

# InHand OpenDevice Platform Quick Start

## Introduction

InHand OpenDevice is a basic platform based on InRouter900 industrial 4G router. Using Python, it provides a programmable environment for users to develop their applications easily.

## Customized Application Debugging

InHand OpenDevice platform provides debugging tools kit for customized applications. For example, based on Windows, users can use PuTTY to verify applications after login the router via WinSCP. The detailed operation steps are as follows:

### 1. Enable debug server

Under CLI configuration view, execute “python start local” and “python debug on”. After correctly configured, status page is shown below after debug server is correctly enabled:

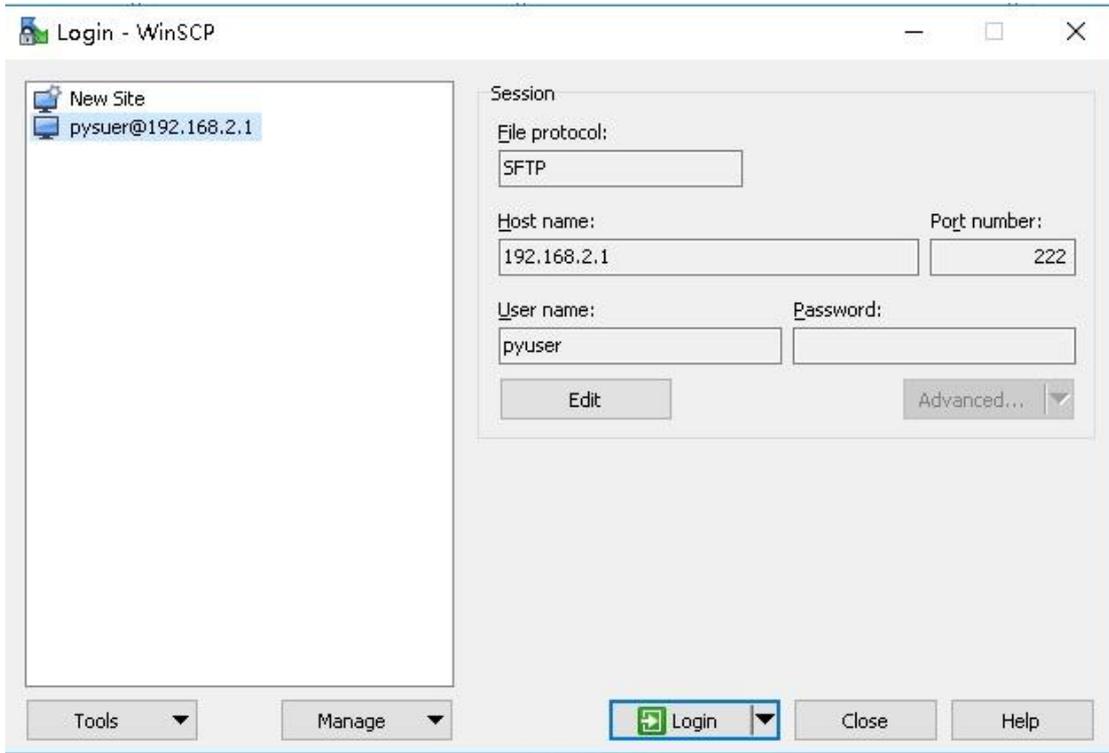


### 2. Connect to debug server

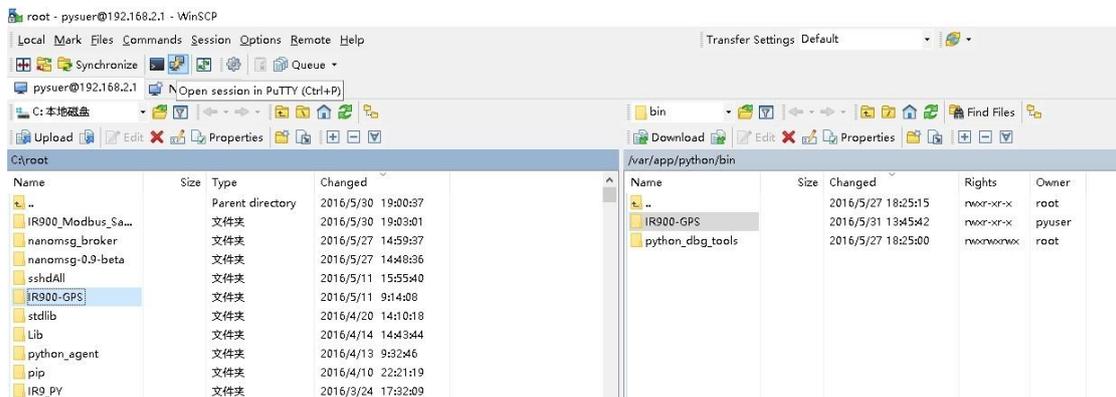
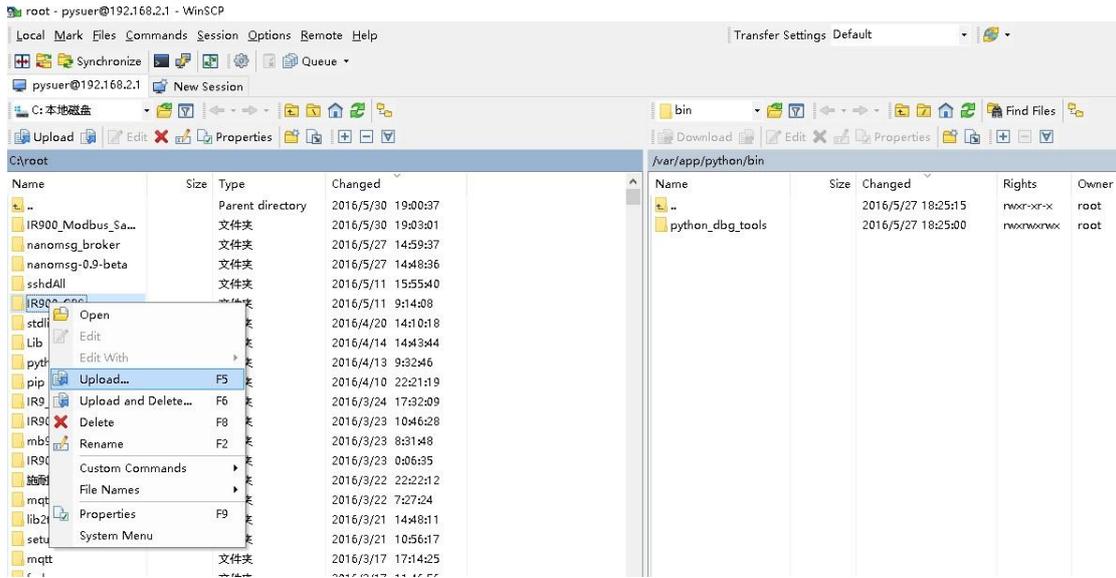
Under Windows development environment, it is recommended to connect [WinSCP](#) to

debugging server and synchronize Python application files and carry out application debugging by using PuTTY.

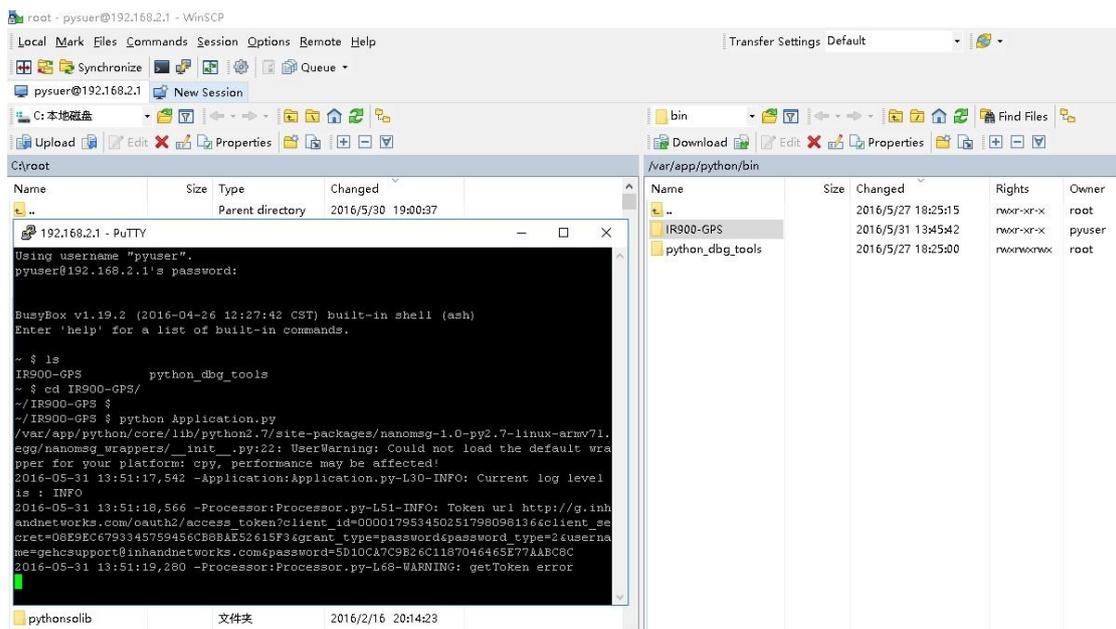
After open WinSCP, select file protocol SFTP and configure a host name being LAN address of router. In the example, address of the router is 192.168.2.1, with a configured port number of 222, user name of pyuser and password of 123456 as shown in the figure below:



