Software installation

Contents (9.1.2011)

1 Software installation

1.1 Automation Net − PVI

1.1.1 System requirements − PVI

The computer on which PVI is to be installed must meet the following requirements:

The computer also has to have an open online interface for the connection between the programming device (computer) and the target system (controller).

An open interface (COM1 − COM4), a serial/USB adapter, or an Ethernet interface can be used.

1.1.1.1 System requirement − PVI Runtime

	Windows XP		Windows Vista / 7		Windows 2000	Windows NT 4.0	Windows 95/98/ME
	32 Bit	64 Bit	32 Bit	64 Bit			
Operating system	✓	✓ 1) 2)	✓ 1)	✓ 1) 2)	✓ 5)	✓ 3) 6) 7)	✓ 4) 6)
Software						SP3 for OPC Server DA 2.0	Windows Socket (WinSock) version ≥2.2 needed
PVI Components	• PVIControl.NET applications can only be created with Visual Studio 2003. • PVIServices applications can be operated with any .NET framework.						
Processor	At least Pentium III ≥650 MHz (recommended Pentium IV ≥850 MHz)						
RAM	At least 256 MB (depending on the number of process objects)						
Hard disk space	At least 20 MB free						

1) No CAN communication.
2) No USB Dongle support on 64 Bit operating systems. On B&R targets (IPC, APC, PPC) no PVI dongle required.
3) PVI services applications not possible.
4) No support for OPC server and PVIServices applications.
5) Limited USB support for CF creation, PVI Transfer.
6) No USB support for CF creation, PVI Transfer.
7) ARCNET OS9 line only up to SP5

1.1.1.2 System requirement − PVI Development

	Windows XP		Windows Vista / 7		Windows 2000	Windows NT 4.0	Windows 95/98/ME
	32 Bit	64 Bit	32 Bit	64 Bit			
Operating system	✓	✓ 1) 2)	✓ 1)	✓ 1) 2)	✓	✓ 3)	✓ 4)
Software						SP3 for OPC Server DA 2.0	Windows Socket (WinSock) Version ≥2.2 required
PVI Components	• PVIControl.NET applications can only be created with Visual Studio 2003. • PVIServices applications can be run with any .NET Framework.						
Processor	At least Pentium III ≥650 MHz (recommended Pentium IV ≥850 MHz)						
RAM	At least 256 MB (depending on the number of process objects)						
Hard disk space	At least 100 MB free						

1) No CAN communication.
2) No USB Dongle support on 64 Bit operating systems. On B&R targets (IPC, APC, PPC) no PVI dongle required.
3) PVI services applications not possible.
4) No support for OPC server and PVIServices applications.

1.1.2 Installing B&R Automation Net (PVI Runtime)

1.1.2.1 PVI Runtime

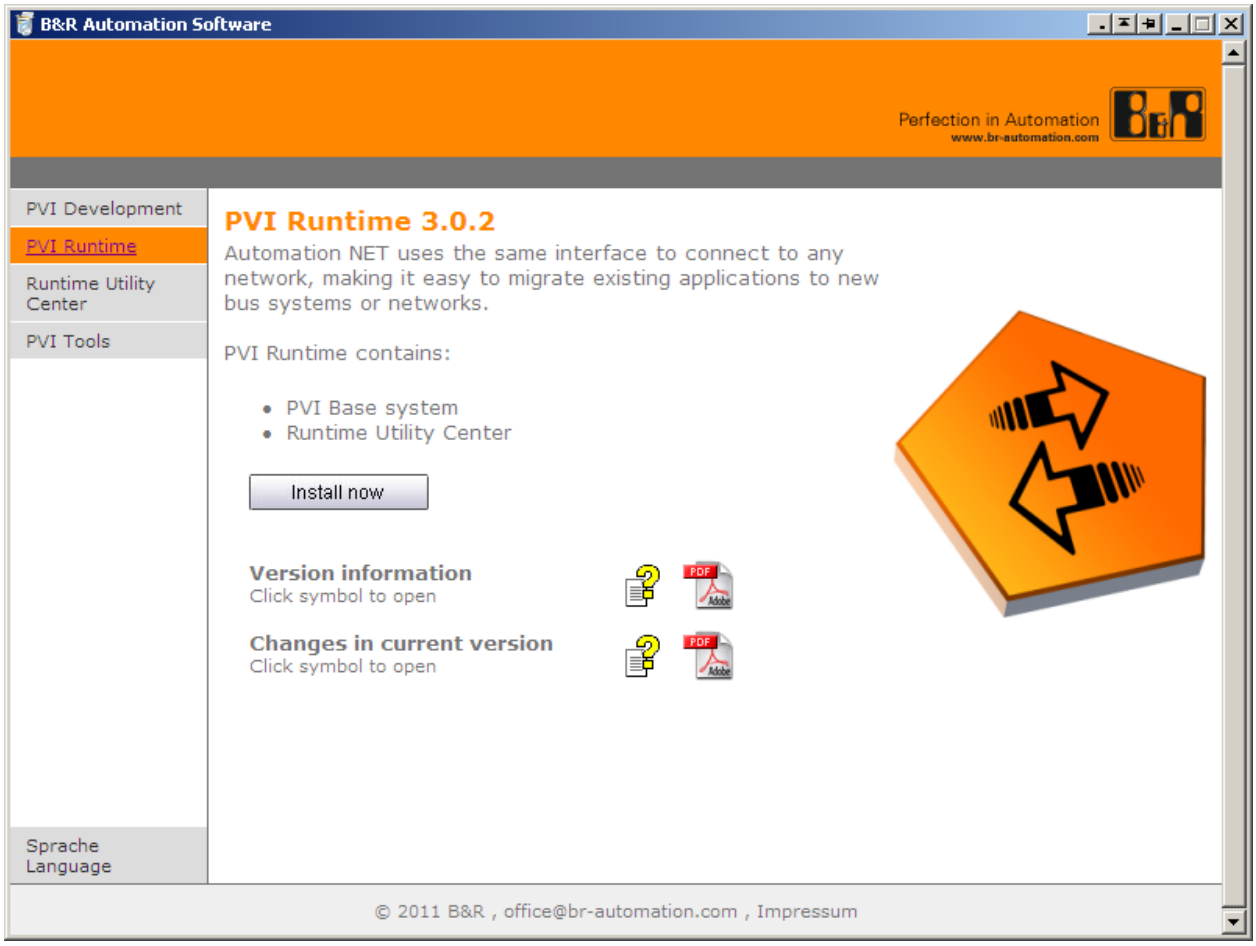
You need administrator rights to install software with the Windows NT/2000/XP operating system! Contact your network administrator if necessary.

1. Insert the language−specific or multi−language (if applicable) installation CD in the computer's CD−ROM drive.

2. If the "AutoPlay" option is activated on your computer, then the B&R Automation Software window appears. If "AutoPlay" is not enabled, run the **Install.exe** file from the root directory of your installation CD.

   If a more current Automation Net version is already installed on your system, the PVI installation is aborted.

   The installation process begins after clicking on the "Start installation" button.



1.1.2.2 PVI Development setup

If one of the components listed below should be installed, the "PVI Development setup" must be installed.

