



Installation Guide

Software Developer's Kit and Open Server™

12.5.1

MICROSOFT WINDOWS

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About This Book

Audience

This book is for System Administrators or the persons responsible for installing the Software Developer's Kit (SDK) or Open Server™.

How this book is organized

This book contains the following chapters:

- Chapter 1, "Before You Begin," which contains pre-installation information and tasks.
- Chapter 2, "Installing SDK and Open Server," which describes the process of installing Software Developer's Kit (SDK) and Open Server.
- Chapter 3, "Post-installation Tasks," which provides information about the tasks you must perform after installing the component software for SDK and Open Server.

Related documents

You can find configuration and other information in these related documents:

- Open Client™ and Open Server *Release Bulletin* version 12.5.1 for your platform contains important last-minute information about Open Client and Open Server.
- Software Developer's Kit *Release Bulletin* version 12.5.1 for your platform contains important last-minute information about SDK.
- jConnect™ for JDBC™ *Release Bulletin* version 12.5.1 contains important last-minute information about jConnect.
- The Open Client and Open Server *Configuration Guide* for your platform contains information about configuring your system to run Open Client and Open Server.
- The Open Client Client-Library™ *Reference Manual* contains reference information for Open Client Client-Library.
- The Open Client Client-Library *Programmer's Guide* contains information on how to design and implement Client-Library programs.
- The Open Server Server-Library *Reference Manual* contains reference information for Open Server Server-Library.

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- The Open Client and Open Server Common Libraries *Reference Manual* contains reference information for CS-Library, a collection of utility routines that are useful in both Client-Library and Server-Library applications.
 - The Open Client and Open Server *Programmer's Supplement* for Microsoft Windows contains platform-specific information for programmers using Open Client and Open Server. This document includes information about:
 - Compiling and linking an application
 - The sample programs that are included with Open Client and Open Server
 - Routines that have platform-specific behaviors
 - The jConnect for JDBC *Installation Guide* contains installation information for jConnect for JDBC.
 - The ASE ADO.NET Data Provider's *User's Guide* provides information on how to access data in ASE using any language supported by .NET, such as C#, Visual Basic .NET, C++ with managed extension, and J#.

Other sources of information

Use the Sybase Getting Started CD, the Sybase Technical Library CD, and the Technical Library Product Manuals Web site to learn more about your product:

- The Getting Started CD contains release bulletins and installation guides in PDF format, and may also contain other documents or updated information not included on the Technical Library CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader (downloadable at no charge from the Adobe Web site, using a link provided on the CD).
- The Technical Library CD contains product manuals and is included with your software. The DynaText reader (included on the Technical Library CD) allows you to access technical information about your product in an easy-to-use format.

Refer to the *Technical Library Installation Guide* in your documentation package for instructions on installing and starting the Technical Library.

- The Technical Library Product Manuals Web site is an HTML version of the Technical Library CD that you can access using a standard Web browser. In addition to product manuals, you will find links to EBFs/Updates, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

To access the Technical Library Product Manuals Web site, go to Product Manuals at <http://www.sybase.com/support/manuals/>.

Sybase certifications on the Web

Technical documentation at the Sybase Web site is updated frequently.

❖ **Finding the latest information on product certifications**

- 1 Point your Web browser to Technical Documents at <http://www.sybase.com/support/techdocs/>.
- 2 Select Products from the navigation bar on the left.
- 3 Select a product name from the product list and click Go.
- 4 Select the Certification Report filter, specify a time frame, and click Go.
- 5 Click a Certification Report title to display the report.

❖ **Creating a personalized view of the Sybase Web site (including support pages)**

Set up a MySybase profile. MySybase is a free service that allows you to create a personalized view of Sybase Web pages.

- 1 Point your Web browser to Technical Documents at <http://www.sybase.com/support/techdocs/>.
- 2 Click MySybase and create a MySybase profile.

Sybase EBFs and software maintenance

❖ **Finding the latest information on EBFs and software maintenance**

- 1 Point your Web browser to the Sybase Support Page at <http://www.sybase.com/support>.
- 2 Select EBFs/Maintenance. Enter user name and password information, if prompted (for existing Web accounts) or create a new account (a free service).
- 3 Select a product.
- 4 Specify a time frame and click Go.
- 5 Click the Info icon to display the EBFs/Maintenance report, or click the product description to download the software.

