

CHAPTER 16

INCREASE EFFICIENCY

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16.1. Finding and Replacing

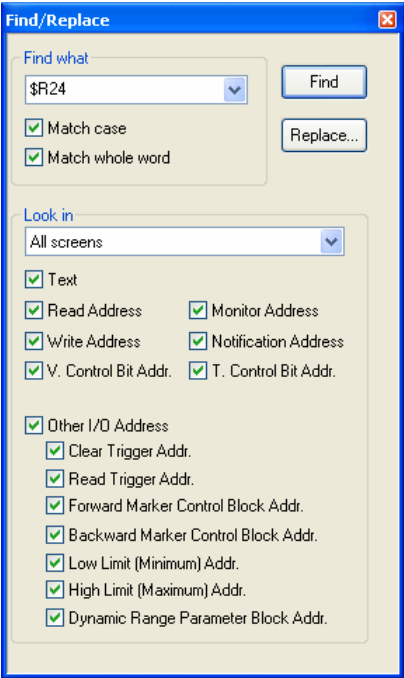
You can use the Find/Replace tool to find and replace texts or addresses used in the project.

16.1.1. Finding/Replacing Texts or Addresses

This section describes how to find or replace texts or addresses using the Find/Replace dockable window or the Find/Replace dialog box.

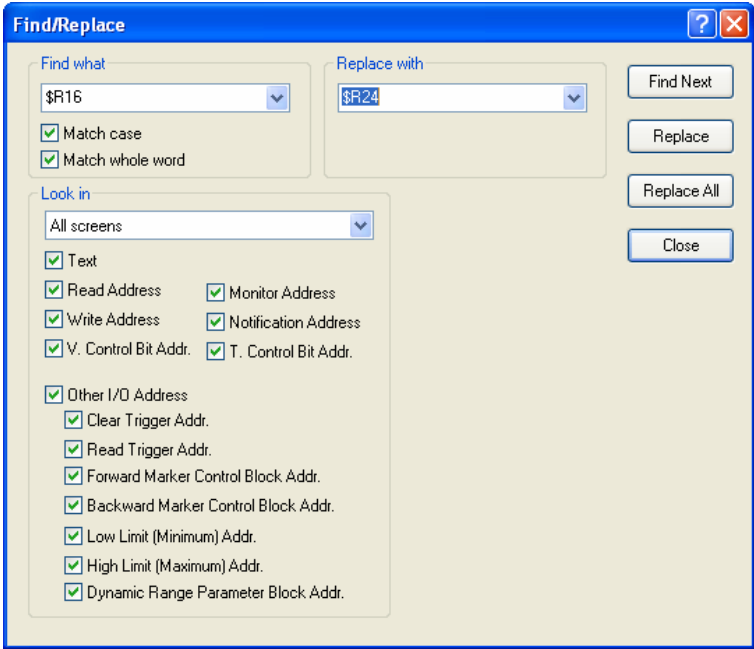
The following is an example of the Find/Replace dockable window for finding Text/Address.

To open the window, use the Find... command on the Edit > Find and Replace menu.



The following is an example of the Find/Replace dialog box for replacing Text/Address.

To open the dialog box, use Replace... command on the Edit > Find and Replace menu.



The following table describes each property in the Find/Replace dockable window/dialog box.

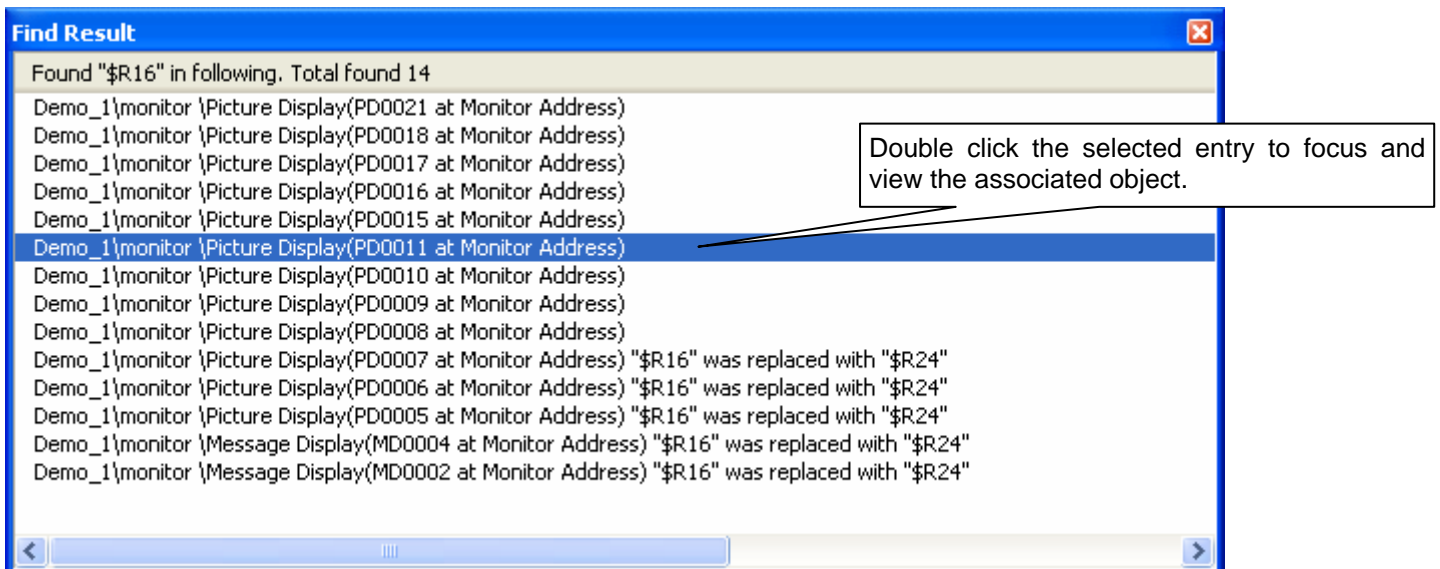
Property		Description
Find what	<Combo Box>	Type the text /address you want to search for, paste it from the clipboard or click a recent entry from the list.
	Match case	Check this option to search only for occurrences that match the combination of uppercase and lowercase characters you enter in the Find what box.
	Match whole word	Check this option to search only for whole words instead of matching the text entered in the Find what box as it occurs within words.
Look in	<Combo Box>	Select one of the following portions of the project you want to search in. Current screen, Current panel application's screens, All screens, Current Macro, Current panel application's macro, All macros, Current panel application's tags, Tags of all panel applications.
	Text/Address	Click any of the listed options to specify the type of text/address to search for.
In dockable window	Find	Click the button to find the specified text or address with selected options. The matches for the search appear in the Find Result window. Please see Section 16.1.2. for details about the Find Result window.
	Replace...	Click the button to bring up the Find/Replace dialog box to do the replacing operation.

