SIEMENS

SIMATIC NET

PC software
SIMATIC NET PC Software V13

Installation Manual

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Legal information

Warning notice system

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

⚠ DANGER

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

⚠ WARNING

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

⚠ CAUTION

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

NOTICE

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

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

Qualified Personnel

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

Proper use of Siemens products

Note the following:

⚠ WARNING

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

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

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Introduction

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SIMATIC NET PC software products

Thank you for choosing a communications product from SIMATIC NET. You have bought an innovative product that combines fast access to automation systems with simple installation and commissioning.

Purpose of this document

This document describes how to install the SIMATIC NET PC software products on your PG/PC.

Validity of this installation manual

This installation manual relates to the products on the DVD "SIMATIC NET PC Software V13".

The installation of the software with VMware ESXi is described in sections 3 and 4.

The installation of STEP 7 Professional V13 (TIA Portal) is described on the STEP 7 data medium.

The information in this manual regarding calling applications using the Start menu applies to Windows 7 SP1 and Windows Server 2008 R2.

Installation of the SIMATIC NET PC software products

2

2.1 Requirements and notes

User experience

To install the SIMATIC NET PC software products, you need to have experience of installing software on the operating system you are using.

To configure the communications modules, you should have experience and knowledge of the following:

- Structure of the plant involved.
- Configuration of the plant.

You should only undertake the installation and configuration described below if you have this knowledge.

2.1.1 Required privileges

Privileges for installation

To install the product, you require administrator privileges.

2.1.2 Requirements and notes relating to the software

Operating systems

The SIMATIC NET PC software products are intended for operation with Microsoft Windows operating systems; for details, refer to the section "Technical data (Page 59)".

Update DVD for which versions?

"SIMATIC NET PC Software, V13" is an update DVD for the following software versions:

- "SIMATIC NET PC Software V12 SP2" with Windows 7 SP1, Windows 8.1 (64-bit), Windows Server 2008 R2 SP1 and Windows Server 2012 R2

The list of products on the back of the DVD case gives you an overview of the products available.

Software licenses

Note

To run the SIMATIC NET products, you require one software license per PC and product.

Example: If you have installed the product "Hardnet IE S7" on a PC and operate three CP 1623 modules with it , you require only one software license.

Example 2: If you use PROFIBUS SOFTNET S7 on a PC in three virtual machines, you require three licenses.

Screen savers

Using a screen saver during operation can cause system overload.

Some screen savers do not release parts of memory again. This leads to a continuous reduction in usable memory.

Virus scanners

The use of a virus scanner during runtime can impair or severely slow down communication. For this reason, dynamic virus protection in particular using gatekeeper mechanisms is not advisable.

The following virus scanners have been tested in conjunction with the SIMATIC NET PC software products (the default settings of the virus scanners were not changed for the test):

Virus scanner name	Tested with operating system
McAfee AntiVirus Plus 2015	• Windows 7 SP1 (32-bit and 64-bit) • Windows 8.1 (64-bit)
Norton Security 2015	• Windows 7 SP1 (32-bit and 64-bit) • Windows 8.1 (64-bit)
Kaspersky AntiVirus 2015	• Windows 7 SP1 (32-bit and 64-bit) • Windows 8.1 (64-bit)
TrendMicro OfficeScan 10.6	• Windows 7 SP1 (32-bit and 64-bit) • Windows 8.1 (64-bit) • Windows Server 2008 R2 SP1 • Windows Server 2012 R2

Note

If you use a virus scanner, make sure that the computer has enough system resources.

Restore points

Note

The "SIMATIC NET PC Software" DVD consists of several individual installation packages and after they have been installed, the Microsoft operating systems create restore points.

It is pointless to restore to an interim status (to the status of a partially installed "SIMATIC NET PC Software" DVD)!

2.1.3 Requirements and notes relating to the hardware

Note

We recommend that you first install the software and license as described in this documentation and install the communications processors afterwards.

Bus collisions after reinstallation

If two PROFIBUS communications processors are installed in one computer, when the computer starts up, both communications modules are assigned bus address 0. This causes collisions if both modules are connected to the same bus.

Solution
Set different bus addresses for the communications processors before attaching to the bus.

Plug and play

If the plug-and-play mechanism does not find the driver after installing the communications processor and then rebooting the computer, you will need to start the search for drivers manually. Follow the steps outlined below:

1. Restart your computer.
2. Open the Device Manager.
3. Select the top expression in the list box (the local PC) and then the menu command "Action" > "Scan for hardware changes".
4. Confirm all the following dialogs with "Next".

Note

If a question appears in this dialog box asking whether or not you want to search for suitable drivers on the Internet, select "No, not this time" and then click "Next".

2.1.4 Steps in installation

Description

Follow the instructions below step by step to install the SIMATIC NET PC software products.

Note

During the installation, you will have to restart your computer several times depending on its configuration and the software you are installing.

These restarts are unavoidable parts of the installation process!

Following a restart on your computer, the installation will continue automatically with the next step. You only need to follow the installation instructions in this description. No further measures are necessary.

Note

Make sure that the same user is logged on following a restart.

Chinese, Korean or Japanese installation

The installation dialog of the SIMATIC NET PC software offers you the choice of "German" or "English". If you want to install on an Asiatic Windows platform, select English.

2.2 Procedure

Step 1 - Registering with the operating system

It is only possible to install SIMATIC NET PC software products if you have administrator privileges.

You should therefore log in with the operating system using an account belonging to the group of administrators.

Step 2 - Closing open applications

Close all active programs. This also includes all virus scanners.

Step 3 - Reading SIMATIC NET documents

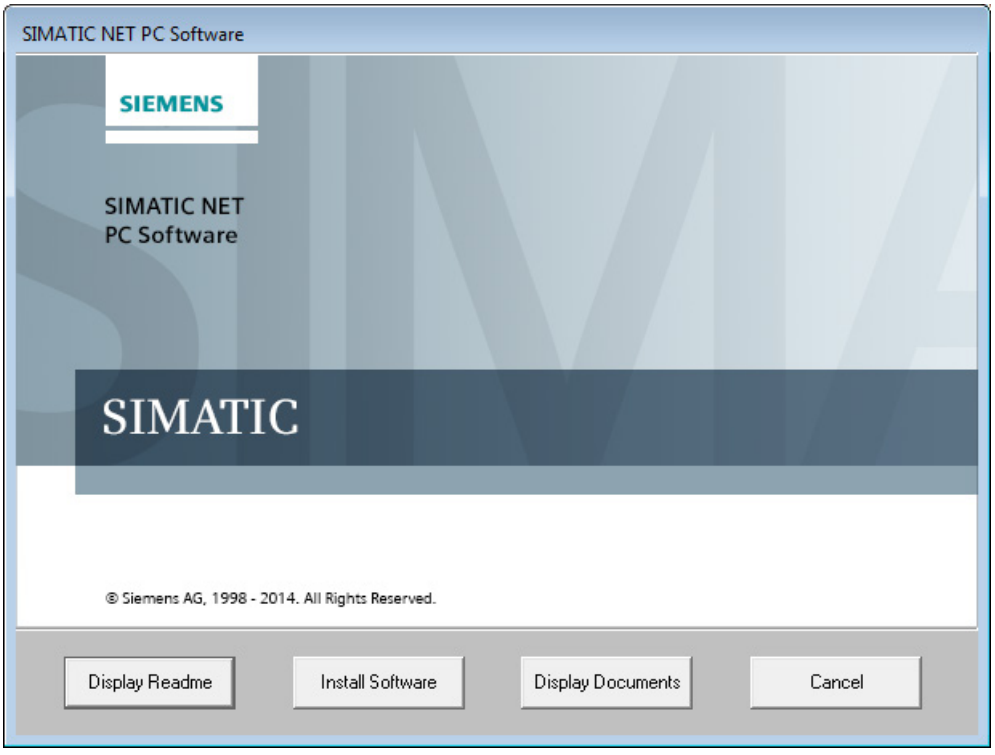
Supplied information
Please read the information that ships along with the product. This is important to you because ...

- ... it may need to be (or at least should be) taken into account during installation.
- ... it may support you when configuring the hardware.
- ... it will provide you with instructions on configuring your specific product that are not contained in the "Industrial Communication for PG/PC" manual.

Descriptions of the SIMATIC NET products
You will find descriptions of the products of this "SIMATIC NET PC Software" on a separate data medium that ships with "SIMATIC NET PC Software". This data medium contains the SIMATIC NET product documentation (Manual Collection).

Step 4 - Inserting the "SIMATIC NET PC Software" DVD

Insert the "SIMATIC NET PC Software V13" DVD and wait until the following dialog box appears:



Note

If this dialog box does not appear at the latest after 30 seconds, the autostart function of your computer is not activated.

In this case, start the "setup.exe" program in the main folder on the "SIMATIC NET PC Software" DVD.

Step 5 - Reading the readme file

The readme file contains the latest information on the SIMATIC NET PC products.

Click the "Display Readme" button and read the information displayed.

Step 6 - Installing software

Click the "Install Software" button.

Follow the instructions in the dialog boxes to select the language you require and to accept the license conditions.

Note

If you want to install on an Asiatic Windows platform, select English.

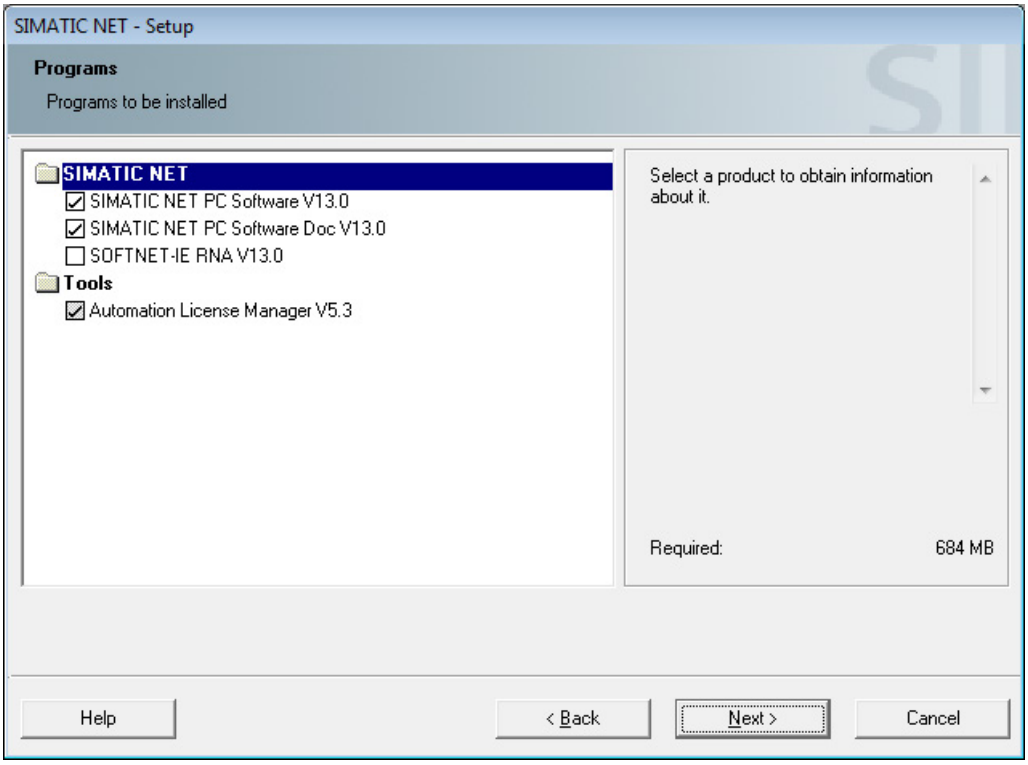
Note

Depending on the operating system, there will be one or two dialog boxes relating to security settings and the energy saving mode that you can confirm with the "Install Software" button if you want the installation to be performed.

