# **SIEMENS**

Security information 2

Windows and views 2

"Data transfer" dialog box 3

General information on synchronizing templates 4

Functions of the data transfer dialog 5

Appendix 6

# **SIMATIC**

Process Control System PCS 7 Help on data transfer dialog

**Programming Manual** 

V9.0 SP4

### Legal information

#### Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

# **DANGER**

indicates that death or severe personal injury will result if proper precautions are not taken.



#### MARNING

indicates that death or severe personal injury may result if proper precautions are not taken.



#### ▲ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

#### NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

#### **Qualified Personnel**

The product/system described in this documentation may be operated only by personnel qualified for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

#### Proper use of Siemens products

Note the following:



#### ▲ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens, Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

#### **Trademarks**

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

#### Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

# **Table of contents**

1	5		
2	Windows	s and views	7
	2.1	Hierarchy window of the standard view	7
	2.2	Detail window of the standard view	10
	2.3	Table view	12
3	"Data tra	ansfer" dialog box	15
4	General	information on synchronizing templates	19
5	Function	ns of the data transfer dialog	21
	5.1	Current difference	21
	5.2	First difference	21
	5.3	Next difference	21
	5.4	Last difference	21
	5.5	Previous difference	21
	5.6	Resume position	21
	5.7	Standard view	22
	5.8	Table view	22
	5.9	Differences only	22
	5.10	Show only objects with different attributes/relations	22
	5.11	Show only the additional objects in A	22
	5.12	Show only the additional objects in B	23
	5.13	Save differences	23
	5.14	Update	23
	5.15	Import: B -> A	24
	5.16	Import: A -> B	24
	5.17	Hide node contents	24
	5.18	Display node contents	24
	5.19	Generate/synchronize process tags: A -> B	24
	5.20	Generate/synchronize process tags: B -> A	24
	5.21	Delete in the target system	24
	5.22	Synchronize templates	25

Appendi	ix	27
6.1	Canceled by user	27
6.2	File could not be opened	27
6.3	Log	27
6.4	Error when starting or closing the data server	27
6.5	Internal error	28
6.6	No further work possible	28
6.7	Insufficient main memory	28
6.8	Object already selected	28
6.9	Cannot open object	29
6.10	Copy	29
6.11	Open Object	29
6.12	Incompatible object	29
6.13	Comparison object is incompatible	30
6.14	Comparison object not the same type	30
6.15	Insufficient main memory for opening the application	30
Index		31

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit

https://www.siemens.com/industrialsecurity.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under

https://www.siemens.com/industrialsecurity.

Windows and views

# 2.1 Hierarchy window of the standard view

### Overview

The standard view consists of the hierarchy window (left pane) and the detail window of the standard view (Page 10) (right pane).

### 2.1 Hierarchy window of the standard view

The following objects are displayed below the title bar:

1. A bar displaying the path information for every object opened for comparison. (A: = first opened object, B: = second opened object).

### 2. Buttons

 The following buttons are available if the comparison was started in the Version Cross Manager:

72	Show filter setting
•	This button shows the current filter settings in another bar.
₹	Hide filter setting
	This button hides the current filter settings.

 The following buttons are available if the comparison was started in the SIMATIC Manager:

<b>=</b>	Show log	
	This button displays the log in the lower section of the dialog box.	
or		
	Hide log	
	This button hides the log again.	
	Save log to file	
	This button saves the messages in the log at any location.	
×	Delete log	
	This button deletes all messages from the log.	
<b>V</b>	Show filter setting	
	This button shows the following information in another bar.	
	The format used for the XML file.	
	The current filter settings. The filter settings are configured in the "XML settings"	
	dialog.	
or		
<b>T</b>	Hide filter setting	
	This button hides the filter settings again.	

3. A bar with the current filter setting, if it was displayed using the "Show filter setting" button described above.

You can change the position of the bars.

### Display in the hierarchy window

The hierarchy view displays all objects as nodes of a tree structure.

#### Note

When XML files are displayed, the object type is sometimes unknown to the Automation Interface. These files are then displayed in the hierarchy window with the "CIR object" label and the following symbol:



This display does not affect the functionality, however.

### Comparison result in the hierarchy window

The text color indicates the result of the comparison between the associated objects.

In addition to colors you can also use icons to visualize the comparison result. The icons for the comparison result displayed next to the object type symbol. It can be useful to show the icons for the comparison result if the text colors are not a sufficiently distinguishing feature.