Continued

Property		Description
In dialog box	Replace with	Type the text you want to replace the find text with, paste it from the clipboard or click a recent entry from the list.
	Find Next	Click the button to find the next occurrence of the text/address specified in the Find what box with selected options until there are no more occurrences. The matches for the search appear in the Find Result window. Please see Section 16.1.2. for details about the Find Result window.
	Replace	Click this button to search for text that matches the find text, then replace it with the text in the Replace with field. The replacement information appears in the Find Result window. Please see Section 16.1.2. for details about the Find Result window.
	Replace All	Replaces all occurrences of the find text with the text in the Replace with field. The replacement information appears in the Find Result window. Please see Section 16.1.2. for details about the Find Result window.
	Close	Click the button to close the dialog box.

16.1.2. Find Result Window

The Find Result window is a dockable window. It lists all the search matches and replacement information. The following is an example of the Find Result window. You can browse the search matches or replacements by double-clicking each entry in the Find Result Window.



You can right-click the Find Result window to get the pop-up menu with the following menu items:

Menu Item	Description
Clear	Clears all the entries in the window.

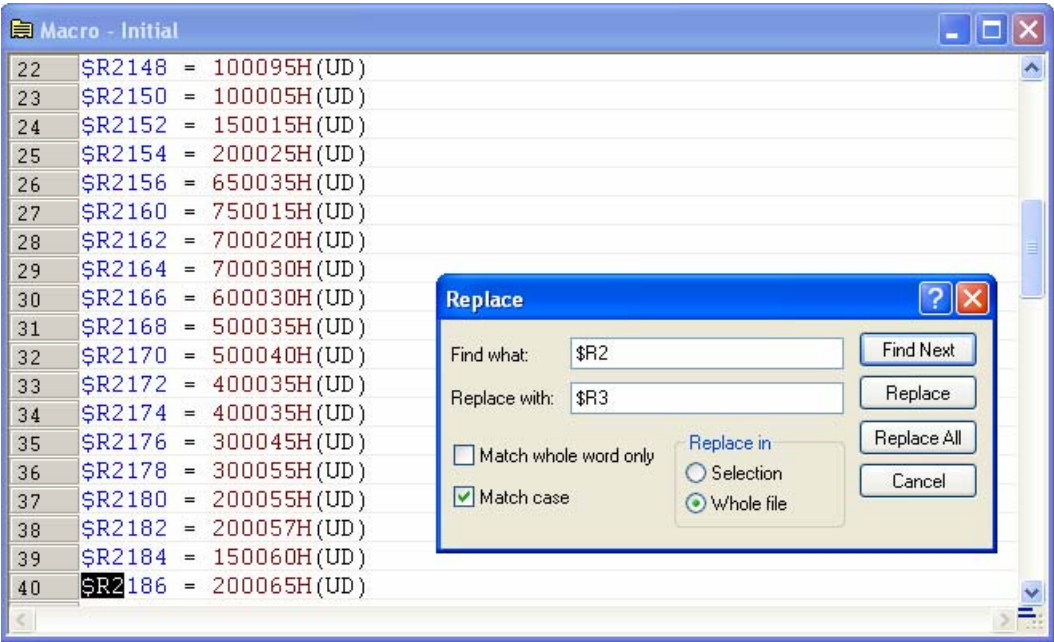
16.1.3. Quick Find and Replace in Macro Editor Window

Quick find and replace allows you to search the text in a currently active macro editor window. The selection moves from match to match, allowing you to review each match within its context.

In the currently active macro editor window, quick find and replace can search or replace through a macro forward from the insertion point. The search or replace automatically continues past the end of the macro into the unsearched portion. A message appears when the entire macro has been searched or replaced.

Note: The matches found are not listed in the Find Results window

To display the Replace dialog box, use the Replace... command on the Edit > Find and Replace menu. The following is an example of the Replace dialog.



