

### Overview

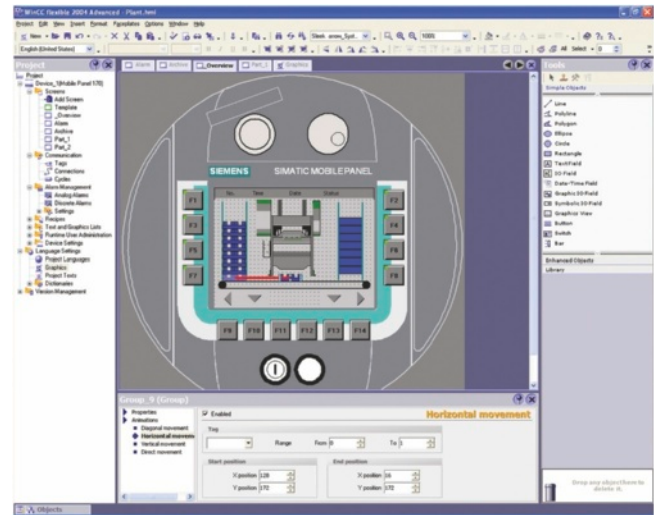
#### **SIMATIC WinCC flexible ES engineering software**

- Family of configuration systems with WinCC flexible Micro/Compact/Standard/Advanced for SIMATIC operator panels, the HMI part of SIMATIC C7 as well as for the PC-based visualization software WinCC flexible Runtime
- Runs under Windows XP Professional / Windows 7 Professional, Ultimate, Enterprise
- Can be expanded by the option "WinCC flexible/Change-Control" for version management and change logging

#### **SIMATIC WinCC flexible Runtime visualization software**

- Modular PC-based HMI solution for single-user systems directly at the machine (further development of ProTool/Pro RT)
- Runs under Windows XP Professional / Windows 7 Professional, Ultimate, Enterprise
- Basic package for visualization, reporting and logging; can be expanded by implementing option packages
- Flexible expansion possible with VB scripts and customized ActiveX controls created with OPP (Open Platform Program)
- Can be integrated into automation solutions based on TCP/IP networks
- Expanded service concepts with remote operation, diagnostics and administration over the intranet and Internet in combination with email communication

### Overview SIMATIC WinCC flexible ES



- Uniform family of engineering tools for configuration SIMATIC HMI Operator Panels, the operator control part of SIMATIC C7 units, SIMOTION/SINUMERIK Panel PCs as well as the PC-based visualization software WinCC flexible Runtime.
- Runs under Windows XP Professional / Windows 7 Professional, Ultimate, Enterprise
- Current version:
  - SIMATIC WinCC flexible 2008 SP3 Micro
  - SIMATIC WinCC flexible 2008 SP3 Compact
  - SIMATIC WinCC flexible 2008 SP3 Standard
  - SIMATIC WinCC flexible 2008 SP3 Advanced

## HMI Software

### SIMATIC WinCC flexible HMI system

#### SIMATIC WinCC flexible ES

##### Benefits

- The integrated configuration software reduces training, maintenance and service overhead and protects the customer's investments
- Minimized configuration overhead due to reuse of scalable and dynamizable objects
- Tools for efficient and simple configuration:
  - Wizard for defining the basic structure of the HMI project
  - Table-based editors simplify the generation and processing of similar types of object, e.g. for tags, texts, or alarms
  - Complex configuration tasks such as the definition of paths of motion or the creation of the fundamental operator prompting are simplified by means of graphical configuration
- Comprehensive support of multi-language configurations for worldwide use
  - Selectable views for entering configuration data in several languages
  - System and user-specific text lexicons
  - Export/import of language-dependent texts

##### Application

SIMATIC WinCC flexible Micro/Compact/Standard/Advanced are engineering tools for configuring SIMATIC HMI devices, the operating component of SIMATIC C7 devices, the SIMOTION/SINUMERIK Panel PCs as well as the PC-based visualization system WinCC flexible Runtime.

