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toolbar

1

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.

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

WARNING

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

with a safety alert symbol, indicates that minor personal injury can result if proper precautions are not taken.

CAUTION

without a safety alert symbol, indicates that property damage can result if proper precautions are not taken.

NOTICE

indicates that an unintended result or situation can occur if the relevant information is not taken into account.

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.

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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.

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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.

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Trademarks

Trademarks

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Trademarks

2.1 Start techniques

Calling the "Comos.exe" file

You can start the COMOS installation by running the "Comos.exe" file in the "Bin" directory. You can also use parameters if you run the program from the command line or via a shortcut. See also section Parameters (Page 7). If start parameters are used, no direct start is performed. See also section Quicklaunch (Page 10).

Calling the "Comos.XIF.exe" file

The "Comos.XIF.exe" executable file is located in the "Bin" directory of COMOS.

- If COMOS was already started, a project is opened and an object is selected in the active COMOS application by running the "Comos.XIF.exe" file with appropriate parameters.
- If COMOS was not yet started, the main application of COMOS is also started by calling the "Comos.XIF.exe" file.

You can create an XIF desktop link using drag&drop. You drag an object from the Navigator onto the desktop for this purpose. An XIF link is automatically created which additionally opens the properties of the object. See also section Start via an XIF link (Page 10).

2.2 Parameters

- The start parameters are optional.
- You can pass any number of start parameters, but each start parameter only once.
- Use the following notation for each start parameter:

/<Start parameter name>:<parameter value>

2.2 Parameters

Parameters

The following table describes the parameters:

Parameters	Name	Description
/DT:	Data type	Data type of the database. Also replaces the parameters /DB and /DN. You obtain this data type from Workset.Init(), for example. Example: /DT: [SQL - SERVER]PT_SQL_SERVER_1
/PR:	Project	Project name
/wo:	Working overlay ID	 Pass the ID of the working layer. 1. Set ID: 2. Open project 3. "Extra > Working layers/Histories > Management", tab "Working layers": Open the properties of the working layer
		4. Apply the value from the "ID" field
/ 05:	User	 Possible values: User name (login) from Workset.CurrentUser.Name Example: /US: Frank 1: Setup user 2: Second account
/MD:	Module	 v: View mode E or ET: Electrical Engineering PID: Piping&Instrumentation Design FEED: Front-end Engineering&Design CA: Construction Assistant See also section Module-specific start (Page 11). PA: The modules belonging to the package are started. Additional information about this topic is available in the "COMOS LS" manual, keyword "Packages".
/CG:	Config	Name of the configuration file. The configuration file must be located in the folder of the respective COMOS version in the following subfolders: "Current\config"

2.3 Application start via an HTML page

Parameters	Name	Description
/MN:	Menu	Name of the menu file. The menu file must be located in the folder of the respective COMOS version in the following subfolder: "Current\config"
/AT:	Application type (AS: Assistant Mode)	Compact display of the COMOS interface. When the mouse is not on the application, the interface is represented by icons that are fixed in the foreground. This facilitates simultaneous work with other applications. Example: /AT:AS
/ID:	Identify	Internal unique identifier of an object: COMOS-Object.SystemUID
/cm.		Example: /ID: A17XK7X4K0
/51.	System type	You can find more information on this topic in the "COMOS.dll" class documentation, keyword "SystemType".
		Object examples: /sT: 8
		Base object example: /ST: 13
/DG:	Debug	Debug mode
		Example: /DG:D
/?	Help	Help

Space

You can enter a space in the database path or the name, particularly if you use Access. In this case it is mandatory that you put the parameters for the path and name in quotation marks.

2.3 Application start via an HTML page

Start via an HTML page

XIF lets you start COMOS from an HTML page via VBScript. Call via: set WshShell = CreateObject("WScript.Shell") WshShell.Run ("xif.exe /DT: [SQL - SERVER]PT_SQL_SERVER_1 " & amp; comosCallParams)

comosCallParams are /PR, /ID etc.

Contact your customer representative or support for further assistance.

2.4 Start via an XIF link

2.4 Start via an XIF link

Creating an XIF link

If you drag an object from COMOS onto the desktop, an XIF link is automatically created there. If you want to directly open the respective project later, you only need to double-click the XIF link. Information regarding the database and users are namely also stored in the XIF link.

In the XIF link, you can enter the same parameters that you use when calling the "Comos.exe" file from the command line. See also section Parameters (Page 7).

Note

Correcting link properties for drag&drop links

If you are logged on with the universal access "@Setup" or the alternative user access "Name_2" in COMOS when creating the drag&drop link, incorrect user information (US) will be input in the link:

/US: @Setup Or /US: Test_2

Correct is: /US: 1 or /US: 2

If you correct this information in the link properties, the link will also work.

2.5 Quicklaunch

Recreating the last work environment

You set the COMOS Quick Launch here:

"View > Quick launch" menu

If the direct start (Quick launch) has been activated, then at the next start, COMOS automatically tries to restore the working environment that existed when you last quit COMOS.

Note

With the direct start you open the database that was closed last and not the last open one. You will not notice a difference if you only work with one COMOS instance.

If you work with several COMOS instances simultaneously, the most recently closed COMOS instance determines the database that opens with Quick launch.

Quick launch tries to open the project that was last used in COMOS. Even the Navigator tree is opened up to the most recently selected object, unless it is an inherited object. You can find more information on this topic in the "Inheriting, Copying, Deleting" manual, keyword "Inheritance".

Quick launch uses the standard access or alternative access of a user only. The universal access is not supported by Quick launch.

Quick launch works only when no other specification is available. Quick launch will not have an effect if you use start properties or start parameters.

2.6 Module-specific start

Module-specific start mode

In the command line for the COMOS start, you can set a module-specific start mode, e.g. /MD: CA for starting the Construction Assistant. See also section Parameters (Page 7).

Command line

If you have entered the module in the command line, the menu file with the same name is also searched as the default setting. You can overwrite the default setting in the command line:

/CG: <Config file name> /MN: <Menu file name>

2.7 Server login with file

Password for server login

The password for the server login (not the COMOS login) for the SQL server and Oracle is saved in a file. Advantages:

- You do not have to enter the password every time you log in.
- It is sufficient if an administrator knows the password. The administrator creates this file once and then distributes it to all clients.
- This technology will also let you use any user name and you are not restricted to the user name "COMOS".

You can find more information on this topic in the commissioning documentation "DB Administration", keyword "Password".

2.8 Remote administration

2.8 Remote administration

You have the option to access COMOS by means of a remote access.

This requires an access with TerminalClient software to a Windows 2000 or Windows 2003 server in administration mode. Contact the support team to find out which licenses are required and how to technically implement this option.

2.9 Detecting internal networks

Background

Company internal PCs log on with a different license then PCs with an external access to the company network.

IP numbers

You can specify IP numbers in collaboration with you customer representative or Customer Support; these are regarded as in-house numbers. This gets you around the problem that the domain of a client is not known in certain cases.

2.10 COMOS Web

2.10.1 Background

COMOS Web is a server-based Internet interface to COMOS. The target group for COMOS Web are users within and outside a company that do not frequently work with COMOS or that are primarily active in a limited task field.

COMOS Web users log in to a COMOS database with the COMOS Web Server via an Internet Explorer from Microsoft.