After login is succeeded, select the Python application that will be uploaded, and press button **F5** or click right button to upload it. For example, upload IR900GPS directory, after file synchronization is succeeded, files uploaded on the equipment can be seen on right interface of WinSCP. Click *enable PuTTY* button in WinSCP to enable PuTTY. If PuTTY is not installed in default path, please specify PuTTY.exe path in WinSCP settings. Besides, WinSCP can also provide command line, which can be directly used by users. As shown in figure below:

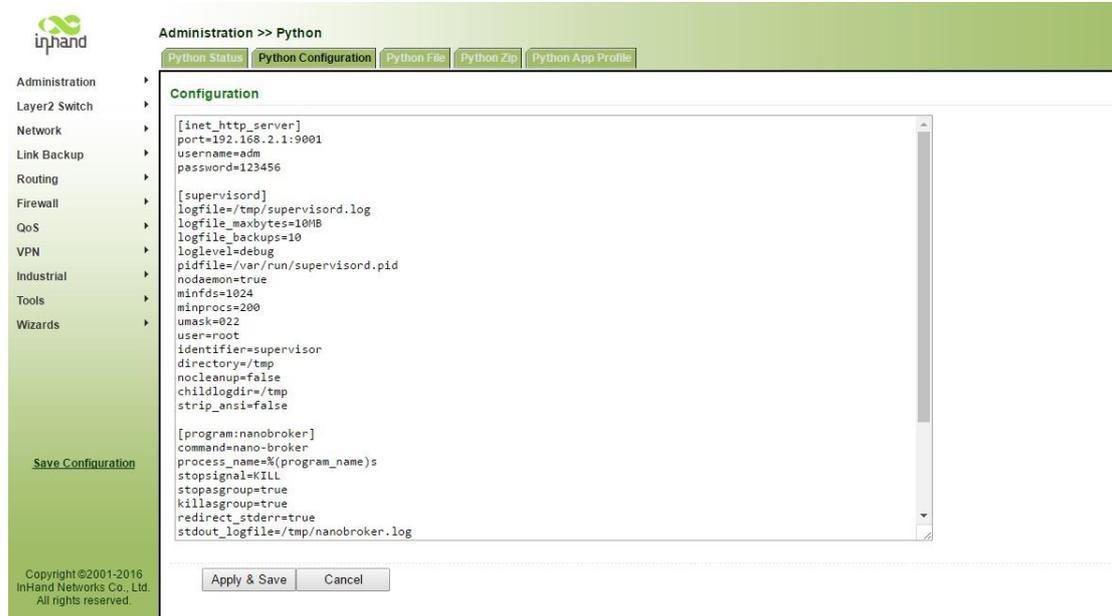


After IR900GPS directories synchronized correctly, launch PuTTY and input password **123456** and **ls** command. Python application can be debugged by executing `cd IR900GPS` to enter the directories and inputting `python Application.py`.



### 3. AppManager configuration

After customized application running correctly, users should add this application auto-start configuration to AppManager. New application auto-start configuration as shown below:



As shown in the figure above, at least two configurations are required. Application name will be the first, such as `[program:IR900GPS]`, the application name should be unique; and then, the next is application path, such as `command=python /var/app/python/bin/IR900GPS/Application.py`

### InHand Networks

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