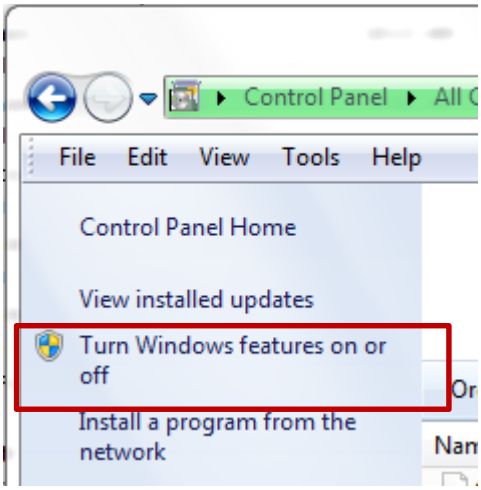
Application Notes
FTP Client

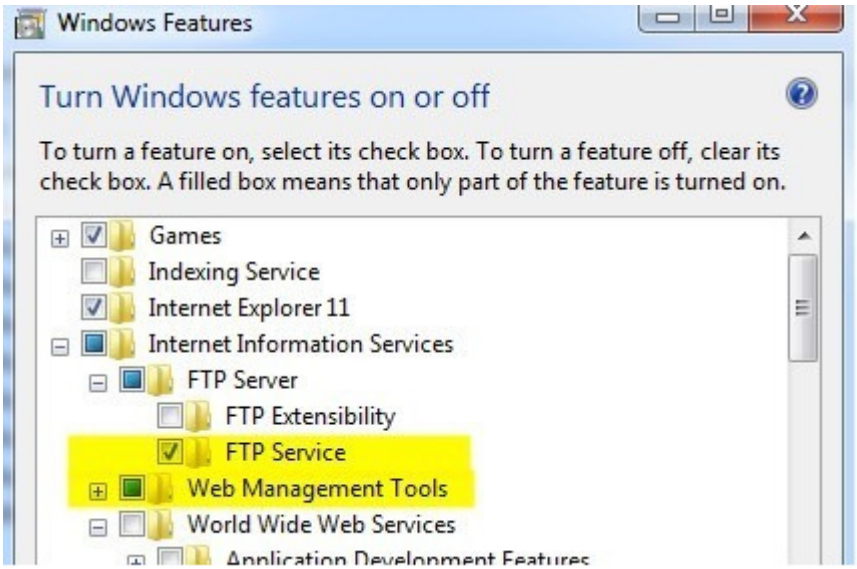
The IDEC FTP function allows users to transfer the files, such as Alarm Log, Data Log, Operation Log, Screenshots, Recipe, ZNV, ZLD, Movie file and, Sound file between the HMIs or the HMI and a PC without having to load the IDEC HMI programming software on the PC.
In this application note, the HMI is configured as a FTP Client and a PC is configured as a FTP Server.

How to Setup an FTP Server in Windows using IIS

For Windows 7 and higher, click on **Start**, **Control Panel**, **Programs and Features** and then click on **Turn Windows features on or off**.



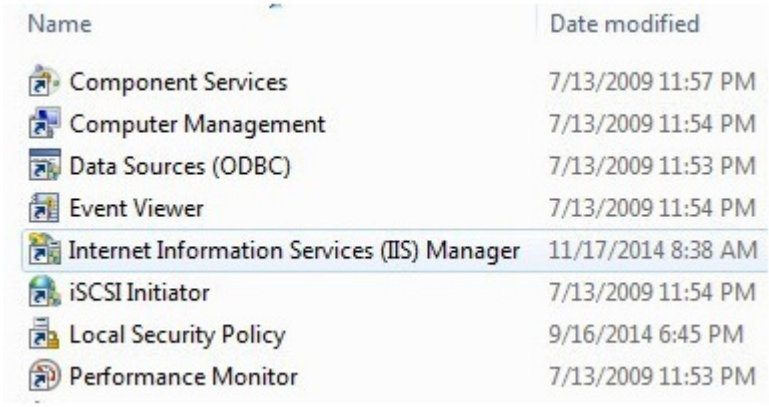
Click on the box next to Internet Information Services and FTP Server. You also need to make sure you check the Web Management Tools box to manage IIS from Administrative Tools later on. For FTP, you need to check the FTP Service box.