If you need help

Each Sybase installation that has purchased a support contract has one or more designated people who are authorized to contact Sybase Technical Support. If you cannot resolve a problem using the manuals or online help, please have the designated person contact Sybase Technical Support or the Sybase subsidiary in your area.

Before You Begin

This chapter provides information about system requirements and the pre-installation tasks you must perform before you install SDK and Open Server. It covers the following topics:

Topic	Page
Supported Microsoft Windows platforms	1
SDK and Open Server components	2
System requirements for SDK and Open Server	5
Pre-installation instructions	8

Supported Microsoft Windows platforms

SDK and Open Server version 12.5.1 products are supported on the following Microsoft Windows platforms:

- Windows NT 4.0 Service Pack 6a
- Windows 2000 Service Pack 3 or later
- Windows 2003 Service Pack 1 or later
- Windows XP

Sybase has tested and certified the following compilers and linkers for use with SDK and Open Server products:

- Microsoft 32-Bit C/C++ Optimizing Compiler, Version 12.00.8804
- Microsoft 32-Bit Executable Linker, Version 6.00.8447

ASE ADO.NET compiler requirements

The ASE ADO.NET Data Provider requires more recent versions of the compilers. The ASE ADO.NET Data Provider version 1.0 is certified with the .NET language compilers included in the Microsoft (R) .NET Framework version 1.1.4322 which are:

- Microsoft (R) Visual C# .NET Compiler version 7.10.3052.4
- Microsoft (R) Visual Basic .NET Compiler version 7.10.3052.4

- Microsoft (R) Visual J# .NET Compiler version 7.10.3077.0
- Microsoft (R) JScript .NET Compiler version 7.10.3052

If you plan to use the ADO.NET Data Provider from managed C++ code, then the C++ compiler version required is Microsoft (R) 32-bit C/C++ Optimizing Compiler Version 13.10.3077.

SDK and Open Server components

The following sections summarize the components of the SDK and Open Server products.

SDK components

SDK 12.5.1 is a set of libraries and utilities for developing client applications. It includes the following components:

- Open Client version 12.5.1 – an API, a set of libraries used to develop and deploy C-language applications that access Adaptive Server® data. Included on the installation medium are:
 - Drivers for integrating Client-Library and Open Server applications with DCE directory and security services
 - Sample programs for Client-Library and DB-Library™
- Open Client Embedded SQL™/C version 12.5.1 – the precompiler that allows you to embed Transact-SQL statements into C-language applications.
- Open Client Embedded SQL/COBOL version 12.5.1 – the precompiler that allows you to embed Transact-SQL statements into COBOL-language applications.
- Language modules – provide system messages and datetime formats to help you localize your applications. Default installation includes:
 - U.S. English language module
 - Unicode UTF-8 encoding (utf8)
 - IBM code page 850 (cp850)
 - IBM code page 437 (cp437)

- ISO 8859-1 (iso_1)
- Hewlett-Packard Roman 8 (roman8) character sets

You can purchase additional language modules through Sybase.

- Open Database Connectivity (ODBC) 3.7
- OLEDB version 2.6
- ASE ADO.NET Data Provider – allows you to access data in ASE using any language supported by .NET, such as C#, Visual Basic.NET, C++ with managed extensions, and J#.
- jConnect for JDBC version 5.5 – the Java implementation of the Java JDBC standard, which provides Java developers with native database access in multitier and heterogeneous environments. For jConnect hardware and software requirements as well as installation instructions, refer to the *Installation Guide* for jConnect for JDBC.
- Java Runtime Environment (JRE) 1.3.1 – the runtime environment required by jConnect for JDBC.

SDK libraries and utilities

Table 1-1 lists libraries and utilities included with SDK.

Table 1-1: Libraries and utilities for Windows

	Open Client/C	Embedded SQL/C	Embedded SQL/COBOL
<i>Libraries</i>			
Client-Library	X	X	X
CS-Library	X	X	X
DB-Library	X		
Bulk-Library	X		
<i>Utilities</i>			
bcp.exe, defncopy.exe, dsedit.exe, dscp.exe, isql.exe	X		
cpre.exe		X	
cobpre.exe			X

Open Server components

Open Server is a set of APIs and supporting tools you can use to create custom servers that will respond to client requests submitted through Open Client or jConnect routines. Open Server includes the following components:

- Open Server version 12.5.1 – a set of APIs and supporting tools. Included on the CD are:
 - Drivers for integrating Client-Library and Open Server applications with DCE directory and security services
 - Sample programs for Client-Library
- Language modules – provide system messages and datetime formats to help you localize your applications. Default installation includes:
 - U.S. English language module
 - Unicode UTF-8 encoding (utf8)
 - IBM code page 850 (cp850)
 - IBM code page 437 (cp437)
 - ISO 8859-1 (iso_1)
 - Hewlett-Packard Roman 8 (roman8) character sets

You can purchase additional language modules through Sybase.

