

24. Recipe Editor

This chapter explains how to use Recipe Editor.

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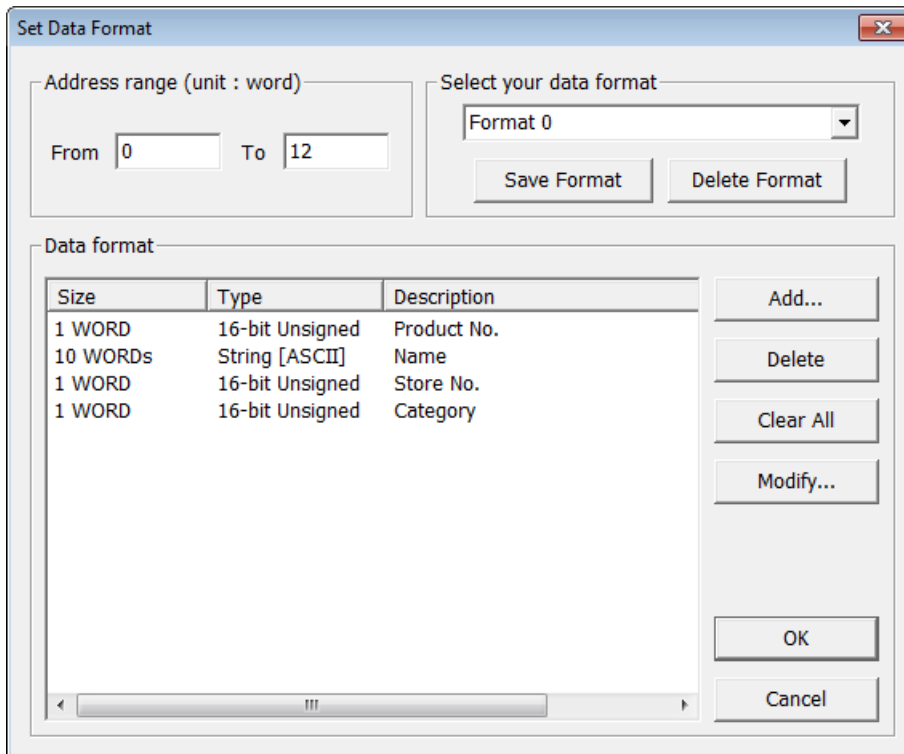
24.1. Overview

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.



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

- 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].

The 'Data Type' dialog box shows the following configuration:

- Description: Data 4
- Radio buttons for data formats:
 - 16-bit BCD
 - 32-bit BCD
 - 16-bit HEX
 - 32-bit HEX
 - 16-bit Unsigned**
 - 16-bit Signed
 - 32-bit Unsigned
 - 32-bit Signed
 - Float
 - String** (with '13' in the text box and 'WORD(s)' label)
 - ASCII
 - Unicode
- Buttons: OK, Cancel

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

ID	ADDRESS	Product No.	Name	Store No.	Category
0	0	0	shampoo	9	4
1	13	1	knife	1	5
2	26	2	chair	3	2
3	39	3	coffee	3	3
4	52	4	pencil	6	5
5	65	5	muffin	6	3
6	78	6	donut	5	3
7	91	7	DVD	9	6
8	104	8	postcard	4	5
9	117	9	maps	5	5
10	130	10	camera	2	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.

 **Note**

- 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).

