

NS-DK

Version 5.00 Edition 1

Installation and Administration Guide

Information in this document is subject to change without notice as a result of changes in the product. The software described in this document is furnished under a license agreement. The software may be used or copied only in accordance with the terms of the agreement. It is illegal to reproduce the software on any medium unless specifically authorized within the terms of the agreement. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose other than the purchaser's personal use without the written permission of Nat System.

© 2006 Nat System. All rights reserved.

The Nat System name and logo, Adaptable Development Environment, Graphical Builder, Information Modeling, Process Modeling, Version Management and Migration Manager are registered trademarks of Nat Systems.

All other trademarks mentioned in this document are registered trademarks of their respective companies.

Contents

About this manual	iii
Organization of the manual	iii
Conventions	iv

Chapter 1 Installing the NS-DK development environment

Before installing NS-DK.....	1-3
Reading the README File.....	1-3
Learning from experience: reviewing the FAQ.....	1-3
Checking hardware and software requirements.....	1-4
Deciding how to install NS-DK	1-5
Installing NS-DK	1-6
Full installation.....	1-6
Custom installation.....	1-9
Updating the system files	1-14

Appendix A System file changes

Modifying system files.....	A-3
Environment variables	A-4
In the AUTOEXEC.BAT file	A-4
In the control panel.....	A-5
The NSDB.INI file	A-6

About this manual

This manual outlines the information you need to install and configure the NS-DK development environment, and gives a checklist of the procedures involved in installing target environments.

It is intended to be used by system administrators and people responsible for installing the NS-DK development environment.

It contains a thematic index which provides entry points by functional themes.

Organization of the manual

This manual contains one chapters and one appendix.

Chapter 1	Installing the NS-DK development environment Shows you how to install NS-DK on your machine.
Appendix	System file changes Explains how to change system files manually to install NatWare.

Conventions

Typographic conventions

Important term	Important terms are printed in bold .
<i>Interface component</i>	The names of windows, dialog boxes, controls, buttons, menus and options are printed in <i>italics</i> .
[F9]	Function key names appear in square brackets.
FILENAME	Filenames are printed in UPPERCASE.
syntax example	Syntax examples are printed in a fixed-width font.

Notational conventions

- A round bullet is used for lists
- ◆ A diamond is used for alternatives
- 1. Numbers are used to mark the steps in a procedure to be carried out in sequence

definition

A **definition** has a special presentation. It explains the term in a single paragraph. The term appears in the first column, then once in bold in the definition.

Operating conventions

Choose
XXX \ YYY

This means you need to open the XXX menu, then choose the YYY command (option) from this menu.

You can perform this action using the mouse or mnemonic characters on the keyboard.

Click the
XXX \ YYY
button

This means you need to display the tool bar named XXX, then click the YYY button in this tool bar (the name of each button is shown by its help bubble).

You can only perform this action with the mouse.

Choose the
XXX button

This means you need to choose the XXX button in a dialog box.

You can perform this action using the mouse or mnemonic characters on the keyboard.

Icon codes



Comment, note, etc.



Reference to another part of the documentation



Danger: precaution to be taken, irreversible action, etc.



Suggestion: helpful hints, etc.



To go a step further: level of detail or expertise greater than the average level of the document



Indicates specific information on using the software under DOS-Windows (all versions)



Indicates specific information on using the software under DOS-Windows 32 bits



Indicates specific information on using the software under DOS-Windows 32 bits



Indicates specific information on using the software under Unix systems

Chapter 1

Installing the NS-DK development environment



The supplied installation kit makes it very easy for you to install the NS-DK package and its tools.

This chapter explains

- What to do before installing NS-DK
- How to install either the full or a partial NS-DK system
- How to update your system files

Contents

Before installing NS-DK	1-3
Reading the README File 1-3	
➤ <i>To read the README file</i>	
Learning from experience: reviewing the FAQ 1-3	
Checking hardware and software requirements 1-4	
Deciding how to install NS-DK 1-5	
Installing NS-DK	1-6
Full installation 1-6	
➤ <i>To install the full NS-DK system</i>	
Custom installation 1-9	
➤ <i>To install a partial NS-DK system</i>	
Updating the system files.....	1-14

Before installing NS-DK

Your NS-DK package contains everything you need to install NS-DK quickly and easily. Before you begin, however, you should:

- Review the README file
- Review "Frequently Asked Questions"
- Make sure you have the necessary hardware and software to run the installation program and to use NS-DK effectively
- Decide how you are going to install NS-DK in a multi-user environment

Reading the README File

Last-minute changes or late-breaking news items concerning NS-DK are explained in a README file located on your CD-ROM.