Depending on the selected product, various target systems can be configured:

##### **WinCC flexible Micro**

- Micro Panels: OP 73micro, TP 170micro, TP 177micro

##### **WinCC flexible Compact**

In addition to the target systems that are configured using WinCC flexible Micro:

- Basic Panels: KTP400 Basic, KTP600 Basic, KTP1000 Basic, TP1500 Basic
- Mobile Panels: Mobile Panel 170, Mobile Panel 177
- 70 series Panels: OP 73, OP 77A, OP 77B
- 170 series Panels: TP 170A, TP 177A, TP 170B, TP 177B, OP 170B, OP 177B
- 170 series Multi Panels: MP 177
- C7 devices: C7-635 (Touch/Key)

##### **WinCC flexible Standard**

In addition to the target systems that are configured using WinCC flexible Compact:

- Mobile Panels: Mobile Panel 277
- 270 series Panels: TP 270, TP 277, OP 270, OP 277
- 270 series Multi Panels: MP 270B, MP 277
- 370 series Multi Panels: MP 370, MP 377
- C7 devices: C7-636 (Touch/Key)

##### **WinCC flexible Advanced**

In addition to the target systems that are configured using WinCC flexible Standard:

- Standard PC
- SIMATIC Panel PC: Panel PC IL 70, Panel PC IL 77, Panel PC 477/477B, Panel PC 577/577B, Panel PC 670, Panel PC 677/677B, Panel PC 870, Panel PC 877
- SIMOTION Panel PC: P012K, P012T, P015K, P015T, PCR, PCR-Touch
- SINUMERIK Panel PC: HT8, OP08T, OP010, OP012, TP012, OP015, TP015, OP015A

For configuring panels released after the start of delivery of WinCC flexible 2008, an HSP (Hardware Support Package) is required that can be downloaded free of charge via the following link:

<http://www.siemens.com/wincc-flexible-hsp>

##### Design

The engineering tools of the SIMATIC WinCC flexible range are based on one another. The available editors largely depend on the respectively configured target systems and their functions. A more comprehensive engineering tool such as WinCC flexible Standard also offers the facilities of the smaller engineering tools, e.g. WinCC flexible Compact or Micro.

Upgrading of a smaller engineering tool to a larger one is possible using a Powerpack. An exception is WinCC flexible Micro.

The scope of functions of the WinCC flexible engineering tools already includes project support for the Runtime options available for SIMATIC Panels or WinCC flexible Runtime, independent of the RT licenses purchased. Separate licensing is required for the target system in order to use the configured Runtime options.

## Function

### **Integration into automation systems**

- Integration into SIMATIC STEP 7 V5.x and Simotion
  - Management of HMI projects within the SIMATIC Manager
  - Shared use of communication settings and process point definitions, i.e., symbols and messages
  - Display of the HMI configuring objects in the SIMATIC Manager
  - Transfer of configuring data via MPI/PROFIBUS/Ethernet using routing

### **Configuration interface**

- Comprehensive and fast access to editors and project data via Workbench applications
- Adaptive user interface of engineering tools depending on configured target system
- User-definable user interface settings, e.g., layout, toolbars, object defaults

### **Project handling**

- Device-independent configuration data can be used on a variety of target systems without the need for conversion; the interface adapts to the functional possibilities of the device currently configured.
- Cross-device utilization of common configuration data (e.g., text library) in multi-device projects
- Wizard-assisted definition of basic structure of HMI projects (e.g., display layout, operator prompting)

### **Screen editor with extensive options for efficient and fast screen configuration**

- Generation of interconnected screen objects via Drag&Drop, e.g., tags for the creation of input/output fields with process interfacing or buttons with screen selection function
- Template for the definition of global screen objects and functions (comparable with the Slide Master in MS PowerPoint)
- User-friendly editor for the creation of image blocks with defined external interface from screen objects
- Graphics-based configuration of motion paths
- Layer technology with up to 32 layers
- Tools for the Align, Rotate and Mirror functions

### **Import/export**

- of texts for translation
- of tags, links, text lists, and messages
- Generation of variable lists for importing from controller programming tools

### **Object-based data management with user-friendly search and edit options**

- Cross-reference list with direct access to all objects, e.g. for editing or selection
- Search for objects in entire project
- Central reassignment of variables
- Text search and replace functions

### **Libraries for predefined/user-defined configuration objects**

- Large number of scalable and dynamizable screen objects included in scope of delivery
- Size-scalable WMF-format graphics for industrial applications included in scope of delivery
- Preview function for library objects
- Storage of all engineering objects in library, e.g., blocks and even entire displays or variables; picture blocks can be created on a customer- or project-specific basis by combining simple screen objects. Changes to these picture blocks can be made centrally (block definition).