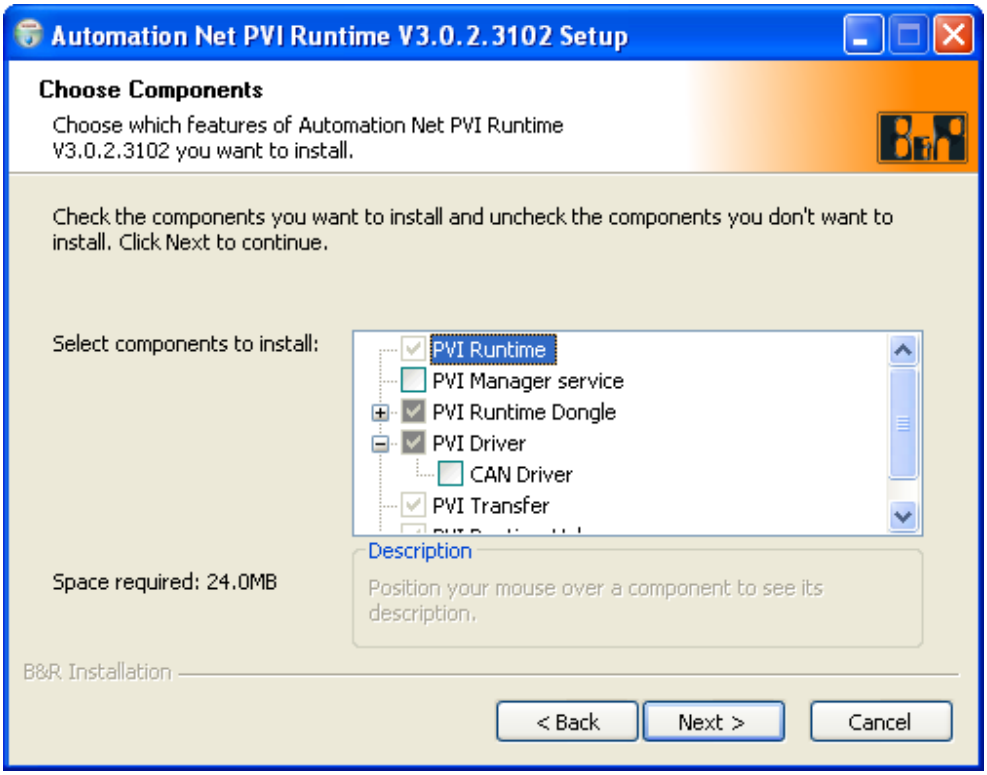
Components included:

PVI base system (PVI Runtime Setup)
Runtime Utility Service (PVI Runtime Setup)
PVI Development Tools
PVI Server
PVI Help, German
PVI Help, English
PVI PDF Documentation
PVI Samples
PVI Tutorial

1.1.3 Adding PVI software components

Setup must be run again in order to add individual components.

Components can be deselected or selected for installation by clicking on the selection tree in the component selection dialog box.



Every time Automation Net is installed, the components selected for installation are shown. Therefore, the only components in the selection tree that can be selected are ones that have been added or those that have not yet been installed.

If components should be removed, the entire Automation Net must be removed and then reinstalled without the respective components (these can then not be selected in the selection tree).

1.1.4 Uninstalling PVI

1.1.4.1 PVI Runtime

PVI Runtime can be removed from the system in the Start menu under **All Programs / B&R Automation / PVI%Version% / Uninstall PVI Runtime**.

1.1.4.2 PVI Development

PVI Development can be removed from the system in the Start menu under **All Programs / B&R Automation / PVI%Version% / Developer / Uninstall PVI Developer**.

1.1.5 PVI setup info

1.1.5.1 PVI Runtime / Developer − Setup

1.1.5.1.1 General setup information for PVI Runtime / Developer

This setup was created using the scripting language NSIS. This makes it possible for B&R to implement logic completely independent of the system.

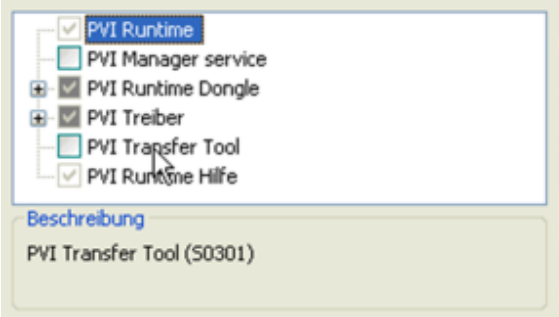
1.1.5.1.2 Overview of the available transfer parameters for the PVI Runtime / Developer setup

Transfer parameters can be used to influence, control or configure preset values for all B&R setups. The following section describes the transfer parameters recognized by the Automation Studio setup.

The names are case sensitive. The preceding characters for each of the parameters (e.g. − or /) must also be

entered correctly.

Parameter	Meaning	Comment	Example
/L	GUI language	1033 for English, 1031 for German	/L=1031 : Dialog boxes in German /L=1033 : Dialog boxes in English
/R	Program mode (reduced mode)	The installer is started in "*reduced mode*". No user input is necessary. The progress bars are shown during installation, but not the greeting, license or components windows.	/R
/RC	Program mode (reduced mode with component selection)	Like the /R option, the user can select the components to be installed, despite working in reduced mode. This option only has an effect in PVI Runtime Setup, and not in PVI Developer Setup. However, PVI Developer Setup applies this option in PVI Runtime Setup if it calls it.	/RC
/RP	Program mode (reduced mode with pause)	Like the /R option, however, user input is needed to close the installation dialog box. This mode is mostly used in order to check the installation process in the details window. This option only has an effect in PVI Runtime Setup, and not in PVI Developer Setup. However, PVI Developer Setup applies this option in PVI Runtime Setup if it calls it.	/RP
/ARS	AR setup file name	This parameter can be used to specify the file name for the Automation Runtime setup. If the parameter is not specified, the developer setup uses the default file name for the runtime setup. In order to automate setup using a batch file, it may be necessary to manually rename the runtime setup file, and if the /ARS parameter is not specified the developer setup would no longer be able to find the runtime setup. The /ARS parameter only looks for a file name, and not the entire path for the AR setup. This option only has an effect in PVI Developer Setup, and not in PVI Runtime Setup. This functionality is available starting with PVI V2.06.00.3x08	/ARS=PVIRuntime.exe
/O	Options	The options that should be installed can be specified in an .ini file. The options are entered in the form of a section identifier. The corresponding identifier is shown in the options dialog box under "description" when you move the mouse over the components (=section).	/O=pvi.ini



A detailed description can be found in the pvi.ini chapter.

/Log	File name for the log	Here you must always enter the complete path, including the file name. The file is not generated until the end of the installation. While the setup is running this file doesn't yet exist. The /Log parameter can also be entered alone (without = and the file path). In this case, the setup chooses a name for the log file automatically. The file is stored in the INSTALLDIR. This functionality is available starting with PVI V2.06.00.3x07	/Log=C:\Temp\InstallationProcess.log or /Log
/D	Target directory	The target directory for the installation is set using the option /D. The /D option must always be the last parameter entered.	/D=C:\Program Files\BrAutomation

1.1.5.1.3 "Reduced Mode" installation

All PVI setups can be installed without user input, e.g. from a batch file.

Example of a batch file:

```
"Automation Net PVI Runtime V2.6.0.exe" /R /O="pvi.ini" /L=1031 /D=C:\Program Files\BrAutomation
```

1.1.5.1.4 ExitCode

A Windows program can return an ExitCode (or return code). This is normally 0 and doesn't affect a user installation. However, there are certain circumstances (e.g silent installation), in which it can be helpful for the ExitCode to have a different value. The following values are possible:

0 = No errors occurred during setup.
1 = User cancelled installation manually.
2 = An error occurred during setup.

Transfer parameters for the setup (e.g. /D or /Log) are not validated explicitly. An invalid parameter must therefore not necessarily result in an error or in an ExitCode <> 0.

Example of a batch file for evaluating the ExitCode:

```
"Automation Net PVI Runtime V2.6.0.exe" /R /O="pvi.ini" /L=1031 /D=C:\Program Files\BrAutomation
IF %ERRORLEVEL% 0
```

Possible reasons for an ExitCode with the value 2 would be:

− User executing the setup is not an administrator.
− A process with the name 'pviman.exe' is running.
− A process with the name 'pvimon.exe' is running.
− A process with the name 'pvitransfer.exe' is running.
− A PVI is already installed that is incompatible with the version being installed.
− The installation directory is read−only.

1.1.5.1.5 pvi.ini

The /O option lets you to provide the PVI Developer and PVI Runtime Setups with a file that allows them to control the individual components of the setup. The options are entered in the form of an identifier. The identifier is shown in the setup's options window under "description" when you move the mouse over the components.

