Installing Natural or Natural Runtime on a PC

This chapter covers the following topics:

- Installation Procedure Overview
- Starting the Setup Program
- Installation Steps
- Additional Installation Steps for Custom Setup
- Starting Natural or Natural Runtime
- Maintaining Your Natural or Natural Runtime Environment
- Updating Your Natural or Natural Runtime Environment
- Silent Installation

Installation Procedure Overview

A setup program is provided for installing Natural or Natural Runtime. This program decompresses the files contained on the installation medium, copies them to hard disk, and creates a Natural or Natural Runtime program folder. The setup program guides you step by step through the installation procedure with explanatory text available with all screens displayed.

The installation procedure is used for first-time installations of Natural or Natural Runtime as well as for update installations (in which case previous configuration information is used by the setup program).

With Natural Runtime, only a subset of the Natural features is installed. Natural Runtime and Natural are two entirely separate environments. The Natural Runtime installation procedure, however, is almost identical with the Natural installation procedure.

The actual installation process consists of two phases:

1. Configuration Phase

You are prompted to enter certain installation values; other values are automatically included by the setup program. The installation parameters are displayed for confirmation prior to the actual installation. During this phase you may cancel the setup procedure at any time or step back to previous dialogs. No changes to your system will occur during this phase.

2. Installation Phase

The setup program installs Natural according to the values you entered during the configuration phase. The Natural shortcuts are created on your Windows desktop.

Important:

You must have administrator rights to install Natural or Natural Runtime.

Starting the Setup Program

Before you start the setup program, ensure that your system meets the requirements outlined in the section *Installation Prerequisites*.

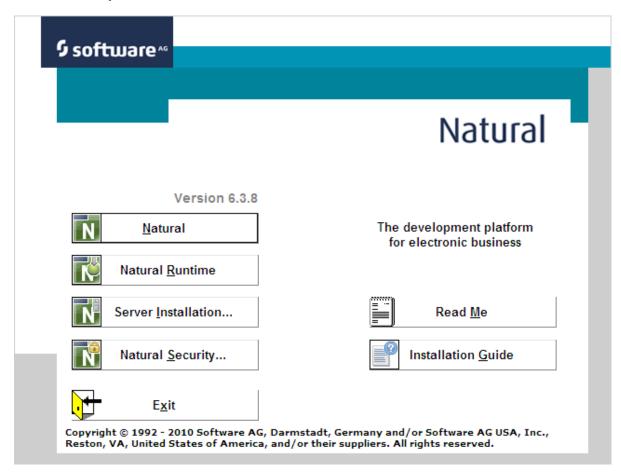
To run the setup program

- 1. Close all active Windows applications.
- 2. Insert the Natural installation medium into the drive.

The setup program is automatically started and the initial installation screen appears.

Note:

If the autostart feature of your operating system is disabled, execute *Setup.exe* which can be found in the root directory of the installation medium.



3. Choose either **Natural** or **Natural Runtime** in the initial installation screen.

The welcome screen for the selected product appears.

4. Choose the **Next** button to proceed.

Now, you will be guided through the installation for the select product. Proceed as described in the sections below.

Notes:

- 1. The server installation and the installation of Natural Security are described in separate sections. See *Installing Natural on a File Server* and *Installing Natural Security* for further information.
- 2. Natural Security cannot be uninstalled without removing the whole Natural environment where Natural Security has been installed.

Installation Steps

This section describes how to install Natural and Natural Runtime on a PC.

The following topics are covered below:

- License Agreement
- Customer Information
- Migration
- Setup Type
- Choose Destination Location
- Ready to Install
- InstallShield Wizard Complete

License Agreement

After the welcome screen, the license agreement screen is displayed. To proceed with the installation, you have to accept the terms in the license agreement.

• Choose the **Yes** button to proceed.

Customer Information

In this screen, you enter your customer information.

- 1. Enter your user name.
- 2. Enter the name of your organization.
- 3. Specify the path to the XML file which contains your license key.

You can overwrite the default with an alternative path to your license key file or change it by choosing the **Browse** button.

4. Choose the **Next** button to proceed.

Migration

This screen appears only if the installation routine detects an older version of Natural or Natural Runtime on your system.

In this screen, you can specify whether you want to migrate your parameter files to the newest version of Natural.

