

TecNote 1118 – Verify Purdue Data on Controllers

File Transfer Protocols In-Use

This tecnote will describe the transferring files from a Trafficware Linux based CPU or controller.

The agency will choose between the Secure Copy Protocol (**SCP**) or the File Transfer Protocol (**FTP**) based on the Linux engine board. **SCP** is used for Version 6 or later versions while **FTP** is used for Version 5 boards. In addition, **FTP** can be used with any 2070-1B or 2070-1E CPU board that utilizes the **OS9** operating system.

Features of Version 6 board

- Used in a 2070-1C CPU board, 980 ATC or a Commander
- with a blue capacitor on the board
- with Secure Digital (SD) card holder





Features of Version 5 board

- Used in a 2070-1C CPU board, 980 ATC or a Commander
- with Secure Digital (SD) card holder



Features of OS9 board

• Used in a 2070-1B or a 2070-1E CPU board

Install WinSCP FTP/SCP Application

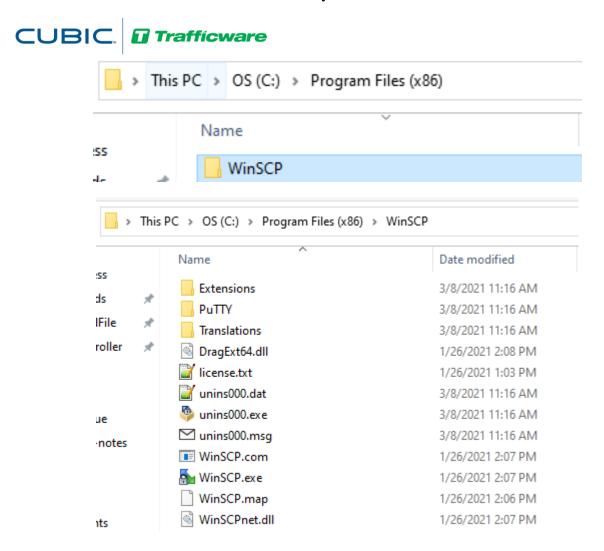
There are mainly two ways to access controller file folders: one is to use FTP/SCP applications, the other is to use windows Command Prompt Commands (CMD). This document introduces the first approach, and take WinSCP as one of the FTP/SCP application example.

Step 1. Get WinSCP Application

Google search WinSCP, get a download page, and download the application. One WinSCP download link is: https://winscp.net/eng/download.php

Step 2. Install WinSCP Local Folder

The program's executable files will be installed, by default, under the local C drive as shown below.



Step 3. Install WinSCP to Agency's Internal Network (if needed)

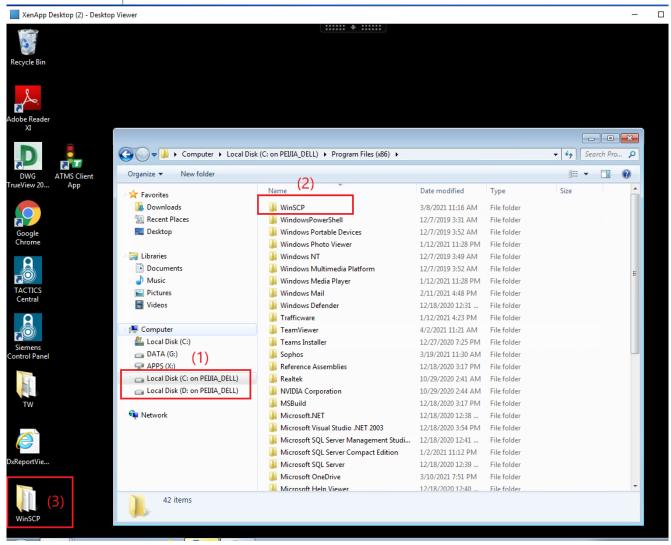
If internet access is enabled and it is applicable to install applications on the agency's platform, either server or applications, you can follow Step 1-2 on the agency's platform.

If internet access or installing an open-source application is inapplicable, please follow Step 4 below.

Step 4. Move WinSCP File Folder to Agency's Platform.

- (1) Local folder access should be enabled on the agency's platform for this step.
- (2) Locate or create the WinSCP executable folder on tje local folder via the agency's platform.
- (3) Copy the WinSCP executive folder to the agency's platform.





Use WinSCP to Connect Local Controller

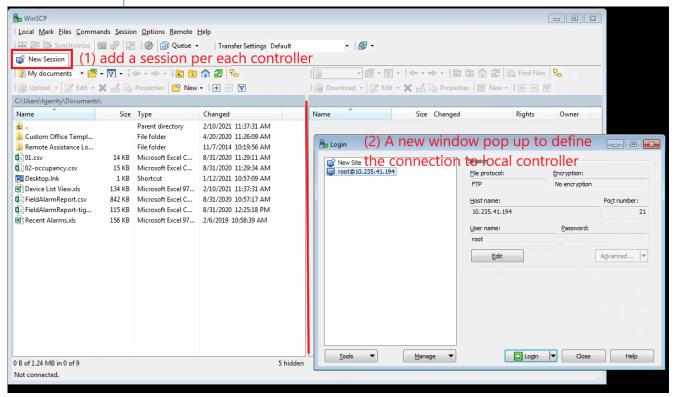
After Step 1-4, WinSCP is ready to be used on the agency's platform to access controller files. Make sure agency IT has turned on Port 22 for SCP protocol and Port #21 for FTP protocol prior to connect local controllers.

