

#### Installation Guide

# Software Developer's Kit and Open Server™

15.0

[ 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<sup>TM</sup>.

#### How to use this book

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 Server *Release Bulletin* version 15.0 for Microsoft Windows contains important last-minute information about Open Server.
- Software Developer's Kit Release Bulletin version 15.0 for Microsoft Windows contains important last-minute information about Open Client<sup>TM</sup> and SDK.
- jConnect<sup>TM</sup> for JDBC<sup>TM</sup> *Release Bulletin* version 6.05 contains important last-minute information about jConnect.
- The Open Client and Open Server Configuration Guide for Microsoft Windows contains information about configuring your system to run Open Client and Open Server.
- The Open Client *Client-Library/C Reference Manual* contains reference information for Open Client Client-Library<sup>TM</sup>.
- The Open Client Client-Library/C Programmers Guide contains information on how to design and implement Client-Library programs.
- The Open Server Server-Library/C Reference Manual contains reference information for Open Server Server-Library.

- 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 Programmers 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 instructions for jConnect for JDBC.
- The jConnect for JDBC Programmers Reference describes the jConnect for JDBC product and explains how to access data stored in relational database management systems.
- The Adaptive Server® Enterprise (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#.
- The Adaptive Server Enterprise ODBC Driver by Sybase User's Guide for Windows and Linux, provides information on how to access data from ASE on Windows and Linux platforms, using the Open Database Connectivity (ODBC) Driver.
- The Adaptive Server Enterprise OLE DB Provider by Sybase *User's Guide* for Microsoft Windows provides information on how to access data from ASE on Microsoft Windows platforms, using the ASE OLE DB Provider.

## Other sources of information

Use the Sybase® Getting Started CD, the SyBooks<sup>TM</sup> CD, and the Sybase 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 SyBooks CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader, which you can download at no charge from the Adobe Web site using a link provided on the CD.  The SyBooks CD contains product manuals and is included with your software. The Eclipse-based SyBooks browser allows you to access the manuals in an easy-to-use, HTML-based format.

Some documentation may be provided in PDF format, which you can access through the PDF directory on the SyBooks CD. To read or print the PDF files, you need Adobe Acrobat Reader.

Refer to the *SyBooks Installation Guide* on the Getting Started CD, or the *README.txt* file on the SyBooks CD for instructions on installing and starting SyBooks.

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

To access the Sybase 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 Click Document Types under Technical Documents from the navigation bar on the left. Then, click Certification Report.
- 3 In the Certification Report filter, select Product, Platform, and Timeframe. Then, click Go.
- 4 Click a Certification Report title to display the report.

#### Finding the latest information on component certifications

- Point your Web browser to Availability and Certification Reports at http://certification.sybase.com/.
- 2 Either select the product family and product under Search by Product; or select the platform and product under Search by Platform.
- 3 Select Search to display the availability and certification report for the selection.

#### 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.svbase.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. If prompted, enter your MySybase user name and password.
- 3 Select a product.
- 4 Specify a time frame and click Go. A list of EBF/Maintenance releases is displayed.

Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as a Technical Support Contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click Edit Roles to add the "Technical Support Contact" role to your MySybase profile.

5 Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

#### Conventions

Table 1: Syntax conventions

Key	Definition
command	Command names, command option names, utility names, utility flags, and other keywords are in sans serif font.
variable	Variables, or words that stand for values that you fill in, are in <i>italics</i> .
{ }	Curly braces indicate that you choose at least one of the enclosed options. Do not include braces in your option.
[ ]	Brackets mean choosing one or more of the enclosed items is optional. Do not include brackets in your option.
( )	Parentheses are to be typed as part of the command.

Key	Definition
	The vertical bar means you can select only one of the options shown.
,	The comma means you can choose as many of the options shown as you like, separating your choices with commas to be typed as part of the command.

## Accessibility features

This document is available in an HTML version that is specialized for accessibility. You can navigate the HTML with an adaptive technology such as a screen reader, or view it with a screen enlarger.

Open Client and Open Server documentation has been tested for compliance with U.S. government Section 508 Accessibility requirements. Documents that comply with Section 508 generally also meet non-U.S. accessibility guidelines, such as the World Wide Web Consortium (W3C) guidelines for Web sites.

**Note** You might need to configure your accessibility tool for optimal use. Some screen readers pronounce text based on its case; for example, they pronounce ALL UPPERCASE TEXT as initials, and MixedCase Text as words. You might find it helpful to configure your tool to announce syntax conventions. Consult the documentation for your tool.