Open Server libraries and utilities

This section lists the libraries and utilities that are installed.

Open Server libraries

The following libraries are installed with Open Server:

- Client-Library
- CS-Library
- Bulk-Library

Utilities

The following utilities are available with your installation:

- bcp, defncopy, dscp, dsedit, and isql

System requirements for SDK and Open Server

This section contains the following information:

- Hardware and software requirements
- Disk space requirements

Hardware and software requirements

Table 1-2 shows the system hardware and software requirements for SDK and Open Server.

Table 1-2: System requirements for SDK and Open Server

Hardware	Operating system	Supported protocols
• Windows NT	• Windows NT 4.0 Service Pack 6a or later	TCP/IP IPX/SPX
• Windows 2000	• Windows 2000 Service Pack 3.0 or later	Microsoft Named Pipes DECNet
• Windows 2003	• Windows 2003 Service Pack 1.0 or later	
• Windows XP PC with 486 or greater Intel processor	• Windows XP	

On Windows NT, Windows 2000, Windows 2003, and Windows XP systems, the ODBC drivers are 32-bit. All required network software supplied by your database system vendors must be 32-bit compliant.

Table 1-3 shows the system requirements for ODBC and OLEDB.

Table 1-3: System requirements for ODBC and OLEDB

<i>Hardware</i>	PC with 486 or greater Intel processor
<i>Operating system</i>	<ul style="list-style-type: none"> • Windows NT 4.0 Service Pack 6a or later • Windows 2000 Service Pack 3.0 or later • Windows 2003 Service Pack 1.0 or later • Windows XP
<i>Web browser</i>	Internet Explorer 4.0 or later
<i>Other components</i>	MDAC*

*MDAC is provided in SDK; however, you should download the most recent version from the Microsoft web site at <http://www.microsoft.com>, which Microsoft updates frequently.

The following table identifies the requirements for the ASE ADO.NET Data Provider.

Table 1-4: System requirements for ASE ADO.NET Data Provider

<i>Hardware</i>	PC with 90MHZ Intel Pentium processor
<i>Operating system</i>	<ul style="list-style-type: none">• Windows NT 4.0 Service Pack 6a or later• Windows 2000 Service Pack 3.0 or later• Windows 2003 Service Pack 1.0 or later• Windows XP <p>Note Only Windows 2000 and Windows XP platforms are supported for development.</p>
<i>Other components</i>	.NET Framework v1.1*
<i>Development</i>	Use one of the following: <ul style="list-style-type: none">• Visual Studio .NET Framework SDK 1.1• Visual Studio .NET 2003• A .NET language compiler, such as C# <p>Note If Visual Studio .NET 2003 is installed, it will install the .NET Framework SDK v1.1.</p>

* Install .NET Framework v1.1 before installing ASE ADO.NET Data Provider included with the SDK.

Installing data access components from Microsoft

Before you can install the Sybase Adaptive Server ODBC Driver or the Sybase Adaptive Server OLEDB Provider, you must meet the system requirements for Windows as shown in Table 1-3. Install the Microsoft components and Sybase products in the following order:

- 1 MDAC
- 2 Adaptive Server ODBC Driver or Adaptive Server OLEDB Provider

Note Versions of Microsoft platforms that include Internet Explorer version 5.0 or certain service packs automatically install MDAC.

Disk space requirements

The required installation disk space will vary from 150MB to 350MB, and depends on the following:

- Product being installed – SDK or Open Server
- Type of install – Typical, Full, or Custom

Table 1-5 shows the approximate disk space required for the components of SDK and Open Server.