If you migrate your parameter files to the newest version of Natural, the parameter files are transferred and the FNAT and steplib settings are changed where necessary. The FUSER will remain unchanged and cannot be modified during the installation procedure.

- 1. Select either **No migration** or the Natural version that you want to migrate.
- 2. Choose the **Next** button to proceed.

Setup Type

In this screen, you select the setup type that best suits your needs. Different screens appear for Natural and Natural Runtime:

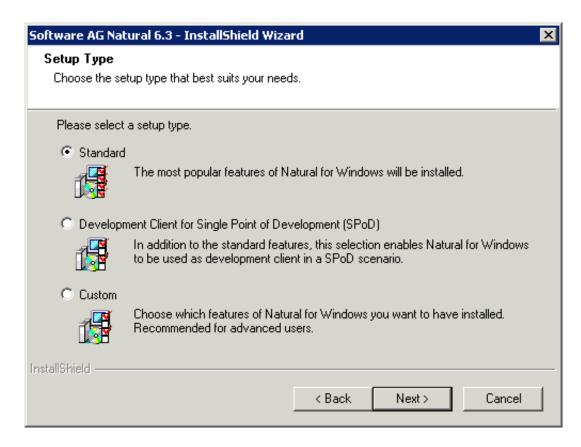
- Natural
- Natural Runtime

Note:

The setup type **Development Client for Single Point of Development (SPoD)** is not available in a Natural Runtime installation.

Natural

This screen appears when you install Natural.



1. Select one of the following setup types:

Standard

If you select this setup type, Natural is installed including the following features:

- Reporter
- Help Compiler
- Example Libraries

• Development Client for Single Point of Development (SPoD)

If you select this setup type, Natural is installed including all standard features plus the following:

- Terminal Emulation
- Natural Development Client (SPoD) which includes the following:
 - Application Wizard
 - Metrics and XRef Viewing
 - Object Description
 - Program Generation

- Schema Generation
- XRef Evaluation
- Object Versioning
- Web I/O Interface client

Custom

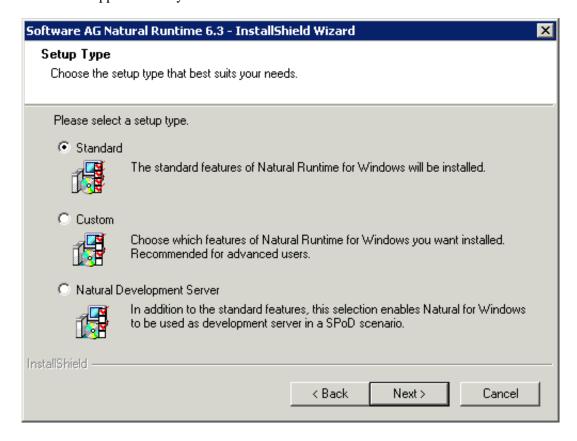
If you select this setup type, a screen appears where you can choose the features you want to install. The standard features are preselected.

Installable features are:

- Example Libraries
- Remote Debugger
- Samples
- Reporter
- O Help Compiler
- Natural Development Client (SPoD)
- Web Interface (SYSWEB3)
- O Natural for Tamino (requires a separate license key file; if you choose to install this feature, you will be prompted to provide the license key file)
- O Mainframe Navigation
- Output Management GUI Client
- Entire Operations GUI Client
- Object Compare
- Local Versioning
- O Trace and debug files
- O Web I/O Interface service
- Natural Development Server (requires a separate license key file; if you choose to install this feature, you will be prompted to provide the license key file)
- Natural for Ajax Tools
- 2. Choose the **Next** button to proceed.

Natural Runtime

This screen appears when you install Natural Runtime.



1. Select one of the following setup types:

Standard

If you select this setup type, Natural Runtime is installed including the following features:

- O Natural Environment
- Reporter

Custom

If you select this setup type, a screen appears where you can choose the features you want to install. The standard features are preselected.