For information about how Sybase supports accessibility, see Sybase Accessibility at http://www.sybase.com/accessibility. The Sybase Accessibility site includes links to information on Section 508 and W3C standards.

#### 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.

## CHAPTER 1 Before You Begin

This chapter provides information about system requirements and the preinstallation 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	3
System requirements for SDK and Open Server	8
Pre-installation instructions	13

## **Supported Microsoft Windows platforms**

SDK 15.0 and Open Server 15.0 are supported on the following Microsoft Windows platforms:

- Windows 2000 (x86) Service Pack 4 (32-bit)
- Windows XP (x86) Service Pack 2 (32-bit)
- Windows XP (x64) Service Pack 2 (32-bit and 64-bit)
- Windows 2003 (x86) Service Pack 1 and 2 (32-bit)
- Windows 2003 (x64) Service Pack 1 and 2 (32-bit and 64-bit)
- Windows Vista (x86) 32-bit
- Windows Vista (x64) 32-bit and 64-bit
- Windows 2008 (x86) 32-bit
- Windows 2008 (x64) 32-bit and 64-bit

**Note** For the most current information about certified platforms, see "Sybase certifications on the Web" on page vii.

## SDK and Open Server compiler requirements

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

- Microsoft 64-Bit C/C++ Optimizing Compiler, version 14.00.50727.42
- Microsoft 32-Bit C/C++ Optimizing Compiler, version 12.00.8804
- Microsoft 32-Bit Executable Linker, version 6.00.8447
- Micro Focus Net Express COBOL Compiler version 4.0

## 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 1.15 is certified with the .NET language compilers included in the Microsoft .NET Framework version 1.1.4322, which are:

- Microsoft Visual C/C++ .NET Compiler version 13.10.3077
- Microsoft Visual C# .NET Compiler version 7.10.6001.4
- Microsoft Visual Basic .NET Compiler version 7.10.6001.4
- Microsoft Visual J# .NET Compiler version 7.10.3077.0
- Microsoft Script .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 32-bit C/C++ Optimizing Compiler version 13.10.3077.

## ASE ODBC and OLE DB compiler requirements

If you plan to use the ODBC Driver or the OLE DB Provider, then the C++ compiler required is Microsoft 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 15.0 is a set of libraries and utilities for developing client applications. It includes the following components:

- Open Client 15.0 an API, a set of libraries used to develop and deploy C-language applications that access ASE data. Included on the installation medium are:
  - Drivers for integrating Client-Library<sup>™</sup> and Open Server applications with directory and security services
  - Sample programs for Client-Library and DB-Library™
- Open Client Embedded SQL<sup>TM</sup>/C 15.0 the precompiler that allows you to embed Transact-SQL® statements into C-language applications.
   Sample programs for Embedded SQL/C are included on the installation medium.
- Open Client Embedded SQL/COBOL version 15.0 the precompiler that allows you to embed Transact-SQL statements into COBOL-language applications. Sample programs for Embedded SQL/COBOL are included on the installation medium.
- Language modules provide system messages and datetime formats to help you localize your applications. Default installation includes only the U.S. English language module and the following character sets supported by the U.S. English language module:
  - IBM code page 437(cp437)
  - IBM code page 850 (cp850)
  - ISO 8859 1 (iso 1)
  - ISO 8859\_15 (iso\_15: Latin9 western European)
  - Unicode UTF-8 encoding (utf8)
  - Macintosh Roman (mac)
  - Hewlett-Packard Roman 8 and Roman 9 (roman8 and roman9)

You can purchase additional language modules for these languages through Sybase:

- Chinese
- French
- German
- Japanese
- Korean
- Polish
- Portuguese
- Spanish
- Thai
- Sybase Adaptive Server® Enterprise ODBC Driver by Sybase 15.0.
- Sybase Adaptive Server Enterprise OLE DB Provider by Sybase 15.0.
- Sybase Adaptive Server Enterprise ADO.NET Data Provider 1.15 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 6.05 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.
- Extended Architecture (XA) Interface Library for ASE Distributed Data Manager. Sample programs for XA are included on the installation medium.

#### SDK libraries and utilities

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

**Note** For more information about jConnect libraries and utilities, refer to the *Installation Guide* for jConnect for JDBC.