Objects which are also identical in terms of their nested objects are marked in gray.

You can determine which nested objects differ by expanding the nodes from root level down. This method allows you to navigate to the nested objects which are not identical.

# Displayed difference

If you jump to a difference, the displayed object is highlighted and is identified by the following symbol in the hierarchy tree.



### Symbols and colors of the comparison result

The following colors and symbols are set by default for the nodes in the hierarchy window (background: white) and are displayed in the detail view by means of the info text:

Color of the object name	Symbol for comparison result	Meaning	Short text (used in the detail window)
Gray		Both objects and their nested objects are identical	Identical
Black	•	The two objects are identical and their nested objects are different	Identical and nested objects dif- ferent
Red	<b>A</b>	The two objects are different and their nested objects are identical	Different and nested objects identical
Dark red	û₩	The two objects are different and their nested objects are different	Different
Blue	•	Object is only available in A	Only in A
Green	-	Object is only available in B	Only in B

#### 2.2 Detail window of the standard view

Color of the object name	Symbol for comparison result	Meaning	Short text (used in the detail window)
Gray	<u> </u>	Object is moved.  This means that the object is identical in A and B, but is	Object in A is moved to the position of the object in B
		used at different points in the hierarchy in A and B. This status display applies to the following objects:  Control modules (CM)  Equipment modules (EM)  Hierarchy folders of the plant hierarchy	Object in B is moved to the position of the object in A

Select the **Display** function to edit the default settings in a dialog box.

### Synchronize templates (types)

The data transfer dialog is also used to synchronize types (templates) and instances of equipment modules/control modules in the project. There are check boxes here in front of the hierarchy levels that you can use to select or deselect individual hierarchy levels or all of them. A check box is only available if there is at least one control module in the hierarchy level.

# 2.2 Detail window of the standard view

### Overview

The standard view consists of the hierarchy window of the standard view (Page 7) (left pane) and the detail window (right pane).

The following objects are displayed below the title bar:

1. A bar displaying the path information for every object opened for comparison. (A: = first opened object, B: = second opened object).

### 2. Buttons

 The following buttons are available if the comparison was started in the Version Cross Manager:

7.	Show filter setting			
	This button shows the current filter settings in another bar.			
∀.	Hide filter setting			
_	This button hides the current filter settings.			

 The following buttons are available if the comparison was started in the SIMATIC Manager:

<b>■</b> Ì¢	Show log		
	This button displays the log in the lower section of the dialog box.		
or			
	Hide log		
	This button hides the log again.		
	Save log		
	This button saves the messages in the log at any location.		
×	Delete log		
	This button deletes all messages from the log.		
<b>√</b>	Show filter setting		
	This button shows the current filter settings in another bar.		
or			
V <sub>2</sub>	Hide filter setting		
	This button hides the current filter settings.		

3. A bar which displays the current filter settings, if the bar was activated by clicking the button. You can change the position of the bars.

### Display in the detailed window

The detail window is divided into the attributes and lower-level objects list boxes. You can use a horizontal scroll bar to change the size of these two fields.

The attributes of the selected object and all its lower-level objects are displayed in the tree window of the list fields (

()

The detailed window is structured as follows:

#### 2.3 Table view

#### **Attributes**

 The first column of the title bar contains the object type icon of the selected object, a hierarchy folder for example:



The following rows are numbered consecutively.

- The attribute names are shown in the **Attribute** column.
- The attribute values are shown in columns A and B.
- The status of the attribute is shown in text form in the Status column, for example "Different".

### Lower-level objects

- The first column of the title bar contains the selected object's object type icon (as with an attribute). The following rows are numbered consecutively.
- In the **Lower-level object** column, the object names of the lower-level objects are shown together with the icon of the type.
- The **Object name** shows the name of the lower-level object.
- The status of the object is shown in text form in the **Status** column, for example "Identical and different on lower level".

Open lower-level objects by double-clicking on the icon in the respective row. The corresponding object is then also opened in the tree (hierarchy window).

### Comparison result in the detailed window

You can recognize the result of the comparison between the associated objects by the color of the attribute and the description in the "Status" column. The colors are the same as those for the comparison results in the hierarchy window.

### 2.3 Table view

#### Overview

The table view sets out the projects to be compared in table format.

