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### Weintek File Transfer Feature

**Introduction:** This instruction manual discusses how to configure **FTP File Transfer** in EasyBuilder Pro. FTP stands for **F**ile **T**ransfer **P**rotocol. This network protocol is commonly used on a network (TCP/IP) to exchange files between a FTP client and a FTP server. Now Weintek HMIs can copy and move files over a network by acting as a FTP client. The HMI can upload files stored in its external memory devices such as a USB flash drive or SD memory card to the target FTP server. The FTP server could be a desktop or a hard drive. File transfer from an FTP server to an external memory device on the HMI is also achievable.

**Recommended Software Version:** Easybuilder Pro v6.04.01.250 or greater version.

Supported Products: cMT series HMI. Please refer to *Appednix A*. Comparison of HMI Software features in EasyBuilder pro user manual for details.

Where to Configure in EasyBuilder Pro: The File Transfer object is accessible in the following objects.

- **Combo Button** object- When tapping this button on the screen, the HMI will copy and move files between FTP devices.
- Action Trigger object- Files will be transferred between FTP devices based on the specified condition, such as rising-edge, falling-edge, or value change.

In this user manual, a **FileZilla Server** is used for demonstration purposes and installed on a PC. **Microsoft Internet Information Services** is a FTP server software on Microsoft Operation System, which is accessible for free. Please consider an appropriate FTP server based on your demand.

Note: This FTP solution created by Weintek does NOT support **FTPS** and **SFTP**, which encrypts the content on data transmission.

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#### Chapter 1-1. Uploading (Transferring to the FTP server) Files

On the HMI screen, tap the [Generate CSV] button to generate **datalog** files in CSV format. The CSV files will be stored in the USB drive.



The File Brower can display the files stored in the USB drive. In this demonstration, the HMI (FTP client) transfers the **DL\_20191107.csv** into the PC (FTP server) through a local network.

To do that, tap on the **DL\_20191107.csv** shown on the File Brower. The file name will populate the **HMI PATH**.





Enter the path which includes the file name in the FTP server.

Once both specified paths are entered, tap the [HMI->FTP server] button to transfer the CSV file.If it succeeds, the percentage (%) register will display "100". If not, the error code will be displayed.

		root] > datalog	× <sup>۲</sup>
	HIVII FTF Serve	DL_20191105.csv	
erro	or O	DL_20191107.csv	
		▶	
respons	e 226		
			- 1
9	% 100		- 1
	HMI PATH	datalog/DL_20191107.csv	
FTP	SERVER PATH	DL1107.csv	×
		Bac Data Loo	ck to Iger Pa

In the FTP server, the transferred CSV file can be found.

I     Image: State of the stat				
Pin to Quick Copy Paste Paste shortcut	Move Copy to to t	New item •	Properties	Select all Select none
Clipboard	Organize	New	Open	Select
← → × ↑ 📴 > This PC > Samsung	_T5 (E:) > WUSA_FTP_Server_for_HN	11		
> 者 Quick access				
> 🗦 Dropbox	<b>X</b> a,			
> 🜰 OneDrive				
👻 💻 This PC	DL1107			

#### Open the CSV file to view data.

JS	, ,	r 🗄	$\times$	$\checkmark f_x$				
	1	д		В	с	D	E	
1	Date			Time	Sinusoidal-1	Sinusoidal-2	Sinusoidal-3	
2		11/7	/2019	14:57:23	0.939692616	0.980107188	0.994845033	
3		11/7	/2019	14:57:24	0.991444886	1.058700681	1.096254468	
4		11/7	/2019	14:57:25	0.999048233	1.07886374	1.127631187	
5		11/7	/2019	14:57:25	0.999048233	1.092375278	1.153514028	
6		11/7	/2019	14:57:25	0.991444886	1.099151969	1.173777103	
7		11/7	/2019	14:57:26	0.965925813	1.096608996	1.193426251	
8		11/7	/2019	14:57:26	0.939692616	1.086457253	1.199269056	

#### Chapter 1-2. Configuration of Upload Function

There is one **Data Sampling** object configured in this HMI project. The trend chart and table are created to show you data.



Create a **Backup** object to generate the CSV file and transfer it into the USB drive. Go to [Data/ History] tab and select **Backup (Per-page)**.

File source: choose Historical data sampling.

Data Sampling object index: choose **the first Data Sampling**. In this case, it is <u>DataStreaming-</u> <u>Curves</u>.

Backup position: choose **USB disk**.

Format: The format will specified to **.CSV** file.

Range: choose 90 days.

Mode: choose **Touch trigger**.