Table 1-1: SDK component libraries and utilities for Windows platforms

	Open Client	Embedded SQL/C	Embedded SQL/COBOL
Libraries	'		1
Client-Library	X	X	X
CS-Library	X	X	X
DB-Library	X	n/a	n/a
Bulk-Library	X	n/a	n/a
XA-Library	X	n/a	n/a
Net-Library <sup>TM</sup>	Х	n/a	n/a
Common-Library	X	n/a	n/a
LDAP	X	n/a	n/a
SSL	X	n/a	n/a
Kerberos	X	n/a	n/a
DCE	X	n/a	n/a
Utilities			
bcp, defncopy, dsedit, ocscfg, isql, certauth, certpk12, certreq, extrjava, instjava, pwdcrypt	х	n/a	n/a
cpre	n/a	x	n/a
cobpre	n/a	n/a	х

LEGEND: x = available; n/a = not available on this component.

#### **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 15.0 a set of APIs and supporting tools. Included on the installation medium are:
  - Drivers for integrating Client-Library and Open Server applications with directory and security services
  - Sample programs for Server-Library and Client-Library
- Language modules provide system messages and datetime formats to help you localize your applications. Default installation includes only the U.S. English language module and the following character sets supported by the U.S. English language module:

- IBM code page 437(cp437)
- IBM code page 850 (cp850)
- ISO 8859\_1 (iso\_1)
- ISO 8859\_15 (iso\_15: Latin9 western European)
- Unicode UTF-8 encoding (utf8)
- Macintosh Roman (mac)
- Hewlett-Packard Roman 8 and Roman 9 (roman8 and roman9)

You can purchase additional language modules for these languages through Sybase:

- Chinese
- French
- German
- Japanese
- Korean
- Polish
- Portuguese
- Spanish
- Thai

Libraries

#### Open Server libraries and utilities

Table 1-2 lists libraries and utilities included with Open Server.

Table 1-2: Open Server libraries and utilities for Windows platforms

· Server-Library

Client-Library
CS-Library
Bulk-Library
Net-Library
Common-Library
LDAP

- SSL
- Kerberos

Utilities

- bcp
- defncopy
- dsedit
- ocscfg
- isql
- certauth
- certpk12
- certreq
- pwdcrypt

## 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 1-3 shows the system hardware and software requirements for SDK and Open Server.

Table 1-3: System requirements for SDK and Open Server

Hardware	Operating system	Supported protocols
• Windows 2000 (x86)	• Windows 2000 Service Pack 4.0 or later	All: • TCP/IP
<ul> <li>Windows 2003 (x86)</li> <li>Windows XP (x86)</li> <li>(PC with 486 or greater Intel processor)</li> </ul>	<ul> <li>Windows 2003 Service Pack 1.0 or later</li> <li>Windows XP Service Pack 1.0 or later</li> </ul>	<ul><li>IPX/SPX</li><li>Microsoft Named Pipes</li><li>DECNet</li></ul>
• Windows 2003 (x64) (PC with x64 architecture)	Windows 2003 Service Pack 1.0 or later	<ul> <li>All:</li> <li>TCP/IP</li> <li>IPX/SPX</li> <li>Microsoft Named Pipes</li> <li>DECNet</li> </ul>

On Windows 2000 (x86), Windows 2003 (x86), and Windows XP (x86) systems, the ODBC drivers are 32-bit. All required network software supplied by your database system vendors must be 32-bit compliant.

On Windows 2003 (x64), the ODBC driver is 64-bit. All required network software supplied by your database system vendors must be 64-bit compliant.

Table 1-4 shows the system requirements for ODBC and OLE DB.

Table 1-4: System requirements for ODBC and OLE DB

- 7	
Hardware	For Windows x86: PC with 486 or greater Intel processor
	• For Windows x64: PC with x64 architecture
Operating system	Windows 2000 (x86) Service Pack 4.0 or later
	• Windows 2003 (x86) Service Pack 1.0 or later
	• Windows XP (x86) Service Pack 1.0 or later
	• Windows 2003 (x64) Service Pack 1.0 or later
Web browser	Internet Explorer 4.0 or later
Other components	Microsoft Data Access Components (MDAC)*
*MDAC is provide	d as part of the Microsoft Windows operating system. You should
download the most	recent version from the Microsoft web site at
http://www.microsof	t.com, which Microsoft updates frequently.

Table 1-5 identifies the requirements for the ASE ADO.NET Data Provider.