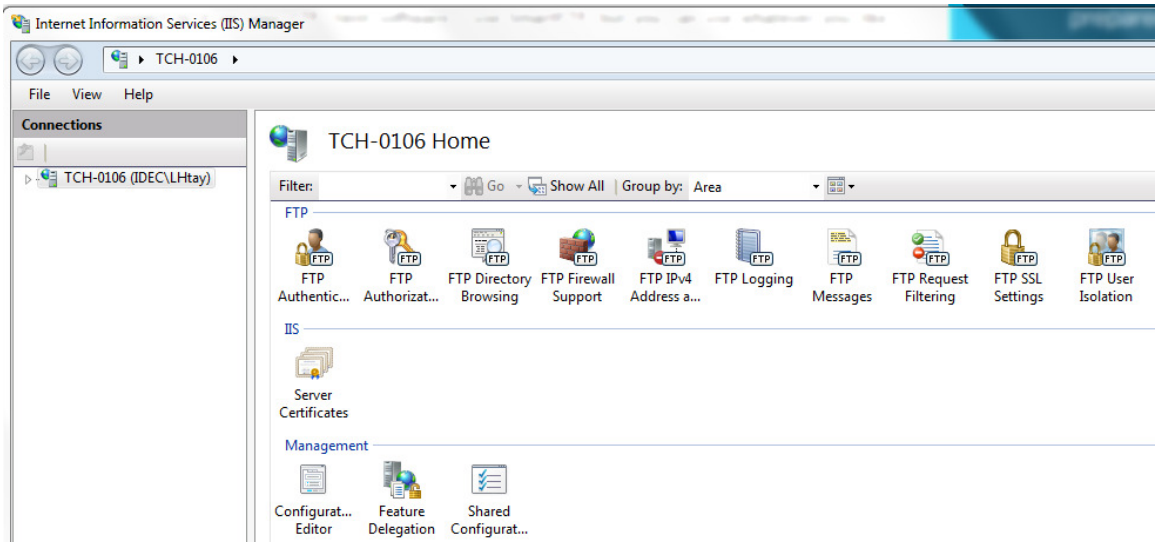
Click OK and then click Next. Windows will install the necessary IIS files along with the FTP service.

Setup and configure IIS for FTP

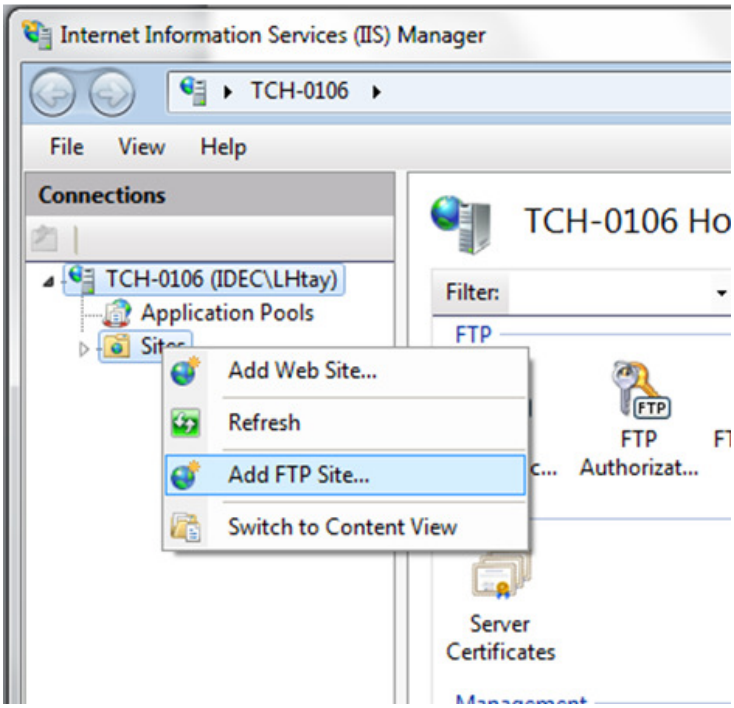
Go to **Start**, then **Control Panel** and click on **Administrative Tools**. You should now see an icon for **Internet Information Services**.