The PVI Setup currently contains the following components:

PVI Developer Setup		PVI Runtime Setup	
Identifier	**Description**	**Identifier**	**Description**
S0100	PVI Automation Net	S0101	PVI Runtime
S0110	PVI Base System	S0102	PVI Manager services
S0120	PVI Development Tools	S0200	PVI Driver
S0130	PVI Controls	S0201	CAN Driver
S0131	Runtime System	S0202	LS251 Driver
S0132	Developer Tools	S0301	PVI Transfer Tool (starting with V2.06.00.3x08)
S0140	PVI Controls .NET	S0401	PVI Runtime Help
S0150	PVI Services	S0500	PVI Runtime Dongle
S0160	PVI Server	S0501	Parallel Interface
S0161	PVI OPC server	S0502	USB Interface
S0161a	PVI OPC Server DA 3.0		
S0161b	PVI OPC Server Diagnostics		
S0162	PVI DDE server		
S0163	PVI web server		
S0164	PVI FastDDE Server		
S0170	PVI Help English		
S0180	PVI PDF Documentation (not currently used)		
S0190	PVI Samples		
S01A0	PVI Tutorial		

If in the INI file, which here in the Help is always named *pvi.ini*, there is no component specified explicitly, the Setup uses the default value. However, the value is different for each component. It is therefore advisable to always specify all components explicitly in such an INI file.

Example of a complete pvi.ini

```
[PVI260]
S0101=1
S0102=1
S0200=1
S0201=1
S0202=1
S0301=1
S0401=1
S0500=1
S0501=1
S0502=1
[PVI260_DEV]
S0100=1
S0110=1
```

```
S0120=1
S0130=1
S0131=1
S0132=1
S0140=1
S0150=1
S0160=1
S0161=1
S0161a=1
S0161b=1
S0162=1
S0163=1
S0164=1
S0170=1
S0190=1
S01A0=1
```

Meaning:
S0132=0 The value 0 means that this component should not be installed.
S0132=1 The value 1 means that this component should be installed.

The PVI Runtime Setup and the PVI Developer Setup use separate "*INI sections*". The name "*INI section*" should not be confused with the name "*Section*", in the sense of an NSIS Setup. An "*INI section*" refers to a group of values within an INI file. The name of an "*INI section*" is written in brackets. For example [PVI260]. An NSIS "*Section*" refers to a encapsulated area within the NSIS Setup. In NSIS terminology, this is called a component. A component can be selected in the component list with a checkmark.

Currently the PVI Runtime Setup always uses the name **[PVI260]** as the INI section. The PVI Developer Setup user **[PVI260_DEV]**. This makes it possible for both setups to use a common INI file. It is also possible to move both INI sections to separate INI files. The file name *pvi.ini* is only an example. The transfer parameter /O only looks for a file name, and not the entire path for *pvi.ini*.

1.2 Automation Studio

1.2.1 Automation Studio system requirements

The computer on which Automation Studio is to be installed must meet the following requirements:

	Minimum	***Recommended***
Processor	Pentium IV 2 GHz or higher	Dual Core
RAM	1 GB	2 GB or higher
Hard disk space	At least 5 GB	At least 10 GB
Graphics	XGA (1024 x 768)	SXGA (1280 x 1024) or higher
Internet Explorer	6.0	7.0 or higher

Automation Studio is supported on the following operating systems:

Windows	***AS 2.x***	***AS 3.0.71***	***AS 3.0.80***	***AS 3.0.81 or higher***
XP − 32−bit	Yes	Yes	Yes	Yes
XP − 64−bit	No	No	Yes[1)]	Yes
Vista − 32−bit	Yes[2)]	Yes[3)]	Yes	Yes
Vista − 64−bit	No	No	Yes[1)]	Yes
7−bit ... 32−bit	Yes[4)]	Yes[3)]	Yes	Yes
7−bit ... 64−bit	Yes[4)]	Yes[4)]	Yes[1)]	Yes

[1)] The default installation directory suggested for the programs (C:\Program Files\(x86)\BrAutomation) during setup is not supported. Limitations for SG3 and SGC projects. Further information regarding operation on 64−bit operating systems available upon request.
[2)] with AS 2.7 UP08
[3)] with AS 3.0.71 UP03

[4] via virtualization with Windows XP mode. Additional information: http://www.microsoft.com/windows/virtual−pc/download.aspx

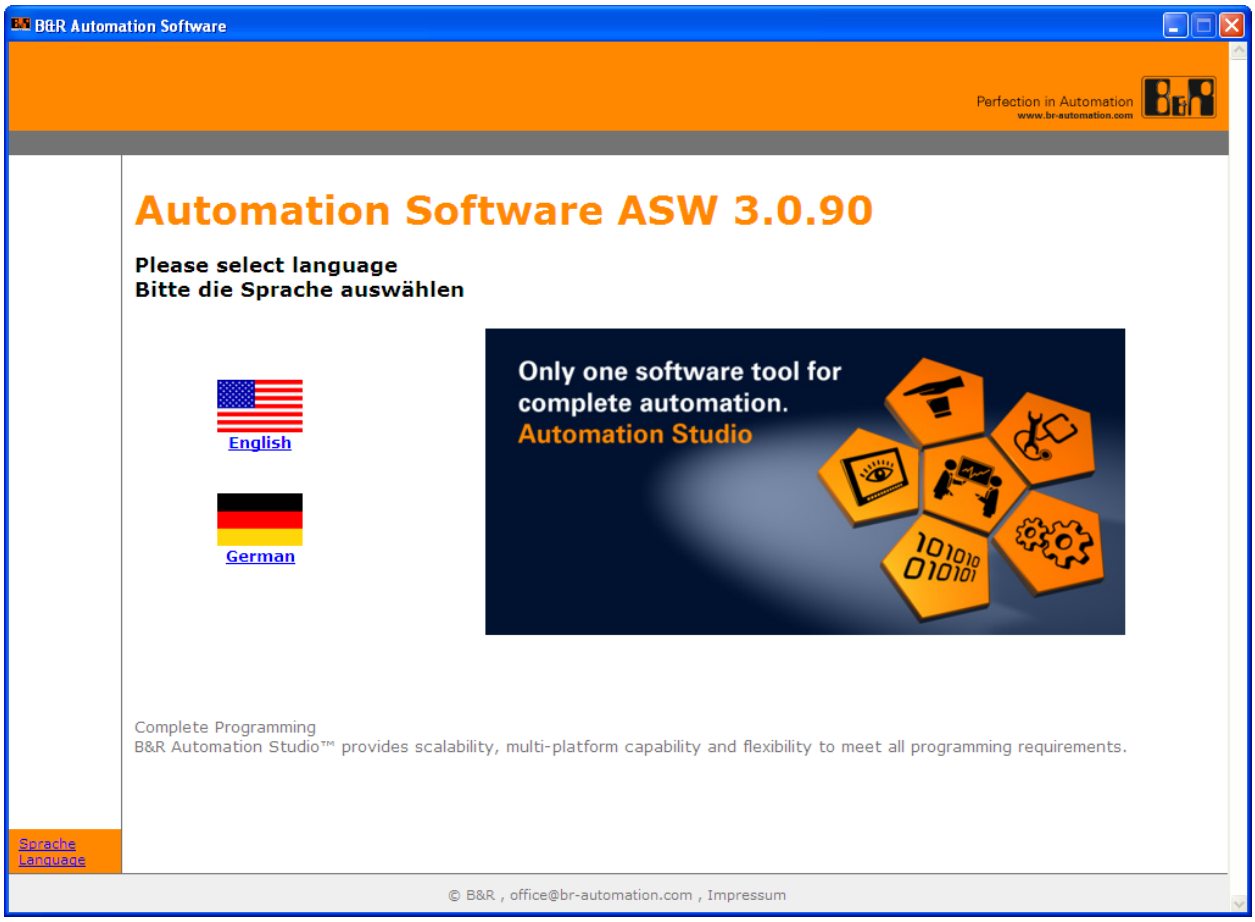
The computer also has to have an open online interface for the connection between the programming device (computer) and the target system (controller).

