2. Utility Manager

This chapter explains how to use Utility Manager.

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	Overview Design Analysis & Testing Publish Maintenance Data Conversion



2.1. Overview

After installing EasyBuilder Pro, double click [UtilityManagerEx] shortcut on the desktop to start. Utility Manager is for launching several utilities and it is a stand-alone program. Please select a model first and note that certain features may not work as expected if an incorrect model is selected.

	Utility Manager > IloT Gateway Series	
	Select Model	TK Series
	🕈 Design	iP Series), the HMI screen projects.
	Analysis & Testing	iE Series
	🎍 Publish	eMT Series eMT Series eVices (or related sponding operable PLC nats.
	Ø Maintenance	XE Series
	Data Conversion	mulation (without PLC).
	Run 🗿 Edit 🖨	CMT X Series - Advanced
Utilities		Description
0		Minimize Utility Manager window.
×		Close Utility Manager.
		Add the frequently used utilities to the toolbar at the bottom
		the window.
Run		Run the selected utility on the toolbar.
Edit		Delete the selected utility on the toolbar.



2.2. Design



Utilities	Description	
EasyBuilder Pro	Launch EasyBuilder Pro to edit projects.	
EasyAddressViewer	Review the address ranges and formats of supported PLCs.	
Simulation	Simulate an HMI on PC by running On-line Simulation or Off-line	
	Simulation. Please select an .exob / .cxob file as source first.	
	Off-line simulation: Simulate project operation on PC without	
	connecting any devices.	
	On-line simulation: Simulate project operation on PC and PLCs	
	are directly connected with PC.	
	Note	
	When using [On-line simulation] on PC, if the target device is	
	a local PLC (the PLC directly connected to PC), there is a one-	
	hour simulation limit.	



2.3. Analysis & Testing





Through	applications to connect to PLC via HMI.
	The Serial Pass-Through feature provides two modes: Ethernet
	and COM port.
	Before using [Ethernet] mode, please check if virtual serial port
	driver has been installed.
	🗇 See "29 Pass-through".
Ethernet Pass-	When PC and PLC are respectively connected to different
Through	Ethernet ports of a Dual-port HMI, this feature allows running the
	application on PC to control PLC through HMI. This feature is only
	supported on cMT / cMT X Series models.
	☑ See "29 Pass-through".

Pass-through feature allows the PC application to connect PLC via HMI. In this case, the HMI works like a converter.





2.4. Publish





2.4.1. Download (PC->HMI)

Download files to HMI via Ethernet or USB cable.

eMT, iE, XE, mTV Series

cMT, cMT X Series

Download (PC->HMI)			Download (PC->HMI)	X
Runtime (firmware)	MQTT Diagnostic tool	USB audio driver	Connection	
Project	PLEASE INPUT EXOB FILE NAME !	Browse	d TP HMI Name	
RW RW	PLEASE INPUT RECIPE FILE NAME !	Browse		
RW_A	PLEASE INPUT RECIPE_A FILE NAME !	Browse		
V Reope database	PLEASE INFUT RECIPE DATABASE FILE NAME !	browse	Project	
Startup screen	PLEASE INPUT LOGO FILE NAME !	Browse		
System settings	PLEASE INPUT A SYSTEM SETTINGS NAME !	Browse	RW PLEASE INPUT RECIPE FILE NA	ME !
			RW_A PLEASE INPUT RECIPE_A FILE F	IAME !
			Recipe database PLEASE INPUT RECIPE DATABA	SE FILE NAME !
			Startup screen PLEASE INPUT START-UP SCR	EN FILE NAME !
			✓ Use system settings file	
Connection			Delete existing user accounts	
 Ethernet 	O USB cable		Delete existing e-Mail contacts and SMTP settings	
4 IP HMI Nan	ne	4	Reset recipe (RW, RW_A) Reset recipe database	Reset operation log
HMI :	▼ 192.168.2.142 (+ 192.168.2.223 (+	IMI-0396) IMI-EDFA)	Reset event log Reset data log	Reset string table
	Search 192.168.2.231 (N	1T8090XE-FAE)	Reset startup screen Reset OPC UA history (HD/	A) Synchronize HMI clock with PC
	Search All		CODESYS	
			Project	
Reboot HMI after down Reset recipe (RW, RW_ Reset recipe database Delete existing user acc	load Synchronize HMI dock with PC A) Reset data log Reset operation log counts, e-Mail contacts and SMTP settings	 Delete startup screen Reset event log Reset string table 		
Port No. Setting	Password : 111111 Mask	Download Exit		
			Port No. Setting Password : 111111	Mask Download Exit
		_		
Sett	ing	Select	iption	EoracMT /
FIO		Jelec		
		CMID	C project, the Project Checksu	im will be
		show	n under the directory of the p	project for
		users	to check whether the project	file has been
		temp	ered with.	
Run	time (firmware)	Upda	e HMI kernel programs. The	firmware
		must	be downloaded at the first ti	me
		down	loading data to HMI.	
MQ	тт	If MQ	TT is used in the project and	HMI is the
		broke	r. this checkbox must be sele	cted before
		STORC		
		down	load.	
Diag	Diagnostic tool Enable the diagnostic tool to send diagnostic		diagnostic	
		data t	o the developers when an er	ror occurs for
		quick	troubleshooting.	
USB	Audio Driver	Enabl	e audio output on HMI so it o	an
		imme	diately emit a sound when a	LISB sound
			alatery enne a sound when a	SSD Sound
		card a	nd a speaker are connected.	



