Notes on Installation and Use

The information and notes contained here are more up-to-date and therefore valid compared with information in other documents.
Please read the notes carefully as they contain important information on installing and using *SIMOCODE ES 2007+SP5*.

```
=======================================================================
|| Please note:                                                      ||
||                                                                   ||
|| You will always find the current version of this Readme file in our ||
|| Customer Support Portal:                                          ||
|| http://support.automation.siemens.com/WW/view/en/58405349        ||
|| The validity of the current version available online outweighs that of ||
|| other documents as well as of this document.                      ||
=======================================================================
```

If you print the file, make sure that the left and right margins are set to a width of 25 millimeters (approximately 1 inch) for A4 portrait.

Table of contents

A   Installation guide

The installation notes contain important information which you require for installing the **SIMOCODE ES 2007+SP5** software. Please read these notes before you start the installation.

A 1   A 1   Scope of supply

This version is provided in three languages and runs under any operating system listed in chapter "A.3.1 Software requirements".

Package	Order Number	Scope
Premium		
Floating License	3ZS1 312-6CC10-0YA5	1 setup CD 1 license key on USB stick 1 certificate of license
License download	3ZS1 312-6CE10-0YB5	1 license key per download 1 certificate of license by mail
Upgrade	3ZS1 312-6CC10-0YE5	1 setup CD 1 license key on USB stick 1 certificate of license
Powerpack (Standard->Premium)	3ZS1 312-6CC10-0YD5	1 license key on USB stick 1 certificate of license
SoftwareUpdateService	3ZS1 312-6CC10-0YL5	Software update service for 1 year with automatic extension. Requires current software version.
Standard		
Floating License	3ZS1 312-5CC10-0YA5	1 setup CD 1 license key on USB stick 1 certificate of license
License download	3ZS1 312-5CE10-0YB5	1 license key for download 1 certificate of license by mail
Upgrade	3ZS1 312-5CC10-0YE5	1 setup-CD 1 license key on USB-Stick 1 certificate of license
Powerpack (Standard->Premium)	3ZS1 312-5CC10-0YD5	1 license key on USB stick 1 certificate of license
SoftwareUpdateService	3ZS1 312-5CC10-0YL5	Software update service for 1 year with automatic extension. Requires current software version.
Basic-		
Floating License	3ZS1 312-4CC10-0YA5	1 setup CD 1 license key on USB stick 1 certificate of license
License download	3ZS1 312-4CE10-0YB5	1 license key for download 1 certificate of license by mail

A 2   Hardware requirements

SIMOCODE ES 2007+SP5 supports all popular Windows Standard PCs and SIMATIC programming devices. Working with *SIMOCODE ES 2007+SP5* sets minimum requirements on the hardware. In order to work efficiently with *SIMOCODE ES 2007+SP5*;use the recommended values.

Operating system	Has the following minimal requirements:		
	Processor	**RAM**	**Graphics**
MS Windows XP Professional	800MHz	512 MB [1]	XGA 1024x768 [3] 16-bit depth of color
MS Windows 7 32 Bit Professional/Ultimate/Enterprise	1 GHz	1GB [2]	XGA 1024x768 [3] 16-bit depth of color
MS Windows 7 64 Bit Professional/Ultimate/Enterprise	1 GHz	2GB	XGA 1024x768 [3] 16-bit depth of color

[1] a mimimum memory expansion of 1 GB is recommended
[2] a mimimum memory expansion of 2 GB is recommended
[3] scaling factor on Windows 7: 100%

Other hardware requirements	
Hard disk Free space[1]	>= 280 MB
Optical drive[2]	CD-ROM drive
Disk drive	Not required
Miscellaneous	RS232 interface, USB interface

[1] Take the additional available memory into account, e.g., for the swap file.
[2] Only required to install *SIMOCODE ES 2007+SP5* and not to actually run it.

