



Cermate

Technical Document

The HMI Solutions and IoT Gateways Provider

Mar 14, 2021 | V 1.0

Software Function Guide

TN054S-E

Data Exchanger Helper

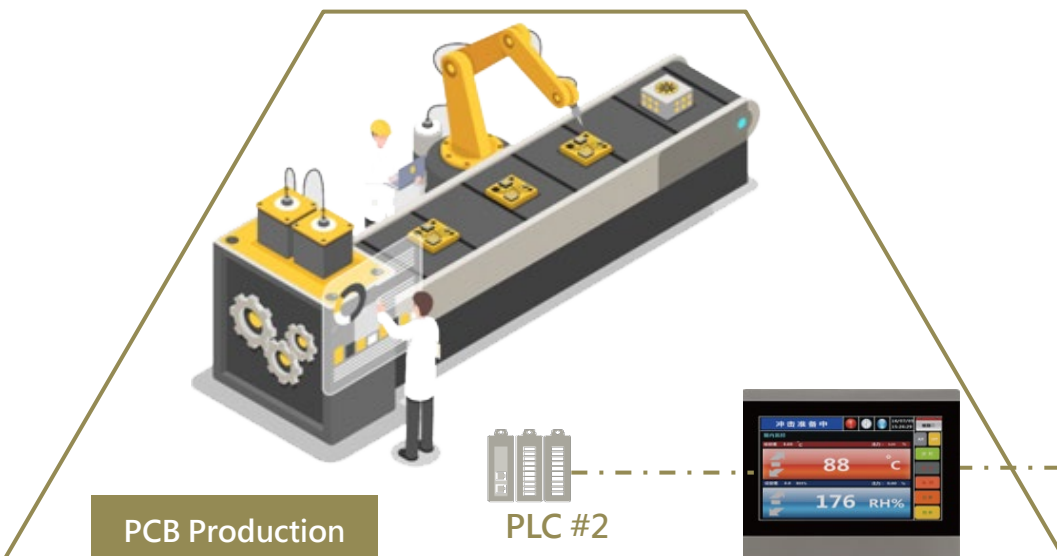
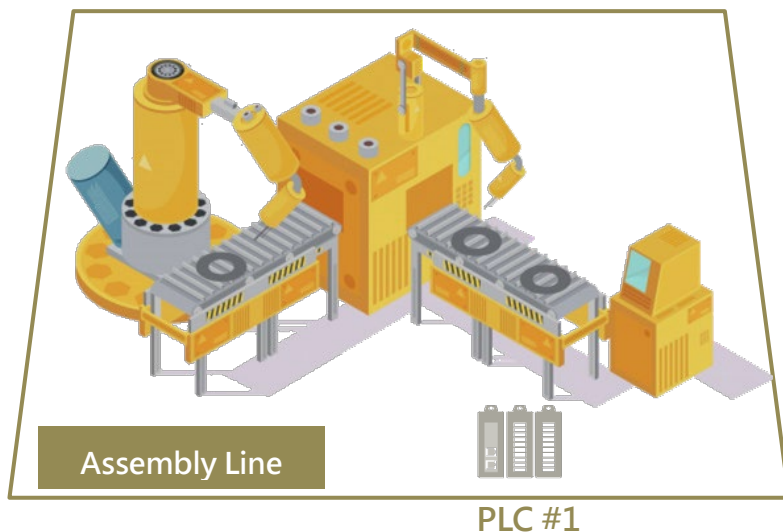
Overview

From PM Designer v2.1, there are many customers use Marco Function to transfer data from one PLC to another one. Based on this requirement, the new version is promoted it as “Data Exchanger” function in PM Designer v4.0. To use this function will be easy to make the data transfer easily.

