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**.

Name	Date modified
Component Services	7/13/2009 11:57 PM
🛃 Computer Management	7/13/2009 11:54 PM
Data Sources (ODBC)	7/13/2009 11:53 PM
Event Viewer	7/13/2009 11:54 PM
💦 Internet Information Services (IIS) Manager	11/17/2014 8:38 AM
🔝 iSCSI Initiator	7/13/2009 11:54 PM
Local Security Policy	9/16/2014 6:45 PM
Performance Monitor	7/13/2009 11:53 PM

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**.

Internet Information	Services (IIS)	Manager			
() () () () () () () () () () () () () (CH-0106 🕨				
File View Help					
Connections			TCH-(0106 H	0
TCH-0106 (IDEC) Application P	LHtay) ools	Filter:			•
Add	Web Site esh			FTP FTP	FI
💣 Add	FTP Site		c Aut	thorizat	
Swit	ch to Conten	t View	\vdash		
		Serve Certifica	r ates		
		Manag	ement _		

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



Add FTP Site		8 ×
Site Information		
FTP site name:		
FTP Data		
Content Directory		
Physical path:		
C:\Users\Ihtay\Desktop\FTP		
	Previous Next F	inish Cancel

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.



Binding and SSL Settings		
Binding		
IP Address:	Port:	
All Unassigned	✓ 21	
Enable Virtual Host Names:		
Virtual Host (example: ftp.contoso.co	m):	
Start FTP site automatically SSL No SSL		
D Paquira SSI		
SSI Certificate		
Not Selected	• Vi	ew



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

d FTP Site		ନ୍ତି <mark>-</mark> ×
Authentication and Autho	prization Information	
Authentication Image: Anonymous Image: Basic		
Authorization Allow a <u>c</u> cess to: All users	•	
Permissions		
 ✓ Meau ✓ Write 		
	Previous Next	<u>F</u> inish Cancel

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.

Internet Information Services (IIS) Manager				
File View Help				
Connections	es • @	Go 🕞 🖵 Show A	II Group by: No Grouping	•
▲ Sites Name	ID	Status	Binding	Path
🛛 🕞 Default Web Site 🛛 🔞 Default We	b Site 1	Stopped (%SystemDrive%\inetpub\wwwroot
FTP Data	2	Started (ftp)	*:21: (ftp)	C:\Users\Ihtay\Desktop\FTP



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).**



Windows Firewall with Advanced	I Security				
File Action View Help					
🗢 🔿 🖄 🖬 🔒					
Prindows Firewall with Advance	Inbound Rules				
Inbound Rules	Name		Group		
Connection Security Rules	File and Printer Sharing	(Spooler Service	File and Printer Sharing		
Monitoring	File and Printer Sharing (Spooler Service File and Printer Sharing				
	File and Printer Sharing	(Spooler Service	File and Printer Sharing		
	File and Printer Sharing	(Spooler Service	File and Printer Sharing		
	FTP Server (FTP Trat	Enable Rule	Server		
	FTP Server Passive (Server		
	FTP Server Secure (F	Cut	Server		
	🕑 Google Chrome (ml	Сору	gle Chrome		
	MomeGroup In	Delete	neGroup		
	HomeGroup In (PNI		neGroup		
	SCSI Service (TCP-I	Properties	I Service		
	SCSI Service (TCP-I	Upla	I Service		
	Key Management S	нер	Management Service		

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

Fil	e Transfei	r Settings	Ture Tree			9	x
	No.	Source	Destination	Trigger Type	Trigger Condition	<u>E</u> dit	
	1					Dele	te
1	2					Up	
	3						vn l

Enter Source, Destination, and Device addresses as below.

Individual Setting	s		 8 ×
General Trigg	er Condition		
Source:	SD Memory Card	<u>F</u> TP Server Manager	
	Location:)G	External Memory Device Folder 🔹
	Specify the Location by Value of	Device Address:	
D <u>e</u> stination:	1.FTP Server	✓ FTP <u>Server Manager</u>	
	Location: Fixed:		External Memory Device Folder 👻
	Specify the Location by Value of	Device Add <u>r</u> ess:	
Operation:	<u> С</u> ору		
	© <u>M</u> ove		
	If the destination file exists:	Overwrite 💌	
🗷 Store the	Error Information when the Transfer is failed:	LDR 0100	
Report w	hen the Transfer ends:	LM 0100	
			OK Cancel

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

Individual Settings						
General Trigger Condition						
<u>T</u> rigger Type:	Rising-edge	•	Data Type:	UBIN16	(W) -	
Device Address:	[LM 0200]					

Next, click an icon FTP Server Manager.

Configuration Online View Forma	t		
Data Operatio Data Storage Area Preventive Maintenance	E-mail File Recipe Global Sound Multimedia	User Accounts	Picture Manager Protocol Manager Text Manager E-mail Address Book M Script Manager FTP Server Manager
System :	ietup	Protect Editor	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.

Individual Settings			? ×
FTP Server Settings			
Server Name:	FTP Server		
⊚ <u>H</u> ost Name:			
IP Address:	192.168.104.105		
<u>U</u> ser Name:	Ihtay		
Pass <u>w</u> ord:	*******		
Port <u>N</u> umber:	21		
Transfer Mode:	<u>P</u> asv <a><u>O</u><u>A</u>ctive		
Connection Timeout:	60 sec		
Transfer Timeout:	60 sec		
Advanced Settings			
Specify <u>F</u> TP Server Set	tings by Value of Device Address		
Top Device Address:			
Copy the Settings	as <u>D</u> efault Value to Device Address:		
		ОК	Cancel

Click OK again to close the File Server Manager.

Manager								? ×
Server Name	Host Name/IP Address	User Name	Password	Port No.	Transfer M	Connection Ti	Transfe	Edit
FTP Server	192.168.104.105	Ihtay	*******	21	Pasv	60sec	60sec	Delete
				21	Pasv	60sec	60sec	
				21	Pasv	60sec	60sec	
	Manager Server Name FTP Server	Manager Server Name Host Name/IP Address FTP Server 192, 168, 104, 105	Manager Server Name Host Name/IP Address User Name FTP Server 192, 168, 104, 105 Intay	Manager Server Name Host Name/IP Address User Name Password FTP Server 192.168.104.105 Intay ********	Manager Server Name Host Name/IP Address User Name Password Port No. FTP Server 192.168.104.105 Ihtay ******** 21 21 21	Manager Value Password Port No. Transfer M FTP Server 192.168.104.105 Ihtay ******** 21 Pasv 21 Pasv 21 Pasv Pasv 21 Pasv	Manager Server Name Host Name/IP Address User Name Password Port No. Transfer M Connection Ti FTP Server 192.168.104.105 Intay ******* 21 Pasv 60sec Image: Pass of the server 1 Pass 60sec 60sec 60sec	Manager Server Name Host Name/IP Address User Name Password Port No. Transfer M Connection Ti Transfer FTP Server 192.168.104.105 Intay ******* 21 Pasv 60sec 60sec 21 Pasv 60sec 60sec 21 Pasv 60sec 60sec 21 Pasv 60sec 60sec 21 Pasv 60sec 60sec

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.

														í.
•						Error Code						•		
LM (0200													
						LDR 0100				L M 1	00		2	
	- Co	vac	÷			1.00	•	- {	1	LITI	00,			
						23			Co	mple	te l	Bit,		
						L	•					•		



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.