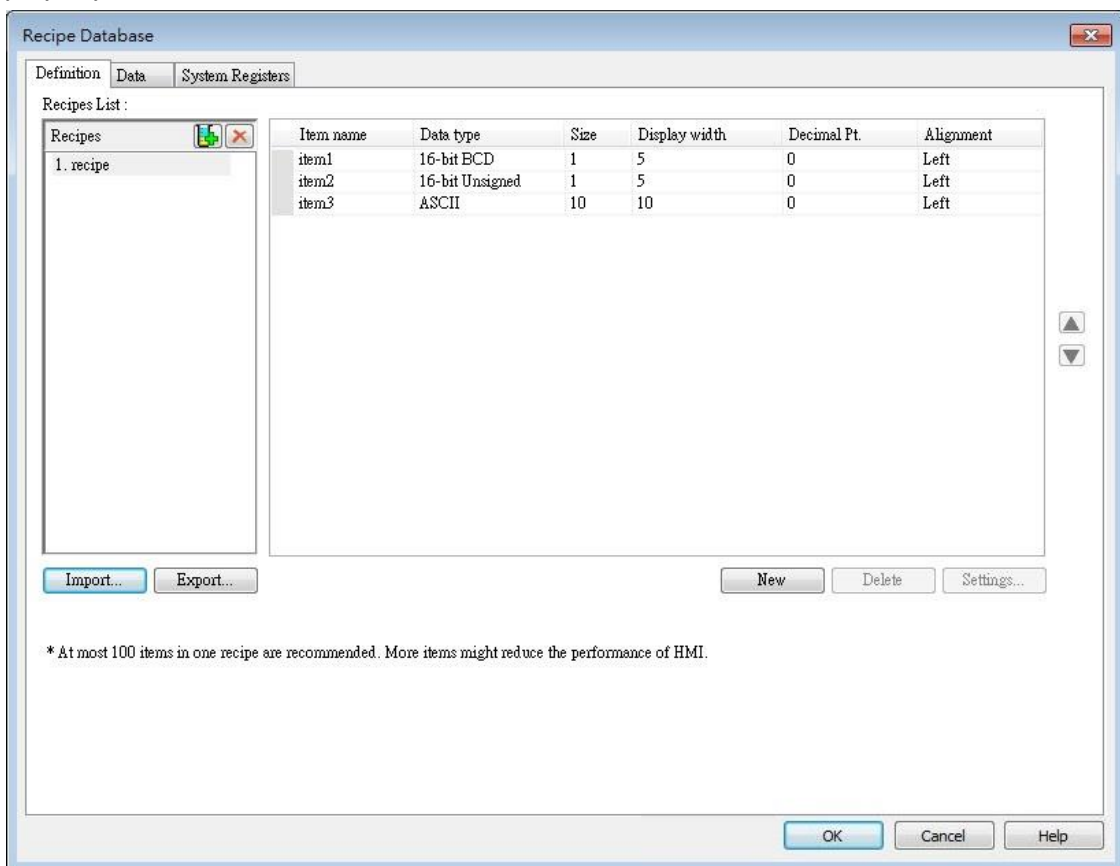
24.3. Recipe Database Settings

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

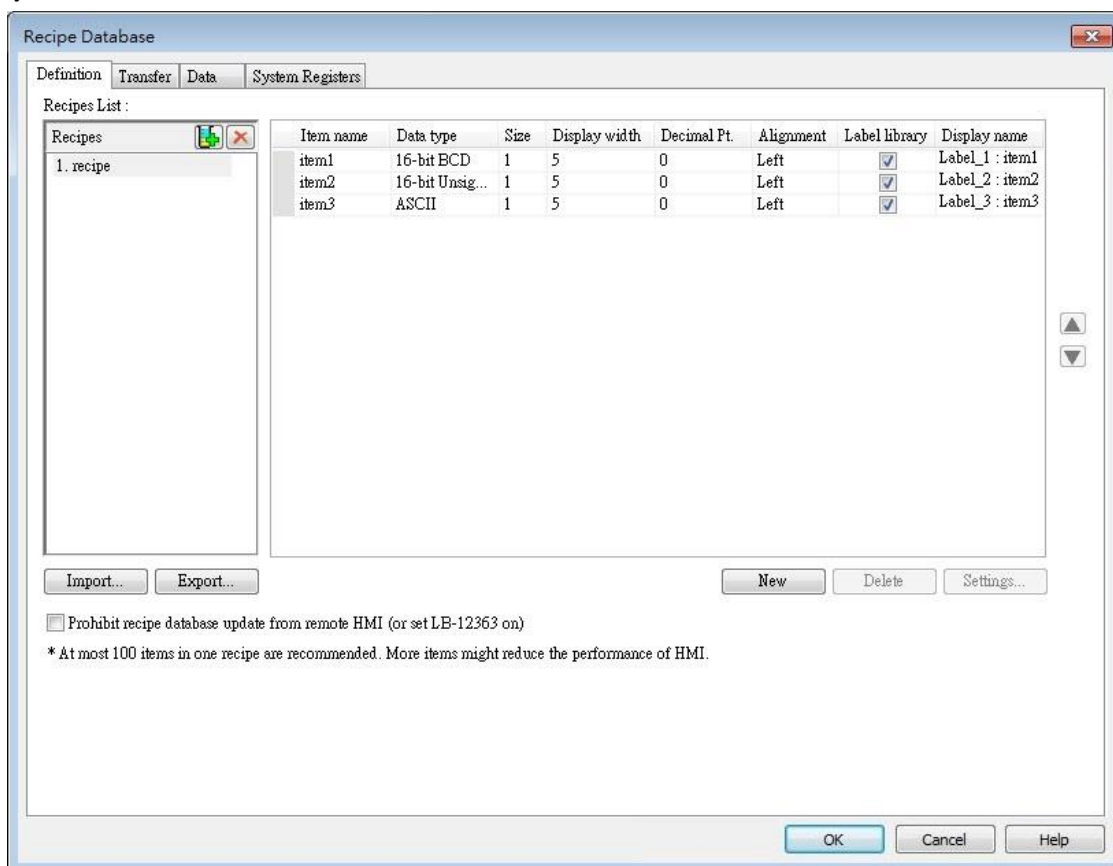
24.3.1. Definition

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

eMT, iE, XE, mTV Series



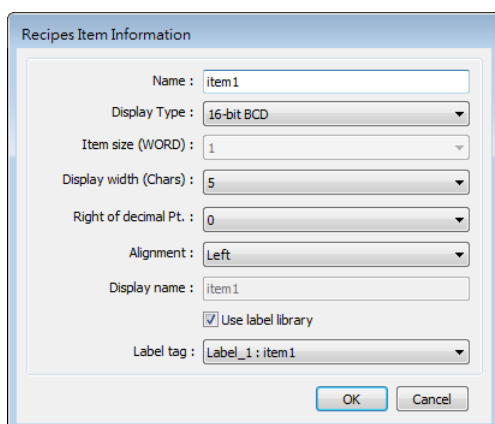
cMT / cMT X Series



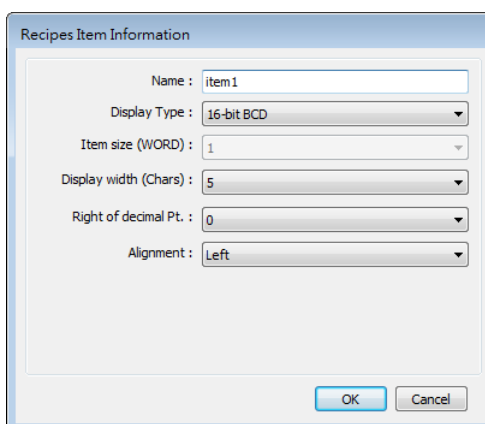
Setting	Description
Recipes List	Add or delete a recipe, the maximum is 100 recipes.
New	Add a new item, the maximum is 1000 items.
Settings	Configure recipe settings, see the following description.
Delete	Delete the selected items.
Import	Import recipe definition.
Export	Export recipe definition. The exported file will not contain recipe records.