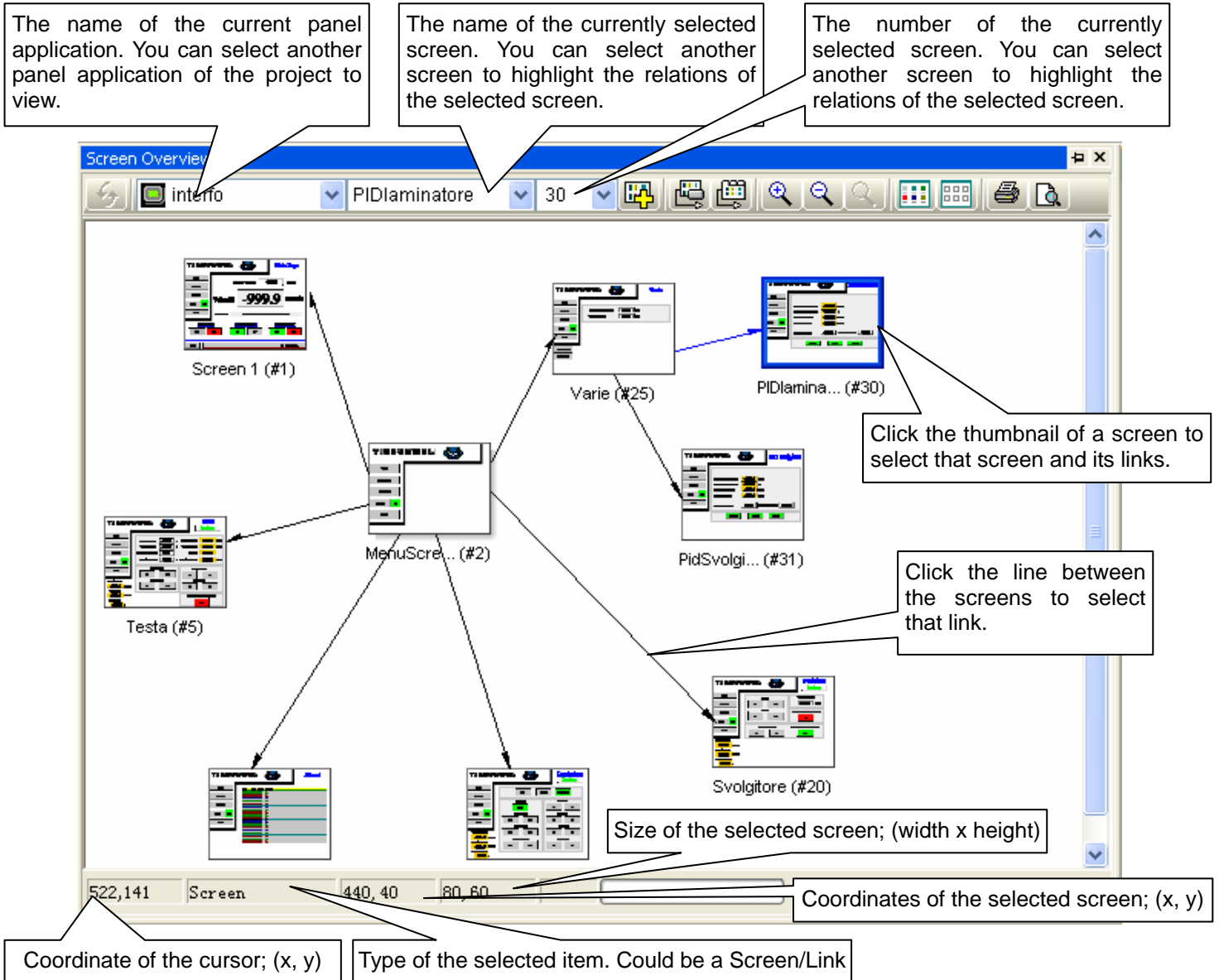
The following table describes each property in the Replace dialog box.

Property	Description	
Find what	Type the text you want to search for or paste it from the clipboard.	
Replace with	Type the text you want to replace the found text with or paste it from the clipboard.	
Match whole word only	Check this option to search only for whole words rather than matching the text you enter in the Find what box as it occurs within words.	
Match case	Check this option to search only for occurrences that match the combination of uppercase and lowercase characters you enter in the Find what box.	
Replace in	Select one of the following portions for the project you want to search in	
	Option	Description
	Selection	Searches or replaces only the selected text in the currently active document.
Find Next	Whole file	Searches or replaces all content displayed in this window for the Find what string.
	Click the button to find the next occurrence of the text specified in the Find what box with the selected options until there are no more occurrences. The matches for the search will be highlighted in the window.	
	Click this button to search for text that matches the found text, and then replace it with the text in the Replace with field.	
Replace All	Replaces all occurrences of the found text with the text in the Replace with field.	
Cancel	Click the button to close the dialog box.	

16.2. Screen Overview

Screen Overview shows the relations between screens of the current application. The relationship between screens is depicted by a line with an arrow head which is called the link. A link is a relationship between screens with the screen button or page selector.


To open the Screen Overview, check the Screen Overview menu item in the View menu. The following is an example of the Screen Overview.
