The following objects are displayed below the title bar:

1. A bar displaying the path information for every object opened for comparison. (A: = first opened object, B: = second opened object).

### 2. Buttons

 The following buttons are available if the comparison was started in the Version Cross Manager:

7.	Show filter setting
	This button shows the current filter settings in another bar.
₩.	Hide filter setting
_	This button hides the current filter settings.

 The following buttons are available if the comparison was started in the SIMATIC Manager:

<b>=</b>	Show log
	This button displays the log in the lower section of the dialog box.
or	
	Hide log
	This button hides the log again.
	Save log to file
	This button saves the messages in the log at any location.
×	Delete log
	This button deletes all messages from the log.
<b>\( \sqrt{\sq}}}}}}}}}}}}}} \end{\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}</b>	Show filter setting
	This button shows the following information in another bar.
	The format used for the XML file.
	The current filter settings. The filter settings are configured in the "XML settings"
	dialog.
or	
<b>T</b>	Hide filter setting
	This button hides the filter settings again.

3. A bar with the current filter setting, if it was displayed using the "Show filter setting" button described above.

You can change the position of the bars.

### Representation in the Table view

- The object type icon of the top node is shown in the title bar in the first column. The following rows are numbered consecutively.
- In the **Object/Attribute** column, the object and attribute names of the lower-level objects are shown together with the type symbol and the modification status symbol.
- The attribute values are shown in columns A and B.

### 2.3 Table view

- The **Object name** column shows the names of the listed objects.
- The status of the attribute is shown in text form in the **Status** column, for example "Different".

You can open more lower-level objects by double-clicking the "+" box in the relevant row. The corresponding object is then also opened in the tree (hierarchy window).

"Data transfer" dialog box

3

#### Overview

Use this dialog to display and process a data exchange or data comparison. The data can be imported, exported or compared. The differences between the objects will be displayed or indicated in color. Single selections are possible.

The data transfer dialog offers the following main functions:

- Data comparison when importing data, for example from COMOS Integrated Engineering.
- Import and export of project data, for example to/from COMOS Integrated Engineering. The data exchange can be performed directly or in XML format.
- Synchronization of types (templates) and instances of equipment modules/control modules in the project

#### **Views**

You can switch between the following views in the data transfer dialog box:

- Table view (Page 12)
- Standard view

You can find more information on the standard view in the sections:

- Hierarchy window of the standard view (Page 7)
- Detail window of the standard view (Page 10)
- Differences only (Page 22)

You can also show or hide a corresponding log in the views.

#### Operator controls

The dialog contains various operator controls. You can find a description later in this section.

### Comparison in the data transfer dialog

You select one object as "master" and another object as the "comparison object". The comparison session starts automatically as soon as you open the comparison object.

You can find information on the symbols and colors in the display of the comparison result in the section "Hierarchy window of the standard view (Page 7)".

### Importing and exporting in the data transfer dialog

Import:

Hardware, process tag types, types and instances of technical equipment / control modules and the plant hierarchy are imported.

Data such as enumerations, equipment properties, message types (for PCS 7 message system), units are also imported. These are displayed in the comparison window under the project library entry under "Shared declarations".

Export:

Data from PCS 7 and XML files can be exported.

# "Synchronize templates" in the data transfer dialog

The data transfer dialog is also used to synchronize types (templates) and their instances of equipment modules/control modules in the project.

Note the following in this context:

- The value of a block parameter is not synchronized under the following conditions:
  - When it is assigned to a control tag.
  - When the "S7\_m\_c" attribute is set.
- The interconnection of a block parameter is not synchronized under the following conditions:
  - When the "S7 m c" attribute is set.
- Block type changes are not synchronized.
- The assigned template (type) is displayed in the hierarchy window in parentheses behind the object.

You can find additional information on the template synchronization in the section "General information on synchronizing templates (Page 19)".

