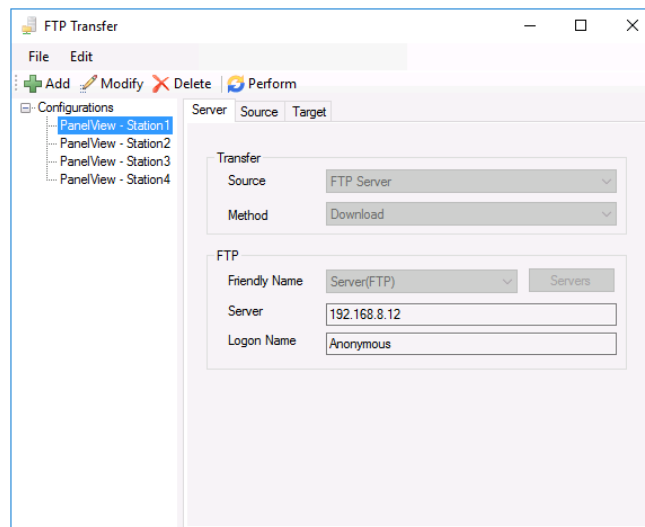# FTP Transfer

Overview

The **FTP Transfer** application is used to transfer files to/from an FTP or SFTP server automatically. A common use of this application is to download data from instrumentation such as touchscreen HMI panels.

The application supports secure, encrypted connection for servers that require it. If a server is maintaining a folder structure, then the application can mirror this on the local system and maintain it automatically.

The main window of the application is opened from the Project Explorer on the right-side **Tools** tab in the **Distribute** section by selecting **FTP Transfer**.

The display consists of menu options, a left panel of configurations and a right panel showing the content of the selected configuration.

To edit an existing configuration, highlight it on the list and click **Modify**. If the configuration name is edited, then the settings will be saved as a new configuration with the edited name.

To delete an existing configuration, highlight it on the list and click **Delete**.

A configuration requires information on the server. This information is setup frem the **Edit**, **Server** menu option.
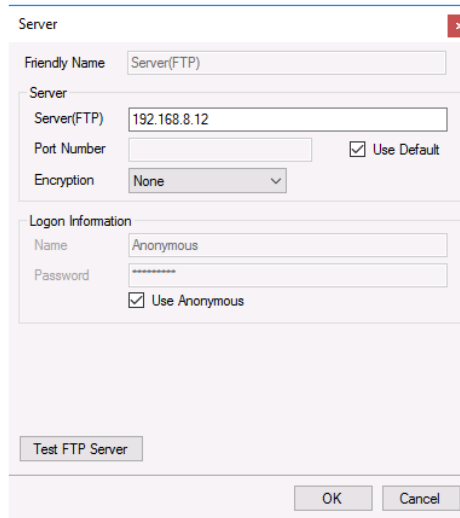
The steps required to implement **FTP Transfer** are:
- Define the Server
- Design a Configuration
- Deploy a Configuration for automatic file transfer.

Define Server

Select **Edit, Server** to show a grid of the servers currently setup. The server in the top row is treated as the default server when designing configurations.

If a new server is required, click the pushbutton (…) in the **Friendly Name** column.

Enter a **Friendly Name** to identify the server. The **Server (FTP)** parameter is the path to the FTP server that will be used along with the **Port Number**. If the FTP server uses the default port (21 for FTP or 22 for SFTP), check **Use Default** otherwise specify the port number.
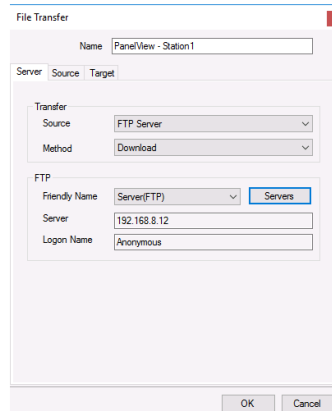
The **Logon Information** may or may not be required depending on the FTP server. Enter a **Name** and the **Password** associated with the **Name** specified. Note, for an SFTP server, **Login Information** is required.

If the server is an SFTP sever, set the **Encryption** to *SFTP*. Otherwise, set the **Encryption** as *None* or the type required by the FTP server.

A test of the settings specified is made by clicking the **Test FTP Server**.

Design a Configuration

Configurations are designed or modified by selecting the menu option **Add** or **Modify**. The **Add** option is always enabled whereas the **Modify** option is enabled when a configuration is selected.

The dialog consists of three tabs **Server** (FTP server), **Source** (source of the files) and **Target** (destination folder).