General	Security	Shape La	bel Profi	le e-Mail		
	Comme	nt :				
	File sour	ce : Historica	al data sam	pling		~
	Data	Sampling obje	ect index :	1. DataStreaming-	Curves	~
Backup	position					
۲	USB disk			O SD card	🔵 e-Mai	1
Storag	e format Form	at: Comma	Separated	Values (*.csv)		~
Storag	e format Form Add BOM ( strings cor Include tin	at : Comma (Byte Order M rectly	Separated lark) to file	Values (*.csv) header for EXCEL c	an interpreting no	n-ASCII
Storag	e format Form Add BOM ( strings cor Include tin	at : Comma (Byte Order M rectly ne information	Separated lark) to file	Values (*.csv) header for EXCEL c ] Include millisecon	an interpreting no d (ms) informatior	in-ASCII
Storag	e format Form Add BOM ( strings cor Include tin	lat : Comma (Byte Order M rectly ne information	Separated lark) to file	Values (*.csv) header for EXCEL c	an interpreting no	vn-ASCII
Storag	e format Form Add BOM ( strings cor Include tin	(Byte Order M rectly ne information	Separated lark) to file	Values (*.csv) header for EXCEL c ] Include millisecon	an interpreting no d (ms) informatior	vn-ASCII
Storag	e format Form Add BOM ( strings cor Include tim Start : 1	<ul> <li>(Byte Order M rectly ne information</li> <li>Today</li> </ul>	Separated lark) to file	Values (*.csv) header for EXCEL c Include millisecon	an interpreting no d (ms) information	vin-ASCII
Storag	e format Form Add BOM ( strings cor Include tin Start : 1 Within :	<ul> <li>(Byte Order M (Byte Order M rectly ne information</li> <li>Today</li> <li>Today</li> <li>day(s)</li> </ul>	Separated lark) to file [ ) Yeste	Values (*.csv) header for EXCEL c Include millisecon Include millisecon	an interpreting no	vn-ASCII
Storag	e format Form Add BOM ( strings cor Include tim Start : Within :	<ul> <li>eat: Comma</li> <li>(Byte Order M rectly</li> <li>einformation</li> <li>Today</li> <li>Today</li> <li>day(s)</li> <li>Tauch bisson</li> </ul>	Separated lark) to file O Yeste	Values (*.csv) header for EXCEL c ] Include millisecon	an interpreting no	n-ASCII

Place the Backup object onto the edited screen as shown below.



Create a File Transfer object. Go to [Object] tab and select the Combo Button.

Within **Down actions**, click on the "plus" button and select **File Transfer**.



On the [General] tab, choose Upload (HMI -> FTP).

Host: It indicates the IP address of the FTP server. Entering the hostname is supported when **Use domain name** is checked.

Port: It indicates the TCP port for FTP connection. The default port is **21**.

Username: Enter the username.

Password: Enter the password.

When the connection between the FTP client and the FTP server is established, the **Username** and **Password** are required to submit to the FTP server. Please contact your FTP Admin in regards to the credentials. **"Use anonymous"** is possible if the server is configured to allow the connection with anonymous.

General F	ile Status	
	🔵 Download (FTP -> HMI)	Upload (HMI -> FTP)
Host :	192 . 168 .	1 . 101 Use domain name
Port :	21	

On the [File] tab, choose **USB disk** because the datalog files come from the USB drive.

HMI file path: Specify the location of the file or define a string register.

For example, enter **datalog/DL.csv** when **Fixed** is chosen.

FTP file path: Specify the location of the file or define a string register.

e Iranster			
General File	Status		
File position			
USB disk		SD card	
LIMI full path	(folder erfolder i filo pomo)		
HIVII TUII patr	(rolder or rolder + file name)		ress
Device :	Local HMI	~	Settings
Address :	LW ~ 1	000	20 word(s)
FTP full path	(folder or folder + file name)	: 🔿 Fixed 💿 Add	ress
FTP full path Device :	(folder or folder + file name) Local HMI	: 🔿 Fixed 💿 Add	Settings

On the [Status] tab, define a register within the **Result address** and select one option within the **Progress** box.

