the following commands:

set comm open <string>

set comm close <string>

3.2. Retrieving a file from FTP server

To retrieve a file from the FTP server issue the following command from the WiFly module:

ftp get <filename>

This will then print the open string on the uart and then the file will start transferring from the FTP server to the WiFly module's uart. Once the file transfer is complete, the WiFly module will print the close string indicating the file is successfully transferred and the FTP connection is closed.

4.0. Updating module firmware

To update the firmware on the WiFly module, it needs to be configured to connect to the Roving Networks ftp server (default configuration). When you use the ftp client mode to connect to your own ftp server, the default configurations are overwritten by your configurations. You will have to restore to the default ftp configurations to download the latest firmware.

The default configurations are:

FTP username = **roving**

FTP password = **Pass123**

FTP filename = **wifly-GSX.img**

FTP directory = **public** (this parameter cannot be modified)

FTP server = 208.109.78.34 (Roving default update server, port 21)