An open interface (COM1 − COM4), a serial/USB adapter, or an Ethernet interface can be used.

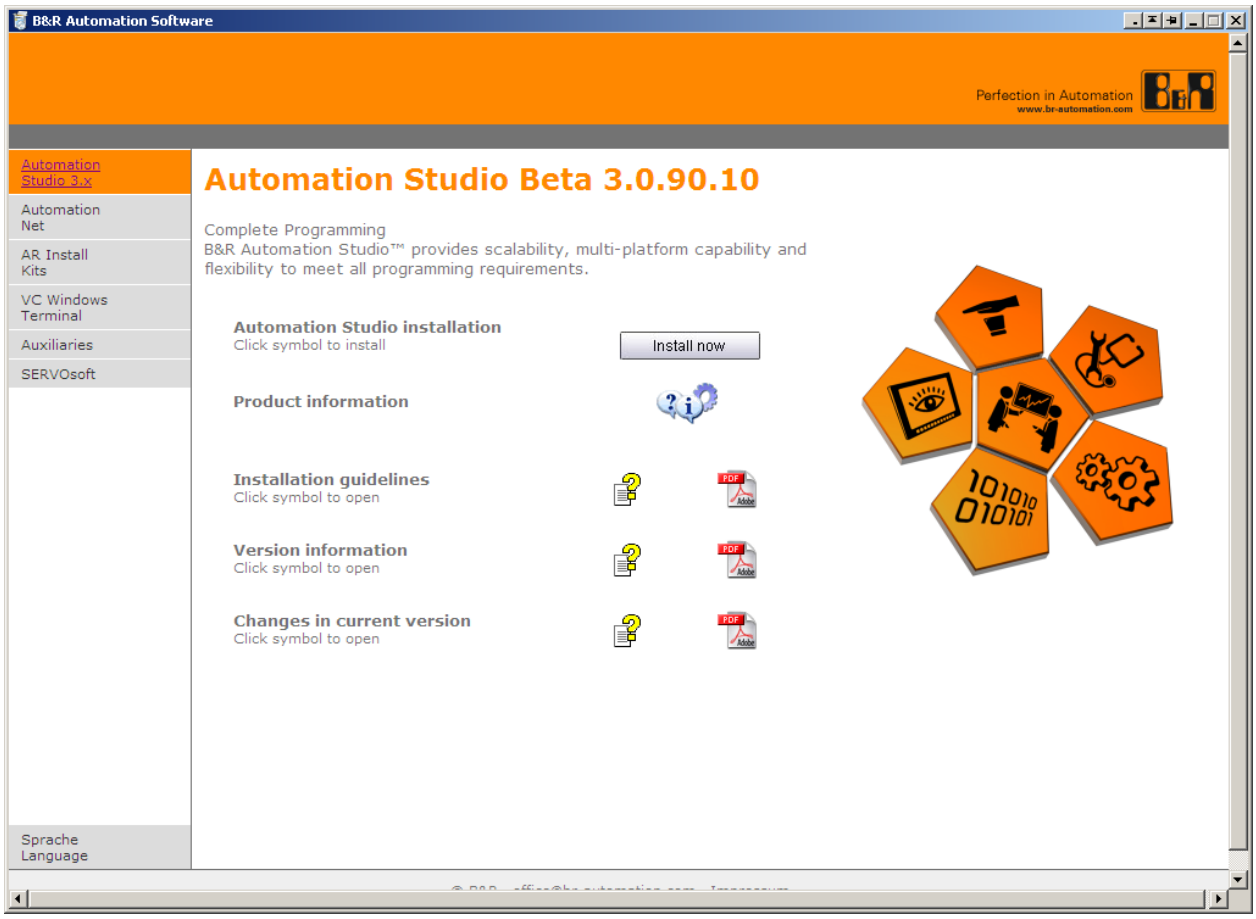
1.2.2 Installing Automation Studio

You need administrator rights to install software with the Windows NT/2000/XP operating system! Contact your network administrator if necessary.

1. Insert the language−specific or multi−language (if applicable) installation CD in the computer's CD−ROM drive.
2. If the "AutoPlay" option is activated on your computer, then the B&R Automation Installation window appears. If "AutoPlay" is not enabled, run the **Install.exe** file from the root directory of your installation CD.
3. If a multi−language installation CD is being used, the language must be selected.



4. Select the desired language with the mouse.
5. In the next window, start the installation by pressing the "Start installation" button.

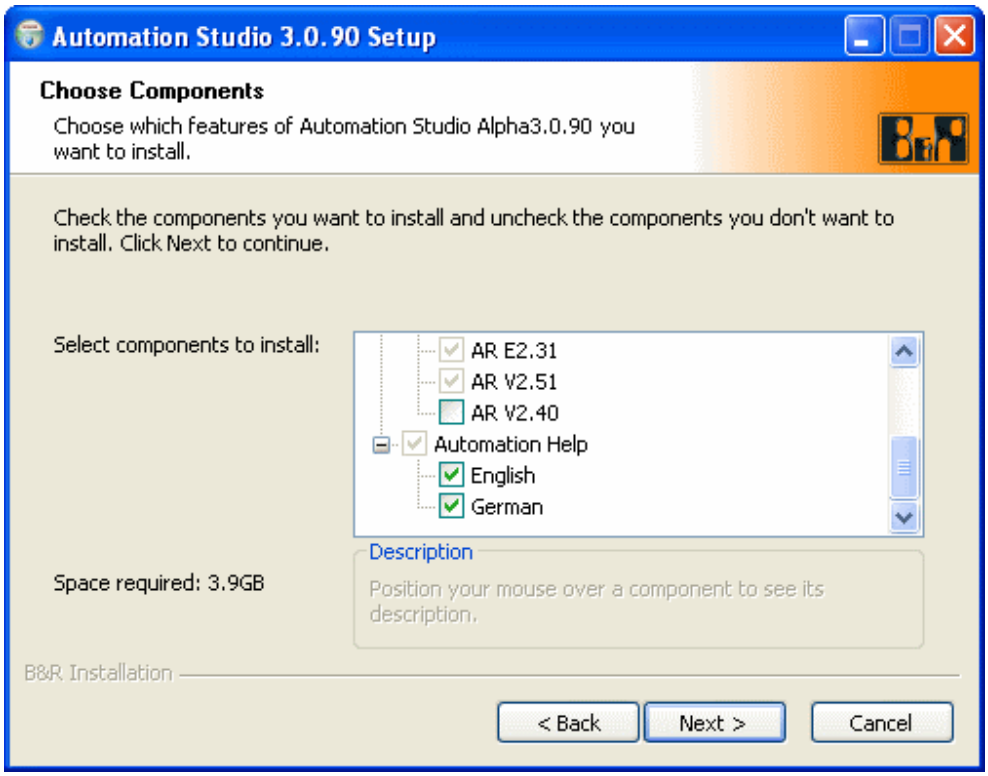


Menus will now lead you through the installation process.

If a current Framework or PVI version is not present on the target computer, they will be installed during setup.

After confirming the license agreement and entering the user data, the installation dialog box for selecting components is displayed.

If a component should not be installed, it can be deselected in the selection tree before continuing the installation by clicking on **Next>**.