Additional information on MS Windows 7:
The "Aero Glass Style" requires a powerful graphics card.
Requirement:
- DirectX9-enabled
- 128 MB separate graphics memory
- The performance power of the graphics system architecture can significantly influence the performance power of *SIMOCODE ES 2007+SP5*.

To use *SIMOCODE ES 2007+SP5* with PROFIBUS (Professional/Premium version only), you also need a SIEMENS communications processor for a PROFIBUS network.

_____
Note
   You can find further information on this subject in Chapter A.4.4.2 Notes concerning the use of communications cards in PCs/PGs
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A 3   Software requirements

A 3.1   Runtime environment

Operating systems

SIMOCODE ES 2007+SP5 is a 32-bit application which is approved for use with the following operating systems:

- Windows XP Professional SP2/SP3
- Windows 7 / Windows 7 SP1 32 Bit Ultimate, Professional and Enterprise (standard installation)
- Windows 7 / Windows 7 SP1 64 Bit Ultimate, Professional and Enterprise (standard installation)
- Windows Server 2003 SP2/ Windows Server 2003 R2 SP2 32 Bit Standard
- Windows Server 2008 R2 SP1/ Windows Server 2008 SP2 Standard

Windows XP mode on Windows 7 is not approved, however.

Information on the operating systems can be found on the Microsoft website.

The ability of **SIMOCODE ES 2007+SP5** to run on the following operating systems is not guaranteed, its use is the responsibility of the user:

- MS Windows Vista Ultimate, Business and Enterprise

- MS Windows 8

- MS Windows Server 2003/2008 (all versions which are not above-mentioned as approved)

SIMOCODE ES 2007+SP5 cannot be installed, and can therefore not be run, on the following systems:

- MS Windows 3.1

- MS Windows for Workgroups 3.11

- MS Windows 95

- MS Windows 98

- MS Windows Millennium

- MS Windows NT 4.0

- MS Windows 2000

- MS Windows XP Home

- MS Windows XP Professional (ohne SP oder mit SP1)

- MS Windows Vista Home Basic, Premium

- MS Windows Vista 64 Bit Versionen

- MS Windows 7 Home Basic/Premium, Starter

- MS Windows Server 2008 HomeServer

Important additional notes:

- An operating system update from MS Windows XP or from MS Windows Vista to MS Windows 7 is not permitted / not possible for an already installed *SIMOCODE ES 2007+SP5*.

- Special feature when installing on MS Windows 7: Observe the notes relating to the user group "Siemens TIA Engineers" in the section "Special features for the MS Windows 7 operating system".

General information:

- Encrypting File System (EFS):

  Never encrypt the installation folder (e.g. C:\Program Files\Siemens) with the EFS. Otherwise, important services such as the Automation License Manager will no longer function.

Additional information on Windows 7:
SIRIUS engineering does not support the language control function.

Other software requirements

	Windows XP	**Windows 7**
Internet browser	Microsoft Internet Explorer V6.0	Microsoft Internet Explorer V8.0

User rights

Restricted user rights are sufficient for working with *SIMOCODE ES 2007+SP5*.

You must have administration rights to install *SIMOCODE ES 2007+SP5*.
You must have administration rights under Windows 7 to modify settings via the application "Set PG/PC interface" (Professional/Premium version only) .

All users working on this PC with *SIMOCODE ES 2007+SP5*, require authorization for writing to the installation folder of *SIMOCODE ES 2007+SP5*.

A 3.2   Compatibility with other software products

A.3.2.1   STEP 7

You require a STEP 7 object manager "*OM SIMOCODE pro*" to integrate *SIMOCODE ES 2007+SP5* **Professional/Premium** into STEP 7. This STEP 7 object manager is offered under "Integration in STEP 7" during the course of the *SIMOCODE ES 2007+SP5* **Professional/Premium** setup.
The "*OM SIMOCODE pro*" requires as a runtime environment:
- SIMATIC STEP 7 V5.4 (or a higher version) for *SIMOCODE pro V*, *SIMOCODE pro C* and *SIMOCODE pro S.*
- SIMATIC STEP 7 V5.5 (or a higher version) for *SIMOCODE pro V (PN).*

The normal software requirements for STEP 7 also apply.