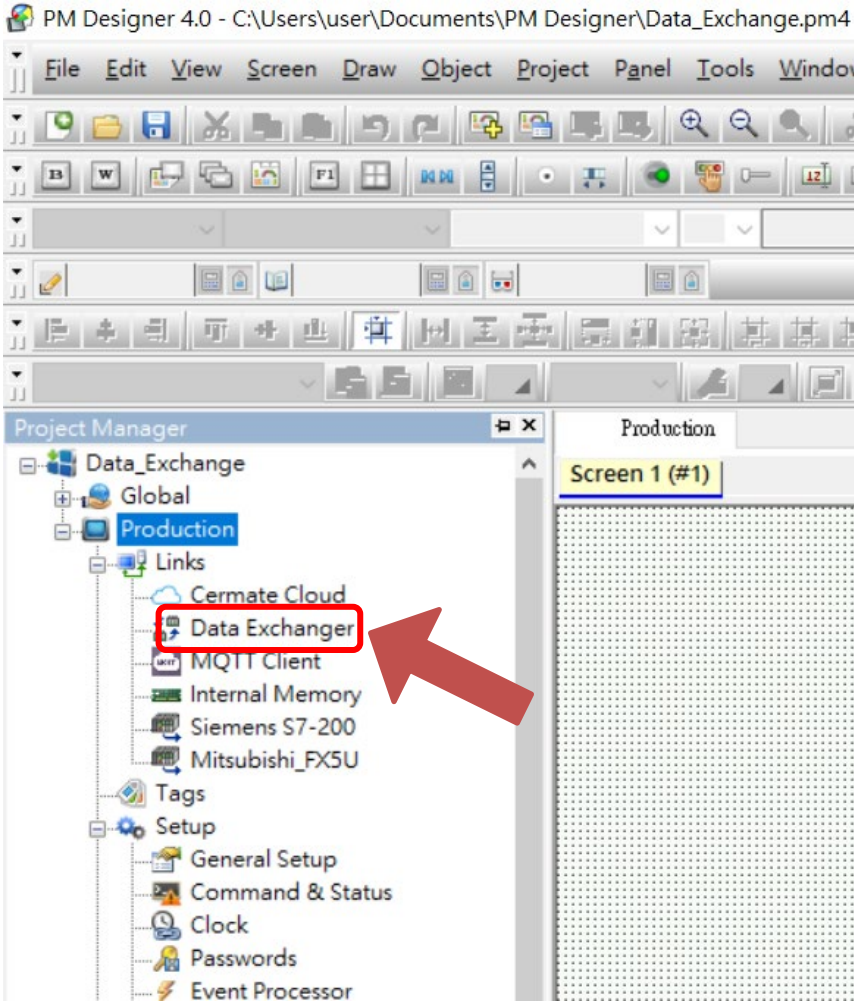
Application

Advantage Features:

1. Simple to configure the System Linking with different PLC Brand Models
2. Easy to create the Data Exchanger Table
3. It can use in all Cermate Edge Devices. HMI & Box(S-Box & ES)
4. It can also use in edge SCADA, PanelExpress.

