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This document describes How to Use/ Configure dialog table in Vijeo Designer

Advantages:

1. To share data between PLC & HMI without having to create any additional logic or create mapping
2. Sending & receiving data HMI system parameters with connected devices

NOTE:

1. The dialog table has been tested with HMIS85 target with M580 CPU via modbus TCP equipment. The same functionality has to be verified on other platform controllers/ PLC before actually starting the project.
2. Software used for testing is Vijeo Designer V6.2 SP5 in Windows 7/10.

## Usage of dialog table on Vijeo designer:

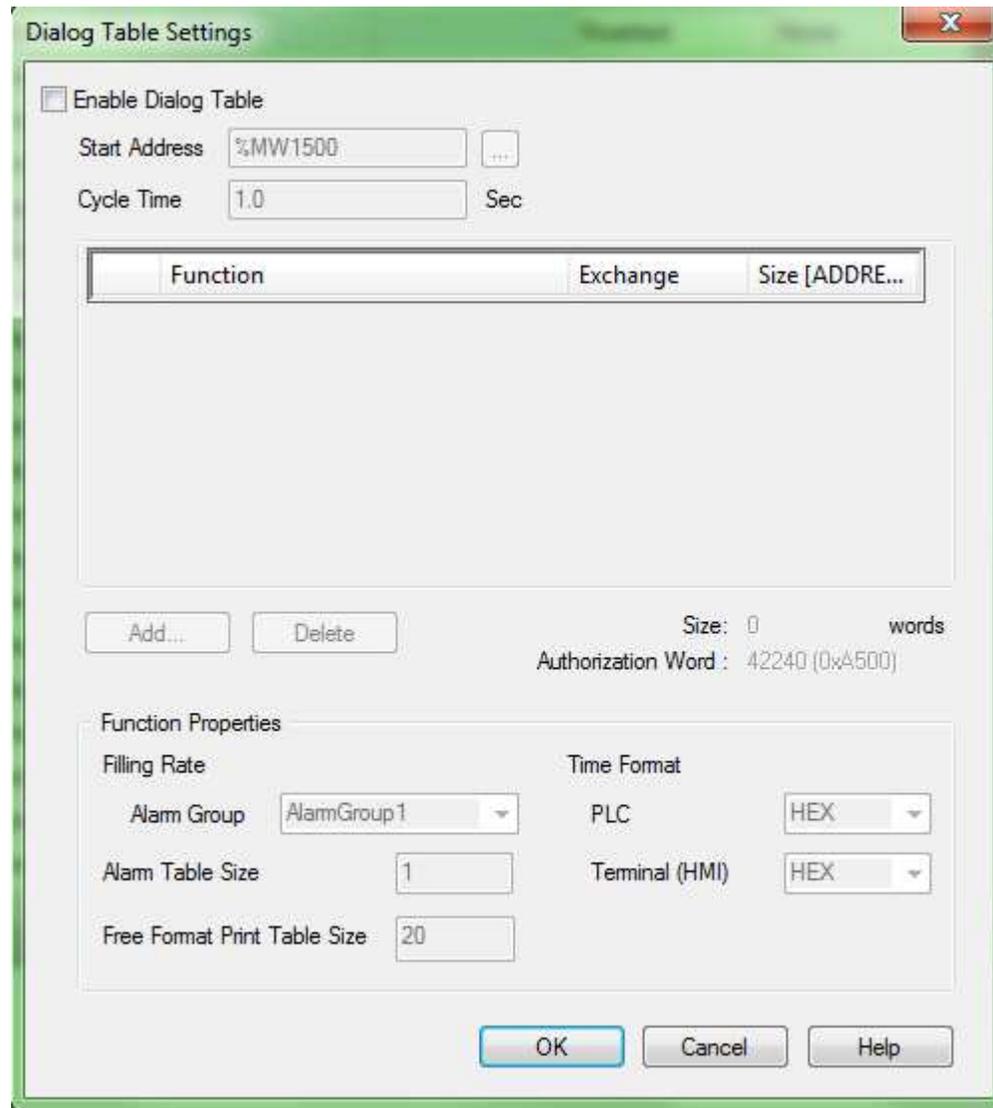
To map HMI system variables to/from PLC we shall enable dialog table on HMI.