Step 7 - Selecting products

The "SIMATIC NET - Setup" dialog box appears.

The information in the figure below is an example and may differ slightly from the information actually shown on the screen.



Description and procedure

The following table describes the programs in the list box shown above. Follow the instructions and read the notes.

Programs to be installed	Description and procedure
Automation License Manager	You can install or uninstall license keys with the "Automation License Manager".
SIMATIC NET PC Software	If the check box is selected, the SIMATIC NET PC software products are all installed at once.
SIMATIC NET PC Software Doc	Select this check box if you want to install the documents for installation and commissioning on your PC.
SOFTNET-IE RNA V13	The "SOFTNET-IE RNA" software allows the integration of PCs in redundant, parallel Ethernet structures based on the Parallel Redundancy Protocol (PRP) functionality. Select this check box if you want to install "SOFTNET-IE RNA". When using SOFTNET-IE RNA, you can only use the CP 1612 A2 or gigabit Ethernet network adapters that support long Ethernet frames as the communications partner. Support of long frames (Jumbo Frames) also needs to be activated.

Note

SIMATIC NET PC software products from an already installed SIMATIC NET PC software will be uninstalled automatically before the software products on this DVD are installed. The configuration data is retained.

You will see a further warning on the screen immediately before the previous software products are uninstalled.

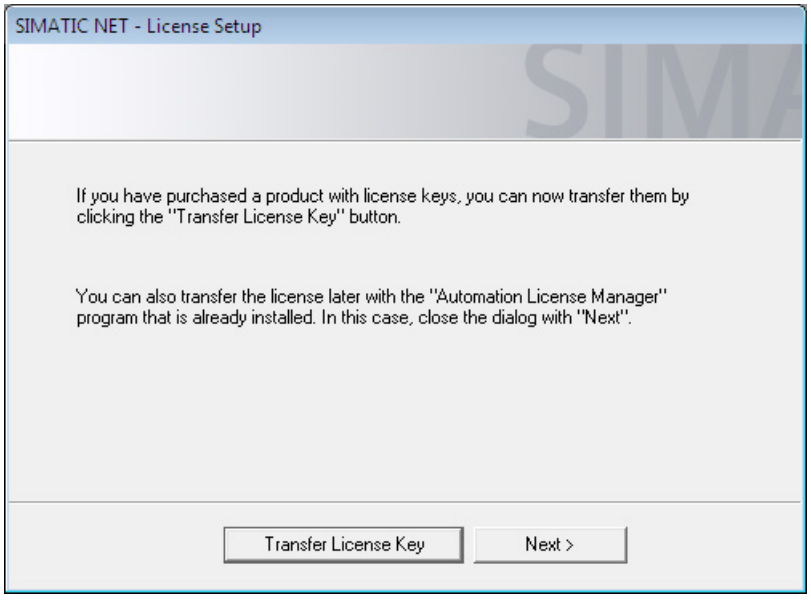
Then click the "Next" button.

Reaction: The software installation starts. This can take some time.

Step 8 - Starting the transfer of license keys

License keys and upgrade license keys
Current license keys are required for the products of the "SIMATIC NET PC Software" DVD. These ship with the product on a USB stick and must be transferred to your computer.

License keys
In the "SIMATIC NET - License Setup", you can decide whether or not the license keys are transferred now during the installation (the "Automation License Manager" is then started) or later. You start the transfer dialog with the "Transfer License Key" button.



Step 9 - Transferring license keys

You can manage the license keys for running SIMATIC NET programs with the "Automation License Manager".

Note

For more detailed information on the "Automation License Manager", refer to the online help for the program.

Transferring license keys

With SIMATIC NET PC products, follow the steps below to transfer license keys to your computer:

Note

Before you can perform the next steps, the "Automation License Manager" must be started if this has not already started automatically.

1. Select the data medium containing the required license key in the left-hand list (navigation area).
2. In the right-hand list (object area), select the license keys you want to transfer.
3. Click on the menu command "License Key" > "Transfer..." > "Transfer License Key" dialog box.
4. Select the local drive of your computer to which you want to transfer the license keys and confirm with "OK".

   Reaction: The license keys are transferred.

Upgrade of older license keys

With authorizations of older SIMATIC products, you can use the upgrade function with new "Upgrade" license keys.

1. As described above, transfer the "upgrade" license key to the data medium on which the authorization is located.
2. Select the authorization of the older SIMATIC product and use the "Upgrade" function (menu command "License Key" > "Upgrade...").

   Reaction: The authorization and the upgrade license key disappear and a current license key appears instead.

After you have transferred all necessary license keys, close the "Automation License Manager" program.

Reaction: The SIMATIC NET installation continues automatically.

Step 10 - Completing the installation

After you have installed the license keys, the computer reports successful installation of the SIMATIC NET PC products.

The computer is restarted on completion of the installation.

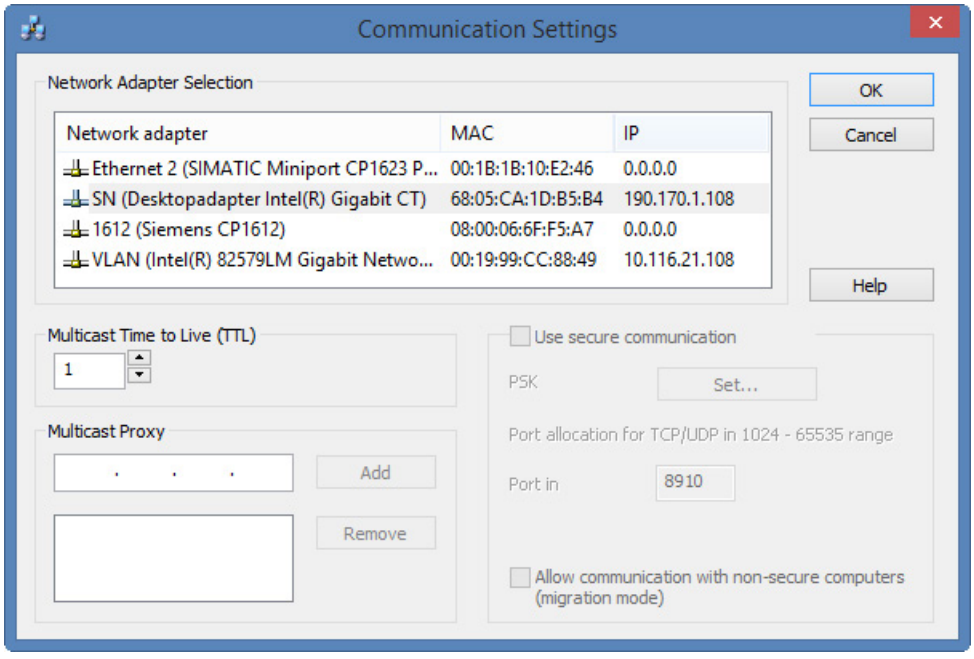
Note

Make sure that the same user is logged on following a restart.

If there is more than one network adapter installed on the PC, the "Selection of the terminal bus" dialog box opens.

Note

If the Ethernet communications modules have not yet been installed, close the dialog with "Cancel" and continue at "Step 11".
Once you have completed "Step 11", the following dialog box appears (see figure).



Here, select the communications module via which this PC will be configured from another PC with STEP 7 and confirm with "OK" (other parameters in this dialog box e.g. "TTL" are irrelevant here and must simply be accepted unchanged).

Note

To transfer a configuration with STEP 7 to a destination PC, a communications module is required in the destination PC that can receive the configuration data.

If several Ethernet modules are displayed, select the one that is connected to the same network and subnet as STEP 7.

Step 11 - Installing communications modules

To install the communications modules, follow the steps below:

1. Read the installation manual or operating instructions for the communications module and any other relevant documentation.
2. Install the communications modules as explained.
3. Restart your computer.

Step 12 - Starting configuration

After restarting the computer, you will need to log on with administrator privileges. It is possible that the Microsoft "Found New Hardware Wizard" will appear.

You will then be asked whether or not you want to install the software automatically. Select this option, click "Next" and close the wizard when it has completed its work with "Finish".

Your computer now contains the SIMATIC NET communications software that still needs to be configured.

The steps involved are described in the "Commissioning PC Stations" manual.

Installing further software components

Please read the two main sections "Installing the OPC XML DA Web Services (Page 41)" and "SNMP service, SNMP OPC MIB compiler and profile files (Page 49)" on the installation of optional software components.

Installation and configuration with VMware vSphere 3

This section describes the requirements for installation as well as the installation of the "SIMATIC NET PC Software" on the "VMware vSphere Hypervisor ESXi 5.1" platform and "VMware vSphere Hypervisor ESXi 5.5 Update 2".

3.1 Requirements and notes

3.1.1 User experience

To install and operate the SIMATIC NET PC software products with "VMware vSphere Hypervisor ESXi 5.1" and "VMware vSphere Hypervisor ESXi 5.5 Update 2", you require experience of the product "VMware vSphere".

Information on "VMware vSphere" (http://www.vmware.com/)

To configure the communications modules, you should have experience and knowledge of the following:

- Structure of the plant involved
- Configuration of the plant
- "SIMATIC NET PC Software" (see "Further Information (Page 61)")

Note

You should only undertake the installation and configuration described below if you have this knowledge.

See also

Siemens Support pages (http://support.automation.siemens.com)

3.1.2 Requirements and notes relating to the software

Operation on a VMware ESXi server

The "SIMATIC NET PC Software V13" is suitable for operation on virtual machines with the VMware server operating system VMware vSphere.

Note the specific product and module releases in the following sections.

Released guest operating systems

You will find a list with the guest operating systems compatible with the ESXi 5.1 and ESXi 5.5 servers and that are suitable for operation as a PC station in the section "Technical data (Page 59)".

NOTICE
Configuration of passthrough for vSphere 5.5 Update 2 The PCIe modules for use in Passthrough are configured in the vSphere WebClient.

NOTICE
Update for PCI/PCIe modules VMware vSphere 5.1 Update 1 (build 1065491) is an absolute necessity when using SIMATIC NET CPs.

Note

UEFI/EFI BIOS

"SIMATIC NET PC Software" does not support installations with UEFI/EFI BIOS for servers guest operating systems.

Notes on licenses

Note

A license must be obtained for each virtual machine (VM). If, for example, you want to operate 5 VMs with the S7 protocol, you need to purchase the product that provides the S7 protocol functionality 5 times. The license key (or keys) then needs to be installed on the VM in which the functionality is used.

3.1.3 Requirements and notes relating to the hardware

You will find a list with the server hardware compatible with the ESXi server on the Web page of VMware.

VMware compatibility list (http://www.vmware.com/resources/compatibility/search.php)

The requirements and restrictions for operation without virtualization also apply.