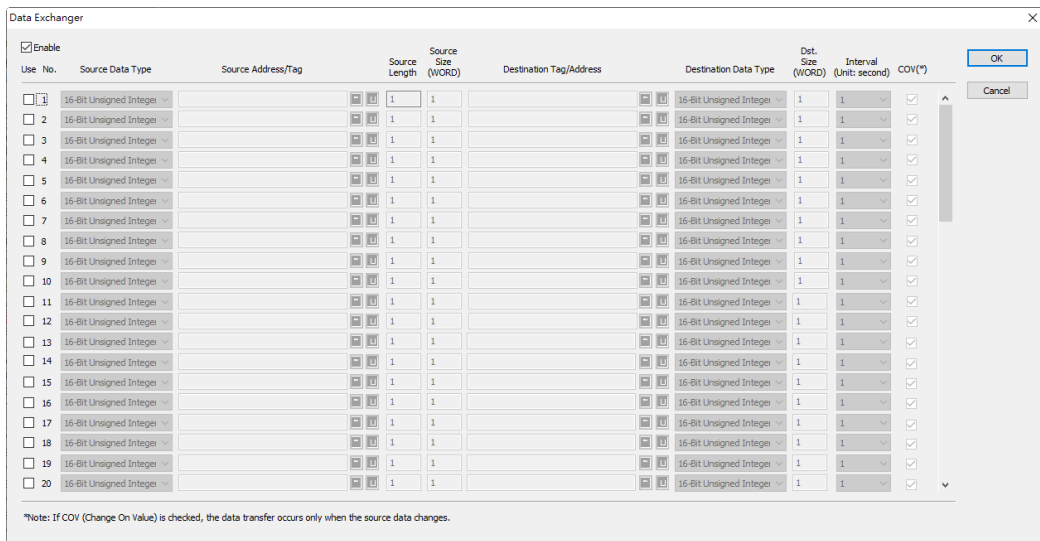


Setting

Software:	PM Designer v4.0.3.68
Hardware :	PA2,PK2,PT2, PX,IT400, S-BOX,ES BOX and PanelExpress series.
Operation :	<p><u>Software setting</u></p> <p>Use Siemens S7-200 communicating with Mitsubishi PLC FX5U as an example;</p> <p>1、 Activate Data Exchange Helper :</p> <ul style="list-style-type: none">Turn on PM 4.0Double Click Data Exchanger from the project manager on the left. (Fig. 1) to activate the Data Exchanger function. <p></p> <p>PM Designer 4.0 - C:\Users\user\Documents\PM Designer\Data_Exchange.pm4</p> <p>File Edit View Screen Draw Object Project Panel Tools Window</p> <p>Production</p> <p>Screen 1 (#1)</p> <p>Project Manager</p> <ul style="list-style-type: none">Data_Exchange<ul style="list-style-type: none">GlobalProduction<ul style="list-style-type: none">Links<ul style="list-style-type: none">Cermate CloudData ExchangerMQTT ClientInternal MemorySiemens S7-200Mitsubishi_FX5UTagsSetup<ul style="list-style-type: none">General SetupCommand & StatusClockPasswordsEvent Processor

(Fig. 1)

Click the checkboxes from the Data Exchanger table. (See Fig. 2)

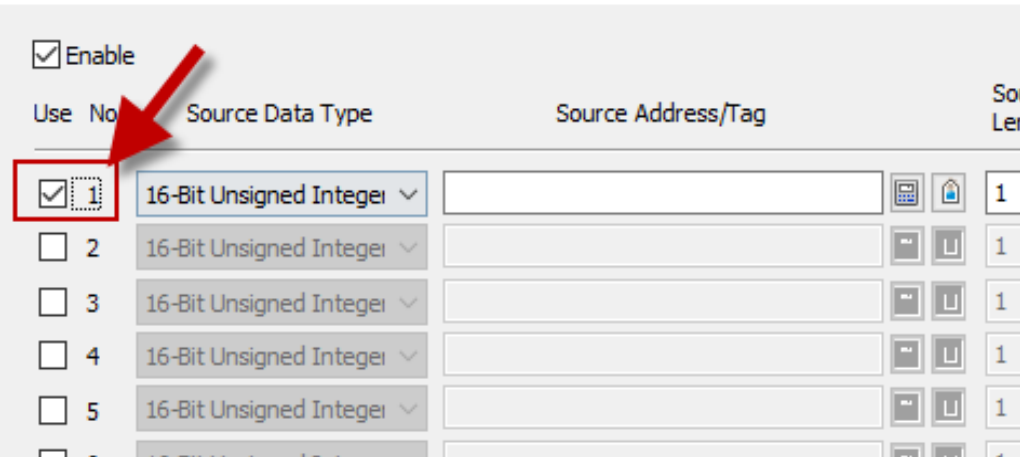


(Fig.2)

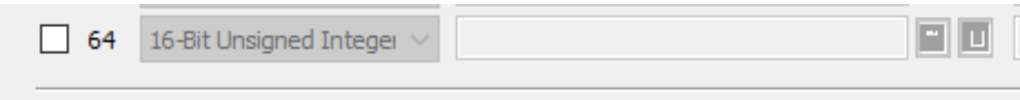
2、 Enable:

Click the first check box to enable the first set of data. Please note that there are 64 sets of data to enable. The more data-enabled, the longer the communication will be. (See Fig. 3 – Fig. 4)

Data Exchanger



(Fig.3)



(Fig.4)