2.10.2 Starting COMOS Web

Requirement

COMOS Web has been installed.

Procedure

To start COMOS Web, proceed as follows:

- 1. Start the Microsoft Internet Explorer.
- Enter the following URL in the "Address" field: "http://<server name>/"

Result

The window for the COMOS Web login opens.

You can find more information on this topic in the "COMOS Web" manual, keyword "Starting COMOS Web".

2.10 COMOS Web

Registration in the database

3.1 Open database

Procedure

- 1. Click the "File > Open database..." menu.
- 2. In the "Open database" window, select the required database type in the first line.

Note

Microsoft Jet database type

Access requires the presetting "Microsoft Jet".

- 3. In the "Database" line, click the "..." button.
- 4. Select the required database in the "Open database" window.

Note

Select instance

If you have selected "Oracle" or "SQL-Server" in the second step, select an instance instead of a database. You can find more information on this topic in the "DB Administration" manual, keyword "Creating instances for an Oracle client".

The "User name" field first takes the user that you used to log in to the company network.

- If you want to work on a shared COMOS database from different locations, click the "Extended" button.
 - In the "Time zone" field, you can find information on your GMT (Greenwich Mean Time) setting. COMOS takes the time information from the respective operating system to synchronize PCs that access a shared database from different time zones.
 - You can enter your location in the "Location" field. For example, this information is used for electronic signatures.
- 6. Select one of the following options:
 - If you want to log in as a user that has already been registered, click the "Open" button.
 - If you want to log in as another user, right-click the "User name" field and select the respective user. Then click the "Open" button.

3.2 Setup login in the example database

3.2 Setup login in the example database

Universal access / user account "@Setup"

A @SETUP user is created in the user administration of the COMOS database and in newly created Access databases. For security reasons you do not have the option to enter any name to log in. The user name of the operating system will be entered in the "User name" input field of the "Open database" dialog field.

Procedure

To enter the "@SETUP" user account in the "User name" input field, proceed as follows:

- 1. Click the "File > Open database..." menu.
- 2. Right-click the "User name" input field.

Various user accounts are offered in the context menu.

3. Click "Universal access" in the context menu.

Result

The "@SETUP" entry is in the "User name" input field. You can now log in with this user account.

3.3 Alternative access

Procedure

Proceed as follows to enter the alternative access in the "User name" field:

- 1. Open the database.
- 2. Right-click the "User name" field.

Various user accounts are offered in the context menu.

3. Click "Alternative access of user" in the context menu.

Result

A user name will be created that consists of the standard user name with the extension "_2". You have the option to assign other user rights than the standard user to this user.

Registration in the database

3.4 Initial login to a new database

3.4 Initial login to a new database

You can find more information on this topic in the "COMOS Administration" manual, keyword "Initial login".

3.5 Login verifications

3.5.1 Definitions

Database model

All object properties available in COMOS are stored in the COMOS database. If a new object property is introduced with a COMOS version, you need to expand the database to include this new property.

Database indices

Database indexes are needed to speed up the access. The result of this check will be output in one dialog window together with the result of the database model check.

Database version

The COMOS DB is assigned specific version numbers whenever relevant enhancements are made.

Document version

Documents are also subject to constant improvement similar to the database model. The document version regulates the range of options available for the user. If the document version was incremented, you can use new options.

3.5 Login verifications

3.5.2 Adjusting database models and database indices

Joint adjustment

You adjust database models and database indices at the same time. Only one window opens. Clicking the "Adjust" button will have an effect on both.

Conversion matrix

Client	Description	
Old clients	 Old database (model and/or indices not adjusted): Normal state Converted database (model and/or indices adjusted): An old client can open the database and use the old functions, while new clients cannot. 	
New clients	 Old database (model and/or indices not adjusted): A new client cannot open the old database. Converted database (model and/or indices adjusted): Normal state 	

User

If a user opens an older COMOS database with a current COMOS version, the following notification is displayed:

"The tables in the database do not match the COMOS requirements! Contact your COMOS administrator!"

COMOS remains open after the message and you can select another database.

Administrator

If an administrator opens an older COMOS database with a current COMOS version, the "Checking tables" dialog field opens. The administrator has the following options:

Option	Description
"No" button	The database remains unchanged and is not opened. COMOS remains open and the administrator has the option to select another matching database.
"Yes" button	The database model will be adjusted. Both the older and the new, current COMOS clients can continue to work as usual. There will be no loss of data. Older COMOS clients cannot use the options that were provided through the update of the database model.

3.5.3 Incrementing the database version

Conversion matrix

Client	Description		
Old clients	 Old database (database version not adjusted): Normal state Converted database (database version adjusted): An old client cannot open the converted database. 		
New clients	 Old database (database version not adjusted): A new client can open the old database. Converted database (database version adjusted): Normal state 		

Execution

The database version in COMOS is managed with the help of the Support dialog. You can find additional information on this topic in the "COMOS Administration" manual, keyword "Adjusting the database version".

Note

You cannot reset an incremented database version.

3.5.4 Incrementing the document version

Old clients cannot work with documents that have a higher document version.

Conversion matrix

Client	Description		
Old clients	 Old database (document version not adjusted): Normal state Converted database (document version adjusted): An old client will gets a warning when logging in. If the new document version has not yet been transferred, an old client can open and edit the documents. After the transfer of the new document version, the old clients only have read access to the document. 		
New clients	 Old database (document version not adjusted): A new client can open the old database. A new client can open and edit old documents. Converted database (document version adjusted): Normal state When old documents are stored for the first time with a new client, the new document version is transferred to the old documents. 		

3.5 Login verifications

Execution

The document version in COMOS is managed with the help of the Support dialog. You can find more information on this topic in the "COMOS Administration" manual, keyword "Adjusting the document version".

Note

You cannot reset an incremented document version.

4

COMOS menu bar and COMOS toolbar

Principle

An XML file controls the content you see in the COMOS menu bar and COMOS toolbar.

The content depends on the module you have started and whether the standard XML file of the module is used or a customer-specific file created by your administrator. See also section Managing the menu bar and toolbar (Page 45).

User menus and administrator menu

Depending on your user rights, menus, submenus, menu commands and tools may be locked or not displayed for you.

Menus and menu commands with the default setting

For information on which menus, submenus and menu commands are contained in the COMOS menu bar by default, see also section Menu overview: User (Page 23) and section Menu overview: Administrator (Page 41).

COMOS menu bar and COMOS toolbar

Menu overview: User

5.1 "File" menu

Commands in the "File" menu

Objective	Symbol	Call	Description
Open or create a database	8	"File > Open database"	Enter the login information in the following dialog field. The database you have used last will be displayed. You can find additional information on this topic in the manual "COMOS Platform Getting Started", keyword "Opening the database and project". Alternatively: Create a database (Access). You can find more information on this topic in the "COMOS Administration" manual, keyword "Creating a new Access database".
Open or create a project	3	"File > Open project"	A database can include one or more projects. Which projects you see also depends on the assigned rights. You can find additional information on this topic in the "COMOS Platform Getting Started" manual, keyword "Project management".
			Alternatively: Create a project. You can find more information on this topic in the "Basic Operation" manual, keyword "Creating projects".
Close project	Ť	"File > Close project"	If more than one project is open at a time, this command is active. The command saves and closes the active project, but not the database.
Close working layer	*	"File > Close working layer"	Effect of "Close working layer" in COMOS:
	G.		If working layers are open, you close the current working layer with this command. The next available project working layer then opens automatically. This may continue until the project itself is opened.
Save current project		"File > Save project"	Effect of "Save project" in COMOS:
			All open objects and actions are saved.
			Note: This also means that a save is made in changed properties (and the "Apply" button is set to inactive.)
			You cannot cancel after saving. Navigator operations cannot be undone.
			 As many as possible are saved. The "Save" button in the dialog fields, however, only saves if the entries are consistent.