Table 1-5: Disk space requirements for Windows NT, Windows 2000, Windows 2003, and Windows XP

Component and version	Disk space required
Language modules	3MB - 6MB per language
Open Client 12.5.1	16MB
Open Server 12.5.1	16MB
Embedded SQL/C 12.5.1	16MB
Embedded SQL/COBOL 12.5.1	16MB
jConnect for JDBC v5.5 (Default options)	16MB (10MB)
Open Database Connectivity (ODBC) 4.2	10.2MB Note To run ODBC, Windows requires MDAC, which needs an additional 15MB.
OLEDB 2.7	13.9MB Note To run OLEDB, Windows requires MDAC, which needs an additional 15MB.
ASE ADO.NET Data Provider version 1.0	.5MB Note The .NET Framework v1.1 requires an additional 150MB.

Note If you install *mdac_typ.exe*, an additional 12MB is required for client systems, and 32MB is recommended for server systems.

For a Full install, the total space required is approximately:

- For SDK – 190MB

- For Open Server – 150MB

Disk space for the install

To ensure that there is sufficient disk space for the install, a Product Summary window displays every component that is to be installed and the total disk space required for all the selected components. If the target directory does not have sufficient disk space, the space-required and the space-available information is displayed. If you continue, an error occurs that stops the installation.

jConnect requirements

jConnect can be installed as a separate product. It requires approximately 16MB for jConnect 5.5, and 10MB for the jConnect default options.

Pre-installation instructions

The following installation tasks describe how to install the SDK or Open Server products on to your system. These instructions do not apply to the SDK product that was provided with the Adaptive Server Enterprise Suite CD.

Note Each purchase of the Adaptive Server Enterprise Suite includes the SDK product, the installation instructions for which can be found in the Adaptive Server Enterprise *Installation Guide*.

Perform pre-installation tasks for SDK and Open Server

Before you install SDK or Open Server, complete the following pre-installation tasks:

Warning! Installing SDK 12.5.1 or Open Server 12.5.1 on the same machine that contains an ASE release prior to ASE 12.5.1 will prevent the earlier version of the server from booting. Sybase recommends not installing the SDK or Open Server products into the same directory with an ASE release prior to ASE 12.5.1. If you require these products on the same machine, refer to the instructions in “Installing 12.5.1 on the same machine as a pre-12.5.1 ASE” on page 13.

❖ Pre-installation tasks

- 1 Read the SDK *Release Bulletin* version 12.5.1 or the Open Client and Open Server *Release Bulletin* version 12.5.1 for your platform for the latest information on the products that you are installing.

Your Sybase product shipment includes printed release bulletins; they are also available from the Sybase Web site at <http://www.sybase.com/support/techdocs>.

- 2 Create a “sybase” account on your system to perform all installation tasks. The operating system administrator usually sets up this account, as this requires “administrator” privileges.
- 3 Log in to the machine as the “sybase” user.

You should maintain consistent ownership and privileges for all files and directories. A single user—the Sybase System Administrator with read, write, and execute permissions—should perform all unload, installation, upgrade, and setup tasks.

Warning! Be sure to have your permissions set before installation. The installer does not check for permissions before installing the product. If you do not have permission, the installer continues to log exceptions in the log file.

The “sybase” user must have read/write/execute privileges from the top (or root) of the disk partition or operating system directory down to the specific physical device or operating system files, as well as the necessary privileges to update the Windows registry.

- 4 Identify or create a directory location for the Sybase installation directory, where you unload the server products.
- 5 Verify that the location for the Sybase installation has sufficient space to unload the software. See “Disk space requirements” on page 7.

The install program automatically sets most of the environment variables it needs as part of the installation; you must set others by running the `%SYBASE%\SYBASE.bat` script file after exiting InstallShield.

Note During installation, if a window does not present a complete view, you can correct the problem by minimizing the window and redisplaying it, or by resizing it.

Installing SDK and Open Server

This chapter describes how to install SDK and Open Server software from a CD using InstallShield. It covers the following topics:

Topic	Page
Using InstallShield for installation	11
Installing SDK or Open Server	12
Uninstalling SDK or Open Server	20
Command line options	22

Using InstallShield for installation

This section describes how to install SDK or Open Server components using InstallShield. These procedures assume that:

- The target computer meets the requirements outlined in “System requirements for SDK and Open Server” on page 5.
- You have completed the list of tasks for SDK and Open Server in “Pre-installation instructions” on page 8.

