

SYBASE®

Installation Guide

Sybase ETL

4.9

DOCUMENT ID: DC01013-01-0490-01

LAST REVISED: September 2009

Copyright © 2009 by Sybase, Inc. All rights reserved.

This publication pertains to Sybase software and to any subsequent release until otherwise indicated in new editions or technical notes. Information in this document is subject to change without notice. The software described herein is furnished under a license agreement, and it may be used or copied only in accordance with the terms of that agreement.

To order additional documents, U.S. and Canadian customers should call Customer Fulfillment at (800) 685-8225, fax (617) 229-9845.

Customers in other countries with a U.S. license agreement may contact Customer Fulfillment via the above fax number. All other international customers should contact their Sybase subsidiary or local distributor. Upgrades are provided only at regularly scheduled software release dates. No part of this publication may be reproduced, transmitted, or translated in any form or by any means, electronic, mechanical, manual, optical, or otherwise, without the prior written permission of Sybase, Inc.

Sybase trademarks can be viewed at the Sybase trademarks page at <http://www.sybase.com/detail?id=1011207>. Sybase and the marks listed are trademarks of Sybase, Inc. ® indicates registration in the United States of America.

Java and all Java-based marks are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Unicode and the Unicode Logo are registered trademarks of Unicode, Inc.

All other company and product names mentioned may be trademarks of the respective companies with which they are associated.

Use, duplication, or disclosure by the government is subject to the restrictions set forth in subparagraph (c)(1)(ii) of DFARS 52.227-7013 for the DOD and as set forth in FAR 52.227-19(a)-(d) for civilian agencies.

Sybase, Inc., One Sybase Drive, Dublin, CA 94568.

Contents

About This Book	v	
CHAPTER 1	Introduction	1
	About Sybase ETL	1
	Sybase ETL Development.....	1
	Sybase ETL Server	2
	Before you begin	2
	Obtaining licenses	2
	Reviewing system requirements	3
	Determining the installation directory	7
	Determining the installation mode	8
CHAPTER 2	Installation	9
	Installing Sybase ETL Development	9
	Installing Sybase ETL Development in GUI mode	9
	Installing Sybase ETL Development in silent mode	11
	Installing Sybase ETL Server	11
	Installing Sybase ETL Server in GUI mode	12
	Installing Sybase ETL Server in non-GUI modes	14
	Installing SQL Anywhere as an ETL repository	17
CHAPTER 3	Postinstallation Tasks	21
	Checking for a valid installation.....	21
	Sybase ETL Development.....	21
	Sybase ETL Server	24
	Configuring file settings for Sybase ETL Server on UNIX.....	24
	Configuring connectivity between Sybase ETL components	24
	Configuring the alert service	25
CHAPTER 4	Upgrading	27
	Upgrading Sybase ETL Development.....	27
	Upgrading Sybase ETL Server	28

	Upgrading Sybase ETL Server on Windows	28
	Upgrading Sybase ETL Server on UNIX and Linux	29
	Migrating an existing repository to SQL Anywhere	30
	Accessing and configuring the empty SQL Anywhere 11 repository	
	32	
CHAPTER 5	Uninstallation	35
	Uninstalling Sybase ETL Development	35
	Uninstalling Sybase ETL Server	36
CHAPTER 6	Installing Drivers for Sybase IQ Connectivity	39
	Installing connectivity drivers	39
	Configuring SQL Anywhere ODBC drivers for Sybase IQ 12.7 for UNIX	
	and Linux	40
	Configuring Open Client drivers for Sybase IQ 12.7, 15.0, and 15.1	41
Index		43

About This Book

Audience

This guide is for data administrators and developers who are responsible for installing and configuring Sybase® ETL components, namely, Sybase ETL Development and Sybase ETL Server.

How to use this book

The *Sybase ETL Installation Guide* is structured as follows:

- Chapter 1, “Introduction” is an overview of the Sybase ETL components. It also outlines the requirements for preparing your environment before you begin to install.
- Chapter 2, “Installation” describes how to install Sybase ETL components.
- Chapter 3, “Postinstallation Tasks” describes the tasks you must perform after you have installed the Sybase ETL components.
- Chapter 4, “Upgrading” describes how to upgrade from an earlier version to the current version of Sybase ETL components.
- Chapter 5, “Uninstallation” describes how to uninstall Sybase ETL components.
- Chapter 6, “Installing Drivers for Sybase IQ Connectivity” describes steps for installing and configuring drivers for connecting to Sybase IQ.

Related documents

This section describes the Sybase ETL documentation set, which you can find on the Getting Started CD and the SyBooks™ CDs. The Sybase ETL Getting Started CD includes:

- *Sybase ETL Release Bulletin* – contains last-minute information that was too late to be included in the books.
- *Sybase ETL Installation Guide* (this document) – describes installation procedures for the components of the Sybase ETL.

The Sybase ETL SyBooks CD includes:

- *Sybase ETL New Features Guide* – describes the new features in Sybase ETL 4.9.

- *Sybase ETL Users Guide* – describes how to transform data from data providers to data targets.
- *Sybase Software Asset Management Quick Start Guide* – describes how to complete a simple installation for an environment with a small number of Sybase products and users.
- *Sybase Software Asset Management Users Guide* – describes asset management configuration concepts and tasks.

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.

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

Conventions

The formatting conventions used in this guide are:

Formatting example	Indicates
command names and method names	When used in descriptive text, this font indicates keywords such as: <ul style="list-style-type: none"> Command names used in descriptive text C++ and Java method or class names used in descriptive text Java package names used in descriptive text
<i>myCounter</i> variable <i>Server.log</i> <i>myfile.txt</i>	Italic font indicates: <ul style="list-style-type: none"> Program variables Parts of input text that must be substituted Directory and file names
File Save	Menu names and menu items are displayed in plain text. The vertical bar shows you how to navigate menu selections. For example, File Save indicates “select Save from the File menu.”
create table table created	Monospace font indicates: <ul style="list-style-type: none"> Information that you enter on a command line or as program text Example output fragments

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.

Sybase ETL 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.



Introduction

This chapter is an overview of Sybase ETL and its components. It also outlines the requirements for preparing your environment for an installation of the Sybase ETL components. Sybase recommends that you read this chapter before proceeding with the installation.

Topic	Page
About Sybase ETL	1
Before you begin	2

About Sybase ETL

Sybase ETL provides extract, transform, and load (ETL) capabilities to consolidate data or copies of data from multiple heterogeneous data sources into one or more data targets, using a comprehensive set of transformation functions.

Sybase ETL includes two components that are installed separately:

- Sybase ETL Development
- Sybase ETL Server

Sybase ETL Development

Sybase ETL Development is a graphical user interface (GUI) tool for creating and designing data transformation projects and jobs. This tool provides a complete simulation and debugging environment to speed the development of ETL transformation flows. ETL Development is available only on Windows.