Installable features are:

- Reporter
- O Web Interface (SYSWEB3)
- Natural for Tamino (requires a separate license key file; if you choose to install this feature, you will be prompted to provide the license key file)

- O Mainframe Navigation
- Output Management GUI Client
- O Entire Operations GUI Client
- Trace and debug files
- Web I/O Interface service
- Natural Development Server (requires a separate license key file; if you choose to install this feature, you will be prompted to provide the license key file)

• Natural Development Server

If you select this setup type, Natural Runtime is installed including all standard features plus the following:

- Natural Development Server (requires a separate license key file; you will be prompted to provide it. You will also be prompted to provide a port number)
- 2. Choose the **Next** button to proceed.

Choose Destination Location

In this screen, you specify the destination folder to which Natural or Natural Runtime will be installed. This folder must reside on a local disk drive.

The default path is displayed according to your %ProgramFiles% system variable setting:

%ProgramFiles%\Software AG\product-name

where *product-name* is either "Natural" or "Natural Runtime".

- 1. You can change this path by choosing the **Browse** button.
- 2. Choose the **Next** button to proceed.

When you have selected the setup type **Custom**, a screen appears in which you have to select the features that are to be installed. Continue reading the section *Additional Installation Steps for Custom Setup* and then continue with the steps below.

When you have not selected the setup type **Custom**, continue reading with the steps below.

Ready to Install

In this screen, your current settings and the features to be installed are displayed for reviewing.

• Confirm the settings by choosing the **Install** button. The files are then copied to your system. The progress of the setup status is shown. The Natural or Natural Runtime shortcuts are created on your Windows desktop.

Or review your choices by choosing the **Back** button.

Or choose **Cancel** to exit the setup program.

InstallShield Wizard Complete

After the files have been copied to your system, the last screen appears. You can display the Readme information now or later.

1. Complete the installation process by choosing the **Finish** button.

The latest information will be displayed, unless you deselect this option.

2. You can restart your computer now or later. It is recommended to restart it now.

Continue reading the section *Starting Natural or Natural Runtime*.

Additional Installation Steps for Custom Setup

The information in this section applies to the setup type **Custom**.

After you have defined the destination location, you have to select the features to be installed. Depending on your choice of features, further information may be required. This section describes all screens which may appear with the setup type **Custom**.

- Select Features
- Database Settings
- Remote Debugger (optional)
- Web I/O Service (optional)
- Web Interface (optional)
- Web Interface Apache (optional)
- Natural for Tamino
- Natural Development Server

After the last screen described in this section has been displayed, continue reading with the above step *Ready to Install*.

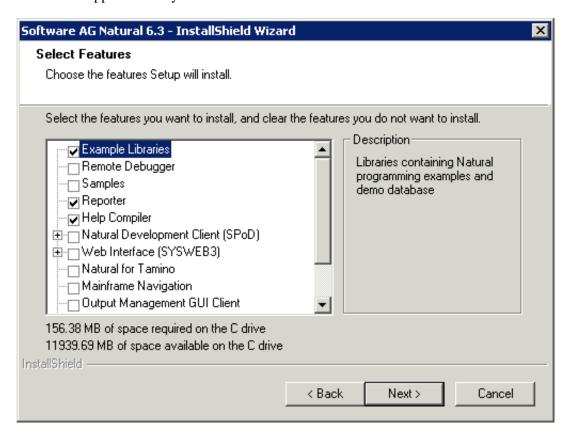
Select Features

In this screen, the standard features to be installed are preselected. You can add or remove features according to your needs. Different screens appear for Natural and Natural Runtime:

- Natural
- Natural Runtime

Natural

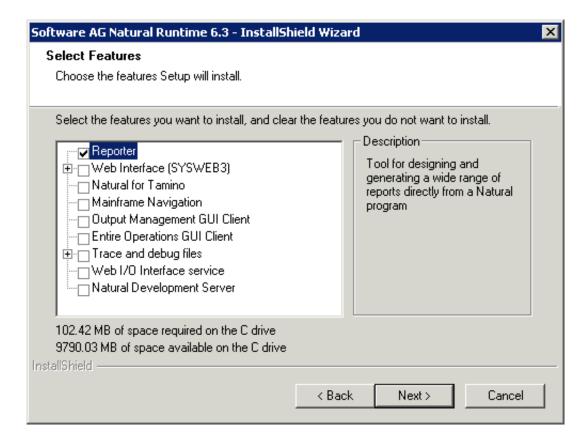
This screen appears when you install Natural.



- 1. Select the features you want to install.
- 2. Choose the **Next** button to proceed.