Click [Settings]:

cMT, cMT X Series



eMT, iE, XE, mTV Series



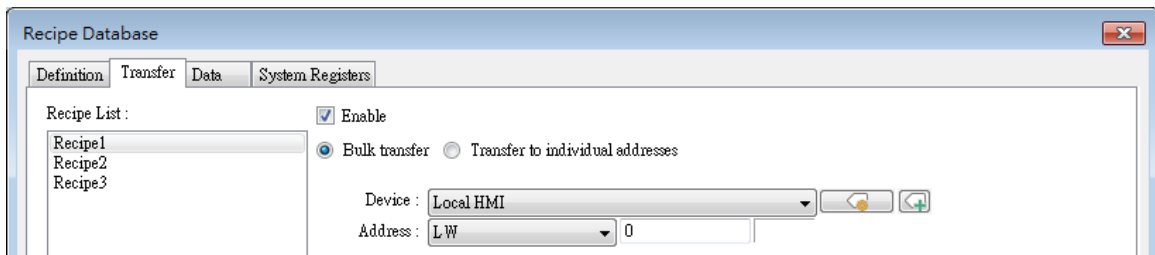
Setting	Description
Name	Enter recipe item name.
Display Type	Setting item data type.
Item size (WORD)	Setting the size of the item.
Display with (Chars)	Setting the number of characters of the item to be displayed.
Right of decimal pt.	Setting the decimal place when displaying data.
Alignment	Setting the alignment when displaying data. [Align left], [Align center], and [Align right] can be selected.
Use label library	On cMT / cMT X series, setting display name is possible. The display name is by default the same as the item name or it may be a tag from Label Tag Library. Please see Chapter 16 Address Tag Library for more details.

24.3.2. Transfer

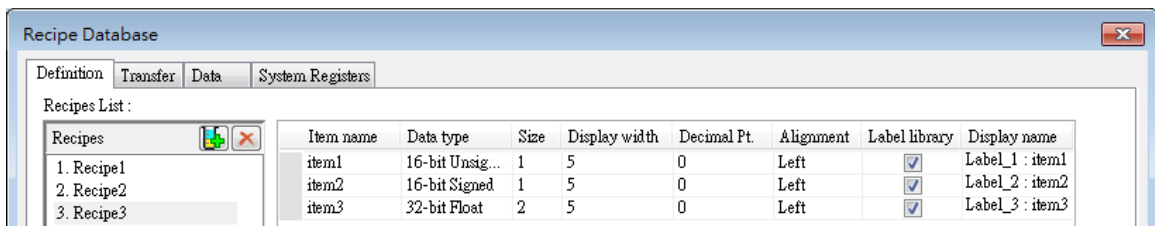
Transfer tab contains the settings for transferring records between the recipe database and designated destinations.

Bulk transfer

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



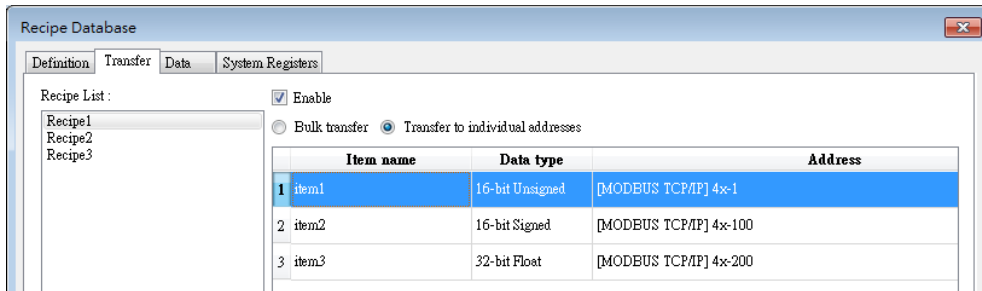
Under this mode, the data type settings of destination addresses must follow those of the recipe items. The following table shows the bulk transfer result when LW-0 is designated as the starting address given settings in the following figure.