Menu overview: User

5.1 "File" menu

Objective	Symbol	Call	Description
			Example: duplicate name in the properties: Save in COMOS:
			Name is automatically corrected; object is saved.
			 Save in properties:
			Save is rejected; an error message is output due to duplicate names.
			The cache is cleared under certain circumstances.
			The existence of objects in the object cache is not an illegal action and should only be reduced by saving if the number has become extremely large due to the use of certain bulk processing functions, such as import actions, etc.
Language of the interface	Q	"File > Languages"	Select the language for the interface in the following dialog window.
			You can find additional information on this topic in the "COMOS Platform Getting Started" manual, keyword "Switching language".
Exit (program)		"File > Exit"	Use this command to exit COMOS. All changes since the last save operation are saved in the project and in the database.

5.2 "View" menu

Commands in the "View" menu

Objective	Symbol	Call	Description
Back	\odot	"View > Back"	This is a navigation help which reverses the last action you executed in COMOS.
Forward	۲	"View > Forward"	If you want to execute a reversed action again, you have to click on the "Forward" menu.
Quick launch	-	"View > Quick launch"	Recreating the most recent work environment. See also section Quicklaunch (Page 10).
Screen 2	-	"View > Screen 2"	Use this menu to open a second screen which displays the COMOS desktop. By default, COMOS is configured in such a way that documents are opened on this screen.
Icon with placing information	-	"View > Icon with placing information"	If the command is activated, a checkmark is displayed in the Navigator at the icons in the upper right-hand corner when the object is placed on a report and also provides placing information (DocObj). You can choose from three different options here:
			• "Hide": No placing information is displayed.
			 "For all placed objects": The checkmark is displayed for all objects with placing information.
			 "For placed elements only": The checkmark is only displayed for objects with placing information that are part of the element collection of another object (on the "Elements" tab).
Properties tree	Ē	"View > Properties tree"	The menu opens a window in the detail area of the Navigator which displays the properties of an object in list format.
Symbol and document preview	1	"View > Symbol and document preview"	The menu opens a window in the detail area of the Navigator which displays symbols of objects or documents.
Window list	00	"View > Window list"	The menu opens a window in the detail area of the Navigator which lists all opened windows in the working area.
Favorites		"View > Favorites"	The menu opens a window in the detail area of the Navigator which lists the favorites you have created in COMOS.
Static New menu	*	"View > Static New menu"	The menu opens a new window in which new objects can be created more quickly. This applies in particular when the same new objects need to be created in bulk.

5.3 "Documents" menu

5.3 "Documents" menu

Using the "Documents" menu, you can select all actions of "All Document tools" as individual actions.

Commands in the "Documents" menu

Objective	Symbol	Call	Description
Print (documents)	5	"Documents > Print"	This is the individual action "Print" of "All Document tools".
Evaluate documents		"Documents > Evaluate"	Runs the "Evaluate" function for any number of reports at once (bulk). You can find more information on this topic in the "Reports - Basic Operation" manual, keyword "Evaluate".
Revision		"Documents > "Revision"	This is the individual action "Revision" of "All Document tools".
Export as DWG/DXF files		"Documents > DWG/DXF Export"	This is the individual action "Save as DWG/DXF file" of "All Document tools".
Word export	Idec	"Documents > Word export"	This is the individual action "Word Export" of "All Document tools".
Excel export	Ixis	"Documents > Excel export"	This is the individual action "Excel export" of "All Document tools".
PDF export	pdf	"Documents > PDF export"	This is the individual action "PDF export" of "All Document tools".
Copy TIFF / PDF file of the released revision	£	"Documents > Copy TIFF/PDF of the released revision	Bulk copying of the TIFF/PDF file of the most recently released revision into the specified directory. This is the individual action "Copy TIFF/PDF of the released revision" of "All Document tools".
Print current revision file	J JJ	"Documents > Print current revision file"	This is the individual action "Print current revision file" of "All Document tools".
Print with revision printer	a	"Documents > Print with revision printer"	This is the individual action "Print with revision printer" of "All Document tools".
All document tools	<u>1111</u>	"Documents > All document tools"	Collection of documents tools, which otherwise can be called in the various submenus of the "Documents" menu. You can find more information on this topic in the "Queries" manual, keyword "Standard query documents".

5.4 "Extra" menu

5.4.1 "Extra > Bulk processing" menu

Commands in the "Extra > Bulk processing" menu

Objective	Symbol	Call	Description
Bulk processing for engineering objects	* •	"Extras > Bulk processing > Bulk processing for engineerin g objects"	You can find additional information on this topic in the "Queries" manual or the "COMOS Platform Getting Started" manual, keyword "Bulk processing for engineering objects".
Bulk processing for base objects	P.	"Extra > Bulk processing > Bulk processing for base objects"	You can find more information on this topic in the "Queries" manual, keyword "Bulk processing of base objects".
Bulk processing for attributes	# @	"Extras > Bulk processing > Bulk processing for attributes"	You can find more information on this topic in the "Queries" manual, keyword "Bulk processing of attributes".
Bulk processing for documents	<u>#0</u>	"Extras > Bulk processing > Bulk processing for documents"	You can find more information on this topic in the "Queries" manual, keyword "Bulk processing for documents".
Bulk processing for connectors	to.	"Extras > Bulk processing > Bulk processing for connectors"	You can find more information on this topic in the "Queries" manual, keyword "Bulk processing for connectors".

5.4.2 "Extra > Query" menu

Commands in the "Extra > Queries" menu

Objective	Symbol	Call	Description
Query	-	"Extra > Query"	This submenu provides access to all base objects that are in the base data under "@System > @O > @Query" and are created by using the "New query" context menu.
			You create a basic structure by using the database adjustment. You can find more information on this topic in the "COMOS Administration" manual, keyword "Database adjustment".

5.4 "Extra" menu

5.4.3 "Extra > Standard import" menu

Commands in the "Extra > Standard import" menu

Objective	Symbol	Call	Description
Standard import	-	"Extra > Standard import"	This submenu provides access to all base objects that are in the base data under "@System > @O > @StdImport" and are created by using the "New standard import" context menu.
			You can find more information on this topic in the "COMOS Administration" manual, keyword "Database adjustment".

5.4.4 "Extra > Translation" menu

Command in the "Extra > Translation" menu

Objective	Symbol	Call	Description
Single translation	Ø	"Extra > Translation > Single translation"	Object translation You can find more information on this topic in the "COMOS Administration" manual, keyword "Single translation".
Bulk translation	69	"Extra > Translation > Bulk translation"	This function simultaneously translates the description for several engineering objects. You can find more information on this topic in the "COMOS Administration" manual, keyword "Bulk translation".
Translation database	4	"Extra > Translation > Translation database"	Opens the "Translation database" plugin. You can find more information on this topic in the "COMOS Administration" manual, keyword "Translation database".