Under Windows, this file is a Microsoft Write file called **README.WRI**.

When you run the installation procedure, this file is automatically copied to your NS-DK installation directory. When installation is complete, NS-DK suggests you read the file.

➡ To read the README file

1. Insert the NS-DK CD-ROM in your CD-ROM drive.
2. Launch a text processing application in order to read the README file, under Windows, launch Microsoft Write or another word processing
3. Open the README file from the drive, under Windows, open **README.WRI**.

As you scan this file, make sure your package contains everything it's supposed to.

Learning from experience: reviewing the FAQ

The FAQ (Frequently Asked Questions) is a paper document included in your NS-DK package. Drawn from the accumulated experience of NS-DK users of all levels and spheres of activity, it synthesizes the practical questions users most often ask Nat Systems Technical Support engineers, and provides simple, coherent responses.

By looking through the FAQ before actually beginning to use NS-DK, you can spare yourself the time and frustration of common — but avoidable — problems. You'll find advice about everything from installation and configuration, to how to use NS-DK's development tools, to database access, generation and deployment.

At the least, we recommend you read the beginning sections of the FAQ:

- Installation and Getting Started
- Dictionary and Use by Several Developers

Checking hardware and software requirements

Before installing NS-DK, make sure you have a sufficiently powerful computer, with enough memory and free disk space. The installation procedure determines the disk space required to install your chosen configuration as well as the remaining disk space available on your machine. It warns you and will not run if you don't have enough space.

The minimal configuration required, depending on your OS is the following:

For Windows XP :

- Pentium 3,
- 512 Mb RAM,
- At least 600 Mb of free disk space

For Windows NT/2000 :

- Pentium 2,
- 256 Mb RAM,
- At least 600 Mb of free disk space

You can find detailed information concerning requirements in the README file.

You should also consider the other software that is necessary for NS-DK to function correctly. For example, the NS-DK installation procedure installs the NS-DK drivers for any databases and TP monitors that you might wish to use, but does not check that these product have themselves been installed. Either before or after you install NS-DK, you should make sure that any database or TP monitor is correctly installed and available for use by NS-DK.



If you have a dongled version of NS-DK, you must connect the dongle to the **parallel port** of the machine:

- **after** you've installed the system;

- **before** you launch NS-DK for the first time.



The default installation directory is C:\NS-DK, but you can specify another name. If you're installing under Windows 98, you must use DOS names containing up to 8+3 characters, the character '~' being forbidden. You cannot use Windows 95 long names for the NS-DK directories, or locate those directories under directories with long names.

For example, you can't install NS-DK in C:\Progra~1\NS-DK, which in a standard Windows 95 installation is equivalent to C:\Program Files\NS-DK.



See Appendix A for information about how the installation procedure modifies the AUTOEXEC.BAT file.

Deciding how to install NS-DK

In a multi-user network environment, you can choose how to make NS-DK available to its users. You can install a copy on each machine, or you can install the system on one machine so that users can access it over the network.

Your choice will probably be influenced by the number and size of your development teams, and the number of repositories they are likely to use. Note that you can create any number of repositories under NS-DK.



See the "Repository Management Guide" for more information about how to manage repositories and workspaces with NS-DK.

Installing NS-DK

When you install NS-DK, you are offered the choice of a full or custom installation. Both installation procedures are explained in detail below.

You will normally use the full installation when you install the system for the first time, and if you re-install a new version of the software.

Custom installation allows you to install selected elements of the system. It is useful if you want to add a module that you haven't previously used, or if you have limited disk space available.

If you check the *Repository* option in the *Installation Components and Sub-Components* dialog box (see below), NS-DK will create a new workspace consisting of the `<InstallationDirectory\PRIV>` and `<InstallationDirectory\GLOB>` directories. This allows you to reinstall a void repository.

By default, the procedure will attempt to install NS-DK over any existing version of the product. It will not however overwrite any existing workspaces.




