# SYBASE<sup>®</sup>

Installation Guide

# jConnect<sup>™</sup> for JDBC<sup>™</sup>

6.05

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# **About This Book**

	This book contains the release notes and installation instructions for jConnect <sup>TM</sup> for JDBC <sup>TM</sup> version 6.05.
Audience	This book is for any person installing or configuring jConnect for JDBC 6.05. It is also for programmers who are designing applications for use directly with jConnect.
How to use this book	The information in this book is organized as follows:
	• "About This Book" introduces jConnect for JDBC and points to other sources of product information and technical assistance.
	• Chapter 1, "Installing jConnect for JDBC," provides system requirements and detailed instructions for installing the product.
	• Chapter 2, "Using jConnect Documentation," provides information on the documentation set for this product.
Related documents	When you install jConnect, the following documentation is available online:
	• <i>jConnect for JDBC Programmer's Reference</i>
	• Javadoc information about jConnect packages, classes, and methods in HTML format only
	See Chapter 2, "Using jConnect Documentation," for more information.
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.

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	Refer to the <i>SyBooks Installation Guide</i> on the Getting Started CD, or the <i>README.txt</i> 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/.
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*	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.
*	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 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** The conventions used in this book are shown in Table 1.

Key	Definition
command	Command, method, and utility names are shown in a bold font. Bold is also used for emphasis.
variable	Variables, or words that stand for values you fill in, are shown in italics. File names are also shown in italics.
user input	Values that you enter are shown in a bold monospaced font.
computer output	Computer output is shown in a regular monospaced font.

#### Table 1: Conventions

# 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.

	Adaptive Server Enterprise ADO.NET Data Provider User's Guide and the HTML documentation have 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.
	The online help for this product is also provided in HTML which you can navigate using a screen reader.
	<b>Note</b> 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.
lf 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 Installing jConnect for JDBC

This chapter contains instructions for installing jConnect for JDBC on Microsoft Windows, UNIX, and Linux platforms. If you are using another platform, substitute commands that are appropriate for your platform.

This chapter covers the following topics:

Name		
Reviewing system requirements	1	
Installing jConnect for JDBC		
Upgrading jConnect		

# **Reviewing system requirements**

This section lists system requirements for Windows, UNIX, and Linux.

### Windows requirements

Table 1-1 lists the system requirements for installing jConnect for JDBC on Windows.

Table 1-1: System requirements for Windows 2000, 2003, and XP
---

•	• • •
Hardware	PC with 486 or greater Intel processor.
Operating system	Windows version supporting Java VM version 1.4 or later.
Memory	16MB.
Free disk space	10MB for default options.
Java Developer's Kit (JDK)	Sun Java Developer's Kit (JDK) 1.4.2 or later.
Web browser	Any browser that supports JDK 1.4.x or later.
Other Sybase products (optional)	Adaptive Server® IQ, OmniConnect <sup>™</sup> , DirectConnect <sup>™</sup> .

IDE (optional)	Any Java application development environment, such as JBuilder.	
Web server (optional)	For jConnect's Tabular Data Stream <sup>TM</sup> (TDS) tunnelling servlet, any Web server that supports the HTTPS protocol and javax.servlet interfaces.	
Database	One of the following:	
	• Adaptive Server® Enterprise 12.5.x (through Adaptive Server Enterprise version 15.x)	
	• Sybase SQL Anywhere version 7.x through 9.x	

# **UNIX and Linux requirements**

Table 1-2 lists the system requirements for installing jConnect for JDBC on UNIX or Linux.

