Remote Client Users Setup

There are multiple different clients that can be used and configured in Factory Studio. They are:

- Windows Rich Clients
- Windows Smart Clients
- Windows Web Clients
- HTML5 Clients
- IOS Clients

In this page we will describe what's required for the installation and configuration of each one of them.

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Windows Rich Clients

Rich clients are client applications that do a significant amount of processing on the client rather than on the server. You can deploy your application for use by Windows rich clients.

Windows rich client deployment	
Installation	Install FactoryStudio on the client computer.
How to start	Run the TRichClient.exe program. For an example of how to automatically start the client when a user logs in to Windows, see "Automatically Starting Windows Clients" in the previous section.
Execution	The project runs in its own window. It allows very strong user security, including the ability to disable Windows task-switch, according to the login on the running project. When running the TRichClientt.exe on 64-bit machines, the application runs in 64-bit native code. If you need to run the 32-bit version, for instance to ensure compatibility with legacy COM and Active-X components, you can use the TRichClient32.exe program.
Communication	Communicates with the server using the Windows Communication Foundation (WCF) (port configurable, default 3101).

Windows Smart Clients

Smart clients are client applications that behave like rich clients, but either run from the web or can be installed painlessly with a single click. You can deploy your application for use by Windows smart clients. The smart client runs like the rich client, that is, they work the same way, but the smart client uses ClickOnce™ installation. This technology lets you have the same functionality as the rich client, but without having to install FactoryStudio on your computer.

The first time you access the application, the system automatically downloads the necessary components to run the application. The next time you access the application, the system verifies if the local cache is the same version of the application that is on the server, and if necessary, updates the local cache before running the application. If the version is the same, the application starts immediately.

Windows smart client deployment	
Installation	No installation required. You just need .NET Framework 4.0 and Internet Explorer 8.0 or later on the client computer. The first time you start the application, it will automatically download the required components from the server. Every time the application starts, it verifies automatically if a new version is available on the server.
How to start	From Internet Explorer (or a shortcut) go to the URL: http://<ServerIPAddressorName>/fs-2018.1/ TSmartClient.application For an example of how to automatically start the client when a user logs in to Windows, see "Automatically Starting Windows Clients" in the previous section.
Execution	Runs exactly the same as the rich client. The functionality of the rich client and the smart client are the same; only the installation and activation methods are different.

Communication	Communicates with the server using WCF (port configurable, default 3101).

Windows Web Clients

A web client accesses the application using a web browser. You can deploy your application for use by Windows web clients.

Windows web client deployment	
Installation	No installation required. You just need .NET Framework 4.0 and Internet Explorer 8.0 or later on the client computer. The first time you start the application, will automatically download from the server the required components. Every time the application starts, it verifies automatically if a new version is available on the server.
How to start	From Internet Explorer (or a shortcut) go to the URL: http://<ServerIPAddressorName>/fs-2018.1 /TWebClient.Xbap For an example of how to automatically start the client when a user logs in to Windows, see "Automatically Starting Windows Clients" in the previous section.
Execution	Runs inside a web browser window using "Partial Trust" (Sandbox Security).
Communication	Communicates with the server using HTTP or HTTPS (port 80).

Automatically Starting Windows Clients

You can create a shortcut to the appropriate executable, depending on the client type, to automatically start the application on a Windows client. You can create the shortcut on the desktop or put it into the Startup folder, as described below.

For the web client, you can also configure the application as the home page in Internet Explorer.

To begin, Go to **Start > All Programs**, right-click the Startup folder, and select **Open** to open the Startup folder.

- In the Startup folder, right-click and select **New > Shortcut**.
- In the Create Shortcut window, paste into the field that displays.
- If you are not using redundancy, delete the redundancy part of the text.
- Do one of the following:
    - For a rich client—At the beginning of the command line, enter or paste the full path to the FactoryStudio installation folder and put quotes around it. It should look something like this: "C:\Program Files (x86)\Tatsoft\FactoryStudio\fs-2018.1\ TRichClient.exe" /ip1:<IP_address>
    - For a smart or web client—At the beginning of the command line, enter or paste the full path to the Internet Explorer installation folder and put quotes around it. It should look something like this: "C:\Program Files (x86)\Internet Explorer\iexplorer.exe" http:<IP_address>/fs-2018.1/TSmartClient.application "C:\Program Files (x86)\Internet Explorer\iexplorer.exe" http:<IP_address>/fs-2018.1/TWebClient.Xbap
- Click **Next**.
- Enter a name for the shortcut.
- Click **Finish**.

When you next restart the computer, the project will start automatically.

iOS Clients

You can deploy your application for use by iOS clients: iPad, iPhone, and iTouch. For other tablet devices, contact support.

iOS deployment	
Installation	Install the SCADA HMI Client app from the Apple Store.
How to start	Start the SCADA HMI Client app and follow the initial setup options.
Execution	On iOS, it runs natively, thus providing higher performance, enhanced security, and access to native graphical components, compared to other applications using Terminal Client, Remote Desktop, or HTML web.
Communication	Communicates with the server by calling a web service using port 80. The server must be on the same VPN or local network as the iOS device, or it can be a public IP address, as long as HTTP access is enabled.

To deploy your project on an iOS device:

- From your iOS device, tap the App Store icon. You can also go to the Apple App Store from iTunes.
- Search for and install the SCADA HMI Client app.
- Start the SCADA HMI Client app.
- Enter the following information:

Field	Description
Host Server	IP address or name of the project server.
Port	Port 80.
Polling	Defines the refresh rate between the client and the server, expressed in quarters of a second. The default value of 1, means the client gets new data from the server every 250 ms. When connecting to servers located on the Internet or low bandwidth networks, that value should be increased. For more information, refer to the help for the app.
User	Project user name as configured in the project. The default is guest.
Password	Project password associated with the user name.
Project	Project name on the remote project server.

- Tap **Login**. The graphics and displays download, then the application starts. The application startup the first time may take a little longer than subsequent startups.