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Configuration of Texts and Languages in SIMATIC PCS 7

SIMATIC PCS 7

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Preface

SIMATIC PCS 7 offers a wide range of setting options for texts and languages. The following chapters describe in detail how they are correctly configured, adjusted or changed.

Purpose of the document

This description helps to provide information on safe handling of the configuration options of texts and languages in a PCS 7 project.

Main contents

This document looks at the following key elements:

- general information on texts and languages in the PCS 7 project
- language settings in PCS 7 for AS/OS engineering
- language settings based on different configuration scenarios

Validity

Valid for SIMATIC PCS 7 V9.0

Table of contents

1 Overview

1.1 Texts and languages in PCS 7 project

The schematic display below shows in which places the texts and languages matter in a SIMATIC PCS 7 project.

Figure 1-1
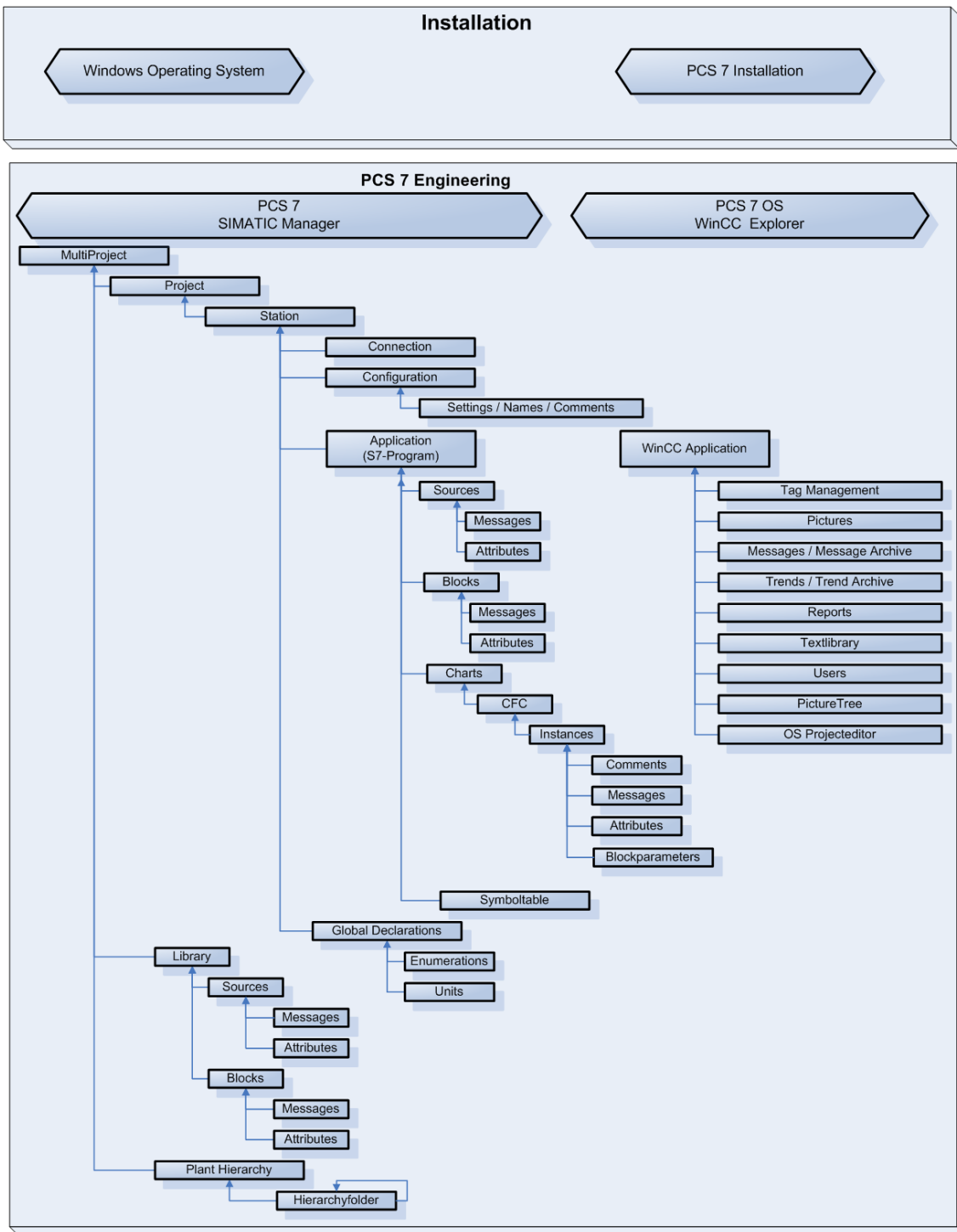
1.2 Basics

1.2.1 Explanation of terms

For assigning byte values to text characters, a number of different, mostly incompatible sets of characters exist - aside from Unicode. Probably the most important character encoding for the Internet is the "American Standard Code for Information Interchange" (ASCII). In ASCII each character is coded with 7 bits; so a maximum of 128 characters are possible. The ASCII comprises – apart from some control characters – mainly English letters of the Latin alphabet and Arabic numbers. Many of the accented characters and umlauts of the many European languages are not contained in the ASCII characters set, not even to mention characters of other alphabets. Numerous character sets that are larger than the ASCII and that comprise more characters have therefore been developed in the course of time. In order to provide a larger character supply, the individual characters of these character sets are encoded with more than 7 bits.

However, even with an 8 bit encoding per character only 256 different characters can be encoded. This is why characters sets have been introduced that use more than one byte for the encoding of each text character. Character sets that use two bytes to display their characters are called "Double Byte Character Set" (DBCS).

ASCII Code

The ASCII encoding was published in June 17, 1963 and 1967 as standard (ASA X3.4-1963), and finally updated in 1968 (ANSI X3.4-1968). Each character is assigned a bit pattern of 7 bits. Since every bit can take on two values, this results in $2^7 = 128$ different bit patterns that can also be interpreted as whole numbers 0–127 (hexadecimal 00–7F).

The character encoding defines 128 characters consisting of 33 non-printable ones and 95 printable ones. The latter ones are starting with the blank:

!"#$%&'()*+,-./0123456789:;<=>?

@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_

`abcdefghijklmnopqrstuvwxyz{|}~

The printable characters comprise the Latin alphabet in upper and lower case letters, the ten Arabic numbers as well as some punctuation characters. The character repertoire corresponds largely to that of an English keyboard or typewriter. In computers and other electronic devices that display text it is usually stored additionally, in accordance with ASCII or downward compatible (ISO 8859, Unicode).

Unicode

Conventional computer characters codes comprise only a limited repertoire of characters, for western character encodings this limit is 128 (7 bit) code positions – just as for the very well known ASCII standard – or 256 (8 bit) positions, such as, for example, for ISO 8859-1 (also known as *Latin-1*) or EBCDIC. Once the Control characters have been deducted, 95 elements can be displayed as characters and Special characters for ASCII and 191 elements for the 8 bit ISO character sets. This Character encoding enables the simultaneous representation of only few languages in the same text, unless deciding to use different fonts with different Character sets.

Unicode is a brand name for an alphanumerical character set ("Character Encoding Scheme"; CES); a system standardized by the international standardization organization ISO for encoding text characters (letters, syllables, ideograms, punctuation characters, special characters, numbers). The official name for the Unicode character set is "Universal Character Set". Unicode attempts to summarize all known text character in one character set, this means not only the letters of the Latin alphabet but also the Greek, Cyrillic, Arabic, Hebrew, Thai alphabet and the so called CJK scripts, i.e. the different Chinese (traditional CN and simplified CN), Japanese (Katakana, Hiragana and Kanji) and Korean (Hangul) scripts. Furthermore, mathematical, economical and technical special characters can be encoded in Unicode.

Note	The use of European and Asia languages still depends on installation in SIMATIC PCS 7.

Double Byte Character Set

Double Byte Character Set (DBCS) is a character set that uses a maximum of two byte to display all characters. This results in a maximum of 65,536 different characters that can be represented. As opposed to this, character sets which only require one byte per character are also referred to as Single Byte Character Set (SBCS). DBCS is a special case of the Multibyte Character Sets (MBCS) which uses a variable number of bytes to encode a character.

Multilingual operating system (MUI)

Microsoft is marketing system expansions for the Windows operating system and Office suite, which make it possible to use the user interface (incl. help texts) of the respective programs in several languages under the term Multilingual User Interface (MUI) in one installation. An English language product must have been installed as a basis each time. If a MUI is installed, the desired language can be set in the Control Panel under the Regional and Language Options.

1.2.2 PCS 7 versions

SIMATIC PCS 7 can be ordered in two different versions.

European

Contains the following default languages:
- English (US)
- German
- French
- Italian
- Spanish

Asian

Contains the following default languages:
- Chinese (Simplified)
- English (US)
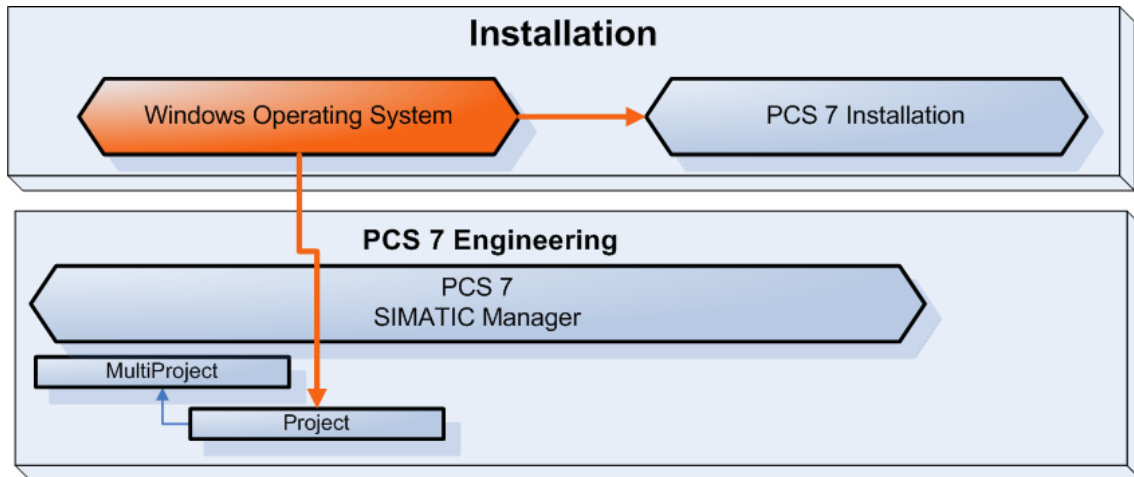
Note	Depending on what version of PCS 7 is installed, the default libraries will be available in the respective languages.
	It already comprises all messages and operator control texts in the default languages which are contained in the respective version.

2 Windows Installation and Settings

Figure 2-1: Influence of the operating system language

Selection of the operating system

The product bundle PCs of PCS 7 are delivered with a multilingual operating system.

On those, the default language is English. Other language packages for German, French, Italian, Spanish (European version) and Chinese (simplified) are preinstalled.

If you install a PC yourself, the following is recommended for the selection of the operating system:

- If only one language is to be used on the PC, select the operating system in the language for the configuration/process management.

- If several languages are to be used, select a multilingual operating system (default: English) and additionally install the Multilingual User Interface Packs (MUI).

Note	Details can be found in the manual "Process Control System PCS 7 – PC Configuration and Authorization" in chapter "Installing PC stations".

Language settings in Windows operating system

The table below shows where the language settings can be made in the operating system.

Table 2-1

Language setting	Effect	Chapter
Regional Options	Depending on location and details of PCS 7 plant	2.1.1
Languages	Windows user interface (menus, dialogs and help) and input texts in different languages	2.1.2
Non-Unicode languages	PCS 7 project language	2.1.3

2.1 Regional settings

The language setting for menus and dialogs can be made as follows:

Start > Control Panel > Clock, Language, and Region > Region and Language

This setting specifies the display of numbers, currencies, date and time.

Note	Adjust this setting in the specifications of the local PCS 7 plant.
	So that numbers, currency, time and date are displayed according to the plant location. PCS 7 will access these values. This is why they should be correct, so that no errors are caused in the process operation of the plant (for example, due to an incorrect time or a wrong date).

Figure 2-2: Regional Options
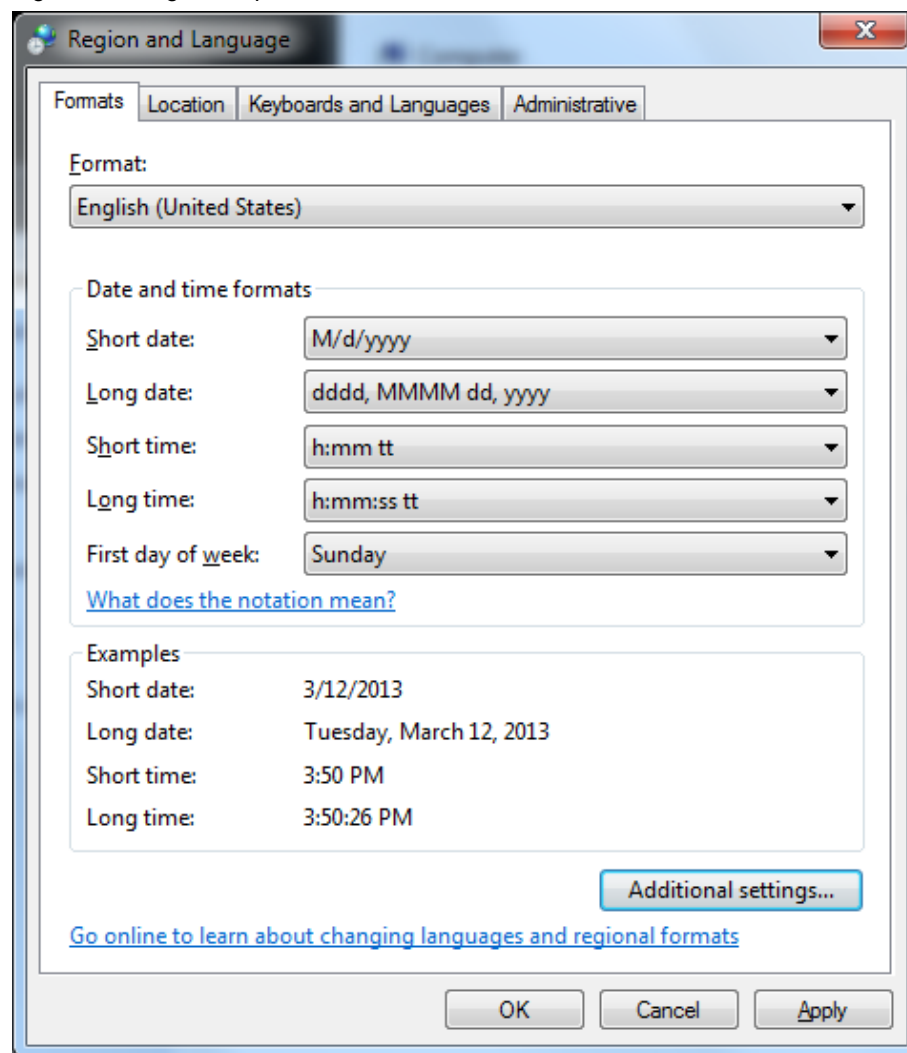
NOTE	If you have selected English (United States) as format you also have to keep a dot {.} as a decimal sparator in "Additional settings …". Otherwise there may be errors when compiling HW-Config.

2.2 Languages

The language of the user interface of the operating system and the text input options can be set under the following menu option:
Start > Control Panel > Clock, Language, and Region > Region and Language > Keyboards and Language

Example

If you would like to enter Chinese texts in your PCS 7 project, you have to enter "Chinese" as input language.