Hardware	Any UNIX or Linux platform that supports Java VM 1.4.x and later.	
Operating system	Sun Solaris, HP UX, IBM AIX, HP Tru64 UNIX, SGI IRIX, any vendor's Linux installation, and so on.	
Memory	16MB.	
Free disk space	10MB for default options.	
Java Developer's Kit (JDK)	Sun's JDK 1.4.2 or later.	
Web browser	Any browser that supports JDK 1.4.x or later.	
Other Sybase products (optional)	Adaptive Server IQ, OmniConnect, DirectConnect.	
Web server (optional)	For jConnect's TDS-tunnelling servlet, any Web server that supports the HTTPS protocol and javax.servlet interfaces.	
Database	One of the following:	
	• Adaptive Server® Enterprise 12.5.x (through Adaptive Server Enterprise version 15.x)	
	• Sybase SQL Anywhere version 7.x through 9.x	

# Installing jConnect for JDBC

To install jConnect for JDBC, complete the following tasks:

- 1 Install JDK or JRE
- 2 Install jConnect products
- 3 Set environment variables
- 4 Install stored procedures
- 5 Review the installation contents
- 6 Test the jConnect installation

### Install JDK or JRE

Before installing jConnect, you must download and install the Java Development Kit (JDK) if developing programs that use jConnect, or the Java Runtime Environment (JRE) based on your needs.

#### Installing JDK/JRE

1 Download the current JDK/JRE from Sun's Java Software Web site at the following URL:

http://java.sun.com/products/index.html

- 2 Download and install the JDK or JRE using the installation instructions provided.
- 3 After installing the JRE/JRE, define the JRE\_HOME/JAVA\_HOME environment variable to point to the JRE/JDK installation directory. See your operating system documentation for instructions.

### Install jConnect products

This section explains how to download jConnect products from the Web or from a CD.

**Note** If you cannot download jConnect from the Sybase Web site, contact Sybase Technical Support to request a CD. When you receive the CD, see "Installing jConnect from a CD" on page 5 for installation instructions.

The following instructions apply to standalone jConnect product downloaded from the Web site or obtained on a CD. If the jConnect you want to install is part of the Sybase Software Developer's Kit (SDK) or any other Sybase product, please refer to the Installation Guide for that product for installation instructions.

#### Installing jConnect from the Web

1 Go to the jConnect download Web page at the following URL:

http://www.sybase.com/products/middleware/jconnectforjdbc

- 2 Click Downloads in the Information box on the left side of the window.
- 3 When you see the registration page, read the jConnect License Agreement, and then complete and submit the provided registration form. You may see a message that your registration has been successful.

- 4 Download the jConnect 6.05 driver and related documentation utilities, as needed:.
- 5 Extract the *zip* files into a directory on your machine.

To extract *zip* files, you need a *zip*-file extraction utility. Most UNIX and Linux platforms provide an unzip utility as part of their standard tools. Windows users can use WinZip.

- 6 After installing jConnect:
  - Set the JDBC\_HOME and CLASSPATH environment variables. See "Set environment variables" on page 6.
  - Review your installation contents. See "Review the installation contents" on page 9.

#### Installing jConnect from a CD

**Note** Use these instructions *only* if you requested a jConnect CD because you cannot download jConnect from the Web. Do not use these instructions to install the version of jConnect included with Adaptive Server Enterprise or other Sybase products. Instead, use the installation guide provided.

- 1 Log in to the machine on which you want to install jConnect. Use a login with Administrator privileges or the ID you use for all installations.
- 2 Place the Sybase jConnect CD in the CD-ROM drive.
- 3 Access the CD from your system:
  - For UNIX or Linux:

Mount the CD by typing the command for your platform.

• For Windows:

Use MyComputer or Windows Explorer to access the CD-ROM drive.

- 4 Select the zip files for components you wish to install. The CD contains jConnect 6.05 driver, documentation, and utilities.
- 5 Extract the *zip* files into a directory on your machine.

To extract *zip* files, you need a *zip*-file extraction utility. Most UNIX and Linux platforms provide an unzip utility as part of their standard tools. Windows users can use WinZip.

6 After installing jConnect:

- Set the JDBC\_HOME and CLASSPATH environment variables. See "Set environment variables" on page 6.
- Review your installation contents. See "Review the installation contents" on page 9.

### Set environment variables

To use the jConnect classes you installed, you must set the JDBC\_HOME and CLASSPATH environment variables.