5.4.5 "Extra > Check" menu

Commands in the "Extra > Check" menu

Objective	Symbol	Call	Description
Object test	¥	"Extra > Check > Object test"	You can find more information on this topic in the "Basic Operation" manual, keyword "Object test".
Edit instances	2	"Extra > Check > Edit instances"	You can find additional information on this topic in the "COMOS Administration" manual, keyword "Edit instances".
Edit product data	¹	"Extra > Check > Edit product data"	Find more information on this topic in the "EI&C Operation" manual, keyword "Edit product data".

5.4.6 "Extra > Detail" menu

Commands in the "Extra > Detail" menu

Objective	Symbol	Call	Description
Modification of name/label	\$	"Extra > Detail > Modification of Name/Label"	You can find more information on this topic in the "EI&C Operation" manual, keyword "Modification of Name/Label".
Device selection (product data)	嚻	"Extra >Detail >Device selection (Product data)"	You can find more information on this topic in the "EI&C Operation" manual, keyword "Product data".
Characteristics for connections	\$	"Extra > Detail > Characteristics for connections	You can find more information on this topic in the "El&C operation" manual, keyword "Characteristics for connections".

5.4 "Extra" menu

5.4.7 "Extras > Working layers/history" menu

Commands in the "Extra > Working layers/history" menu

Objective	Symbol	Call	Description
Management	aff.	"Extra > Working layers/history > Management"	You can find more information on this topic in the "Basic Operation" manual, keyword "History management".
Object status	6 13	"Extra > Working layers/history > Object status"	You can find more information on this topic in the "Basic Operation" manual, keyword "Object status".
Release Manager	80	"Extra > Working layers /history > Release Manager"	You can find more information on this topic in the "COMOS Administration" and "Revisions" manuals, keyword "Release Manager".

5.4.8 "Extra > Viper 3D Editor" menu

You can open the Viper 3D visualization tool from this menu.

Commands in the "Extra > Viper 3D Editor" menu

Objective	Symbol	Call	Description
3D Piping	1 ++	"Extra > Viper 3D Editor > 3D Piping"	You can find additional information on this topic in the "Viper" quickstart that is available from
Electrical Engineering		"Extra > Viper 3D Editor > Electrical engineering"	the support team.
Symbol editor	1 ++	"Extra > Viper 3D Editor > Symbol editor"	

5.4.9 "Extra > Object matcher" menu

"Extra > Object matcher" menu

Objective	Symbol	Call	Description
Object Matcher	ଟ	"Extra > Object matcher"	The role the object matcher is to compare and copy. It compares two trees sections in different projects. You can find more information on this topic in the "Inheriting, Copying, Deleting" manual, keyword "Object matcher".

5.4.10 "Extra > Cross-Project Copy" menu

"Extra > Cross-Project Copy" menu

Objective	Symbol	Call	Description
Copying across projects	C	"Extra > Cross-Project Copy"	You can find more information on this topic in the "Inheriting, Copying, Deleting" manual, keyword "Cross-project copy".

5.4.11 "Extra > Report designer" menu

"Extra > Report designer" menu

Objective	Symbol	Call	Description
Report designer	ä	"Extra > Report designer"	Module for creating report templates. You can find more information on this topic in the "Reports - Basic Operation" manual, keyword "Report designer".

5.4.12 "Extra > Reimport" menu

"Extra > Reimport" menu

Objective	Symbol	Call	Description
Reimport	<i>(</i>)	"Extra" > Reimport"	You can find more information on this topic in the "Interfaces" manual, keyword "Reimport".

5.4 "Extra" menu

5.4.13 "Extra > Engineering tasks" menu

"Extra > Reimport" menu

Objective	Symbol	Call	Description
Engineering tasks	e⇔	"Extra > Engineering tasks"	Opens an interface for creating and executing engineering tasks.
			You will find additional information on this topic in the "Working with SIMATIC Automation Designer" manual, keyword "Detailed engineering with tasks".

5.4.14 "Extra > Restrict working areas" menu

"Extra > Restrict working areas" menu

Objective	Symbol	Call	Description
Restrict working areas	A	"Extra > Restrict working areas"	You can find more information on this topic in the "Rights" manual, keyword "Restrict working areas".

5.4.15 "Extra > Object debugger" menu

"Extra > Object debugger" menu

Objective	Symbol	Call	Description
Object debugger	R	"Extra > Object debugger"	For directly affecting objects per script. You can find more information on this topic in the "COMOS Administration" and "Rights" manuals, keyword "Object debugger".

5.4 "Extra" menu

5.4.16 "Extra > Monitoring" menu

Commands in the "Extra > Monitoring" menu

Objective	Symbol	Call	Description
System Monitor		"Extra > Monitoring > System Monitor [Ctrl+S]"	You can find more information on this topic in the "COMOS Administration" manual, keyword "System Monitor".
Performance Monitor	M	"Extra > Monitoring > Performance Monitor"	You can find more information on this topic in the "COMOS Administration" manual, keyword "Performance Monitor".
Performance Monitor (ListView)	М	"Extra > Monitoring > Performance monitor for query analysis"	For analyzing queries. In this alternative display of the performance monitor, the interface is constructed without queries which distort the results in the analysis of queries.
CVS Monitor	B	"Extra > Monitoring > CVS Monitor"	To display all clients that are currently available via CVS. You can find more information on this topic in the "Infrastructure planning" manual, keyword "Network segments / cache synchronization (CVS)".
Database performance	2	"Extra > Monitoring > Database performance"	You can find more information on this topic in the "COMOS Administration" manual, keyword "Database performance".

5.5 "Plugins" menu

5.5 "Plugins" menu

5.5.1 No multiple starts

You cannot start from a plugin with multiple instances.

5.5.2 "Plugins > Basic" menu

Commands in the "Plugins > Basic" menu

Objective	Symbol	Call	Description
Define attribute colors.	1	"Plugins > Basic > Define attribute color"	Opens the "Define attribute color" plugin. You can find more information on this topic in the "Basic Operation" manual, keyword "Define attribute color".
Document interface	්	"Plugins > Basic > Document interface"	Opens the "Document interface" plugin. You can find more information on this topic in the "Interfaces" manual, keyword "Document interface".
Native object XML import export	ា	"Plugins > Basic > Native Object XML Import Export"	Opens the "Native Object XML Import Export" plugin. You can find additional information on this topic in the "Interfaces" manual, keyword "Native Object XML Import Export".
Cross-class copy	6	"Plugins > Basic > Cross-class copy"	Opens the "Cross-class copy" plugin. You can find more information on this topic in the "Inheriting, Copying, Deleting" manual, keyword "Cross-class copy".
Full-text search	M	"Plugins > Basic > Full-text search"	Opens the "Full-text search" plugin. You can find more information on this topic in the "Document Management" manual, keyword "Full-text search".
Unit conversion	I+I	"Plugins > Basic > Unit conversion"	Opens the "Unit conversion" plugin. You can find more information about this topic in the "COMOS Administration" manual, keyword "Unit conversion".
Error analysis for 3D objects		"Plugins > Basic > 3D object error analyzer"	Opens the "3D object error analyzer" plugin. You can find more information on this topic in the "PipeSpec Designer" manual, keyword "3D object error analyzer".
DWG/DXF mapping editor	0	"Plugins > Basic > DWG/DXF mapping editor"	Opens the "DWG/DXF mapping editor" plugin. You can find additional information on this topic in the "Interfaces" manual, keyword "Mapping editor".
Assign line types	-	"Plugins > Basic > Assign line types".	Opens the "Assign line types" plugin. You can find more information on this topic in the "P&ID" manual, keyword "Assign line types".