Figure 2-3: Languages
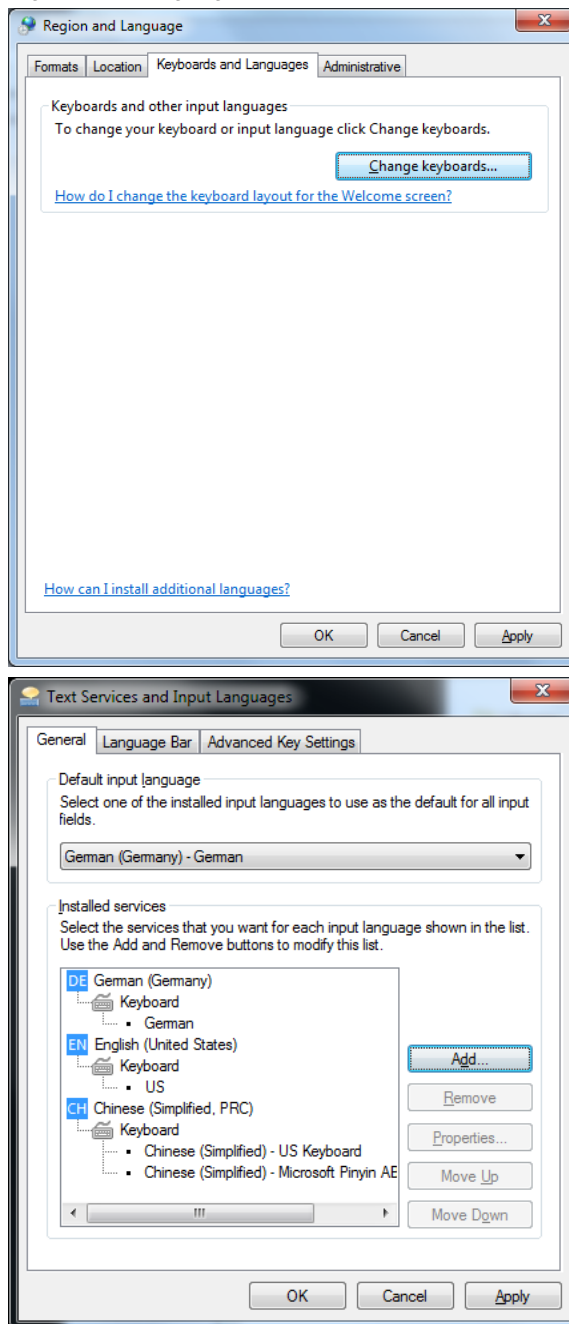
2.3 Non-Unicode language (PCS 7 project language)

For programs that do not support Unicode, you also have to set the desired language. You can do this through menu option:

Start > Control Panel > Clock, Language, and Region > Region and Language > Administrative

Note	You should select the language first, before you create the PCS 7 project. This is due to the fact that the non-Unicode language is set as the project language at the time of creating the PCS 7 project. Changing to another project language later is not possible. If you would like to open a PCS 7 project which has been configured in another (not a neutral) project language, for example, Japanese than you have to adjust the language for non-Unicode programs in this language first, otherwise you cannot open the project.

Figure 2-4: Language for non-Unicode program
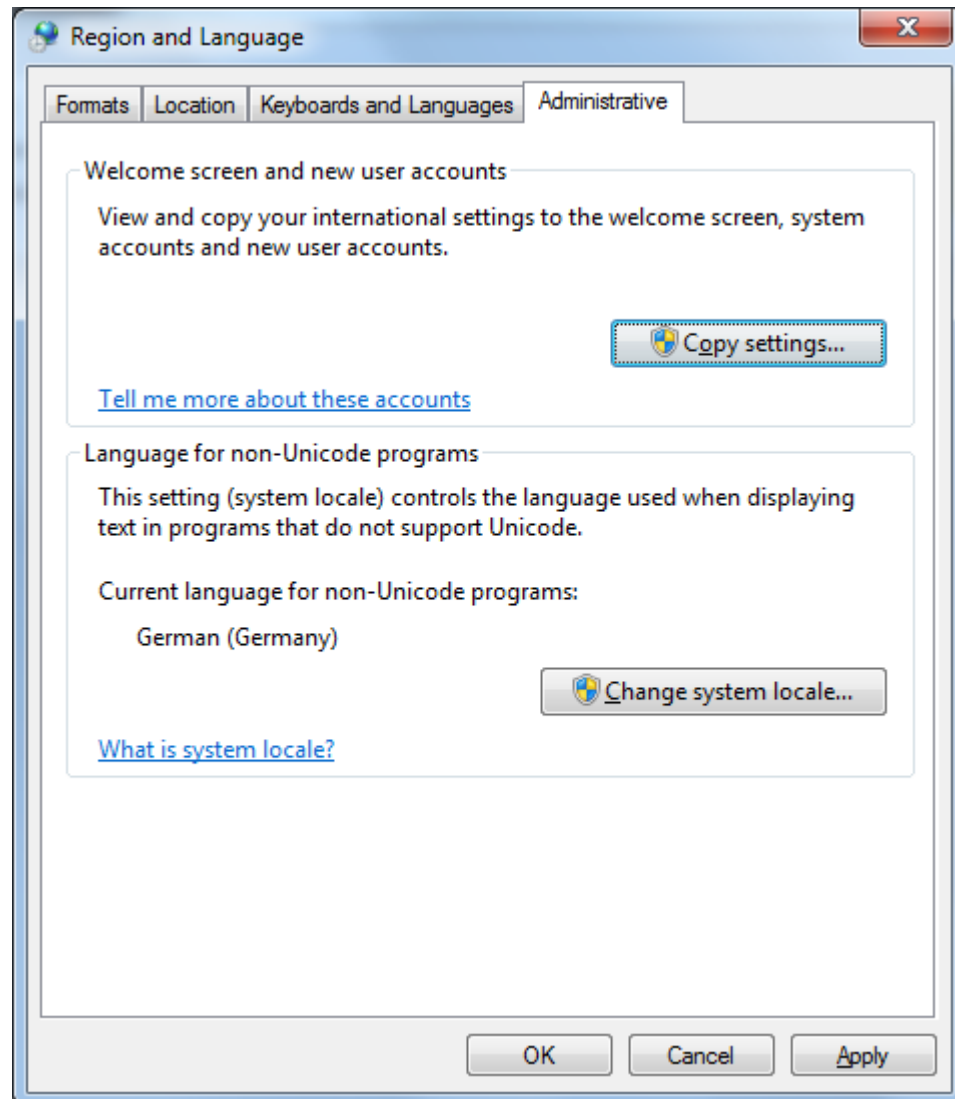
Figure 2-5: Project language
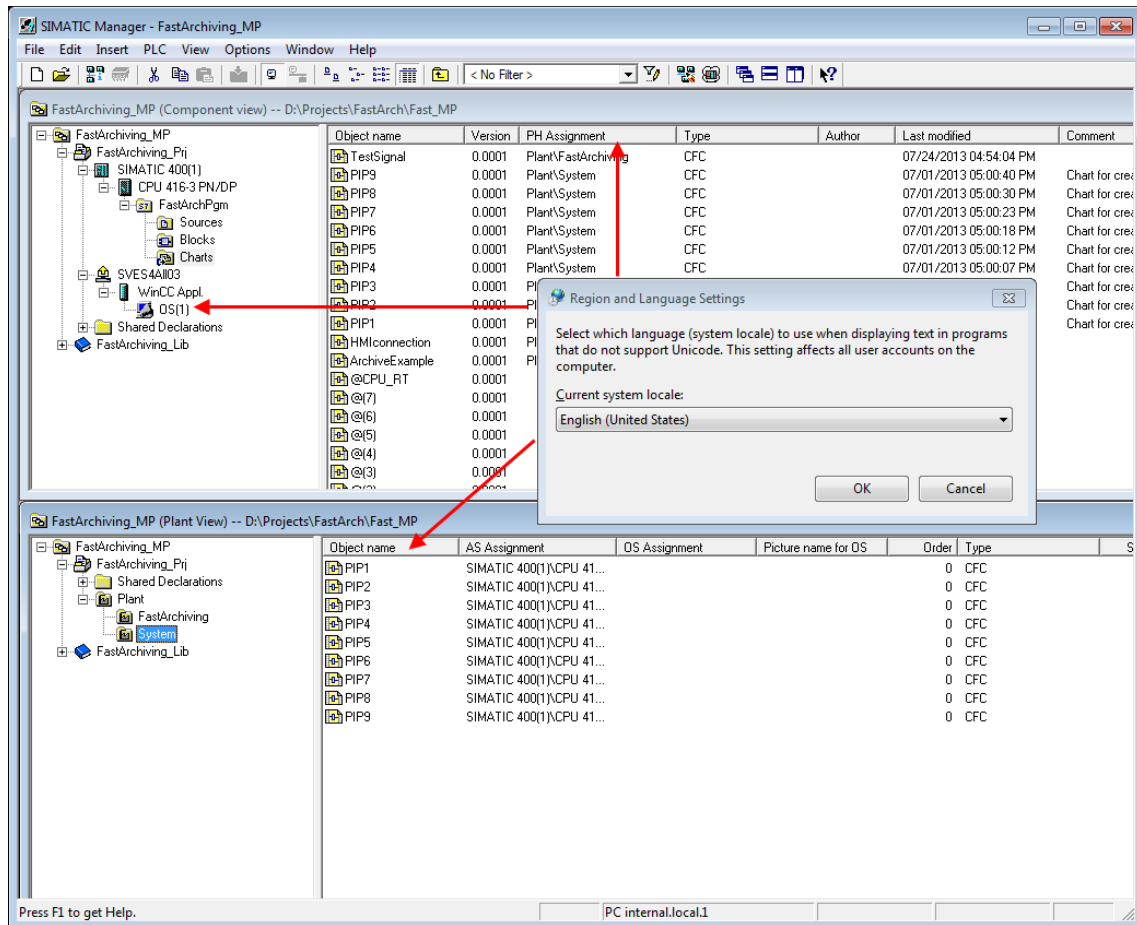
The PCS 7 project language is the language that was selected as non-Unicode language when creating the project.

If you are planning to open and process projects or libraries under any Windows language setting, you have to identify them as language neutral. If the projects/libraries contain texts with special characters, umlauts or similar, that are not defined under the respective Windows language setting, the characters may not be displayed correctly when showing the projects/libraries and there may be data corruption when changing or copying objects.

This is why projects or libraries may only be identified as language neutral if it is ensured that all texts contained therein are restricted to the ASCII character repertoire (English character set without special characters). STEP 7 cannot determine whether this condition was maintained – this is the responsibility of the user.

If the language neutral setting was selected in PCS 7, it is possible to open the project under other non-Unicode language settings.

For this purpose, select the project in the WinCC Explorer and open "Object *Properties… > General > Can be opened under any Windows language settings (language neutral)"* via the context menu.

Note	When creating the projects and libraries make sure that only texts from the ASCII character repertoire were used.

Figure 2-6: Project properties
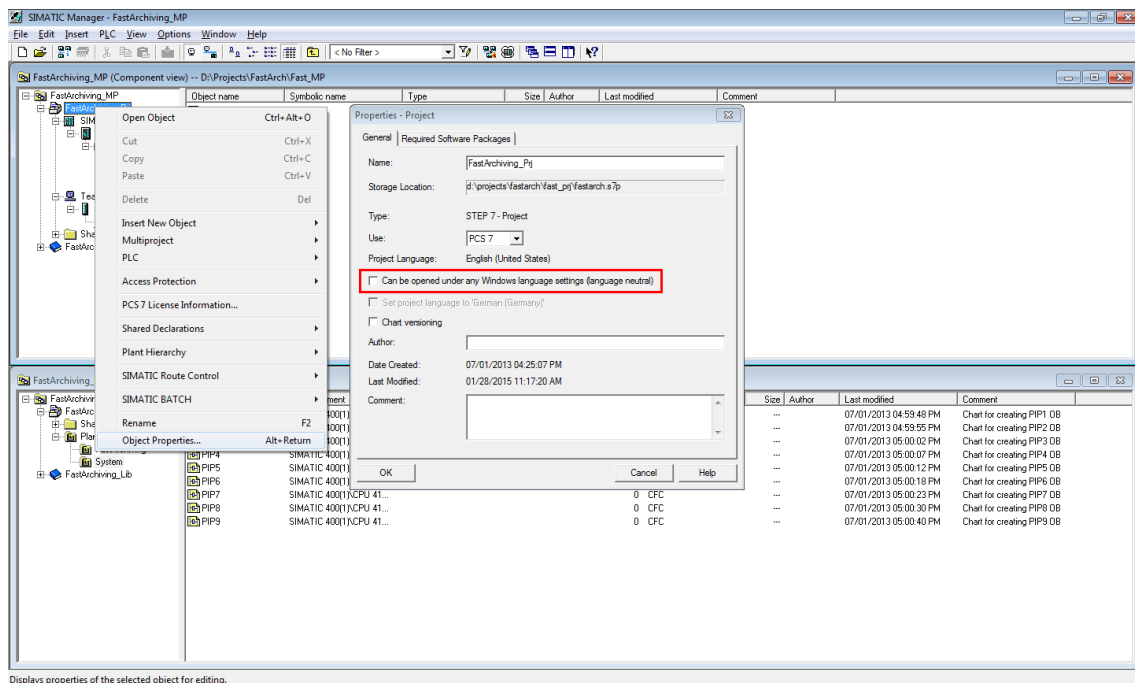
3 Configuration Rules/Settings

3.1 Configuration instructions

- The characters { ' } { . } { % } { \ } { * } { ? } { : } { blank } within a name are converted into the substitute character { $ } during OS compilation. The ES separator { \ } is converted to character { / }.

- The maximum length of a tag name is 128 characters. Note that in OS, 128 characters are not shown in their entirety in many editing windows. You therefore need to restrict the length of the HLD.

- Note that the national special characters occupy two characters and that the maximum length of the name is therefore restricted accordingly.

- Note that the length of the transferred texts depends on the maximum text length of the target block in the OS (Tag Logging e.g. event 50 character; origin 32 characters). When compiling the OS, texts of a maximum length of up to 255 characters are transferred.
  Remedy:
  Enlarge the maximum character length of the user text block or select a shorter PIC.

- In the mnemonic area it generally has to be determined whether the I/O address concept for the multi-project to be created, is on the basis of German or English.

- For all projects in the multi-project the language setting for the display devices must be checked. Here, set all languages that are to be used in engineering and on the OS.
  For projects that contain an OS server this has to be performed before the first compilation, so that the texts are created in all languages in the OS.

Note	The configuration in PCS 7 is mainly in the SIMATIC manager. The configuration data is transferred via "Compile OS" in the respective OS project.
	In the OS, only the configuration of the images takes place, apart from the general configurations.
	In multilingual projects it is recommended to insert the translations already in the SIMATIC manager. The translated texts are automatically inserted via "Compile OS" in the OS.
	Later changes directly in the OS can lead to inconsistencies in the data management.
	Some texts can only be set monolingual by engineering. If these texts have to be made multilingual in the OS text library, this should take place later, to avoid inconsistencies and overwriting.

3.2 Language settings in SIMATIC Manager

Figure 3-1
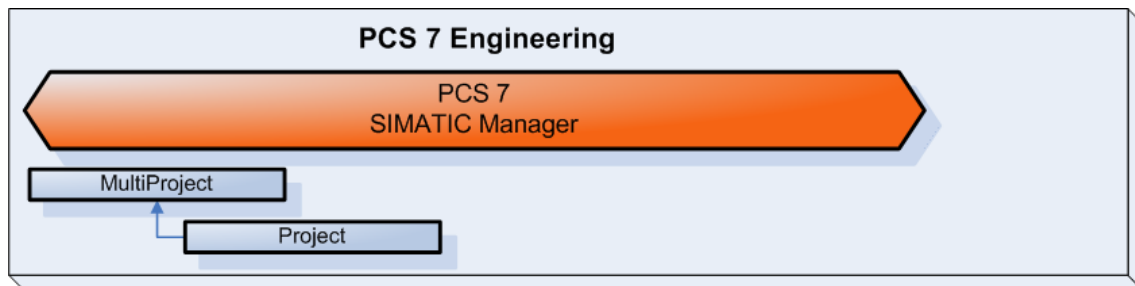
The following menu options are found in the SIMATIC Manager:

- *Options > Customize... > Language*
  This is where the language for the interface is set. You can furthermore specify the language for the mnemonic, with which you want to program the S7 blocks. If all languages are installed during the installation, then subsequently all these languages are available in this dialog setting.

- *Options > Language for Display Device*
  In the dialog field "Add/Delete Language, Set Default Language" you can select the languages in which the configured texts can be generated. This setting is project-specific.

Note	When changing the language for the display devices, attention needs to be paid, that this language is used as reference language for the OS text library.
	The reference language is used to check whether a text already exists in the text library when performing "Compile OS".

NOTICE	The reference language should not be changed. The modification process and the subsequent OS compilation may cause inconsistencies or even loss of already translated texts in the text library.

- Options > Manage Multilingual Texts > Change Languages...

  After the text types of the project have been translated and imported, you can use this dialog field to select the language in which to display these text types. You can select whether the language is changed for title and comments or display texts or both. This language change is object related, i.e. you can trigger a language change separately for projects, stations, programmable modules, S7/M7 programs, symbol tables, block folders and all blocks.

  The languages which are available in this context depend on the selection under *Options > Language for Display Devices*. All languages installed in the project can be selected here.

| Note | The language change for "Title and comments" is only executed for the selected object. The language change for "Display texts" always causes a language change in the entire project.

A change of language of the "Display texts" always also changes the "Default" language for the display devices. |
|---|---|

The area-oriented OS compilation

In the "area-oriented" mode, the OS assignment of the areas in the plant hierarchy is decisive when creating the tags, messages and data for the SFC visualization. You can only select this mode if a configured plant hierarchy is available. This mode is preset for new projects from V6.1.

For the driver blocks, not assigned in the Plant Hierarchy, the tag names in the OS are composed of *<program_name>/<chart_name>/<block>*.

The AS-oriented OS compilation

In "AS-oriented" mode the S7 programs assigned to the operator station or the operator stations are ruling. This mode is default for PCS 7 projects < V6.1 and for projects without configured Plant Hierarchy. The program name becomes part of the OS tag name.

Symbols and faceplates in the OS display the tag name. For "area-oriented OS compilation" the program name is displayed in the asset management.

Note	Multilingualism is not possible here.

