

SYBASE®

Installation Guide

Software Developer's Kit

15.0

[Mac OS X]

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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) for Mac OS X on Intel.

How to use this book

This guide contains these chapters:

- Chapter 1, "Before You Begin," contains preinstallation information and tasks.
- Chapter 2, "Installing the SDK," describes how to install the SDK.
- Chapter 3, "Post-Installation Tasks," provides information about the tasks you must perform after installing the component software for the SDK.

Related documents

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

- Software Developer's Kit *Release Bulletin* version 15.0 for Mac OS X contains important last-minute information about Open Client™ and SDK.
- jConnect for JDBC *Release Bulletin* version 6.05 contains important last-minute information about jConnect™ for JDBC™.
- The Open Client Client-Library/C *Reference Manual* contains reference information for Open Client Client-Library™.
- The Open Client Client-Library/C *Programmer's Guide* contains information about how to design and implement Client-Library applications.
- The Open Client *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 *Programmer's Supplement* for Mac OS X contains information for programmers using Open Client products. This document includes information about:
 - Compiling and linking an application
 - Sample programs that are included with Open Client products

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- Routines that have platform-specific behaviors
 - The Open Client *Configuration Guide* for Mac OS X contains information about configuring your system to run Open Client™ products on Mac OS X 10.5 or later on Intel, 32-bit.
 - The Adaptive Server® Enterprise ODBC Driver *User's Guide* for Windows and Linux, provides information on how to access data from Adaptive Server Enterprise on Windows and Linux platforms, using the Open Database Connectivity (ODBC) Driver.
 - The jConnect for JDBC *Programmer's Reference* contains information for programmers using jConnect.

Other sources of information

Use the Sybase® Getting Started CD, the SyBooks™ 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 Certification Report.
- 3 In the Certification Report filter select a product, platform, and timeframe and then click Go.
- 4 Click a Certification Report title to display the report.

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

- 1 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 Base 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.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. 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.
<i>variable</i>	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.
	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.



Before You Begin

This chapter provides information about system requirements and the tasks you must complete before you install Software Developer's Kit (SDK).

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Supported platforms

Open Client version 15.0 works with Adaptive Server 15.0 on these platforms:

- APPLE Mac OS X 10.5 or later on Intel, 32-bit
- HP-UX 11.11 (or HP-UX 11iv1.0) on PA-RISC
- HP-UX 11.23 on Itanium
- IBM RS/6000 AIX 5.2
- Linux RH 3.0 x86
- Linux RH 4.0 on Itanium 64-bit
- Linux RH 3.0 on POWER
- Linux RH 3.0 on AMD64 (Opteron)/EMT64
- Sun Solaris 8 (SPARC) 32-bit and 64-bit
- Sun Solaris 10 x64 32-bit and 64-bit

SDK components

The following sections summarize the components of the SDK.

SDK components

SDK 15.0 is a set of libraries and utilities that you can use to develop client applications and includes the following components:

- Open Client version 15.0 – an application programming interface (API), which is a set of libraries used to develop and deploy C-language applications that access Adaptive Server data. Included on the installation medium are sample programs for Client-Library and DB-Library™.
- Sybase Adaptive Server ODBC Driver by Sybase, version 15.0.
- 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
- jConnect for JDBC 6.05 – the Java implementation of the Java JDBC standard, which provides Java developers with native database access in multitenant and heterogeneous environments.

SDK libraries and utilities

Table 1-1 lists the libraries and utilities that are included with the SDK.

Note For jConnect libraries and utilities, see the *jConnect for JDBC Installation Guide*.

Table 1-1: SDK libraries and utilities for Mac OS X

SDK	Open Client
<i>Libraries</i>	
Client-Library	x
CS-Library	x
DB-Library	x
Bulk-Library	x
Net-Library™	x
Common-Library	x
SSL	x
<i>Utilities</i>	
bcp, defncopy, isql, pwdcrypt	x

LEGEND: x = available

System requirements for the SDK

These are the hardware and software requirements for installing the SDK:

Table 1-2: Hardware and software requirements for SDK 15.0 on Mac OS X

Hardware	Operating system	Supported protocol
APPLE Mac OS X on Intel	Mac OS X 10.5 or later	TCP

The required installation disk space is approximately 49MB. However, the required disk space depends upon whether you choose a standard or customized installation.

Pre-installation instructions for the SDK

The following tasks describe how to prepare for installing the SDK on your system.

Note The instructions in this document do not apply to installing the SDK included in the Adaptive Server Enterprise Suite. Those instructions are in the Adaptive Server Enterprise *Installation Guide*.

❖ Preparing for installation

- 1 Read the SDK *Release Bulletin* version 15.0 for Mac OS X for the latest information about the products you are installing.

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

- 2 Create a “sybase” account on your system to perform all installation tasks.
- 3 Log in to the machine as the “sybase” user.

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! Because the installation program does not check for permissions before installing the product, be sure to have your permissions set before installation. If you do not have the proper permission, the installer logs 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.