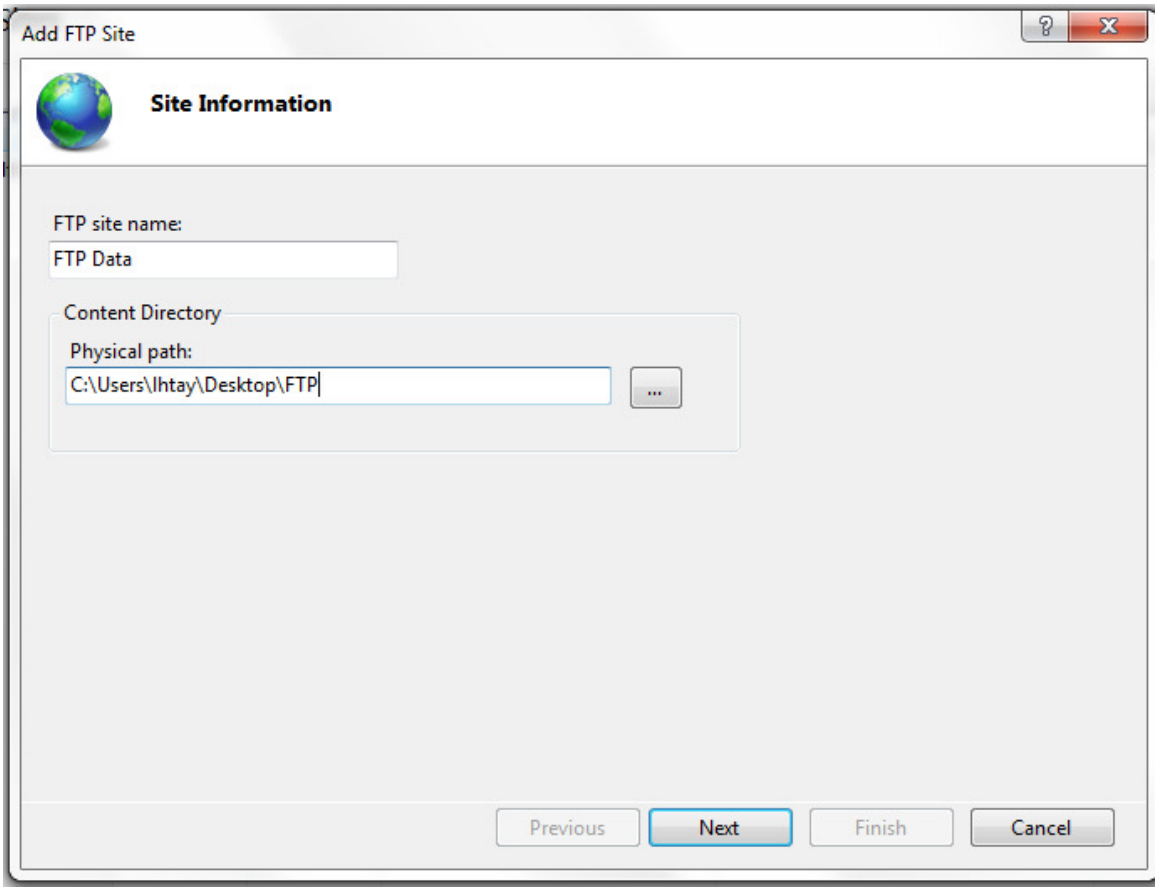
You will see a bunch of configuration options right on the home screen for authentication, SSL settings, directory browsing, etc.



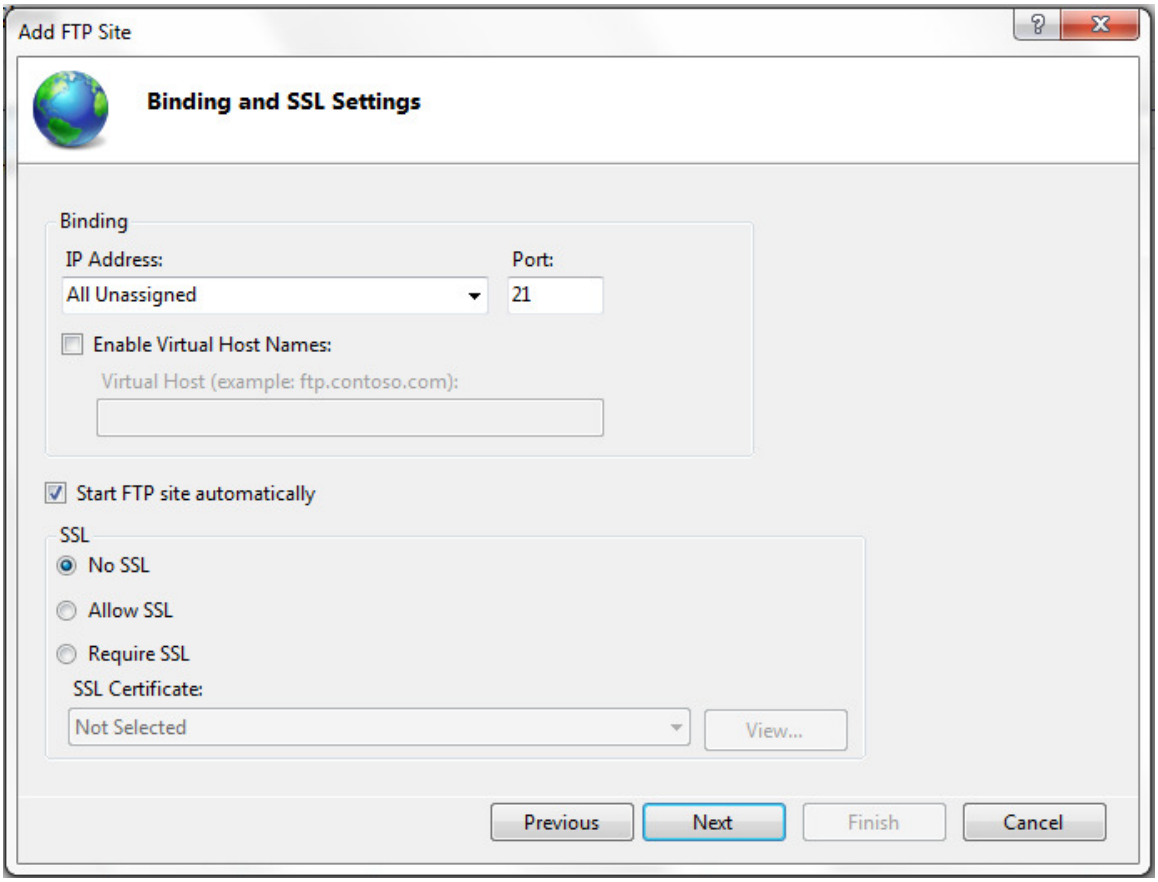
To start the FTP server here, you have to right-click on **Sites** and then choose **Add FTP Site**.