Warning:
The F Configuration Pack from V5.5+SP6 onwards is additionally required for the configuration of a PROFIsafe-capable SIMOCODE basic type in STEP7. This is included in the scope of supply of Distributed Safety from V 5.4 + SP5 and F Systems from V 6.1 onwards.
Please also observe the software prerequisites of F Configuration Pack, Distributed Safety and F systems.

A.3.2.2 SIRIUS engineering

If you want to install Switch ES Power on a PC together with ***SIMOCODE ES 2007+SP5***, you must always install Switch ES Power first. Otherwise, faults will occur in all functions using PROFIBUS (online opening via PROFIBUS, chain view, group functions).
Background: The Switch ES Power setup always installs its own components for PROFIBUS communication regardless of whether these may already be available in a current version on the PC.
If you have already encountered this problem, you must first remove all SIRIUS engineering programs and Switch ES Power, and then install them again in the correct order.

A 3.3 Online-Documentation

For information about the immediate operating and functional context, please refer to the standard Windows Help. Refer to section B, Notes concerning the documentation, in the second part of this Readme file for details about the documentation structure.

A 4   Installation

A 4.1   Installing *SIMOCODE ES 2007+SP5*

Before starting the Setup program, please close all applications (MS Word, etc.) and the "Control Panel" window. After installing **SIMOCODE ES 2007+SP5**, you may have to reboot MS Windows in order to activate all system variables.

Insert the **SIMOCODE ES 2007+SP5** CD into the drive. A menu-prompted Setup program guides you through the installation procedure for **SIMOCODE ES 2007+SP5** . The Setup program starts automatically when you insert the **SIMOCODE ES 2007+SP5** CD. If you have deactivated this function on your computer, you can start the Setup program in   MS Windows Explorer by double-clicking the SETUP.EXE program on the CD.

After starting the Setup program, you can install **SIMOCODE ES 2007+SP5**. The Setup program guides you step by step through the installation procedure. After completion of the setup program and possibly restart of your PC, you can start **SIMOCODE ES 2007+SP5** by double-clicking on the desktop symbol "**SIMOCODE ES 2007+SP5**" or, under MS Windows XP, for example, via Start -> SIRIUS engineering -> **SIMOCODE ES 2007+SP5**.

Note
> **SIMOCODE ES 2007+SP5** is registered in MS Windows XP/MS Windows 7 system
> files.
> You must not move or rename any **SIMOCODE ES 2007+SP5** files or folders using MS
> Windows tools such as Explorer, nor must you modify any **SIMOCODE ES 2007+SP5**
> data in the MS Windows registry. Making such modifications may affect program
> execution.

A 4.2   License key of *SIMOCODE ES 2007+SP5*

Before you can start working with **SIMOCODE ES 2007+SP5**, you must transfer the license key (user authorization) from USB memory stick to the computer. There are two ways of doing this:

- You will receive a prompt from the "Setup" program during installation of **SIMOCODE ES 2007+SP5** that your computer does not have a suitable license key. You can then either have the "Setup" program install the license or you can install the license manually at later time with the "Automation License Manager" program.

- If the license key cannot be installed during setup, continue the setup program without installing the license key. Then boot the computer and install the license key using the taskbar in "SIRIUS engineering\License Management\Automation License Manager".

To operate **SIMOCODE ES 2007+SP5**, you must make sure the Automation License Manager is installed.