### Operator controls

The following buttons are available in the data transfer dialog:

Button	Brief description  Jump to first difference	<b>Link to additional information</b> First difference (Page 21)
•	Jump to previous difference	Previous difference (Page 21)
1	Select current difference	Current difference (Page 21)
II	Define resume position	Resume position (Page 21)
<b>•</b>	Jump to next difference	Next difference (Page 21)
H	Jump to last difference	Last difference (Page 21)
詚	Change to standard view	Standard view (Page 22)
	Change to table view	Table view (Page 12)
84	Change to "Differences only" view	Differences only (Page 22)

	Show only objects with different attributes/ relations	Show only objects with different attributes/relations (Page 22)
•	Show only the additional objects in A	Show only the additional objects in A (Page 22)
•	Show only the additional objects in B	Show only the additional objects in B (Page 23)
	Save differences of the current comparison	Save differences (Page 23)
49	Update view	Update (Page 23)
6	Generating/synchronizing of process tags B -> A (not available when synchronizing control modules)	Generate/synchronize process tags: B -> A (Page 24)
0	Generating/synchronizing of process tags A -> B (not available when synchronizing control modules)	Generate/synchronize process tags: A -> B (Page 24)
<b>€</b>	Execute import from B to A (not available when synchronizing control modules)	Import: B -> A (Page 24)
<u> </u>	Execute import from A to B (not available when synchronizing control modules)	Import: A -> B (Page 24)
<b>\$</b> P	Synchronizing types/templates and instances of control modules.	Synchronize templates (Page 25)
	(Button is only available when the data transfer dialog is in the "Synchronize templates" function.)	
Check boxes	Also delete any process tags, equipment	Delete in the target system
"Delete at tar- get"	modules or control modules	(Page 24)
Button	Close dialog box	-
"Close"		

General information on synchronizing templates

# 4

#### Introduction

Preconfigured software modules are used in automation technology for programming automation devices and for the process control description of the industrial plant. A distinction is made between simple program blocks (functions and function blocks) and complete automation charts (CFC).

PCS 7 also allows you to create templates, the so-called types, for describing equipment modules and control modules according to ANSI/ISA-88.

These types of equipment modules/control modules are stored in the master data library of the PCS 7 project.

#### Note

### Terms "Template" and "Type"

In automation technology, a template of the equipment module/control module in the master data library is referred to as a "type". The corresponding copy in the PCS 7 project is referred to as an "instance".

Since the data exchange described here and the synchronization function are performed in the context of PCS 7, the terms "type" and "template" are used interchangeably.

### Areas of application for a template synchronization

An equipment module/control module can be copied from the master data library and re-used in any plant hierarchy node in the project. You can also use the PCS 7 – Advanced ES engineering tool to create equipment modules/control modules.

Because changes can be made at the instances in the PCS 7 project as well as at the types in the master data library, there is no structural identity between the template and its instances.

The types are usually changed in later phases as well, for example during commissioning. Proof of identity between a template and its instances is required for plants that require validation.

#### Starting the synchronization function

The "Synchronize templates" function of the data transfer dialog is used to synchronize the type (template) with the instances in PCS 7. To do this, the data transfer dialog is opened in the plant view using the menu command "Technological types > Synchronize..." in the shortcut menu of the project.

### How synchronization works

PCS 7 uses the data transfer dialog to compare templates/types and its instances in order to provide proof of the compatibility and agreement between a type (template) and its instance.

The types as well as their instances basically consist of the technological description of the equipment module/control module and the associated automation chart, the SFC and CFC with their interconnected functions and function blocks. Synchronization includes the technological description as well as the SFC/CFC itself.

The equipment module/control module appears in a hierarchy window with its instance name. Because the instance name is typically different from the name of the template, the instance name is followed by the name of the template or, in the case of lower-level control modules, a corresponding name path in parentheses. For CFC blocks there is also the name of the block type.

Modifications in the CFC (e.g. parameter values, interconnections between functions or function blocks, new CFC blocks) are applied to all instances. CFC blocks deleted in the template are also deleted in all instances during synchronization.

Synchronization of the instance object and associated type is limited to the relevant attributes and relations in this process. Attributes that are also present at the instance or the type, or attributes that are usually modified at the instance, are not included in the synchronization result. The object attributes are filtered out automatically.

Control tags, sub-functions, messages, etc. of the technological description and functions or function blocks that were added in the type are marked and displayed as additional objects in the data transfer dialog.

Changes to the type can now be applied to individual or all instances.

#### Notes:

- Note that all instance-specific changes that do not affect the objects of the type are retained.
   Functions and function blocks that were added to the instance are already suppressed in the data transfer dialog.
- Control tags of a control module
   Control tags, for example parameters, signals in the interface of a control module, can never
   be extended for specific instances. They must always correspond to the control module
   type. This also applies to sub-control modules.
- Instance-specific changes in nested charts
  - In basic charts, instance-specific changes are maintained.
  - In sub-charts, instance-specific changes are not supported and are overwritten during synchronization.