InstallShield is a Java-based installation program that uses XML input. It unloads and installs all Sybase components using a consistent installation interface across all platforms. The installation program creates the target directory (if necessary) and unloads all the selected components into that directory.

You have three options for installing Sybase components from the distribution media using the installation program:

- GUI (graphical user interface) mode, which allows you to install the components using the InstallShield interface.
- Console mode, which allows you to install components in a command line environment.

- Response file, which allows you to record or create a response file. Using a response file, you can install SDK or Open Server two different ways:
 - Silent, which lets you install the product without any interaction required on your part. This is convenient if you are performing identical installations on multiple machines.
 - Interactive installation using response file, which lets you install interactively, but with all the responses already filled in, so that you can accept all the default values and install SDK or Open Server according to the responses in the response file. This can be convenient if several sites are installing SDK or Open Server and must conform to a standard installation.

Each of these options is described in the following sections.

Note If you encounter problems during installation, check the installation log file to see a record of the installation process. The file is located in `%SYBASE%\log.txt`, where `%SYBASE%` is the SDK or Open Server installation directory.

Installing SDK or Open Server

Although you can verify product installation at the end of this process, you need to perform additional configuration procedures before you can use the products. For more information, see “Configuring the components” on page 25.

Warning! The installation program exits without warning if any Sybase executables or DLLs are loaded into memory and the installation program tries to overwrite any of the files that are in use. If this occurs, close any Sybase products that are running and restart the installation.

The installation program automatically sets most of the environments variables it needs, such as `PATH`, as part of the installation. It unloads the `.bat` files that contain the remaining environment variables that you must set manually.

Installing 12.5.1 on the same machine as a pre-12.5.1 ASE

To allow you to install SDK or Open Server 12.5.1 in a different directory but on the same machine as a pre-12.5.1 ASE installation, and to prevent the previous version from being affected, follow the procedures to run ASE as a server or service, as described in the following sections.

Starting ASE

You can start ASE and associated servers manually or automatically after each reboot. The following sections describe the procedures.

❖ Starting ASE servers manually

- 1 Disable automatic startup of ASE and associated servers. To do this, open “Services” control panel (refer to Windows documentation on how to access this), and change the Startup property for the servers from “Automatic” to “Disabled.”
- 2 Complete the SDK or Open Server installation as documented.
- 3 Edit the value for the environment variables LIB and INCLUDE. Update the SYBASE directory to the new SDK/Open Server 12.5.1 location.
- 4 Start the servers manually:
 - Open a command prompt and change the directory to the pre-12.5.1 ASE SYBASE directory.
 - Execute the SYBASE.BAT file.
 - Start each server by using the following command

```
startserver -f <RUNfile>
```

where <RUNfile> is the batch file associated with each server.

❖ Starting ASE and associated server(s) automatically as services

- 1 Save the value of environment variables SYBASE and PATH in a text file.
- 2 Complete the SDK or Open Server installation as documented in the following installation sections.
- 3 Edit the value for the environment variables SYBASE and PATH to restore them to the values saved in step (1.)
- 4 To use the new SDK/Open Server 12.5.1 components:
 - Open a command prompt.

- Change the directory to the location where it is installed.
- Execute the *SYBASE.BAT* script.

Installing in GUI mode

Sybase recommends that you use the GUI mode for installing SDK or Open Server.

❖ Installing in GUI mode

- 1 Verify that the drive on which you install the products has enough disk space for the products being installed, and at least 10MB extra disk space for the installation program. The program frees this space after the installation is complete.
- 2 Set the TEMP environment variable to a temporary directory, such as *c:\temp* for the installation program to use, only if the current *temp* location does not have sufficient free space to use during installation. The *TEMP* directory is actually from *%TMP%*, and if this does not exist, from the *%TEMP%* directory.
- 3 Insert the SDK or Open Server CD in the CD-ROM drive. If you want to install both products, repeat this procedure using the appropriate CD, following the installation of the first product.

InstallShield should start automatically. If it does not, select Start | Run, and enter the following, where *x*: is your CD drive:

```
x:\setup.exe
```

You might see the following error message:

```
Error writing file = There may not be enough
temporary disk space. Try using -is:tempdir to use a
temporary directory on a partition with more disk
space.
```

If so, set the temporary directory to another directory that has more disk space by entering the following at the command line:

```
x:\setup.exe -is:tempdir <directory_name>
```

where *directory_name* is the name of the temporary directory to which the installation program will write its temporary files.