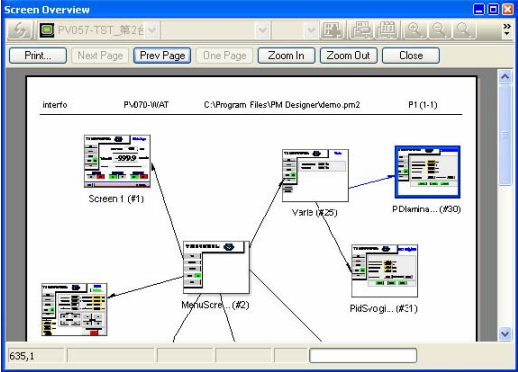
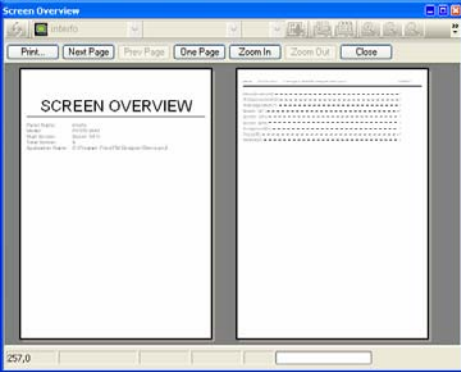
With the selected screen and links, you may do the following:

- Open the screen or screen properties
Double-click the selected screen to open it if it is not already opened.
Double-click the selected screen to open its property sheet if it is not already opened.

- Move the selected screen and its links

Left-click anywhere inside the selected screen and hold down the button. When the cursor changes to , drag the mouse to move the selection to another area of the screen overview window. It will "float" over the rest of the window, allowing you to position it wherever you want it to be. Release the mouse button to "let go" of the selection.

The following table describes each icon in the Screen Overview window.

Icon	Tool Tip	Description																
	Refresh	Reload the current content of the screens. Available only when the relations between screens are changed.																
	New Screen	Create a new screen for the current panel application.																
	Add Screen Button Link	Add a new screen button for the selected screen and set up the properties of the screen button in the pop-up properties dialog. Available only when a screen is selected.																
	Add Page Selector Link	Add a new pages selector for the selected screen and set up the properties of the page selector in the pop-up properties dialog. Available only when a screen is selected.																
	Zoom In	Make the screen overview one step bigger.																
	Zoom Out	Make the screen overview one step smaller.																
	Normal Size	Restore the screen overview to normal size.																
	Show Content	Show all the contents of the screens. For example: <div></div> <div>Screen 1 (#1)</div>																
	Show Name/Number	Show screen name and screen number in a rectangle to indicate a screen. For example: <div></div>																
	Print	Print the application information, screen index and screen overview. The application information includes Panel Name, Model, Start Screen, Total Screens, Application Name. Screen Index is used to list all the screens and the page where the screen is located.																
	Print Preview	<p>Preview the screen overview before printing. The following is examples of the Print Preview Window.</p> <div></div> <p>Choose from the following commands to customize your page preview.</p> <table><tr><th>Click the button</th><th>To do this</th></tr><tr><td>Print...</td><td>Set printing options and print the page.</td></tr><tr><td>Next Page</td><td>Display the next page to be printed.</td></tr><tr><td>Prev Page</td><td>Display the previous page to be printed.</td></tr><tr><td>One Page</td><td>Display only one full page in the screen.</td></tr><tr><td>Zoom In</td><td>Increase the magnification.</td></tr><tr><td>Zoom Out</td><td>Decrease the magnification.</td></tr><tr><td>Close</td><td>Close the Print Preview window.</td></tr></table>	Click the button	To do this	Print...	Set printing options and print the page.	Next Page	Display the next page to be printed.	Prev Page	Display the previous page to be printed.	One Page	Display only one full page in the screen.	Zoom In	Increase the magnification.	Zoom Out	Decrease the magnification.	Close	Close the Print Preview window.
Click the button	To do this																	
Print...	Set printing options and print the page.																	
Next Page	Display the next page to be printed.																	
Prev Page	Display the previous page to be printed.																	
One Page	Display only one full page in the screen.																	
Zoom In	Increase the magnification.																	
Zoom Out	Decrease the magnification.																	
Close	Close the Print Preview window.																	

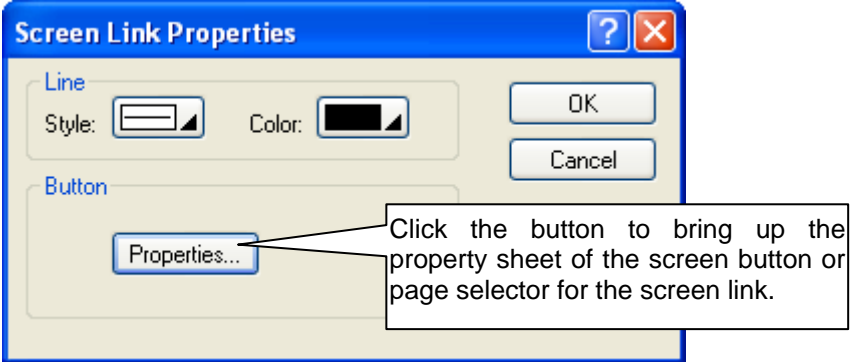
You can right-click the blank space in the Screen Overview to get the pop-up menu with the following menu items:

Menu Item	Description
New Screen...	Create a new screen for the current panel application and display the screen overview.
Select All	Select all the screens and links.