> **Note**
> The Automation License Manager prevents the authorizations and license keys from
> being installed on invalid drives or media, such as RAM drives, diskettes or compressed
> drives (e.g. DBLSPACE). If the hard disk of a device with removable cartridge is
> registered as "Exchangeable memory medium" and not as "hard disk", it will be treated
> like a CD and cannot be used for installation of license keys.
> In the case of compressed drives, you can install on the associated host drive.
>
> Be sure to read the notes on the Automation License Manager in the ALM
> README.WRI file on the **SIMOCODE ES 2007+SP5** installation CD under "Automation
> License Manager\disk1\".
> The folder "C:\AX NF ZZ" contains hidden files. (Drive C: is the drive on which the

authorization/License Key is installed.) They include information you will need to authorize your software!
If you do not follow these instructions, you risk losing the authorization/license key permanently.

Notes regarding fault-free operation of the license key

- The USB memory stick must not be write-protected. This means that there is a risk of viruses being transferred from hard drives onto the USB memory stick. You should therefore always check your programming device / PC for viruses before installing or uninstalling a License Key.

- If you use an optimizing program that enables you to move fixed blocks of memory, only use this option once you have transferred the license key from the hard disk to the USB memory stick.

- The license key will create a cluster with a special identification on the target drive. Some inspection programs will identify this cluster as "defective". Do not attempt to restore it.

- Remember to copy the license key to USB memory stick before formatting, compressing or restoring your hard disk or before installing a new operating system.

- If a backup copy of your hard disk contains copies of license keys, there is a risk that these copies may overwrite the valid installed license keys and thus destroy them when you restore your backup data to the hard disk. To prevent a valid license key from being overwritten by a backup copy, you are strongly recommended to remove all license keys or exclude them from the backup process before you start with the backup.

The license key can be transferred to a memory medium other than a USB memory stick, such as a diskette.

Using the trial license
If no valid license key is installed for *SIMOCODE ES 2007+SP5*, a trial license key is used. This is supplied and installed by default together with *SIMOCODE ES 2007+SP5*. However, *SIMOCODE ES 2007+SP5* can only be used for 14 days with this license key. When *SIMOCODE ES 2007+SP5* is started for the first time without a valid license key, activation of the trial license key is offered.

A 4.3   Removing *SIMOCODE ES 2007+SP5*

Note
All software products must be removed in the usual MS Windows way.
Simply remove the software package (e.g. "*SIMOCODE ES 2007+SP5*"), using, for example, "Start > Control Panel > Install or remove programs" under MS Windows XP.

When you remove the software, all device drivers (for the PROFIBUS communication interfaces) remain installed. If you have not installed any other products on the PC that require these drivers, you should remove them using "Set PG/PC interface" (e.g. under MS Windows XP via Start > Settings > Control Panel > Set PG/PC interface, and click on "Select").

A 4.4   Advanced installation guide

A.4.4.1   Using a wheel mouse

When using a wheel mouse, please ensure that the drivers from the appropriate manufacturer provided with the mouse are installed. If this is not the case, the wheel's function will not always be supported by *SIMOCODE ES 2007+SP5*.

A.4.4.2 Notes concerning the use of communications cards in PCs/PGs

CP5611/CP5611 Onboard (SIMATIC NET PROFIBUS interface via PCI Bus)

You require a PC or a programming device with PCI bus to use the CP5611 card. You can then address SIMATIC stations via MPI or PROFIBUS (9.6 Kbit/s to 12 Mbit/s).

If you install **SIMOCODE ES 2007+SP5** after the CP has been inserted in the computer, the plug&play mechanism enters the CP5611 in the Device Manager of the Control Panel\System in "Other Devices". Therefore the CP is sometimes not recognized when installing **SIMOCODE ES 2007+SP5**.

In such cases, remove the CP5611 in the Device Manager after installing **SIMOCODE ES 2007+SP5** and reboot your computer.

Observe the notes in the online help under "Setting the PG/PC interface".

CP5512 (SIMATIC NET PROFIBUS interface via PC card)

A PC or a programming device with a PC card slot is required to use the CP 5512. You can then address SIMATIC stations via MPI or PROFIBUS (9.6 Kbit/s to 12 Mbit/s).