Table 1-5: System requirements for ASE ADO.NET Data Provider

Hardware	For Windows x86: PC with 90MHz Intel Pentium processor
	<ul> <li>For Windows x64: PC with x64 architecture</li> </ul>
Operating system	Windows 2000 (x86) Service Pack 4.0 or later
	• Windows 2003 (x86) Service Pack 1.0 or later
	<ul> <li>Windows XP (x86) Service Pack 1.0 or later</li> </ul>
	• Windows 2003 (x64) Service Pack 1.0 or later
	<b>Note</b> Only Windows 2000 (x86) and Windows XP (x86) platforms are supported for development.
Other components	.NET Framework v1.1*
Development	Use one of the following:
	• Visual Studio .NET Framework SDK 1.1
	<ul> <li>Visual Studio .NET 2003</li> </ul>
	A .NET language compiler, such as C#
	<b>Note</b> If Visual Studio .NET 2003 is installed, it will install the .NET Framework SDK v1.1.

<sup>\*</sup> 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 OLE DB Provider, you must meet the system requirements for Windows as shown in Table 1-4. Install the Microsoft components and Sybase products in the following order:

#### 1 MDAC

2 Adaptive Server ODBC Driver or Adaptive Server OLE DB 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 installation Typical, Full, or Custom

Table 1-6 shows the approximate disk space required for the components of SDK and Open Server.

Table 1-6: Disk space requirements for Windows 2000, Windows 2003, and Windows XP

3MB - 6MB per language
16MB
(10MB)
2.37MB
<b>Note</b> To run ODBC, Windows requires MDAC, which needs an additional 5MB.
2.46MB
<b>Note</b> To run OLE DB, Windows requires MDAC, which needs an additional 15MB.
1.02MB
Note The .NET Framework 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 required for the installation

To ensure that there is sufficient disk space for the installation, 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 without sufficient disk space, an error occurs that stops the installation.

#### jConnect requirements

jConnect can be installed as a separate product. It requires approximately 16MB for jConnect 6.05 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 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*.

#### Pre-installation tasks for SDK and Open Server

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

**Warning!** Installing SDK 15.0 or Open Server 15.0 on the same machine that contains an ASE release prior to ASE 15.0 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 15.0. If you require these products on the same machine, refer to the instructions in "Installing 15.0 on the same machine as a pre-15.0 ASE" on page 20.

#### Preparing for installation

- 1 Read the SDK *Release Bulletin* version 15.0 for Microsoft Windows or the Open Server *Release Bulletin* version 15.0 for Microsoft Windows for the latest information on the products 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 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 SDK and Open Server products.
- 5 Verify that the location for the Sybase installation has sufficient space to unload the software. See "Disk space requirements" on page 11.

**Note** When using a Chinese, Japanese, or Korean locale, Sybase recommends that you set the JAVA\_FONTS to the directory where the locale's fonts are installed. This ensures that InstallShield uses the correct font.

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

When you have reviewed and verified installation requirements and have completed pre-installation tasks, you are ready to install SDK and Open Server.

**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.

## CHAPTER 2 Installing SDK and Open Server

This chapter describes how to install SDK and Open Server software from a CD using InstallShield.

Topic	Page
Using InstallShield for installation	17
Installing SDK or Open Server	20
Uninstalling SDK or Open Server	28
Command-line options	30

## **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 8.
- You have completed the list of tasks for SDK and Open Server in "Pre-installation instructions" on page 13.

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:

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

- 3 Response file, which allows you to record or create a response file. Using a response file, you can install SDK or Open Server in 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 is 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 using a different font

When installing in GUI mode, you can specify the installer display font by using the -font command line option or the *font.ini* file. This option is useful when your Java virtual machine (JVM) is unable to correctly pick the font to display for your locale, and the product installers display unintelligible characters.

**Note** If you use both the -font command line option and the *font.ini* file, the font specified using the -font command line option takes precedence.

#### Using the -font command line option

You can modify the default installer display font when you start the InstallShield. For example:

x:\setup.exe -is:javaconsole -font "FZFangSong"

Here, *x*: is your CD drive. The example uses the Chinese font FZFangSong and requires that your regional options are set to a Chinese locale. To set regional options, go to the Control Panel, choose Regional and Language Options, and select the Regional Options tab.

To ensure that characters are displayed correctly, the JAVA\_FONTS environment variable must point to the location of the font files. Otherwise, InstallShield terminates with this message:

Invalid command line option: unable to find fontname font.

Make sure the font name is correct and JAVA\_FONTS environment variable is set.