You can right-click the selected screen to get the pop-up menu with the following menu items:

Menu Item	Description
Add Screen Link...	Add a new screen button for the selected screen and set up the properties of the screen button in the pop-up properties dialog.
Open Screen...	Open the selected screen.
Delete Screen	Delete the selected screen.
Screen Properties...	Open the screen property dialog box of the selected screen.

You can right-click the selected link to get the pop-up menu with the following menu items:

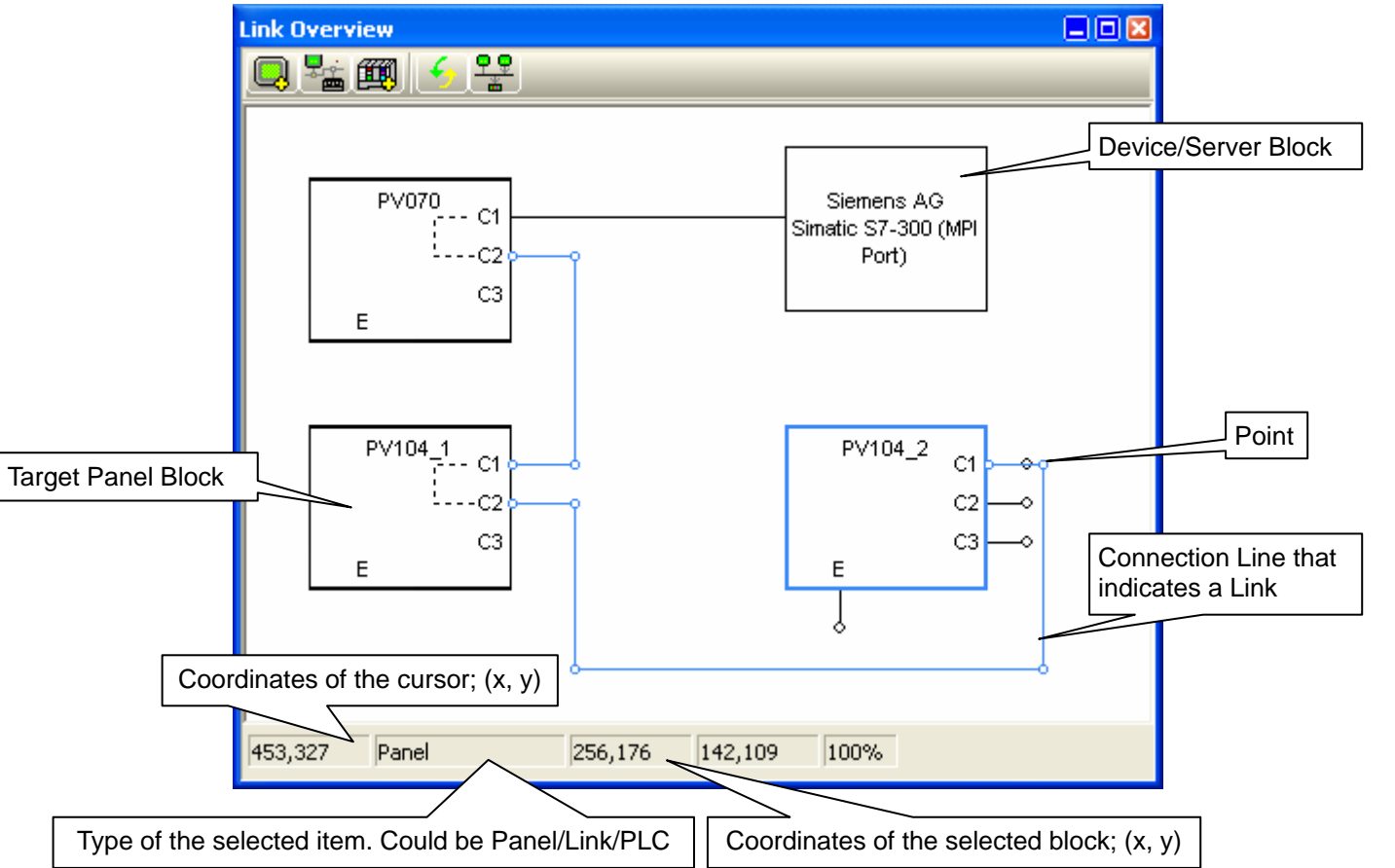
Menu Item	Description
Insert Point	Add a point at the specified position.
Delete Point	Delete a selected point.
Delete Screen Link	Delete the selected link.
Delete Screen Link and Button	Delete the selected link and its associated button.
Screen Link Properties	<p>Set the screen link properties in the following pop-up dialog.</p> 

16.3. Link Overview

Link Overview shows the relations between devices/servers and panels of the entire project. The Link Overview is a block and line diagram. The block indicates a target panel or the device/server. The line indicates the link. The line with an arrow header indicates the link relationship.

There are two types of blocks in the link overview window: **Target Panel Block** and **Device/Server Block**. The Target Panel Block includes application Name and supported link ports, such as C stands for COM port (C1 = COM1), E stands for Ethernet port. The Device/Server Block includes the device type.

To open the Link Overview, check the Link Overview menu item in the View menu. The following is an example of the Link Overview.




You can position the mouse over a target panel block, a device/server block, or a link to select the related item. With the selected item, you may do the following:

■ **Open the properties dialog to set up item properties**

- Double-click the target panel block to open the General Setup dialog box to set up the panel application.
- Double-click the link to open the Link Properties dialog box to set up the link.
- Double-click the device/server block to open the Link Properties property sheet to select the device for the link.