The Welcome window appears.

- 4 Click Next to proceed with the installation.

- 5 Read the License and Copyright Agreement. Using the drop-down list at the top of the window, select the geographic location where you are installing to display the agreement appropriate to your region. Select “I agree” and click Next.

You must agree to the license and copyright agreement before you can continue.

Note In certain cases when SDK or Open Server 12.5.1 are installed with other Sybase products, you may see warnings about overwriting newer versions of *.xml files. In these cases, simply instruct the installer to overwrite these files and proceed with the installation.

- 6 In the installation directory window, click Next to accept the default directory for the installation, or enter a different directory where you want to install the products. One of the following occurs:

- If the installation directory you chose does not exist, InstallShield prompts:

```
The directory does not exist. Do you want to
create it?
```

Click Yes.

- If the installation directory exists, the software prompts:

```
You have chosen to install into an existing
directory. Any older versions of the products you
choose to install that are detected in this
directory will be replaced. DO NOT install into
a pre 12.5.1 ASE release area as this will break
ASE. Do you want to continue with installation
into this directory?
```

If you click Yes and the older products were not installed with InstallShield (for example, if you installed a version of Adaptive Server earlier than 12.5.1), InstallShield overwrites the common components.

Warning! Do not install into an existing pre-12.5.1 ASE release area; this will cause ASE to not be able to reboot.

If you are prompted to overwrite any DLLs, select Yes only if the version of the new DLLs is later than the one it is attempting to overwrite.

- 7 Select one of the three types of installation:
 - Typical, which installs the SDK or Open Server components considered to be useful for most customers. The components that will be installed and the total disk space required will be displayed prior to installation. These components were described for SDK in “SDK and Open Server components” on page 2.
 - Full, which installs every SDK or Open Server component from the CD. The components that will be installed, and the total disk space required will be displayed prior to installation.
 - Custom, which allows you to select the components for SDK or Open Server to install. When you select Custom install, the next window displayed is the Component Selection window, which allows you to select which components to install.

Note Be aware that certain components are automatically installed if they are required to run other selected components.

After you have selected the desired components, click Next.

- 8 Before proceeding to the next window, InstallShield verifies the selections, and checks for dependencies and available disk space. The Product Summary window displays every component that is to be installed and the total disk space required for all the selected components.

Note If the target directory does not have enough free space, the space-required and the space-available information is displayed. If you click Next without sufficient hard disk space, an error occurs that stops installation.

- 9 Verify that you have selected the correct type of installation, and that you have enough disk space to complete the process. Click Next to continue the installation. The installation program unloads all the components from the CD and displays a progress indicator. When the installation is complete, a message is displayed indicating that the InstallShield Wizard has completed installing your product. Click Next.
- 10 A window displays a message indicating that the installation was successful and advising you to check for software updates on MySybase. Click Finish to clear the window.

Installing in console mode

If you want to run the installer without the graphical user interface (GUI), you can launch InstallShield in console mode. In cases where InstallShield launches automatically, click Cancel to cancel the GUI installation and then launch the setup program from a terminal or console.

❖ Installing in console mode

The steps for installing components in console mode are the same as those described in “Installing in GUI mode” on page 14, except that you execute the InstallShield installation program from the command line using the `setup -console` command, and you enter text to select the installation options, as follows:

- 1 Enter the following at the command line:

```
setup -console
```

The installation program starts and displays the Welcome window as follows:

```
-----
Welcome to the InstallShield Wizard for Sybase
Software Developer's Kit or Open Server (depending
on which product you are installing), Version 12.5.1

The InstallShield Wizard will install either
Software Developer's Kit or Open Server Software,
Version 12.5.1 on your computer.

To continue, choose Next.

Press 1 for Next, 3 to Cancel or 4 to Redisplay [1]
-----
```

- 2 The flow of the installation is identical to a regular GUI installation, except that the display is written to a terminal window, and responses are entered using the keyboard. Follow the remaining prompts to install either Software Developer's Kit or Open Server software.

Installing using a response file

A silent installation (sometimes referred to as an unattended install) is done by running InstallShield and providing a response file that contains answers to all of InstallShield's questions.

Creating a response file

There are two methods of generating a response file for InstallShield:

- *Record* mode: In this mode, InstallShield performs an installation of the product, and records all of your responses and selections in the specified response file. You must complete the installation to generate a response file. To create a response file, enter:

```
setup.exe -options-record <responseFileName>
```

where *responseFileName* is a name you choose for the response file.