Item Name	Destination	Data Type of Dest. Address
item1	LW-0	16-bit Unsigned
item2	LW-1	32-bit Signed
item3	LW-3	32-bit Float

Transfer to individual addresses

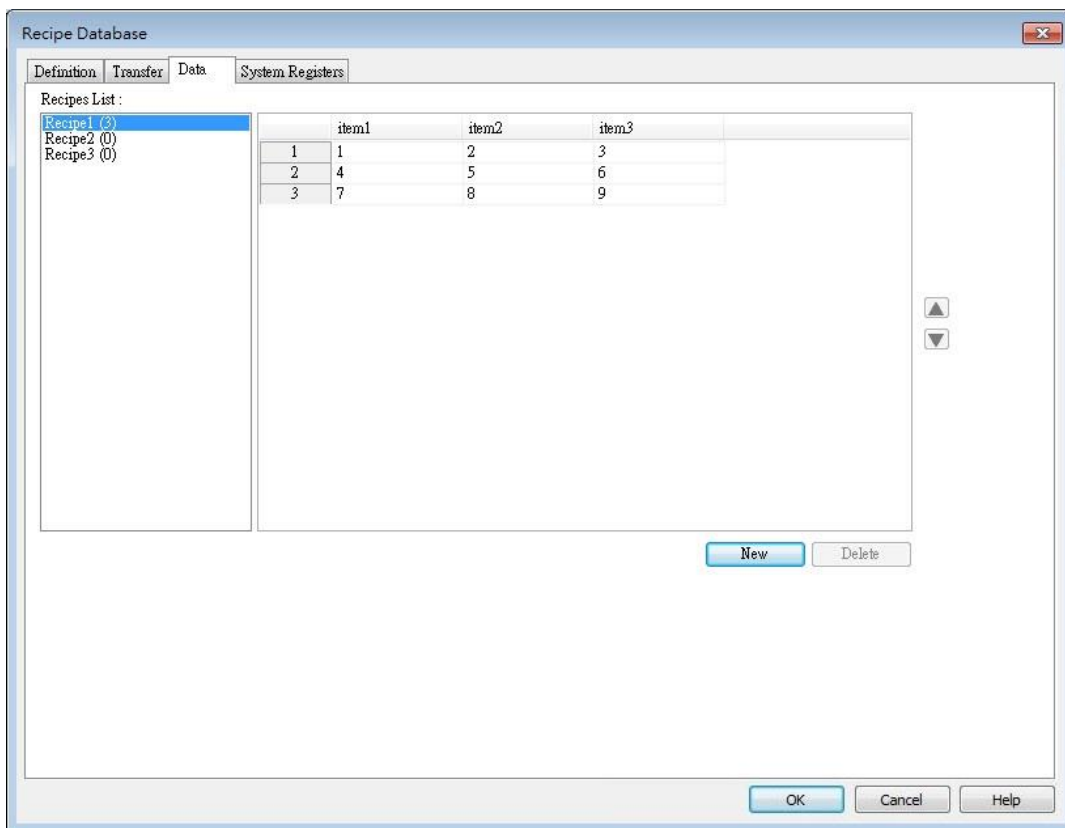
Transfer destination of each item within a record is configured individually.