ETL Development is divided into two major subcomponents:

- ETL Development desktop – provides the graphical user interface. Use the desktop to create and design data transformation projects.
- ETL Development engine – controls actual processing, such as connecting to databases and executing procedures.

Sybase ETL Server

Sybase ETL Server is a scalable and distributed grid engine, which connects to data sources, and extracts and loads data to data targets or data sinks, using transformation flows designed using ETL Development.

Before you begin

This section describes the tasks you must complete before you begin installing the Sybase ETL components.

Obtaining licenses

ETL Development You do not need a license file to install and run Sybase ETL Development.

ETL Server ETL Server uses the Sybase Software Asset Management (SySAM) licensing mechanism for license administration and asset management tasks. After you purchase ETL Server, go to the SPDC to generate and download the licenses. See the *Sybase Software Asset Management Users Guide*.

Before generating licenses, decide whether you are using a served or an unserved license model. For information on how to determine which is appropriate for your site, see Chapter 1, “Getting Started” in the *Sybase Software Asset Management Users Guide*.

By default, ETL Server comes with a 30-day trial license. You can install and use ETL Server for a grace period of 30 days without a license. To continue using it after the end of the grace period, you must obtain valid licenses from the SPDC, and apply the license in one of these ways:

- Copy the license to the *licenses* folder of the installation directory.
- Apply the license to a previously deployed license server.

See “Installing Sybase ETL Server” on page 11.

Reviewing system requirements

Before installing ETL Development and ETL Server, make sure your system meets the software and hardware requirements.

Sybase ETL Development

This section describes platforms, operating systems, and disk space requirements for ETL Development.

Operating system

The platform and operating systems supported by ETL Development are:

- Windows XP Professional with Service Pack 3 – 32-bit
- Windows XP Professional with Service Pack 2 – 64-bit
- Windows XP Professional N – 32-bit
- Windows Vista – 32-bit and 64-bit Windows Vista Business, Business N, and Enterprise editions
- Windows Vista Ultimate Service Pack 1 – 32-bit and 64-bit
- Windows 2003 Service Pack 2 – 32-bit and 64-bit Windows 2003 Standard Enterprise, and Data Center editions
- Windows 2008 – 32-bit and 64-bit Standard, Enterprise, and Data Center editions

Disk space

The minimum amount of disk space required by the ETL Development is 450MB.

Sybase ETL Server

This section describes platforms, operating systems, databases, and database interfaces that ETL Server supports.

Operating systems

Table 1-1 lists the platform and operating systems supported by ETL Server.

Table 1-1: Sybase ETL Server platforms and operating systems

Platform	Version
HP Itanium	<ul style="list-style-type: none"> • 11.23 – 64-bit • 11.31 – 64-bit
IBM AIX	<ul style="list-style-type: none"> • 5.3 – pSeries 64-bit • 6.1 – pSeries 64-bit
Microsoft Windows	<ul style="list-style-type: none"> • Windows 2003 Service Pack 2 – 32-bit and 64-bit Windows 2003 Standard, Enterprise, and Data Center editions • Windows XP Professional Service Pack 3 – 32-bit • Windows XP Professional Service Pack 2 – 64-bit • Windows XP Professional N – 32-bit • Windows Vista – 32-bit and 64-bit Windows Vista Business, Business N, and Enterprise editions • Windows Vista Ultimate Service Pack 1 – 32-bit and 64-bit • Windows 2008 – 32-bit and 64-bit Standard, Enterprise, and Data Center editions
Red Hat Enterprise Linux	<ul style="list-style-type: none"> • 4.0 x86 – 32-bit Advanced Server and Workstation Editions • 4.0 – 64-bit • 5.0 – 32-bit, 64-bit • 4.0 on POWER – 64-bit • 5.0 on POWER – 64-bit
Sun Solaris	<ul style="list-style-type: none"> • 9 (SPARC) – 64-bit • 10 (SPARC) – 64-bit • 10 x86 – 64-bit
SuSE Linux Enterprise Server	<ul style="list-style-type: none"> • 9 Service Pack 4 – 32-bit, 64-bit • 10 – 32-bit, 64-bit • 9 Service Pack 4 on POWER – 64-bit • 10 on POWER – 64-bit

For a complete list of supported operating systems on each platform, see the Sybase platform certifications Web site at <http://certification.sybase.com>.

Disk space

The minimum amount of disk space required by the ETL Server is 1GB.

Note To install SQL Anywhere® 11, the minimum amount of disk space required is 1.6GB.

Interfaces

The interfaces supported by ETL Development for connecting to destination or source databases from a component, are:

- Sybase
- DB2 – only supported for connecting to source databases.
- ODBC – you must install the ODBC driver on the same computer as Sybase ETL Development, and you must define a system data source name (DSN) for the target.
- Oracle – only supported for connecting to source databases.
- OLE DB – only supported for connecting to source databases.
- SQLite Persistent – is only supported for connecting to source databases.

See “Database connection settings,” in Chapter 5, “Components” in the *Sybase ETL 4.9 Users Guide*.

Table 1-2 lists the interface drivers supported by ETL Server.

Table 1-2: Interface driver versions for Sybase ETL Server

Driver	Version
Sybase native (via Client-Library)	15.0 ESD #6 (Windows)
	15.0 ESD #15 (UNIX and Linux)
Note These driver version are installed with Sybase ETL installation.	
Adaptive Server® Enterprise ODBC	15.00.00.325 (Windows only)
SQL Anywhere ODBC	11.00.00 (IQ 12.7 only)
Note As of version 10.0, Adaptive Server Anywhere has been renamed SQL Anywhere.	
Sybase IQ 12.7 ODBC	11.00.00.1264
Sybase IQ 15.0 ODBC	11.00.00.1264
	11.00.00.5120
	11.00.01.5027
Sybase IQ 15.1 ODBC	11.00.01.5027
IBM DB2 native	8.1.8.762, 9.01.00.369
IBM DB2 ODBC	8.01.08.762, 9.01.00.369 (Windows only)
Microsoft SQL Server ODBC	2000.86.3959.00 (Windows only)
MySQL	5.1.4
Oracle native (via Oracle Call Interface (OCI))	11.01.00.06
Oracle ODBC	11.01.01.06 (Windows only)

Databases

Table 1-3 shows the repository, source, and destination databases supported by ETL Server.