CP 5711 (SIMATIC NET PROFIBUS connection via USB 2.0)

Use of the CP 5711A requires a PC or programming device with a USB connection. This allows SIMATIC stations to be contacted via MPI or PROFIBUS (9.6 Kbit/s to 12 MBit/s).

Hardnet modules

If you use the Industrial Ethernet network card CP1613 or the PROFIBUS cards CP 5613/14, you also require the option package SIMATIC NET PC in an edition compatible with the installed STEP 7 version (see compatibility list S7KOMP_A.PDF in the "STEP 7" installation folder).

You require the SIMATIC Net software as of V6.2 (CD 11/2003) to operate CP5613_A2 and CP5614_A2.

General PC/programming device settings

Commissioning plug&play-enabled modules

To start up the plug&play-enabled modules (e.g. CP5512, CP 5611 und CP5711), the following procedure is recommended under MS Windows XP/MS Windows 7:

1. Install **SIMOCODE ES 2007+SP5**.

2. Exit MS Windows, turn off the PC and insert the card. The CP 5512 can also be inserted during operation.

3. The communications card is automatically installed after switching on again (or plugging in the CP5512).

4. Under Windows XP, the Hardware Wizard is displayed. In the first dialog shown, select the option "No, not this time". Confirm all following dialog boxes (do not click on CANCEL).

5. Then check the settings or select the desired interface configuration in "Set PG/PC interface" (Control Panel **> Set PG/PC interface**).

Observe the notes in the online help under "Setting the PG/PC interface".

When **SIMOCODE ES 2007+SP5** is installed on programming devices, the communication drivers are installed automatically and the default settings are accepted.

Setting of interrupt and address

MS Windows XP/MS Windows 7

The settings for address area and interrupt cannot be modified under MS Windows XP or MS Windows 7. The set values can be viewed as follows: Open "Administrative Tools" and then "System" under, say, MS Windows XP via **Start > Settings > Control Panel > Administrative Tools**. You can view the values of the individual modules under Device Manager, and you can see the assigned resources under System Information > Hardware resources.

In the BIOS of the PC, a specific interrupt and address area can be reserved for PCI components. Please consult your PC or BIOS manufacturer.

Operating networks exclusively with passive nodes (slaves)

Before you start working with your programming device/PC on a network to which only slaves (passive nodes) are currently connected, you must activate the option "PG/PC is only master on the bus". Otherwise, your programming device/PC will remain inactive. To do this, proceed as follows:

1. Starten "Set PG/PC interface" (e.g. under MS Windows XP via **Start > Settings > Control Panel > Set PG/PC interface**).
2. Display the properties of the module parameters used.
3. Activate the option "PG/PC is only master on the bus" on the dialog page displayed.
4. Close the dialog box again

Once you have finished working on this network, you should deactivate the option. The network is thus protected against faults which can occur if the PROFIBUS/MPI cable is inserted when the interface of your programming device / PC is still running.

A.4.4.3 S7 TeleService

The "S7 Teleservice" function can only be used with **SIMOCODE ES 2007+SP5** via MPI when using the TS adapter I or II.

A.4.4.4 GSD

The GSD files for all supported PROFIBUS devices are available for downloading at the following location: http://support.automation.siemens.com/WW/view/en/113630

The GSD files for all supported PROFINET devices are available for downloading at the following location: http://support.automation.siemens.com/WW/view/en/38702563

Please refer to "Installing a GSD" in the documentation for your configuration software (e.g. "STEP 7") for more information about installing GSD.

B   Release Notes
The information and notes contained here are more up-to-date and therefore valid compared with information in the online help.