3.3 Language settings in OS project

The language settings in the system (SIMATIC Manager, WinCC) must be uniform during OS compilation. Make sure that you have selected the same configuration or default language in the SIMATIC Manager and WinCC.

3.3.1 Language settings in WinCC

The following menu options are found in the **WinCC Explorer**:

- *Tools > Language...*
  This is where you set the language for the interface.

- *Computer > Properties > Properties > Parameters*
  Here you can set the language for runtime. The language for the printout of the project documentation in WinCC is set via this field.

The following menu option is available in the **GraphicsDesigner**:

- *View > Language...*
  For the configuration of the pictures, you have to select the language first under which the pictures are then shown in runtime.

The following menu option can be found in **AlarmLogging**:

- *View > Input language…*
  Manually configured message texts must be created in the language used in the project.

Language settings for **Runtime**:

- Button to change language:
  This is where you can set the current display language in runtime. For this purpose all switchable parts have to be configured in the respective languages.

3.3.2 WinCC interface language

This changes the interface language of the WinCC Explorer and of the editors.

Figure 3-2: Language settings in WinCC Explorer
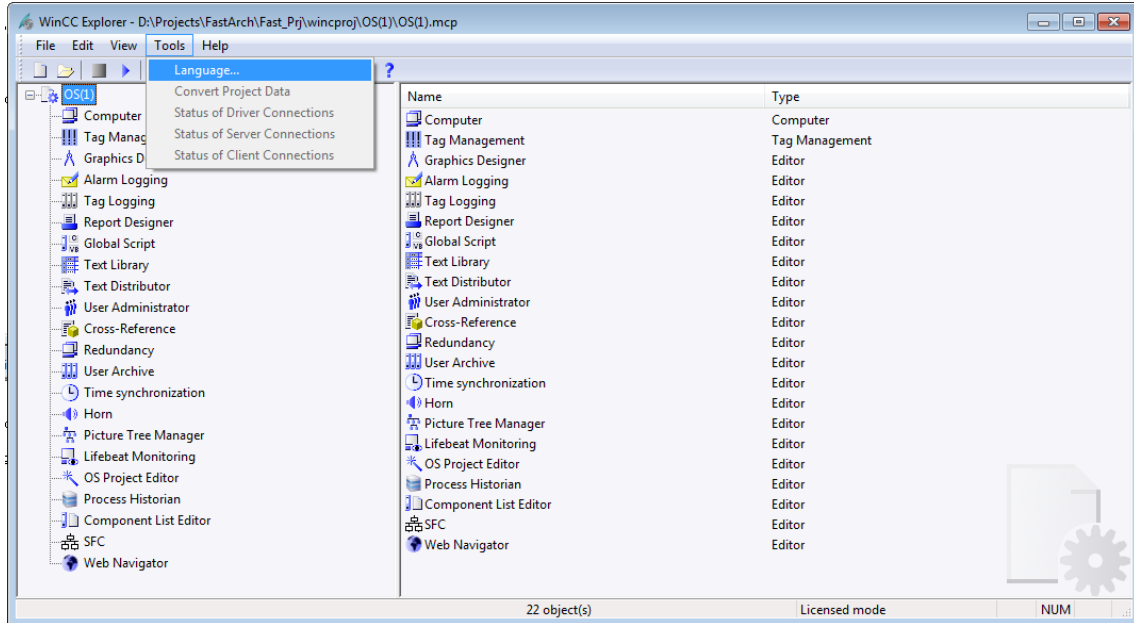
3.3.3 WinCC project language(s) (configuration language)

The project language is the language that is to be provided for the project at runtime. It is possible to store several languages so that they are available for selection in the runtime.

Difference between WinCC interface languages and WinCC configuration language

The WinCC project language is directly selected in the editor which is used for the configuration, for example, in Graphics Designer. After changing the language, the interface language does not change but only the texts in the configured pictures.

The following figure displays the Graphics Designer with English as project language.

Figure 3-3: Project language in Graphics Designer

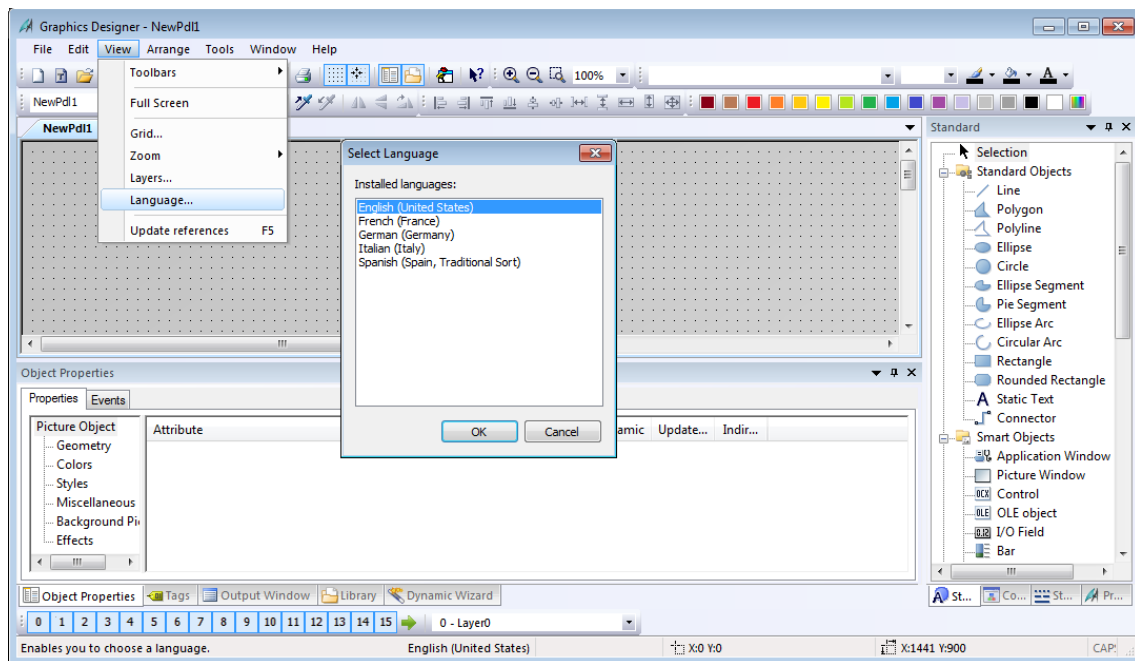In addition to the installed languages, you can use other languages supported by WinCC. If you are using a project language that is not available in WinCC, then the default texts are not copied in the selected project language.

Note

WinCC only supports the primary languages.

Examples:

- English (USA), but not English (GB)
- German (Germany), but not German (Austrian)

3.3.4   Runtime language

The Runtime language is the language in which the project is displayed in the runtime.

Language settings at runtime

Select the language with which the project is to be enabled on the selected computer.

For this purpose, select the "Computer" in the WinCC Explorer and open "*Properties > Properties > Parameters*" via the context menu.

In "Runtime Language" you select your desired language.

Default runtime language

The runtime uses the text of this language if there is no text in the set runtime language.

Note	If the associated translations are not available in the default runtime language either, "???" is output.
	"Runtime Language" and "Default Runtime Language" should differ (e.g. language setting at runtime German and default Runtime language English (USA)).

Figure 3-4: Language settings in WinCC Explorer
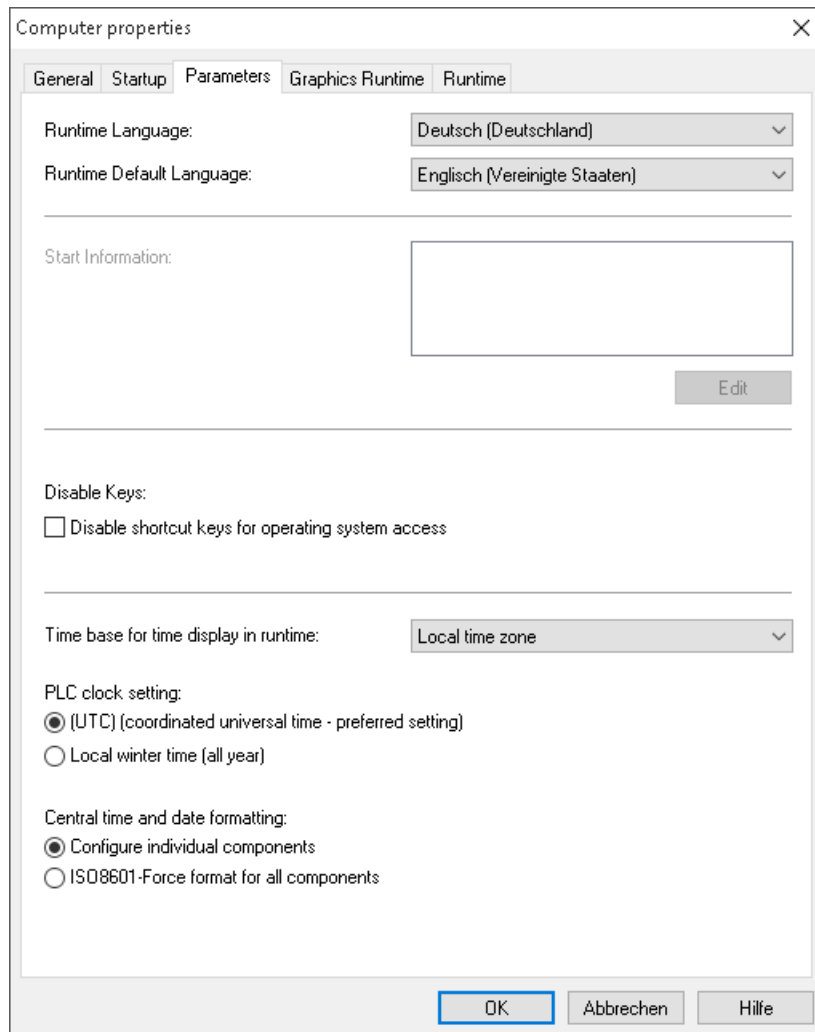
4 Languages in AS Engineering

4.1 Texts in SIMATIC Manager / Multiproject

In the SIMATIC Manager itself or its configuration tools, texts and/or languages can be configured in various places.

- General configuration rules in SIMATIC Manager
- Project language
- Language for display devices

Table 4-1: Texts in multiproject

Text Type	Meaning	Notes
Multiproject	Name of multiproject	See chapter 4.1.2
Project	Name of project	See chapter 4.1.3
Station	Name of station	See chapter 4.1.4 and chapter 4.1.15
Connections	Connection names in NetPro	No relevance for multilingualism
HW configuration		See chapter 4.1.5
S7 program	Program folder	See chapter 4.1.7
Messages	Message configuration	See chapter 4.1.9 and 4.4
Attributes	Block attributes	See chapter 4.1.9
Charts	CFC charts	See chapter 4.1.10
Symbols	Symbolic name	See chapter 4.1.13
Declarations		See chapter 4.1.14
Enumerations		See chapter 4.1.14
Units		See chapter 4.1.14
Libraries		See chapter 4.2
Plant hierarchy		See chapter 4.3

4.1.1 Export and import of "multilingual" texts in SIMATIC Manager

An individual file is created for each text type during export. It has the text type as name and the export format as ending (Texttyp.Format: for example, SymbolComment.csv or BlockTitle.xls)

Files that do not fulfill the name convention cannot be entered as source or target.

The translatable texts within a project are divided in the following text types:

Table 4-2: Export and import of texts in SIMATIC Manager

Text Type	Meaning	PCS 7 OS Relevance
BlockTitle	Block title comment	No, display only in SIMATIC Manager
BlockComment	Block comment	No
NetworkTitle	Network title	No
NetworkComment	Network comment	No
LineComment	Line comment in STL	No
InterfaceComment	Var_Section comment (declaration table in code blocks) and UDT comment (user-defined data types), data block comment and block connection comment	No, display only in SIMATIC Manager
SymbolComment	Symbol comment	No, display only in symbol table
S7UserTexts	Texts entered by user, that can be output on display devices	Process messages OS picture names
S7SystemTextLibrary	Texts from system text libraries that can be integrated in messages, updated dynamically at runtime and displayed on the PG or other display devices.	System messages They must not be changed.
S7UserTextLibrary	Texts from user text libraries that can be integrated in messages, updated dynamically at runtime and displayed on the PG or other display devices.	Process messages

Export or import is performed either on project or on library level. If subordinate levels are selected, there will only be a partial export.

For this purpose, select the Object, which you want to export and open "*Options > Manage Multilingual Texts > Export*" and select a target language.

If exported texts are to be imported again, then the texts in the source language must not be changed. Only translations where the source texts (exported texts) match an existing entry in the "source language" column are accepted.

Figure 4-1: Exporting user texts
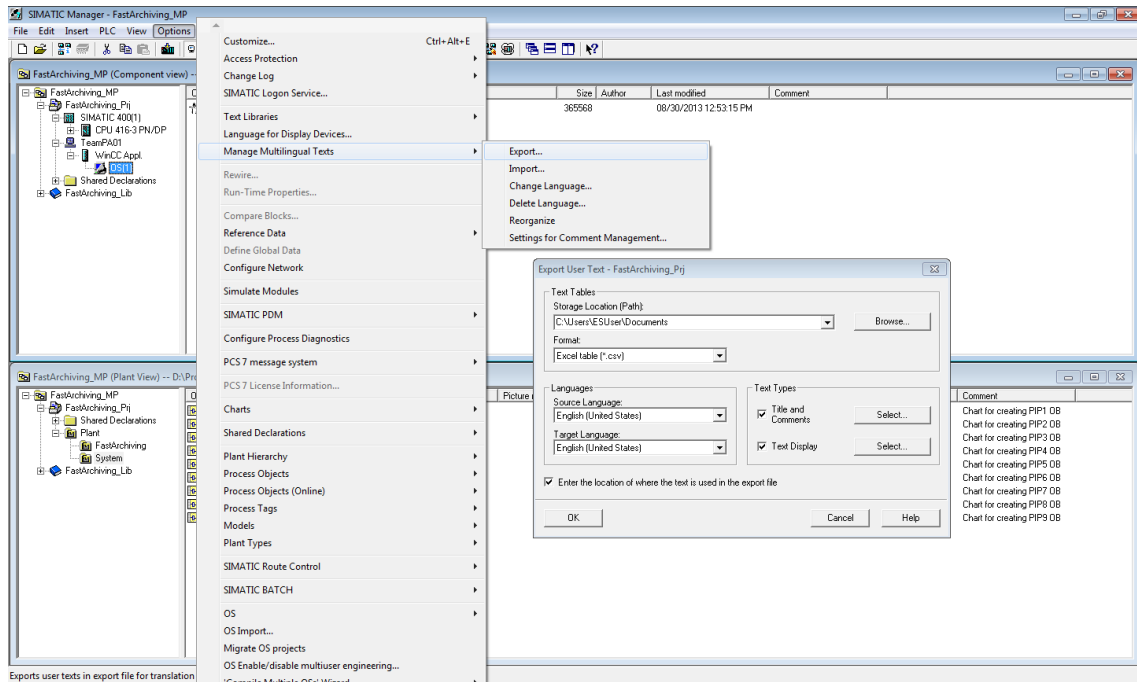
Figure 4-2: Example of exported texts
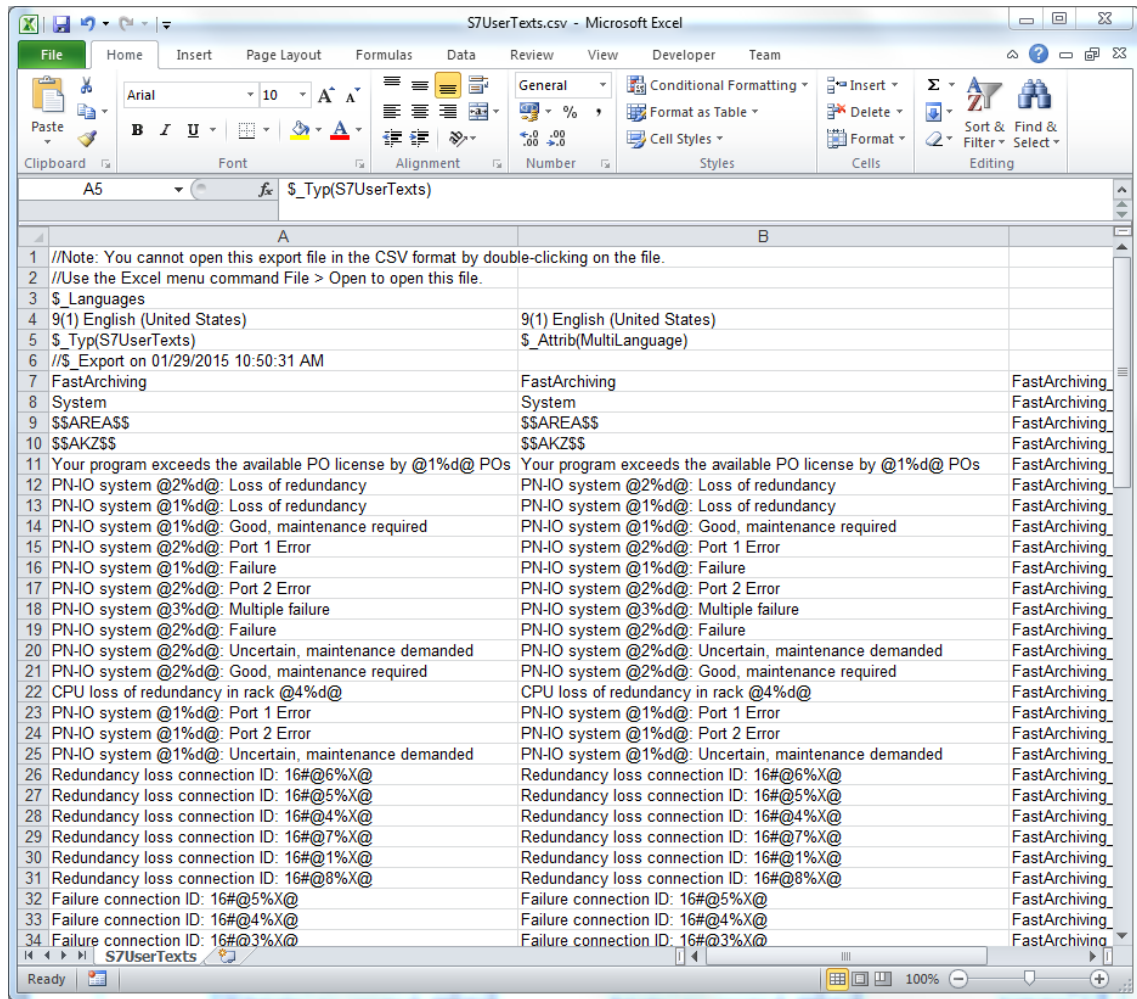
Note	The export of texts is only possible as an orderly pair of source language and target language.
	During the import, the text is compared by means of the source language, i.e. when editing, only the target language must be changed.
	When importing the translated texts, these texts are replaced in the entire project. If you have, for example, translated texts that belong to a certain CPU and these texts also appear in other places of the project, then all the text passages in the project are replaced!