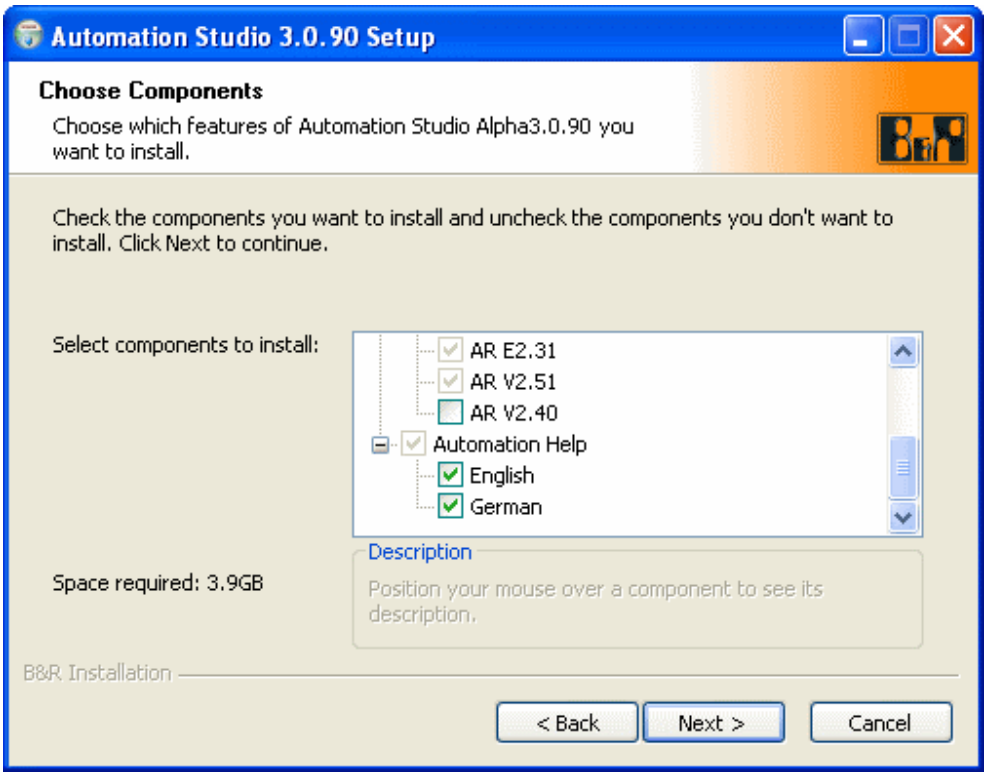
In the dialog box shown below, the installation directory can be changed by clicking the **Browse...**button.

Begin the installation by clicking on the **Install...** button.

1.2.3 Adding software components in Automation Studio

Setup must be run again in order to add individual components.

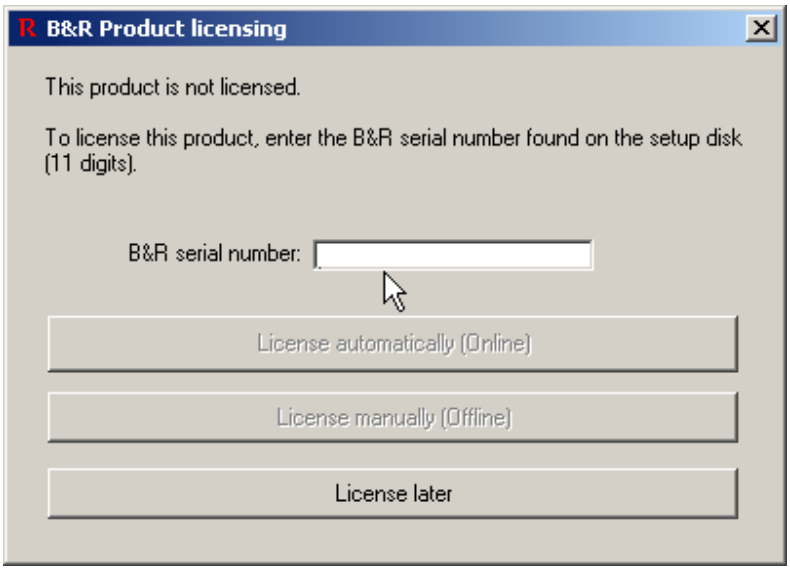
Components can be deselected or selected for installation by clicking on the selection tree in the component selection dialog box.



1.2.4 Licensing

1.2.4.1 Automation Studio

The following dialog box is displayed as long as Automation Studio has not yet been registered:



Enter the B&R serial number (included on the CD insert) into the first input field.

Once a valid serial number is entered, all buttons become active.

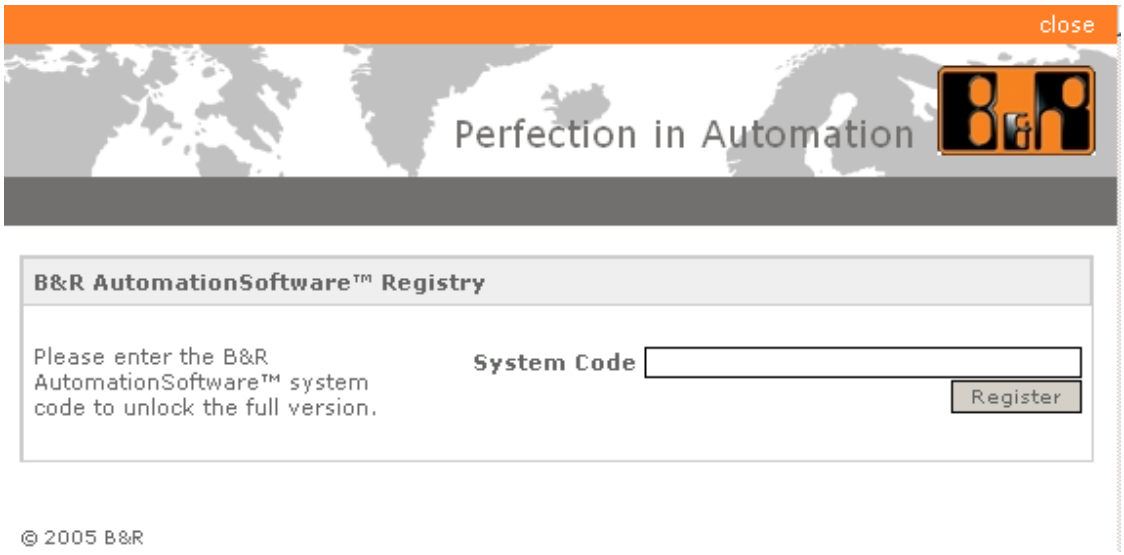
1.2.4.2 License automatically (online)

Pressing the **License automatically (online)** button automatically licenses the B&R Automation Studio™ Version online if there is an existing Internet connection.

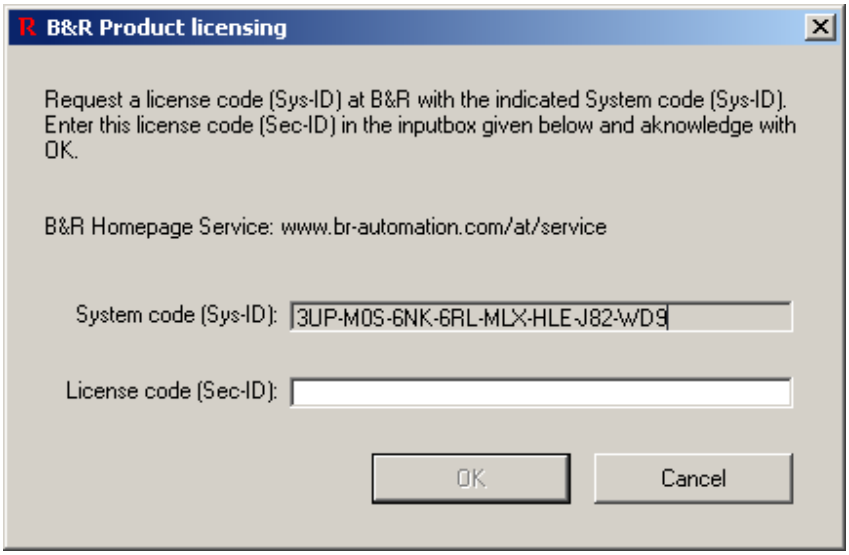
An error message is output if a connection cannot be established to the B&R server.