Table 1-3: Sybase ETL Server database support

Database	Version	Repository	Source	Destination	Stage
Sybase Adaptive Server Enterprise	15.0.2 ESD #6	No	Yes	No	Yes
	15.0.1 ESD #4				
	12.5.4 ESD #8				
	15.0.3 ESD #1				

Database	Version	Repository	Source	Destination	Stage
Sybase SQL Anywhere Server	10.0	Yes	Yes	No	Yes
	11.0				
	Note Sybase recommends to use SQL Anywhere 11.0 as an ETL repository.				
Sybase IQ	12.7 ESD #5	No	Yes	Yes	Yes
	15.0				
	15.1				
IBM DB2 UDB	9.1	No	Yes	No	No
	8.2				
Microsoft SQL Server	2000	No	Yes	No	No
	2005 SP2				
MySQL	5	No	Yes	No	No
Oracle	10g	No	Yes	No	No
	11g				

Compatible products

Sybase ETL is compatible with the Sybase products listed in Table 1-4.

Table 1-4: Compatible products

Product	Version
Replication Server®	15.0 or later
Open Client/Server™	15.0 or later
Replication Agent™	15.0 or later
Sybase Software Asset Management (SySAM)	2.0

Determining the installation directory

Sybase ETL components, are by default, installed in these locations:

- ETL Development – *C:\Program Files\Sybase\ETLDevelop49.*
- ETL Server – *C:\Program Files\Sybase\ETLServer49.*

The installer checks for any existing Sybase folder in the *C:\Program Files* directory. If it locates a Sybase directory, it by default installs the components in this directory. If it cannot locate such a directory, it creates one and installs the components in the new directory.

Warning! Do not install ETL Development or ETL Server in the same directory as Sybase IQ 15.0.

Determining the installation mode

You can install ETL Development and ETL Server using:

- GUI mode – allows you to install the components using a graphical user interface.
- Non-GUI modes (console or silent) – allows you to install the components using the console mode or using silent mode, which requires no interaction.

Topic	Page
Installing Sybase ETL Development	9
Installing Sybase ETL Server	11
Installing SQL Anywhere as an ETL repository	17

Before installing Sybase ETL components:

- Close any open applications or utilities.
- Make sure that the target computer meets the hardware requirements and operating system requirements for installing Sybase ETL components. See “Reviewing system requirements” on page 3.
- Make sure that you have the necessary licenses available in your installation environment. See “Obtaining licenses” on page 2.

Installing Sybase ETL Development

You can install ETL Development using the setup program provided in your installation media, or download and extract the Sybase ETL component images from the Sybase Product Download Center (SPDC) at <http://sybase.subscribenet.com>.

You can install ETL Development using either GUI mode or silent mode. However, Sybase recommends that you use GUI mode. See “Installing Sybase ETL Development in GUI mode.”

Installing Sybase ETL Development in GUI mode

- 1 Launch the setup program.

The setup program should start automatically. If it does not, select Start | Run and browse to *Setup_ETLDevelopment.exe*.

- 2 Specify the language to use for installation. Click OK. The Welcome window displays. Click Next.
- 3 Read the License Agreement. Select “I accept the agreement” and click Next.

If you do not find a license agreement that matches your location, or if the license agreement is unreadable on your system, you can read all available license agreements at the Local Sybase Software Licenses Web site at <http://sybase.com/softwarelicenses> and re-run the setup program.

- 4 The installer prompts you to close all other applications, specifically GridNode, before proceeding. Click Next.

Note To terminate GridNode, run the GridNode --shutdown command.

- 5 Click Browse to select an installation directory, click Next to accept the default directory, or enter a new directory to be created. Sybase recommends that you use only alphanumeric characters for the installation path.

Warning! Do not install ETL Development in the same installation directory as Sybase IQ.

- 6 Specify the Start Menu folder in which you want to create a program shortcut. To create the shortcut in the default folder, click Next. Otherwise, click Browse to specify a new folder.
- 7 Select “Install for All Users” if you want to be able to launch the application on user accounts with restricted access rights.

Note For Windows Vista and Windows 2008, “Install for All Users” is the default selection. If you have selected to install ETL Development in the default location, unselecting this option may cause the application to run into errors.

When started the first time on a user account, all files requiring write privileges are copied to the user directory, typically at:

- Windows 2003 and Windows XP – *C:\Documents and Settings\<login user>\Application Data\SYBASE\Sybase ETL Development\<product version>*

- Vista and Windows 2008 – `C:\Users\<login user>\AppData\Roaming\SYBASE\Sybase ETL Development\<product version>`

Select “Create a desktop icon” to create an icon for ETL Development on the desktop. Click Next.

- 8 The installation summary window displays. Review the information, and click Install.
- 9 Once installation is complete, the installer displays a Readme file. View the contents of the file and click Next.
- 10 Click Finish.

Installing Sybase ETL Development in silent mode

At the command prompt, navigate to the installation directory and enter:

```
Setup_ETLDevelopment.exe /VERYSILENT /DIR=installation
directory /TASKS="Desktopicon,Allusers"
```

where:

- *DIR* – is the directory path where you want to install ETL Development. Sybase recommends that you use only alphanumeric characters and do not include white spaces in the installation path, when installing in silent mode.
- (Optional) *TASKS* – are the additional tasks you want the installer to perform, such as creating a desktop icon for ETL Development, or installing for all users.

Installing Sybase ETL Server

This section describes how to install ETL Server using GUI mode and non-GUI modes. You can install ETL Server using the setup program provided in your installation media, or download and extract the Sybase ETL component images from the Sybase Product Download Center (SPDC).

Note You can install ETL Server using the GUI mode only on Windows.

Installing Sybase ETL Server in GUI mode

On Windows

- 1 Launch the setup program.

The setup program should start automatically. If it does not, select Start | Run and browse to *SybaseETLServer.exe*.
- 2 Select the language to use for installation. Click OK. The Welcome window displays. Click Next.
- 3 Select the product edition you want to configure.
 - Evaluation – allows you to install and use ETL Server without a license for a grace period of 30 days. To continue using ETL Server after the end of the grace period, you must obtain valid licenses from the SPDC. See “Obtaining licenses” on page 2.
 - Licensed Edition – requires you to provide a license for installation.
- 4 Read the License Agreement. Select “I accept the agreement” and click Next.

If the license agreement is unreadable on your system, you can read all available license agreements at the Local Sybase Software Licenses Web site at <http://sybase.com/softwarelicenses> and rerun the setup program.
- 5 The installer prompts you to close all other applications, specifically GridNode, before proceeding. Click Next.

Note To terminate GridNode, run the GridNode --shutdown command.

- 6 Select the installation directory. Click Next to accept the default directory, click Browse to select a different installation directory, or enter a new directory to be created. Sybase recommends that you use only alphanumeric characters in the installation path.

Warning! Do not install ETL Server in the same installation directory as Sybase IQ.