4.1.2 Multiproject

Name conventions

For the naming of the multproject, the following specifications apply:

- names for multiprojects can be freely assigned. PCS 7 automatically creates a path on Windows level, where the data is stored.
- special characters and umlauts should be avoided.
- Not allowed are: { \ } { / } { . } { : } { , } { ; } { " } { = } { ? } { + } { * } { [} {] } { | } { Leerzeichen }
- Asian characters are not permitted
- no language can be specified for multiprojects.

Note	The name of the multiproject is not language relevant.

When selecting the multiproject, the project language for the individual projects is displayed in the detail window.

The project language shows the language that was, or is set through the control panel in the WINDOWS language setting as "non-Unicode language" when the project or the library was created or is being created.

4.1.3 Projects

Note	The same rules apply for the name of projects as for the multiproject.
	• special characters and umlauts should be avoided
	• Asian characters are not permitted
	The name of the project is not language relevant.

The SIMATIC Manager allows names that are longer than 8 characters. However, the name of the project directory is shortened to 8 characters.

NOTICE	Project names have to differ in the first 8 characters.
	There is no case sensitivity.

4.1.4 SIMATIC 400 stations:

- The AS name is entered in the Plant Asset Management (if configured).
- The name is stored in the OS text library.
- Spaces in the AS name are replaced by "_" characters in the OS tag management.

NOTICE	The station name also has an effect on existing connections.
	Make sure to readjust and reload existing connections when you rename a station.
	Language adjustment is not possible.

4.1.5 Components of HW Config

Name conventions

For the naming of all components in HW Config, the following specifications apply:

- the name must not be longer than 14 characters.
- when creating the module driver (compile CFC) the names from the HW Config are used for the CFC block instances.
- Name of CFC blocks can be max. 16 characters.
- the module group wizard shortens the name of the HW Config to 14 characters and always adds "_1".
- make sure the specified name is unique. There is no case sensitivity, since this is not observed during OS compilation.

Note	The blocks inserted by the driver generator receive the name of the assigned module.
	Process control messages that appear in the WinCC messages system contain the name of their origin. In this case, this is the name of the block name and therefore also the name of the monitored module.
	If the process control messages are supposed to contain a certain text, you can alter the name of the module accordingly in the HW Config. This text is then part of the process control message.

NOTICE	The name of HW Config components is part of the respective Asset tag; this is why it must be unique and monolingual. Furthermore, the display of the name is created from a tag and not from the text library, therefore multilingualism is not possible.

Comments

As of PCS 7 V7.0, the comments of the components in the faceplate are displayed in the Asset Management.

The comment is stored in the OS text library.

Names of SNMP nodes

Rules:

- no spaces
- no special characters
- only use upper case letters

Note	They are added as Asset tags to the OS and for this reason they are monolingual.

4.1.6 Names of connections in NetPro

Local ID

For SIMATIC PC stations (applications) enter a string of up to 24 characters.

Note	No relevance for multilingualism in the OS.

4.1.7 S7 program folder / S7 programs

To avoid confusion, it is recommended to assign unique names to the S7 program folders of various SIMATIC 400 stations.

- When "AS-oriented OS compilation" takes place, the name becomes part of the tag name in the OS.
- When "area-oriented OS compilation" takes place, the name of the program folder is only used for the driver blocks.

The tag name is displayed in the OS in various places:

- Block icon
- ToolTip text at block icon
- Faceplate
- Process value archiving

Note	The name of S7 program folder / S7 programs is monolingual.

4.1.8 Sources

As of PCS 7 V6.1 SP1 you can enter foreign-language texts in the S7 SCL sources that do not correspond to the set STEP 7 language. Thus, it is possible, for example, to operate STEP 7 with S7-SCL in the STEP 7 language English, in Chinese Windows and to enter Chinese texts in the S7 SCL source.

Rules for foreign language text in S7-SCL

- S7-SCL V5.3 SP1 allows foreign language characters in the following areas of the sources:
    - global symbols that are contained in the STEP 7 symbol table
    - string constants and block attributes (TITLE = '...', AUTHOR: '...', FAMILY: '...'.)
    - user-defined attributes
    - Comments
- The length of the string constants generally has to be restricted to 254 bytes. For the block attributes AUTHOR and FAMILY, a length of 8 bytes applies. The following elements must only have characters from the English character set (ASCII characters 0x2a - 0x7F):
    - IEC string functions
    - block parameters and local symbols
    - constructs, that make up the S7-SCL language (e.g., instructions)

4.1.9 Blocks

Note	Adjust the used blocks before starting the configuration in master data library. In the properties as well as in the language.

Symbolic name

The system limit for symbolic names of function blocks is 16 characters. If possible, assign the symbolic name with no more than 8 characters and identical to the bock names, so that they are same. Additional characters for the symbolic name will be cut off when they are displayed in the CFC editor.

Note	The symbolic name is stored in the OS text library. The internal tags <Tagprefix>.#blocktype refer to the symbolic name and are displayed in the loop view of the faceplate.

The symbolic block name is monolingual in the SIMATIC Manager.

In mandatory cases, the translation of the symbolic block name can be performed in the OS text library.

Block connection names

When selecting the name, bear in mind that only the first eight characters will be visible when all contacts in CFC are displayed at the same time. Long connection (port) names are only visible as tooltip text in full length in the CFC chart.

To ensure differentiability, uniqueness and consistency, specify a name convention at the beginning of the configuration. Depending on the characteristic, several connections are generated when creating the interface connections. The connection names are each added a postfix, to give the connections a unique name.

Rules for the length of the connection name:

- Setpoint values and times: 16 characters

- Block contact: 10 characters

- All other characteristics: 24 characters

Note	The tag management in the OS is monolingual
	The block connection names are part of the tag and therefore monolingual.

Block comments

The comment can be any text that appears in the block header and in the OS in the opened faceplate in the window bar. A max. of 14 characters are displayed in the block header. For small blocks the comment is not displayed. The block name is monolingual in the SIMATIC Manager.

The block comment is entered in the text library in the OS. Through the library, the comment can be made multilingual in the OS, if required.

Block attributes

For the labeling of binary displays, analog value displays, combination fields, option boxes and operator protocols, the texts from the block instances are read out from the parameter attributes.

Part of it can be translated through export and import in the SIMATIC Manager. All static texts in the faceplates have to be exported, translated and subsequently re-imported with the help of the text distributer.

Note, that the default texts in ES are configured in the default library in English for the "s7_shortcut", "s7_unit", "S7_string_0" and "S7_string_1" attributes. Configure these texts in the language that is intended for the operator (plant operator) on the OS.

If you would also like to have these texts provided in additional languages on the OS, you have to translate them in the text library of WinCC. When using the APL the fields "s7_shortcut", "S7_string_0" and "S7_string_1" are empty. In this case, the texts are stored multilingual in the faceplate. When these fields are filled, only this text is available which then has to be translated in the text library, just as with the default blocks.

Note	Lettering from the PCS 7 default library that corresponds to the block connection names (e.g. PV) is completely capitalized in faceplate and displayed identical in all languages.

Figure 4-3:
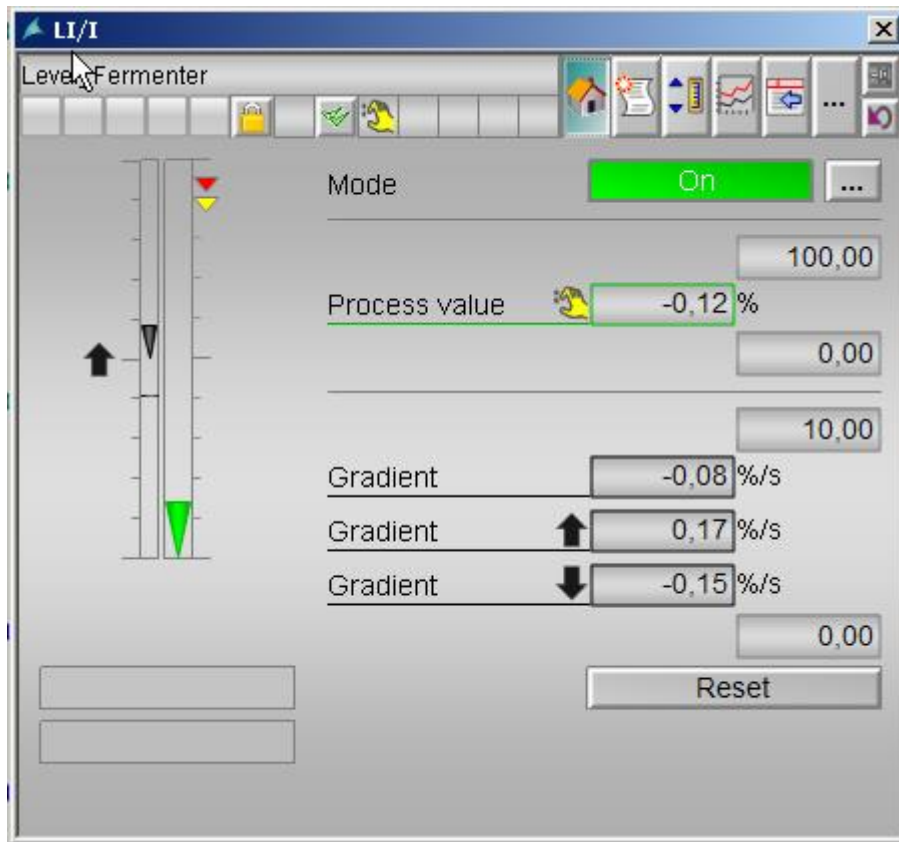
Block messages

The messages can be adjusted to the language through export and import of the S7UserTexts. Keywords and parameters for format instructions are reserved for, for example, origin, OS area and associated message values. (e.g. $$AKZ$$ or @1%s@...). Make sure that special characters in messages do not overlap with keywords.

Note	Information on configuration of messages and associated message values in CFC can be found under the following FAQ "How do you configure additional messages with texts and message-associated values in CFC?" https://support.industry.siemens.com/cs/ww/en/view/770488

NOTICE	Leave all system and driver blocks unchanged.

4.1.10 CFC charts

Names of CFC charts

When naming, make sure that the tag name is not longer than 128 characters during OS compilation.

The name is composed of the names of the folders in the hierarchy path, the chart name, the block name, the separator (full stop) and the connection name.

Rules:

- Maximum 22 characters
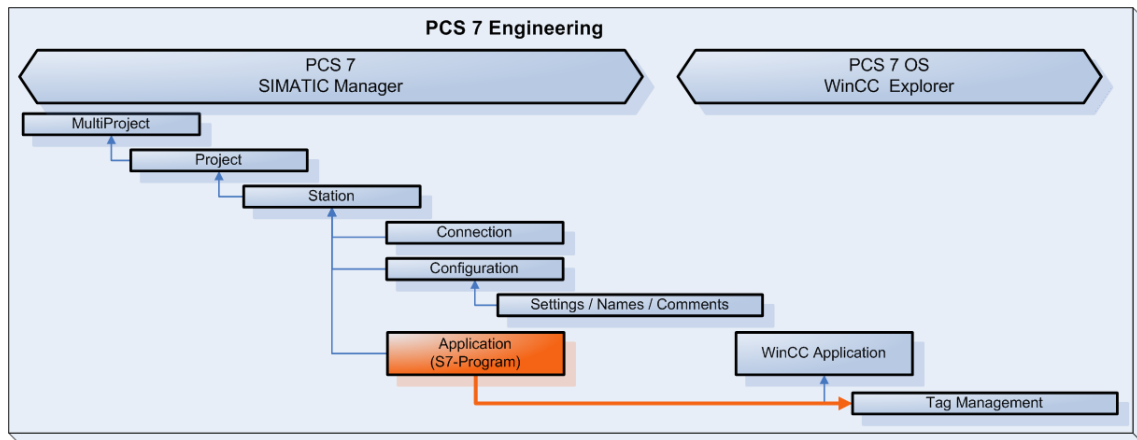- Not allowed are: { \ } { / } { . } { " } { % }

Note	The CFC chart name is part of the tag name and is monolingual.

Comments

Chart comments are not transferred to the OS.

4.1.11 Block instances

Figure 4-4: S7 program

Block instances

The instance of a block has to be unique throughout the chart. The uniqueness is checked by CFC.

Rules:

- The name can be up to 16 characters.
- Illegal characters are: { / } { \ } { . } { " } { % }

Note	The instance name is part of the tag name in the OS and is therefore monolingual.

Block messages

Figure 4-5: After OS Compile the messages are contained in the text library
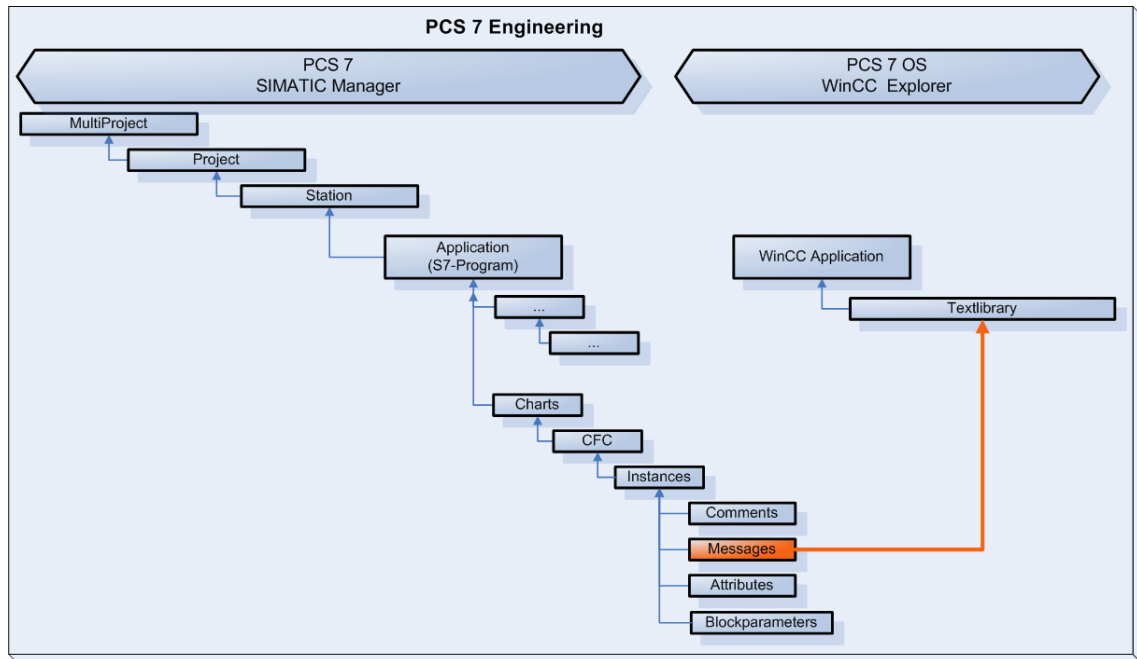
Figure 4-6: Messages of adjusted instances after updating the block

These instance-specific messages can be translated or adjusted through export/import in the SIMATIC Manager.