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

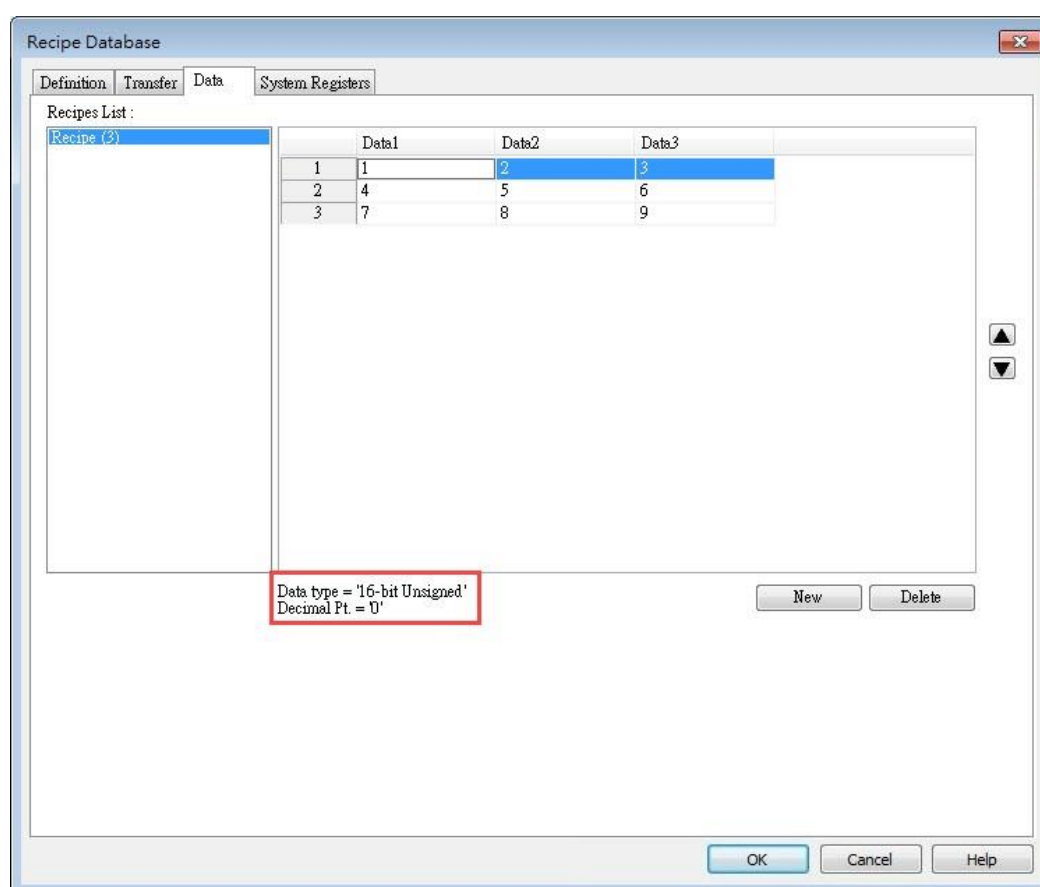
Data tab contains an editor for recipe content. Before recipe content can be edited in this tab, the data type of the items should be set in Definition tab.



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.

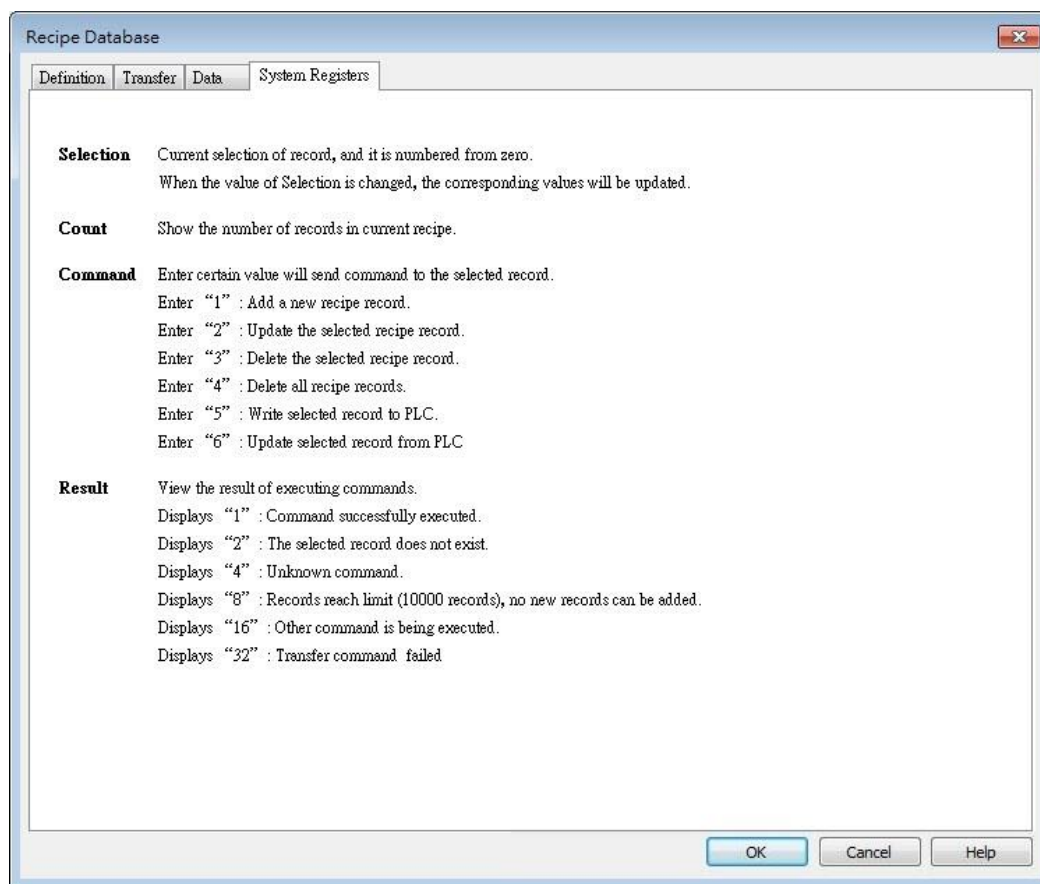
Setting	Description
Recipes:	The recipes created in Definition tab. The number enclosed in brackets shows the total number of records in the corresponding recipe.
Add	Adds records into the recipe according to the defined data type.
Delete	Deletes the edited content.
Up / Down Arrows	Moves the selected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



