



DataDirect®

SequeLink®

Installation Guide

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Preface

This book is your guide to installing your MERANT™ DataDirect® SequeLink® 5.1 environment. Read on to find out more about your SequeLink environment and how to use this book.

What Is DataDirect SequeLink?

DataDirect SequeLink is a middleware product that provides point-to-point connections from client to server for the latest data access standards, including Open Database Connectivity (ODBC), Java Database Connectivity (JDBC) applications, and ActiveX Data Objects (ADO) applications.

Using This Book

This book assumes that you are familiar with your operating system and its commands; the concept of directories; the management of user accounts and security access; and your network protocol and its configuration.

This book contains the following information:

- [Chapter 1 “Before You Install” on page 17](#) describes information that you should know before you install SequeLink, such as product requirements. It also provides CD mounting instructions for your platform.
- [Chapter 2 “Installing SequeLink Server” on page 29](#) provides installation instructions for SequeLink Server, including

instructions for installing the SequeLink Manager on the same SequeLink server.

- [Chapter 3 “Installing the SequeLink Manager” on page 87](#) provides installation instructions for the SequeLink Manager on a networked client.
- [Chapter 4 “Installing SequeLink ODBC Client” on page 91](#) provides installation instructions for SequeLink ODBC Client.
- [Chapter 5 “Installing SequeLink ADO Client” on page 109](#) provides installation instructions for SequeLink ADO Client.
- [Chapter 6 “Installing SequeLink Java Client” on page 119](#) provides installation instructions for SequeLink Java Client.
- [Chapter 7 “Installing and Viewing Online Books” on page 131](#) provides installation instructions for the SequeLink documentation.

NOTE: This book refers the reader to Web URLs for more information about specific topics, including Web URLs not maintained by MERANT. Because it is the nature of Web content to change frequently, MERANT can guarantee only that the URLs referenced in this book were correct at the time of publishing.

SequeLink Documentation

The following documentation is provided on your SequeLink CD in PDF format. You can view the online documentation on the CD using the Acrobat Reader.

The following table provides a guide for finding information in your SequeLink documentation.

For information about...	Go to...
SequeLink concepts and planning your SequeLink environment	<i>Getting Started with SequeLink</i>
Installing the SequeLink middleware components	<i>SequeLink Installation Guide</i>
Administering your SequeLink environment	<i>SequeLink Administrator's Guide</i>
Developing ODBC, ADO, and JDBC applications for the SequeLink environment	<i>SequeLink Developer's Reference</i>
Troubleshooting and referencing error messages	<i>SequeLink Troubleshooting Guide and Reference</i>

DataDirect product documentation is also available in PDF and HTML formats on the MERANT DataDirect Web site:

<http://www.merant.com/products/datadirect/download/docs/dochome.asp>

Conventions Used in This Book

This section describes the typography, terminology, and other conventions used in this book.

Typographical Conventions

This book uses the following typographical conventions:

Convention	Explanation
<i>italics</i>	Introduces new terms that you may not be familiar with, and is used occasionally for emphasis.
bold	Emphasizes important information. Also indicates button, menu, and icon names on which you can act. For example, click Next .
UPPERCASE	Indicates the name of a file. For operating environments that use case-sensitive file names, the correct capitalization is used in information specific to those environments. Also indicates keys or key combinations that you can use. For example, press ENTER.
monospace	Indicates syntax examples, values that you specify, or results that you receive.
<i>monospaced italics</i>	Indicates names that are placeholders for values you specify; for example, <i>filename</i> .
forward slash /	Separates menus and their associated commands. For example, Select File / Copy means to select Copy from the File menu.
vertical rule	Indicates an OR separator to delineate items.
brackets []	Indicates optional items. For example, in the following statement: SELECT [DISTINCT], DISTINCT is an optional keyword.

Convention	Explanation
braces { }	Indicates that you must select one item. For example, {yes no} means you must specify either yes or no.
ellipsis . . .	Indicates that the immediately preceding item can be repeated any number of times in succession. An ellipsis following a closing bracket indicates that all information in that unit can be repeated.

Mouse Conventions

This action...	Means to...
Click	Point to an object with the mouse pointer and press the left mouse button.
Double-click	Click the left mouse button twice.
Right-click	Click the right mouse button.
Drag	Press and hold the left mouse button while dragging item(s) to another part of the screen.
SHIFT+Click	Press and hold the SHIFT key; then click a selection. This lets you select a series of objects.
CTRL+Click	Press and hold the CTRL key; then click a selection. This lets you select objects randomly.

Keyboard Conventions

Select menu items by using the mouse or pressing ALT+ the key letter of the menu name or item.

Environment-Specific Information

This book supports users of various operating environments. Where it provides information that does not apply to all supported environments, the following symbols are used to identify that information.