This example uses **Percentage** so that the operators can see the generated error code and the update bar.

	le Status		
esult addre	55		
Device :	Local HMI		✓ Settings
Address :	LW	~ 100	16-bit Unsigned
Progress			
		Percentage	O Number of bytes
_			0
File inc	lex/count enab	led	
∐ File ind	lex/count enab	led	
File ind	iex/count enab	led	
File inc	fex/count enab Frror : LW-100 ( 0 : none	e, 1 or more : error)	
File ind	fex/count enab Frror : LW-100 ( 0 : non onse : LW-101	e, 1 or more : error)	
File ind E Respo	Iex/count enab Frror : LW-100 ( 0 : non onse : LW-101 ( FTP sen	e, 1 or more : error) ver return codes)	

Create three **Numeric** objects on the screen to display the **Error**, **Response**, and % with addresses specified to LW-100, LW-101, and LW-102.

error	LW- 100 ######
response	LW-101 ######
%	LW-102 #######

Create two **ASCII** objects to input the file paths.



Create a File Browser object. Enable **Full (folder+ file name) address** and specify the register LW-1000.

File Browser Object's Properties	
General Dutline Security Profile	LW-1000
Enable	[root] 2
	folder2
File name address	folder3
Enable	file1.csv
	file2.csv
Full (folder + file name) address	file3.csv
Device : Local HMI Settings	file4.csv
Address : LW V 1000 Lo words)	flick corr
	************************
OK Cancel Apply Help	Back to Data Logger Page

The resulting configuration should look similar to this.

HMI -> FTP se	/er [root]	<u>لا</u> م
	folder1	
error #####	folder2	
	folder3	
response #####	file1.csv	
	file2.csv	
LW-102 % ######	file3.csv	
	file4.csv	
HMI PATH		
FTP SERVER PATH		
		Backto
		Data Logger Pa

#### Chapter 2-1. Downloading (Transferring from the FTP server) Files:

On the HMI screen, the PDF reader is used to display PDF files. Operators can select the available PDF files on the File Browser. The PDF files are downloaded from the FTP server.



Enter the file name of the PDF file stored in the FTP server. The path format depends on the FTP server.



<b>e</b>	FTP se	erver -> HMI		[root] System Volume Information	Ľ
er	ror	0		CMT-4CSF	
respor	ise	0			
	%	0			
			BC pd	6	
1	FTP SE	RVER PATH	Brochu	ire.pdf	

Enter a file name that you want to "save as".

Tap the [FTP server ->HMI] button to download the PDF file.

If it succeeds, the percentage (%) register will display "100". If not, the error code will be displayed.

			[root]	×7
FTP	server -> HMI		System Volume Information	
			CMT-4C5F	
error	0		C datalog	
			BC.pdf	
response	226			
0/_	100			
76	100			
	HMI PATH	BC.pd	f	
FTP S	SERVER PATH	Broch	ure.pdf	
		2.0011		

Go back to the PDF reader page and tap the PDF file on the File Browser. Then you can view the PDF file.



# Chapter 2-2. Configuration of Download Function

Create a PDF Reader object.

File position: choose **USB disk**.

Path: define a string register.

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General Prof	ile				
	Comment :				
Back	ground color :	Tra	nsparent	Ŧ	
File position					
USB (	disk 1		◯ SD card		
Path					
Device :	Local HMI			~	Settings
Address :	LW	~	160		20 word(s)
* PDF Reade	r requires OS ve	rsion 2016030	1 or later.		

Create a File Browser object. Enable **Full (folder+ file name) address** and specify the register LW-160.

ile Browser Object's Properties	×
General Outline Security Profile	
Folder path address	
Enable Enable	
File name address	
Enable	
Full (folder + file name) address	
Inable	
Device : Local HMI V Settings	
Address : LW ~ 160 20 word(s)	
Control address	
Enable	

<sup>₩-180</sup> 88 ← •			
	PDF	LW-180 [root]	<mark>ریا</mark> folder1
			folder2
			folder3 file1.csv
			file2.csv
			file3.csv file4.csv
			Go to File Transfer Page

The resulting configuration should look like the screenshot below.

Create a File Transfer object. Go to [Object] tab and select Combo Button.

Within **Down actions**, click on the "plus" button and select **File Transfer**.

Action Grou	0 qu	
0		
	Delay	1
	Set Bit	
	Set Word	
	Change Window	
	Execute Macro	
	Popup Window	
Up action:	Close Window	
Action 6	Keyboard Input	
Action c	Screen Hardcopy	
C	Acknowledge All Events (Alarms)	
	Import Data	
	Wait Until	
	Data Transfer (Global)	
	File Transfer	

On the [General] tab, choose **Download (HMI -> FTP).** 

Host: It indicates the IP address of the FTP server. Entering the hostname is supported when **Use domain name** is checked.

Port: It indicates the TCP port for FTP connection. The default port is **21**.

Username: Enter the username.

Password: Enter the password.