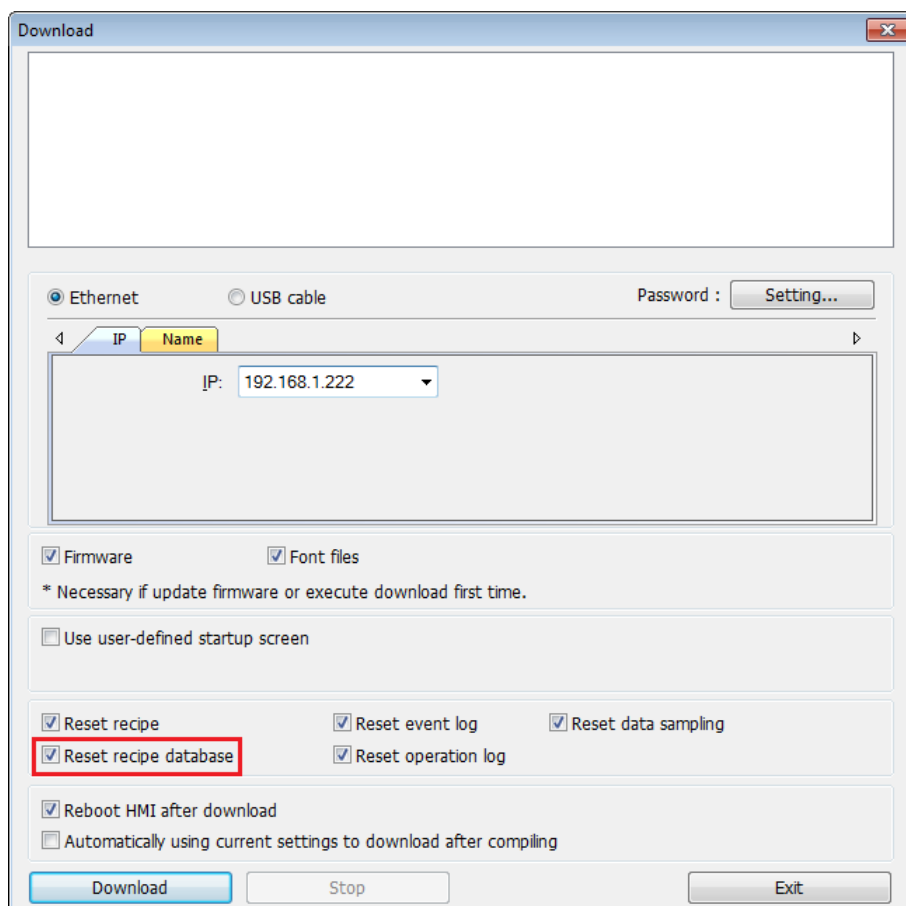
24.3.4. System Registers


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



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.



 Click the icon to watch the demonstration film. Please confirm your internet connection before playing the film.