Symbol	Environment
	Windows. Information specific to the Microsoft Windows 95, Windows 98, Windows ME, Windows NT, and Windows 2000 environments is identified by the Windows symbol.
	Windows NT. Information specific to the Microsoft Windows NT environment is identified by the Windows symbol and the letters "NT."
	Windows 2000. Information specific to the Microsoft Windows 2000 environment is identified by the Windows symbol and the number "2000".
	UNIX. Information specific to UNIX environments is identified by this symbol, which applies to all supported UNIX environments. UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Ltd.
OS/390	OS/390. Information specific to OS/390 environments is identified by the letters OS/390.

Ordering Printed Books

As part of your SequeLink license agreement, you may print and distribute as many copies of the SequeLink books as needed.

If you do not want to print each of these online books, you can order hard-copy versions from MERANT. To order, please complete the following order form and fax your request to MERANT at (919) 461-4526.

Contacting Technical Support

MERANT provides technical support for all registered users of SequeLink, including limited installation support, for the first 30 days. For support after that time, contact us using one of the following methods or purchase further support by enrolling in the SupportNet program. For more information about SupportNet, contact your sales representative.

The MERANT Web site provides the latest support information through SupportNet Online, our global service network that provides access to valuable tools and information. Our SupportNet users access information using the Web, automatic email notification, newsgroups, and regional user groups. SupportNet Online includes a knowledge base that allows you to search on keywords for technical bulletins and other information. You also can download product fixes for your DataDirect products.

World Wide Web

<http://support.merant.com>

E-Mail

USA, Canada, and Mexico	datadirect.answerline@merant.com
Australia and New Zealand	australia.answerline@merant.com
Japan	jpn.answerline@merant.co.jp
All other countries	int.datadirect.answerline@merant.com

Local Telephone Support

Local phone numbers can be found at:

<http://support.merant.com/websupport/contact/supportnetanswerline.asp>

Live Answerline telephone support is available 24 hours a day, seven days a week.

Fax and Mail Information

Fax US	1 919 461 4527
Fax International	+32 (0) 15 32 09 19
Mail	1500 Perimeter Park Drive, Suite 100, Morrisville, NC 27560 USA

When you contact us, please provide the following information:

- The **product serial number** located on the Product Registration Information card or on a product serial number card in your package. The number will be checked to verify your support eligibility. If you do not have a SupportNet contract, we will ask you to speak with a sales representative.
- Your **name and organization**. For a first-time call, you may be asked for full customer information, including location and contact details.
- The **version number** of your DataDirect product.
- The type and version of your **operating system**.
- Any **third-party software or other environment information** required to understand the problem.
- A **brief description of the problem**, including any error messages that you have received, **and the steps preceding the occurrence of the problem**. Depending on the complexity of the problem, you may be asked to submit an example so that we can recreate the problem.
- An assessment of the **severity level** of the problem.

1 Before You Install

This chapter describes information that you should know before you install SequeLink, such as product requirements. It also provides CD mounting instructions for your platform.

NOTE: SequeLink 5.1 Servers are compatible with SequeLink 5.0 Clients. Similarly, SequeLink 5.1 Clients are compatible with SequeLink 5.0 Servers. Only SequeLink 5.1 services can be configured, managed, or monitored with the SequeLink Manager 5.1.

Product Requirements

This section lists the product requirements for:

- SequeLink Server
- SequeLink ODBC Client
- SequeLink ADO Client
- SequeLink Java Client
- SequeLink Manager Snap-in

For the latest information about the operating system platforms supported for each SequeLink component, see <http://www.merant.com/products/datadirect/odbc/sl5/techdocs/matrix.asp>

SequeLink Server

Windows NT and Windows 2000:

- 486 or Pentium processor-based PC
- 32 MB of RAM recommended
- Minimum of 5 MB of free disk space
- Winsock 1.1-compliant TCP/IP
- MMC 1.1 or 1.2 (you can download this software from www.merant.com/products/datadirect/mmc.asp)

UNIX:

- CD-ROM drive on your UNIX server, or a Windows 3.1, Windows 9x, Windows ME, Windows NT, or Windows 2000 PC with a CD-ROM drive and file transfer capability to a supported UNIX server.
- TCP/IP

OS/390:

- The amount of disk space that is required depends on the disk type. The minimum required is 500 tracks for a 3390 device (or equivalent), excluding space for primary and secondary log files. The size of log files depends on system use.
- IBM TCP/IP for OS/390 V3R2 or higher.
- The SAS/C runtime libraries are installed with SequeLink Server.
- Any SAF-compliant security system product, including:
 - IBM RACF V2R1 or higher
 - Computer Associates CA-ACF2 6.0 or higher
 - Computer Associates CA-TOP SECRET

NOTE: Make sure that your security system supports SAF RACROUTE macros.