RW / RW_A	Select an .rcp recipe file.		
Recipe database	Select a .db file of Recipe Database.		
Startup screen	Download a .bmp file to the HMI, which will be		
	displayed after the HMI is started, and then the		
	downloaded project is loaded. Please note that		
	when downloading a project to a cMT / cMT X		
	model, it is not possible to select both Project		
	and Startup Screen in the download window.		
Use system settings file	Select a .conf system settings file.		
Reboot HMI after download	Automatically reboot after download.		
Port No. Setting	Select the port by which to download the		
	project file via Ethernet.		
Synchronize HMI clock	Synchronize HMI time with PC time when		
WITHFC	downloading project file.		
Reset recipe / recipe database / event log / data log / operation log / string table / OPC UA history (HDA) / startup screen / Delete existing user accounts, e-Mail contacts and SMTP settings	Erase the selected files on HMI before download.		
CODESYS	Use Utility Manager to download CODESYS boot		
	project.		



2.4.2. Upload (HMI->PC)

Upload files from HMI to PC via Ethernet or USB cable. Click [Browse] and assign the file path before uploading.

cMT, cMT X Series

eMT, iE, XE, mTV Series

Upload (HMI->PC)			Upload (HMI->PC) X
Project RW RW_A Recipe database Operation log	PLEASE INPUT EXOB FILE NAME I PLEASE INPUT RECIPE FILE NAME I PLEASE INPUT RECIPE JA FILE NAME I PLEASE INPUT RECIPE DATABASE FILE NAME I PLEASE INPUT OPERATION LOG FILE NAME I	Browse Browse Browse Browse Browse	Connection Ethernet USB cable HMI: cMT3090-FAE HMI: cMT3090-FAE
Data log Event log	PLEASE INPUT DATA LOG FOLDER NAME I PLEASE INPUT EVENT LOG FOLDER NAME I Use CSV (Comma Seprated Values) format to save data/event log	Browse Browse	Search All Search All Search and Change IP
Connection Ethernet I IP HMI Name	EM file location : © 50 card © USB dak		✓ Project C: {Users \user /Desktop \cMT 3090.cxob History ✓ Recipe ✓ Recipe ✓ Event log ✓ Data log ✓ C: {Users \user \Desktop
HMI : Port No. Setting	Search All Search All Password : 111111 Mask Upload (MMI-	PC) Exit	Port No. Setting Password : 111111 Mask Upload Exit

Setting	Description
Event log	Upload the .evt file on HMI to PC.
Extended Memory	Upload the .emi file saved in SD card or USB disk
(EM)	to PC.

For information about [Project], [RW / RW_A], [Recipe database] or [Data log], see "2.4.1 Download" in this chapter.

Note

- The file will be uploaded to PC in .exob / .cxob format. Please decompile it into editable .emtp / .cmtp file first and open the .emtp / .cmtp file in EasyBuilder Pro.
- To upload the historical files saved in the external device, please use FTP. See "32 FTP Server Application" for more information.



2.4.3. Build Download Data for SD/USB Disk

Build Download Data for SD/USB Disk	— ×
Select the folder to save download data :	
PLEASE INPUT DIRECTORY NAME !	Browse
Sources	
Project	
PLEASE INPUT EXOB FILE NAME !	Browse
Recipe (RW)	
PLEASE INPUT RECIPE FILE NAME !	Browse
Recipe A (RW_A)	
PLEASE INPUT RECIPE_A FILE NAME !	Browse
☑ Data log	
PLEASE INPUT DATA LOG FILE NAME !	Browse
User-defined startup screen	
PLEASE INPUT START-UP SCREEN FILE NAME !	Browse
Build	Exit

- 1. Insert an external device (SD card or USB drive) to PC.
- 2. Designate the directory to save data.
- 3. Browse for the directory of the source files.
- 4. Click [Build] to create download file.

Files will then be saved to the inserted device for users to download to HMI without having to use a USB cable or Ethernet.

2.4.4. Steps to Download Project to HMI via USB Disk or SD Card

To download data in a folder (e.g. a folder named "123" (K:\123)) in a USB disk.

- 1. Insert USB (in which the project is saved) to HMI.
- 2. In [Download / Upload] dialog box select [Download].
- 3. Enter Download Password.
- In [Download Settings] dialog box, select [Download project files] and [Download history files].
- 5. Press [OK].
- 6. In [Pick a Directory] dialog box, select directory: usbdisk\disk_a_1\123.
- 7. Press [OK].