The following are the results:

- An installation of Open Server or SDK on your computer
- A response file containing all of your responses from the installation

If this response file is then used for a silent installation, the resulting installation is identical to the one from which the response file was created: the same installation location, same feature selection, and all the same remaining information. The response file is a text file that you can edit to change any responses prior to using it in any subsequent installations.

- *Template* mode: In this mode, InstallShield creates a response file containing commented-out values for all required responses and selections. However, you do not need to install the product, and you can cancel the installation after the response file has been created. To create this template file, enter:

```
setup.exe -console -options-template  
<responseFileName>
```

where *responseFileName* is the absolute file name you choose for the response file, for example:

```
C:\SDK\OptionsTemplate.txt
```

Note The directory *C:\SDK* must already exist.

If run in console mode, as shown in the previous example, InstallShield provides a message indicating that the template creation was successful. If run in GUI mode, no message is provided. However, you can click Cancel immediately and a response file is created.

If you then use this response file for a silent installation, the default values for all responses are used. Edit the template with the values you want to use during installation.

Interactive installation using a response file An interactive installation using a response file allows you to accept the default values obtained from the response file that you have set up or to change any of those values for the specific installation. This is useful when you want multiple similar installations but with some minor differences that you want to change at installation time.

At the command line, execute the following command:

```
setup.exe -options <responseFileName>
```

Installing in silent mode A silent mode installation, sometimes referred to as an unattended installation, allows you to install the product with all responses being taken from the response file that you have set up. There is no user interaction. This is useful when you want multiple identical installations or when you want to automate the installation process.

At the command line, execute the following command:

```
setupConsole.exe -silent -options <responseFileName>  
-W SybaseLicense.agreeToLicense=true
```

where *responseFileName* is the name of the file containing the installation options you chose. The *-W* option specifies that you agree with the Sybase License Agreement text.

Warning! Sybase recommends that you use the *setupConsole.exe* executable which runs in the foreground, when running a silent installation. The normal *setup.exe* executable runs in the background, giving you the impression that the installation has terminated immediately, and results in additional installation attempts using the silent installation. Multiple installations at the same time may corrupt the Windows Registry and lead to a failure to restart the operating system.

Except for the absence of the GUI screens, all actions of InstallShield are the same, and the result of an installation in silent mode is exactly the same as one done in GUI mode with the same responses.

Uninstalling SDK or Open Server

InstallShield includes an uninstall feature that removes the Sybase components you have installed.

Special uninstall considerations

Following are issues that you must consider before performing an uninstall.

Two or more products sharing components

Sybase does not support the uninstall feature of two or more Sybase products that share components that have been installed in the same directory (with the exception of the SDK and Open Server products), such as, ASE Suite and SDK, or ASE Suite and Open Server. This is because these products have many files in common, and InstallShield cannot completely resolve the interdependencies.

Removing files installed from the CD

The uninstall removes only those files that were loaded from the install CD. Some Sybase files, such as *log* and *configuration* files, are left intact for administrative purposes. If Open Server and SDK products are installed into the same directory and then both uninstalled, some directories may remain if they were created by the installation of one product and uninstalled by the other. A subsequent uninstall process is required to remove them, as described in the following paragraph.

Uninstalling products installed in the same directory

When both Open Server and SDK are installed in the same directory and you uninstall one of the products, the files used by that product are also uninstalled, leaving the remaining product functioning correctly. However, the product uninstaller remains active, because uninstallation cannot complete until the other product is also removed. If you decide to remove both products, you must make a second attempt to uninstall the first product using the following command (for example, for Open Server):

```
%SYBASE%\OpenServer\uninstall.exe -is:javahome <path to CDROM>\JVM
```

A typical sequence would be:

- 1 Install SDK.
- 2 Install Open Server.
- 3 Uninstall Open Server.
- 4 Uninstall SDK.

- 5 Uninstall Open Server using the command shown previously. (In this typical example, the last entry must be Open Server.)

Uninstall procedure

You can invoke the uninstall procedure using either the GUI or the console method. Sybase recommends that you use the GUI method.

Before uninstalling Sybase software, shut down all Sybase applications and processes. Log in to your machine using an account with “administrator” privileges, then shut down all other processes for the components you are uninstalling.