How to open & create entry on dialog table:

The screenshot displays the Vijeo Designer interface. On the left is the Navigator pane showing a project tree for '599: POSMON' with various components like 'Master Panels', 'Forms & Reports', and 'Variables'. The main area is the 'Target1 - Variable Editor' window, which contains a table of system variables. The table has columns for Name, Data Type, Data Source, Scan Group, Device Address, Alarm Group, and Logging Group. The 'Data Source' column for row 17 is highlighted, and a dropdown menu is open, showing 'External' selected. Below the table is a 'Feedback Zone'.

	Name	Data Type	Data Source	Scan Group	Device Address	Alarm Group	Logging Group
1	ActiveFunc	STRING	External	MasterU	%MW1553		None
2	ACTIVFUN	STRING	External	MasterU	%MW17920		None
3	Arrow	BOOL	Internal			Disabled	None
4	Auto	BOOL	External	MasterU	%MW404:X4	Disabled	None
5	Auto1	BOOL	External	MasterU	%MW854:X2	Disabled	None
6	Auto2	BOOL	External	MasterU	%MW855:X2	Disabled	None
7	Badcyc	BOOL	External	MasterU	%MW403:X3	Disabled	None
8	BadCycle	UINT	External	MasterU	%MW409	Disabled	None
9	Blocked	BOOL	External	MasterU	%MW404:X0	Disabled	None
10	Brek	BOOL	External	MasterU	%MW404:X12	Disabled	None
11	btnArrowDown	BOOL	External	MasterU	%MW1521:X1	Disabled	None
12	btnArrowLeft	BOOL	External	MasterU	%MW1521:X3	Disabled	None
13	btnArrowRight	BOOL	External	MasterU	%MW1521:X2	Disabled	None
14	btnArrowUp	BOOL	External	MasterU	%MW1521:X0	Disabled	None
15	btnF01 Console	BOOL	External	MasterU	%MW1520:X0	Disabled	None
16	btnF03Local	BOOL	External	MasterU	%MW1520:X2	Disabled	None
17	btnF04Auto	BOOL	External	MasterU	%MW1520:X3	Disabled	None
18	btnF05ResetFit	BOOL	External	MasterU	%MW1520:X4	Disabled	None
19	btnF06Manual	BOOL	External	MasterU	%MW1520:X5	Disabled	None
20	btnF08StartCycle	BOOL	External	MasterU	%MW1520:X7	Disabled	None
21	btnF09	BOOL	External	MasterU	%MW1520:X8	Disabled	None
22	btnF10StopAtEOC	BOOL	External	MasterU	%MW1520:X9	Disabled	None

Under IO Manager the possible IO devices/ communication devices which are configured in project are displayed. Select the Master (in case of UniTelway) otherwise just the equipment go to property and open dialog table.



Once the table is opened, enable dialog table and enter the start address & cycle time (how often this must be executed) for the entries.

Then select Add button which will open a popup with the list of functions available to add in dialog table entries:

**Dialog Table Settings**

Enable Dialog Table

Start Address: %MW1500

Cycle Time: 1.0 Sec

Function	Exchange	Size [ADDRE...]

Add... Delete

Size: 0 words  
Authorization Word: 42240 (0xA500)

**Function Properties**

Filling Rate: Alarm Group: AlarmGroup1

Time Format: PLC: HEX

Alarm Table Size: 1 Terminal (HMI): HEX

Free Format Print Table Size: 20

OK Cancel Help

**Dialog Table Functions**

Add	Function	Exchange	Size
<input type="checkbox"/>	Image of static function keys	To PLC	1
<input type="checkbox"/>	Image of system keys	To PLC	1
<input type="checkbox"/>	Image of numeric keys	To PLC	1
<input checked="" type="checkbox"/>	Communication control	To PLC	1
<input type="checkbox"/>	Set PLC clock	To PLC	4
<input checked="" type="checkbox"/>	Number of displayed page	To PLC	1
<input type="checkbox"/>	Number of last field entered	To PLC	1