Natural Runtime

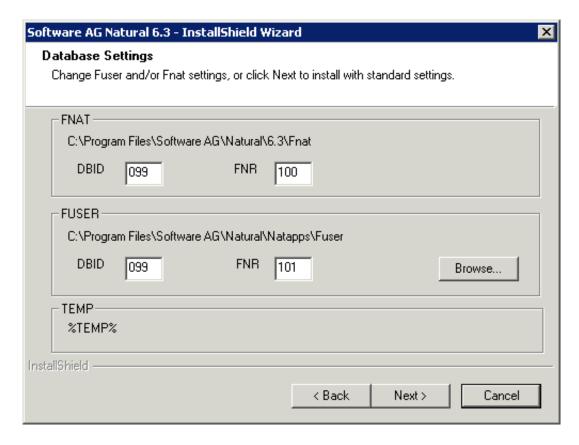
This screen appears when you install Natural Runtime.



- 1. Select the features you want to install.
- 2. Choose the **Next** button to proceed.

Database Settings

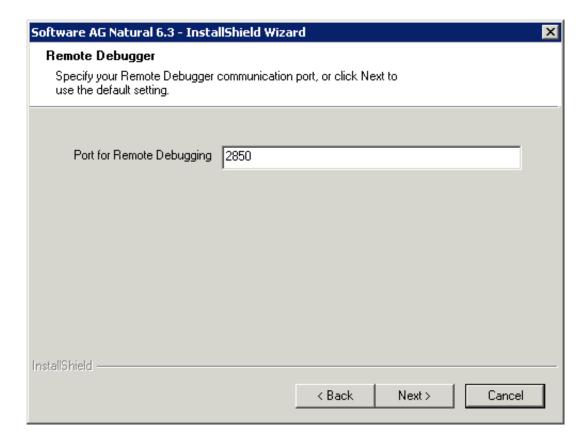
In this screen, the values for the database IDs and file numbers for FUSER and FNAT and the default path for the FUSER directory are displayed. Example for Natural:



- 1. You can change the FUSER settings by choosing the **Browse** button.
- 2. Choose the **Next** button to proceed.

Remote Debugger (optional)

This screen appears only if you have selected the feature **Remote Debugger** (not available with Natural Runtime). The default port for the Remote Debugger is displayed.



1. You can enter a value for the Remote Debugger communication port (TCP port).

Values between 0 and 65535 are valid. The default value is 2850.

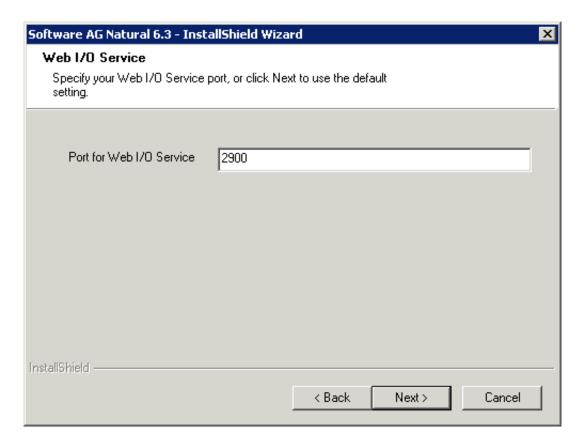
2. Choose the **Next** button to proceed.

Note:

Unlike on Windows without Terminal Services activated, the Natural Remote Debugger Service is not installed as a Windows Service. However, in order to use it for debugging Natural programs remotely, it can be started via the Windows **Start** menu (**Start** > **Programs** > **Software AG Natural** *n.n*). After starting the remote debugging service in this fashion, a dialog will appear displaying the port ID that must be used with the RDPORT parameter in the remote Natural session. For further information on how to use the Remote Debugger, refer to the *Debugger* documentation.

Web I/O Service (optional)

This screen appears only if you have selected the feature **Web I/O Interface service**. The default port for the Web I/O Interface service is displayed.