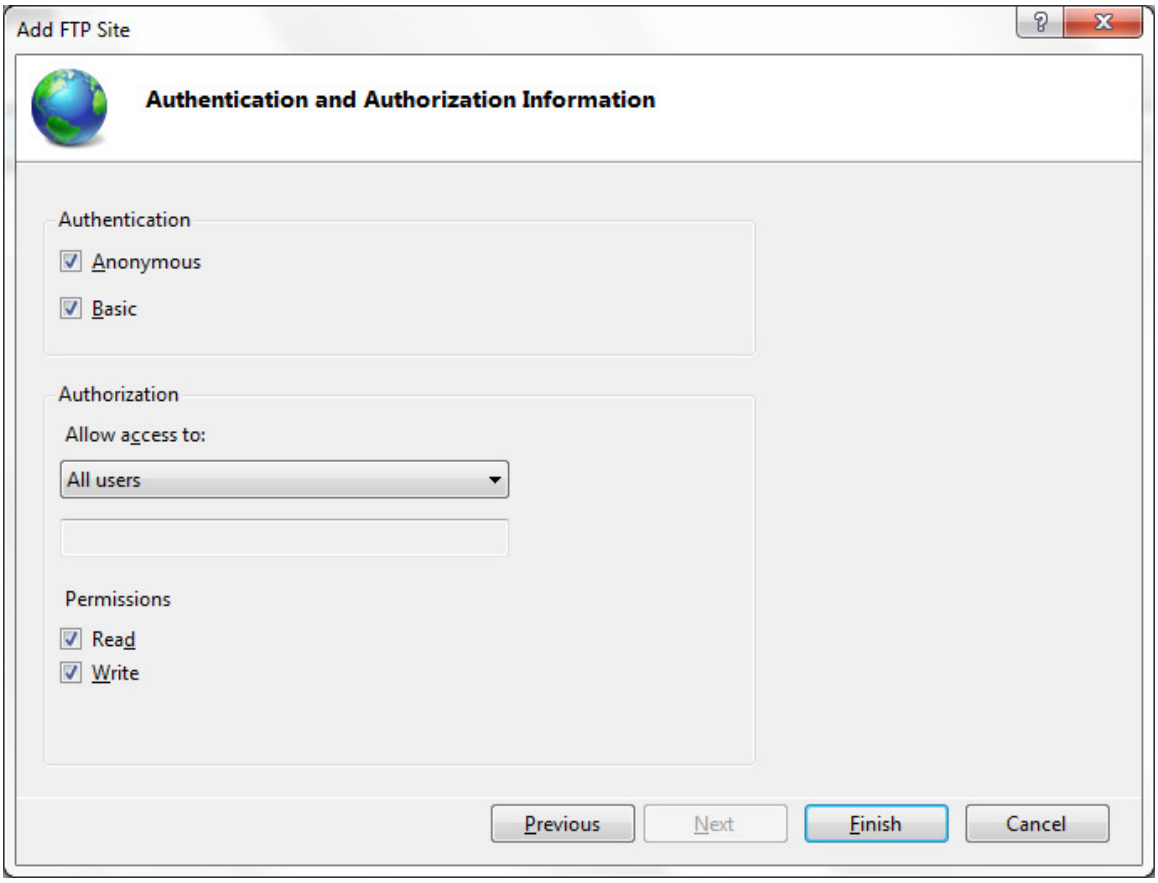
Give your FTP site a name and choosing the physical location for the files. Click Next.