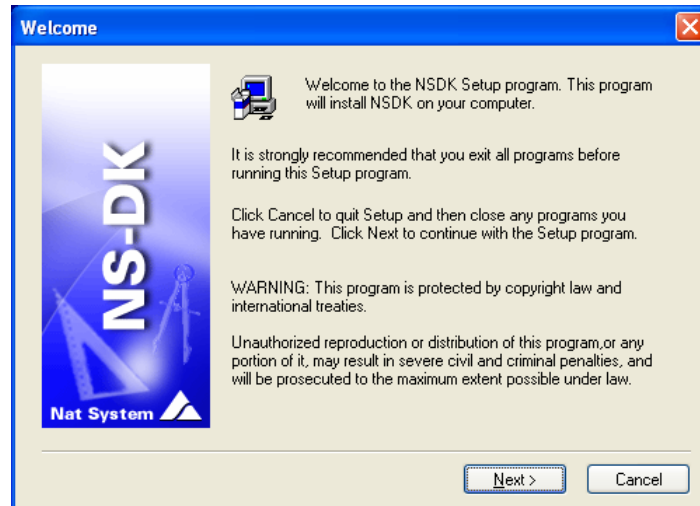
For more information about workspaces, see Chapter 2. See the "Repository Management Guide" for complete information about workspaces.

Full installation

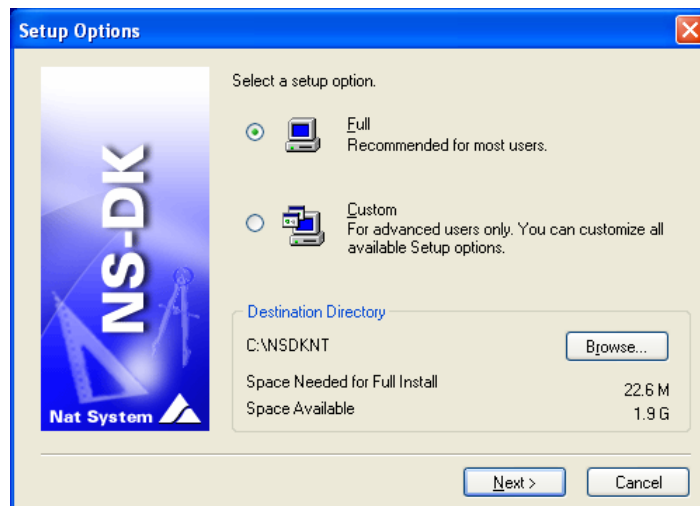
The following instructions assume that you're installing NS-DK for the first time. This procedure installs the complete NS-DK configuration which allows you to follow the tutorial in the "Getting Started" manual.

➤ **To install the full NS-DK system**

1. For best results, make sure no other applications are open on your machine.
2. Insert the NS-DK CD-ROM into your CD-ROM drive, choose *Start \ Run*. The *Run* dialog box opens. In the entry field, type:

Choose *OK*.
3. After initializing, the installation program displays a welcome window.



4. Click the *Next>* button. The *Setup Options* dialog box opens.

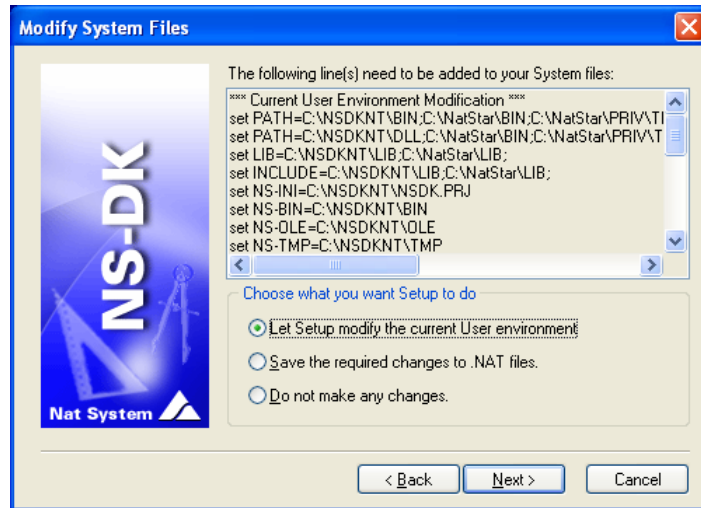


5. Select the *Full* installation option by clicking its associated button. And, in the group *Destination Directory*, retain the default directory or press the *Browse...* button in order to select the desired directory.



The path for the installation directory is limited to 110 characters.

