24. Recipe Editor

This chapter explains how to use Recipe Editor.

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24.1. Overview

Recipe Editor is used to create, view, and edit recipe data.

EasyBuilder Pro also provides another tool for editing recipe: Recipe Records. To use this tool; first define a recipe in EasyBuilder Pro [Data/History] » [Recipe Database] tab, and then use [Recipe View Object] to display the content. The following introduces the usage of these two editing tools.

24.2. Recipe / Extended Memory Editor Setting

- 1. Open Utility Manager and click [Recipe/Extended Memory Editor].
- 2. To add new .rcp or .emi files, click [File] » [New].
- 3. Set address range and select data format.

Data Format			— ×
Address range	(unit : word) To 12	Select your data format Format 0 Save Format	▼ Delete Format
Data format Size 1 WORD 10 WORDs 1 WORD 1 WORD	Type 16-bit Unsigned String [ASCII] 16-bit Unsigned 16-bit Unsigned	Description Product No. Name Store No. Category	Add Delete Clear All Modify
•	m		OK Cancel

Setting	Description
Address range	Fill in address range, the unit of which is word.
Select your data	Save the specified data format for loading next time.
format	The saved file name is "dataEX.fmt" under
	EasyBuilder Pro's installation directory.
Data format	Edit new data format in this field.



4. Click [Add] to enter a description of the data type, and select data format. When selecting [String], please enter the length (words) and select [ASCII] or [Unicode].

Data Type	
Description : Data 4	
C 16-bit BCD	C 32-bit BCD
C 16-bit HEX	C 32-bit HEX
• 16-bit Unsigned	O 16-bit Signed
C 32-bit Unsigned	C 32-bit Signed
C Float	
C String	WORD(s)
ASCII	C Unicode
ОК	Cancel

5. After setup, click [OK] to start editing recipe data.

Category 4
4
5
2
3
5
3
3
6
5
5
1

In this example, the total length of data format is 13 words. Each 13 words will be one set of recipe data.

The first set: "product no." = address 0, "Name" = address 1 ~ 10, "Store No." = address 11, "Category" = address 12;

The second set: "product no." = address 13, "Name" = address 14 ~ 23, "Store No." = address 24, "Category" = address 25;...and so on.





After editing recipe data, it can be saved as .rcp, .emi, or .csv files. The .rcp files can be downloaded to HMI using Utility Manager or external devices (USB drive or SD card). The .emi files can be saved directly to the external device which is inserted to HMI as extended memory (EM).

24.3. Recipe Database Settings

In EasyBuilder Pro, open [Data/History] » [Recipe Database] to define recipes, set transfer method and edit recipe data.

24.3.1. Definition

In Definition tab configure recipe database settings including recipe name, item name, data type...etc.

Recipes List : Recipes 🚯 💌	Item name	Data type	Size	Display width	Decimal Pt.	Alignment	
	Data1	16-bit Unsigned	1	5	Decimarit.	Left	
1. Recipe	Data2	32-bit Signed	2			Left	
	Data3	32-bit Float	2	5 5	0 0	Left	
Import Export				New	Delete	Settings	
Prohibit recipe database update f * At most 100 items in one recipe a				erformance of HMI.			

Setting	Description
Recipes List	Add or delete a recipe, the maximum is 100 recipes.
New	Add a new item, the maximum is 1000 items.
Settings	Configure recipe settings, see the following description.



Delete	Delete the selected items.
Import	Import recipe definition.
Export	Export recipe definition. The exported file will not contain recipe records.

Click [Settings]:

Recipes Item Information	
Name :	NewItem1
Display Type :	16-bit BCD 🔹
Item size (WORD) :	▼
Display width (Chars) :	5 🔹
Right of decimal Pt. :	•
Alignment :	Align left 🔹
	OK Cancel

Description
Enter recipe item name.
Setting item data type.
Setting the size of the item.
Setting the number of characters of the item to be displayed.
Setting the decimal place when displaying data.
Setting the alignment when displaying data. [Align left], [Align center], and [Align right] can be selected.

24.3.2. Transfer

Transfer tab contains the settings for transferring records between the recipe database and designated destinations.

Bulk transfer

Transfer destinations of a record are consecutive addresses starting from the designated address.