■ **Move the selected block**

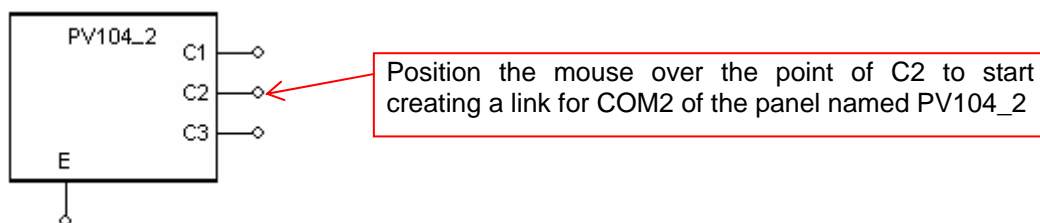
Left-click anywhere inside the selected block and hold down the button. When the cursor changes to , drag the mouse to move the selection to another area of the link overview window. It will "float" over the rest of the window, allowing you to position it wherever you want it to be. Release the mouse button to "let go" of the selection.

■ **Shape the connection line**

Position the mouse pointer over one of the points on the selected connection line, drag the point until the connection line is the shape and size you want.

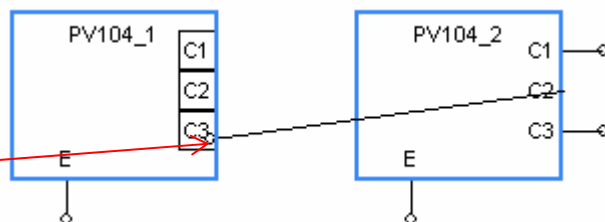
■ Create a link

1. Position the mouse pointer over the point of the communication port. For example:

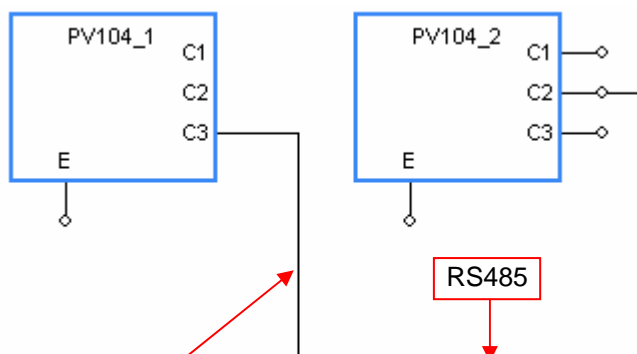


2. Drag the mouse to move the point to the communication port of another panel or device/server. For example:

Drag the point to C3 (COM3) of another panel named PV104_1. When the mouse is positioned to PV104_1, there are rectangles around its communication ports. The dragged point must be inside the rectangle when creating a link for that port.








3. Release the mouse button to bring up the Link Properties dialog box to set up the new link.
4. Press the OK button to accept the settings or press the Cancel button to cancel the operations. The following is an example of the new links between two panels.



Link Name:	PV104_2_Link1
Link Type:	Direct Link (COM)
Device/Server:	PanelMaster Data Sharer (RS485)
Link Port:	COM2 (PV104_2_Link1)

Link Name:	PV104_1_Link1
Link Type:	Direct Link (COM)
Device/Server:	PanelMaster Data Sharer (RS485)
Link Port:	COM3 (PV104_1_Link1)

The following table describes each icon in the Link Overview window.

Icon	Tool Tip	Description
	Add Panel Application	Add a new panel application, set up the panel type and application name in the pop-up property sheet.
	Add Link	Add a new link for the selected panel and set up the link properties in the pop-up property sheet. Only available when the target panel is the current selection.
	Add Device/Server	Add a new Device/Server.
	Refresh	Reload the current relations between panels and the device/server of the project.
	Show Relationship	Display lines with an arrow head to show the relationship between panels and the device/server.

You can right-click the target panel block in the Link Overview to get the pop-up menu with the following menu items:

Menu Item	Description
Add Link	Create a new communication link.
Delete Panel Application	Delete the panel application.
Panel Application Properties	Open the General Setup dialog box.

You can right-click the link in the Link Overview to get the pop-up menu with the following menu items:

Menu Item	Description
Insert Point	Add a point at the specified position.
Delete Point	Delete a selected point.
Delete Link	Delete the associated communication link.
Link Properties	Open the Link Properties dialog box of the associated communication link.

You can right-click the blank place in the Link Overview to get the pop-up menu with the following menu items:

Menu Item	Description
Add Device/Server	Create a new Device/Server
Add Panel Application	Create a new panel application.
Refresh	Reload the current relations between panels and device/server of the project.

You can right-click the Device/Server block in the Link Overview to get the pop-up menu with the following menu items:

Menu Item	Description
Remove Device/Server	Delete the selected Device/Server.
Device/Server Properties	Open the Link Properties dialog box

16.4. Object Library

The Object Library Window is a dockable window. It makes configuring, managing and sharing user-defined objects easier. It contains default objects, common objects, object groups and global objects.

■ Default Objects

Each type of screen objects can have one default object and the default objects are saved in the object library. The settings of a default object will be used as the initial settings for a newly created object of the same type. To view all the default objects for the project, you can click the window tab named Objects.