### **Language support**

- Multilingual project creation (max. 32 languages) in editors thanks to selectable views
- Automatic translation on basis of system- and user-specific dictionaries in central text library
- Central management of language-specific texts and graphics in libraries
- Edit, export and import of texts for translation
- Language-specific graphics

### **Visual Basic Script support**

- IntelliSense function for fast programming of access to runtime objects
- Simple creation of control sequences in script code;
- Script debugging in Simulator and WinCC flexible Runtime

### **Test and startup support**

- Simulation of HMI projects on engineering PC
- Jump to error cause based on alarm messages in the Compiler
- Advanced ProSave service tool for all operating systems supported by WinCC flexible

### **ChangeControl (option)**

- Version management of project versions with rollback
- Logging of configuration changes, e.g., for regulated industries

### Note:

For further information, refer to "WinCC flexible options".

### **Default runtime data in engineering tools**

- Users and passwords
- Recipe data records

## HMI Software

### SIMATIC WinCC flexible HMI system

#### SIMATIC WinCC flexible ES

##### Technical specifications

System requirements (minimum requirements)	WinCC flexible Engineering Software
<b>Operating system</b>	Windows XP Professional SP3 (32 bit), Windows 7 Professional, Ultimate, Enterprise (32 and 64 bit)
	Additionally for SIMATIC WinCC flexible Micro: Windows XP Home SP3
<b>Processor</b>	Pentium 4 (or comparable) processor running at 1.6 GHz or faster
<b>Resolution</b>	1024 x 768 or higher
<b>Main memory (RAM)</b>	≥ 1 GB, ≥ 512 MB for WinCC flexible Micro
<b>Hard disk (free memory space) <sup>1)</sup></b>	≥ 2 GB <sup>2)</sup> ≥ 1.2 GB for WinCC flexible Micro <sup>3)</sup>
<b>DVD drive</b>	for software installation

<sup>1)</sup> In addition to the space needed by WinCC flexible, Windows also requires space on the hard disk; e.g. for the swap file. The following formula has proven itself in the past: The size of the swap file = 3 x the size of available RAM. For further information, refer to your Windows documentation

<sup>2)</sup> When installing one language. An additional 200 MB are required for each further language. In the case of different partitions for system and configuration: System partition approx. 700 MB, project partition approx. 1.3 GB.

<sup>3)</sup> When installing one language. An additional 80 MB are required for each further language. In the case of different partitions for system and configuration: System partition approx. 600 MB, project partition approx. 600 MB.

##### Ordering data

##### Article No.

###### WinCC flexible 2008 Micro incl. SP3

Engineering software for configuration of Micro Panels, electronic documentation (.pdf)

- Single license and documentation on DVD, single license key without license key
- as download <sup>1)</sup>, software download, single license, without license key download, e-mail address required for the delivery

6AV6610-0AA01-3CA8

6AV6610-0AA01-3CH8

###### WinCC flexible 2008 Compact incl. SP3

Engineering software for configuring Micro Panels, Basic Panels and 70/170 series Panels incl. C7-635; software for engineering option WinCC flexible /ChangeControl <sup>2)</sup>; simulation software for Micro Panels, Basic Panels and 70/170 series Panels incl. C7-635, native drivers; electronic documentation (.pdf)

- Software and documentation on DVD, floating license, license key on USB stick
- as download <sup>1)</sup>, software and license key download, floating license, e-mail address required for the delivery

6AV6611-0AA51-3CA5

6AV6611-0AA51-3CH5

###### WinCC flexible 2008 Standard incl. SP3

Engineering software for configuring Micro Panels, Basic Panels and 70/170/270/370 series Panels incl. C7-635/636; software for engineering option WinCC flexible /ChangeControl <sup>2)</sup>; simulation software for Micro Panels, Basic Panels and 70/170/270/370 series Panels incl. C7-635/636; native drivers; electronic documentation (.pdf)

- Software and documentation on DVD, floating license, license key on USB stick
- as download <sup>1)</sup>, software and license key download, floating license, e-mail address required for the delivery

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- <sup>1)</sup> Current information and availability regarding the new delivery package can be found at: <http://www.siemens.com/tia-online-software-delivery>
- <sup>2)</sup> A separate license for WinCC flexible/ChangeControl must be purchased for each engineering station