NOTICE	Instance-specific adjustment of the messages is not overwritten in the individual charts when the block types are updated from the Master Library.

Units and codes

The unit and operator control texts of block types from the default libraries (e.g. PCS 7 Library) included in delivery, are fully in English and partially translated in

the respective default languages. However, a translation of the missing texts can be performed in the text library.

The units and codes of the APL blocks are fully stored for all default languages.

4.1.12 SFC charts/types

Names of SFC types

The max. length for the names of SFC types is 16 characters.

Rules:

- No special characters apart from: { _ }
- not allowed: { \ } {.} { / } { " } { % }
- No umlauts
- Maximum length: 16 characters

Names of SFC charts

When naming, make sure that the tag name is not longer than 128 characters during OS compilation.

The name is composed of the names of the folders in the hierarchy path, the chart name, the separator (full stop) and the connection name.

Rules:

- The chart name must not be longer than max. 22 characters.
- The following characters are not allowed: { \ } { / } { . } { " } { % }

Because the SFC chart name is part of the tag management it has to be monolingual, however, on the OS side, it can be adjusted by the text library.

Chain, step and transition names

Here, the following rules apply:

- Maximum length: 16 characters
- Has to contain at least one letter

The contents of SFC (within SFC Controls) are not totally accessible in engineering and for this reason they can only be adjusted to a limited extent in the language.

The display name of the setpoint values, the control strategies and the parameters can be adjusted in the language. For this purpose, the display name property has to be adjusted for the respective language.

Comments in SFC charts/types

Here, the following rules apply:

- Maximum length: 80 characters
- only visible in the characteristics dialog

OS comments in SFC charts/types

You can enter an OS comment of max. 256 characters for the SFC chart/SFC type under any condition. This comment can then be found in the OS for the respective step or the respective transition under comment.

Note	The OS comment can not be managed multilingual. It has to be written in the language that is intended for the operator.

SFC visualization

Note	The control elements for the SFC are OCX elements and can not be adjusted to their language. They are available in the default languages of PCS 7.

4.1.13 Symbol table

Work with symbolic names in PCS 7 projects. A symbolic name makes it possible for you to work with a descriptive name instead of absolute addresses.

Note	Symbolic names must be unique and therefore monolingual.

4.1.14 Global declarations

Changes in names for units, enumerations or equipment properties in the template have the effect that they are recreated in the target project when they are synchronized. The global declarations used so far remain at their locations.

Deleted units, enumerations or equipment properties in the template are not taken into account when they are synchronized in the target project, i.e. they remain where they are.

Enumerations

The enumerations are created in the project language and transferred with the compilation of the OS in the text library. This is where the texts can be translated in all languages.

Note	You can find further information about language settings for enumerations under the FAQ "How can you use the texts of enumerations (under Shared Declarations in the SIMATIC Manager) for display in WinCC?". https://support.industry.siemens.com/cs/ww/en/view/27147567

Units

Units are defined in the global declarations (max. 16 characters) and are used in process images for the visualization of values of the block connections.

Note	**Default library**: Units are stored in the text library during OS compilation. The entries in the text library are not case sensitive (i.e. no distinction between lower and upper case). **APL**: If there is "0" at PV_Unit, the S7_Unit is used, otherwise the unit is provided by a DLL.

4.1.15 SIMATIC PC stations

The symbolic PC name specifies the server prefix and therefore the server data. This is decisive for the OS server client communication.

Note	The setting can only be made for the first configuration. It is used and displayed for the name of the server within the "SIMATIC Server View" layout. • Avoid national special characters. • Multilingualism is not possible here.

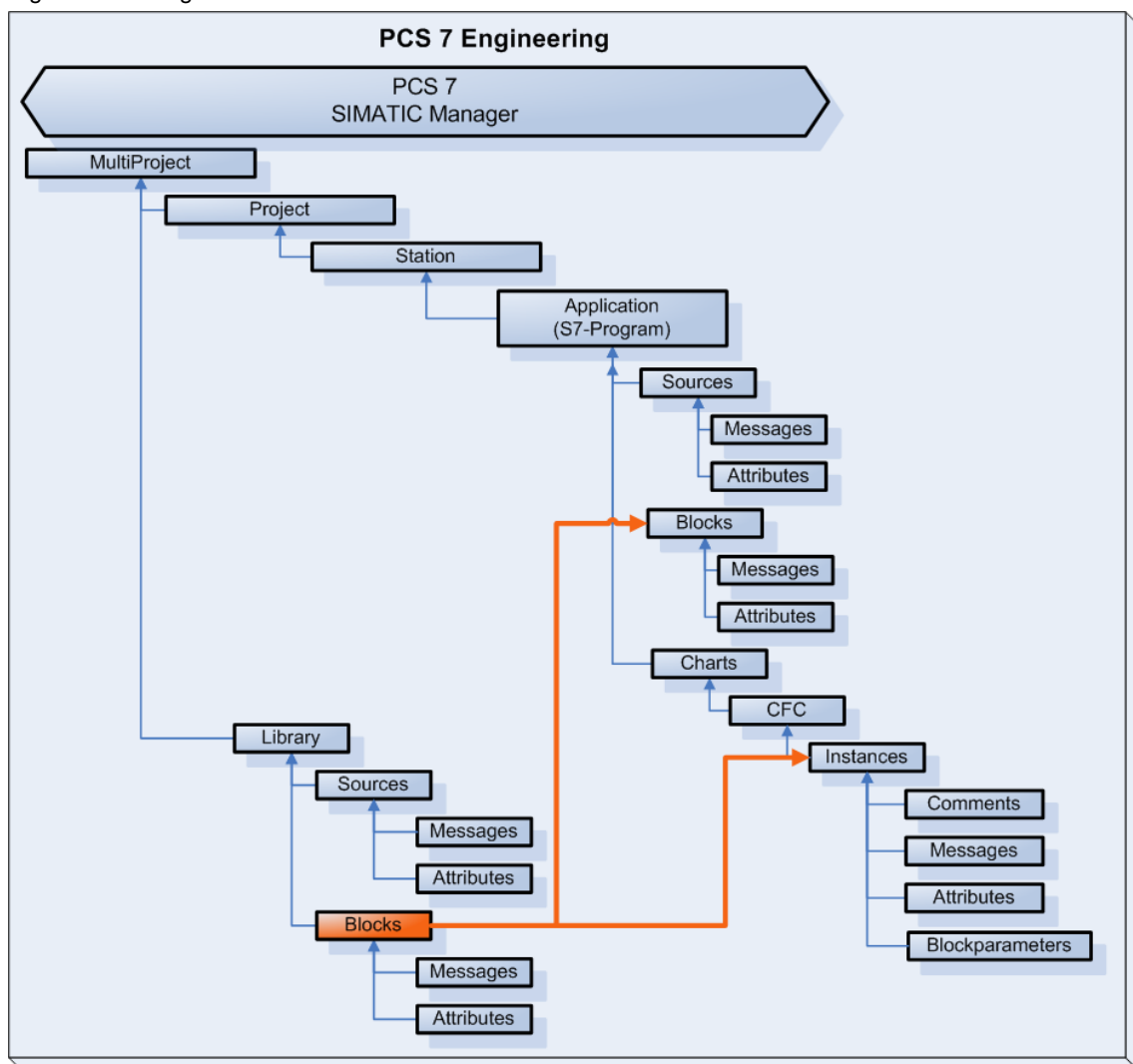## 4.2 Names and texts in libraries

The SIMATIC Manager allows names that are longer than 8 characters. However, the name of the library directory is limited to 8 characters. This is why library names have to differ in the first 8 characters.

There is no case sensitivity.

Note	Names of libraries are not language relevant.

4.2.1 Blocks

Figure 4-7: Using blocks

The default languages are included in delivery for all PCS 7 libraries. If you want to use a different language, the translation has to take place in the master data library and in the project. This can take place in the selected language directly on the block or with the help of export and import.

Once the translated texts have been imported, the new language or the changes in the project can be published through "Update block types".

Note	The instance-specific adjustment of the messages is not overwritten in the individual charts when the block types are updated from the Master Library.

4.3 Names and texts of the plant hierarchy

4.3.1 Hierarchy folder

Description

The name of the plant hierarchy (PH) folder is part of the tags and is monolingual.

The following special characters must not be used in the name of the hierarchy folder: { . } { % } { / } { \ } { " }.

The container name in the plant hierarchy can be specified in the object properties of the hierarchy folder.

For the naming of the Hierarchy Folder, the following specifications apply:

- The characters { ' } { . } { % } { \ } { * } { ? } { : } { blank } within a name are converted into the substitute character { $ } during OS compilation. The ES separator { \ } is converted to character { / }.

- The maximum length of a tag name is 128 characters. Note that in OS, 128 characters are not shown in their entirety in many editing windows. You therefore need to restrict the length of the HID.

- Note that the national special characters occupy two characters and that the maximum length of the name is therefore restricted accordingly.

- Note that the length of the transferred texts depends on the maximum text length of the target block in the OS (Tag Logging e.g. event 50 character; origin 32 characters). When compiling the OS, texts of a maximum length of up to 255 characters are transferred.
  Remedy:
  Enlarge the maximum character length of the user text block or select a shorter HID.

- Maximum length: 24 characters

NOTE	The maximum number of characters permitted for the name of a hierarchy folder you can set (1 to 24) under "*Options > Plant Hierarchy > Settings...*" for each level.

Note	With the help of the export and import wizard in the SIMATIC Manager, you can configure the container names in several languages.

4.3.2   OS area IDs

Figure 4-8: PH folder name or OS area ID via OS compilation in text library
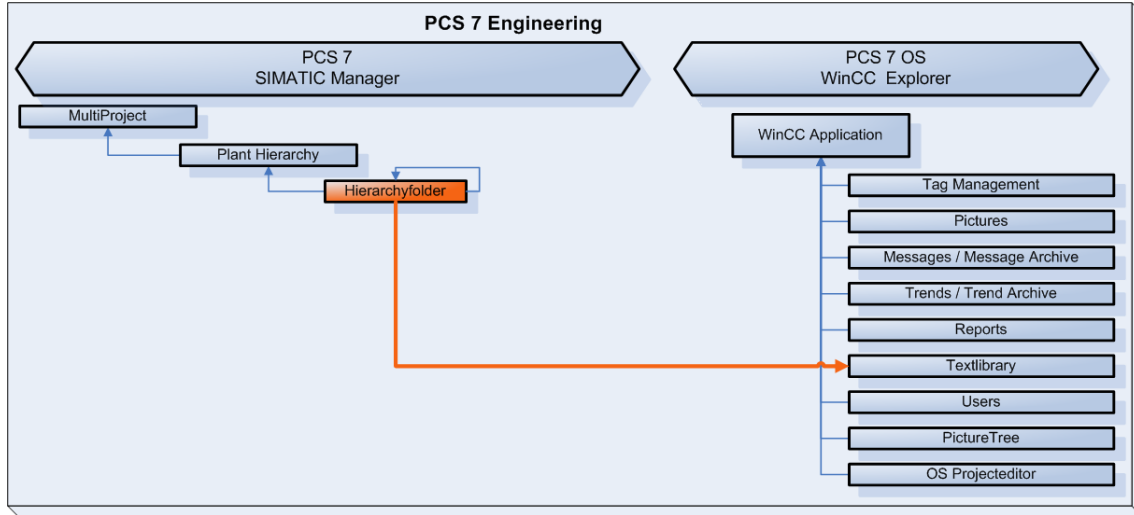
Description

It is possible to indicate or change the displayed text in the OS area ID. A translation can take place through export and import of the S7UserTexts file in the SIMATIC Manager.
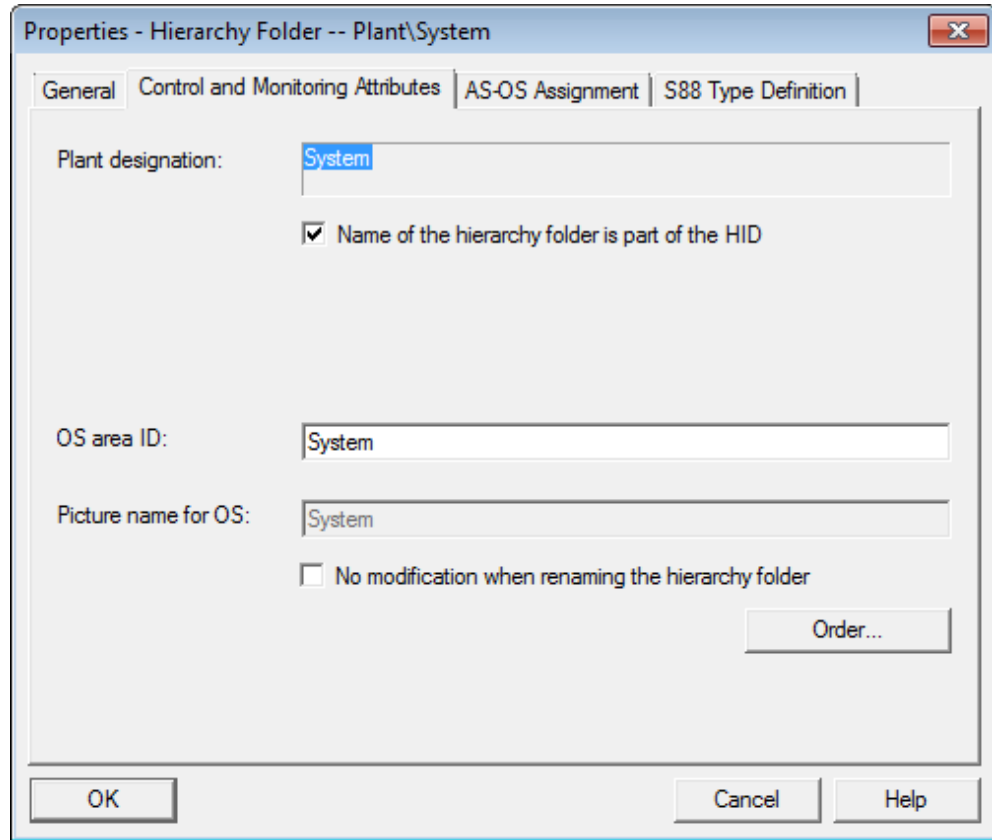
Note   The realization in several languages should take place before the first OS compilation.

Configuration

To be able to change the OS area ID, right click on the respective PH folder and select the "Control and Monitoring Attributes" tab.

Figure 4-9: Hierarchy folder properties

4.3.3 Process pictures

Make sure that the length of the image name is no longer than 24 characters. Image name and container name (i.e. names in PictureTree) are independent of each other.

Note   The name of the process image (file name) must be unique and therefore monolingual. File names should not contain special characters or umlauts.

4.4 Names and texts of the process object view

In the process object view the messages of the instances can be adjusted under the respectively set language. In all other tabs multilingual administration is not possible.

Texts and messages can be exported and imported just as in the plant hierarchy or the component view.

Figure 4-10: Process Object View
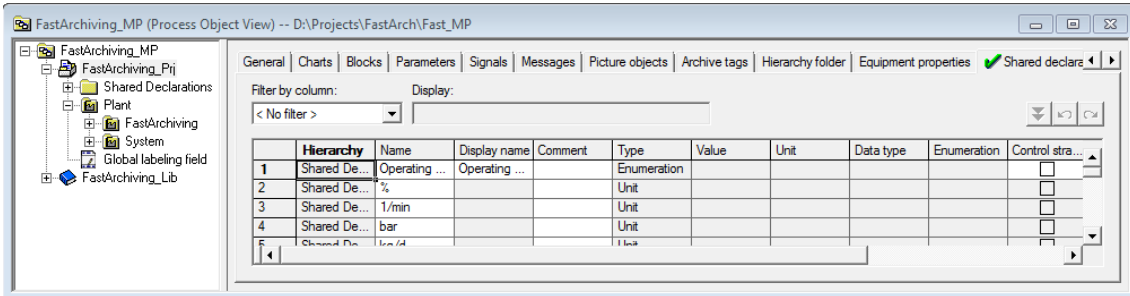
5 Languages in OS Engineering

With PCS 7 you can configure your projects in several languages. In the process, PCS 7 OS supports the multilingual configuration of virtually all objects, whose texts are visible in Runtime.

In addition to the direct text entry, PCS 7 OS offers you comfortable export and import options to translate your configuration with the text distributor. This is especially of advantage when you configure large projects with a high proportion of text.

Table 5-1: Texts in OS project

| Text Type	Language relevance
OS project name	See chapter 4.1.15
Tag management	Tags are monolingual
Screens	See chapter 5.2
Messages	See chapter 5.3
Message archive	See chapter 5.3
Curves	No relevance for multilingualism
Curve archive	See chapter 5.4
Reports	See chapter 5.5
Text library	See chapter 5.6
User Administration	See chapter 5.7
PictureTree	No relevance for multilingualism
OS project editor	No relevance for multilingualism
Scripts	See chapter 5.10

5.1 Tag management

Tags are monolingual. The language cannot be changed.