Minimum requirements of SIMATIC NET for a VM (virtual machine):

- 2.4 GHz (2 cores)
- 2 GB RAM (for 32-bit)/4 GB RAM (for 64-bit)

3.2 VMware passthrough

If the SIMATIC NET communication is exclusively via virtual networks, you can skip this section.

Following installation, the VMware ESXi server supports only standard hardware (main boards, processors, graphics cards, network adapters, ...) from the compatibility list of VMware (refer to the section "Requirements and notes relating to the hardware (Page 20)").

Assuming that the server hardware supports "Intel® Virtualization Technology (Intel® VT) for Directed I/O (Intel VT-d)" and this is activated in the BIOS, modules can be passed through to the virtual machine. You can install and use these modules with the drivers of the vendor.

For this method, VMware uses the terms "direct path I/O" or "passthrough". In the remainder of this document, only the term "passthrough" will be used.

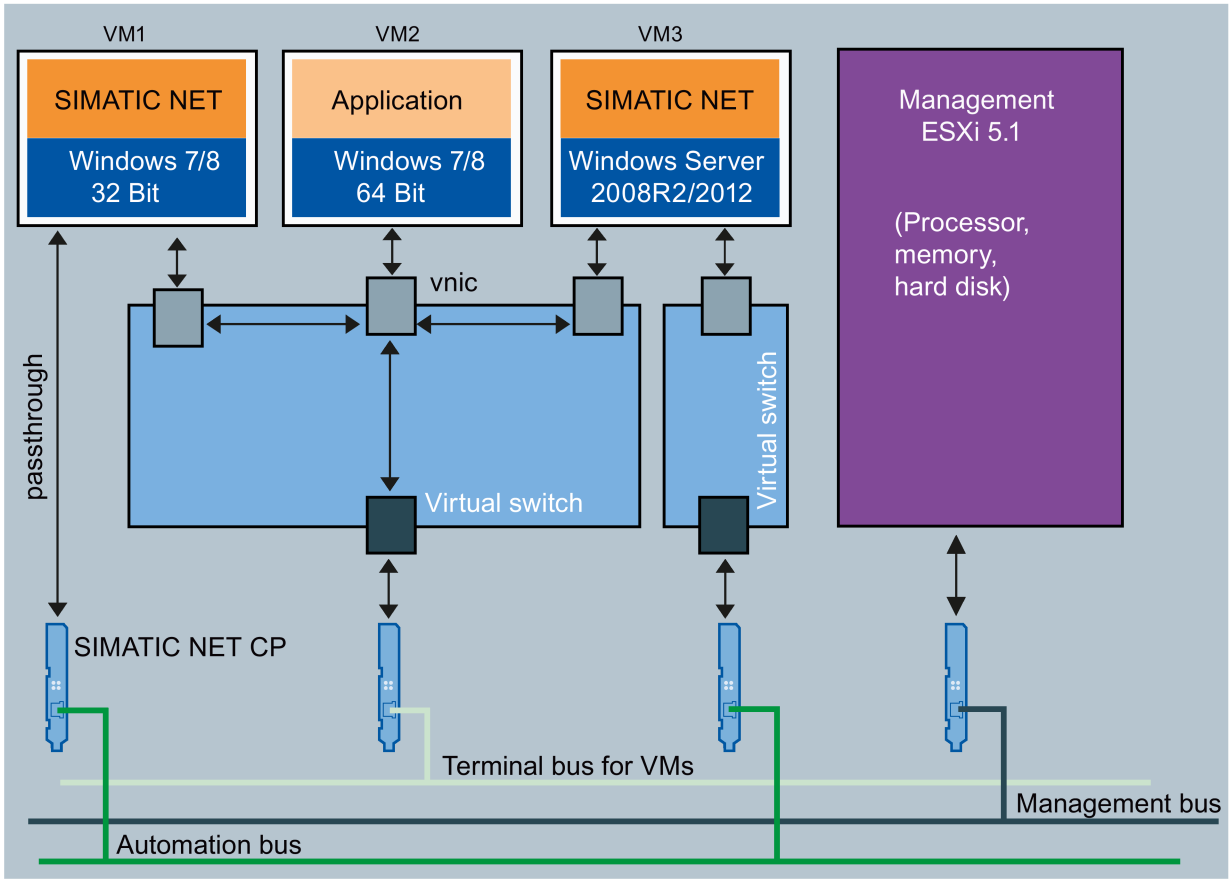


Figure 3-1 Division of the Ethernet networks

Figure 3-1 shows a suggestion for dividing up the Ethernet networks based on their tasks:

- VM1 uses a HARDNET module (e.g. CP 1623) for the automation network.
- VM2 is only connected to one virtual adapter on a separate virtual switch, at the same time it shares a real adapter with the other two virtual machines.

- VM3 uses a virtual Ethernet interface (SOFTNET IE) with a separate virtual switch to the automation network.
- The management of the ESXi server also uses its own virtual switch, for example to allow a backup to be copied in without repercussions for the system.
- The terminal bus is intended for the connection of "Remote Desktop Service".

3.2.1 SIMATIC NET modules released for ESXi

VMware vSphere Hypervisor ESXi 5.1

The following SIMATIC NET modules have been released for passthrough operation with VMware vSphere Hypervisor ESXi 5.1:

PCIe Ethernet modules:

- CP 1623
- CP 1628

PCIe PROFIBUS modules:

- CP 5622
- CP 5623

USB PROFIBUS module:

- CP 5711

VMware vSphere Hypervisor ESXi 5.5 Update 2

The following SIMATIC NET modules have been released for passthrough operation with VMware vSphere Hypervisor ESXi 5.5 Update 2:

PCIe Ethernet modules:

- CP 1623 (only 1 CP)
- CP 1628 (only 1 CP)

USB PROFIBUS module:

- CP 5711

3.2.2 Setting up SIMATIC NET modules for passthrough with the vSphere Client

To be able to use SIMATIC NET modules for passthrough operation, the following steps are necessary:

Step 1 - enabling Intel Virtualization Technology in the BIOS of the server

Requirement:
The server hardware supports the "Intel® Virtualization Technology (VT-d)".

You will find information as to whether your hardware supports "Intel® Virtualization Technology (VT-d)" on the following Intel website:

Intel Website (http://www.intel.com/support/motherboards/desktop/sb/CS-030922.htm?wapkw=(vt-d)).

Step 2 -configuring the module for passthrough

Follow the steps below to assign a module to a VM using passthrough:

1. Start the vSphere client.
2. Click on the server in the navigation tree on the left.
3. Click on the "Configuration" tab.
4. Click on "Advanced Settings" in the small "Hardware" dialog window.
5. Right-click on "Configure passthrough..." above the large dialog window if no modules have yet been marked for passthrough mode. If modules have already been marked for passthrough, click "Edit...".

   Reaction: The "Mark devices for passthrough" dialog box opens.

6. Select one or more modules based on their device ID/vendor ID and subdevice ID/subvendor ID.

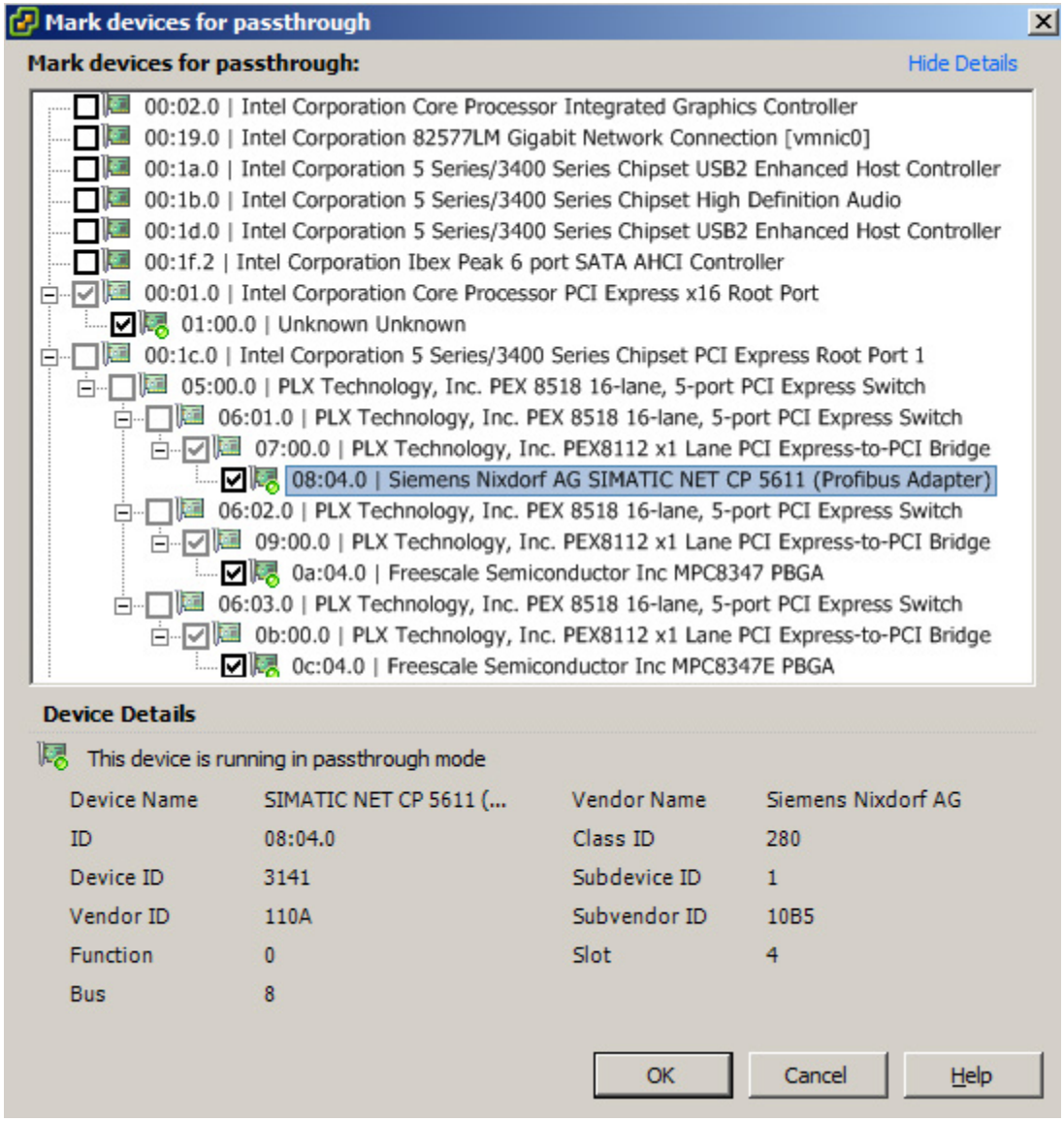


Figure 3-2 Selecting modules for passthrough with the vSphere Client

7. Confirm your entries with "OK".
8. Restart the ESXi server to activate the passthrough configuration.

The following table shows the device IDs, vendor IDs, subdevice IDs, subvendor IDs and display names for SIMATIC NET modules:

Table 3- 1 Assignment of the IDs

Module	Device ID / Vendor ID	Subdevice ID / Subvendor ID	Display name Passthrough configuration
CP 5622	407E/110A	407E/110A	Unknown Unknown
CP 5623	4069 / 110A	4069 / 110A	Unknown Unknown
CP 1623	0085/1957	4046 / 110A	Freescale Semiconductor Inc MPC 8347 PBGA
CP 1628	0084/1957	4074 / 110A	Freescale Semiconductor Inc MPC 8347E PBGA

3.2.3 Setting up SIMATIC NET modules for passthrough with the vSphere Web Client

Step 1 - enabling Intel Virtualization Technology in the BIOS of the server

Requirement:
The server hardware supports the "Intel® Virtualization Technology (VT-d)".