1.2.4.3 License manually (offline)

Pressing the **License manually (offline)** button opens up a licensing dialog box. You can use the system code (Sys−ID) shown here to apply for the actual activation code from the B&R Homepage Services site.



Entering the system code (Sys−ID) and pressing the **Register** button displays the activation code, which must then be entered into the lower input field in the Automation Studio licensing window (License code (Sec−ID)).



If the correct code has been entered, then the licensing procedure can be completed with the **OK** button.

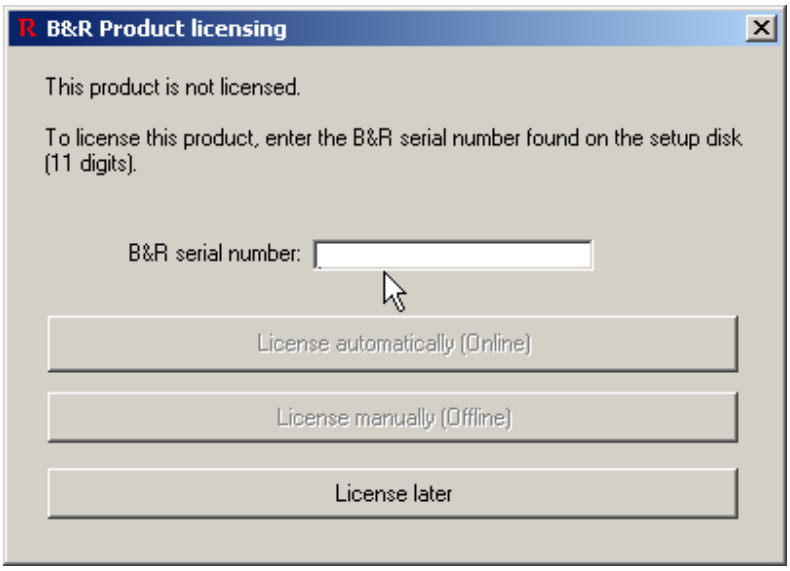
If a valid B&R serial number is not input, the dialog box can still be closed with **License later**, which starts the 30 day evaluation period.

The time left in the evaluation period is shown each time Automation Studio™ is started. Operation is possible during this period without limitations.

If the evaluation period expires, then the software must be licensed to be able to continue using it.

1.2.4.4 Option license

In the information dialog box in Automation Studios pressing the "**Option license**" button while the option "B&R AS C++ Option" has not yet been enabled, the following appears:



Enter the B&R serial number in the first input field. Once a valid serial number has been entered, the enabled option is displayed in the Automation Studio information dialog box.

If a valid license number has already been entered and the "**Option license**" button is pressed, then the existing license can be deleted.

1.2.5 Uninstalling Automation Studio

If there are several version of B&R Automation Studio being used on your computer simultaneously, only the **active** version can be uninstalled.
If no versions are active, the Version Changer can be used to activate the one you want to uninstall (see Version Changer help).

Automation Studio can be removed from the system in the Start menu under **All Programs / B&R Automation / Automation Studio %Version% %Language% / Uninstall Automation Studio**.

Once the uninstall wizard is started, the uninstall process is carried out automatically.

1.2.5.1 Applies to multiple installations (only Version AS2.x):

If there is still a B&R Automation Studio version present on your computer after one has been uninstalled, it has to be activated using the Version Changer.

1.2.6 Automation Studio setup info

1.2.6.1 Automation Studio Help − Setup

1.2.6.1.1 General setup information for the Automation Studio Help

The Automation Studio Help setup installs both the English and the German Help for Automation Studio.

1.2.6.1.2 Available transfer parameters for the Automation Studio Help setup

Transfer parameters can be used to influence, control or configure preset values for all Automation Studio 3.x setups. The following section describes the transfer parameters recognized by the Automation Studio setup.

The names are case sensitive. The preceding characters for each of the parameters (e.g. − or /) must also be entered correctly.

Parameter	Meaning	Comment	Example
/L	GUI language	1033 for English, 1031 for German	/L=1031 : Dialog boxes in German /L=1033 : Dialog boxes in English

/R	Program mode	Currently only "*reduced mode*" is available. This provides a simplified GUI. Superfluous dialog boxes are hidden (e.g. license screen).	/R=Y
/Log	File name for the log	Here you must always enter the complete path, including the file name. The file is not generated until the end of the installation. While the setup is running this file doesn't yet exist. The /Log parameter can also be entered alone (without = and the file path). In this case, the setup chooses a name for the log file automatically. The file is stored in the INSTALLDIR. This function is available starting with Automation Studio V3.0.72.	/Log=C:\Temp\InstallationProcess.log or /Log
/D	Target directory	The target directory for the installation is set using the option /D. The /D option must always be the last parameter entered.	/D=C:\Program Files\BrAutomation

1.2.6.1.3 ExitCode

A Windows program can return an ExitCode (or return code). This is normally 0 and doesn't affect a user installation. However, there are certain circumstances (e.g silent installation), in which it can be helpful for the ExitCode to have a different value. The following values are possible:

0 = No errors occurred during setup.
1 = User cancelled installation manually.
2 = An error occurred during setup.

Transfer parameters for the setup (e.g. /D or /Log) are not validated explicitly. An invalid parameter must therefore not necessarily result in an error or in an ExitCode <> 0.

Example of a batch file for evaluating the ExitCode:

```
"Automation Studio V2.6.0 English Help.exe" /R /L=1031 /D=C:\Program Files\BrAutomation
IF %ERRORLEVEL% 0
```

Possible reasons for an ExitCode with the value 2 would be:

− A valid installation of Automation Studio could not be found.

1.2.6.2 Automation Runtime − Setup

1.2.6.2.1 General setup information for Automation Runtime

This setup was created using the scripting language NSIS. This makes it possible for B&R to implement logic completely independent of the system. The Automation Runtime setup consists of multiple subordinate setups. Depending on the selected components, the individual setups are started in the background of the superordinate Automation Runtime setup.

1.2.6.2.2 Available transfer parameters for the Automation Runtime setup

Transfer parameters can be used to influence, control or configure preset values for all Automation Runtime setups. The following section describes the transfer parameters recognized by the Automation Runtime setup.

The names are case sensitive. The preceding characters for each of the parameters (e.g. − or /) must also be entered correctly.

Parameter	Meaning	Comment	Example
−L	GUI language	1033 for English, 1031 for German	/L=1031 : Dialog boxes in German /L=1033 : Dialog boxes in English
−R or /R	Program mode	This parameter runs the setup in "*reduced mode*". This provides a simplified GUI. Superfluous dialog boxes are hidden (e.g. license screen). The −RP parameter must not also be entered.	−R=Y
−RP or /RP	Program mode	The "*reduced mode with pause*" parameter functions in the same way as the −R parameter, with the only difference being a pause at the end of the setup. This means that the last dialog box of the setup is not closed automatically. The −R parameter must not also be entered.	−RP
−G	Path	Global installation path	−G=C:\Program Files\BrAuto
−V	Path	Local installation path	−V=C:\Program Files\BrAuto\AS30070
−T	Structure entry	Specifies the installation structure for Automation Studio. There are currently two options here: − 2.6.0 − 3.0.70	−T=3.0.70
−h or −?	Setup help	Shows the possible transfer parameters for setup as MessageBox. The setup doesn't continue to run afterward. This means that it would be pointless to specify other transfer parameters.	−h
/Log	File name for the log	Here you must always enter the complete path, including the file name. The file is not generated until the end of the installation.	/Log=C:\Temp\InstallationProcess.log or

		While the setup is running this file doesn't yet exist. The /Log parameter can also be entered alone (without = and the file path). In this case, the setup chooses a name for the log file automatically. The file is stored in the INSTALLDIR.	/Log
/D	Destination path	The target directory for the installation is set using the option /D. The /D option must always be the last parameter entered.	/D=C:\Program Files\BrAutomation

1.2.6.2.3 ExitCode

A Windows program can return an ExitCode (or return code). This is normally 0 and doesn't affect a user installation. However, there are certain circumstances (e.g silent installation), in which it can be helpful for the ExitCode to have a different value. The following values are possible:

0 = No errors occurred during setup.
1 = User cancelled installation manually.
2 = An error occurred during setup.