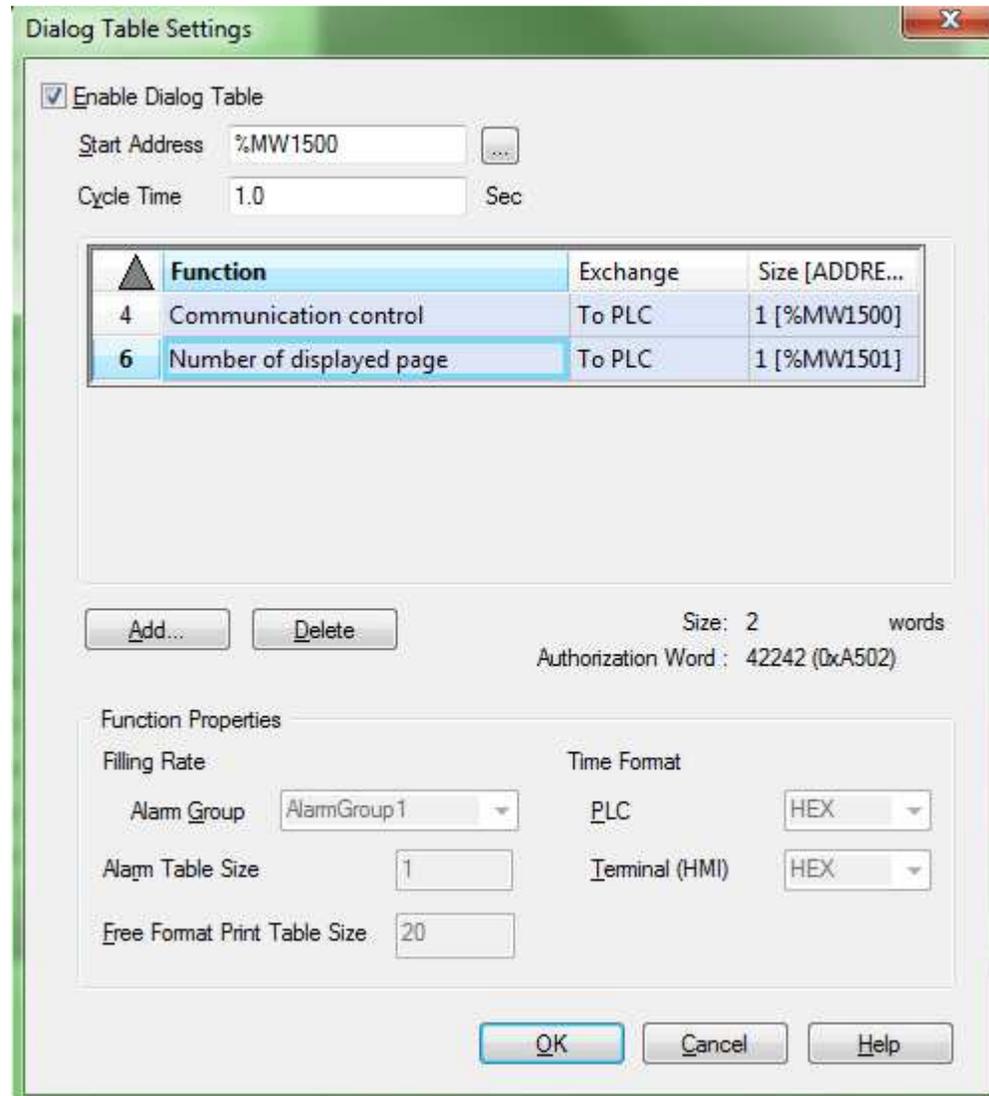
Include XBTL featured functions

OK Cancel Help

In this case I have selected few of them which are checked (ex: communication control, number of displayed page, etc.)

The table below shows the added list of functions where the function column shows the description, exchange indicate whether HMI sending or receiving data between PLCs, size shows the address with which the data transfer happens (address is not customizable based on the start address set all the entries shall be assigned address automatically)

Here communication control function checks for the proper operation of dialog table whereas the function number of displayed page gets the information of the current panel being opened on runtime and send the value to PLC on address %MW1500 & %MW1501 respectively.



Once these entries are created on dialog table upon downloading the project to target HMI, on PLC we will be able to see the values.