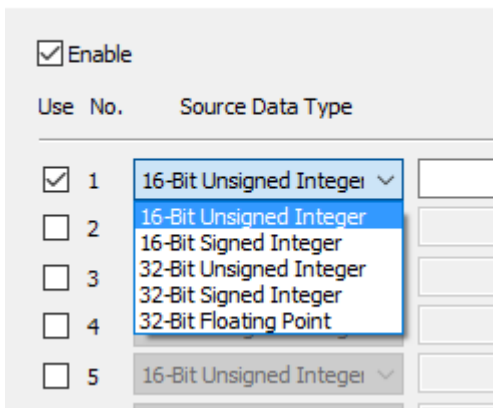
3、 The Source Data Type

There are five different data types to choose from. See Fig. 5 and 6

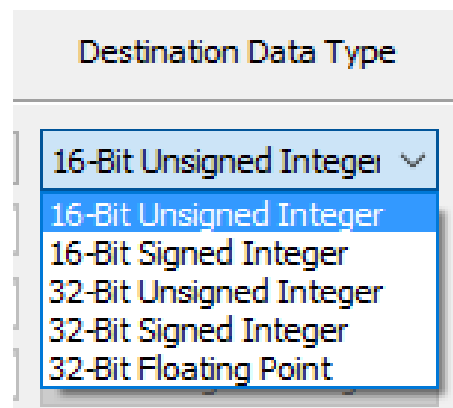
- a. 16-Bit Unsigned Integer
- b. 16-Bit Signed Integer
- c. 32-Bit Unsigned Integer
- d. 32-Signed Integer
- e. 32-Bit Floating Point

It supports exchanging between the above five data types.

Data Exchanger



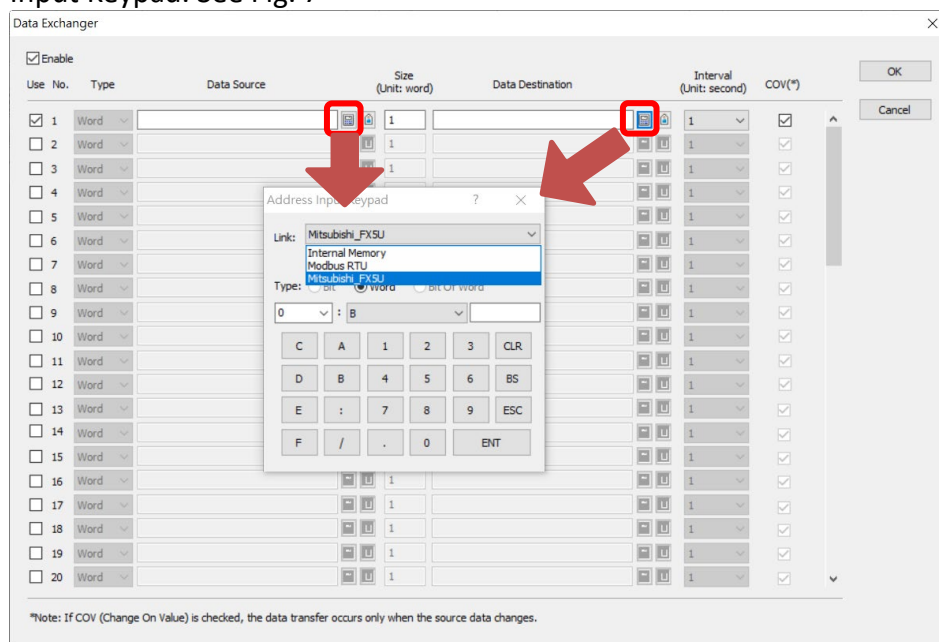
(Fig.5)



(Fig.6)

4、 Source Address/Tag:

Click the checkboxes below from the Source Address/Tag to show the Address Input Keypad. See Fig. 7

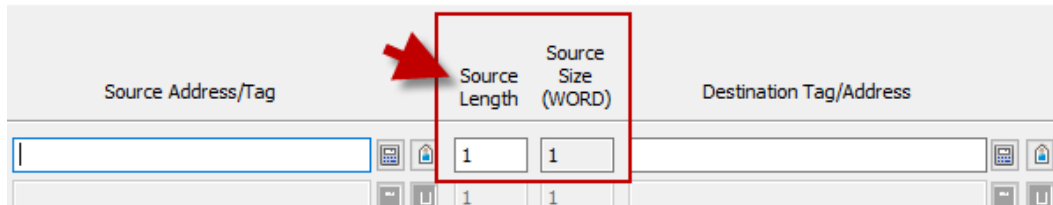


(Fig.7)

5、 Source Length and Source Size(WORD):

Enter the Source Length you want to exchange here. The maximum continuous source length is 125.