Transfer parameters for the setup (e.g. /D or /Log) are not validated explicitly. An invalid parameter must therefore not necessarily result in an error or in an ExitCode <> 0.

Example of a batch file for evaluating the ExitCode:

```
"Automation Runtime 2.6.0.1309_V2.92.exe" /R /L=1031 /D=C:\Program Files\BrAutomation
IF %ERRORLEVEL% 0
```

Possible reasons for an ExitCode with the value 2 would be:

− A valid installation of Automation Studio could not be found.
− The installation directory is read−only.

1.2.6.3 Automation Studio − Setup

1.2.6.3.1 General setup information for Automation Studio

This setup was created using the scripting language NSIS. This makes it possible for B&R to implement logic completely independent of the system.

1.2.6.3.2 Available transfer parameters for the Automation Studio setup

Transfer parameters can be used to influence, control or configure preset values for all Automation Studio 3.x setups. The following section describes the transfer parameters recognized by the Automation Studio setup.

The names are case sensitive. The preceding characters for each of the parameters (e.g. − or /) must also be entered correctly.

Parameter	Meaning	Comment	Example
/L	GUI language	1033 for English, 1031 for German	/L=1031 : Dialog boxes in German /L=1033 : Dialog boxes in English
/R	Program mode	Currently only "*reduced mode*" is	/R=Y

		available. This provides a simplified GUI. Superfluous dialog boxes are hidden (e.g. license screen).	
/Log	File name for the log	You must always enter the complete path, including the file name. The file is not generated until the end of the installation. While the setup is running this file doesn't yet exist. The /Log parameter can also be entered alone (without = and the file path). In this case, the setup chooses a name for the log file automatically. The file is stored in the INSTALLDIR.	/Log=C:\Temp\InstallationProcess.log or /Log
/D	Target directory	The target directory for the installation is set using the option /D. The /D option must always be the last parameter entered.	/D=C:\Program Files\BrAutomation

1.2.6.3.3 ExitCode

A Windows program can return an ExitCode (or return code). This is normally 0 and doesn't affect a user installation.

0 = No errors occurred during setup.
1 = User cancelled installation manually.
2 = An error occurred during setup.

Transfer parameters for the setup (e.g. /D or /Log) are not validated explicitly. An invalid parameter must therefore not necessarily result in an error or in an ExitCode <> 0.

Example of a batch file for evaluating the ExitCode:

```
"Automation Studio V3.0.71.exe" /R /L=1031 /D=C:\Program Files\BrAutomation
IF %ERRORLEVEL% 0
```

Possible reasons for an ExitCode with the value 2 would be:

− User executing the setup is not an administrator.
− The file 'BrAddOn.ini' could not be found.
− The operating system is Windows 2000 on which the SP4 is not yet installed.
− The operating system is Windows XP on which the SP2 is not yet installed.

− A process with the name 'pviman.exe' is running.
− A process with the name 'pvimon.exe' is running.
− A process with the name 'pvitransfer.exe' is running.
− A process with the name 'pg.exe' is running.
− A version of Automation Studio is already installed that is incompatible with the version being installed.
− The installation directory is read−only.

1.3 Automation Studio Target for Simulink®

1.3.1 Automation Studio Target for Simulink® − System requirements

The following components are required for automatic code generation with B&R Automation Studio Target for Simulink®:

- Automation Studio 3 (Version 3.0.71 or higher)
- The MathWorks products, Release 2007b or higher
- MATLAB® (Version 7.5 or higher)
- Simulink® (Version 7.0 or higher)
- Real−Time Workshop® (Version 7.0 or higher)

Optional (for source code that is more efficient and easier to read):

- Real−Time Workshop® Embedded Coder™ (Version 5.0 or higher)

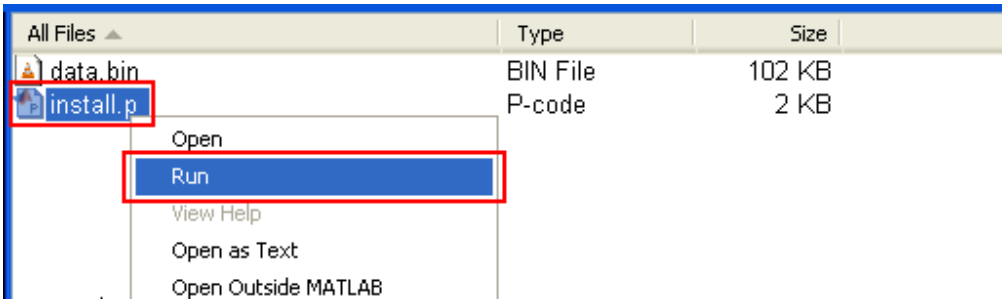
In order to use Stateflow® objects, the following is also required:

- Stateflow® (Version 7.0 or higher)
- Stateflow® Coder™ (Version 7.0 or higher)

Nearly all toolboxes from The MathWorks are fully compatible with B&R Automation Studio Target for Simulink®.

1.3.2 Automation Studio Target for Simulink® − Installation

B&R Automation Studio Target for Simulink® is installed under MATLAB® by running the file **install.p**, which is located in the installation directory after Automation Studio is installed "**%AS_Installationsverzeichnis%\BrAutomation\Simulink Target Setup**".

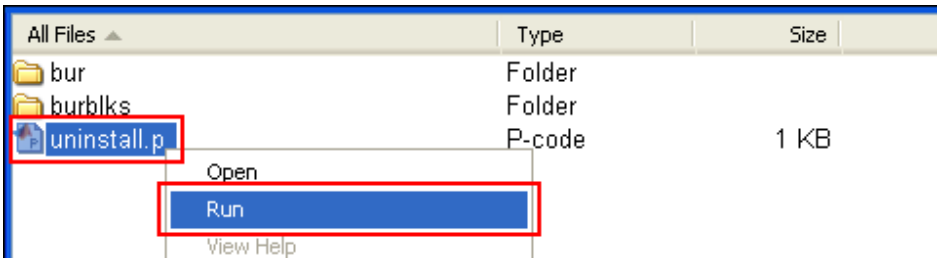


The components for automatic code generation are copied to a user−specific directory (e.g. C:\Program Files\BrAutomation\B&R Automation Studio Target for Simulink® − the name "B&R Automation Studio Target for Simulink®" is automatically added to the selected directory names) and then registered in MATLAB®.

After the installation, MATLAB® should be restarted to ensure proper integration.

1.3.3 Automation Studio Target for Simulink® − Uninstallation

To remove B&R Automation Studio Target for Simulink® from the system, run **uninstall.p** under MATLAB®.