You are allowed to specify any object as the default object for the type of that object. The old default object of the same type is discarded when you specify a new default object. To make an object as a default object, right-click the object to get the pop-up menu and click the Save as Default command in the pop-up menu.

■ Common Objects/Object Groups

The common object/object group can be used in the whole project. To view the common objects/object groups, you can click the window tab with a user defined name.

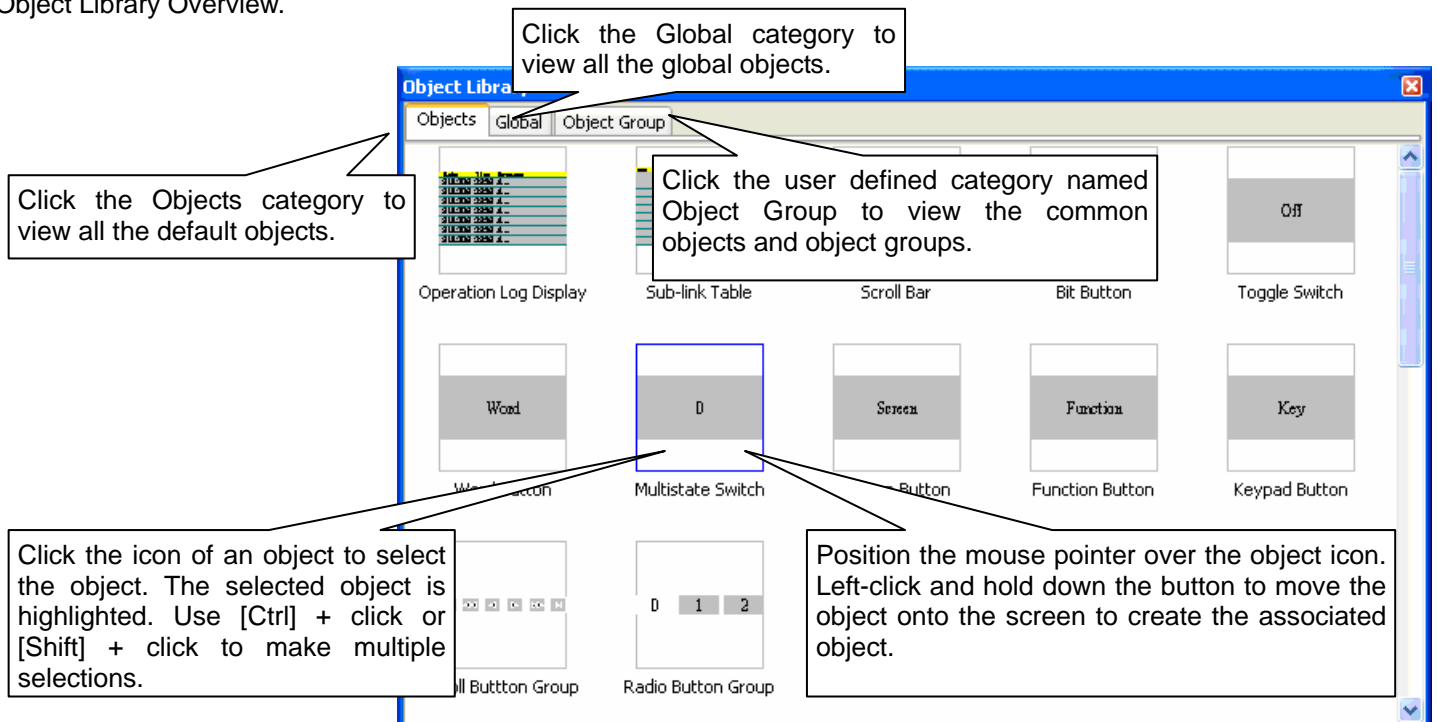
To make an object as a common object/object group, right-click the object/object group to get the pop-up menu and click the Save to Object Library... command to bring up the Save to Object Library dialog. In the dialog, you may type a name and select a user defined category for the common object/object group.

■ Global Objects

Global objects can be used in the entire project. Any modification of a global object will be applied everywhere it is used in the project. To view all the global objects for the project, you can click the window tab named Global.

To make an object as a global object, right-click the object to get the pop-up menu and click the Save as Global Object... command to bring up the Save to Object Library dialog. In the dialog, you may type a name and select a user defined category for the global object.

To open the Object Library, check the Object Library menu item in the View menu. The following is an example of the Object Library Overview.



You can right-click the tab on the top of Object Library to get the pop-up menu with the following menu items:

Menu Item	Description
Add Category...	Create a new category for common objects and object groups. The left dialog is an example of the Add Category dialog for you to specify the category name and icon size for displaying the object of the new category. <div data-bbox="963 282 1466 757" data-label="Image"> </div>
Delete Category...	Delete the selected category.
Category Properties...	Click the command to bring up the left sample dialog to set up category properties. You can rename the category in the dialog and define the icon size for the object to be displayed. <div data-bbox="963 813 1466 1288" data-label="Image"> </div>
Import Library...	Import an existing category from an object library file (*.pol)
Export Library...	Export a selected category of the object library to an object library file (*.pol)
Clean Unused Data in Library	Click the command to clean all the unused objects in the selected category.