# Functions of the data transfer dialog

### 5.1 Current difference

Use the element bar icon to move the section of the hierarchy window so that the current difference is visualized in the view. This function is useful, for example, after you reduced the size of the window. The object of the difference shown is marked () and is also identified by the symbol

# 5.2 First difference

Use the element bar icon to navigate to the first difference in the tree view. (the search starts at the root level of the hierarchy tree). The object of the difference shown is marked (a) and is also identified by the symbol

### 5.3 Next difference

Use the element bar icon to navigate from the selected object to the last difference (the search starts at the lowest level of the hierarchy tree). The object of the difference shown is marked (a) and is also identified by the symbol a.

### 5.4 Last difference

Use the element bar icon it to navigate to the last difference in the tree view. (the search starts at the lowest level of the hierarchy tree). The object of the difference shown is marked (a) and is also identified by the symbol ...

### 5.5 Previous difference

Use the element bar icon \_ to navigate from the selected object to the previous difference (the search starts at the highest level of the hierarchy tree). The object of the difference shown is marked ( a) and is also identified by the symbol \_ .

# 5.6 Resume position

Use this function to define a selected object as resume position for difference navigation in the object tree to begin.

The element bar is only displayed when you have completed a comparison. It is available both in the default view and in the table view.

5.11 Show only the additional objects in A

# 5.7 Standard view

Use this function to change to the standard view.

You can find additional information about the standard view in the following sections:

- Hierarchy window of the standard view (Page 7)
- Detail window of the standard view (Page 10)

### 5.8 Table view



Use this function to change to the table view.

You can find additional about the table view in the section "Table view (Page 12)".

# 5.9 Differences only



Use this function to change to the "Differences only" view.

You can open this view both in the standard and in the table view. The structure of the current view remains unchanged; only the objects and attributes with differences will be displayed.

# 5.10 Show only objects with different attributes/relations



Use this function to switch to the "Show only objects with different attributes/relations" view.

You can open this view from both the default view and in the table view. The structure of the current view remains unchanged; only the objects and attributes with differences will be displayed.

# 5.11 Show only the additional objects in A



Use this function to switch to the "Show only the additional objects in A" view.

You can open this view from both the default view and in the table view. The structure of the current view remains unchanged; only the objects and attributes with differences will be displayed.

# 5.12 Show only the additional objects in B

Use this function to switch to the "Show only the additional objects in B" view. You can open this view from both the default view and in the table view. The structure of the current view remains unchanged; only the objects and attributes with differences will be displayed.

# 5.13 Save differences

Use this option to save the differences of the current comparison into a .csv file. This option is available both in the standard view and in the table view.

Below you will find more information on each column of the .csv file:

Column	Description	
"Status"	Status of the compared object/attribute:	
	Symbol	Symbol description
	(#)	Different value in each project
	(+)	Available only in project A
	(-)	Available only in project B
	(->)	Moved from project A to project B
	(<-)	Moved from project B to project A
"Object name"	Name of the compared object/attribute	
"Object/Attribute"	Logical path of the compared object/attribute	
"Value A"	Value of the compared object/attribute in project A	
"Value B"	Value of the compared object/attribute in project B	

# 5.14 Update



The function is used to update the comparison result. The following steps will be executed in this process:

- All internal management structures are deleted.
- Both comparison objects are loaded again, including all lower-level objects.
- A full comparison of the objects takes place.
- The updated result of the comparison is displayed in the comparison window.

#### Alternative method:



The button shown above is not available if the comparison was started in the Version Cross Manager:

This button is available in the toolbar and in the Version Cross Manager menu as an alternative.

# 5.15 Import: B -> A



Use this function to import the edited data from "B" to "A". This enters the additional objects together with their properties into the target project and accordingly synchronizes the changed data in regard to their properties attributes.

# 5.16 Import: A -> B



Use this function to import the edited data from "A" to "B". This enters the additional objects together with their properties into the target project and accordingly synchronizes the changed data in regard to their properties attributes.

### 5.17 Hide node contents

Use this function to hide the content of a selected node.

# 5.18 Display node contents

Use this function to display all subelements, starting at the selected node.

# 5.19 Generate/synchronize process tags: A -> B



This function starts the CAx Generator which generates / updates the process tags in project "B" based on comparison data.