#### Setting JDBC\_HOME

JDBC\_HOME represents the directory in which you install jConnect. For example:

**Note** The *zip* file is not aware of your directory structure and installs everything below a directory with the specific jConnect driver's name.

• On Windows:

If you unzipped the jConnect 6.05 driver in *C*:\*Sybase* on Windows, you must set JDBC\_HOME to:

 $C:\Sybase\jConnect-6_0$ 

• On UNIX and Linux:

If you installed the *zip* file into */usr/local/Sybase*, you would set JDBC\_HOME to:

/usr/local/Sybase/jConnect-6\_0

#### Setting the CLASSPATH

CLASSPATH is the location of the jConnect runtime classes and/or *jar* files for JDK 1.4.x or later. This section describes what you need in your CLASSPATH depending on which versions of JDK and jConnect you are using.

Using jConnect 6.05 with JDK 1.4.x and later

To use jConnect 6.05 with JDK versions 1.4.x and later, add the following path to the CLASSPATH environment variable:

• On UNIX or Linux:

*\$JDBC\_HOME/classes/jconn3.jar* 

On Windows: . %JDBC HOME%\classes\jconn3.jar Running samples or To run the samples or the TDS-tunnelling servlet, add the following to the TDS-tunnelling servlet CLASSPATH environment variable: On UNIX or Linux: \$JDBC HOME/classes/jconn3.jar:\$JDBC HOME/classes On Windows: %JDBC HOME%\classes\jconn3.jar;%JDBC HOME%\classes **Note** Sybase requires that you run JDK 1.4.2 or later with jConnect 6.05. In addition, the CLASSPATH should include the location of any application classes you have defined. CLASSPATH If you use Netscape, some restrictions may apply to the way you set your restriction using CLASSPATH environment variable. Netscape The Java VM security manager will not allow a version of jConnect installed in your local file system to create a connection to a server, even if the server is your local system. This can create a problem if you use Netscape to run an applet that uses jConnect. When Netscape needs to load jConnect to create a connection to a server, it looks for a CLASSPATH defined in its environment to find the jConnect classes. If it finds a CLASSPATH that you have defined to point to your local jConnect installation, it loads jConnect directly from the local file systemrather than from the server-and tries to create a connection. This generates a security error and the connection fails. In summary, if you are using Netscape to run jConnect applets, do not set the CLASSPATH to the local jConnect directory.

### Install stored procedures

For jConnect to function properly, you must install stored procedures and tables on the Adaptive Server Enterprise or Adaptive Server Anywhere database to which your application will be connecting. jConnect provides the following scripts to install the required stored procedures and tables:

- *sql\_server12.5.sql*, which installs stored procedures on Adaptive Server Enterprise versions 12.5.x. or later.
- *sql\_server15.0.sql*, which installs stored procedures for Adaptive Server Enterprise 15.x or later.
- *sql\_asa.sql*, which installs stored procedures on SQL Anywhere and Adaptive Server Anywhere databases.

**Note** If you use ASE 12.5.3 or later, or ASA 9.0.2 or later, the scripts come pre-installed on the server. You will need to install these scripts only if you have a later version of the driver than the one that shipped with ASE. In addition, for backward compatibility, *sql\_server.sql* and *sql\_server12.sql* are included on ASE 11.9.2 and 12.0 respectively, although these versions are no longer supported.

#### Running stored-procedure installation scripts

- 1 Verify that your JAVA\_HOME, JDBC\_HOME, and CLASSPATH environment variables are set.
- 2 Use the IsqlApp sample application according to the instructions in the following sections, based on the target database and your platform.

#### On an Adaptive Server Enterprise database

The following describes how to install stored procedures for metadata in an Adaptive Server Enterprise database using Windows, UNIX, and Linux.