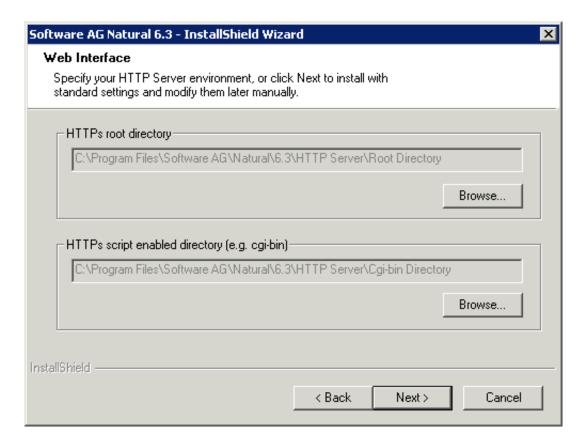
1. You can enter a value for the Web I/O Interface service port (TCP port).

Values between 0 and 65535 are valid. The default value is 2900.

2. Choose the **Next** button to proceed.

Web Interface (optional)

This screen appears only if you have selected the feature **Web Interface**. Example for Natural:



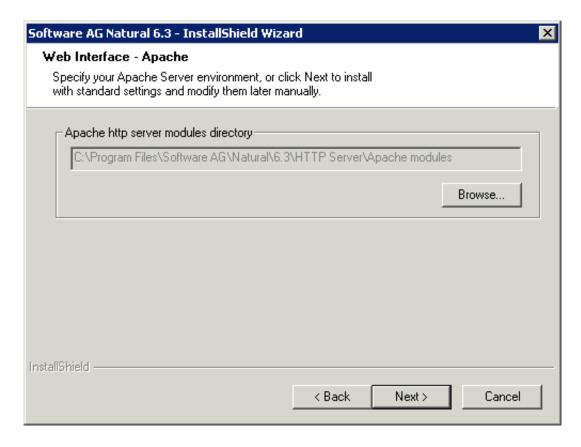
In this screen, you can verify the HTTP server root directory and the HTTP server script enabled directory for the Web Interface.

The paths shown in the screen are displayed according to your ProgramFiles% system variable setting.

- 1. If necessary, choose the **Browse** buttons to change the paths.
- 2. Choose the **Next** button to proceed.

Web Interface - Apache (optional)

This screen appears only if you have selected the feature **Web Interface** and have selected the HTTP server extensions for Apache. Example for Natural:



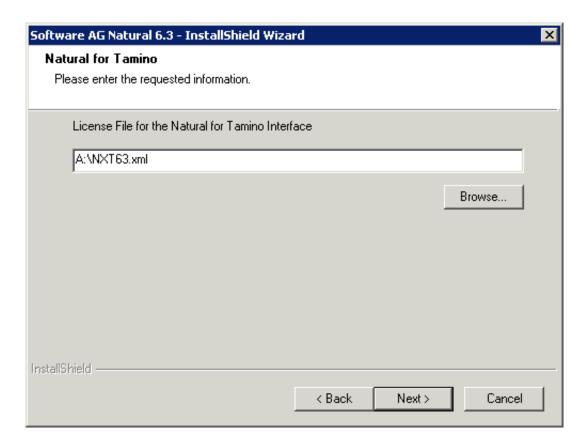
In this screen, you can verify the Apache HTTP server bin directory for the Web Interface.

The path shown in the screen is displayed according to your %ProgramFiles% system variable setting.

- 1. If necessary, choose the **Browse** button to change the path.
- 2. Choose the **Next** button to proceed.

Natural for Tamino

This screen appears only if you have selected the feature **Natural for Tamino**. Example for Natural:

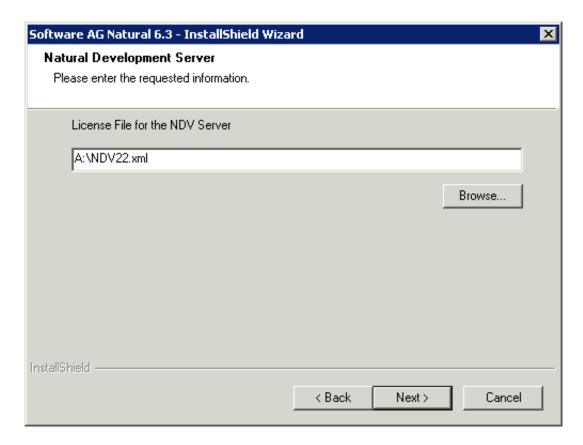


In this screen, the path and file name of your Natural for Tamino license key file is required.