5.2 Process pictures

All images can be processed in the Graphics Designer and can therefore be managed in several languages. Texts in images and on picture elements (e.g. static texts
or labeling of buttons) are not translated in the text library but directly in the respective picture. By means of the text distributor you can also translate texts in pictures and picture elements in several languages. You may have to adjust the size of the picture elements. Each element has to be large enough so that the space is still enough for the language with the longest terms.

Figure 5-1: Language settings for texts in pictures in the Graphics Designer
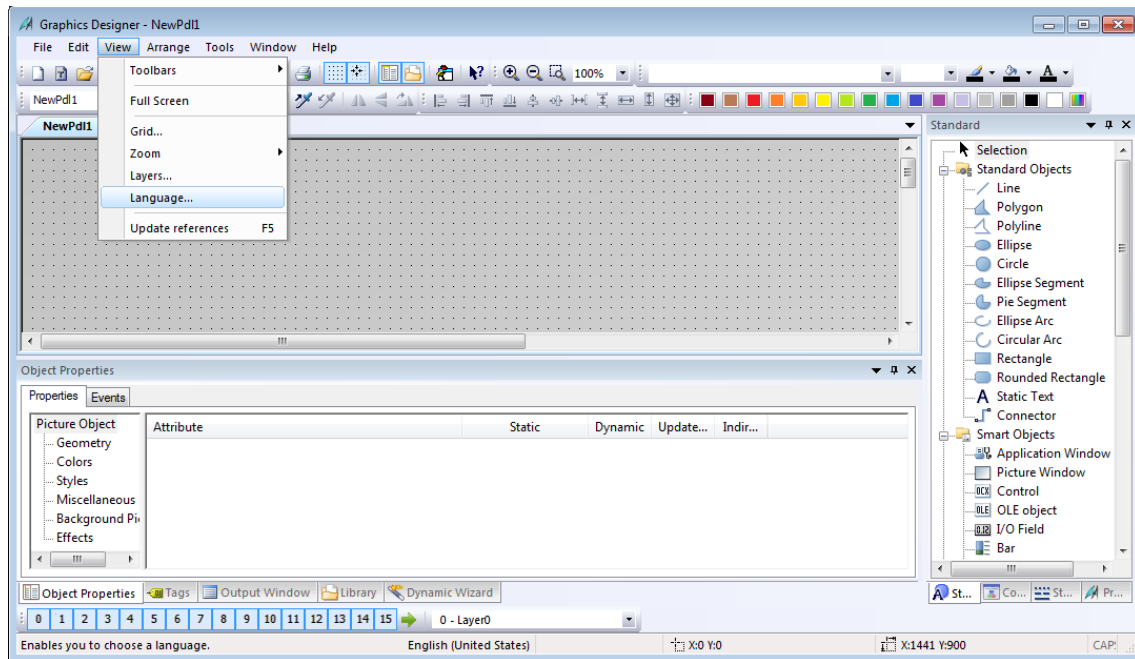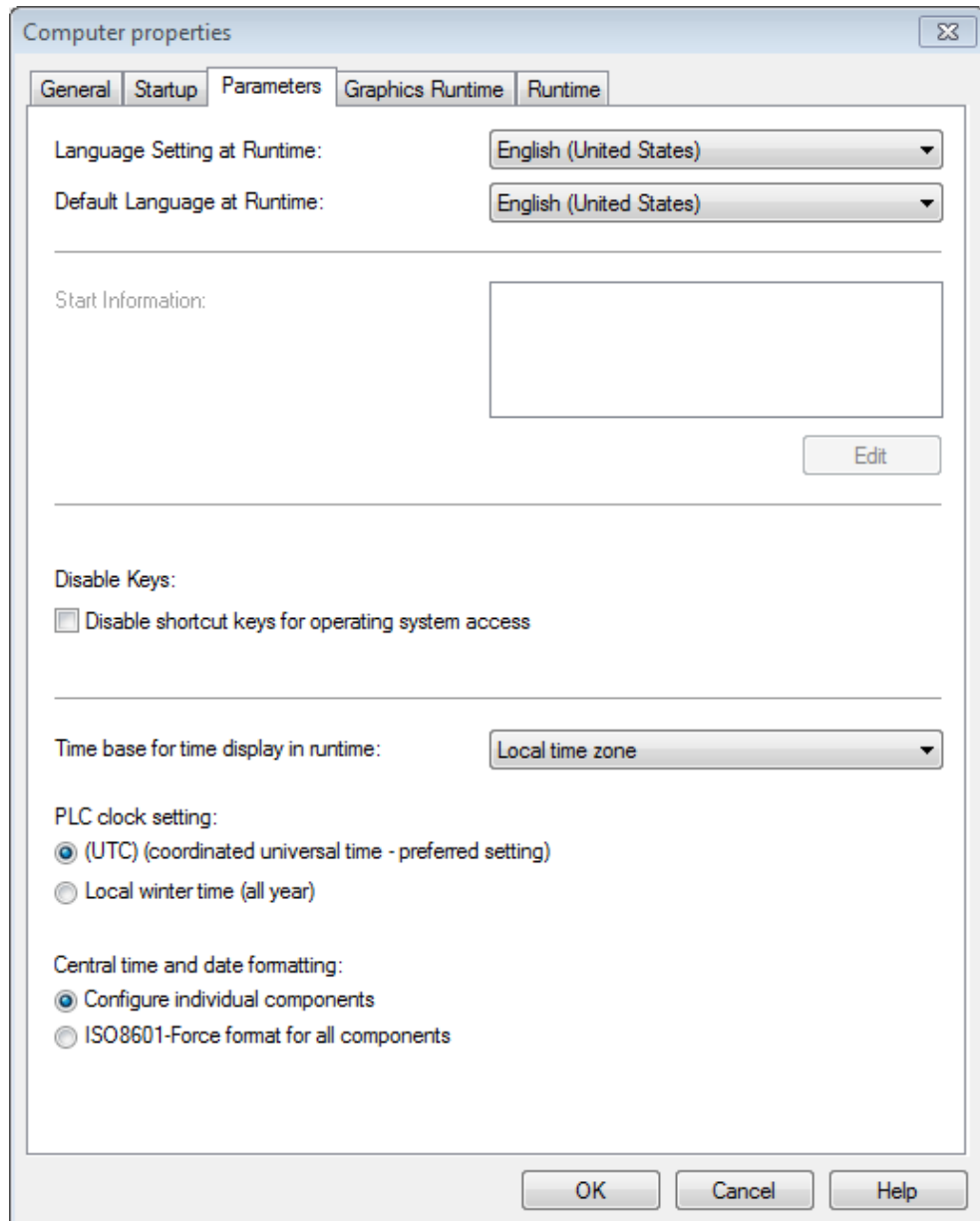
5.3   Messages/message archive

The message texts of blocks have to be translated in the SIMATIC Manager.

Note   If no default language is used, you should set the "Default Language at Runtime" to "English (United States)" to display, for example, the WinCC system messages.

Figure 5-2: Default Language at Runtime

Note   Restriction:

The type of message is displayed in the language which was the language at runtime at the time of occurrence.

5.4 Curves/curve archive

Curves or curve archives are only monolingual.

5.5 Reports

5.5.1 Layout

There are language-specific folders for layouts in which the respective layout is stored for each language. In addition, there is a folder for language-neutral layout. Static texts are saved in the layout.

The layouts are used dynamically for the reports, depending on the set runtime language. Dynamic objects in the layouts are inserted, also depending on the respective runtime language.

A further language can be added with the following menu command:

WinCCExplorer > ReportDesigner > "Rechtsklick auf Layouts" > Sprache hinzufügen

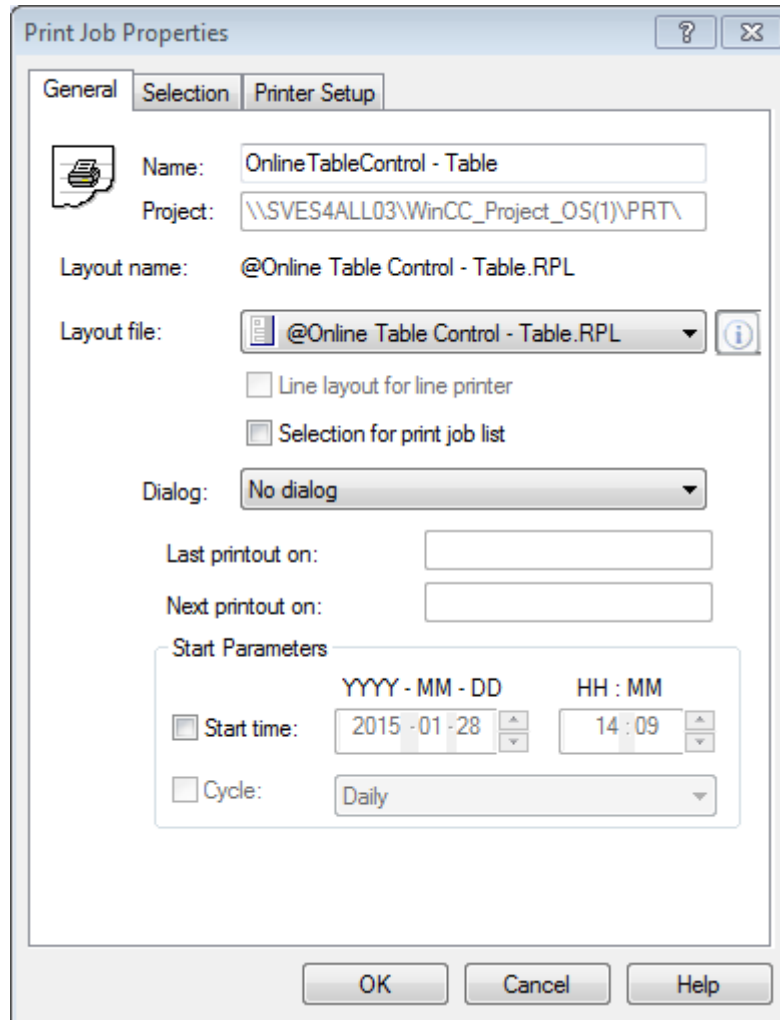| Note | An added layout language cannot be deleted again. |

Figure 5-3: Layout language setting
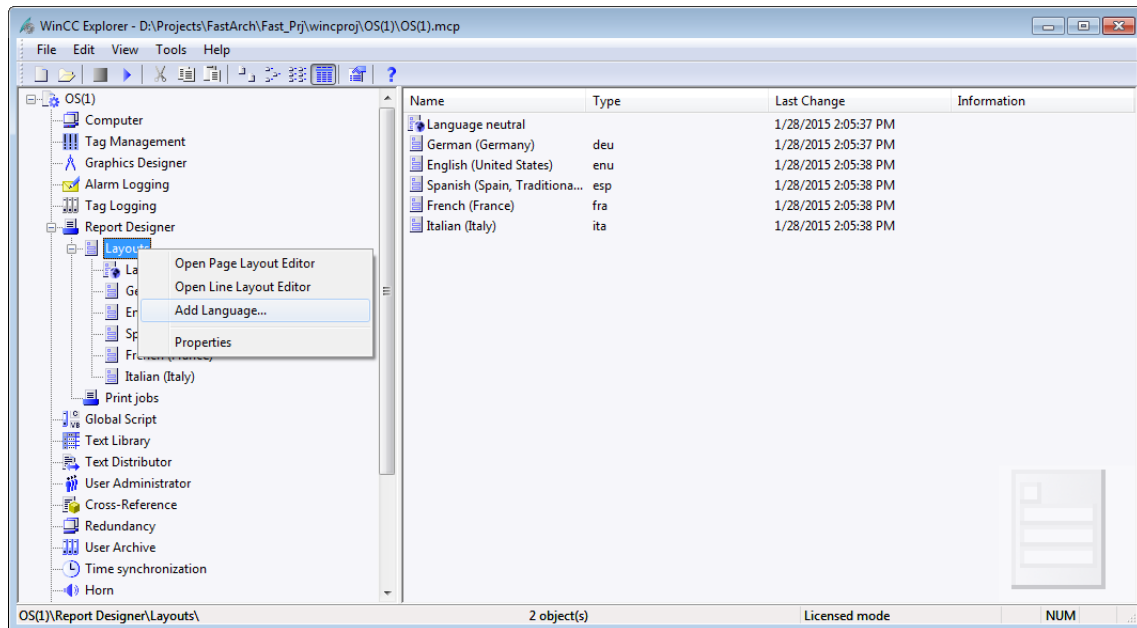
5.5.2   Print job

When configuring a report and selecting the desired layout, it becomes instantly apparent whether the respective layout is language neutral (available for all languages) or not (only available for particular languages).

Figure 5-4: Print Job Properties

Legend

Table 5-2

Symbol	Discription
	Language neutral layout
	Layout available in all configured languages
	Layout not available in all configured languages

Note	If a report is ordered to be printed and it is not available in the current runtime language, then the default language, set up in WinCC is used.

5.6 Text library and text distributor

Text library

The text library contains the dynamic objects and can either be edited directly in the column or by export and import.

Text distributor

The text distributor can edit all texts of images and faceplates. For this purpose, an export and import has to be carried out.

It is important to observe the format of the exported file. For processing in MS Excel, it is recommended to export everything as ".txt".

More information, as well as instructions on how to successfully export and import can be found in FAQ with the entry ID: 29419870.

Note	Changes in the text library of the OS should only be made once the configuration has been completed.

5.7 User administrator

The names of the created user groups in the Windows operating system and in the OS user administrator have to be written in exactly the same way. Observe case sensitivity.

Note	User names have to be monolingual.

5.8 Picture Tree Manager

The Picture Tree Manager is irrelevant for the multilingualism of PCS 7.

5.9 OS project editor

The OS project editor is irrelevant for the multilingualism of PCS 7.

5.10   Scripts

Scripts are usually monolingual.

Note	If texts have to be processed in scripts, this can be realized, for example, through the deviation of a "text tag" with a reference to the text library.
	The following code of the script has to consider this multilingualism.

NOTICE	ANSI-C has no mechanisms for monitoring char arrays (character strings). Incorrect programming can lead to the overwriting of non-assigned memory areas.

6 Use Cases

Regarding multilingual PCS 7 projects, exemplary use cases show the approach and the settings before and during the configuration.

Note For a distributed (worldwide) configuration, a joint project language has to be agreed upon before the start (preferably English).

6.1 Monolingual configuration: English (US)

Requirement

- Windows 7 (English version or English language package)

- Regional and language settings: All English (see chapter 2)
  Start > Control Panel > Clock, Language, and Region > Tab Administrative

Figure 6-1: Regional and language options
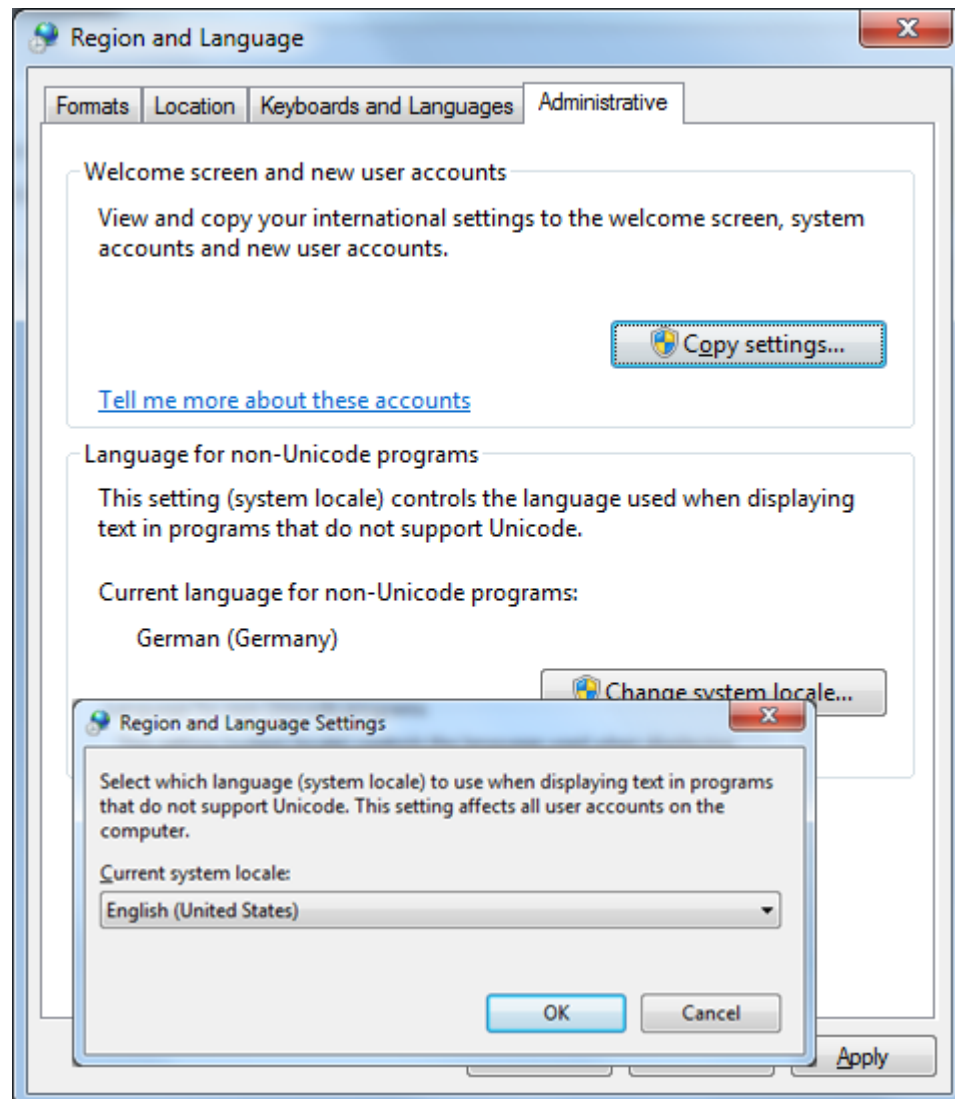
For languages in programs that do not support Unicode, select English (US) as default in the selection tab. Also adjust the regional and language settings to English.