Menu overview: User

5.5 "Plugins" menu

Objective	Symbol	Call	Description
Pipe Spec Mapping	1	"Plugins > Basic > Pipe Spec Mapping"	Opens the "Pipe Spec Mapping" plugin. You can find additional information on this topic in the "P&ID" manual, keyword "Pipe spec mapping via the Navigator".
Job Management	IJ	"Plugins > Basic > Job Management".	Opens the "Job Management" plugin. You can find more information on this topic in the "Basic Operation" manual, keyword "Job Manager".
Data Aggregation	4	"Plugins > Basic > Data Aggregation".	The plugin allows you to create data lists in COMOS that can be grouped, similar to Excel lists. The level of detail for the lists can be controlled by grouping.
PDMS Interface	V	"Plugins > Basic > PDMS Interface"	Opens the "PDMS Interface" plugin. You can find additional information on this topic in the "COMOS 3D Integration Operation" manual, keyword "COMOS PDMS Integration".

5.5.3 "Plugins > Maintenance" menu

Commands in the "Plugins > Maintenance" menu

Objective	Symbol	Call	Description
Maintenance	Fill and the second sec	"Plugins > Maintenance > Maintenance"	For selecting:
			Maintenance order
			Manual maintenance preview
			Resource management
			Direct
			Maintenance demon
			You can find more information on this topic in the "MRO (Maintenance Repair and Overhaul)" manual under the keywords "Maintenance order", "Manual maintenance preview", "Resource management" and "Maintenance demon" and in the "Portable & Direct" manual , keyword "Direct".
Events	μ,	"Plugins > Maintenance > Events"	For selecting:
			Event manager
			Easy event
			You can find more information on this topic in the "MRO (Maintenance Repair and Overhaul)" manual, keywords "Event manager" and "Easy event".

Menu overview: User

5.5 "Plugins" menu

Objective	Symbol	Call	Description
Shutdown	4	"Plugins > Maintenance > Shutdown"	For selecting:
			Shutdown management
			Quick edit
			Logistics
			You can find more information on this topic in the "Shutdown" manual, keywords "Shutdown management" and "Quick edit plugin".
Resources	2 9	"Plugins > Maintenance	For selecting:
		> Resources"	Resource management
			Shift management
			Resource monitor
			You can find more information on this topic in the "MRO (Maintenance Repair and Overhaul)" manual, keywords "Resource management", "Shift management" and "Resource monitor".
Warehouse management		"Plugins > Maintenance > Warehouse management"	For selecting:
	88		Warehouse management
			Goods receipt
			Goods issuing
			You can find more information on this topic in the "MRO (Maintenance Repair and Overhaul)" manual, keywords "Warehouse management", "Goods receipt", "Goods issuing".
Object search	٩	"Plugins > Maintenance > Object search"	The "Object search" plugin is used to search for objects throughout the entire data structure. You can find more information on this topic in the "MRO (Maintenance Repair and Overhaul)" manual, keyword "Object search".

5.5.4 "Plugins > Mechatronics" menu

Commands in the "Plugins > Mechatronics" menu

Objective	Symbol	Call	Description
Plant and machine configuration	đ	"Plugins > Mechatronics > Plant and machine configuration"	Opens the "Plant and machine configuration" plugin. You can find more information on this topic in the "Express" manual, which you can obtain from Support, keyword "Plant and machine configuration".
Path-time diagram	Ħ	"Plugins > Mechatronics > Path- time diagram"	Opens the "Path-time diagram" plugin. You can find more information on this topic in the "ME Designer" manual, which you can obtain from Support, keyword "Path-time diagram".

5.5.5 "Plugins > PT" menu

Commands in the "Plugins > PT" menu

Objective	Symbol	Call	Description
Signal name matching	차	"Plugins > PT > Signal name matching"	You can find more information on this topic in the "Instrumentation and Control" manual, keyword "Signal name matching".
Signal/device assignment manager	Ƴ	"Plugins > Signal/device assignment manager"	Find more information on this topic in the "EI&C Operation" manual, keyword "Signal/device assignment manager".
Updating macro blocks	1	"Plugins > Update macro blocks"	You can find more information on this topic in the "Logical" manual, keyword "Update macro blocks".
Generic Excel import	X	"Plugins > Generic Excel import"	Additional information about this topic is available in the "Automation Interfaces" manual, keyword "Generic Excel import".
IEC/JIC conversion	%	"Plugins > PT > IEC-JIC conversion"	You can find more information on this topic in the "EI&C Administration" manual, keyword "IEC to JIC".
SPI Interface	0	"Plugins > SPI Interface"	You can find more information on this topic in the "Automation Interfaces" manual, keyword "SPI".
Automation	-	"Plugins > Automation"	The following commands are available in this menu:
			" > Create templates"
			" > Import / Export PCS 7"
			You can find more information on this topic in the "Automation Interfaces" manual, keywords "Create templates" and "Data transfer PCS 7".

5.5.6 "Plugins > PQM" menu

Commands in the "Plugins > PQM" menu

Objective	Symbol	Call	Description
Include documents	1	"Plugins > PQM > Include documents"	Opens the "Include documents" plugin.
File transfer	Þ	"Plugins > PQM > File transfer"	Opens the "File transfer" plugin. You can find additional information on this topic in the PQM" manual, keyword "File transfer".
Start Excel	関	"Plugins > PQM > Start Excel"	Starts Excel.
Start Outlook	0	"Plugins > PQM > Start Outlook"	Starts Outlook.

5.5 "Plugins" menu

Objective	Symbol	Call	Description
Start Powerpoint	0	"Plugins > PQM > Start PowerPoint"	Starts Powerpoint.
Start Visio	1	"Plugins > PQM > Start Visio"	Starts Visio.
Start Word	W	"Plugins > PQM > Start Word"	Starts Word.
Viewer settings	¢¢	"Plugins > PQM > Viewer settings"	Opens the "Viewer settings" plugin, in which you can assign individual file types to specific viewers for display in COMOS. If a file type is not assigned to a viewer in COMOS, the default viewer of the operating system is used. You can find additional information on this topic in the "PQM" manual, keyword "Viewer settings".
DVM Transmittal	4 9	"Plugins > PQM > DVM Transmittal"	You can find additional information on this topic in the "PQM" manual, keyword "DVM Transmittal".

5.5.7 "Plugins > ET" menu

Commands in the "Plugins > Mechatronics" menu

Objective	Symbol	Call	Description
EPlan5 data exchange	*#	"Plugins > Mechatronics > EPlan5 data exchange"	Opens the "EPlan data exchange" plugin. You can find more information on this topic in the "Electrical Engineering" manual, keyword "EPLAN data exchange".
Ruplan import		"Plugins > Mechatronics > Ruplan import"	Opens the "Ruplan import" plugin. You can find more information on this topic in the "Electrical Engineering" manual, keyword "Ruplan import".
VNS import	0	"Plugins > Mechatronics > VNS import"	Opens the "VNS import" plugin. Available for compatibility. You can find more information on this topic in the "Automation Interfaces" manual, keyword "VNS".