- 7 Specify the Start Menu folder in which you want to create a program shortcut. To install in the default folder, click Next. Otherwise, click Browse to specify a new folder.
- 8 Select “Register as Windows System Service” if you want to start or stop ETL Server using services.

Select “Install for All Users,” if you want to be able to launch the application on user accounts with restricted access rights.

Note For Windows Vista and Windows 2008, “Install for All Users” is the default selection. If you have selected to install ETL Development in the default location, unselecting this option may cause the application to run into errors.

When started the first time on a user account, all files requiring write privileges are copied to the user directory, typically at:

- Windows 2003 and Windows XP – *C:\Documents and Settings\<login user>\Application Data\SYBASE\Sybase ETL Server\<product version>*
- Windows Vista and Windows 2008 – *C:\Users\<login user>\AppData\Roaming\SYBASE\Sybase ETL Server\<product version>*

Depending on whether you have selected “Install for All Users,” log files are located in the *\log* subdirectory of either the user or the installation directory.

Click Next.

- 9 The installation summary window displays. Review the information, and click Install.
- 10 Once installation is complete, the installer displays a Readme file. View the contents of the file and click Next.
- 11 If you have installed the Licensed Edition, the installer prompts you to select the license method. You can select one of these options:
 - Use previously deployed license server – if you have a previously deployed license server, enter the license server host name of the machine where the license server is running, and the license server port number if the port number you are using is not the same as the default. Click Next.

Note If you encounter issues providing the host name, provide the IP address of the host machine instead.

- License file – click Browse to select the location of the license file. Click Next.

Note After you provide the license, the installer verifies whether the license is valid. If the installer cannot verify a valid license, you can continue with the installation; however, the product will stop working in 30 days, unless you obtain and install an appropriate license.

- 12 A final window appears, indicating that the installation was successful. Click Finish.

On UNIX and Linux

You cannot install ETL Server on UNIX and Linux using the GUI mode. To install ETL Server on these platforms, use the non-GUI modes. See “Installing Sybase ETL Server in non-GUI modes.”

Installing Sybase ETL Server in non-GUI modes

You can install ETL Server using either the console or silent mode. On Windows, ETL Server can be installed using silent mode only. On UNIX and Linux, ETL Server can be installed using console mode or silent mode.

On Windows using silent mode

At the command prompt, navigate to the installation directory and enter:

```
SybaseETLServer.exe /VERYSILENT /DIR=<installation directory> /TASKS="InstallAsService,Allusers"
```

where:

- *DIR* – is the directory path where you want to install ETL Server. Sybase recommends that you use only alphanumeric characters and do not include white spaces in the installation path.
- (Optional) *TASKS* – are the additional tasks you want the installer to perform, such as installing ETL Server as a Windows service or installing for all users.

On UNIX and Linux using console mode

- 1 At the command prompt, change to the installation directory, and launch the setup program:

```
SybaseETLServer.shar
```

- 2 Specify if you want to install the evaluation copy or a licensed copy.

- Evaluation copy – enter “1” to install and use ETL Server without a license for a grace period of 30 days. To continue using ETL Server after the end of the grace period, you must obtain valid licenses from the SPDC.
 - Licensed copy – enter “2” to install and use ETL Server with a license.
- 3 A list of countries or regions appear. Select your location and press Enter. If you agree to the terms of the license agreement, enter “Y” to continue the installation. If you disagree with the terms of the license, enter “N” to exit the installation.

If you do not find a license agreement that matches your location, or if the license agreement is unreadable on your system, you can read all available license agreements at the Local Sybase Software Licenses Web site at <http://sybase.com/softwarelicenses> and rerun the setup program.

- 4 Enter the destination directory where you want to install ETL Server.

If the directory exists, this message appears:

```
The specified directory already exists and will be
overwritten. [y/n]
```

- 5 Enter “Y” to install for all users, if you want to be able to launch the application on user accounts with restricted access rights.

When started the first time on a user account, all files requiring write privileges are copied to the user directory, typically, *\$HOME/SYBASE/Sybase ETL Server/<product_version>/Demodata*.

Depending on whether you have selected to install for users, the log files will be located in the *\log* subdirectory of either the user or the installation directory.

- 6 If you have installed the licensed copy, select one of these license methods:

- Use license file – enter “1” to provide the location of the license file.

Note After you provide the license, the installer verifies whether the license is valid. If the installer cannot verify a valid license, you can continue with the installation; however, the product will stop working in 30 days, unless you obtain and install an appropriate license.

- Use previously deployed license server – enter “2” if you have a previously deployed license server.

Enter the license server host name of the machine where the license server is running, and the license server port number if the port number you are using is not the same as the default.

- 7 If the software is installed successfully, a message appears indicating a successful installation.

On UNIX and Linux
using silent mode

- 1 At the command prompt, navigate to the installation directory and enter:

```
SybaseETLServer.shar --silent --destination <dest>  
--all-user
```

where:

- destination <dest> – is the directory path where you want to install ETL Server. Sybase recommends that you use only alphanumeric characters and do not include white spaces in the installation path.
 - all-user – allows you to launch the application on user accounts with restricted access rights.
- 2 After successful installation, copy the license into the *licenses* folder of the installation directory.

If you want to deploy the license to an existing license server, create a *.lic* file and copy it to the *licenses* folder after you have added this information:

- License server host name of the machine where the license server is running.
- License server port number if the port number you are using is not the same as the default.

For example:

```
"SERVER sysamserver ANY 27000  
USE_SERVER"
```

where, *sysamserver* is the hostname of the machine where the license server is running, and 27000 is the default port number of the license server. See the *Sybase Software Asset Management Users Guide*.

After successful installation:

- Check for a valid installation of components. See “Checking for a valid installation” on page 21.
- Configure ETL Development and ETL Server connectivity. See “Configuring connectivity between Sybase ETL components” on page 24.

Installing SQL Anywhere as an ETL repository

In ETL 4.9, Sybase SQL Anywhere is the only supported repository. SQL Anywhere 11, which is the recommended version for use as an ETL repository, is installed and configured as a repository with the installation of ETL Development. It is also packaged with ETL Server and can be installed manually.

If you are using a non SQL Anywhere repository from an earlier version of ETL, you must migrate your existing ETL repository to SQL Anywhere 11. See “Migrating an existing repository to SQL Anywhere” on page 30.

Note Each SQL Anywhere database can support only one ETL repository. You may encounter errors if multiple schemas within a SQL Anywhere database contain multiple sets of repository tables.

- 1 Install ETL Server.
- 2 Run the SQL Anywhere 11 installer:
 - Windows –
 - a Navigate to the installation directory.
 - b Unzip and extract the *SQLAnywhere11.zip* file.

By default, the files are extracted to the installation directory.
 - c Navigate to the *SQLAnywhere* folder and double-click *setup.exe*.
 - UNIX and Linux –
 - a Navigate to the installation directory.
 - b Unzip and extract the *SQLAnywhere11.tar.gz* file.

