

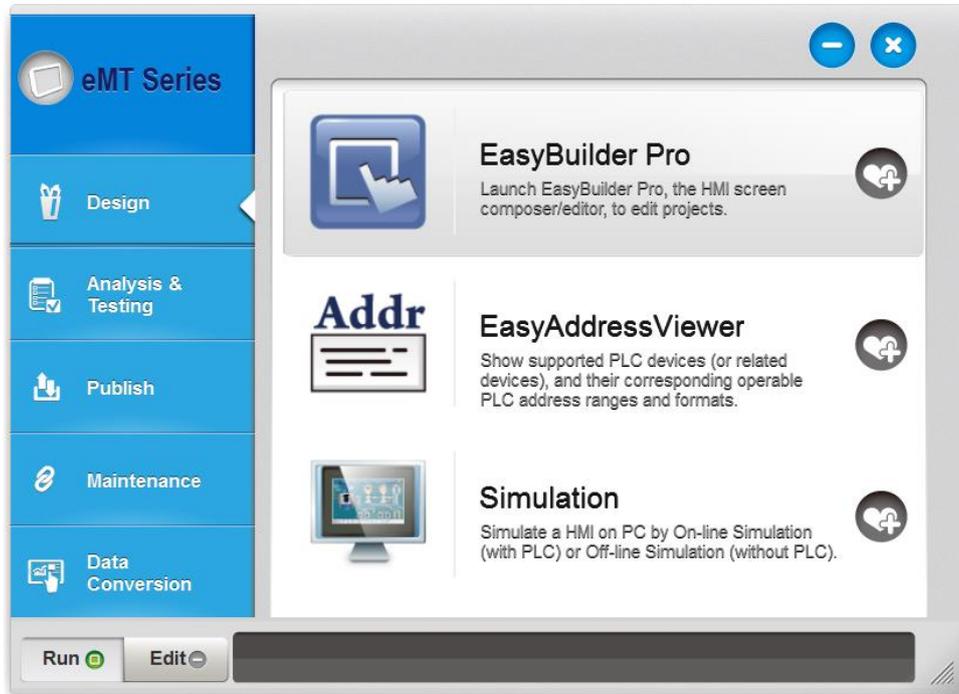
## 2. Utility Manager

This chapter explains how to use Utility Manager.

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## 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.



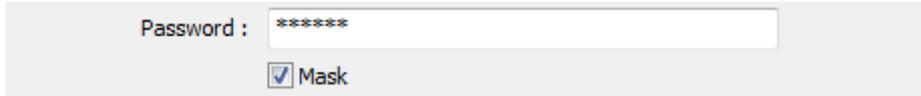
Utilities	Description
<b>Select Model</b>	Select your HMI model. Please note that if the model is incorrect, certain features may not work correctly.
<b>Design</b>	<p><b>EasyBuilder Pro:</b> Launch EasyBuilder Pro to edit projects.</p> <p><b>EasyAddressViewer:</b> Review the address ranges and formats of supported PLCs.</p> <p><b>Simulation:</b> Simulate a HMI on PC by On-line Simulation (with PLC) or Off-line Simulation (without PLC).</p>
<b>Analysis &amp; Testing</b>	<p><b>EasyDiagnoser:</b> On-line monitoring and debugging tool. Diagnose the connection status between PC/HMI and PLC.   See "33 EasyDiagnoser".</p> <p><b>EasyWatch:</b> Allows users to monitor HMI or PLC address values via Ethernet on PC.   See "35 EasyWatch".</p> <p><b>Reboot HMI:</b> Restart a HMI to its initial condition by Ethernet or USB connection.</p> <p><b>Pass-Through:</b> Allows PC applications to control PLC via HMI. In this case the HMI is an adaptor.</p>