When the connection between FTP client and FTP server is established, the **Username** and **Password** are required to submit to the FTP server. Please contact your FTP Admin in regards to the credentials. **"Use anonymous"** is possible if the server is configured to allow the connection with anonymous.

eneral F	ile Status	
	Download (FTP -> HMI)	O Upload (HMI -> FTP)
Host :	192 . 168 .	1 . 101 Use domain name
Port :	21	
Username :	wusa	Use anonymous
Password :		@

On the [File] tab, choose **USB disk** because PDF files are saved in the USB drive.

HMI file path: Specify the location of the file or define a string register.

FTP file path: Specify the location of the file or define a string register.

incruit in the	Status			
File position				
USB disk		○ SD card		
HMI full pa	h (folder or fold	er + file name) : 🔵 Fixed	Address	
Device	Local HMI		✓ Se	ttings
Address	LW	~ 1000	20 w	ord(s)
Address	LW	~ 1000	20 w	ord(s)
Address				
FTP full pat	n (folder or folde	er + file name): 🔿 Fixed	Address	
FTP full pat	n (folder or folde	er + file name): 🔵 Fixed	Address	ttings

On the [Status] tab, define a register within the **Result address** and select one option within the **Progress** box. This example uses Percentage so that the operators can see the generated error code and the update bar.

#### Weintek File Transfer Feature

esult address		
Device : Local HMI		✓ Settings
Address : LW	~ 110	16-bit Unsigned
Progress		
O None	Percentage	O Number of bytes
File index/count enal	bled	
Error: LW-110		
(0:non	e, 1 or more : error)	
Response : LW-111		
	ver return codes)	
( FTP set		

Create three **Numeric** objects on the screen to display the **Error**, **Response**, and % with addresses specified to LW-110, LW-111, and LW-112.

error	LW-110 ######
response	LW-111 ######
%	LW-112 ######

Create two **ASCII** objects to input the file paths.



Create a File Browser object. Enable **Full (folder+ file name) address** and specify the register LW-1000.

eneral	Outline	Security	Profile			
Folder	path addr	ress				
		Enable				
File en	ma addrau					
rile na		ss Faabla				
		Enable				
			-			
Full (fo	older + file	name) add	dress			
Full (fo	older + file	name) ado Enable	dress			
Full (fo	older + file	: name) ado Enable cal HMI	dress		~	Settings
Full (fo De Add	older + file	name) add Enable cal HMI	dress	× 1000	~	Settings 20 word(s)
Full (fo De Add	older + file	: name) ado Enable cal HMI V	dress	× 1000	~	Settings 20 word(s)
Full (fo De Add	older + file	: name) add Enable cal HMI V	dress	× 1000	~	Settings 20 word(s)

The resulting configuration should look similar to this.

uv-m FTF	P server -> HMI	[root]	<b>L</b> <sup>2</sup>
			folder1
orror	UV-110		folder2
enor			folder3
	LW- 111		file1.csv
response	####		file2.csv
			file3.csv
%	<u>444444</u>		file4.csv
			filoEcov
	1.0	6.1000	
	HMI PATH	ААААААААА	
		1.4000	
FTP	SERVER PATH	AAAAAAAAAA	ممممممممممممممممممم
			Deskte
			PDF Reader Page

### Chapter 3. Transferring Multiple Files within a Folder:

You can upload multiple files to the FTP server at a time by entering the folder names of **HMI PATH** and **FTP SERVER PATH**.

H	HMI -> FTP serve	r	[roc	[]		×7
				System Volume Information		
error	0			Tim-CMT3090		
				datalog		
response	226			Databace		
panaa				Database		
0/_	100					
70	100					
		/atalog				
		uatalogi				
FTP S	FRVER PATH	datalog/	,			
		uatarog,				
					Back t Data Logge	o r Pa
					00	

You can also download multiple files from the FTP server at a time by entering the folder names of **HMI PATH** and **FTP SERVER PATH**.

					2	
FT	P server -> HMI		[roc	Dt] System Volume Information	Ľ	
				Tim-CMT3090		
error	0			datalog		
				manual		
response	226			Database		
%	100					
		manua	al/			
		manue	A17			
FTP SERVER PATH manu		al/				
					Back to PDF Reader F	'age



www.WeintekUSA.com Founded in 1996, WEINTEK LABS is a global-leading HMI manufacturer and is dedicated to the development, design, and manufacturing of practical HMI solutions. WEINTEK LAB's mission is to provide quality, customizable HMI-solutions that meet the needs of all industrial automation requirements while maintaining customer satisfaction by providing "on-demand" customer service. WEINTEK LABS brought their innovative technology to the United States in 2016, WEINTEK USA, INC., to provide quality and expedient solutions to the North American industrial market.

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