6. Choose *Next>*. The *Modify System Files* dialog box opens.



4. Accept the default *Let Setup modify the current User environment* option. This option sets the environment variables automatically.

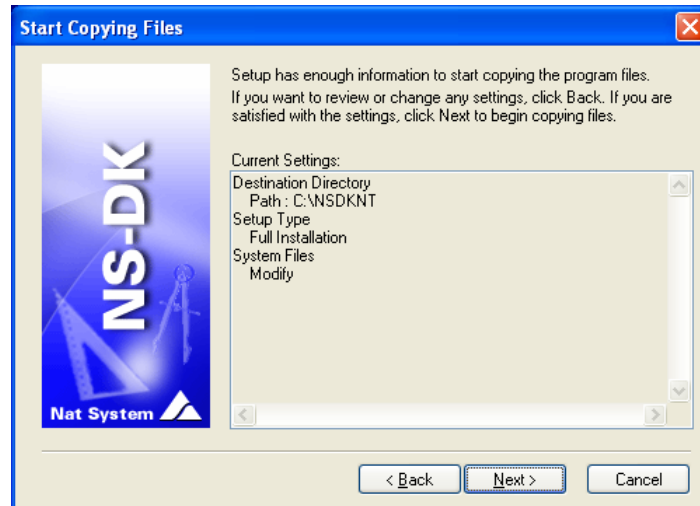
If you check the option *Save the required changes to .NAT files*, the installation procedure sets the environment variable in a .NAT start-up file. This .NAT file should be renamed as a .BAT or .CMD file.

Example of AUTOEXEC.NAT file:

```
SET PATH=c:\nsdknt\DLL;c:\nsdknt2\BIN;%PATH%
SET LIB=c:\nsdknt\LIB;%LIB%
SET INCLUDE=c:\nsdknt\LIB;%INCLUDE%
SET NS-INI=c:\nsdknt\NSDK.PRJ
SET NS-BIN=c:\nsdknt\BIN
SET NS-OLE=c:\nsdknt\OLE
SET NS-TMP=c:\nsdknt\TMP
SET NS-BCK=c:\nsdknt\BCK
SET NS-NCL=c:\nsdknt\NCL
SET NS-HELP=c:\nsdknt\HELP
SET NS-LST=c:\nsdknt\LST
SET NS-SCR=c:\nsdknt\SCR
SET NS-TPL=c:\nsdknt\TPL
SET NS-SEG=c:\nsdknt\SEG
SET NS-BMP=c:\nsdknt\BMP
SET NS-VAR=c:\nsdknt\VAR
SET NS-CFG=c:\nsdknt
SET NS-SAMPLES=c:\nsdknt\SAMPLES
SET NS-HW=c:\nsdknt\BIN
SET NS-DB=c:\nsdknt\NSDB\NSDB.INI
```

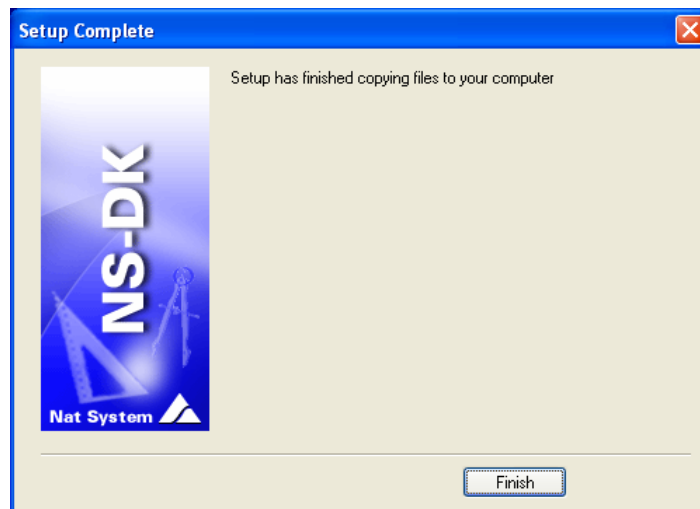
If you check the option *Do not make any changes*, you must set the environment variables yourself. Please refer to Appendix A for further information.

5. Then choose *Next>*.
6. After a few seconds, the *Start Copying Files* dialog box opens.



It displays a summary of your current installation settings. Accept these settings by choosing *Next>*.

7. The installation process begins copying NS-DK's files to your computer.



Custom installation

The instructions in this section are for performing a custom, or partial, installation of NS-DK.