- 1. If necessary, choose the **Browse** button to change the path.
- 2. Choose the **Next** button to proceed.

Natural Development Server

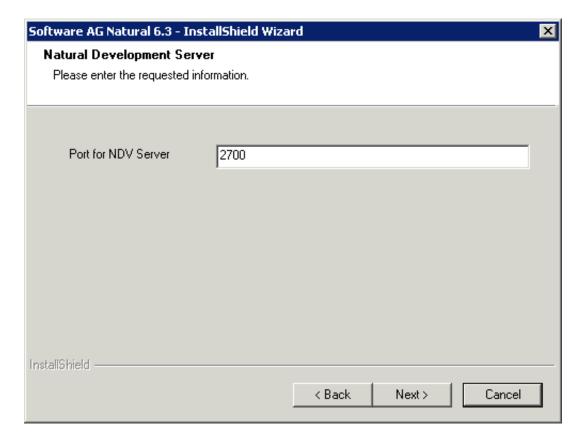
This screen appears only if you have selected the feature **Natural Development Server**. Example for Natural:



In this screen, the path and file name of your Natural Development Server license key file is required.

- 1. If necessary, choose the **Browse** button to change the path.
- 2. Choose the **Next** button to proceed.

In the resulting screen, the default port for the Natural Development Server is displayed.



3. You can enter a value for the Natural Development Server port (TCP port).

Values between 0 and 65535 are valid. The default value is 2700.

4. Choose the **Next** button to proceed.

When the Natural Development Server is installed, it is automatically added as an allowed program to the Windows firewall.

Continue reading with the step *Ready to Install* earlier in this section.

Starting Natural or Natural Runtime

Once the installation process is completed, you can start a Natural or Natural Runtime session.

For Natural, shortcuts for the following product components have been created on your Windows desktop:

- Natural
- Natural Configuration Utility
- Natural Component Browser

If you would like to read more about using Natural, refer to First Steps with Natural.

For Natural Runtime, shortcuts for the following product components have been created on your Windows desktop:

- Natural Runtime
- Natural Configuration Utility

Before using Natural or Natural Runtime, however, you may need to set up parameters and individual settings depending on your environment. If you wish to do so, see *Profile Parameter Usage* in the *Operations* documentation. For information on transferring Natural objects from another platform (for example, UNIX), see *Object Handler* in the *Tools and Utilities* documentation.

Note:

When Natural or Natural Runtime has been installed in an environment protected by the Windows firewall and can therefore not be started, see *Configuring the Microsoft Windows Personal Firewall to Run Natural* in the *Operations* documentation.

To start Natural

• From the Windows Start menu, choose **Programs > Software AG Natural** *n.n* **> Natural**.

Or:

Use the following shortcut on your Windows desktop.



Or:

Execute the file *natural.exe* which is stored in Natural's *bin* directory. For example:

C:\Program Files\Software AG\Natural\n.n\bin\

where n.n is the current version number.

Natural Studio, the development environment for Natural, appears.

Note:

Dynamic parameters can be added when Natural is started from a shortcut.

To start Natural Runtime

• From the Windows **Start** menu, choose **Programs > Software AG Natural Runtime** *n.n* **> Natural Runtime**.

Or:

Use the following shortcut on your Windows desktop.



Or:

Execute the file *naturalr.exe* which is stored in Natural Runtime's *bin* directory. For example:

C:\Program Files\Software AG\Natural Runtime\n.n\bin

where n.n is the current version number.

Note:

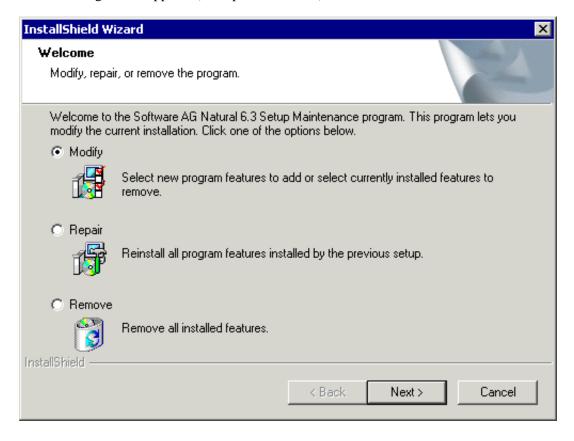
Dynamic parameters can be added when Natural Runtime is started from a shortcut.