For example:

```
gunzip SQLAnywhere11.tar.gz
tar -xvf SQLAnywhere11.tar
```

By default, the files are extracted in the installation directory.
 - c Using a command prompt, navigate to the folder where you have extracted the file, and enter:

```
./setup
```

Note When installing SQL Anywhere on Solaris, make sure to include */bin* before */usr/ucb/bin* in the PATH variable.

- 3 Select the language for installation and click OK.
- 4 Select Install SQL Anywhere 11.
- 5 On the Welcome window, click Next.
- 6 On the License Agreement window, select the geographic location where you are installing to display the agreement appropriate to your region. Read the license agreement. Select “I accept the terms of this agreement” and click Next.
- 7 Enter the license key.
 - On Windows – the license key is available in the *SA11_license_key.txt* file in the installation directory.
 - On UNIX and Linux – the license key is available in the *SA11_license_key.txt* file in the installation directory.

Click Next.

If you have entered an incorrect license key, click Back, and reenter the key. To install an Evaluation Edition of SQL Anywhere for 60 days, click Next.

- 8 Accept the default Server license information and click Next.
- 9 Select the Setup type and click Next.
- 10 Click Install.
- 11 On successful installation, the installer displays:

```
Setup has finished installing SQL Anywhere 11 on your
computer.
```

You can select to view the README file or the iAnywhere Online Resources. Click Finish to proceed.

- 12 Click Finish to complete the setup.

After installing SQL Anywhere, you must configure the SQL Anywhere ODBC drivers. See “Configuring SQL Anywhere ODBC drivers for Sybase IQ 12.7 for UNIX and Linux” on page 40.

See the SQL Anywhere documentation installed by the SQL Anywhere installer, for information on how to set up a repository database.

Topic	Page
Checking for a valid installation	21
Configuring file settings for Sybase ETL Server on UNIX	24
Configuring connectivity between Sybase ETL components	24
Configuring the alert service	25

Checking for a valid installation

This section describes how to verify a valid and successful installation of ETL Development and ETL Server.

Sybase ETL Development

Verify that ETL Development has been successfully installed.

❖ Starting Sybase ETL Development

- 1 In Windows, select Start | Programs | Sybase | Sybase ETL Development 4.9 | Sybase ETL Development.

The Welcome window displays. To prevent this window from displaying every time the application starts, unselect Show on Startup, and click Close.

- 2 The repository login window appears, showing these default values:
 - Connection – Repository
 - Client – transformer
 - Client user name – TRANSFORMER
 - Password – transformer

These values are automatically set the first time you log in. On subsequent logins, you might need to select or enter this information.

- 3 Click Logon. If you can successfully log in to ETL Development, the installation is successful.

Note The installer creates an initial set of data sources. If these repository data sources are lost for any reason, ETL Development cannot open until you restore them following the procedures below.

❖ **Restoring the initial set of ODBC data sources of the demo repository**

- 1 Configure the ODBC user data source.
 - a Select Start | Settings | Control Panel | Administrative Tools | Data Sources (ODBC).

Note To administer data sources on a 64-bit machine, run *odbcad32.exe*, from *C:\WINDOWS\SysWOW64*.

- b Click Add.
- c Select SQL Anywhere 11 from the list. Click Finish.
- d Enter DEMO_Repository as the ODBC data source name.
- e Click the Login tab and enter “dba” as the user ID and “sql” as the password.
- f Click the Database tab and in the Start line field, enter “*C:\Program Files\Sybase\ETLDevelop49\dbeng11.exe*.” This is the default installation location.

Note ETL Development runs *dbeng11.exe* for configuring the ETL repository. *dbeng11.exe* is a single user database and cannot be accessed from other machines. To access the repository from another machine, specify *dbsrv11.exe* instead of *dbeng11.exe* in the Start line field.

- g Edit the Database file field.
 - If the application is installed for a single user in the default location, enter “*C:\Program Files\Sybase\ETLDevelop49\Demodata\demo_rep.db*”
 - If the application is installed for all users:

- For Windows XP or 2003 – enter “*C:\Documents and Settings\<login user>\Application Data\SYBASE\Sybase ETL Development\<product version>\Demodata\demo_rep.db*”
 - For Windows 2008 or Vista – enter “*C:\Users\<login user>\AppData\Roaming\SYBASE\Sybase ETL Development\<product version>\Demodata\demo_rep.db*”
- h Go back to the ODBC tab and click Test Connection to verify the connection.
- 2 Set up the repository connection in the Repository Logon window:
 - a Select File | Open Repository.
 - b Select Repository from the Connection list and choose:
 - Edit or,
 - Add, and enter a name for the connection.
 - c Select ODBC from the Interface list.
 - d Select DEMO_Repository from the Host list.
 - e Click Save.
 - 3 Configure the additional ODBC user data sources required by the projects in the demo repository:
 - Driver – SQL Anywhere 11
 - Name – ETLDEMO_DWH; database – demo_dwh.db
 - Name – ETLDEMO_GER; database – demo_ger.db
 - Name – ETLDEMO_US; database – demo_us.db

The database files for these user data sources are also located in the *Demodata* folder of the installation directory, when installed for a single user, or in the user data directory, when installed for all users.

Sybase ETL Server

To check for valid installation of ETL Server, navigate to the directory where ETL Server is installed, using a command prompt, and enter:

- Windows –
`GridNode.exe -ll`
- UNIX and Linux –
`GridNode.sh -ll`

If your installation is valid and successful, the license information displays.

Configuring file settings for Sybase ETL Server on UNIX

On UNIX installations, initialization (*.ini*) file settings are not read by ETL Server, unless you have a *GridNode.ini* file. To specify the settings:

- 1 Make a copy of the *Default.ini* file in the *etc* folder of your installation directory and rename the file *GridNode.ini*.
- 2 Specify the general settings to be shared by all applications in the *Default.ini* file.
- 3 Specify exclusive settings for ETL Server in the *GridNode.ini* file.
- 4 Remove the information on general settings from the *GridNode.ini* file.

Configuring connectivity between Sybase ETL components

To configure connectivity between ETL Development and ETL Server:

- 1 Open ETL Development and select File | Preferences.
- 2 Select Engine.
- 3 In the Execution engine server field, specify the IP address or machine name of the grid engine server.

- 4 Click Save.

Configuring the alert service

To define e-mail alert notifications in ETL, configure the alert service by editing the *Default.ini* file. If you are configuring the alert service on a UNIX installation of ETL Server, edit the *GridNode.ini* file.

Note This configuration is also required to use the uSMTP JavaScript function. See Appendix A, “Function Reference,” in *Sybase ETL 4.9 Users Guide*.