Database Requirements:

[Table 1-1](#) lists the databases supported by SequeLink Server on Windows NT/2000 and their requirements.

Table 1-1. Databases Supported by SequeLink on Windows NT/2000

Database	Database Requirements
DB2 V6R1 and V7R1	<ul style="list-style-type: none"> <li data-bbox="736 522 1290 687">■ For DB2 V6R1, FixPack 4 or higher must be installed. To determine your DB2 version, enter the command <code>db2level</code> at the Command window. Version 6.1.0.21 or higher must be reported. <li data-bbox="736 713 1290 878">■ For DB2 V7R1, FixPack 1 or higher must be installed. To determine your DB2 version, enter the command <code>db2level</code> at the Command window. Version 7.1.0.1 or higher must be reported.
Informix 7.3, 9.14, and 9.20 (see note)	<p data-bbox="736 895 1290 1017">For Informix, Informix Client SDK 2.40 must be installed. To determine if it has been installed, check the Windows NT/2000 registry for the following key:</p> <p data-bbox="736 1052 1290 1112">HKEY_LOCAL_MACHINE\SOFTWARE\Informix Software, Inc.\INFORMIX-Connect2.40</p> <p data-bbox="736 1130 1290 1190">If this key exists, Informix Client SDK 2.40 is installed.</p>

NOTE: Informix 9.20 is also known as Informix 2000.

Table 1-1. Databases Supported by SequeLink on Windows NT/2000 (cont.)

Database	Database Requirements
Microsoft SQL Server 6.5, 7.0, 2000	<ul style="list-style-type: none"> <li data-bbox="701 345 1250 510">■ For Microsoft SQL Server 6.5, MDAC 2.1.2.4202.3 must be installed. You can download this software from http://www.microsoft.com/data/download_21242023.htm. <li data-bbox="701 539 1250 736">■ If you want to use the Microsoft Distributed Transaction Controller (MS DTC) or Java Transaction API (JTA) with your Windows NT/2000 application server, the Distributed Transaction Coordinator service must be started.
Oracle 7.3, 8.0.6 and higher	For Oracle7 on Windows NT, you must install Oracle8 Client for Windows NT before you install SequeLink Server.
Sybase 11 and 12	For Sybase 12, if you want to use the Microsoft Distributed Transaction Controller (MS DTC) or Java Transaction API (JTA) with your Windows NT/2000 application server, then Sybase 12 must be installed and configured with the ASE 12 DTM Option.

NOTE: Informix 9.20 is also known as Informix 2000.

Table 1-2 lists the databases supported by SequeLink Server on UNIX and their requirements.

Table 1-2. Databases Supported by SequeLink on UNIX

Database	Database Requirements
DB2 V6R1 and V7R1	None.
Informix 7.3, 9.14, and 9.20 (see note)	<p>For Informix, Informix Client SDK 2.40 must be installed. To determine if it has been installed, check the version of the Informix Client SDK in the following file:</p> <p><i>INFORMIXDIR</i>/release/en_us/0333/CLIENTREL.TXT</p> <p>where <i>INFORMIXDIR</i> is the <i>INFORMIXDIR</i> environment variable.</p> <p>If this file does not exist, the Informix Client SDK is not installed.</p>
Oracle 7.3, 8.0.6 and higher	■ None.
Sybase 11 and 12	■ None.
NOTE: Informix 9.20 is also known as Informix 2000.	

Table 1-3 lists the databases supported by SequeLink Server on OS/390 and their requirements.

Table 1-3. Databases Supported by SequeLink on OS/390

Database	Database Requirements
DB2 V4R1, V5R1, and V6R1	<ul style="list-style-type: none"> <li data-bbox="765 423 1253 557">■ For DB2 V5R1, RRSAP with the maintenance release PTF UQ21561 is required for distributed transaction support. <li data-bbox="765 579 1253 644">■ For DB2 V6R1, RRSAP is required for distributed transaction support.

SequeLink ODBC Client

Windows 9x, Windows ME, Windows NT, and Windows 2000:

- 486 or Pentium processor-based PC.
- 8 MB of RAM (Windows 9x and Windows ME), 16 MB of RAM (Windows NT and Windows 2000).
- Winsock 1.1-compliant TCP/IP.
- COMCTL32.DLL 472.3611.1900 or higher must be available in the Windows system directory. A patch can be obtained at: <http://www.microsoft.com/msdownload/ieplatform/ie/comctrl.asp>.
- On Windows 9x and Windows ME clients, DCOM98 must be installed. By default, DCOM is supplied with Windows NT. For more information about obtaining and installing DCOM, refer to Article Q191094 and Article Q191704 in the Microsoft KnowledgeBase.