Maintaining Your Natural or Natural Runtime Environment

You can modify, repair or remove a Natural or Natural Runtime installation at any time after it has been installed.

- 1. Choose the **Add/Remove Programs** feature of your operating system.
- 2. In the list of currently installed programs, select **Software AG Natural** *n.n* or **Software AG Natural Runtime** *n.n* (where *n.n* is the current version number).
- 3. Choose the **Change/Remove** button.

The following screen appears (example for Natural).



4. Select the required option button and choose the **Next** button. See the descriptions below for further information.

Modify

The **Select Features** screen of the custom installation will be displayed. There you can change your former choice of features. The features that are currently installed are selected. You can add or remove features by selecting or deselecting the corresponding check boxes. If you add new features, the

installation will step-by-step prompt you for further input in accordance with your choice, as described above beginning in section *Select Features*.

If you deselect features, they will be uninstalled.

Repair

The repair feature allows you to repair your installed Natural or Natural Runtime environment, for example if application binaries were deleted by mistake or your system files are incomplete.

Note:

If there are damaged or incorrect entries in the Registry or configuration files, the repair function may not be able to repair this. Then it will be necessary to re-install the environment.

Remove

Using this feature you can uninstall your Natural or Natural Runtime environment.

Updating Your Natural or Natural Runtime Environment

If Natural or Natural Runtime is already installed on your PC and you want to install a newer update package or patch level for the same version number, proceed as described below.

Notes:

- 1. It is only possible to update your environment when the third digit in the version number, which indicates a correction level, changes.
- 2. From a parallel installation with an older version number (first 2 digits), it is only possible to migrate the parameter files.

Important:

If you are using the Natural Web I/O Interface, make sure that the required version of Microsoft .NET Framework has already been installed on your PC *before* you start the update installation. The required version is listed under *Software* in the section *Installation Prerequisites*.

To update your environment

- 1. Start the update installation in the same way as a new installation by executing *setup.exe* from the installation medium.
- 2. Choose the product you want to install.

The welcome screen is displayed.

3. Choose the **Next** button to proceed.

A message appears asking if you wish to update Natural or Natural Runtime.

4. If you choose **Yes**, your version will be replaced by the newer version. The former version will be uninstalled and subsequently the new update package or patch level version will be installed using the same settings as your former installation.

The new version will provide the same features as the former version. If you wish to change them, you can use the Modify function described in section *Maintaining Your Natural or Natural Runtime Environment* after the installation has been executed successfully.

Silent Installation

It is possible to record an installation process in order to replay it on other PCs using the same user input as entered during the recorded installation. Since a replayed installation does not require any additional user interaction, no user interface is displayed.

To record a silent installation

• Use the following command:

```
x:\WINDOWS\NAT\Setup.exe /r -f1"%TEMP%/Natnnn.iss
```

where x stands for the letter of your disk drive containing the Natural installation medium and nnn stands for the current version number of Natural.

As a result of this installation, you will find the file *Nat<nnn>.iss* in your temp directory. This file can be used for silent installations of the same Natural environment on other PCs.

To start a silent installation

• Use the following command:

```
x:\WINDOWS\NAT\Setup.exe /s -f1"%TEMP%/Natnnn.iss
```

where x stands for the letter of your disk drive containing the Natural installation medium and nnn stands for the current version number of Natural.

After a silent installation of Natural is completed, a *setup.log* file is written to the same location as the *Nat<nnn>.iss* record file. Review this log and look for one of the following results:

Setup Code	Explanation
0	Successful installation.
1	General error.
2	Invalid mode.
3	Required data not found in the Nat <nnn>.iss.</nnn>
4	Insufficient memory.
5	File does not exist.
6	Cannot write to the response file.
7	Unable to write to the log file.
8	Invalid path to the InstallShield Silent response file.
9	Not a valid list type (string or number).
10	Data type is invalid.
11	Unknown error during setup.
12	Dialogs are out of order.
51	Cannot create the specified folder.
52	Cannot access the specified file or folder.
53	Invalid option selected.

If any errors occur during a silent installation, an error log can be found and reviewed in the following directory:

%TEMP%/NATnnnInst.log

where *nnn* stands for the current version number of Natural.