5.5.8 "Plugins > SAP" menu

Commands in the "Plugins > SAP" menu

Objective	Symbol	Call	Description
SAP Login	SAN .	"Plugins > SAP > SAP Login"	Opens the "SAP Login" plugin. You can find more information on this topic in the "SAP Interface" manual, keyword "Login".
SAP interface configuration	3 <u></u>	"Plugins > SAP > SAP interface configuration"	Opens the "SAP interface configuration" plugin. You can find more information on this topic in the "SAP Interface" manual, keyword "Interface configuration".

5.6 "Help" menu

Commands in the "Help" menu

Objective	Symbol	Call	Description
COMOS Platform	-	"Help > COMOS Platform"	Opens a menu to select the PDF help files for COMOS Platform.
COMOS Process	-	"Help > COMOS Process"	Opens a menu to select the PDF help files for COMOS Process.
COMOS Automation	-	"Help > COMOS Automation"	Opens a menu to select the PDF help files for COMOS Automation.
COMOS Operations	-	"Help > COMOS Operations"	Opens a menu to select the PDF help files for COMOS Operations.
Full-text search	-	"Help > Full-text search"	For opening the full-text search.
COMOS <version number=""> readme</version>	-	"Help > COMOS <version number> readme"</version 	Opens a PDF help file with important information about the installed version.
Show help at start	-	"Help > Show help at start"	Option activated: Next time you start COMOS, the PDF help file "COMOS <version number=""> readme" will open automatically.</version>
COMOS info	-	"Help > COMOS info"	Information on the installed COMOS version
Database info	-	"Help > Database info"	Information regarding the database in use.

Menu overview: User

5.6 "Help" menu

6

Menu overview: Administrator

6.1 Using the administrator functions

Requirement

You have administrator rights in the open database.

6.2 "Administrator > Script error handling" menu

"Administrator > Script error handling" menu

Objective	Symbol	Call	Description
Script error handling	-	"Administrator > Script error handling"	You can find more information on this topic in the "Properties" manual, keyword "Script error handling".

6.3 "Administrator > Base data" menu

Commands in the "Administrator > Base data" menu

Objective	Symbol	Call	Description
Standard tables	F	"Administrator > Base data > Standard tables"	You can find additional information on this topic in the "COMOS Administration" manual, keyword "Standard tables".
Unit systems	() U	"Administrator > Base data > Unit systems"	You find more information on this topic in the "COMOS Administration" manual, keyword "Unit systems".
Document types	Ð	"Administrator > Base data > Document types"	You can find more information on this topic in the "Document Management" manual, keyword "Document types".
Import ECAD components	Ð	"Administrator > Base data > Import ECAD components"	You can find more information on this topic in the "EI&C Operation" manual, keyword "Import ECAD components".
Pipe spec management	6	"Administrator > Base data > Pipe specs"	You can find more information on this topic in the "PipeSpec Designer" manual, keyword "Pipe specs".

Menu overview: Administrator

6.4 "Administrator > System" menu

Objective	Symbol	Call	Description
Bulk processing of report templates	890 100	"Administrator > Base data > Bulk processing of report templates"	The menu opens a utility program for bulk processing of evaluating reports. The program searches and replaces text expressions. You can find additional information on this topic in the "Reports - Basic Operation" manual, keyword "MultiCrp.exe".
Advanced properties	ĩ	"Administrator > System > Extended properties"	You can find additional information on this topic in the "COMOS Administration" manual, keyword "Extended properties".

6.4 "Administrator > System" menu

Commands in the "Administrator > System" menu

Objective	Symbol	Call	Description
Support	† ¥	"Administrator > System > Data maintenance (support)"	The "Data maintenance (support)" dialog window includes a number of utility programs and organizational help.
			You can find more information on this topic in the "COMOS Administration" manual, keyword "Support".
User management	0 ²	"Administrator > System > User management"	You can find additional information on this topic in the "Rights" manual, keyword "User management".
Permissions	5	"Administrator > System > Permissions"	Opens the "Permissions" plugin. You can find additional information on this topic in the "Rights" manual, keyword "Permissions".
Database adjustment		"Administrator > System > Database adjustment"	You can find more information on this topic in the "COMOS Administration" manual, keyword "Database adjustment".
Project directory matching	1	"Administrator > System	Synchronize document folder
	9	> Synchronize document folder"	You can find more information on this topic in the "COMOS Administration" manual, keyword "Synchronize document folder".
Numbering ranges	-	"Administrator > System > Numbering ranges"	You can find more information on this topic in the "COMOS Administration" manual, keyword "Numbering ranges".

6.5 Menu "Administrator > Update Classification"

6.5 Menu "Administrator > Update Classification"

Commands in the "Administrator > Update classification" menu

Objective	Symbol	Call	Description
Current project		"Administrator > Update Classification > Current project"	Updates the classifications from the base object data for the current project. You can find more information on this topic in the "Queries" manual, keyword "Performing a classification update".
All projects		"Administrator > Update Classification > All projects"	Updates the classifications from the base object data for all projects. You can find more information on this topic in the "Queries" manual, keyword "Performing a classification update".

Menu overview: Administrator

6.5 Menu "Administrator > Update Classification"

Managing the menu bar and toolbar

7.1 Introduction

Principle

The COMOS menu bar and COMOS toolbar can be controlled with an XML file. The file controls:

- The content the user can see in the COMOS menu bar
- The toolbars used to form the COMOS toolbar and the content that is offered in them

You have the option to create a custom file - "Main.xml". You adapt the definition of COMOS menu bar and COMOS toolbar to suit your requirements in this file.

If no "Main.xml" is available, COMOS uses a standard XML file, which is managed internally by the system.

If "Main.xml" is corrupt, the standard XML file is also used. If "DBMon.exe" or "DebugView.exe" are running, a corresponding message appears there.

Advantage of customized XML files

- The COMOS menu bar and COMOS toolbar can be extended by customer-specific content (menus, submenus, menu commands, tools).
- The content offered by the default setting can be reduced to the content relevant to the given user.

7.2 Clone of "Main.xml"

7.2 Clone of "Main.xml"

Principle

You have the option to create a clone of "Main.xml": XML files that have the same XML structure but a different file name

In order for a clone to be used, it must be passed as a COMOS start parameter. Passing start parameters is not required for the following modules:

- Construction Assistant
- EI&C
- FEED
- P&ID
- View

The clones are used automatically when you start the module, provided they adhere to a fixed naming convention.

See also section Creating a custom XML file (Page 47).