1.3.4 Automation Studio Target for Simulink® − Documentation

Documentation for B&R Automation Studio Target for Simulink® can be found as a PDF file in the following directory:

%AS_Installationsverzeichnis%\BrAutomation\Simulink Target Setup**B&R Automation Studio Target for Simulink.pdf**

1.4 FAQ

1.4.1 Installing a USB dongle

Can be used for:

- ARwin
- Automation Net / PVI

1.4.1.1 Installation procedures

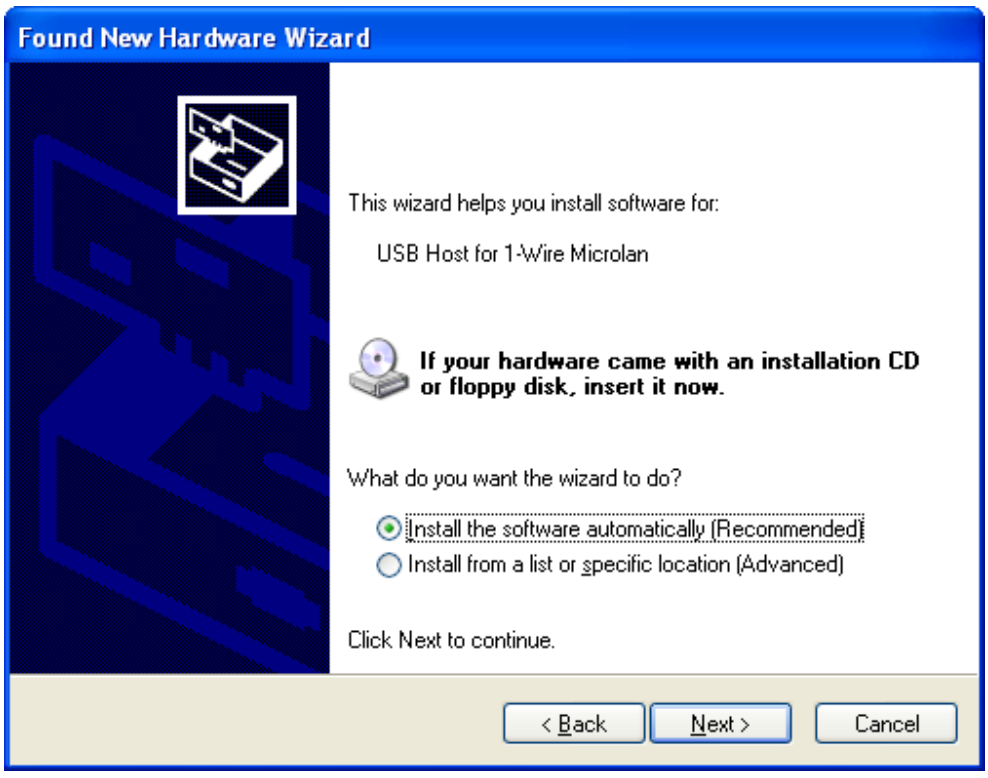
If the dongle was already connected during the installation of Automation Studio or Automation Net, it had to be removed and reconnected to the interface once before installing the driver.

The first time a USB dongle is used, its driver must be installed. This is done as follows:

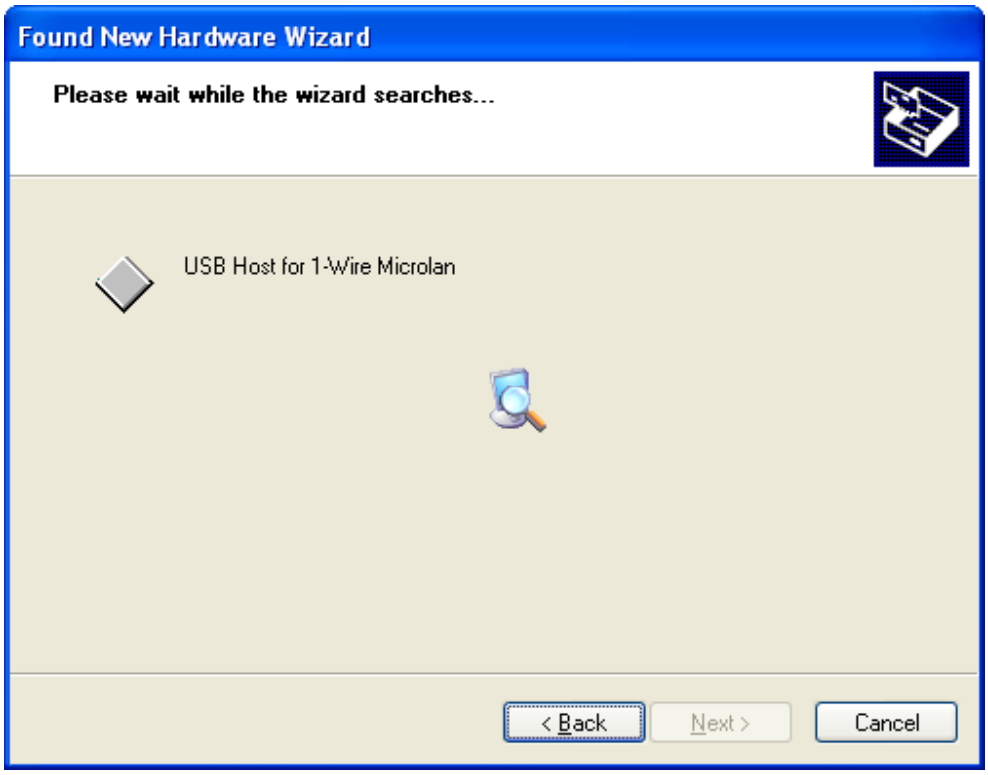
- Insert the USB dongle in the USB port. The operating system will detect the new hardware and display the following dialog box

select **Yes, this time only** and click on **Next>** to continue.

- In the next dialog box, select **Install the software automatically** and continue with **Next>**.

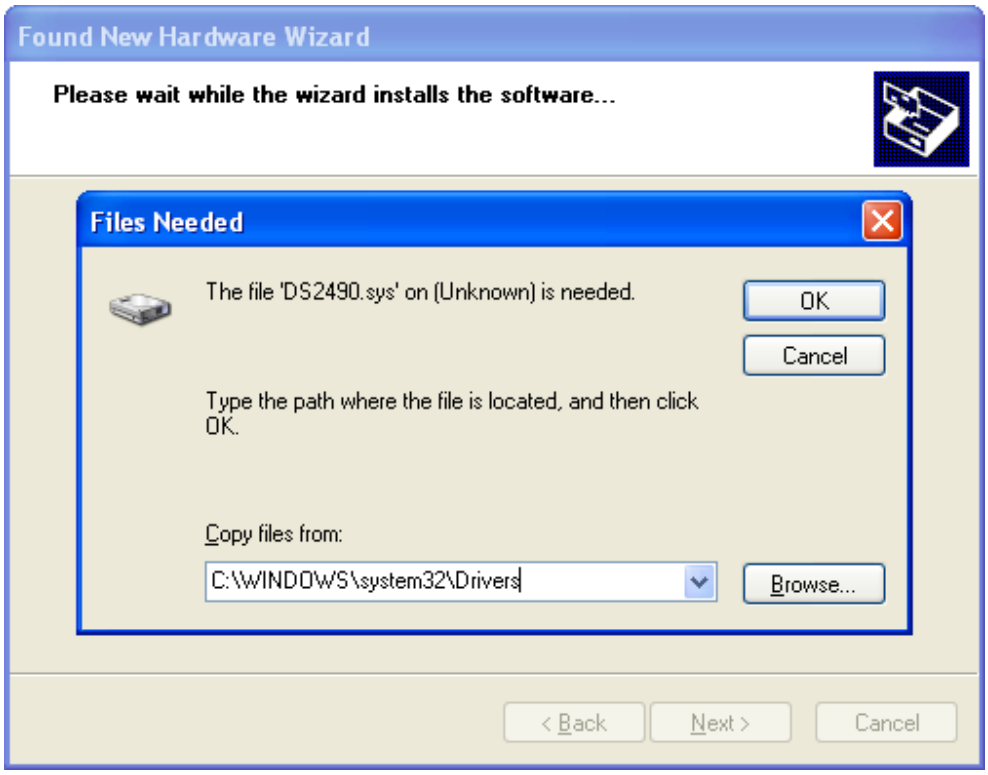


- The system now searches for the dongle's driver.



This process can take several minutes!

- If the driver cannot be found, the path shown in the dialog box must be entered in order to continue the installation.



Component	Description
ARwin	For the ARwin, use the directory described above "C:\Windows\system32\Drivers", since a different dongle driver is used than for PVI. The dongle driver for the ARwin can only be used in Windows XP, since the ARwin is only released for this operating system.
PVI	

For PVI, use the dongle drivers in the directory "%InstallDir%\BrAutomation\PVI\V3.00.00\PVI\WinUSB".

The dongle driver for PVI can also be used in Windows Vista and Windows 7 (both only the 32−bit version).

- Once installation is complete, click **Finish**.