# 5.20 Generate/synchronize process tags: B -> A



This function starts the CAx Generator which generates / updates the process tags in project "A" based on comparison data.

# 5.21 Delete in the target system

### Additional process tags in the target project (delete in the target system)

When importing/generating, you can choose to delete or retain any process tags in your target project which were not available in the current XML file at the time of synchronization.

Activate the check box if you want to delete the additionally existing process tags.

Deactivate the check box if you want to keep the additionally existing process tags.

If the data transfer dialog is located in the "Synchronize templates" function, this check box does not exist.

# 5.22 Synchronize templates



You can use this function to start synchronization of types/templates and instances of the individual control modules or equipment modules.

Button is only available when the data transfer dialog is in the "Synchronize templates" function.

5.22 Synchronize templates

Appendix

# 6.1 Canceled by user

### Cause

The cancellation has caused an indefinite state of the comparison document and prevents further editing.

# Remedy

Re-select the comparison objects.

# 6.2 File could not be opened

**Cause:** The file is already opened in a different application.

**Remedy:** Close the file in the respective application.

# 6.3 Log

A log will be output after generating or importing process tags. The log contains the following messages that are classified as follows:

- Information
- Warning
- Error

You can save or delete the log in a file using the buttons in the toolbar of the views.

The name and storage location of the log file can be selected as required.

# 6.4 Error when starting or closing the data server

#### Cause

Possibly a faulty installation.

### Remedy

Reinstall the application or contact the Hotline.

6.8 Object already selected

# 6.5 Internal error

#### Cause

A programming error was generated.

### Remedy

Note down the error number of the last action and contact the Hotline.

# 6.6 No further work possible

### Cause

An error has caused an indefinite state of the comparison document and prevents its further editing.

# Remedy

Compare both objects once again. The most recently selected object may be inconsistent if this error persists. Contact the Hotline.

# 6.7 Insufficient main memory

Execution of the current function failed due to insufficient RAM capacity on your PG / PC.

### Remedy

- Close all unnecessary applications and the documents and then repeat the operation.
- To reduce memory required, download and compare subsections of the project and not the entire project.

Install additional RAM if this does not resolve the problem.

# 6.8 Object already selected

#### Cause

You cannot compare the same object.

### Remedy

Select a different object of the same type.

# 6.9 Cannot open object

#### Cause

- An attempt was made to open an XML file which contains objects which are not supported in STEP 7. This error is generated if the optional packages required for these objects are not installed.
- Automation Interface does not support this object.
   The following objects are supported: Chart folder, CFC, SFC, SFC type, S7 program, project, library, symbol table, global declarations, data block, data type, system function, system function block, function, function block, offline block folder, SIMATIC 400-Station, SIMATIC 300-Station, SIMATIC PC station, and SIMATIC H station.

### Remedy

- Select a different object.
- Install the optional packages as required.

# 6.10 Copy

Use this function to copy the selected text from the detail view of the standard view (right pane) or from the table view to the clipboard.

You can select multiple cells or rows, or the complete table by clicking the top-left corner of the table.

# 6.11 Open Object

Use this function to open the selected object for further processing.

The function is only active if a suitable editor for the object has been installed (e.g. the CFC Editor for a CFC, or "LAD /STL/FBD" for a block).

# 6.12 Incompatible object

#### Cause

You can only compare objects of the same type, for example, CFC with CFC, or chart folder with chart folder.

6.15 Insufficient main memory for opening the application

### Remedy

Select a different object of the same type.

# 6.13 Comparison object is incompatible

#### Cause

You selected an incompatible comparison object or canceled the comparison. This has caused an indefinite state.

### Remedy

Select a compatible comparison object and read the data once again.

# 6.14 Comparison object not the same type

### Cause

Both objects must be of the same type. For example, you can only compare a CFC with a CFC, or a chart folder with a chart folder.

# 6.15 Insufficient main memory for opening the application

### Remedy

To remedy the problem, try one or several of the following actions:

- Close all programs not currently needed.
- Increase the size of the paging file if this was set manually.

  Disadvantage: Reduces the speed of access to the paging file.
- Expand your main memory.

# Index

### C

Comparison result In the detail window, 10 In the hierarchy window, 7

# D

Default setting of the hierarchy window, 7 Detail window, 10

# Н

Hierarchy Window, 7

# L

Layout In the detail window, 10 In the hierarchy window, 7

### Т

Table view, 12