Step 5. Connect to Controllers

The WinSCP will automatically show file folder of the platform on the left side of its main window.

- (1) Add a new session to connect local controller. Each controller has its own session.
- (2) Then a new window will pop up to configure connections to a local controller.
- (3) Choose the right protocol type, host name, port number, user name and password (please check following sessions for **FTP** or **SCP** connections specifically.)
- (4) Click the Login button to connect the controller.

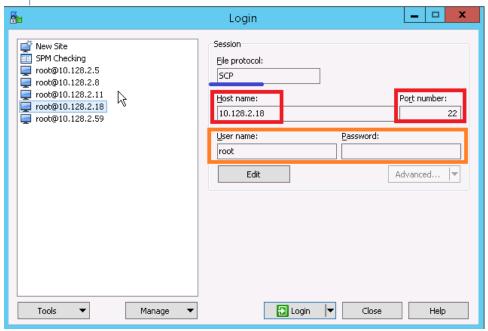
CUBIC. Trafficware



Connect Controllers via SCP on WinSCP

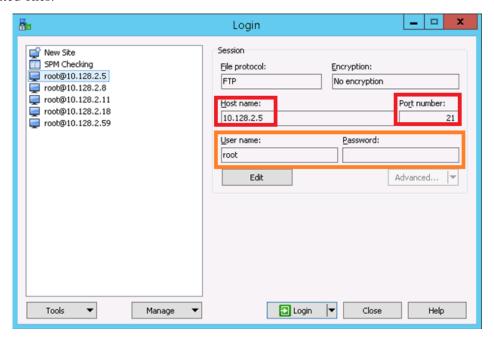
- File Protocol = SCP
- Host name = IP of local controller
- Port number = 22, make sure the agency has turned this port on
- Username and password: please contact the Trafficware Support Team or the agency if they have dedicated ones.





Connect Controllers via FTP on WinSCP

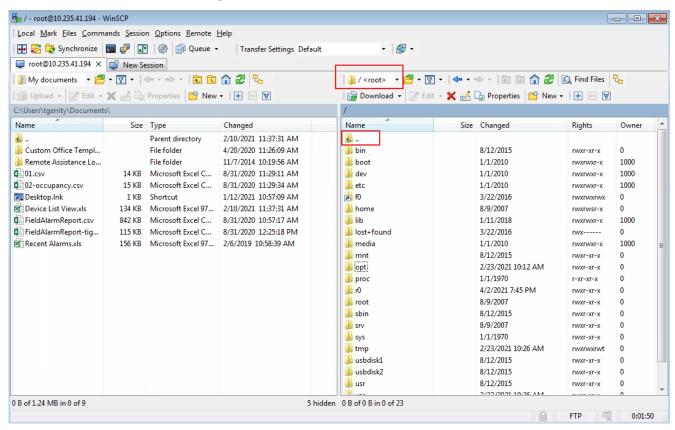
- File Protocol = FTP
- Host name = IP of local controller
- Port number = 21, make sure the agency has turned this port on
- Username and password: please contact the Trafficware Support Team or the agency if they have dedicated ones.





Access Purdue Files

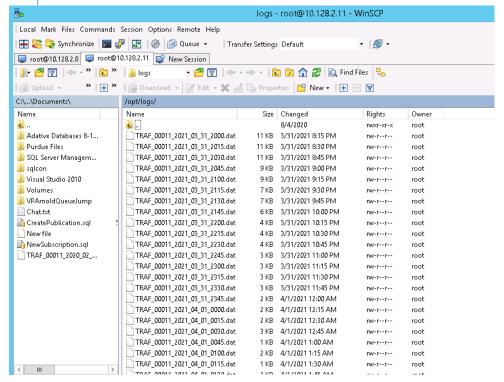
Once connected to the local controller, file folders of the local controller will show on the right side of WinSCP main window. If it does not show the main folders under root, either by clicking the "three dot" button or choose the root folder under the dropdown menu, as shown below.



Purdue files are installed under the following location in the controller:

- For Trafficware board: root/opt/logs
- For MaCain board: root/atc/logs





Summary

This document provides an easy way to transfer files from a controller to your PC or laptop by using WinSCP. Via Win SCP, the agency can gather High Resolution (Purdue) data files on controllers based on the **FTP** or **SCP** protocol respectively. Please refer to TechNote 1109 for further information on High Resolution (Purdue) data.