You will find information as to whether your hardware supports "Intel® Virtualization Technology (VT-d)" on the following Intel website:

Intel Website (http://www.intel.com/support/motherboards/desktop/sb/CS-030922.htm?wapkw=(vt-d)).

Step 2 -configuring the module for passthrough

Follow the steps below to assign a module to a VM using passthrough:

1. Start the vSphere WebClient.
2. Go to the server in the navigation tree on the left.
3. Click the "Manage > Settings > Hardware > PCI Devices" tab.
4. Click on the symbol to edit the hardware.

5. Select one or more modules based on their device ID/vendor ID and subdevice ID/subvendor ID.

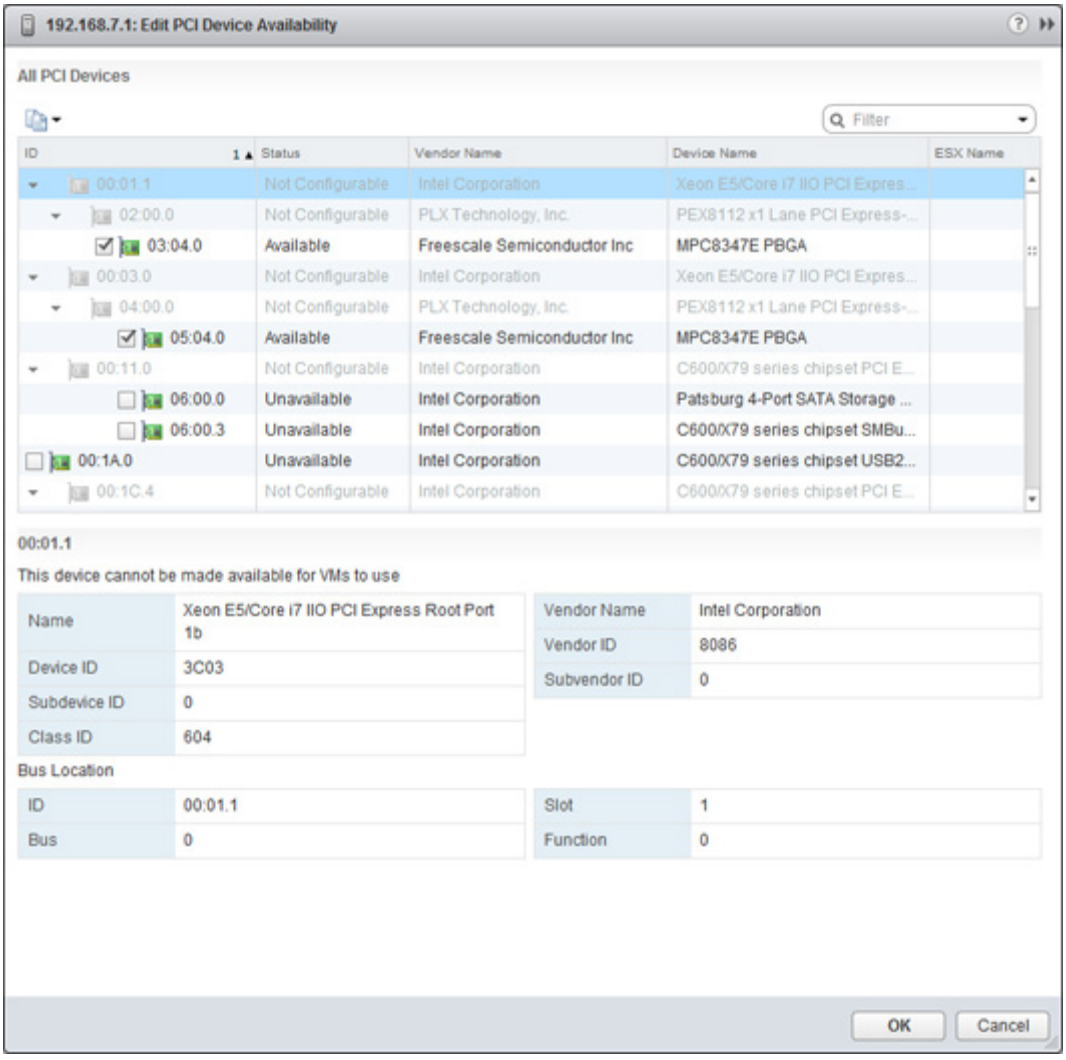


Figure 3-3 Selecting modules for passthrough with the vSphere WebClient

6. Save the entry by clicking the "OK" button.
7. Restart the ESXi server to activate the passthrough configuration.

3.3 Installation of the SIMATIC NET PC software in a virtual machine

To install the "SIMATIC NET PC Software V13", follow the steps described in the section "Installation of the SIMATIC NET PC software products (Page 7)".

Recommended procedure for installation

To reduce the number of restarts of virtual machines and the ESXi server required during installation, follow the steps below when commissioning SIMATIC NET modules with VMware passthrough:

1. Install the required SIMATIC NET modules in the ESXi server.
2. Start the ESXi server.
3. Select the required passthrough modules in the server settings (see section "Setting up SIMATIC NET modules for passthrough with the vSphere Client (Page 23)").
4. Restart the ESXi server.
5. Install the "SIMATIC NET PC software" in the required virtual machine.
6. Shut down the operating system of the virtual machine.
7. Add the relevant module in the settings of the virtual machine.
8. Restart the virtual machine.

3.4 Upgrade

3.4.1 Upgrade procedure SIMATIC NET

The "SIMATIC NET PC Software V13" has been released only for use with VMware vSphere Hypervisor ESXi 5.1, to upgrade from "SIMATIC NET PC Software V12 SP2 to "SIMATIC NET PC Software V13", the ESXi server must first be updated to VMware vSphere 5.1 Update 1.

1. Run the Hypervisor update to vSphere 5.1 Update 1 (build 1065491).

NOTICE
Update for PCI/PCIe modules Operation of SIMATIC NET modules is possible only with vSphere 5.1 Update 1.

2. Following the server upgrade, update the virtual machines. To do this, the current VMware Tools must be installed on the virtual machines.
   SIMATIC NET communication has been released for virtual machines with version "vmx-09".
3. Then install the "SIMATIC NET PC Software V13".

3.4.2 Upgrading Hypervisor

"SIMATIC NET PC Software, V13" has been released for VMware vSphere Hypervisor ESXi 5.5 Update 2.
Follow the steps below to upgrade your server:

1. Make sure that you do not use any PROFIBUS module in the passthrough, otherwise a host upgrade is not allowed.
2. Update your "SIMATIC NET PC Software" to version V13
3. Shut down all virtual machines
4. Install the upgrade to VMware vSphere Hypervisor ESXi 5.5 Update 2.

NOTICE
Loss of the connection to the management
When replacing PCIe modules, it is possible that the connection to the management network will be lost.
Check the active network card in the console of the server and if necessary specify the network card to be used.

3.5 Notes and restrictions

3.5.1 VMware vSphere vMotion

"vMotion" is the term used by VMware for moving virtual machines from one server to another during operation.

vMotion is not possible if modules are used in passthrough mode in the relevant VM.

vMotion has been released for operation of SOFTNET-IE S7 via the virtual network adapter E1000.

3.5.2 Options for operating the virtual machines

The following options for operating virtual machines were tested and released:

- Microsoft Remote Desktop connection

See also the notes in the readme of Remote Desktop and Terminal Services.

Note

Operator control restriction

A virtual machine must not be operated from more than one console at any one time.

Make sure that the connection between the Remote PC and VM is not interrupted.

When using Remote Desktop, the connection must be established as an administrator to be able to use the full range of functions of the "SIMATIC NET PC Software". (Call on the client: mstsc.exe /admin (as of Windows Vista) or mstsc /console (up to Windows XP))

3.5.3 Intel SR-IOV

SR-IOV stands for "Single Route I/O Virtualization" and allows several VMs direct access to a PCIe device at the same time.

The use of SR-IOV has not been released for SIMATIC NET communication.

3.5.4 Configuration of the MAC address in STEP 7 projects

The automatically assigned MAC address of the virtual network adapter used for SIMATIC NET communication must not be changed.

For this reason, the MAC address of the virtual network adapter to be used must be configured in the STEP 7 project.

Configuration of the vCenter server environment and virtual machines for use of SIMATIC NET

4

Note

The settings described below can also be made with the vSphere WebClient.

To use the "SIMATIC NET PC Software" to create and manage the virtual machines, the vSphere WebClient is required.

4.1 Configuration of the virtual Standard Switch (vSS)

For SIMATIC NET communication via SoftNet Ethernet products, a separate virtual Standard Switch (vSS) must be used (see Figure 3-1, Division of the Ethernet networks).

Configuring a VMkernel port for server management tasks on this switch (vSS) is not permitted.

NOTICE
SIMATIC NET communication is not released for the virtual Distributed Switch (vDS).

To be able to use SIMATIC NET communication via vSS, the following settings must be made in the properties of the vSwitch and the port groups.

NOTICE
The settings can be specified separately for the vSwitch, individual port groups or individual VMkernel ports. Remember that the settings for the port group/VMkernel port overwrite the settings on the vSwitch and therefore have priority.

You can open the properties as follows:

1. Open the vSphere client.
2. Click on the server in the navigation tree on the left.
3. Click on the "Configuration" tab.
4. Click "Network" in the small "Hardware" dialog window.

5. To configure the network, click "Properties…" on the right above the network.
6. In the menu on the left, select the port group for the created network (the settings can be seen in the right-hand column, see Figure 4-1).

To change the settings, click the "Edit…" button at the bottom left.
The properties dialog and the settings to be made are explained in the following sections.