➤ To install a partial NS-DK system

1. For best results, make sure no other applications are open on your machine.

2. Insert the NS-DK CD-ROM into your CD-ROM drive, choose *File \ Run* in your Windows Program Manager.

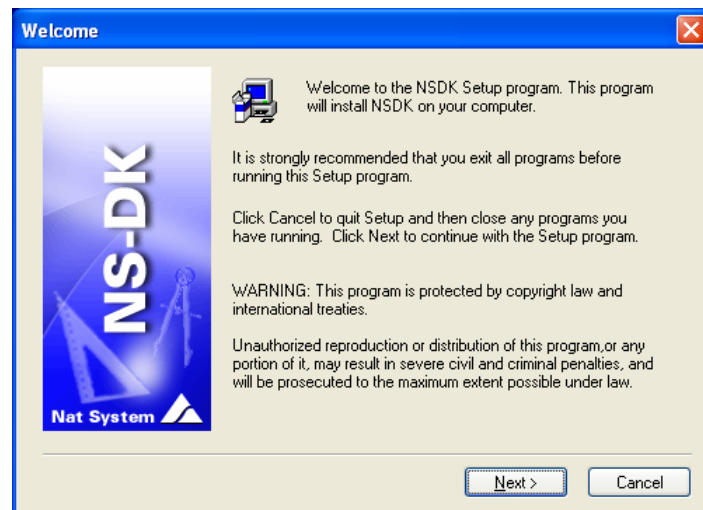
For Windows, choose *Start \ Run*.

The *Run* dialog box opens. In the entry field, type:

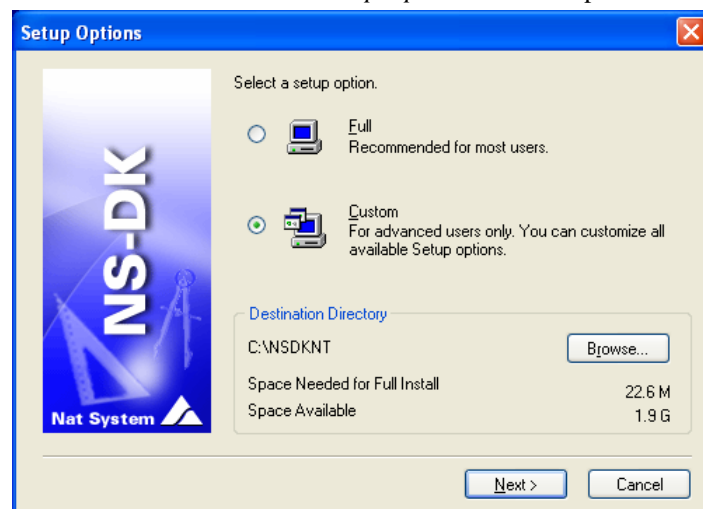
E:\SETUP

Choose *OK*.

After initializing, the installation program displays a welcome window.



3. Click the *Next>* button. The *Setup Options* window opens.



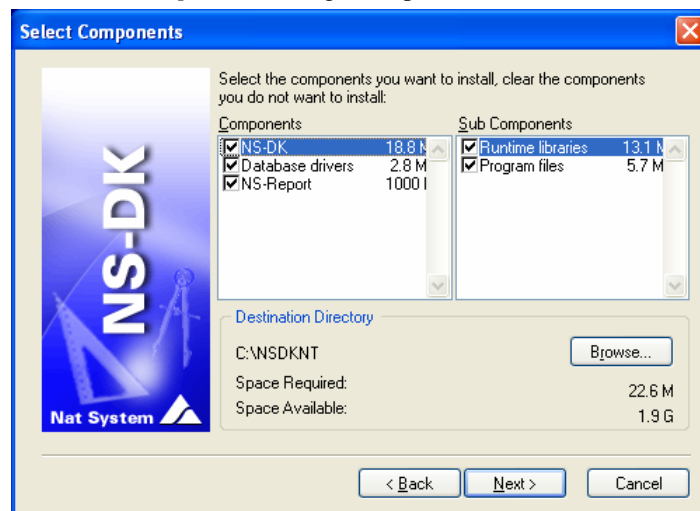
4. Select the *Custom* installation option. And, in the group *Destination Directory*, retain the default directory.