Recipe Database	
Definition Transfer Data Syste	m Registers
Recipe List :	Imable
test1 test2	Bulk transfer Transfer to individual addresses
test3	Device : Local HMI
	Address : LW V

Under this mode, the data type settings of destination addresses must follow those of the recipe items. The following table shows the bulk transfer result when LW-0 is designated as the



finition Transfer Data S ecipes List :	ystem Registers					
Recipes 🔥 🔀	Item name	Data type	Size	Display width	Decimal Pt.	Alignment
1. Recipe	Data1	16-bit Unsigned	1	5	0	Left
	Data2	32-bit Signed	2	5	0	Left
	Data3	32-bit Float	2	5	0	Left
Item Name Destination			Data Ty	pe of Des	t. Address	
Data1	LW-0			16-bit U	Insigned	
Data2	LW-1		32-bit Signed			
Data3	LW-3		32-bit Float			

starting address given settings in the following figure.

Transfer to individual addresses

Transfer destination of each item within a record is configured individually.

efinition Transfer Data	System Reg	gisters			
Recipe List :	V	Enable			
test1 test2	0	Bulk transfer 💿 Transfe	er to individual addresse	5	
test3		Item name	Data type		Address
	1	16int	16-bit Signed	[MODBUS TCP/IP] 4x-1	
	2	32int	32-bit Signed	[MODBUS TCP/IP] 4x-100	
	3	64int	64-bit Signed	[MODBUS TCP/IP] 4x-200	
	4	unicode_10	Unicode	[MODBUS TCP/IP] 4x-50	
	5	16bcd	16-bit BCD	Disable	

Under this mode, the data type setting of each destination addresses must also follow those of the corresponding recipe item. In the settings shown above, the data type of address 4x-1 should be 16-bit Signed, and 4x-100 should be 32-bit Signed, and so on.

24.3.3. Data

Data tab contains an editor for recipe content. Before recipe content can be edited in this tab, the data type of the items should be set in Definition tab.





efinition Transfer Data	System Reg	isters				
lecipes List :						
Recipe (3)		Data1	Data2	Data3		
	1	1	2	3 6 9		
	2	4	2 5 8	6		
	3	7	8	9		
					18° 18° 2	
					New	Delete

In the example shown above, Recipe created in the Definition tab can be found. Items shown on the right hand side come from item names added in Definition tab. Data of each item name can be configured in this tab following the data type defined in the Definition tab.

Setting	Description
Recipes:	The recipes created in Definition tab. The number
	enclosed in brackets shows the total number of
	records in the corresponding recipe.
Add	Adds records into the recipe according to the
	defined data type.
Delete	Deletes the edited content.
Up / Down Arrows	Moves the selected record upward / downward.

To define recipes according to the specified data type, click [Add] button above the record list to insert a new record and start editing each item. When click on the item, the item's data type will be shown under the record list. This helps users to fill in each item with appropriate value. Click [OK] to confirm and save the records.



Recipe Database							×
Definition Transfer Data	System Register	rs					
Recipes List :	S.						
Recipe (3)		Data1	Data2	Data3			1
		1	2	3			
		4	5	6			
	3	7	8	9			
							-
	Data type = '	16-bit Unsigned' = '0'			New	Delete	ור
	Decimal Pt. =	• U					
-							
					ОК	Cancel	Help

24.3.4. System Registers

In System Register tab, a list of recipe database related control addresses and their descriptions can be found.



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ecipe Data	abase								Ŀ
Definition	Trans	fer Data	System Registers						
Selectio			ction of record, and it i						
		When the va	due of Selection is cha	nged, the correspond	ling values will be	updated.			
Count		Show the nu	mber of records in cur	rent recipe.					
Comma			ı value will send comm		ecord.				
			: Add a new recipe rec						
			: Update the selected re						
		Enter "3"	: Delete the selected re-	cipe record.					
			: Delete all recipe reco:						
		Enter "5" : Write selected record to PLC.							
		Enter "6"	: Update selected recor	rd from PLC					
Result		View the res	ult of executing comm	ands.					
			" : Command success	•					
		양양 고망 가가지 옷	2":The selected recor						
			4" : Unknown comma						
		양양 전쟁 전화 전	3": Records reach lim		no new records can	ı be added.			
			6": Other command						
		Displays "3	32" :Transfer commai	nd failed					
						3	ОК	Cancel	Help

Note

- The maximum number of Recipe Database acceptable in a project file is 100 Recipe Databases. A Recipe Database can contain 1000 items.
- Each recipe can hold a maximum of 10000 records.
- The maximum data length acceptable in a Recipe Database is 2000 words. Exceeding the limit can lead to compilation failure.
- The name of Recipe Database and recipe items should be in alphanumeric.
- The recipe records will be stored in the .exob file after compilation and will be downloaded to HMI. These recipes cannot be shared with other project files. If users need to modify the recipe contents and download them to the HMI, make sure that [Reset recipe database] check box is selected during download. If not, the recipe database in the HMI will not be updated.



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 Reboot HMI after download Automatically using current settings to download after compiling 	
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