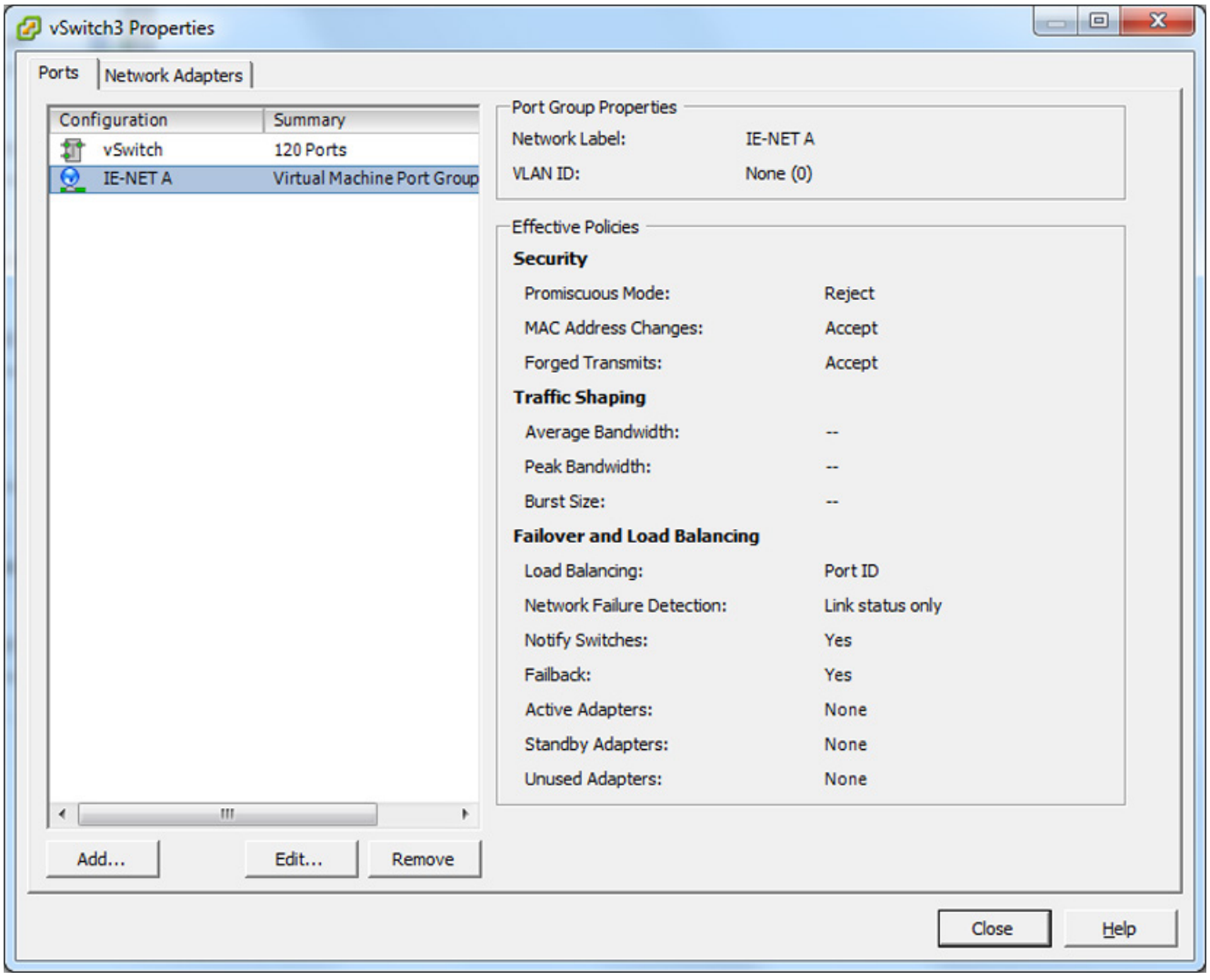


Figure 4-1 Selecting the port group in the properties of the vSwitch

4.1.1 General

The name of the port group is assigned on this page. This name is the name of the network connection that can be selected in the "Properties of virtual machines".

The default setting for VLAN "None (0)" must be retained.

4.1.2 Security

For SIMATIC NET communication, the default settings for security must be retained.

- Promiscuous Mode: "Reject"
- MAC Address Changes: "Accept"
- Forged Transmits: "Accept"

4.1.3 Traffic Shaping

The VMware function "Traffic Shaping" allows central and distributed restriction of the usable bandwidth.

The VMware function "Traffic Shaping" has not been released for the SIMATIC NET PC Software V13.

The default setting "Disabled" must be retained for "Traffic Shaping".

4.1.4 NIC Teaming

The settings in the "NIC Teaming" tab allow the settings for load balancing and failover configuration.

The default settings "Disabled" must be retained for NIC teaming.

NOTICE
The server settings for assigning the MAC addresses must not be changed when using SIMATIC NET communication. This involves the assignment type and the VMware OUI value (Organizationally Unique Identifier). The default values are as follows: Assignment type: "VMware OUI assignment" VMware OUI: for example "00:50:56" :xx:xx:xx

4.2 Configuration of the virtual machine

4.2.1 Hardware

Note

1:1 assignment between module and VM recommended

If a module marked for passthrough is assigned to several VMs, only one VM can be started because the module can only be operated exclusively by one VM. The module should therefore only be assigned to one VM.

1. Open the vSphere client.
2. Click on the required machine in the navigation tree on the left.
3. To edit the properties of the virtual machine, open the shortcut menu (right-click) and select "Edit Settings".

   Reaction: The "Virtual Machine Properties" window opens.

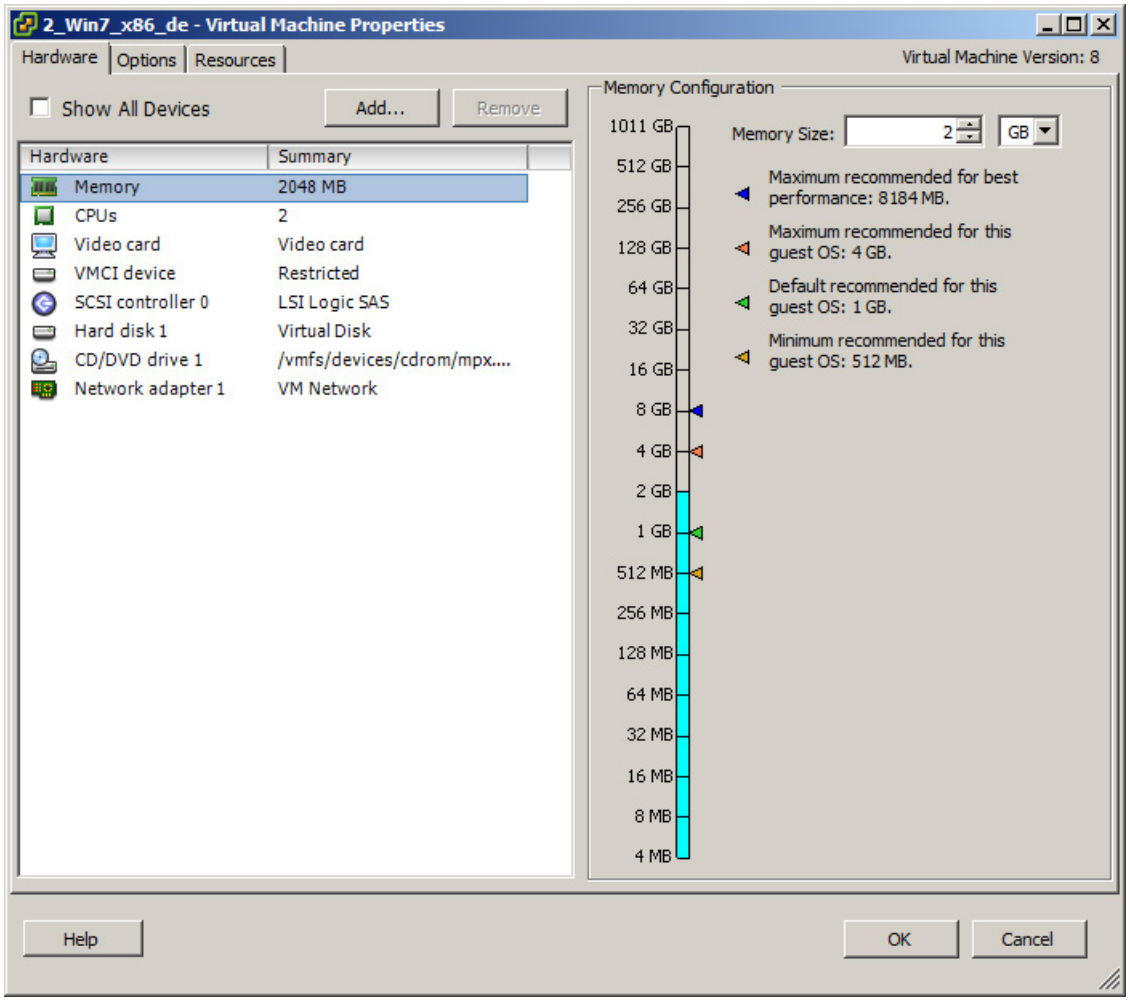


Figure 4-2 Properties of virtual machines

4.2.1.1 CPU/RAM settings

Select "Memory" on the left and configure the memory, for 32-bit systems at least 2 GB and for 64-bit systems at least 4 GB.

Select "CPUs" and set 1 for the "Number of virtual sockets" and at least 2 for the "Number of cores per socket".

4.2.1.2 Assigning a PCIe module marked with passthrough to a virtual machine

Follow the steps below to assign a module marked with passthrough to a virtual machine:

1. Click the "Add..." button.

   Reaction:

   The "Add Hardware" dialog box opens.

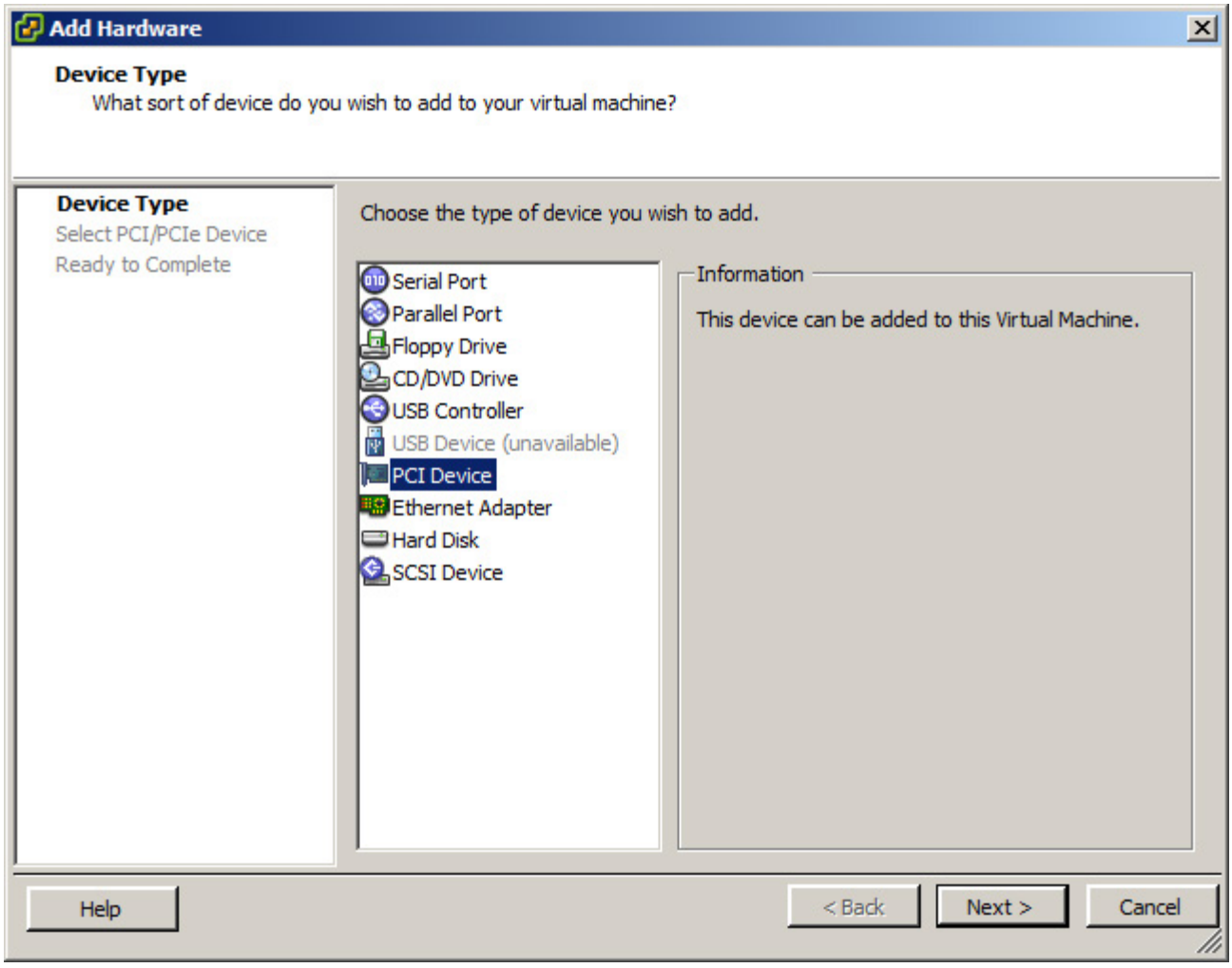


Figure 4-3 Figure 4-2 Selecting the device type

2. From the list, select the device type you want to add to the virtual machine and click "Next".
3. In the drop-down list, select the module you want to add to the virtual machine and click "Next".