You can right-click the selected object in the Global category window or the user defined category window to get the pop-up menu with the following menu items:

Menu Item	Description
Rename Object...	Click the command to bring up the Rename dialog to rename the selected object.
Delete Selected Objects...	Delete the selected object.
Object Properties...	Click the command to bring up the object properties dialog. Only available in the Global category.

16.5. Object List

The Object List window is a dockable window. It shows the screen objects and the associated I/O addresses.

You can modify the object properties in the Object Property dialog box by double-clicking each entry in the Object List window.

You can right-click anywhere inside the Object List window to get the pop-up menu. In the pop-up menu, check any of the menu items such as ID, Write, Monitor, Read, Notification, TCtrl, VCtrl, and Note to display that column. Use the Select All command in the pop-up menu to display all the columns.

To open the Object List, check the Object List menu item in the View menu. The following is an example of the Object List.

The name of the screen. You can select another screen of the panel application to view its object list.

Number	Object	ID	Write	Monitor	Read
000	Rectangle	R0003	N/A	N/A	N/A
001	Bit Button	BB0008	1\Dbx_FTCrotturaCartaTest	N/A	N/A
002	Rectangle	R0002	N/A	N/A	N/A
003	Rectangle	R0001	N/A	N/A	N/A
004	Rectangle	R0000	N/A	N/A	N/A
005	Text	T0000	N/A	N/A	N/A
006	Message Display	MD0000	N/A	1\M_AbilTesta	N/A
007	Bit Button	BB0000	1\Dbx_TagliAntChiuso	N/A	N/A
008	Bit Button	BB0001	1\Dbx_TaglioAntAperto	N/A	N/A
009	Text	T0001	N/A	N/A	N/A
010	Bit Button	BB0002	1\Dbx_TaglioPostChiuso	N/A	N/A
011	Bit Button	BB0003	1\Dbx_TaglioPostAperto	N/A	N/A
012	Text	T0002	N/A	N/A	N/A
013	Bit Button	BB0006	1\Dbx_ChisuraTrainoInf	N/A	N/A
014	Bit Button	BB0007	1\Dbx_AperturaTrainoInf	N/A	N/A
015	Text	T0004	N/A	N/A	N/A
016	Bit Button	BB0004	1\Dbx_ChisuraTrainoSup	N/A	N/A
017	Bit Button	BB0005	1\Dbx_AperturaTrainoSup	N/A	N/A
018	Text	T0003	N/A	N/A	N/A
019	Text	T0005	N/A	N/A	N/A
020	Text	T0006	N/A	N/A	N/A

Double click the selected entry to bring up the property dialog of the associated object.

16.6. I/O List

The I/O list window is a dockable window. It shows all the I/O addresses of the project and their owners. You can modify the address by double-clicking each entry in the I/O list window. If the address is used by an object, you can redefine the address in the pop-up property dialog of the associated object. If the address is used by a Macro, you can change the address in the macro editor window.

You can also click the Address column of the selected entry to type in the address directly. To open the I/O List, check the I/O List menu item in the View menu. The following is an example of the I/O List.

The name of the current panel application. You can select another panel application of the project to view.

I/O List

Demo

Address	Purpose	Used by	Comment
Y2	Monitor	Screens; <1>; <MAIN>; <Toggle Switch>; <TS0023>	
Y2	Write	Screens; <1>; <MAIN>; <Toggle Switch>; <TS0023>	
M17	Touch operation control bit	Screens; <1>; <MAIN>; <Toggle Sw	
M14	Monitor	Screens; <1>; <MAIN>; <Toggle Sw	
M14	Write	Screens; <1>; <MAIN>; <Toggle Sw	
M17	Touch operation control bit	Screens; <1>; <MAIN>; <Toggle Switch>; <TS00	
R1103	Monitor	Screens; <1>; <MAIN>; <Numeric Display>; <ND0021>	
R12	Monitor	Screens; <1>; <MAIN>; <Numeric Entry>; <NE0019>	
R12	Write	Screens; <1>; <MAIN>; <Numeric Entry>; <NE0019>	
R100	Monitor	Screens; <1>; <MAIN>; <Numeric Display>; <ND0017>	
R1100		<Numeric Display>; <ND0014>	
R1102		<Numeric Display>; <ND0013>	
D1		<Multistate Lamp>; <ML0010>	
D1	Monitor	Screens; <1>; <MAIN>; <Multistate Lamp>; <ML0009>	
R25	Monitor	Screens; <1>; <MAIN>; <Bar Graph>; <BG0007>	
D10	Write	Screens; <1>; <MAIN>; <Word Button>; <WB0006>	
M60	Monitor	Screens; <1>; <MAIN>; <Bit Button>; <BB0005>	
M60	Write	Screens; <1>; <MAIN>; <Bit Button>; <BB0005>	
R117	Monitor	Screens; <1>; <MAIN>; <Numeric Display>; <ND0004>	
R116	Monitor	Screens; <1>; <MAIN>; <Numeric Display>; <ND0003>	
R115	Monitor	Screens; <1>; <MAIN>; <Numeric Display>; <ND0002>	
R2020	Monitor	Screens; <5>; <PID Setting>; <Numeric Entry>; <NE0017>	
R2020	Write	Screens; <5>; <PID Setting>; <Numeric Entry>; <NE0017>	
R2030	Monitor	Screens; <5>; <PID Setting>; <Numeric Entry>; <NE0015>	

Double click the selected entry to bring up the property dialog of the associated object.

Click the address column of the selected entry to type in a new address.