#### Using the font.ini file

Another way to specify the InstallShield display font is to create a *font.ini* file in the installer image root directory. The *font.ini* file specifies the font name and the font location. For example:

```
#Set to Kochi Mincho font
font=Kochi Mincho
path=C:\Sybase\share\fonts\ja\TrueType
```

The example uses the Japanese font Kochi Mincho and requires that your regional options are set to a Japanese locale. To set regional options, go to the Control Panel, choose Regional and Language Options, and select the Regional Options tab. If the font or the font path specified in the *font.ini* file is incorrect, the InstallShield terminates with this message:

```
Error: Unable to find fontname font.

Make sure font name and path are correct in font.ini file.
```

## 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 35.

**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 15.0 on the same machine as a pre-15.0 ASE

To allow you to install SDK or Open Server 15.0 in a different directory but on the same machine as a pre-15.0 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 servers

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

#### Starting ASE and associated servers manually

- Disable automatic start-up of ASE and associated servers. To do this, click Services in the control panel (refer to Microsoft Windows documentation on how to access this), and change the Startup property for the servers from Automatic to Disabled.
- 2 Save the current value of environment variables in a text file: SYBASE, SYBASE\_OCS, INCLUDE, and PATH.
- 3 Complete the SDK or Open Server installation as documented in the following installation sections.

- 4 Click System in the control panel. Open the Advanced tab and click Environment Variables. Edit the value for the environment variables SYBASE, SYBASE\_OCS, INCLUDE, and PATH with the values saved in the text file (as done in Step 2).
- 5 Start the servers manually:
  - Open a command prompt and change the directory to the pre-15.0 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

- Disable automatic start-up of ASE and associated servers. To do this, click Services in the control panel (refer to Microsoft Windows documentation on how to access this), and change the Startup property for the servers from Automatic to Disabled.
- 2 Save the current value of environment variables in a text file: SYBASE, SYBASE\_OCS, INCLUDE, and PATH.
- 3 Complete the SDK or Open Server installation as documented in the following installation sections.
- 4 Click System in the control panel. Open the Advanced tab and click Environment Variables. Edit the value for the environment variables SYBASE, SYBASE\_OCS, INCLUDE, and PATH with the values saved in the text file (as done in Step 2).
- 5 Start the servers automatically as services. To do this, click Services in the control panel and change the Startup property for the servers from Disabled to Automatic.

### 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.
- 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: \text{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 installation files.

The Welcome window appears.

- 3 Click Next to proceed with the installation.
- 4 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.

- 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, InstallShield 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 15.0 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 15.0), InstallShield overwrites the common components.

**Warning!** Do not install into an existing pre-15.0 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.

**Note** If you install both SDK and Open Server software in the same directory, you may see warnings about overwriting newer versions of \*.h files. In these cases, simply instruct the installer to overwrite these files and proceed with the installation.

- 6 Select one of the three types of installation:
  - Typical (default), which installs the SDK or Open Server components
    considered to be useful for most customers. In this type of installation,
    only the U.S. English language module and its supported character
    sets are installed.

The components that will be installed and the total disk space required are displayed prior to installation. These components are described for SDK in "SDK and Open Server components" on page 3.

• Full, which installs every SDK or Open Server component including all the supported language modules from the CD.

The components that will be installed and the total disk space required are displayed prior to installation. For a list of language modules you can install, see "SDK and Open Server components" on page 3.

 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.

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.

- 7 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.
- 8 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.
- 9 A window displays a message indicating that the installation was successful and advising you to check for software updates on downloads at http://www.sybase.com. 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 22, except that you run the InstallShield installation program from the command line using the setupConsole command, and you enter text to select the following installation options:

1 Enter the following at the command line:

```
setupConsole.exe -console
```

The installation program starts and displays the Welcome message.

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.

For a complete list of command-line options, see Table 2-1 on page 30.

## 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:

1 Record mode: In this mode, InstallShield performs an installation of the product and records all 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 the absolute path of the file name you choose for the response file, for example:

C:\SDK\OptionsTemplate.txt

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

You can also use the console mode to generate a response file without using the graphical interface. To do so, enter:

setupConsole.exe -options-record responseFileName

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 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

2 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:

```
setupConsole.exe -options-template responseFileName
```

where *responseFileName* is the file name you choose for the response file. When specifying the response file name, include the full directory path of its location.

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 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, enter the following command:

```
setup.exe -options responseFileName
```

where *responseFileName* is the file name containing the installation options you chose. When specifying the response file name, include the full directory path of its location.

### 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, enter the following command:

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

where *responseFileName* is the absolute path of the file name 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 you are running a silent installation. The normal setup.exe executable runs in the background, giving you the impression that the installation has terminated, 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. Because these products have many files in common, InstallShield cannot completely resolve all the interdependencies.