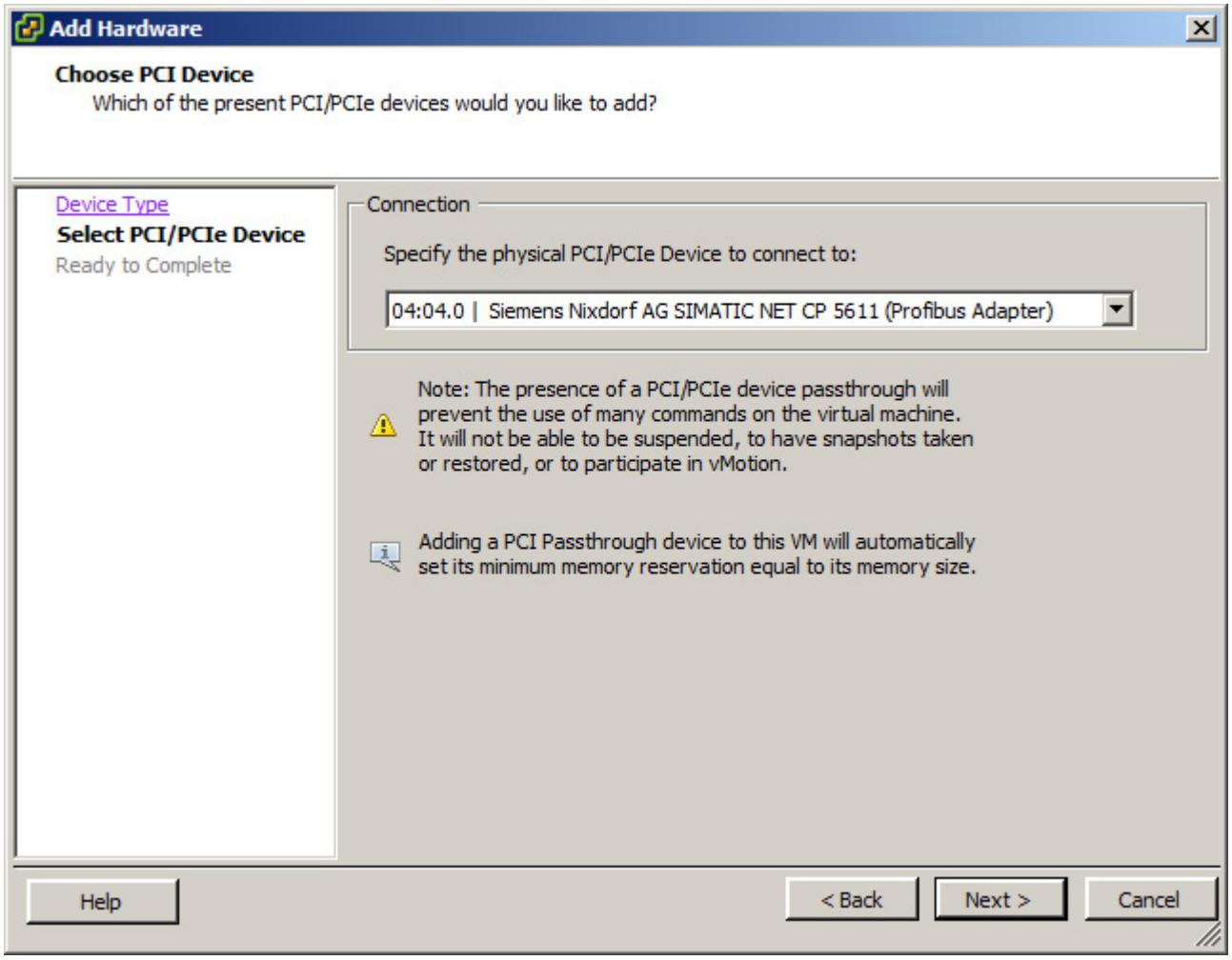


Figure 4-4 Figure 4-3 Selecting the module

Note

With a CP 5711, first add a USB controller

To be able to assign a CP 5711 to a virtual machine, you must first add a USB controller. Follow the steps described below:

1. Initially select "USB controller" instead of "PCI device".
2. Start the VM and wait until the VMware device drivers for the controller are installed. You can then shutdown the VM and continue at Step 3.
3. You can add the CP 5711 by selecting "USB device" in the "Add Hardware" dialog.

Note

Selecting the correct module

Depending on the module selected, the name displayed in the drop-down list may be shown as "Unknown" or similar. The selection of the correct module is achieved by the assignment in the "Mark Devices for Passthrough" dialog.
Table 3-1 "Assignment of the IDs" in the section "Setting up SIMATIC NET modules for passthrough with the vSphere Client (Page 23)" supports you when selecting the correct SIMATIC NET modules.
If modules are the same, the "ID" is decisive. A passthrough module can be operated by only one VM at any one time.

4.2.1.3 Adding network adapter E1000 to the virtual machine

SIMATIC NET communication has been released only for the E1000 network adapter.

The virtual network adapters E1000E, VMXNET 2 and VMXNET 3 have not been released.

The setting of the MAC address for SIMATIC NET communication must remain set to the default (automatic).

When adding an Ethernet adapter, you need to select the corresponding network based on the port group name (section "Configuration of the virtual Standard Switch (vSS) (Page 31)").

4.2.2 Options

The following settings relate to the advanced options in the "Options" tab.

4.2.2.1 Memory/CPU Hotplug

The settings for "Memory/CPU Hotplug" must remain set to the defaults:

- "Disable memory hot add for this virtual machine"
- "Disable CPU hot plug for this virtual machine"

4.2.2.2 Boot options

The settings for "Boot options" must remain set to "BIOS" for the specified boot firmware.

4.2.2.3 Starting a virtual machine

Once you have assigned the module marked for passthrough to a virtual machine, the device manager of the operating system recognizes the virtual machine when the corresponding module starts up.

If "SIMATIC NET PC software" is installed and a SIMATIC NET module is assigned, the suitable driver will be installed automatically.

Installing the OPC XML DA Web Services

5

Description

OPC XML-DA (Data Access) allows access to process variables over the Internet.

You will find more detailed information on OPC XML-DA in the manuals "Industrial Communication with PG/PC" (Start menu "Start" > "All Programs" > "Siemens Automation" > "SIMATIC" > "SIMATIC NET - Industrial Communication with PG/PC Basics" and "SIMATIC NET - Industrial Communication with PG/PC Interfaces").

OPC XML-DA can only be operated in conjunction with the "Internet Information Services" (IIS) Windows component.

Is the "IIS" Windows component already enabled?

How you continue from here depends on whether the "Internet Information Services (IIS)" Windows component and "ASP.NET" are already enabled.

If the "Internet Information Services (IIS)" Windows component and "ASP.NET" are ...	then ...
• ... already activated,..	... you can go straight to Step 5 - "Security settings for OPC" and check the functionality of the OPC XML-DA Web services.
• ... not already activated,..	... read the following note and start the installation Step 1 - "Enable Internet Information Services (IIS) Windows function".

Step 1 - Enable "Internet Information Services (IIS)" Windows function

The "Internet Information Services (IIS)" Windows feature is an HTTP Web server. It is required to operate OPC XML DA Web services.

Procedure under Windows 7 SP1

Install the Internet Information Services as described below:

1. In the Control Panel, go to "Programs" > "Programs and Features" > link "Turn Windows features on or off".
2. Open the structure "Internet Information Services (IIS)"> "Web Management Tools" and enable the option "IIS Management Console".
3. Open the tree structure "Internet Information Services (IIS)"> "WWW services" > "Application Development Features" and enable the option "ASP.NET".
4. Confirm with "OK".

Procedure with Windows 8.1

1. In the Control Panel, go to "Programs" > "Programs and Features" > "Turn Windows features on or off".
2. Open the structure "Internet Information Services"> "Web Management Tools" and enable the option "IIS Management Console".
3. Open the tree structure "Internet Information Services" > "WWW services" > "Application Development Features" and enable the option "ASP.NET 4.5".
4. Confirm with "OK".

Procedure in Windows Server 2008 R2

1. Open the Server Manager and enable the role "Web server (IIS)" with the required features for the local server.
2. As the role service for this role, add the application development service "ASP.NET".
3. As the role service for this role, add the management service "IIS Management Console".

Procedure in Windows Server 2012 R2

1. Open the Server Manager and enable the role "Web server (IIS)" with all required features for the local server.
2. As the role service for this role, add the application development service "ASP.NET 4.5".
3. As the role service for this role, add the management service "IIS Management Console".

Step 2 - Register ASP.NET 4.0 IIS (only in Windows 7 SP1 and Windows Server 2008 R2)

The ASP.NET IIS registration tool (Aspnet_regiis.exe) is used to register ASP.NET applications with the Internet Information Services (IIS).

Follow the steps below to register ASP.NET 4.0:

1. Open a Windows command line window in administrator mode.
2. Change to the ASP.NET installation folder:
   - 32-bit system
     „cd %windir%\Microsoft.NET\Framework\v4.0.30319"
   - 64-bit system
     „cd %windir%\Microsoft.NET\Framework64\v4.0.30319"
3. Start registration of ASP.NET 4.0 by calling "aspnet_regiis.exe -i".
4. Wait until the call returns to the Windows command line.
5. Exit the Windows command line.

Step 3 - Configuring the OPC XML DA (local host) Web service

The OPC XML DA Web service provides process data that can be accessed over the Internet using HTTP.

Configuration consists of the following parts:

- The address of the Web service is named.
- The connection to the installed SIMATIC NET software is established.

Procedure

Follow the steps below to configure the Web service:

1. Open the "Internet Information Services (IIS) Manager" dialog box.

   Start menu "Start" > "Control Panel" > "System and Security" > " double-click on "Internet Information Services (IIS) Manager".

   Reaction: The "Internet Information Services (IIS) Manager" dialog opens.

2. In the navigation area, add a new application pool under <current PC> "Application Pools".

   <current PC> > "Application Pools" > shortcut menu "Add Application Pool..."

   Reaction: A new window opens.

3. In the "Name" input box, enter the name "Classic SIMATIC.NET AppPool".

   In the drop-down list boxes, enter:

   – .NET Framework version: .NET Framework v4.0.30319

   – Managed pipeline mode: Classic

   and enable the option "Start application pool immediately".
   Confirm with "OK"

   Reaction: A new application pool was created.