The input language is irrelevant; however, at least the input of Latin characters should be possible.
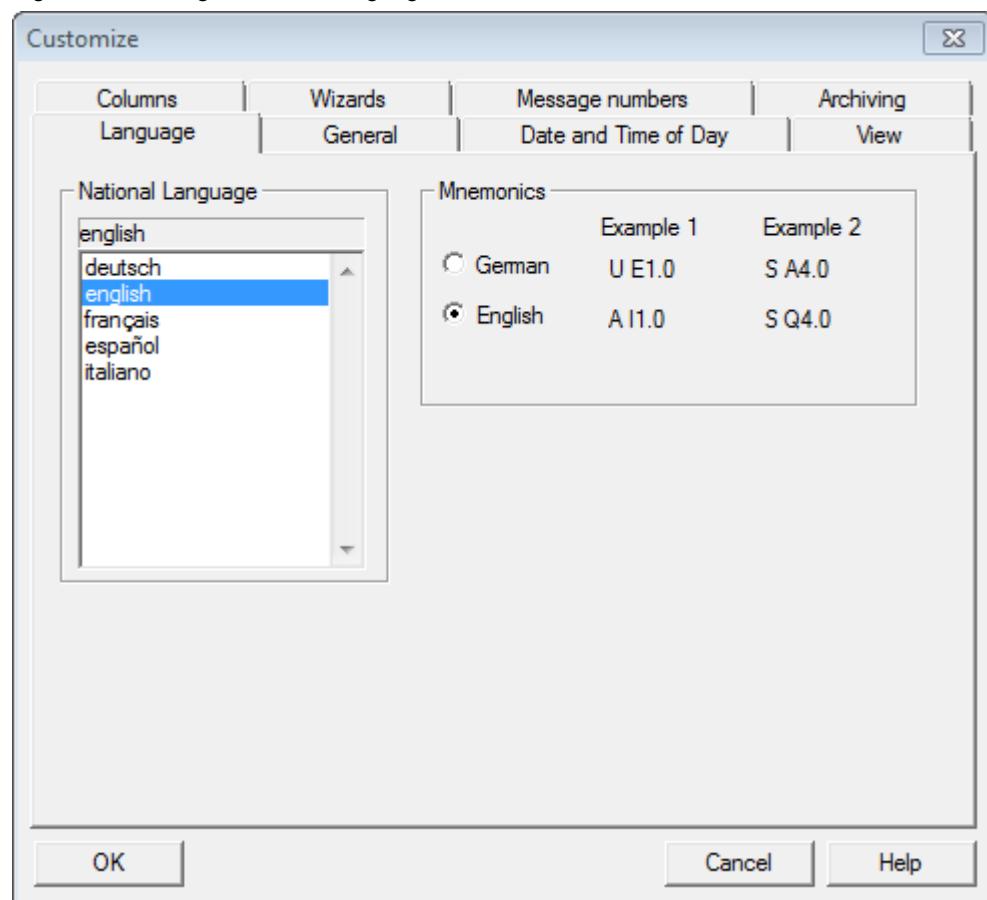
Note   When using only one language, attention needs to be paid that this language is set as default in the operating system in the SIMATIC Manager and in WinCC.

Procedure

1. Start the SIMATIC Manager and check the language setting (see chapter 3.2).
   Options > Customize > Tab Language

Figure 6-2: Setting of national language and mnemonics

If necessary, set the language setting to English. This requires a restart of the SIMATIC Manager.
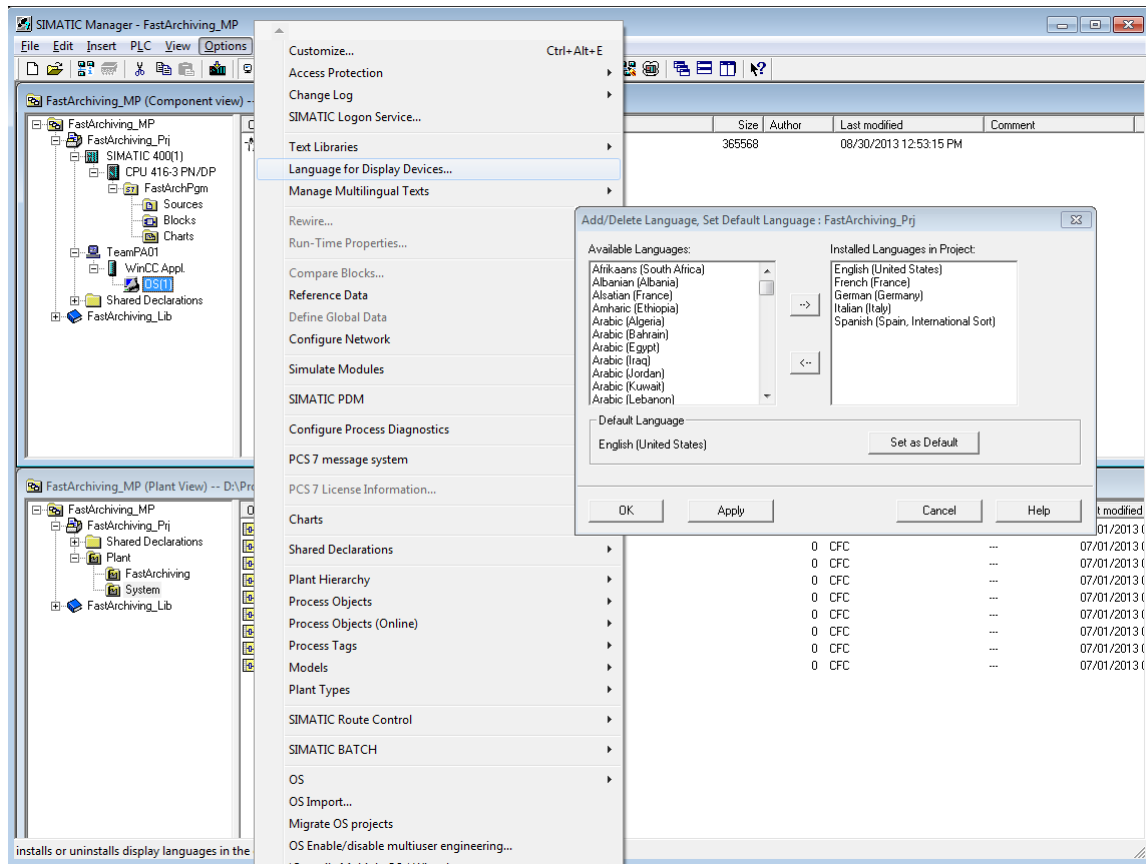
2. Create your project.

3. Check the display languages and adjust them if necessary:

Options > Language for Display Devices

- Add English (US) to the installed project languages.
- Set English (US) as default language

Figure 6-3: Setting of display language

| **Note** | You can remove or keep the other languages. |

4. Create the master data library

5. Configure the hardware and the program.

6. Create the master data library.

7. Compile the charts and if necessary enable the Asset Management.

8. Compile the OS (see chapter 3.3).

9. Open the OS project and check the language settings. They all have to be set to English.
   - Tools > Language > English (US) (Figure 3-2).
   - *Computer >Properties> Parameters > Runtime Language > English (US)*
   - Open the Graphics Designer and also set the language to English:
     View > Language > English (US) (Figure 3-3)

10. Start processing the OS project. All performed steps are now stored in the English language list.

6.2 Multilingual configuration: English / German

For multilingual configuration, a language has to be defined throughout as default in the operating system, in the SIMATIC Manager and in WinCC. In this example, English is to be available as configuration language and German as second language.

Requirement

- Windows 7 (MUI English and German)
- Regional and language settings: All English
  Start > Control Panel > Clock, Language, and Region > Tab Administrative

Figure 6-4: Regional and language settings
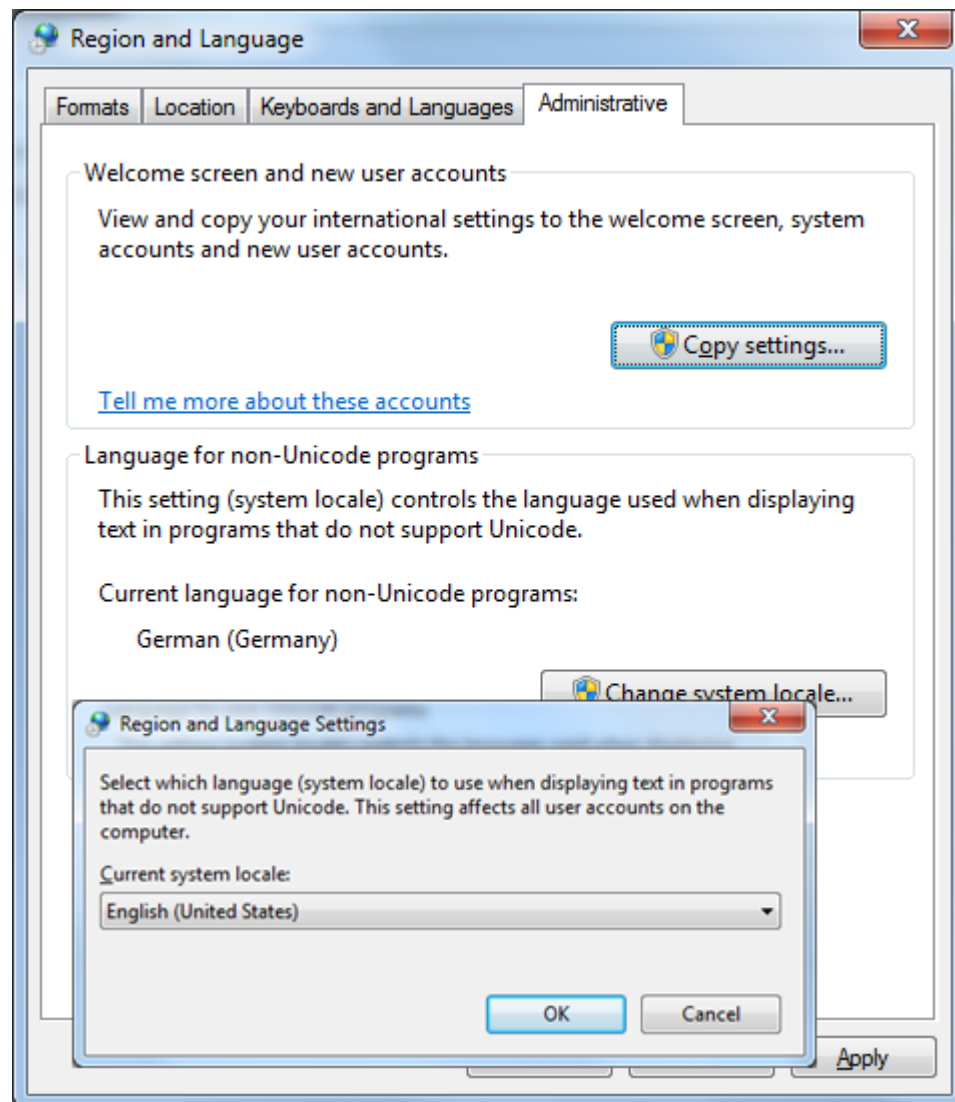
For programs that are not Unicode capable, you have to select English (US) as language in the "Advanced" tab. The regional and language settings should also be adjusted to English.

The input language is irrelevant. However, the input of Latin characters should be possible.

Procedure

1. Start the SIMATIC Manager and check the language setting (see chapter 3.2). *Options > Customize > Tab Language*

Figure 6-5: Setting of national language and mnemonics
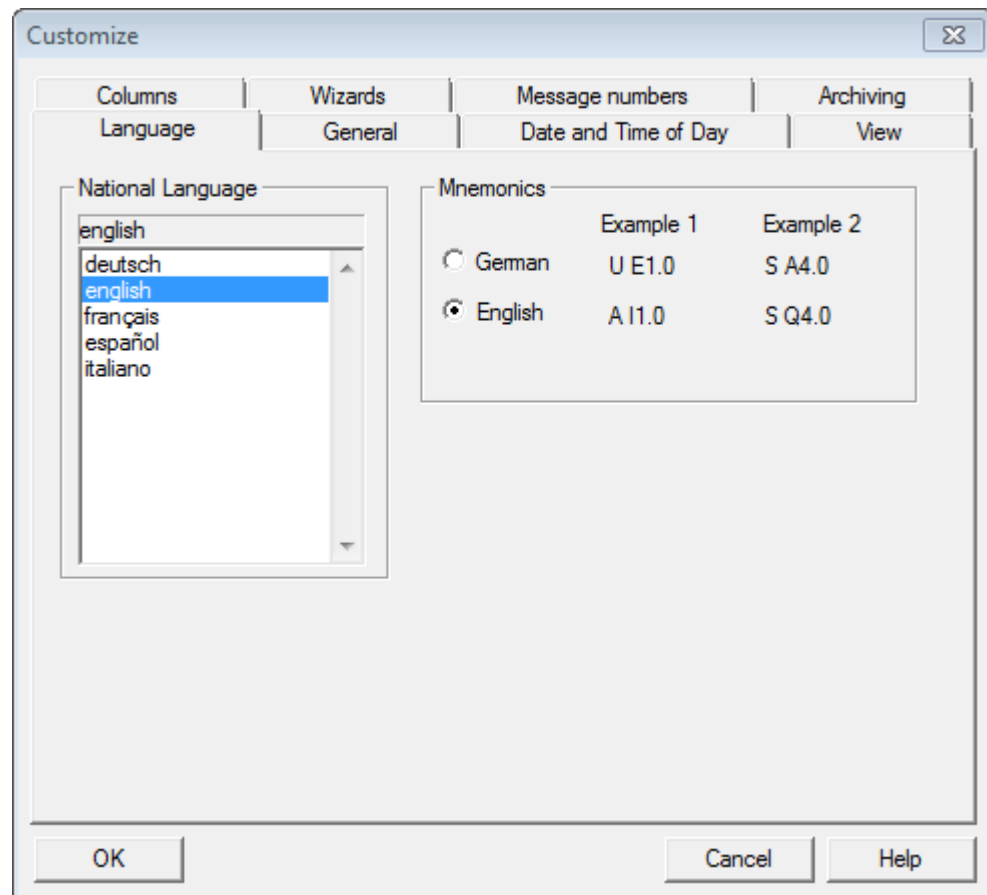
Check, whether the language settings for English is enabled. If this is not the case, reset it to English. Afterwards the SIMATIC Manager needs to be restarted.

2. Create your project.

3. Check the display languages and adjust them if necessary:
   Options > Language for Display Devices (Figure 6 6).
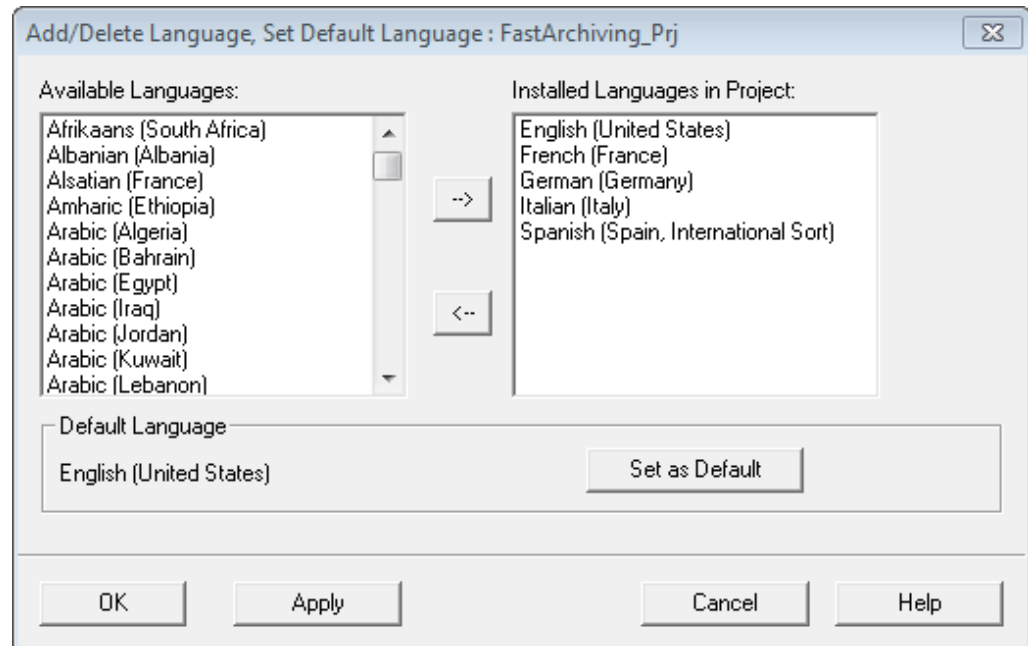   - Add English (US) to the installed project languages.
   - Also add German as additional language.
   - Set English (US) as default language.