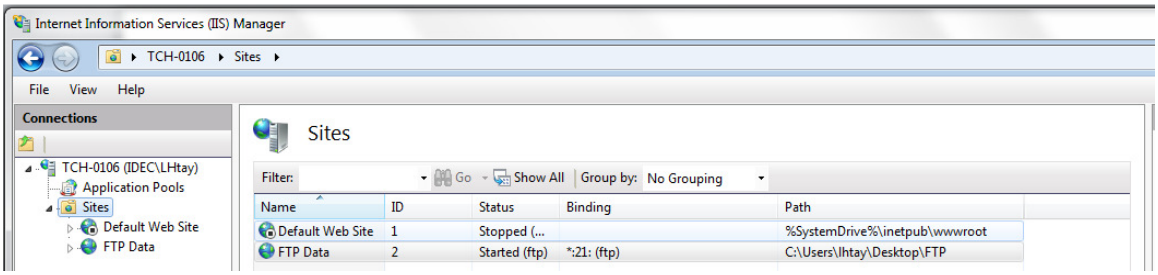
You can leave it at **All Unassigned** if you don't plan on running any other website. Keep the **Start FTP site automatically** box checked and choose **No SSL.** Click Next to continue.


Add FTP Site
Binding and SSL Settings
Binding
IP Address:
All Unassigned
Port:
21
Enable Virtual Host Names:
Virtual Host (example: ftp.contoso.com):
Start FTP site automatically
SSL
No SSL
Allow SSL
Require SSL
SSL Certificate:
Not Selected
View...
Previous
Next
Finish
Cancel

You have to choose whether you want **Anonymous** or **Basic authentication** or both.
Click Finish.

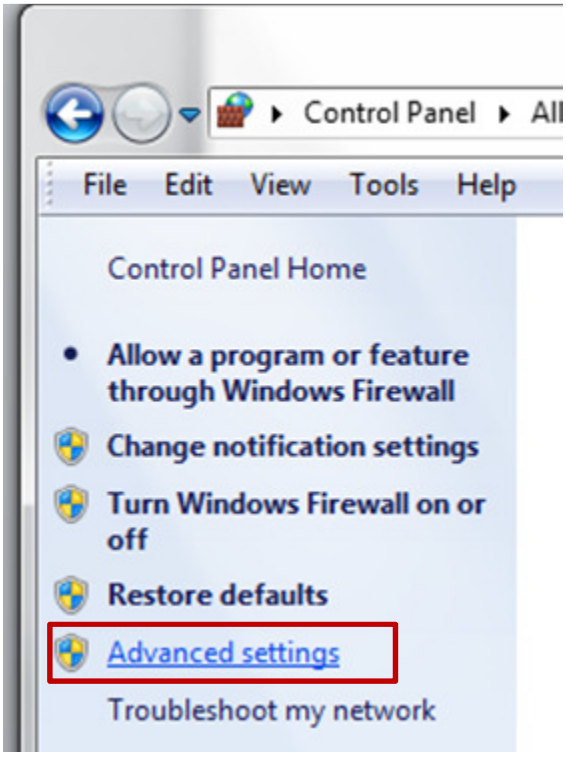


This is what you should see on you IIS Manager. The files will be stored at your selected physical location below. In this example, it will be on the Desktop, FTP folder.