B 1   Enhancements and changes since earlier versions

B 1.1   What's new in SIMOCODE ES 2007 + SP2

The following operating systems are additionally supported:
*   MS Windows 7

The following expansion modules are additionally supported:
*   DM-F LOCAL
*   DM-F PROFIsafe

B 1.2   What's new in SIMOCODE ES 2007 + SP3

The following operating systems are additionally supported:
*   Windows 7 + SP1 Professional
*   Windows 7 + SP1 Enterprise
*   Windows 7 + SP1 Ultimate
*   Windows 7 64 Bit Professional
*   Windows 7 64 Bit Enterprise
*   Windows 7 64 Bit Ultimate
*   Windows 7 64 Bit + SP1 Professional
*   Windows 7 64 Bit + SP1 Enterprise
*   Windows 7 64 Bit + SP1 Ultimate

B 1.3   What's new in SIMOCODE ES 2007 + SP4

The following basic unit is additionally supported:
*   SIMOCODE pro V PN (BU3)

B 1.4   What's new in SIMOCODE ES 2007 + SP5

The following basic unit is additionally supported:
*   SIMOCODE pro S (BU0)

The following expansion modules are additionally supported:
*   Multifunction Module
*   Earth Fault Module – 3UF7510

B 2   Common errors

Problems with CP5613/5614
Older versions of the SIMATIC NET software cause problems with DP standard diagnostics via CP5613/5614.

Symptoms:
*   In chain view, all found DP slaves are displayed scored-through in red.
*   In the case of functions that establish an online connection (e.g. "Open online"), you always receive a message that the diagnostics frame could not be read. The online connection is then established despite this.

Remedy:

- Install the SIMATIC NET CD 2005 or an even more up-to-date version.

B 3   Notes concerning the documentation

The *SIMOCODE ES 2007+SP5* documentation is available via the online help.

SIMOCODE ES 2007+SP5 help
You can activate "*SIMOCODE ES 2007+SP5* help" by choosing Help > Help Topics.
"*SIMOCODE ES 2007+SP5* help" contains all the essential information you need to use the
SIMOCODE ES 2007+SP5 software.

B 4   Special Characteristics of the MS Windows 7 Operating System

Note that MS Windows 7 offers an extended protection concept.

This means that access to protected areas of the file system, such as the directories
"Programs" and "Windows", is virtualized , Your data will be forwarded by the operating
system in such a case to non-protected areas.

Note that the software under MS Windows 7 is no longer available at "**Start menu> SIRIUS
engineering**", but under "**Start menu > Programs > Siemens Automation > SIRIUS
engineering** " This change is caused by the current architecture of MS Window 7. Any
information listed in the documentation and online help has to be interpreted accordingly.

Setting the access rights in the operating system
Important changes have been made to the MS Windows 7 safety concept in *SIMOCODE ES
2007+SP5*. A user group "Siemens TIA Engineer" will be created under MS Windows 7. The
installer will automatically be added to this user group. Users from this user group have
additional rights which are necessary for starting the application and for configuring the
programming device / PC interface.

For manual IP configuration of the PGs (for PROFINET without DHCP), the user must also
be added to the preinstalled user group "Network configuration operators."
The administrator has to assign these user rights.

User account control

Operation of *SIMOCODE ES 2007+SP5* with MS Windows 7 is possible using User Account
Control (UAC) that is either activated (3 levels possible) or deactivated (without any
notifications).

After changing User Account Control (e.g. by changing the UAC of a program installed by
the system administrator), it must be observed that some settings made by the user will no
longer be present. For example, the position and size of the application windows are reset to
their old (default) values.

Online connections via the SIMATIC network path require an existing installation of STEP 7.
Please observe the notes on User Account Control in the corresponding STEP 7
documentation.

Set up domain global user group "Siemens TIA Engineer"
For operation in a domain, you can create a domain global user group that will be mapped to
the local user groups "Siemens TIA Engineer" and "Network configuration operators".
The following prerequisites will have to be met:
- The domain administrator has created a domain global user group.

- The domain administrator has added users to the domain global user group whose login will be used for access to **SIMOCODE ES 2007+SP5**.

Setting the PG/PC interface
You need at least "Siemens TIA-Engineer" rights to reconfigure the PG/PC interface.

C Technical Assistance

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http://www.siemens.com/industrial-controls/technical-assistance