Figure 6-6: Setting of display language

Note	You can remove or keep the other languages.

4. Create the master data library.
5. Adjust the blocks in the master data library in German and in English.
   For this purpose, the master data library has to be exported, adjusted and re-imported in the SIMATIC Manager (see chapter 4.1.1).
6. Configure the hardware and the S7 program.
7. Compile the S7 program and if necessary enable the Asset Management.

Note	All default messages and texts already exist in the system in the default languages. However, translations can be adjusted and used, for example, for user-generated blocks.
	For this purpose, you have to export, process and compile all texts and re-import them.
	Export takes place through: *Options > Multilingual Texts > Export*
	In the context menu that opens up, it is important that the source language and the target language are selected correctly.
	Import takes place through: *Options > Multilingual Texts > Import*

NOTICE	No changes must be made in the source language column.

8. Compile the OS (see chapter 3.3).

9. Open the OS project and check the language settings. They all have to be set to English.

   - *Tools > Language > English (US)* (Figure 3-2).

   - *Computer >Properties> Parameters > Runtime Language > English (US)*

   - Open the Graphics Designer and also set the language to English:
     View > Language > English (US) (Figure 3-3)

Note	Missing texts can be directly translated in the text library or you export, translate and import them.

10. The processing of OS has to take place in English as well as in German. There are two options:

   - Make all text changes in the Graphics Designer in English and in German. Process and save the language settings in English and in German for each image.

   - Create all texts in the Graphics Designer only in English. Once you have completed the OS processing, perform an export with the text distributor, translate the texts and re-import them.

Note	User-defined texts have to be configured multilingual.

6.3 Monolingual configuration: Chinese (Simplified)

NOTE	All procedures, descriptions and screenshots relevant for PCS 7 are based on the PCS 7 V7.1 and are applicable to the PCS 7 V8.1 without restrictions.

Exemplary configuration of an ASIA project.

Requirement

- Windows 7 MUI with Chinese language package (Simplified)
- SIMATIC PCS 7 ASIA Installation
- Regional and language settings (see chapter 2):
  - Menus: English
  - Input language: English and Chinese
  - Language for non-Unicode program: Chinese

Procedure

1. Start the SIMATIC Manager and check the language setting. (see chapter 3.2)
   Options > Customize > Language (Figure 6-5)

   You can select either English or Chinese as interface language for the SIMATIC Manager. In this example, English is used.

2. Creating the PCS 7 project.

3. Adjust the display languages.
   Options > Language for Display Devices

   Here, you can choose between English (US) and Chinese as default language at the beginning.

| Note | In this context, it must be kept in mind that all Text0, Text1, and Shortcut texts are stored in Chinese (Simplified) in the blocks of the ASIA version.

If you choose, for example, English as default display language, these texts have to be adjusted in the SIMATIC Manager. If this is only performed in the text library, then all texts are stored in Chinese again in the English column the next time the text is compiled. |
|------|--|

Note	For new projects it is recommended to set the default display language to Chinese (provided you have Chinese language skills).

4. Create the master data library.

5. Adjust the blocks in the master data library to English.
   For this purpose, the master data library has to be exported, adjusted and re-imported in the SIMATIC Manager (see chapter 4.1.1).

6. Configure the hardware and the S7 program.

7. Compile the S7 program and if necessary enable the Asset Management.

Note	All default messages and texts already exist in Chinese and English in the system. However, translations can be adjusted and configured, for example, for user-generated blocks. For this project, all texts have to be exported, edited and re-imported. *Options > Multilingual Texts > Export* In the context menu that opens up, it is important that the source language and the target language is selected correctly. After successful export, the files can be, for example, with the help of Excel, edited, translated and subsequently re-imported. Import is performed as follows: *Options > Multilingual Texts > Import*

NOTICE	No changes must be made in the source language column.

8. Compile the OS. (see chapter 3.3)

9. If you have worked with default PCS 7 resources, everything will be in Chinese as well as English. Before processing with OS can be started, the language settings also have to be checked first of all.

    - *WinCCExplorer > Options > Language*
    - *WinCCExplorer > Computer > Properties > Parameters > Runtime* Language *> Chinese*
    - Open the Graphics Designer and also set the language to English: *View > Language > English (US)* (Figure 3-3)

    Now you can translate everything in the text library that is still missing (for example, S7_Text0, S7_Text1 and S7_Shortcut block texts). The changes can be either made directly in the text library or you export them, translate them and re-import them.

10. The processing of OS has to be performed in English as well as in Chinese. There are two options:

    - Make all text changes in the Graphics Designer in English and in Chinese. Process and save the language settings in English and in Chinese for each image.
    - Create all texts in the Graphics Designer in English or Chinese. Once you have completed the OS processing, perform an export with the text distributor, translate the texts and re-import them.

| Note	User-defined texts have to be configured multilingual.

6.4 Converting projects from English to Chinese (Simplified)

NOTE	All procedures, descriptions and screenshots relevant for PCS 7 are based on the PCS 7 V7.1 and are applicable to the PCS 7 V8.1 without restrictions.

In this example, a project that was configured with the EU Version of PCS 7 is to be ported to the ASIA version. The project was configured in English and all other EU default languages are also kept.

When opening a neutral project, the following message will always be displayed: Figure 6-7
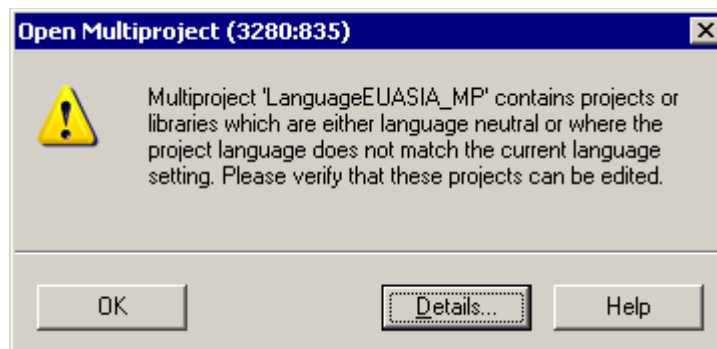
NOTICE	The project and the master data library can only be opened and edited, if the PCS 7 project language was previously set to language neutral.

Requirement

- Windows 7 MUI with Chinese language package (Simplified)
- Regional and language settings (see chapter 2):
    - Menus: English
    - Formats: Chinese
    - Input language: English and Chinese
    - Language for non-Unicode program: Chinese

Procedure

1. Open the SIMATIC Manager and check the language setting (see chapter 3.2).
   Options > Customize > Language

   Select English as interface language for the SIMATIC Manager.

2. Dearchive the respective project.

3. Select the project and adjust the display language.
   Options > Language for Display Devices

   Add Chinese (PRC) and keep English as default language (see figure 6-13).

Note	In this context, it must be kept in mind that all Text0, Text1, and Shortcut texts are stored in Chinese in the blocks of the ASIA version.
	If you choose, for example, English as default display language, these texts have to be adjusted in the SIMATIC Manager. If this is only performed in the text library, then all texts are stored in Chinese again in the English column the next time the text is compiled.

Note	For new projects it is recommended to set the default display language to Chinese (provided you have Chinese language skills).

Figure 6-8
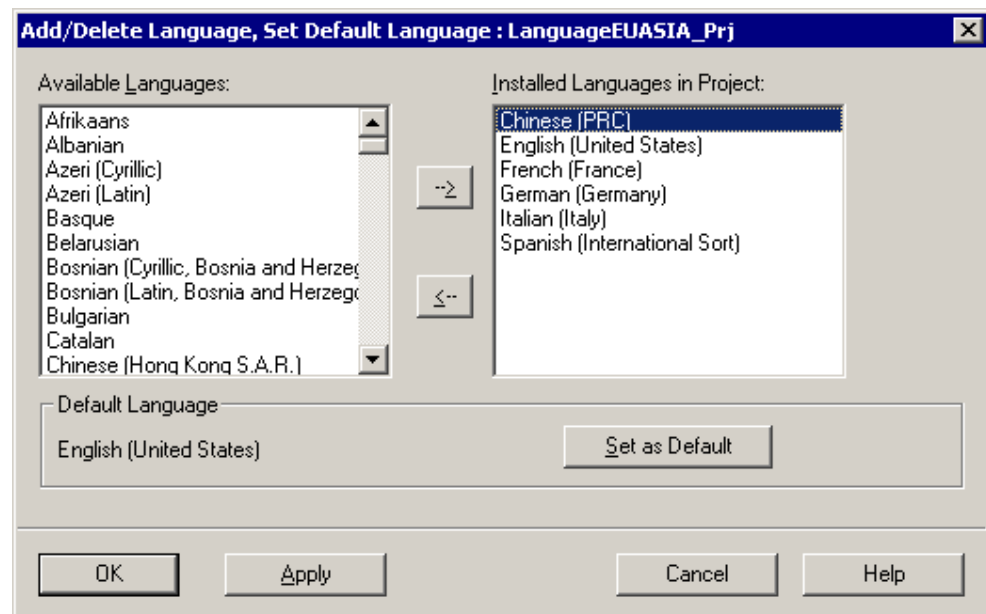
4. Perform the same procedure again for the master data library.
   Thus, the blocks in the master data library are replaced with those of the ASIA version.
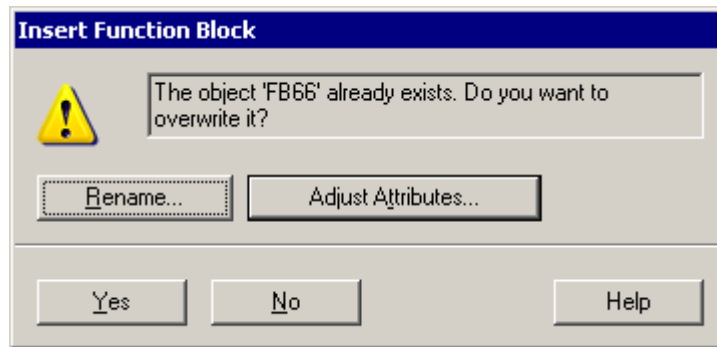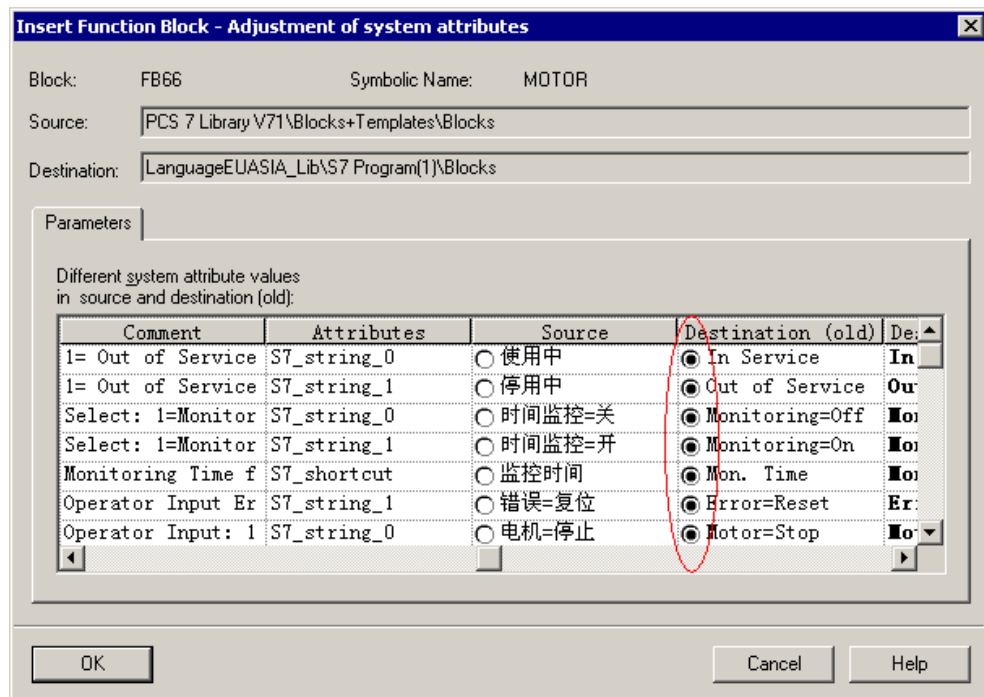
Figure 6-9

Figure 6-10

NOTICE	When replacing the blocks, you should keep the English text otherwise the Chinese texts for S7_Text0, S7_Text1 and S7_Shortcut are entered in the English language column.

5. Upgrade the master data library by the new language by exporting, processing and importing it (see chapter 4.1.1).

6. Update the blocks to introduce the changes in the project.
   The Chinese texts and messages are added.

7. Export the texts of the project, adjust them and carry out an import.

8. Compile and load the S7 program.

9. Compile the OS (see chapter 3.3).
   Thus, the new language was automatically added in the OS.

10. If you have worked with default PCS 7 resources, everything will be in Chinese as well as English. Before processing can be started in OS, the language settings have to be checked first of all.

   – *"WinCCExplorer > Options > Language"*

   – *"WinCCExplorer > Computer > Properties > Parameters > Language Setting at Runtime"*

   – Open the Graphics Designer and also set the language to English: *View > Language > English (US)* (Figure 3-3)

   Now you can translate everything in the text library that is still missing (for example, S7_Text0, S7_Text1 and S7_Shortcut block texts). The changes can be either made directly in the text library or you export them, translate them and re-import them.

11. The processing of OS has to be performed in English as well as in Chinese. There are two options:

   – Make all text changes in the Graphics Designer in English and in Chinese. Process and save the language settings in English and in Chinese for each image.

   – Create all texts in the Graphics Designer in English or Chinese. Once you have completed the OS processing, perform an export with the text distributor, translate the texts and re-import them.

Note	User-defined texts have to be configured multilingual.

7 Appendix

7.1 Service and Support

Industry Online Support

Do you have any questions or need assistance?

Siemens Industry Online Support offers round the clock access to our entire service and support know-how and portfolio.

The Industry Online Support is the central address for information about our products, solutions and services.

Product information, manuals, downloads, FAQs, application examples and videos – all information is accessible with just a few mouse clicks at:
https://support.industry.siemens.com

Technical Support

The Technical Support of Siemens Industry provides you fast and competent support regarding all technical queries with numerous tailor-made offers – ranging from basic support to individual support contracts. You send queries to Technical Support via Web form:
www.siemens.com/industry/supportrequest

SITRAIN – Training for Industry

With our globally available training courses for our products and solutions, we help you achieve with practical experience, innovative learning methods and a concept that's tailored to the customer's specific needs.

For more information on our offered trainings and courses, as well as their locations and dates, refer to:
www.siemens.com/sitrain

Service offer

Our range of services includes the following:

- Plant data services
- Spare parts services
- Repair services
- On-site and maintenance services
- Retrofitting and modernization services
- Service programs and contracts

You can find detailed information on our range of services in the service catalog:
https://support.industry.siemens.com/cs/sc

Industry Online Support app

You will receive optimum support wherever you are with the "Siemens Industry Online Support" app. The app is available for Apple iOS, Android and Windows Phone:
https://support.industry.siemens.com/cs/ww/en/sc/2067

7.2 Links and Literature

Table 7-1

No.	Topic
\1\	Siemens Industry Online Support https://support.industry.siemens.com
\2\	Link to this entry page of this application example https://support.industry.siemens.com/cs/ww/en/view/56248153
\3\	How can you configure the "Report System Error" functionality of an S7 station to be multilingual? https://support.industry.siemens.com/cs/ww/en/view/23596958
\4\	How can you configure multilingual texts in process screens? https://support.industry.siemens.com/cs/ww/en/view/29419870
\5\	What are the options for setting languages in PCS 7? https://support.industry.siemens.com/cs/ww/en/view/8763245
\6\	How can you configure process screens in multiple languages with WinCC text reference tags? https://support.industry.siemens.com/cs/ww/en/view/29419661
\7\	Russian Localization for PCS 7 (System expansion for process visualization in Russian) https://support.industry.siemens.com/cs/ww/en/view/35221749
\8\	How can you use the texts of enumerations (under Shared Declarations in the SIMATIC Manager) for display in WinCC? https://support.industry.siemens.com/cs/ww/en/view/27147567

7.3 History

Table 7-2

Version	Date	Modifications
V1.0	12/2011	First version for PCS 7 V7.1
V2.0	06/2013	Update to PCS 7 V8.0 SP1
V3.0	03/2015	• Update to PCS 7 V8.1 • Update chapter 2.1 to Windows 7
V4.0	12/2017	Update to PCS 7 V9.0