Evaluation sequence

During startup, COMOS checks whether an XML file has been passed as a start parameter. Then COMOS checks which XML files are available and uses the first file found in the following order:

- 1. File passed as a start parameter
- 2. If COMOS has been started with the Construction Assistant, EI&C, FEED, PID or View modules: The module-specific clone (must adhere to the fixed naming convention)
- 3. "Main.xml"
- 4. If COMOS has been started with one of the modules mentioned in step 2: The internal system XML file for this module
- 5. The internal system standard XML file

7.3 Storage directory

Storage directory for "Main.xml" and its clones: "<COMOS installation directory>\config\menu"

Managing the menu bar and toolbar 7.4 Creating a custom XML file

7.4 Creating a custom XML file

Procedure

- Go to the directory "<COMOS installation directory>\config\menu". The "ExampleMain.xml" file is located there.
- If the file is not present, install the latest update.
 The file is copied to the directory.
- 3. Open file in an XML editor or text editor that supports Unicode.
- 4. Edit the XML file to meet your needs.

Note

Note case-sensitive entry (upper and lower case letters)

Your entries are case-sensitive, as described in this document.

- 5. Save your changes.
- 6. Rename the file. You have two options
 - Assigning standardized name:

The file is automatically evaluated during the start of the following module:

Module	Name of the XML file
Construction Assistant	"CA.xml"
EI&C	"ET.xml"
FEED	"FEED.xml"
P&ID	"PID.xml"
View	"V.xml"
Remaining modules	"Main.xml"

 Assigning name freely: The file is only evaluated when it was passed as a COMOS start parameter: /MN:<File name>

7.4 Creating a custom XML file

Adapting the XML file

You have the following options:

- Remove the nodes of menus, submenus, menu commands, or toolbars and tools that are not needed from the <menu> node.
- Register the custom menus, menu commands, etc., in the <Lib> node and use them in the <Menu> node.
- Change the definition of a menu command or tool from the toolbar, which is used by the standard XML file.

Examples: Change the visibility of a command or change its label, assign a command to a different function right as the present one

Proceed as follows:

- In the <Lib> node, open the <Tool> node with which the menu command or tool is registered.
- Copy the node.

With the following steps, you edit the copy.

- Change the value of the id attribute. Use a unique identifier.
- Adapt the attributes and subnodes.
- In the <Menu> node, open the <Toolbar> node.
- Search for the menu command or tool whose *idref* attribute uses the original *id*.
- Replace the value for *idref* with the *id* you have assigned.

See also

Clone of "Main.xml" (Page 46)

7.5 Example

Objective

Edit a "Main.xml" to add a submenu for opening base objects to the "Extra" menu in the COMOS menu bar.

Requirement

- A "Main.xml" is available.
- The file contains the following nodes:
 - <ComosMainMenu> <Lib> <Toolbars> <Toolbar id="MainMenu" type="MainMenu" />
 - <ComosMainMenu> <Menu> <Toolbars> <Toolbar idref="MainMenu">

And the subnode <Tool idref="ID_mnuExtra"> below that.

Procedure

- 1. Open "Main.xml".
- 2. Open the following node: <ComosMainMenu> <Lib> <Tools>.
- 3. Add the following subnodes:

```
<Tool id="ID_MyOwnAdminQueries" type="PopupMenu">
<Caption>
<Text xml:lang="de-de" value="Meine Administrator-Abfragen" />
<Text xml:lang="en-en" value="My administrator queries" />
</Caption>
<Binding type="CDevices" root="@System!@O!@Query" />
```

<Rights dependencyProperty="Visible" adminOnly="true" /></Tool>

4. Open the following node:

<ComosMainMenu> <Menu> <Toolbars> <Toolbar idref="MainMenu">

5. Add the following subnode:

<Tool idref="ID_MyOwnAdminQueries" />

6. Save the file.

7.6.1 Structure

Overview

The XML file for configuring the COMOS menu bar and COMOS toolbar has the following structure:

Node layer 1	Node layer 2	Description
<comosmainmenu></comosmainmenu>		The parent node
	<general></general>	For the declaration of the used XML structure
		Attribute: Version
		Current: Version="1"
	<lib></lib>	Library for registering the basically available menu bars, toolbars and their contents
		See also section Attributes and subnodes of <lib> (Page 50).</lib>
	<menu></menu>	Defines the content users can see in COMOS.
		See also section Attributes and subnodes of <menu> (Page 57).</menu>

7.6.2 Reference to node <Lib>

7.6.2.1 Attributes and subnodes of <Lib>

Purpose of <Lib>

Library for registering the basically available menu bars, toolbars and their contents

Attributes of <Lib>

None

Subnodes of <Lib> and their attributes

Node	Attributes	Description
<tools></tools>	-	Here, you can register items in the COMOS interface that can be used by the menu bar and toolbars (menus, submenus, commands, tools).
		There is a <tool> subnode for every item. See also section Attributes and subnodes of <tool> (Page 51).</tool></tool>
<toolbars></toolbars>	-	Here, you can register the toolbars or menu bar that can be used in the COMOS interface.
		There is a <toolbar> subnode for each toolbar and for the menu bar. See also section Attributes and subnodes of <toolbar> (Page 57).</toolbar></toolbar>

7.6.2.2 Attributes and subnodes of <Tool>

Purpose of <Tool>

Each node represents an item in a toolbar or menu bar, which is basically available in the interface. The attributes define the properties and behavior of the item.

Attributes of <Tool>

Attribute	Description	
id	Must be unique. Any character string.	
type	Determines the type of menu bar and toolbar item.	
	Possible values:	
	• PopupMenu	
	A menu or submenu	
	In order to create a menu with three drop-down submenus, you need four <tool> nodes of the type PopupMenu.</tool>	
	• Button	
	A command in a menu or a button for a tool in a toolbar	
	• StateButton:	
	An option	
	• ComboBox	
	A list generated automatically by COMOS for selecting a case. Name: ID_ProjCasesCB	
	Other lists cannot be registered.	
	• Seperator	
	Hyphen for optical division of menus	

Subnodes of <Tool> and their attributes

Note

Mandatory node

The <rool> node requires the following subnodes:

- <Caption> and <Text>
- If <Tool> for type has the value "Button" or "StateButton": <Class> or <Binding>
- For tool buttons: <Picture>

Node	Attributes	Description
<caption></caption>	-	Defines the label of an item.
		The label appears in the tooltip for buttons.
		The label is read depending on the interface language configured in COMOS. If there is no label for the current interface language, the English text is read.
		Subnodes:
		 If the translations are determined by the ITX functionality, a <caption> subnode is required.</caption>
		• If the translations are entered manually, a <caption> subnode is required for each language.</caption>
<text></text>	xml:lang Or	Subnodes of <caption></caption>
	itx	There must be a separate $< Text >$ node for each language, in which the label is displayed.
		All languages for which ITX support is available are permitted.
		xml:lang:
		Use the following syntax:
		 xml:lang="<standard code="" language="">" value="<label>"</label></standard>
		Example:
		<caption><text <br="" xml:lang="en-en">value="Load"/><text <br="" xml:lang="de-de">value="Laden"/></text></text></caption> itx:
		• The label is determined with the ITX functionality.
		Support from the Support required.