Enter a **Name** for the configuration to reflect its settings e.g., *PanelView Plus* or *Red Lion controller*.
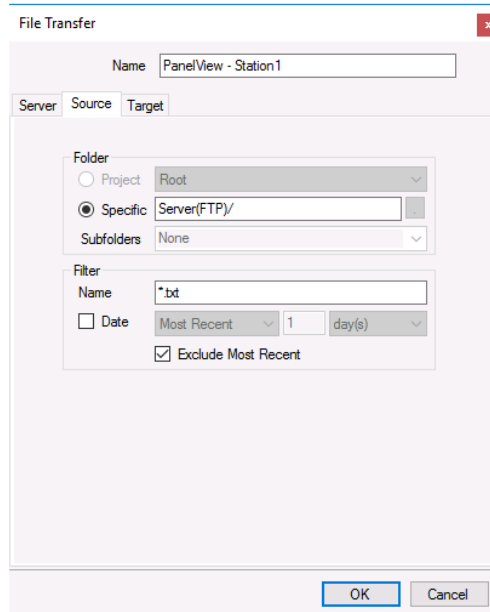
Server

Select the **Transfer Source**. This can either be **FTP Server** or **Local Network** where the source files are stored. Set **Transfer Method** to *Upload* to transfer to the **Source** or *Download* to transfer from the **Source**.

The **FTP Server** is defaulted to the first server defined when the servers were setup (see **Define Server**). If a different server is required, select it from the drop-down list. A new server can be defined by clicking the **Servers** button.

Source

The **Source** determines which files are transferred.

The **Folder** can be **Project** or **Specific**.

Project folder (*Root, Excel, Web or PDF*) indicates the files are in the a project folder. This option is only selectable if the **Method** on the **Server** tab is *Upload*. **Subfolders** of a project folder can be manually added in the text field or selected from the drop-down list.

Example: To upload all the Excel reports generated from the template *DailyFlow* set **Project** to Excel and **SubFolder** to *DailyFlow*.

Specific folder indicates that the files are in a specific folder on the system.

If **Method** is *Upload*, this is a folder on the local machine. A browse pushbutton […] is provided to browse the available folders on the system.

If **Method** is *Download*, this is a folder on the FTP server. This setting may be left blank if the files are on the root of the FTP Server. If subfolder needs to be specified, each can be separated by "/" (FTP) or "\" (local network), e.g., *PanelViewStation/Alarms*.

The **Filter** determines which files from the **Folder** will be considered. The filter **Name** can be a combination of hard coded text, wildcards ("*****" for multiple characters) or "**?**" (for a single character). Files that begin with an underscore ("**_**") are never considered.

Example: To attach all the *Excel* reports that start with *Flow*, set the **Filter Name** to *Flow*.xls**.

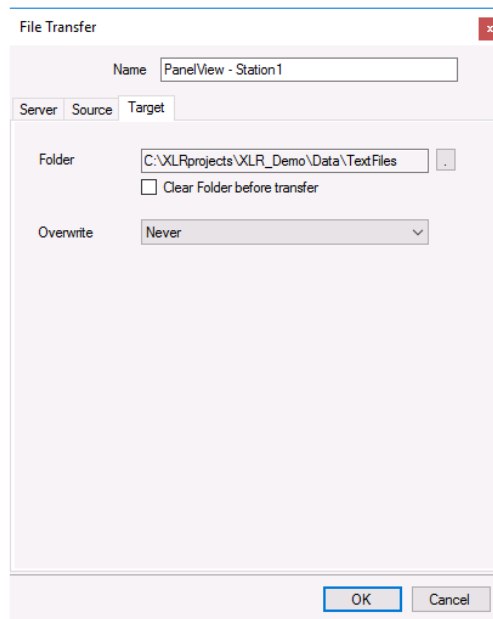Check **Date** to filter the files on the file modified date. This setting can be:
- **Most Recent**
  The most recent file is considered.
- **Within**
  All files *newer* than what is specified is considered.
- **Outside**
  All files *older* than what is specified is considered.

Example: To transfer all reports generated within the last week, set the date filter to *Within 1 week(s)*. To transfer all reports generated more than 3 days ago, set the date filter to *Outside 3 day(s)*.

The most recent file satisfying the **Name** and **Date** settings can be excluded by checking **Exclude Most Recent**.

Target
The **Target** indicates where the files are transferred.

If **Method** is *Download*, **Folder** is on the local machine. A browse pushbutton […] is provided to browse the available folders on the system. This setting cannot be left empty.

If **Method** is *Upload*, **Folder** is on the **Source** on the **Server** tab. If a subfolder needs to be specified, each folder should be separated by "/" (FTP) or "\" (local network), e.g., *PanelViewStation/Alarms*.

All the files in the **Target Folder** that match the **Filter Name** on the **Source** tab are deleted before the file transfer occurs by checking **Clear Folder before transfer**.

The **Overwrite** setting indicates if files in the **Target Folder** are overwritten. Choices are:
- **Never**
  Overwrite is disabled.

- **Always**

  Overwrite is always enabled
- **Size Change**

  Overwrite is always enabled if the source file size differs from the target.

Validate

Any configuration can be validated by highlighting it from the main window and selecting **Perform**. This will run the configuration and display the results.

Deploy a Configuration

A configuration is deployed for automatic processing on time or process events from the **Scheduler** using either the *FTP a Workbook* or *FTP by a Configuration*.

Configurations can also be deployed from third party applications such as HMI screens, VBA macros, and the windows command line. The syntax to execute a configuration is as follows:

Install\bin\ xlrFTP.exe /f Configuration

Where *Install* is the full path to the installation and *Configuration* is the name of the configuration file.

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