- 4 Identify or create a directory location for the Sybase installation directory, where you are going to unload the SDK.
- 5 Verify that the location for the Sybase installation has sufficient space to unload the software. See “System requirements for the SDK” on page 3.

The installation program automatically sets most of the environment variables. You must set others using the *SYBASE.csh* or *SYBASE.sh* scripts file located in *\$SYBASE*. You must also source the environment before using the product.

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

This chapter describes the various methods of installing the SDK for Mac OS X .

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SDK installation methods

You can install using a GUI or command prompt. You can either download the SDK software from the Sybase Product Download Center (SPDC) at <https://sybase.subscribenet.com>, install the SDK from the CD, or use the command line interface for the installation.

❖ Accessing SPDC

- 1 Once you have purchased a Sybase product, you can download the product and generate any applicable licenses from the SPDC at <https://sybase.subscribenet.com>. Once you purchase a Sybase product, you receive an e-mail message that contains a URL to the SPDC site, a user name, and a password.

Note If you purchased the Sybase software from a Sybase reseller, you may not have access to SPDC.

- 2 Click the URL. When prompted, enter the user name and password. Your login is typically your e-mail address. If you have forgotten your password, use the password finder on the SPDC login page.
- 3 Locate Software Developer's Kit 15.0 for Mac OS X on the product list. From the product page, download the installation program and documentation.

- 4 The install CD download file is a Mac OS X disk image (*.dmg*), which allows it to be mounted on your desktop as a new volume. In some Web browsers, downloading a disk image also causes the disk image to be mounted automatically. If this does not happen with your browser, double-click the disk image. The Finder mounts the image as a new file system volume, named *Sybase_SDK_150*.
- 5 Double-click the volume icon. The contents of the volume, including the SDK installation package, appear in a separate window. Double-click the package icon to start the Mac OS X installation program.
- 6 Complete steps 2 through 5 in “Installing from the CD” on page 8.

If you are installing on a headless system such as Xserve, see “Installation on Xserve” on page 9.

❖ **Installing from the CD**

- 1 Insert the CD into the drive, and when it becomes visible on your desktop, double-click its icon. Double-click the SDK installer package.
- 2 In the Welcome to the Sybase Software Developer’s Kit 15.0 Installer window, click Continue.
- 3 In the Software License Agreement window, click Continue.
- 4 Click Agree after reviewing the license information.
- 5 Choose one of:
 - Install — for a standard, complete installation.
 - Customize — to choose the components to install.
 - a In the Custom Install on <computer name> window, unselect the components that you do not want to install.

By default, all the components are selected. Review the disk space required for the installation.
 - b Click Install to install only the selected components.

Click Standard Install to revert to the complete installation.

The SDK is installed in the */Applications/Sybase* directory.

Installation on Xserve

If you intend to install in a headless system, you must make the installation package visible to that system. You can use the Finder to copy the package to a location that is visible to the headless system (NFS-mounted file system), and then review this section. To install the SDK on Xserve running in a headless mode (without a monitor), you can either:

- Use the Apple Remote Desktop, which gives you a desktop interface to the Xserve or,
- Use the shell command `/usr/sbin/installer`.

To install using the command line installer, place the disk image containing the SDK installation package on a disk volume accessible to Xserve. Enter:

```
sudo installer -pkg /Volumes/Sybase_SDK_150/sdk150.mpkg -target /
```

Where the path name to the installation package (*.mpkg*) identifies the exact location of the file. The target is the root device (“/”).

Note You must provide a complete path name to the installation package.

Uninstalling the SDK

To uninstall the SDK, use the uninstall shell script in */Applications/Sybase/System/Install*. You can run the uninstall script only with superuser privileges. Enter either of these commands:

- `sudo ./uninstall`
- `sudo ./uninstall override`

Warning! Use the uninstall script with caution. Running it empties the *Applications/Sybase* folder.

This chapter describes the tasks you must perform after installation.

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Setting environment variables

The installation program automatically sets most of the environment variables it needs, such as PATH, as part of the unloading process. The installation program also unloads *.sh* and *.csh* files, which contain the environment variables you must set manually before you can configure and run Open Client components successfully.

Bourne and C shell files

The installation program unloads Bourne shell and C shell files containing environment variables in:

- *\$SYBASE/SYBASE.sh*
- *\$SYBASE/SYBASE.csh*

To set the environment variables, either:

- Modify the component's RUN environment permanently using the environment variable values from the shell files or,
- Update the component's RUN environment immediately before invoking the component, as described below.

To update the RUN environment immediately:

- In a Bourne shell, enter:

```
cd $SYBASE
. SYBASE.sh
```

- In a C shell, enter:

```
cd $SYBASE
```

```
source SYBASE.csh
```

Configuring the components

Configure each Open Client component following the instructions in the Open Client 15.0 *Configuration Guide* for Mac OS X. For any jConnect post-installation tasks, see the jConnect for JDBC *Installation Guide*.

Modifying interfaces file entries

Use a text editor of your choice to modify directory service entries in the *interfaces* file. For information about setting environment variables, see the Open Client 15.0 *Configuration Guide* for Mac OS X.

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