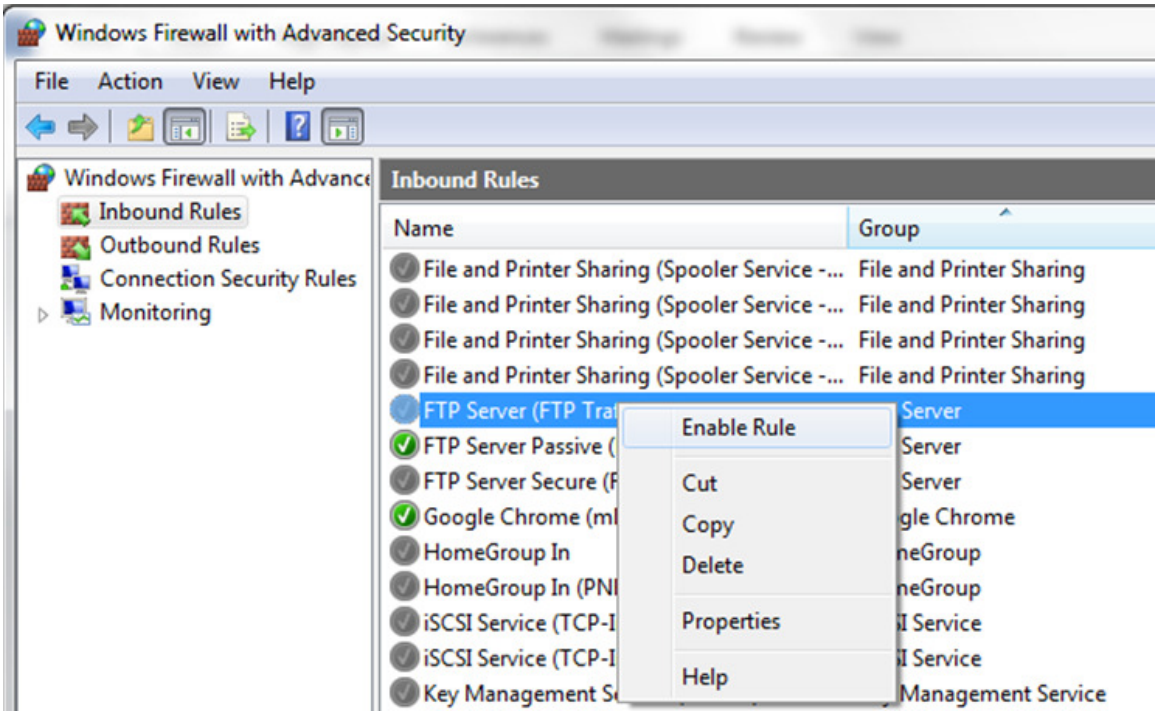


Set up and Configure Windows Firewall traffic

Go to **Start**, then **Control Panel** and click on **Windows Firewall**.
And then, Click Advanced Settings.



Now you should see **Windows Firewall with Advanced Security** dialog box. Click **Inbound Rules** and Right click on **FTP Server (FTP Traffic-In)** and Select **Enable Rule.** Do the same for the **FTP Server Passive (FTP Passive Traffic-In).**



Next, Click on Outbound Rules, and Right Click on FTP Server (FTP Traffic-out) and FTP Server Passive (FTP Passive Traffic-out) to Enable Rule.

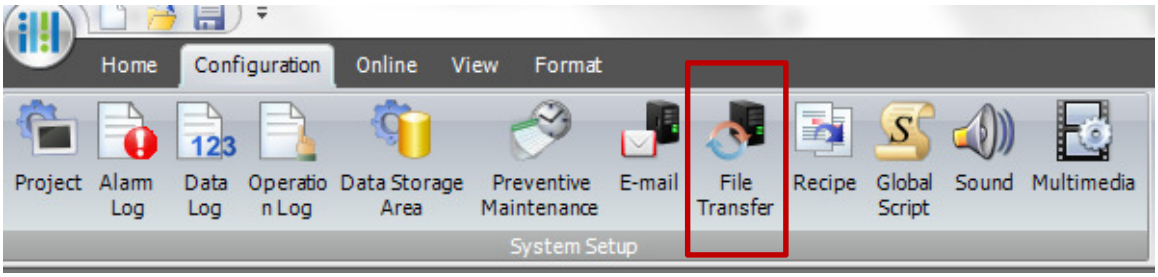
Now you finished setting up the FTP Server in Windows.

****

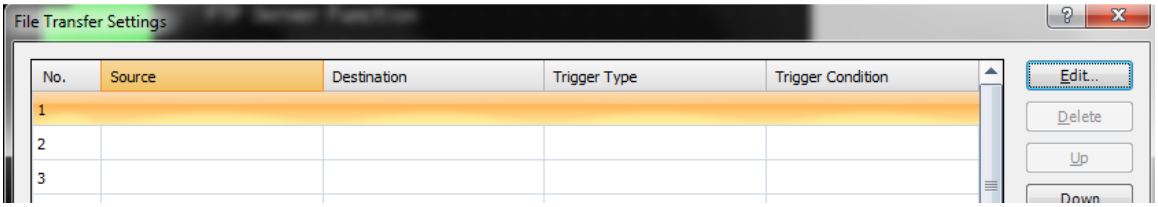
Next, Launch HMI application software WindO/I-NV4.

In NV4, go ahead and create a simple Alarm Log or Data Log file and save the CSV file onto the SD External Memory Card. For detailed settings on the Alarm Log or Data Logging, please refer to the User's Manual.