- 1 Navigate to the *etc* directory in the installation folder.
- 2 Use a text editor to open the *Default.ini* file and define the alerting configuration in the “SMTP” section, to match your SMTP server and account information:

```
[SMTP]
Server = SMTP Server name
Port = port number of the SMTP Server
Sender = account@SMTP Server
Credential = user/password
RetryCount = retry count
RetryInterval = retry interval
```

For example:

```
Server = localhost
Port = 25
Sender = admin@localhost
Credential = admin/7357506276773D3D
RetryCount = 0
RetryInterval = 5
```

- 3 Save and close the file.

Topic	Page
Upgrading Sybase ETL Development	27
Upgrading Sybase ETL Server	28
Migrating an existing repository to SQL Anywhere	30

Upgrading Sybase ETL Development

Before upgrading ETL Development:

- Shutdown all Sybase ETL Development or ETL Server processes running on the same machine. To verify, go to the Windows Task Manager and click the Processes tab to check for the *GridNode.exe* process. If running, select the *GridNode.exe* process and click End Process.

Note Make sure “Show Processes From All Users” is selected.

❖ Upgrading ETL Development

- 1 Install the current version of ETL Development. You can:
 - Leave the earlier version and install the new version in a different directory, or
 - Uninstall the earlier version and install the new version. See “Uninstalling ETL Development in GUI mode” on page 35. Before uninstalling, back up the *.ini* files in the *etc* directory.
- 2 If the previous version of ETL Development was installed for all users, rename or delete the demo data sources for each user, before upgrading. Log in as each user and use the ODBC Data Source Administrator to rename or delete DEMO_Repository, ETLDEMO_DWH, ETLDEMO_GER, and ETLDEMO_US data sources.

- 3 Copy the *.ini* files from the *etc* folder of the earlier installation directory to the new installation directory.
- 4 To use projects and jobs from earlier versions, migrate them to the current version.
- 5 Start the new ETL Development version. In the ETL Development Repository Login window, select the repository to connect to and provide the user name and password that was used to connect to the repository in the earlier version.

Upgrading Sybase ETL Server

Upgrading Sybase ETL Server on Windows

Before upgrading ETL Server, go to the Windows Task Manager and click the Processes tab to check for any active *GridNode.exe* process. If a *GridNode.exe* process is running, select it and click End Process.

Note Make sure “Show Processes From All Users” is selected.

❖ Upgrading Sybase ETL Server on Windows

- 1 Install the new version of ETL Server. You can:
 - Leave the earlier version and install the new version in a different directory. See “Installing Sybase ETL Server” on page 11.
 - Uninstall the earlier version and install the new version. See “Uninstalling Sybase ETL Server” on page 36.

Note If you are uninstalling the earlier version, create a backup of the ODBC or native connectivity files, which includes the *.odbc.ini* file or the ODBC or native drivers.

- 2 Start the new ETL Server.
 - To start the ETL Server directly, enter:

GridNode

- To start the ETL Server as a service, enter:

```
GridNode --install
```

- 3 To verify whether the server has started, go to the Windows Task Manager and click the Processes tab to check if the *GridNode.exe* process is running.

Upgrading Sybase ETL Server on UNIX and Linux

Before upgrading ETL Server:

- Shut down any running GridNode. At the command prompt, enter:

```
./GridNode.sh --shutdown
```

- Verify that the GridNode has shut down successfully:

```
ps -e | grep GridNode
```

If the GridNode is still running, kill the process.

❖ Upgrading Sybase ETL Server on UNIX and Linux

- 1 Install the new version of ETL Server in a new installation directory.
- 2 Copy the *.ini* files from the *etc* folder of the earlier installation directory to the new installation directory.
- 3 Start the new ETL Server.

- To start the ETL Server directly, enter:

```
GridNode.sh
```

- To start the ETL Server as a service, enter:

```
GridNode --install
```

- 4 To verify whether the server has started, enter:

```
ps -e | grep GridNode
```

After successfully upgrading, you may uninstall the older version of ETL Server. See “Uninstalling Sybase ETL Server” on page 36.

Migrating an existing repository to SQL Anywhere

SQL Anywhere is the only supported repository in Sybase ETL. SQL Anywhere 11 is the recommended version for use as an ETL repository. If you are using any other repository from an earlier version of ETL, you must migrate your existing ETL repository to SQL Anywhere 11.

Included with the Sybase ETL Development installation is a SQL Anywhere 11 repository for migration of an existing repository. See “Migrating an existing repository to SQL Anywhere” on page 30.

Note If you have installed Sybase ETL Server and not installed Sybase ETL Development in your environment, you must manually install SQL Anywhere 11, which is packaged separately with Sybase ETL Server. See “Installing SQL Anywhere as an ETL repository” on page 17.

❖ Migrating from an existing repository to a SQL Anywhere repository

Before you migrate:

- Create an ODBC data sources named **SourceRepos** to point to the repository to be migrated.
- Make a backup of the target repository if it contains existing projects and jobs.
- Verify the connections to the source and target repositories.

Note You can only migrate ETL 4.5 and later repositories.

To migrate:

- 1 Navigate to Start | Programs | Sybase | Sybase ETL Development 4.9 to launch Sybase ETL Development.
- 2 Set up the repository connection in the Repository Logon window:

Note If the Repository Login window does not open on launch, select File | Open Repository to open it.

- a Click Add and enter **repositoryMigrate** as the name.

Note **repositoryMigrate** defines the job and project objects that are used to implement migration. This ODBC entry is defined during installation.

 - b Select ODBC from the Interface list.
 - c Select **repositoryMigrate** from the Host list.
 - d Enter **dba** as the user and **sql** as the password.
 - e Click Test Logon to test the connection.
 - f Click Save.
- 3 Select the **repositoryMigrate** connection, if it is not already selected, and click Logon. The other default connection parameters are:
 - Client – transformer
 - Client User – TRANSFORMER
 - Password – transformer
 - 4 In the navigation pane, click Jobs to expand the list of jobs.
 - 5 Right-click the **migrate Repository** job and select Job Execute with Parameter Set.

Note The **migrate Repository** job assumes that the repository tables have been created in the target repository. These tables are already created in the database to which the **repositoryNew** data source points. If you are migrating to a different instance of SQL Anywhere, make sure the repository tables have been created in that database, using the Repository Test Logon button on the Repository window, before running the **migrate Repository** job.

- 6 Sort the parameter list by clicking the component column header, then to sort the parameter column, press Ctrl and click the column.

Note The Component column should be sorted by destination and source.

- 7 The Value column contains a default value of **TargetRepos** for each of the destination components in the migration projects (migrateCHUNK, migrateDATA, migrateOBJECT and migratePERFORMANCE). Double click **TargetRepos** and enter **repositoryNew** to change the value.