	 See "29 Pass-through".
<b>Publish</b>	<p><b>Download:</b> Download project file to HMI via Ethernet or USB cable.</p> <p><b>Upload:</b> Upload files on HMI to PC via Ethernet or USB cable.</p> <p><b>Build Download Data for SD/USB Disk:</b> Build the data to be saved in SD card / USB drive and then insert the device to HMI to download the data. This feature is not supported by cMT Series.</p>
<b>Maintenance</b>	<p><b>EasyPrinter, Backup/Printer Server:</b> A backup/printer server on PC, which receives backups from HMI and run a defined batch to convert, or HMI screenshots to print out on PC.</p> <p><b>Administrator Tools:</b> Allows storing the data of [User Accounts], [USB Security Key], [e-Mail SMTP Server Settings], and [e-Mail Contacts] to USB.</p> <p> See "36 Administrator Tools".</p> <p><b>cMT Viewer:</b> Connect to a cMT Series model. PC is the display terminal for cMT project.</p> <p><b>Data/Event log Information:</b> Connect with HMI via USB cable or Ethernet to check the number of history files in HMI. This feature is not supported by cMT Series.</p> <p><b>EasyAccess 1.0:</b> Control remote HMI instantly and conveniently no matter which corners in the world you are. You can find more information at: <a href="http://www.ihmi.net">www.ihmi.net</a></p>
<b>Data Conversion</b>	<p><b>Database Editor:</b> Used to edit recipe data.</p> <p> Click the icon to download the document about Recipe Database.</p> <p><b>Easy Converter:</b> Reads the data sampling file and event log file in HMI and convert the files to Excel (.xls) format.</p> <p> See "25 EasyConverter".</p> <p><b>Recipe Editor:</b> Used to create, view, and edit recipe data.</p> <p> See "24 Recipe Editor".</p>
	Minimize the window.
	Close the window.
	Add the frequently used utilities to the toolbar at the bottom of the window.
<b>Run</b>	Run the selected utility on the toolbar.
<b>Edit</b>	Delete the selected utility on the toolbar.

## 2.2. HMI IP, Password

### Settings

When operating HMI via Ethernet or USB cable, please set the password for HMI to protect against unauthorized access.



Set the download password. To use masking password, select [Mask] check box.

### Note

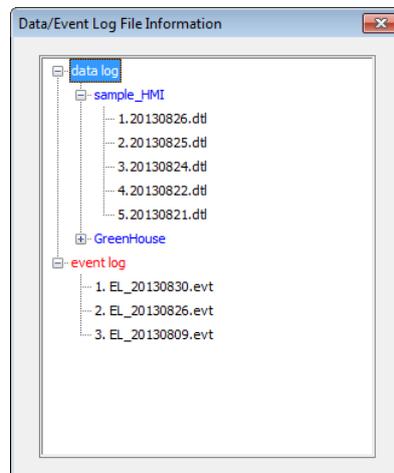
- Please remember the password, otherwise, while restoring HMI default settings, the project files and data in HMI will be completely erased.

### Reboot HMI

Reboot the HMI without unplugging. After reboot, the system returns to the initial state. Set the correct IP address when rebooting HMI via Ethernet.

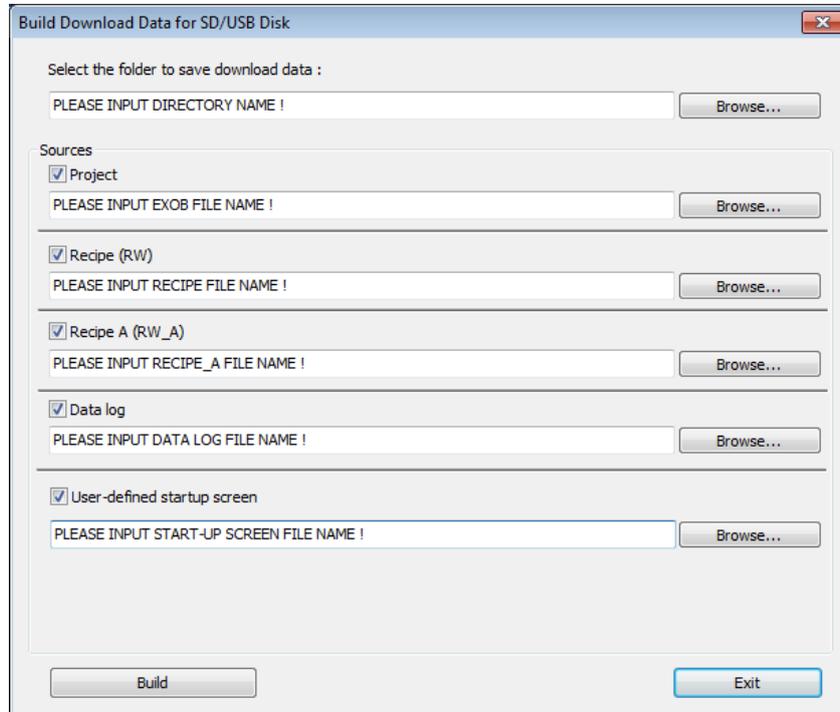
### Data/Event Log File Information

After setting, connect with HMI to check the number of history files in HMI.



## 2.3. Editing Tools

### 2.3.1. Build Download Data for SD/USB Disk



1. Insert an external device (SD card or USB drive) to PC.
2. Assign the directory to store data.
3. Select the directory of the source file.
4. Click [Build] to create files for downloading.

Files will then be store to the inserted device for users to download to HMI without connecting via a USB cable or Ethernet.

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

Assume we will download data in the folder named “123” (K:\123) on an 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.
4. In [Download Settings] dialog box, select [Download project files] and [Download history files] check boxes.
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.