**Warning!** Do not uninstall Open Server and SDK products in the directory that contains other Sybase products installed using an installation program other than InstallShield. By doing so, you can remove the components shared by Sybase products and affect their operation.

Removing files installed from the CD

The uninstall feature 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.

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 at the command line:

For SDK:

%SYBASE%\uninstall\SDK\uninstall.exe

For Open Server:

%SYBASE%\uninstall\OpenServer\uninstall.exe

The InstallShield Uninstall Wizard Welcome window is displayed.

- 4 Click Next to proceed to the Feature Selection window.
- 5 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.

6 Click Next to move to the Uninstall Summary window. 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 *not* to remove them.

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
-is:javaconsole
```

#### For Open Server:

```
%SYBASE%\uninstall\OpenServer\uninstall.exe
-is:javaconsole
```

The uninstall program starts.

2 Choose the SDK or Open Server software you want to uninstall and click OK.

The SDK or Open Server software you chose is uninstalled.

For a complete list of command-line options, see Table 2-1 on page 30.

# **Command-line options**

Table 2-1 lists alphabetically the command-line options 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.
	Use this option with -is:javaconsole option.

Option	Purpose
-is:javaconsole	Displays the Java console during installation. This has no affect on the mode in which the installer runs.
-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.
-is:tempdir directory	Sets the path to the temporary directory ( <i>directory</i> ) 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 ( <i>responseFileName</i> ) that can be used to provide user input during installation.
-options-record responseFileName	Automatically generates a response/options "record" type file responseFileName after the completion of the installation or uninstallation.
-options responseFileName	Specifies that a response/options file ( <i>responseFileName</i> ) be used to execute the installation/uninstallation, which contains command-line options, one command per line, that set specified properties for the installation. A response/options 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 installation is "silent."
	Use this option with -is:javaconsole option.
-W beanID.property name.subproperty nam>=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 27.

Option	Purpose
-is:javaconsole	Displays the Java console during installation. This has no affect on the mode in which the installer runs.
-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.
-is:tempdir directory	Sets the path to the temporary directory ( <i>directory</i> ) 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.
-options-record responseFileName	Automatically generates a response/options "record" type file responseFileName after the completion of the installation or uninstallation.
-options responseFileName	Specifies that a response/options file ( <i>responseFileName</i> ) be used to execute the installation/uninstallation, which contains command-line options, one command per line, that set specified properties for the installation. A response/options 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 installation is "silent."
	Use this option with -is:javaconsole option.
-W beanID.property name.subproperty nam>=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 27.

Option	Purpose
-G globalWizardProperty = "value"	Sets the global wizard properties on the command line or in a <i>responseFile</i> . This option sets the expected response from the end user during silent installation or uninstallation. This option must include at least one argument.
	The following are the <i>globalWizardProperty="value"</i> options you can specify:
	replaceExistingResponse="yes   no   yesToAll   noToAll"
	Set this to store the end user response whether to replace a file that currently exists on their system with the one being installed.
	replaceNewerResponse="yes   no   yesToAll   noToAll"
	Set this to store the end user response whether to replace a file that currently exists on their system with the one being installed if the existing file is newer than the file being installed.
	removeExistingResponse="yes   no   yesToAll   noToAll"
	Set this to store the end user response to whether to remove a file that currently exists on their system.
	• removeModifiedResponse= "yes   no   yesToAll   noToAll"
	Set this to store the end user response whether to remove a file that has been modified since installation.
	overwriteJVM="yes   no   cancel"
	Set this to determine whether to overwrite "_jvm" directory, if it already exists on the target system. The JVM Resolution bean looks for the value of this property which, if set to "no" or "cancel" prevents the directory from being overwritten.

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

### CHAPTER 3 Post-Installation Tasks

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	35
Configuring the components	35

**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

The following describes where to locate information to connect and configure the Open Client and Open Server components:

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

- 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 ADO.NET Data Provider *User's Guide*.
- To connect, configure and use the ASE ODBC driver on Windows and Linux platforms, refer to Chapter 2, "Connecting to a Database," in the Adaptive Server Enterprise ODBC Driver by Sybase *User's Guide* for Microsoft Windows and Linux.
- To connect and use the OLE DB Provider to access data from ASE on Microsoft Windows platforms, refer to Chapter 2, "Connecting to a Database," in the Adaptive Server Enterprise OLE DB Provider by Sybase User's Guide for Microsoft Windows.

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