- 8 Update the Value column for the source components, which defines the required information for the source repository.
 - Database – the name of the database is optional if the source database is defined in ODBC.
 - Host – ODBC data source name definition.
 - Interface – dbodbc
 - Password – database password, if defined in the ODBC definition.
 - Schema – schema name is optional if the source database is defined in ODBC.
 - User – database user name, if defined in ODBC definition.

The details of the source repository are transferred to the Target Repository.

- 9 Click Execute.

Note If your source repository is not accessed via ODBC, change the Interface value to either **dbsybase** for **ct-lib** or **dbole** for **OLE DB**.

- 10 Login to your new repository and verify if your projects and jobs have been migrated successfully.

Accessing and configuring the empty SQL Anywhere 11 repository

Sybase ETL Development includes an empty SQL Anywhere 11 repository, separate from the migration repositories. To access and define the ODBC data source for the empty SQL Anywhere 11 repository:

- 1 Navigate to `<ETL_Development_install_directory>\etc` and rename the `repositoryEmpty.db` to a name of your choice. For example, `myRepository_ETL49.db`.
- 2 Configure the ODBC data source names to define your own repository by creating a System data source that points to `myRepository_ETL49.db`

- a Select Start | Settings | Control Panel | Administrative Tools | Data Sources (ODBC).

Note To administer data sources on a 64-bit machine, run *odbcad32.exe* from *C:\WINDOWS\SysWOW64*.

- b Click Add.
- c Select SQL Anywhere and click Finish.
- d Click the ODBC tab. In the Data source name field, enter **myRepository_ETL49**.
- e Click the Login tab and enter **dba** as the User ID and **sql** as the Password.
- f Click the Database tab and enter these values:
- Start line – *C:\Program Files\Sybase\ETLDevelopment49\dbeng11.exe*. This is the default install location.

Note ETL Development runs *dbeng11.exe* for configuring the ETL repository. *dbeng11.exe* is a single user database and cannot be accessed from other machines. To access the repository from another machine, specify *dbsrv11.exe* instead of *dbeng11.exe* in the Start line field.

- Database file – *C:\Program Files\Sybase\ETLDevelopment49\etc\repository\myRepository_ETL49.db*
- g Click the ODBC tab and click Test Connection to verify the connection.

❖ Connecting to the repository in ETL Development

- 1 Navigate to Start | Programs | Sybase | Sybase ETL Development 4.9 to launch Sybase ETL Development.
- 2 Set up the repository connection in the Repository Logon window:
 - 1 Click Add and enter **myRepository_ETL49** as the name.
 - 2 Select ODBC from the Interface list.
 - 3 Select *myRepository_ETL49* from the Host list.

- 4 Enter **dba** as the user and **sql** as the password.
- 5 Click Test Logon to test the connection.
- 6 Click Save.
- 7 Select Register new user and click Logon.
- 8 Enter **transformer** to confirm your password and click OK.

Topic	Page
Uninstalling Sybase ETL Development	35
Uninstalling Sybase ETL Server	36

Before uninstalling:

- Log in to your machine using an account with administrator privileges.
- Shut down all Sybase applications and processes.
- Move any log, database, or user-created files that you want to keep from the installation directory to another location.
- Determine the mode of uninstallation—GUI or silent mode. Sybase recommends that you use the GUI mode to uninstall.
- If ETL Development was installed for all users, before uninstalling it, Sybase recommends you to log in as each user, and use the ODBC Data Source Administrator to remove the DEMO_Repository, ETLDEMO_DWH, ETLDEMO_GER, and ETLDEMO_US data sources.

Uninstalling Sybase ETL Development

❖ Uninstalling ETL Development in GUI mode

- 1 Select Start | Settings | Control Panel | Add or Remove Programs. Select Sybase ETL Development 4.9 and click Remove.

A message appears prompting you to confirm the removal of ETL Development and its components. Click Next.

- 2 A status bar appears, displaying the progress of the uninstallation. When the uninstallation is complete, click OK to exit the uninstaller.

Some files and directories remain after uninstallation. Move any files that you want to keep to another location, then manually delete these files and directories. If ETL Development was installed for all users, delete the user data directories from:

- On Windows 2003 and Windows XP – *C:\Documents and Settings\<login user>\Application Data\SYBASE\Sybase ETL Development\<product version>*
- On Windows Vista and Windows 2008 – *C:\Users\<login user>\AppData\Roaming\SYBASE\Sybase ETL Development\<product version>*

Uninstalling Sybase ETL Server

Uninstall ETL Server in GUI mode and console mode.

You cannot use console mode to uninstall on Windows, or GUI mode to uninstall on UNIX and Linux.

❖ Uninstalling Sybase ETL Server in GUI mode (Windows)

- 1 Select Start | Settings | Control Panel | Add or Remove Programs. Select Sybase ETL Server 4.9 and click Remove to launch the uninstaller.

Click Yes to confirm that you want to completely remove ETL Server and all of its components.

- 2 A status bar displays the progress of the uninstallation. When the uninstallation is complete, click OK to exit the uninstaller.

❖ Uninstalling Sybase ETL Server in console mode (UNIX and Linux)

- 1 At the command prompt, navigate to the installation directory and enter:

```
./uninstall
```

- 2 Enter Yes to confirm that you want to completely remove ETL Server and all of its components.

Note Some files and directories may not be removed during uninstallation. You have to manually delete these files and directories.

❖ Uninstalling Sybase ETL Server in silent mode (UNIX and Linux)

- At the command prompt, navigate to the installation directory and enter:

```
./uninstall --silent
```

ETL Server and all of its components are silently uninstalled.

Installing Drivers for Sybase IQ Connectivity

Topic	Page
Installing connectivity drivers	39
Configuring SQL Anywhere ODBC drivers for Sybase IQ 12.7 for UNIX and Linux	40
Configuring Open Client drivers for Sybase IQ 12.7, 15.0, and 15.1	41

Installing connectivity drivers

Table 6-1 lists the drivers you can use to connect to Sybase IQ.