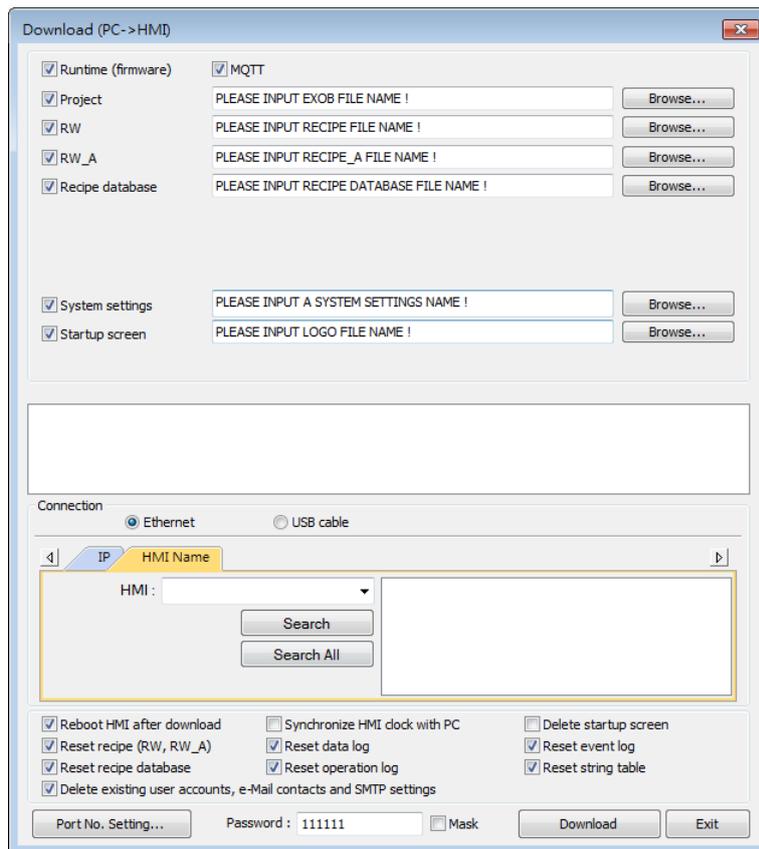
 **Note**

- If only the history files are downloaded, it is necessary to reboot HMI to update files.

## 2.4. Transfer

### 2.4.1. Download (PC->HMI)

Download files to HMI via Ethernet or USB cable.



Setting	Description
<b>Firmware</b>	Update HMI kernel programs. The firmware must be downloaded at the first time downloading data to HMI.
<b>MQTT</b>	If MQTT is used in the project and HMI is the broker, this checkbox must be selected before download.
<b>Project</b>	Select an .exob / .cxob project file.
<b>RW / RW_A</b>	Select a .rcp recipe file.
<b>Recipe database</b>	Select a .db file of Recipe Database.
<b>System settings</b>	Select a conf. system settings file.

<b>Startup screen</b>	Download a .bmp bitmap file to HMI. After HMI is rebooted, this .bmp file will be shown before project starts.
<b>Reboot HMI after download</b>	Automatically reboot after download.
<b>Port No. Setting</b>	Select the port by which to download the project file via Ethernet.
<b>Synchronize HMI clock with PC</b>	Synchronize HMI time with PC time when downloading project file.
<b>Reset recipe / recipe database / event log / data log / operation log / string table / Delete startup screen / Delete existing user accounts, e-Mail contacts and SMTP settings</b>	Erase the selected files in HMI before download.

#### 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.

Setting	Description
<b>Event log</b>	Upload the .evt file in HMI to PC.

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**Extended Memory  
(EM)**


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Upload the .emi file saved in SD card or USB disk to PC.

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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 file first and open the .emtp / .cmtmp 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.

## 2.5. Simulation

### 2.5.1. Off-line Simulation / On-line Simulation

Off-line simulation: Simulate project operation on PC without any connection.

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 10 minutes simulation limit.

Before executing On-line/Off-line Simulation, please select the source .exob file.

When executing On-line/Off-line Simulation, right click to use these functions:



Setting	Description
<b>Exit simulation</b>	Stop simulating.
<b>Run EasyDiagnoser</b>	To monitor current communication status.
<b>Screenshot</b>	Capture and save current screen image as a picture file in the screenshot folder under the installation directory.

## 2.6. Pass-Through

This function allows the PC application to connect PLC via HMI. In this case, the HMI works like a converter.



Pass-through provides two modes: **[Ethernet]** and **[COM port]**.

When using **[Ethernet]**, please install the virtual serial port driver first.



For more detail, please refer to “Chapter 29 Pass-Through Function”.