4. In the shortcut menu of the newly created application pool "Classic SIMATIC.NET AppPool", select the menu command "Advanced Settings...".

   Reaction: A new window opens.

5. In the "Process Model" section, set the "Identity" value of "ApplicationPoolIdentity" to "NetworkService".

6. For 64-bit systems (Windows 7 SP1 64-bit, Windows 8.1 64-bit, Windows Server 2008 R2 SP1 and Windows Server 2012 R2):

   In the "General" section, change the "Enable 32-bit applications" value from "False" to "True".

   Reaction: This makes it possible to load the 32-bit OPC XML DA Web service in the ISS.

   Close the dialog with "OK".

7. In the navigation area of the "Internet Information Services (ISS) Manager", go to "Default Web Site" via <current PC> and open its substructure.
   <current PC> > "Sites" > "Default Web Site"

8. If you find the entry "OPC.SIMATIC.NET" here, skip all other entries in these instructions and continue at Step 5.
9. Select "Default Web Site" and open "Add Application..." in the context menu.

   Reaction: A new window opens.
10. Enter the folder name of the Web service in the "Alias" box.
    We recommend the name "OPC.Simatic.NET" because the supplied sample programs can then be used unchanged.
11. Select the newly created "Classic SIMATIC.NET AppPool" application pool and confirm with "OK".
12. In the "Physical path" box, enter the path to the directory in which the installed "SIMATIC NET PC Software" DVD makes the data accessible.

    Enter the path as follows:

    "Program Files (x86)\Siemens\SIMATIC.NET\opc2\binXML"

    Confirm with "OK".
13. Confirm the entries in the "Add Application" dialog with "OK".

    Reaction: The created Web service is displayed with its alias in "Default Web Site".

Step 4 - ISAPI and CGI restrictions (only in Windows 7 SP1 and Windows Server 2008 R2 SP1)

The ISAPI and CGI restrictions are request handlers with which dynamic contents can execute on a server. These restrictions are either CGI files (.exe) or ISAPI extensions (.dll). You can add user-defined ISAPI restrictions if the IIS configuration system allows this.

Procedure

Follow the steps below to specify the ISAPI and CGI restrictions:

1. In the Internet Information Services (IIS) manager, go to your <current PC> in the navigation panel.
2. In the data area, double click on "ISAPI and CGI Restrictions".
   Reaction: The content area shows the possible settings for "ISAPI and CGI Restrictions".
3. Select the entry "ASP.NET v4.0 30319" with the path "C:\Windows\Microsoft.NET\Framework\v4.0.30319\aspnet_isapi.dll".
4. Select the restrictions with the "Edit..." shortcut menu.
   Reaction: A new window opens.
5. Enable "Allow extension path option to execute" and confirm with "OK".

   Note

   Steps 6 to 8 are only necessary with Windows 7 SP1 64-bit and Windows Server 2008 R2, they are not necessary with Windows 7 SP1 32-bit.

6. Select the entry "ASP.NET v4.0 30319" with the path "C:\Windows\Microsoft.NET\Framework64\v4.0.30319\aspnet_isapi.dll".

7. Select the restrictions with the "Edit..." shortcut menu.
   Reaction: A new window opens.
8. Enable "Allow extension path option to execute" and confirm with "OK".

Step 5 - Security settings for OPC XML-DA

The Microsoft Internet Information Services (IIS) make your PC accessible from the Internet. It is therefore essential to specify suitable access permissions.

Procedure

Follow the steps below to specify the access rights:

1. Go to your newly created Web service (Web site) in the Internet Information Services (IIS) Manager; in this example: "OPC.Simatic.NET".

   Start menu "Start" > "Control Panel" > "System and Security" > " double-click on "Internet Information Services (IIS) Manager".

   Reaction: The "Internet Information Services (IIS) Manager" dialog opens.
2. Select the entry "OPC.Simatic.NET" in the navigation area.

   <this PC> > "Sites" > "Default Web Site" > "OPC.Simatic.NET".
3. Double-click on "Authentication" in the data area.

   Reaction: The content area shows the possible settings for "Authentication".
4. Make the settings you require for anonymous access and authenticated access.
5. Restart the IIS so that the new security settings for the OPC XML DA server are applied.

Step 6 - Security settings for OPC

Before the Internet Information Services (ISS) can access OPC data, they must be given access permissions to specific OPC services.

Procedure

Follow the steps below to obtain access rights:

1. Close the "Communication Settings" application.

   Start menu "Start" > "All Programs" > "Siemens Automation" > "SIMATIC" > "SIMATIC NET" > "Communication Settings".
2. Go to "SIMATIC NET Configuration" > "OPC Settings" > "Security" in the tree structure and enable "Remote basic communication and OPC communication".

   Note

   By enabling OPC security, additional security settings necessary for OPC communication are made. These are described in the online help of the "Security" configuration dialog.

This completes installation and configuration of the software components for operating OPC XML DA.

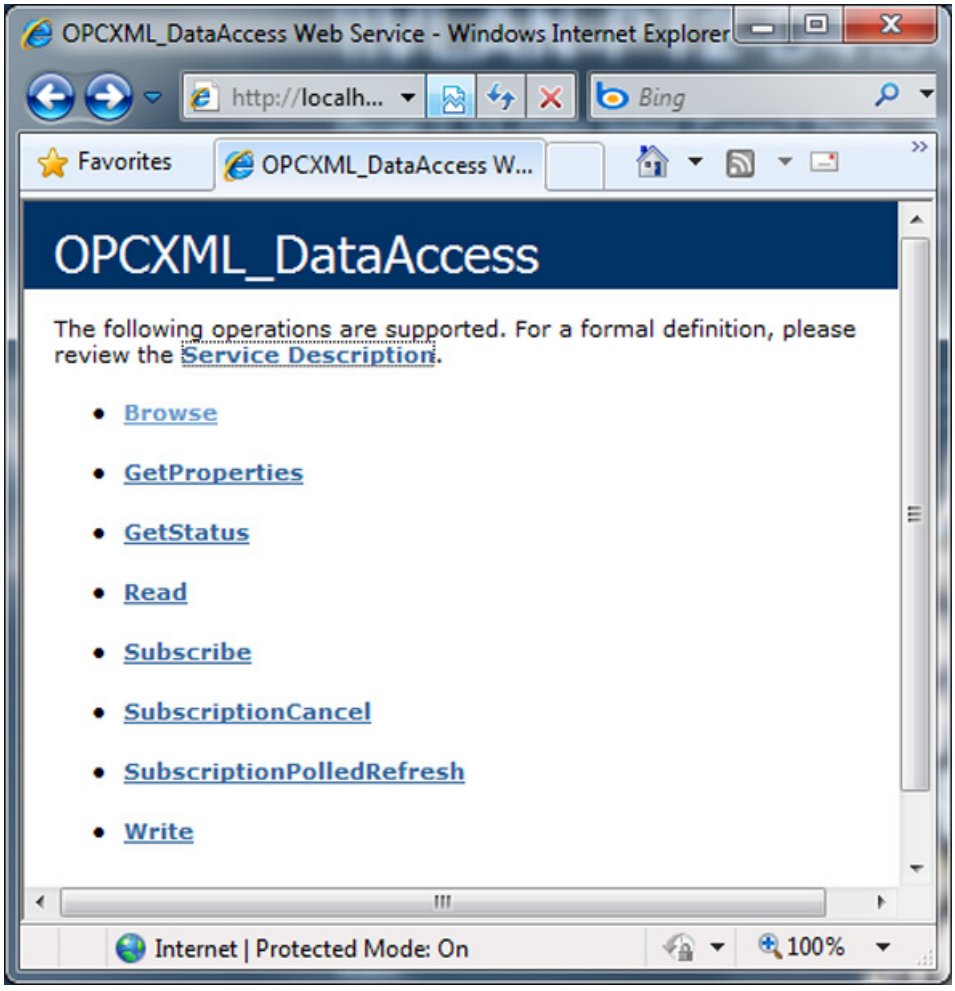
The next steps involve checking that everything works correctly.

Step 7 - Displaying your Web page in the Internet Explorer

You can display the new Web page with the Internet Explorer:

Type in the following URL in the Internet Explorer (assuming your Web service has the name "OPC.Simatic.NET"): (http://localhost/OPC.Simatic.NET/sopcweb.asmx)

Installation was successful when the possible OPC XML DA function calls (Read, Write ...) are displayed (see figure):



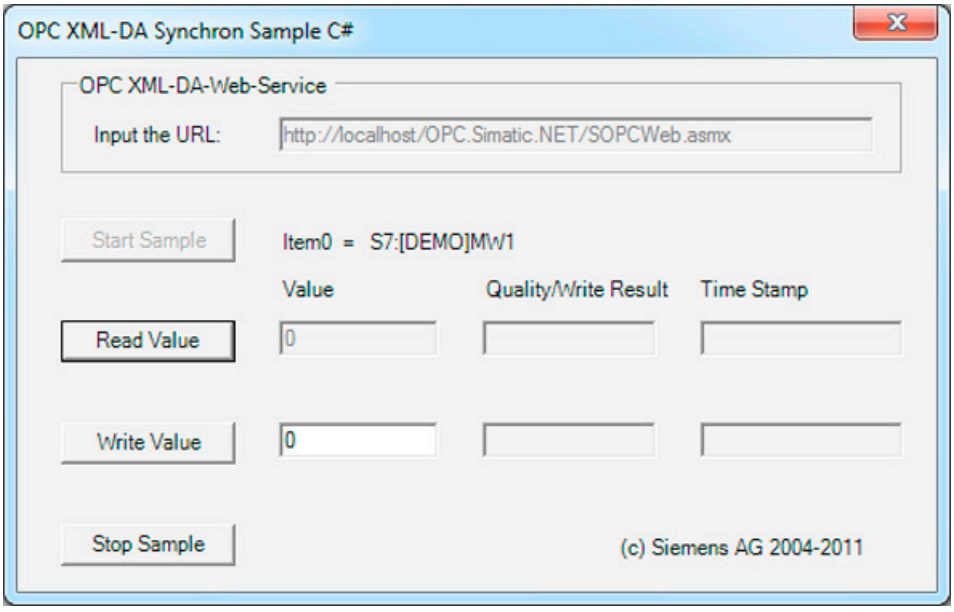
Step 8 - Using the sample program for the OPC XML DA interface

Note

You will find the sample client program in the folder:
"Program Files (x86)\Siemens\SIMATIC.NET\opc2\samples\xml\sync\opcxml_da_sync.exe"

Requirements
Follow the steps below before you use the sample program:

1. Activate the demo mode for the S7 communication protocol as described in the "Industrial Communication for PG/PC" manual.
2. After starting the sample program, enter the following address in the "Input the URL" box assuming your Web page has the name "OPC.Simatic.NET":
(http://localhost/OPC.Simatic.NET/sopcweb.asmx)



SNMP service, SNMP OPC MIB compiler and profile files

6

6.1 Installing the SNMP service

Purpose

The SNMP OPC Server requires the SNMP service in the operating system. Full use of the SNMP OPC Server is only possible if this Windows component is installed / enabled.

Introduction

Following standard installation of Windows, the full SNMP service is not yet available in the operating system. Without taking further steps, you can query items but cannot use SNMP traps.

Installing the SNMP service involves the following steps:

- Installing the SNMP service
- Adapting the network security settings to your own security needs

Requirement

You must be logged on as administrator or as a member of the administrators' group to be able to perform the installation.