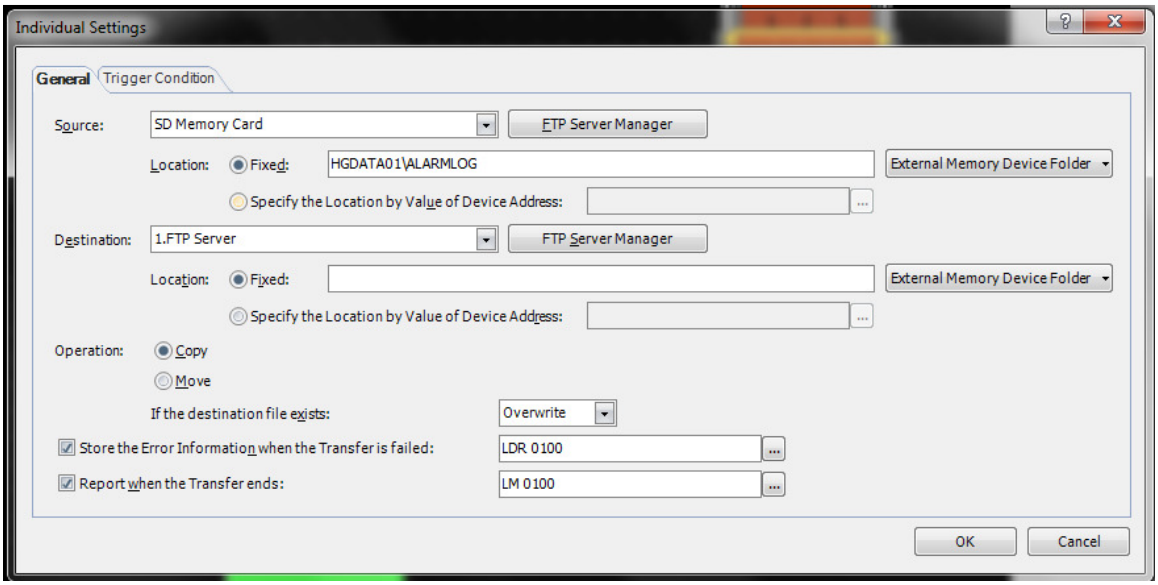
Select Configuration, Click File Transfer to enter the settings for the Client device.



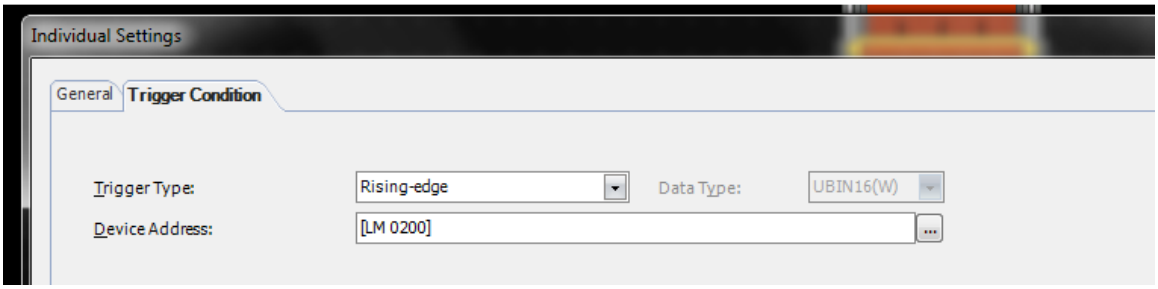
Click Edit



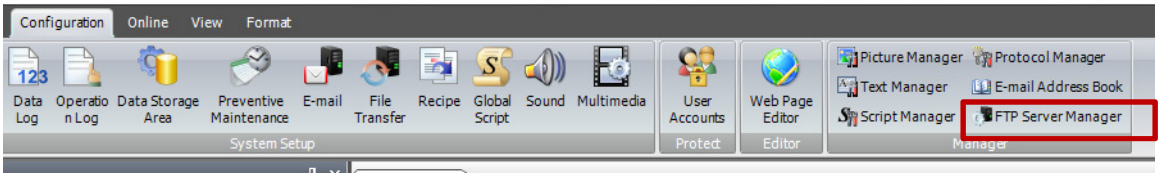
Enter Source, Destination, and Device addresses as below.