Project will then be updated.

Note

If history data is downloaded but not the project file, please reboot HMI to update files.



2.5. Maintenance

	Utility Manager	_	
	Select Model >		Administrator Tools Build user account and mail setting files in a USB drive/SD card without modifying project file, and then transfer them to HMI by USB/SD.
	Analysis & Testing	Viewer	CMT Viewer Connect to a cMT-SVR machine. PC acts as a display terminal for cMT-SVR.
	<i>8</i> Maintenance		CMT-iV5/iV6 Firmware Update Update firmware on cMT-IV5/iV6
	Run 💿 Edit 👁		
Utilities	<u></u>	Description	
Adminis	trator	Allows saving the	e data of [User Accounts]. [USB Security Key]. [e-
Tools		Mail SMTP Serve	r Settings], and [e-Mail Contacts] to USB.
		Gree "36 Admi	inistrator Tools"
cMT Vie			
	wer	cMT Viewer can	connect to a cMT / cMT X Series model. PC is the
	wer	cMT Viewer can of display terminal f	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project.
cMT-iV5 Firmwai	wer /cMT-iV6 re Update	cMT Viewer can o display terminal f	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project. /iV6 runtime (firmware) or OS.
cMT-iV5 Firmwar cMT-Ser Update	wer /cMT-iV6 re Update rver OS	cMT Viewer can o display terminal f Updates cMT-iV5 Updates cMT-SVF	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project. /iV6 runtime (firmware) or OS. R/SVR-200 OS.
cMT-iV5 Firmwar cMT-Ser Update cMT-	wer /cMT-iV6 re Update rver OS	cMT Viewer can o display terminal f Updates cMT-iV5 Updates cMT-SVF	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project. /iV6 runtime (firmware) or OS. R/SVR-200 OS.
cMT-iV5 Firmwar cMT-Ser Update cMT- Gatewar	wer cMT-iV6 re Update ver OS y/CTRL OS	CMT Viewer can o display terminal f Updates cMT-iV5 Updates cMT-SVF	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project. /iV6 runtime (firmware) or OS. R/SVR-200 OS.
cMT-iV5 Firmwar cMT-Ser Update cMT- Gatewar Update	wer /cMT-iV6 re Update rver OS y/CTRL OS	cMT Viewer can o display terminal f Updates cMT-iV5 Updates cMT-SVF	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project. /iV6 runtime (firmware) or OS. R/SVR-200 OS.
cMT-iV5 Firmwar cMT-Ser Update cMT- Gatewar Update CODESY Upgrade	wer cMT-iV6 re Update ver OS y/CTRL OS S Firmware	cMT Viewer can o display terminal f Updates cMT-iV5 Updates cMT-SVF Updates cMT-Gat	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project. /iV6 runtime (firmware) or OS. R/SVR-200 OS. teway/CTRL OS.
cMT-iV5 Firmwar cMT-Ser Update cMT- Gatewar Update CODESY Upgrade SSL/TLS	wer cMT-iV6 re Update ver OS y/CTRL OS S Firmware certificate	cMT Viewer can o display terminal f Updates cMT-iV5 Updates cMT-SVF Updates cMT-Gat Updates CODESY Upgrades the bui	connect to a cMT / cMT X Series model. PC is the for cMT / cMT X project. /iV6 runtime (firmware) or OS. R/SVR-200 OS. teway/CTRL OS. S firmware on cMT / cMT X HMI. ilt-in expired SSL/TLS certificate on HMI.

Options in this tab may vary according to model.



EasyBuilder Pro V6.10.01

Upgrade	
FTP Server	Update the certificate and private key for the FTP server on the
Certificate Update	HMI.
HMI Information	
Collector	Obtains a file with diagnostic information from Hivii.
EasyPrinter /	
Backup Server	Runs remote backup/printer server on PC.
Data/Event log	Connects with HMI via USB cable or Ethernet to check the
Information	number of history files on HMI. This feature is not supported on
	cMT / cMT X Series.
	Data/Event Log File Information tata log - 1.20130826.dtl - 2.20130825.dtl - 3.20130824.dtl - 4.20130822.dtl - 5.20130821.dtl ErrenHouse

···· 1. EL_20130830.evt ···· 2. EL_20130826.evt ···· 3. EL_20130809.evt

Supports access to remote HMI by connecting EasyAccess server

over Internet. You can find more information at: www.ihmi.net

HMI Information Collector is available only on cMT / cMT X Series models, and the applicable OS version is 20210705 or later.



EasyAccess 1.0

Note

2.6. Data Conversion



Utilities	Description
Recipe Database	Edits recipe data.
Editor	Lick the icon to download the document about Recipe
	Database.
Easy Converter	Reads HMI-generated data logs, event logs, and operation logs
	and converts the files to Excel (.xlsx) format.
	🕝 See "25 EasyConverter".
Recipe Editor	Creates new recipe data to be used on HMI and modifies the
	existing recipe data.
	🕝 See "24 Recipe Editor".