#### Installing stored procedures on Windows

- 1 Go to a DOS prompt
- 2 Enter the following command on *one line* from the %JDBC\_HOME%\classes directory:
  - For Adaptive Server Enterprise version 15.x:

```
java IsqlApp -U sa -P password -S jdbc:sybase:
Tds:[hostname]:[port] -I %JDBC_HOME%\sp\sql_server15.0.sql -c go
```

• For Adaptive Server Enterprise version 12.5.x:

```
java IsqlApp -U sa -P password -S jdbc:sybase:
  Tds:[hostname]:[port] -I %JDBC_HOME%\sp\sql_server12.5.sql -c go
```

#### Installing stored procedures on UNIX and Linux

- Enter the following command from your \$JDBC\_HOME/classes directory:
  - For Adaptive Server version 15.x:

```
java IsqlApp -U sa -P password -S jdbc:sybase:
Tds:[hostname]:[port] -I $JDBC_HOME/sp/sql_server15.0.sql -c go
```

• For Adaptive Server version 12.5.x:

```
java IsqlApp -U sa -P password -S jdbc:sybase:
Tds:[hostname]:[port] -I $JDBC HOME/sp/sql server12.5.sql -c qo
```

#### On a SQL Anywhere or Adaptive Server Anywhere database

The following describes how to install stored procedures for metadata in a SQL Anywhere or Adaptive Server Anywhere database using Windows, UNIX, and Linux.

#### Installing stored procedures on Windows

- 1 Go to a DOS prompt
- 2 Enter the following command on *one line* from the %JDBC\_HOME%\classes directory:

```
java IsqlApp -U dba -P password -S jdbc:sybase:
Tds:[hostname]:[port] -I %JDBC_HOME%\sp\sql_asa.sql -c go
```

#### Installing stored procedures on UNIX and Linux

 Enter the following command from your \$JDBC\_HOME/classes directory:

```
java IsqlApp -U dba -P password -S jdbc:sybase:
Tds:[hostname]:[port] -I $JDBC_HOME/sp/sql_asa.sql -c go
```

#### **Review the installation contents**

After completing the jConnect installation, review the contents listed in this section.

### Packages

For jConnect version 6.05, the following packages are found inside *jar* files (*jconn3.jar* for the release build and *jconn3d.jar* for the debug build):

- com.sybase.jdbc3.jdbc
- com.sybase.jdbc3.tds
- com.sybase.jdbc3.timedio
- com.sybase.jdbc3.utils
- com.sybase.jdbcx

The jConnect driver, com.sybase.jdbc3.jdbc.SybDriver, is located in the com.sybase.jdbc3.jdbc package.

#### **Directories and files**

Table 1-3 lists the directories and files in *jconnect605.zip*.

Name	Туре	Description
jconnect-6_0	Directory	Contains all of the jConnect version 6.05 files and subdirectories.
classes	Subdirectory	Contains the following jConnect 6.05 components:
		• <i>jconn3.jar</i> file that contains jConnect 6.05 classes
		• <i>sample2</i> subdirectory with jConnect 6.05 class files for sample applets and applications
		• gateway2 subdirectory for compiled TDS-tunnelling servlet
devclasses	Subdirectory	Contains the <i>jconn3d.jar</i> file that contains the same jConnect 6.05 components as <i>jconn3.jar</i> , but debug mode is turned on.
docs	Subdirectory	Contains the:
		• <i>en</i> subdirectory, which contains the English javadoc documentation
		• <i>en/progref</i> subdirectory, which contains the <i>jConnect for JDBC</i> <i>Programmer's Reference</i> in HTML and PDF format
		• <i>en/installdocs</i> subdirectory, which contains the <i>jConnect for JDBC Installation Guide</i> in HTML and PDF format
gateway2	Subdirectory	Contains source code for the TDS-tunnelling servlet.
sample2	Subdirectory	Contains source code for sample Java applications.