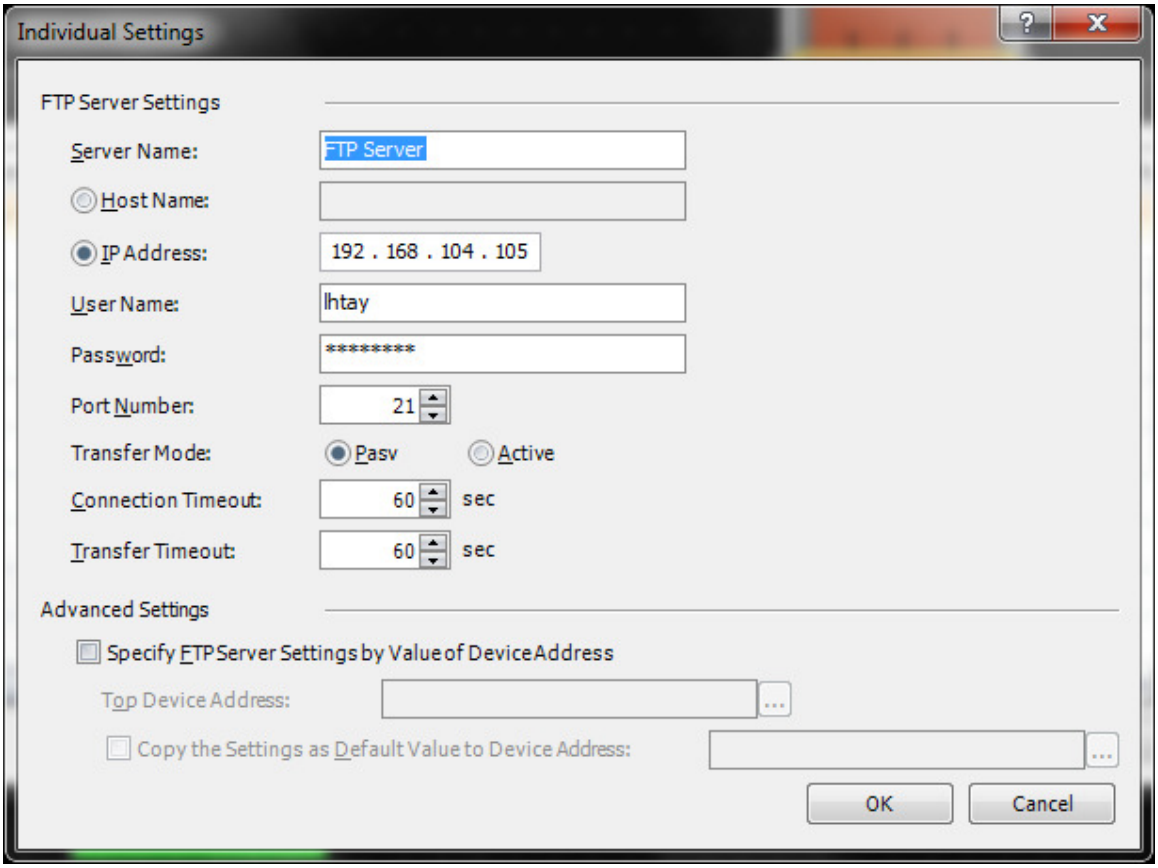
Then, go to Trigger Condition to set the trigger bit.



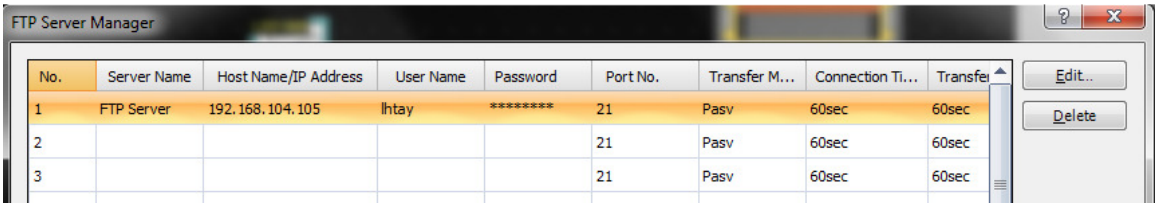
Next, click an icon FTP Server Manager.



Click Edit to open the Individual Settings. Enter your PC IP address, PC log in name and Password. Port Number is 21. Click OK.



Click OK again to close the File Server Manager.



In your NV4, create a bit button to copy the file, Numerical Input to check the error code, and Pilot Lamp to check the status.

Below are the error codes in Bit position.

Bit position	Function	Cause	Solution
0	External Memory Device Access Error	• No external memory device specified as the source or the destination is inserted. • The external memory device specified as the source or the destination cannot be accessed.	•Insert an accessible external memory device. •Mount the external memory device.
1	External Memory Device Reading or Writing Error	• The folders and files in the external memory device specified as the source or the destination cannot be read. • Creating folders, writing to files and deleting files in the external memory device specified as the source or the destination cannot be executed.	• Insert an external memory device read or write. • Insert an external memory device which has sufficient space.
2	FTP Server Connection Error	• The FTP server specified as the source or the destination cannot be accessed when the interval specified in Connection Timeout elapses. • When **Host Name** is selected with the radio button in the **FTP server settings**, the **Preferred DNS Server** or **Alternate DNS Server** setting is incorrect. • The host name of the FTP server could not be resolved.	• Connect a LAN cable. • Change the network settings configured on the MICRO/I. • Change the IP address or the port number of the FTP server. • Change the **Preferred DNS Server**, **Alternate DNS Server** settings. • Change the Host Name of the FTP server.
3	FTP Server Authentication Error	The user name or the password is incorrect.	Change the user name or the password.
4	FTP Server Command Error	An error for the command transmitted to the FTP server was returned.	Contact the administrator of the FTP server.
5	FTP Server Transfer Error	The FTP server does not return a response when the interval specified in Transfer Timeout elapses.	Contact the administrator of the FTP server.
6	FTP Server Force Terminate	The process of the file transfer stopped by using the HMI Special Relay LSM65.	-
7 to 15	Reserved	-	-

If everything works well, you should see the complete bit is ON and the value in LDR 100 is 0 which is normal operation.