Uninstalling in GUI mode

- 1 From the Start menu, select Settings | Control Panel | Add/Remove Programs.
- 2 Select the product or feature you want to remove.
- 3 Click Change/Remove to remove the software.

An alternative is to enter the following from the command line:

For *SDK*:

```
%SYBASE%\uninstall\SDK\uninstall.exe
```

For *Open Server*:

```
%SYBASE%\uninstall\OpenServer\uninstall.exe
```

- 4 The InstallShield uninstaller Wizard Welcome Panel is displayed.
- 5 Click Next to proceed to the Feature Selection Panel.
- 6 Select the product or feature you want to remove.

Note You will not be able to select certain features because they are required by other features. For example, the Open Client feature requires the English Language module, so this module cannot be selected unless Open Client is also selected.

- 7 Click Next to move to the Uninstall Summary Panel. If you are satisfied with your selections, click Next for InstallShield to remove the files associated with the products you selected.

Note You may be prompted to decide whether to remove shared files. Sybase recommends you do not remove them.

- 8 When this is completed, click Finish to end the uninstall.

❖ **Uninstalling in console mode**

- 1 Go to the %SYBASE% directory, and at the DOS window prompt, enter the following:

For *SDK*:

```
%SYBASE%\uninstall\SDK\uninstall.exe
-console
```

For *Open Server*:

```
%SYBASE%\uninstall\OpenServer\uninstall.exe
-console
```

The uninstall program starts.

- 2 Choose the SDK or Open Server software product you want to uninstall. The SDK or Open Server software product you chose is uninstalled.

Command line options

The following table lists alphabetically the command line options that you can use when running an installer or uninstaller.

Table 2-1: Command line options

Option	Purpose
-console	Specifies to use the console interface mode, where messages during installation are displayed on the Java console and the Wizard is run in console mode.
-is:javaconsole	Displays the Java console during installation. This has no affect on the mode in which the Installer runs (see -console).

Option	Purpose
-is:javahome <Java home directory>	Indicates that the installer or uninstaller uses the specified JVM rather than the default. Only a version 1.4.x JVM may be specified. If used when installing the product, no uninstaller is created.
-is:tempdir <directory>	Sets the path to the temporary directory (<directory>) to which the installer should write its temporary files. If the specified directory does not exist or is not a directory, the installer uses the system <i>temp</i> directory instead, and no error message is provided.
-log !<filename>	Initializes logging for the installer, where !<filename> is the name of a file to save the log information. If you specify “!” without a file name, the default log file name is used.
-options-template <responseFileName>	Automatically generates a response/options “template” type file (<responseFileName>) that can be used to provide user input during installation.
-option-record <responseFileName>	Automatically generates a response/options “record” type file <responseFileName> after the completion of the installation or uninstallation.
-options <responseFileName>	Specifies that a <i>response/options</i> file (<responseFileName>) be used to execute the installation/uninstallation, which contains command line options, one command per line, that set specified properties for the installation. A <i>response/options</i> file is usually used when a silent installation is run (see the next option).
-silent	Specifies to install or uninstall the product in silent mode, where the installation/uninstallation is performed with no user interaction and the install is “silent.”
-W <beanID>.<property name>.<subproperty name>=<value>	Specifies properties to the installer. This option must be used to agree to the Sybase License conditions during a silent installation. Refer to “Installing in silent mode” on page 19.

Note When using the command line option, specify the full path, including the file name for the <responseFileName>.

This chapter describes the tasks you perform after installation is complete, including configuration of Open Client, Open Server, and jConnect for JDBC. It covers the following topics:

Topic	Page
Setting environment variables	25
Configuring the components	25

Note For post-installation tasks for jConnect for JDBC, see the *Installation Guide* for jConnect for JDBC.

Setting environment variables

InstallShield unloads the `%SYBASE%\SYBASE.bat` file that contains the environment variables. Modify the component's RUN environment using the variables in the `SYBASE.bat` file.

Configuring the components

Configure each Open Client or Open Server component following the instructions in the Open Client and Open Server *Configuration Guide* for Microsoft Windows.

For information on how to configure and use the ASE ADO.NET Data Provider, refer to Chapter 1, "Understanding and Deploying the ASE ADO.NET Data Provider," in the Adaptive Server Enterprise .NET Data Provider *User's Guide*.

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