Table 1-3: Directories and files for jconnect605.zip installation

Name	Туре	Description
sp	Subdirectory	Contains isql scripts that install stored procedures for function escapes and DatabaseMetaData methods on a database server. The scripts are:
		• <i>sql_asa.sql</i> (Adaptive Server Anywhere)
		• <i>sql_server15.0.sql</i> (Adaptive Server Enterprise version 15.x)
		• <i>sql_server12.5.sql</i> (Adaptive Server Enterprise version 12.5.x)
tools	Subdirectory	Contains a perl script ( <i>decode-tli</i> ) that UNIX or Linux users can apply to parse an <i>interfaces</i> file into a readable format.
netimpct.gif	Graphic file	Contains a jConnect graphic.
index.html	HTML file	Contains links to jConnect documentation and jConnect samples.

#### **JDBC 2.0 samples**

You can find JDBC 2.0 code samples in the *sample2* subdirectory under the jConnect installation directory. For more information, see "jConnect Sample Programs," in Appendix B of the *jConnect for JDBC Programmer's Reference*.

#### JDBC 3.0 conformance

The JDBC 3.0 specification provides much new functionality unavailable in the JDBC 2.0 specification. jConnect 6.05 contains the methods offered in the JDBC 3.0 specification; however some are not implemented. Applications that invoke any un-implemented JDBC 3.0 methods receive a SQL exception indicating that the method has not been implemented.

Future versions of jConnect will support the missing JDBC 3.0 features.

### Test the jConnect installation

After jConnect is installed, test the installation by running the Version program.

**Note** The Version program connects to a demonstration database that Sybase has made available on the Internet. You must have Internet access to run the Version program successfully, or explicitly run it with [-U *username*] [-P *password*] [-S *servername*] commands to point it to your database.

#### Testing the installation

- 1 From the DOS prompt for Windows, or at a UNIX or Linux prompt, change to the *JDBC\_HOME* directory.
- 2 Verify that your CLASSPATH variable is set for running the sample programs (see "Setting the CLASSPATH" on page 6 for details) and enter the following text:

java sample2.SybSample Version

A SybSample window appears. At the top of the window, the Running Sybase Sample text box displays the source code for Version as the program runs. The middle text box (Sample Output) should display version information. For example:

Using JDBC driver version 6.05 jConnect (TM) for JDBC(TM)/6.05...

- 3 Depending on the output, do one of the following:
  - If the previous message appears in the Sample Output text box, you have successfully installed jConnect.
  - If you get the previous message but the source code for Version does not appear in the Running Sybase Sample text box, and the Status text box at the bottom of the window shows a message like the following, you successfully installed jConnect but probably did not enter the command to run the Version program from the *sample2* directory under *JDBC\_HOME*:

java.io.FileNotFoundException: Version.java

• If the SybSample window does not appear and you get the following error message, check your CLASSPATH to verify that it is set correctly:

Can't find class sample2.SybSample

• Using Windows, if the SybSample window does not come up, and you get one of the following error messages, make sure that your path includes the *bin* subdirectory of your JDK home directory:

```
"Name specified is not recognized as an internal or external command" (Windows NT)
```

"Bad command or file name" (Windows 95)

4 When you have verified that your installation was successful, click Close to exit the SybSample window.

#### Verifying the jConnect version

The following describes how to check the exact build version of your jConnect installation.

- \* Verifying the build version of the installation
  - Execute the following command; from your *\$JDBC\_HOME/classes* directory on UNIX or Linux, or from your *%JDBC\_HOME%\classes* directory on Windows:

java -jar jconn3.jar

This command prints a version string like the following:

jConnect (TM) for JDBC(TM)/6.05(Build 25773/P/EBF12723/JDK14/Fri Aug 5 0:05:43 2005

Here, the version number is 6.05. The 5-digit number following the letters "EBF" indicates the exact version of jConnect. This number increases as subsequent EBFs are released.

Sybase recommends that you check the Sybase download Web site periodically for updated versions of jConnect and download the latest version.

# **Upgrading jConnect**

If you are migrating from one version of jConnect to another, Table 1-4 shows which upgrade paths require you to change and recompile the source code.