Table 6-1: Drivers for connecting to Sybase IQ

Sybase IQ version	Driver	Packaging and installation details
12.7	SQL Anywhere ODBC drivers	<p>These drivers ship with Sybase ETL and are automatically installed when you install SQL Anywhere, which is packaged with ETL Server.</p> <p>After installation, you must configure the drivers. See “Configuring SQL Anywhere ODBC drivers for Sybase IQ 12.7 for UNIX and Linux” on page 40.</p>
	Open Client™ drivers	<p>These drivers ship with Sybase ETL and are automatically installed when you install ETL Server and ETL Development.</p> <p>After installation, you must configure the drivers. See “Configuring Open Client drivers for Sybase IQ 12.7, 15.0, and 15.1” on page 41.</p>
15.0 and 15.1	Sybase IQ 32-bit ODBC drivers	<p>These drivers ship with Sybase ETL and are automatically installed when you install Sybase ETL Development.</p> <hr/> <p>Note Windows and Linux-x86 require 32-bit ODBC drivers for both 32-bit and 64-bit platforms.</p> <hr/>

Sybase IQ version	Driver	Packaging and installation details
	Open Client drivers	<p>These drivers ship with Sybase ETL and are automatically installed when you install Sybase ETL Server and ETL Development.</p> <p>After installation, you must configure the drivers. See “Configuring Open Client drivers for Sybase IQ 12.7, 15.0, and 15.1” on page 41.</p>

Configuring SQL Anywhere ODBC drivers for Sybase IQ 12.7 for UNIX and Linux

These conventions are used in this section:

- `<installation_directory>` is where SQL Anywhere is installed.
- `<lib_version>` is the subdirectory containing the SQL Anywhere 11 drivers. Depending on your configuration, the name of the subdirectory is `lib32` or `lib64`.
- `$USERHOME` is the home directory that contains the `.odbc.ini` file.

The `.odbc.ini` file contains the ODBC driver configuration information, such as the data source name (DSN) definitions. Driver managers such as unixODBC look for the `.odbc.ini` file specified in the ODBCINI environment variable. For more information on `.odbc.ini`, see the unixODBC Web site at <http://www.unixodbc.org/internals.html>.

- 1 In the `<installation_directory>`, create a symbolic link called `libodbc.so` to the supplied SQL Anywhere 11 ODBC driver file:


```
ln -s <installation_directory>/<lib_version>/libdbodbc11.so libodbc.so
```
- 2 In the `.odbc.ini` file, add an entry similar to:

```
[My_IQ_Server]
Driver=/opt/sybase/<installation_directory>/<lib_version>/libdbodbc11.so
uid=dba
pwd=SQL
EngineName=My_IQ_Server_asiqdemo
CommLinks=tcipip(host=iq_hosting_server;port=2638)
AutoStop=no
DatabaseName=asiqdemo
```

- 3 Add the environment variable ODBCINI=*\$USERHOME/.odbc.ini* to your server.
- 4 To set the necessary environment variables, run the *sa_config.sh* or *sa_config.csh* file in the *<installation_directory>/<bin_version>/* directory, where *<bin_version>* can be *bin32* or *bin64*, depending on your configuration.

Note If you have multiple Sybase IQ servers with the same server name, database name, and port number, use server name caching to connect to the target Sybase IQ server. Add the DoBroadcast=DIRECT communication parameter to the CommLinks connection parameter, in the *.odbc.ini* file, in your ETL Server:

```
CommLinks=tcPIP (DoBroadCast=DIRECT;
host=iq_hosting_server;port=2638)
```

See “Server name caching for faster connections,” in Chapter 3, “Sybase IQ Connections” in the *Sybase IQ 12.7 System Administration Guide*.

Configuring Open Client drivers for Sybase IQ 12.7, 15.0, and 15.1

❖ Configuring Open Client drivers on Windows

- 1 Set these environment variables:

```
SYBASE = <install_dir>\ocs
SYBASE_OCS = OCS-15_0
PATH = %SYBASE%\%SYBASE_OCS%\bin;%SYBASE%\
%SYBASE_OCS%\dll
```

- 2 Use the dsedit utility to create an entry for your server in the *sql.ini* file. For example:

```
[myiqserver]
master=TCP,myiqhost,2638
query=TCP,myiqhost,2638
```

❖ Configuring Open Client drivers on UNIX and Linux

- 1 Navigate to the installation directory and use a text editor to open the *GridNode.sh* file.

- 2 Locate and uncomment these lines to set the environment variables:

```
#SYBASE=<install_dir>/ocs
#export SYBASE
#SYBASE_OCS=OCS-15_0
#export SYBASE_OCS
#LD_LIBRARY_PATH=<install_dir>/ocs/OCS15_0/lib:${LD_LIBRARY_PATH}
#export LD_LIBRARY_PATH
#LIBPATH=<install_dir>/ocs/OCS-15_0/lib:${LIBPATH}
#export LIBPATH
```

- 3 Create an entry for your server in the *<install_dir>/ocs/interfaces* file. For example:

```
myiqserver
master tcp ether myiqhost 2638
query tcp ether myiqhost 2638
```

Index

A

about Sybase ETL 1
accessibility viii

B

before you begin 2

C

checking for valid installation 21
configuring
 connectivity between Sybase ETL components 24
 file settings for Sybase ETL Server 24
conventions viii

D

default installation directory
 Sybase ETL Development 7
 Sybase ETL Server 7
disk space requirements
 Sybase ETL Development 3
 Sybase ETL Server 5

I

installation
 modes 8
 overview 9
 prerequisites 9
installation modes
 GUI mode 8
 non-GUI modes 8

installation prerequisites 2
 determining installation directory 7
 determining installation mode 8
 obtaining licenses 2
 reviewing system requirements 3
installing
 SQL Anywhere ETL repository 17
 SQL Anywhere repository 17
 Sybase ETL Development in GUI mode 9
 Sybase ETL Development in silent mode 11
 Sybase ETL Server in GUI mode 12
 Sybase ETL Server in non-GUI mode 14
installing Sybase ETL Server
 on UNIX and Linux 14, 16
 on Windows 12, 14

M

migrating
 existing repository to SQL Anywhere 11 30

O

operating system requirements 3

P

postinstallation tasks 21
preinstallation tasks 1
prerequisites for
 installation 2
 uninstallation 35
upgrading 27

Index

S

- Sybase ETL
 - subcomponents 2
- Sybase ETL Development
 - configuring connectivity with Sybase ETL Server 24
 - installation 9
 - licenses 2
 - starting 21
 - supported operating systems 3
- Sybase ETL Server 2
 - configuring connectivity with Sybase ETL Development 24
 - configuring file settings on UNIX 24
 - supported databases 6
 - supported interfaces 5
 - supported operating systems 4
 - SySAM licenses 2
- Sybase Technical Support ix
- Sybase ETL Development 21
- Sybase ETL Server 24

T

- typographical conventions viii

U

- uninstalling
 - prerequisites 35
- uninstalling Sybase ETL Server
 - on UNIX and Linux 36, 37
 - on Windows 36
- upgrading
 - Sybase ETL Development 27
 - Sybase ETL Server 28, 29
- upgrading prerequisites
 - Sybase ETL Development 27
 - Sybase ETL Server 28, 29
- upgrading Sybase ETL Server
 - on UNIX and Linux 29
 - on Windows 28

V

- verifying valid installation 21