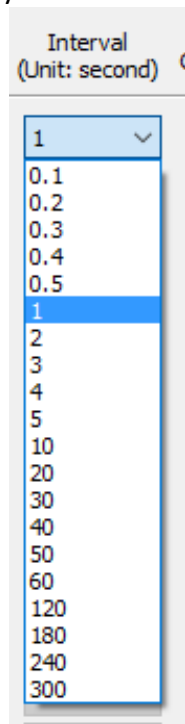
If it's an internal address, such as \$U, then the maximum source length is 512. See Fig. 8.)



(Fig. 8)

6、 Interval:

The interval unit is "Second". The system exchanges data with the interval you choose. See Fig.9



(Fig.9)

7、 Send when change:

If you click COV(*), the system will send data when there's any source data change. This function will increase the efficiency of the system. (See Fig.10)



(Fig.10)

Example:

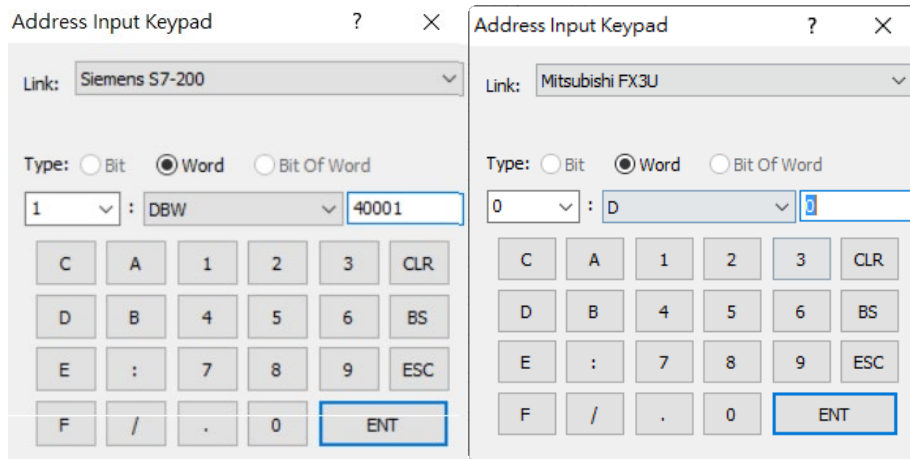
Select Siemens S7-200 to send data to Mitsubishi FX5U PLC address. See Fig 11, 12

Here we send the data from Siemens S7-200 address W40001~W40010 to FX5U address D0~D9 with an interval of 5 seconds.

Settings:

The Source Address/Tag of the Siemens S7-200 starts at W40001

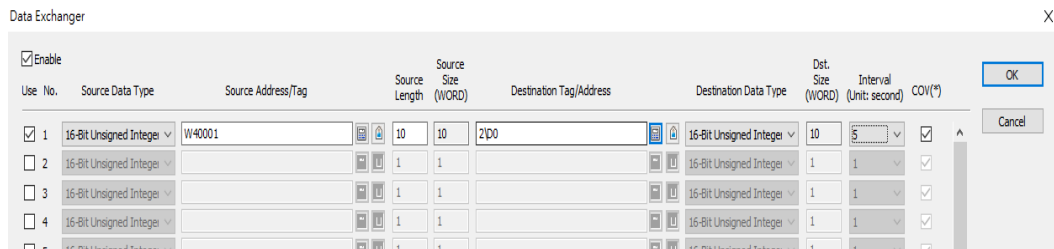
The receiving Address/Tag of the FX5U address starts at D0



(Fig. 11)

(Fig.12)

When you finish setting, you will get the picture below. (Fig.13)



(Fig. 13)



Technical Support Information

Website www.cermate.com

Quick contact information overseas
Worldwide: +886-910011914
Linda@cermate.com

Cermate Technologies Inc.
Phone: +886-2-22437000
E-mail: service@cermate.com

Cermate Technologies (Shanghai) Inc.
Phone: +86-21-23570800~2
E-mail: service01.sh@cermate.com

Shenzhen Cermate Technologies Inc.
Phone: +86-755-83562179,
E-mail: sa-cermate@cermate.com