From jConnect version	To jConn	ect version	I					
	4.0	4.1	4.2	5.0	5.2	5.5	6.0	6.05
3.0	No changes required	No changes required	No changes required	Changes required *	Changes required *	Changes required *	Changes required *	Changes required *
4.0	N/A	No changes required	No changes required	Changes required *	Changes required *	Changes required *	Changes required *	Changes required *
4.1	N/A	N/A	No changes required	Changes required *	Changes required *	Changes required *	Changes required *	Changes required *

Table 1-4: Upgrade paths that require recompiling

From jConnect version	To jCor	nnect versio	on					
4.2	N/A	N/A	N/A	Changes required *	Changes required *	Changes required *	Changes required *	Changes required *
5.0	N/A	N/A	N/A	N/A	No changes required	No changes required	Changes required *	Changes required *
5.2	N/A	N/A	N/A	N/A	No changes required	No changes required	Changes required *	Changes required *
5.5	N/A	N/A	N/A	N/A	N/A	N/A	Changes required *	Changes required *
6.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No changes required *

\* See Chapter 6, "Migrating jConnect Applications," in the *jConnect for JDBC Programmer's Reference* for instructions.

**Note** Sybase strongly recommends that you use jConnect 6.05 for JDBC applications. This version provides the most features and supports the most Sybase database capabilities.

# CHAPTER 2 Using jConnect Documentation

Your jConnect installation includes the *jConnect for JDBC Programmer's Reference* and javadoc information (see below) about jConnect packages, classes, and methods.

This chapter covers the following topics:

Name	Page
Programmer's reference	15
Java documentation of jConnect extensions to JDBC	16
jConnect documentation access using index.html files	16
jisql and Ribo documentation	16

# Programmer's reference

The *jConnect for JDBC Programmer's Reference* provides information and examples specific to the *jConnect* driver, as well as solutions and workarounds for problems you may encounter when using *jConnect*.

When you install jConnect, it creates a *docs* directory is created under the jConnect installation directory. The *docs* directory contains an *en/progref* subdirectory containing the *jConnect for JDBC Programmer's Reference* in HTML and PDF formats. To obtain this reference in languages other than English, download the *docsINT.zip* file from the jConnect download Web site. See "Install jConnect products" on page 4 for instructions.

# Java documentation of jConnect extensions to JDBC

The Java Development Kit (JDK) from Java Software contains a *javadoc* script for extracting comments from source-code files and putting them in corresponding HTML files. This script is used to extract documentation of jConnect packages, classes, and methods from jConnect source files. When you install jConnect, the javadoc information is installed in the following directories:

• For UNIX or Linux:

\$JDBC\_HOME/docs/en/javadocs

• For Windows:

 $\% JDBC\_HOME\% \backslash docs \backslash en \backslash javadocs$ 

The javadoc information is available only in HTML format.

# jConnect documentation access using index.html files

Using a Web browser, you can access both the *jConnect for JDBC Programmer's Reference* and the jConnect javadoc information from an *index.html* file:

- *\$JDBC\_HOME/index.html* (UNIX or Linux) and *%JDBC\_HOME%\index.html* (Windows) contain links for accessing the jConnect documentation and for running sample JDBC applets.
- \$JDBC\_HOME/docs/index.html (UNIX or Linux) and %JDBC\_HOME%\docs\index.html (Windows) contain links to the jConnect documentation.

# jisql and Ribo documentation

Ribo and jisql are JDBC development tools:

• jisql provides a database GUI from which users can connect to a database, issue SQL commands, and view output graphically.

• Ribo allows JDBC developers to capture and view communication between jConnect and a database. Ribo can also decode TDS messages, which Sybase databases use to communicate with client applications, helping developers to diagnose problems.

**Note** Because Ribo and jisql use some jConnect classes, Sybase strongly recommends that you use JDK 1.4 or later when you run these utilities.

For more information on Ribo and jisql, refer to the documentation provided with these applications, which you can download from the Sybase Web site.

When you download jisql, a doc subdirectory contains this documentation:

• An .html version of the jisql User's Guide. Open jisql-1.html first.

When you download Ribo, a doc subdirectory contains this documentation:

• An .html version of the Ribo User's Guide. Open ribo-1.html first.

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