If you want to install NS-DK in a different directory, choose *Browse*; a dialog box is displayed for you to enter the name of the directory (which may be on the network). If the directory doesn't exist, you are asked if you want to create it. If you don't, you are returned to step 3 to enter another name.



The path for the installation directory is limited to 110 characters.

5. The *Select Components* dialog box opens.

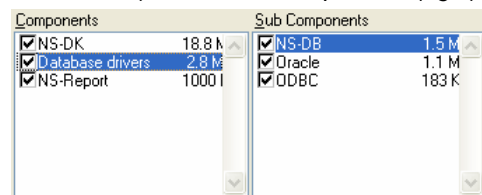


6. Check the components you want to install.

7. If you don't want to install a component, clear it by clicking its check mark (not the component's name).

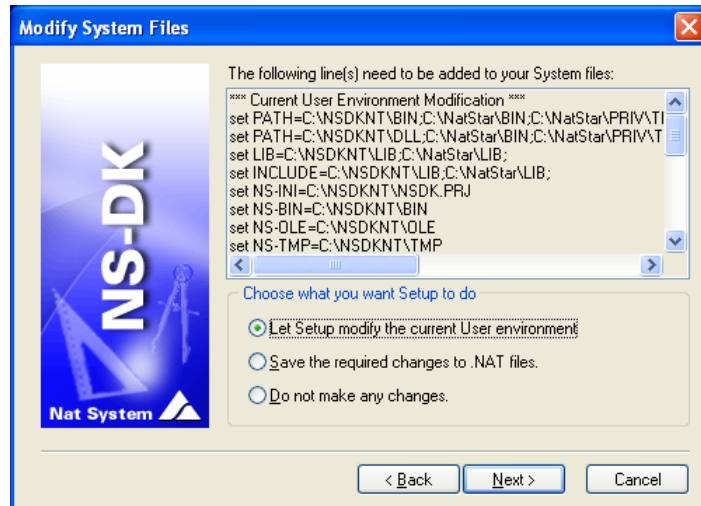
As you highlight *Database drivers*, the available drivers are displayed on the right.

The following is an example of a highlighted component (Database drivers in the left-hand list) and its sub-components (right).

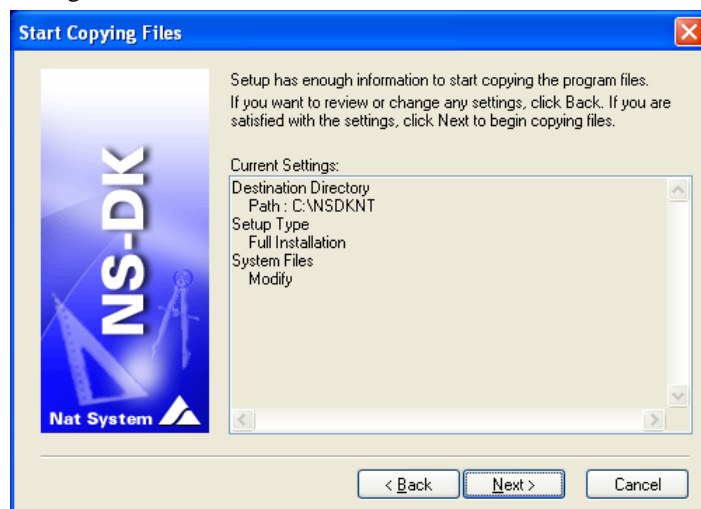


To save space you may decide not to install all the available database drivers right now. Remember that you can always repeat this custom installation procedure and install new drivers later if necessary.

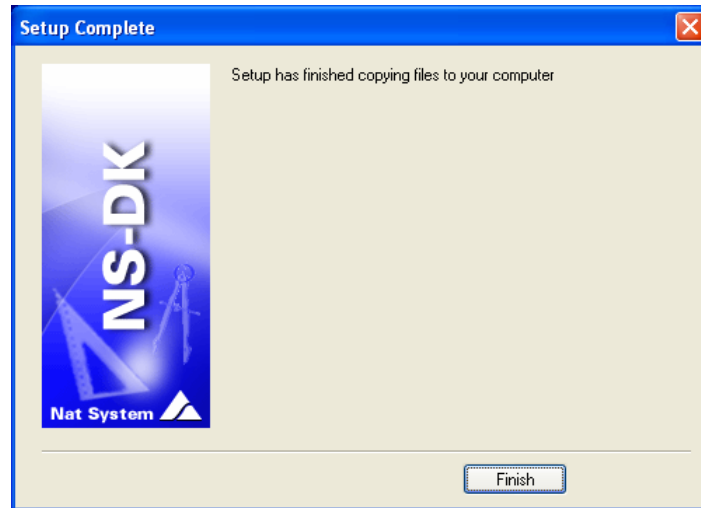
8. Once you've checked the appropriate boxes, choose *Next>*. The *Modify System Files* dialog box opens.