Node	Attributes	Description
<picture></picture>	key	Assigns the picture specified by key to the higher-level <tool> node.</tool>
		Permitted picture formats:
		• "*.ico"
		• "*jpg"
		• "*.png"
		Permitted dimensions: 16 x 16 pixels
		If the <tool> higher-level node is an option (type="StateButton"), the picture is only visible when the option is deactivated. If the option is activated, the user sees a check mark.</tool>
		Value for key for a custom picture:
		Path to the picture file
		 File name if the file is located in the following directory: "<comos directory="" installation="">\Current\config\icons"</comos>
<class></class>	type,	Defines the action triggered when the user selects this item.
l	progid,	Values for type:
l	assembly,	• NET
	method	A .NET WPF interface opens or a .NET method is started.
		Sets the assembly and progid attributes. To invoke a method, also set the method attribute.
		• COM
		A COM plugin or COM method is started. To invoke a method, also set the method attribute. Values for progid:
		• If type="NET": The full name of the class that defines the .NET WPF interface
		The .NET class must have a constructor without parameters.
		• If type="COM": The ProgID of the plugin
		assembly:
		• Not defined if type="COM"
		 Value: The full name of the assembly, i.e. without the extension "*.dll"
		Custom assemblies must be located in the following directory: " <comos directory="" installation="">\bin\Custom".</comos>
		Value for method: Name of the method that is called
		Examples:
		NET WPF interface:
		<class assembly="Comos.UIF" progid="<br" type="NET">"Comos.UIF.UIControls.UIFormsList"/></class>
		.NET method:

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7.6 XML structure

Node	Attributes	Description
		<pre><class assembly="TestNET" method="ABC" progid="TestNET.XY" type="NET"></class> • COM plugin: <class progid="CPlugInWord.Word" type="COM"></class> You can find additional information about this topic in the "Programming" manual, keyword ".NET components for COMCON"</pre>
<rights></rights>	dependency- Property, functionRights Or adminOnly	 Locks the item or hides it, depending on the user rights. Values for dependencyProperty: Visible The item is only visible when the condition set by the functionRights or adminOnly attribute is fulfilled. Enabled The item can only be selected when the condition set by the functionRights or adminOnly attribute is fulfilled.
		 functionRights: Bit field for the function rights that the user must have You can find the current list of the function rights and their constants in the "COMOS_dll" class documentation. Values for adminOnly: true or false Examples: <rights <="" dependencyproperty="Enabled" li=""> </rights>
<binding></binding>	type, root	<pre>adminOnly="true" /> Links the item to a base object. Typical application case: Opening an object query from a menu. Queries behave the same way in the base data and engineering data so that these objects can be integrated using a base object call. Values for type: CDevice When the user selects the item, the base object specified by root opens. CDevices When the user selects the item, a submenu appears with the base objects located below the base object specified by root. Base objects with base object references are not displayed. Value for root: The SystemFullName of the base object Example: </pre>
<window></window>	type, area, subarea,	Only when a NET WPF interface is opened: Determines the behavior of the interface Values for type:

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Node	Attributes	Description
	width, height, scaleMode, resizeMode, state	 Tab Tab The interface is inserted in the area or subarea as a tab. Default Floating The interface appears as a non-modal window. The window and main application can be used interchangeably.
		 Modal The interface appears as a modal window. You can only use the main application again once you close the window. area:
		 Set only if type="Tab" Value: Document The tab is opened in the working area. Default Value: Document2
		 If COMOS is used on two screens (menu bar, command "View > Screen 2": The tab is opened in the working area of the second screen. Value: Navigator
		The tab is opened in the Navigator. subarea: • Set only for type="Tab" • Value: Detail
		<pre>The tab is opened in the detail area. width and heigt: Set only if type="Modal" or ="Floating" Width and height in the unit defined by scaleMode Not for type="Tab"</pre>
		 Set only if type="Modal" or ="Floating" Values: pixel or twips resizeMode: Set only if type="Modal" or ="Floating"
		 Values: NoResize or Resize (default) autoClose: Set only if type="Modal" or ="Floating" Value: true Default

Node	Attributes	Description
		The window closes automatically with a project change or database change.Value: false
		state:
		 Defines whether the tab of a card is fixed of its contents are replaced the next time you open an object of the same type.
		Values:
		 Reuse: "Reuse tab/window" button is green (not fixed). The user can switch to yellow (fixed).
		 Unique: The "Leave tab/window open" button is yellow. The user can switch to green (reuse).
		 ReuseOnly: The button is green. It is not possible to switch to yellow.
		 UniqueOnly: The button is yellow. It is not possible to switch to green.
		Example:
		<pre><window height="6810" resizemode="NoResize" scalemode="twip" type="Floating" width="9045"></window></pre>

Combining the <Tools> node

When a custom XML file is available, COMOS does the following:

- COMOS combines the custom file and the standard file to form the contents of the <Lib><Tools> node.
- If two <Tool> nodes from the custom file and standard file have the same value for id, the definition from the standard file is given priority.

7.6.2.3 Attributes and subnodes of <Toolbar>

Purpose of <Toolbar>

Each node represents a toolbar or menu bar, which is basically available in the interface. Its attributes define the properties and behavior of the toolbar or menu bar.

Attributes of <Toolbar>

Attribute	Description
id	Must be unique. Any character string.
type	Determines the type of bar.
	Possible values:
	• MainMenu
	COMOS menu bar
	• Toolbar
	A toolbar of the COMOS toolbar

Subnode

 $< \tt Toolbar>$ can have the $< \tt Rights>$ subnode. The node has the same attributes as the node of the same name under $< \tt Tool>.$

See also

Attributes and subnodes of <Tool> (Page 51)

7.6.3 Reference to node <Menu>

7.6.3.1 Attributes and subnodes of <Menu>

Purpose of <Menu>

Defines the content displayed in the COMOS interface.

Attributes of <Menu>

None

Subnode of <Menu> and it attributes

Node	Attributes	Description
<toolbars></toolbars>	-	Here you define the menu bars and toolbars the user can see in COMOS.
		Subnodes: There is a <toolbar> subnode for each bar.</toolbar>
		See also section Attributes and subnodes of <toolbar> (Page 58).</toolbar>

7.6.3.2 Attributes and subnodes of <Toolbar>

Purpose of <Toolbar>

Each node represents a toolbar or menu bar, which the user can see in COMOS.

Attributes of <Toolbar>

Attribute	Description
idref	Reference to a toolbar or menu bar registered in the <lib><toolbars> node</toolbars></lib>
	The value of idref must be identical to the value assigned to the corresponding <toolbar> node in the library with the id attribute.</toolbar>
	Example:
	<lib></lib>
	<toolbars></toolbars>
	<toolbar id="Query_Main" type="Toolbar"></toolbar>
	<menu></menu>
	<toolbars></toolbars>
	<toolbar idref="Query_Main"></toolbar>

Subnodes of <Toolbar> and their attributes

Under <Toolbar>, you define the toolbar and menu bar items the user sees in COMOS (menus, submenus, menu commands and tools). There is a Tool node for every item.

Attributes of <Tool>:

Attribute	Description
idref	Reference to a toolbar or menu bar item registered in the <lib><tools> node</tools></lib>
	The value of idref must be identical to the value assigned to the corresponding <tool> node in the library with the id attribute.</tool>
	Example:
	<lib></lib>
	<tools></tools>
	<tool id="id_MenuView" type="PopupMenu"></tool>
	<menu></menu>
	<toolbars></toolbars>
	<toolbar idref="MainMenu"></toolbar>
	<Tool idref="id_MenuView> <tool></tool>

Subnodes of <Tool>

Only when the node referenced via idref is a PopupMenu type. In this case, there is a <Tool> subnode under <Tool> for each submenu.

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7.6 XML structure