Note

If programs already use the OPC server and the SNMP service was installed while an OPC Server was active, all programs that use the OPC Server must be closed and restarted. The OPC server must also be shut down with "Communication Settings" > "Exit OPC Server" and then restarted.

Note

If the computer is connected to a network, the general network settings may prevent installation of the SNMP services.

Stage 1 - Installing the SNMP service

Procedure with Windows 7 SP1 and Windows 8.1
Install the SNMP service as described below:

1. In the Control Panel, go to "Programs" > "Programs and Features" > link "Turn Windows features on or off".

   Reaction: The dialog box with the tree structure of the installed Windows features opens.

2. Enable the "Simple Network Management Protocol (SNMP)" check box in the "Windows Features" list and confirm with "OK".

   Reaction: The SNMP service starts automatically whenever you restart the system.

NOTICE
Exit OPC server If the SNMP service was installed on an OPC server that is already active, the OPC server must be shut down. Shut down the OPC server with "Communication Settings" > "Exit OPC server" to ensure that the settings are adopted. With the next request, it will start up again automatically.

Procedure with Windows Server 2008 R2 and Windows Server 2012 R2

For the local server, add the "SNMP service" feature.

NOTICE
Exit OPC server If the SNMP service was installed on an OPC server that is already active, the OPC server must be shut down. Close the OPC server with "Communication Settings" > "Exit OPC server" to ensure that the settings are adopted. With the next request, it will start up again automatically.

Note

The SNMP service starts automatically whenever you restart the system.

Stage 2 - Adapting the network security settings to your own security requirements

When you install the SNMP service, not only the SNMP protocol but also an SNMP agent is installed.

Note

Adapt the network security settings and the access permissions of the SNMP agent to your own security needs. You will find more detailed information in our manual "Commissioning PC Stations".

In the Control Panel, go to "System and Security" > "Administration" > "Services" entry > "Services" dialog, "SNMP Trap" entry > right-click on "Properties" > "Security" tab.

6.2 SNMP OPC MIB compiler and profile files

MIB compiler of STEP 7

The range of information that can be monitored by the devices with the SIMATIC NET SNMP OPC server depends on the particular device profile. With the integrated MIB compiler of STEP 7, existing profiles can be modified and new device profiles created for any SNMP-compliant device. It requires MIB files according to the SMIv1 standard.

MIB files for CP 1613 A2, CP 1623 and CP 1628

Suitable MIB files ship with STEP 7.

When you enter the required device in the plant configuration, the "device profile" parameter offers you the profiles with the name of the module, for example "CP1623_V10.txt" and they can be selected here.

The following MIB files are supported for the CP 1613 A2:

- rfc1213.mib
- automationSystem.mib
- automationTime.mib

The following MIB files are supported for the CP 1623 and CP 1628:

- rfc1213.mib
- automationSystem.mib
- automationPS.mib
- automationTime.mib

Uninstalling the SIMATIC NET PC software products 7

Procedure

To uninstall SIMATIC NET PC software products, follow the steps outlined below:

1. Go to "Programs and Features"

   Start menu "Start" > "Control Panel" > "Programs" > "Uninstall Program" link.

2. Select the entry "SIMATIC NET PC Software" or "SOFTNET-IE RNA" and start to uninstall.

   Reaction: The SIMATIC NET PC software products are deleted from the hard disk.

   The license keys can be uninstalled, if you require, using the "Automation License Manager" or you can leave them on the hard disk.

3. If there are no further SIMATIC programs on your computer that require licenses, select the "Automation License Manager" and start to uninstall the licenses.

   Note

   Any licenses left on the computer can no longer be backed up without the "Automation License Manager".

Note

After uninstalling the SIMATIC NET PC software products, any CP installed in the PC will no longer work because the device driver is also uninstalled. SOFTNET modules can also be operated with other SIMATIC products (e.g. STEP 7).

This is indicated in the device manager by a yellow exclamation point.

You can remedy this situation by reinstalling the "SIMATIC NET PC Software" DVD.

Automated installation 8

8.1 Purpose and general description

Use in enterprises

Enterprises that install plants with large numbers of computers generally want to use the same installation everywhere. Automated installation provides this option. The settings are made with a control file.

Sequence

Installation only requires a few user decisions that generally need to be taken at the end of the installation.

Control file

The control file is structured like an INI file. As an ASCII file, it is also easy to read. The control file is generated during a sample run; in exceptional situations, it can be corrected manually.

8.2 Structure of the control file

Description

The control file has the name "Ra_Auto.ini" and has the following structure:

```
[BUNDLEINFO]
CreatedWith=SIMATIC NET PC Software
RaSetupVersion=
[GENERAL]
AutoReboot=True
RebootOnEnd=True
Setuplanguage=en
IdName=
IdCompany=
IdNumber=
LicenseKeyDestinationDrive=C:
TransferLicenseManagerKey=False
InstallLanguage=de;en
OnlyUpdateInstallation=False
[DIALOGS]
DialogLicenseList=False
DialogDone=True

[PRODUCTCODE1]
DestinationDrive=C:
Selected=True
DestinationPath=[ProgramFilesFolder]SIEMENS\SIMATIC.NET
```

If necessary, the following parameters can be adapted, the other parameters should not be changed

[General] area

General settings are made in the [General] area.

Parameters	Value range	Description
AutoReboot	True/false	Automatic restart at the end
RebootOnEnd	True/false	Display of restart prompt
Setuplanguage	de=German en=English	Installed language

[Dialogs] area

The display of dialog boxes can be influenced in the [Dialogs] section.

Parameters	Value range	Description
DialogDone	True/false	Display of the closing dialog

[PRODUCTCODE1] area

The [Productcode1] area contains the product code as a title and the three following parameters. Examples of product codes are: [LICENSEMANAGER] or [SIMNETPC].

Parameters	Value range	Description
DestinationDrive	-	Installation drive, for example "C:\"
Selected	True/false	Product selection
DestinationPath	-	Installation path The installation path can be changed dynamically by a placeholder.

8.3 Generating the control file automatically

Description

The control file is generated by the setup program automatically by making a manual trial installation and can then be used to control the installation program.

The setup program can be controlled by a batch file.

Example of a batch file

The batch file shown here generates the control file "Ra-Auto.ini".

Under Windows 7 SP1 32-bit

```
cd \sw\x86
setup.exe /record
```

In Windows 7 SP1 64-bit, Windows 8.1 64-bit, Windows Server 2008 R2 SP1 and Windows Server 2012 R2

```
cd \sw\x64
setup.exe /record
```

Following this, a screen is displayed in which other settings can be made.

The lines of the batch file example have the following significance:

Line	Meaning
1	The program changes to the "x86" or "x64" folder.
2	The program starts the manual test installation and generates the control file "Ra_Auto.ini" with the "/record" parameter. All user actions in the dialogs are stored there. The record action stops after the "component selection" and closes the program.

Note

During the automatic installation, note that the path for the "Ra_Auto.ini" file can be set with the following instruction:

Under Windows 7 SP1 32-bit:

```
sw\x86\setup.exe /silent=<Dr>:\<folder>\Ra_Auto.ini
```

In Windows 7 SP1 64-bit, Windows 8.1 64-bit, Windows Server 2008 R2 SP1 and Windows Server 2012 R2:

```
sw\x64\setup.exe /silent=<Dr>:\<folder>\Ra_Auto.ini
```

Unless a path is specified, the Windows directory is searched.

If additional questions arise or error messages are displayed during installation, a suitable dialog opens.

Technical data

9

The "SIMATIC NET PC Software V13" DVD can be used with the following operating systems:

Operating system *	Minimum requirements
Windows 7 SP1 Professional 32-bit	2.4 GHz PCs with 2 GB RAM, 2 cores
In Windows 7 SP1 Professional 64-bit Windows 8.1 Pro 64-bit	2.4 GHz PCs with 4 GB RAM, 2 cores
Windows 7 SP1 Enterprise 32-bit	2.4 GHz PCs with 2 GB RAM, 2 cores
Windows 7 SP1 / 8.1 Enterprise 64-bit	2.4 GHz PCs with 4 GB RAM, 2 cores
Windows 7 SP1 Ultimate 32-bit	2.4 GHz PCs with 2 GB RAM, 2 cores
Windows 7 SP1 Ultimate 64-bit	2.4 GHz PCs with 4 GB RAM, 2 cores
Windows Server 2008 R2 SP1 / Windows Server 2012 R2 (Standard and Enterprise Edition)	2.4 GHz PCs with 4 GB RAM, 2 cores

*Use of VMware ESXi V5.1 and VMware ESXi V5.5 Update 2 see section "Installation and configuration with VMware vSphere (Page 19)"

For more detailed information on multilanguage versions and the service packs required for the supported operating systems, please refer to the readme file on the "SIMATIC NET PC Software" DVD.

For more detailed information on the minimum requirements for the PC, also refer to the readme file on the "SIMATIC NET PC Software" DVD.

Further Information 10

10.1 Documentation guide

Readme file of the SIMATIC NET products

All the important information relating to the SIMATIC NET products and other information on configuration and operation can be found in the two readme files for the overall product (main directory of the product DVD).

Quick Start for SIMATIC NET products

You will find a quick start for configuration in the "Commissioning PC Stations" manual if you have installed the documentation (Start menu "Start" > "All Programs" > "Siemens Automation" > "SIMATIC" > "SIMATIC NET" > "Commissioning PC Stations").

Commissioning PC Stations

The "Commissioning PC Stations" manual also contains overviews of all the PC engineering and configuration programs (Start menu "Start" > "All Programs" > "Siemens Automation" > "SIMATIC" > "SIMATIC NET" > "Commissioning PC Stations").

The "Commissioning PC Stations" manual is a PDF document and can be read and printed out when required with the Acrobat Reader.

"Communication Settings" configuration program

Here, you will find information relating to a variety of topics, for example procedures manuals for the project engineering and configuration of connections.
("Communication Settings" folder > "help" > "SIMATIC NET Configuration")

Manual Collection

As a separate data medium the Manual Collection ships with "SIMATIC NET PC Software". The Manual Collection contains the entire SIMATIC NET product documentation.

10.2 Other documents

Supplied documents and information

Documents and information on SIMATIC NET products are available on the accompanying DVD. The most important documents are:

- The "Readme.htm" file with the latest information on each product (in the main directory of the DVD).
- Any printed leaflets accompanying a product

Following installation, the following documents are available:

- SIMATIC NET - Commissioning PC Stations
- SIMATIC NET - Industrial Communication with PG/PC

You can also obtain information in the integrated online help systems using the F1 key.

Additional Information on the Internet

Along with a wide range of other information, you can also obtain documentation on the product from the Internet:

(http://support.automation.siemens.com/WW/view/en/) > Technical Info (under "More on Product Information") > Manuals/Operating Instructions

Other product-related Internet addresses include:

- Siemens AG, Industry Sector, SIMATIC NET

  (http://www.siemens.com/net)
- SIMATIC NET product catalog "IK PI"
  (http://w3app.siemens.com/sc-static/catalogs/catalog/IK_PI_2015_de.pdf)

10.3 Technical support, contacts and training

You will find information on this in the file "TechnicalSupport.pdf" in the "\doc" folder of the "SIMATIC NET PC Software" DVD.