8. Once you've selected the components you want to install, choose *Next>*. The *Start Copying Files* dialog box opens, displaying a summary of your chosen installation settings.



9. Accept these settings by choosing *Next>*. The installation process begins copying NS-DK's files to your computer.



See Chapter 2 for instructions.

Updating the system files

The installation procedure needs to modify the following files AUTOEXEC.BAT for Windows (32 bits)

If you don't let the system make the necessary changes, you must do so yourself, using a text editor.



For complete information, see Appendix A.

Appendix A

System file changes



Installing NS-DK requires changes to be made to certain system files. You can either let these changes be made automatically by the installation procedure, or you can modify the files yourself. This appendix describes the modifications which must be made.

The default NS-DK installation sets the environment variables automatically. If you have chosen another option, check either in the AUTOEXEC.NAT file or in the PATH environment variable that the PATH is correct.

This appendix explains

- How to modify your system files

Contents

Modifying system files.....	A-3
Environment variables	A-4
In the AUTOEXEC.BAT file A-4	
➡ <i>Paths</i>	
In the control panel A-5	
The NSDB.INI file	A-6

Modifying system files

Installing NS-DK requires modifications to the following system files:

- For DOS-Windows (32 bits): AUTOEXEC.BAT only.
- NSDB.INI.

The necessary modifications are shown below. If you didn't let the installation procedure update your system files, you will need to modify them manually. Use any text editor to do this.

The modifications will not take effect until you have shut down your system and rebooted it.



For the remainder of this chapter, the following generic names are used for your directories:

Generic name	Description
<NS-DK>	Stands for the NS-DK <i>Installation directory</i> that you specified during installation.
<Glob>	Stands for the shared repository directory. By default this is <NS-DK>\GLOB.
<Priv>	Stands for the personal repository directory. By default this is <NS-DK>\PRIV.

Environment variables

In the AUTOEXEC.BAT file

In order to change environment variables in the AUTOEXEC.BAT file.

Add or update the following variables:

```
SET LIB=<NS-DK>\LIB;...
SET INCLUDE=<NS-DK>\INCLUDE;...
```

These are used for the generation and build process:

- LIB defines the path for NS-DK's libraries (.LIB files)
- INCLUDE defines the path for NS-DK's include files (.H files)

```
SET NS-INI=<NS-DK>\INI
```

The pathname of the NS-DK configuration files (*.INI...).

```
SET NS-DB=<NS-DK>\INI\NSDB.INI
```

The path and name of the NSDB / NSDBR configuration file (NSDB.INI).

```
SET NS-HELP=<NS-DK>\HELP
```

The path for NS-DK's on-line help. If you do not set this variable to point to the directory containing the help files, you must indicate the complete path for each help file in the *Help Files* field in the *Miscellaneous* tabbed window in the NS-DK *Options \ Setup* dialog box.

```
SET NS-COM=<NS-DK>\INI\NSCOM.INI
```

The path and name of NS-DK's client-server configuration file (NSCOM.INI).

➤ **Paths**

Indicate the paths of the executables and dynamic libraries for NS-DK as well as the dynamic libraries (product DLLs and generated DLLs) built with NS-DK:



```
SET PATH=<NS-DK>\DLL;<NS-DK>\BIN;<Priv>\TEST\DLL;<Glob>\CLASSES\DLL
```

In the control panel

In order to configure the PATH environment variable, open the Windows *Control Panel* (*Start/Settings/Control Panel menu*), double-click on the *System* icon. The *System Properties* window appears. Click on the *Advanced* tab, then the button *Environment variables*. Warning, user system variables are specific to the user profile, whereas system variables are the same whatever the user profile.

The NSDB.INI file

The installation program automatically adds the following two databases to the [User] section of the NSDB.INI file:

```
[User]  
...  
SQLWKDB= ' <NS-DK>\NSDB\SQLDB.DAT '  
SAMPLE= ' <Glob>\SAMPLE.DAT '
```