UNIX:

TCP/IP is required.

SequeLink ADO Client

Windows 9x, Windows ME, Windows NT, and Windows 2000:

- 486 or Pentium processor-based PC.
- 8 MB of RAM (Windows 9x and Windows ME), 16 MB of RAM (Windows NT and Windows 2000).
- Winsock 1.1-compliant TCP/IP.
- COMCTL32.DLL 472.3611.1900 or higher must be available in the Windows system directory. A patch can be obtained at: <http://www.microsoft.com/msdownload/ieplatform/ie/comctrl.asp>.
- On Windows 9x and Windows ME clients, DCOM98 must be installed. By default, DCOM is supplied with Windows NT. For more information about obtaining and installing DCOM, refer to Article Q191094 and Article Q191704 in the Microsoft Knowledgebase.

SequeLink Java Client

[Table 1-4](#) lists the product requirements for using the SequeLink Java Client.

Table 1-4. Product Requirements for SequeLink Java Client

For applications using...	Product Requirements
JDBC 1.22 API	JDK 1.1.x or higher compatible JVM
JDBC 2.0 Core API	JDK 1.2 or higher compatible JVM
JDBC 2.0 Optional Package	JDK 1.2 or higher compatible JVM Also, the following APIs are required and are supplied with SequeLink Java Client: <ul style="list-style-type: none"> ■ JDBC Optional Package 2.0 ■ JNDI 1.2 ■ JTA 1.01

SequeLink Manager Snap-in

The following list describes the product requirements for the SequeLink Manager Snap-in:

- Windows NT 4.0 or Windows 2000
- 486 or Pentium processor-based PC
- 3 MB of RAM
- Winsock 1.1-compliant TCP/IP
- MMC 1.1 or 1.2 (you can download this software from www.merant.com/products/datadirect/mmc.asp)

Mounting Your MERANT DataDirect CD

This section provides CD mounting instructions for your SequeLink Server platform.

Windows

Windows 9x, Windows ME, Windows NT 4.x, and Windows 2000 provide the system option AutoPlay for CDs as a default feature. If enabled, the Product Setup starts immediately when you insert the CD in the CD-ROM drive.

If you have AutoPlay for CDs disabled or you will be mounting the CD on a network drive:

- 1 Insert the CD into the CD-ROM drive. If you have a local CD-ROM drive, this typically is drive D. If the CD-ROM drive is on a network, mount the CD and create a mapping to the CD-ROM drive.
- 2 To view the contents of the CD, double-click the CD-ROM drive icon in the My Computer window.

UNIX

Mount the CD as a file system. The following examples assume that the */cdrom* mount point is available on your UNIX system. If not, replace */cdrom* with a valid mount point.

AIX

```
mount -r -v cdrfs /dev/device /cdrom
```

where *device* is the device name assigned to your CD-ROM drive. The device name can be found using the AIX tool *smit*. For example:

```
mount -r -v cdrfs /dev/cd0 /cdrom
```

TRU64 (OSF/1)

- 1 Log on your UNIX machine.
- 2 If you do not know the device name for the CD-ROM drive, use the following command to find it:

```
file /dev/rrz*c
```

The entry for the CD-ROM drive includes the words “RRD42 disk.” On a DEC 3000 Model 500 processor, the logical unit number for the CD-ROM drive is usually rz4.

- 3 Mount the CD with the following command, substituting the unit number of your CD-ROM drive for *unit*:

```
mount -r -t cdfs -o noversion /dev/rzunitc /cdrom
```

HP-UX

Log in as root, and enter the following command:

```
mount -F cdfs -o cdcase device /cdrom
```

where *device* is the device name assigned to your CD-ROM drive. The device name can be found using the HP tool *sam*. For example:

```
mount -F cdfs -o cdcase /dev/dsk/c0t4d0 /cdrom
```

Solaris

On Solaris, CDs automatically mount when inserted in the CD-ROM drive.

Read the README File

Read the SequeLink READ.ME text file for late-breaking information about SequeLink.

2 Installing SequeLink Server

The chapter provides installation instructions for SequeLink Server, including instructions for installing the SequeLink Manager on the same SequeLink Server. For information about installing the SequeLink Manager on a networked client, see [Chapter 3 “Installing the SequeLink Manager” on page 87](#).

IMPORTANT: When installing SequeLink Server 5.x on servers that already have a SequeLink Server (any version) installed, you must use a different TCP/IP port from the one already used for the existing SequeLink Server. In addition, different versions of SequeLink Server must be installed in different directories.

Installing SequeLink Server on Windows NT and Windows 2000



PREREQUISITE: You must have administrator privileges to install SequeLink Server on Windows NT and Windows 2000. For database prerequisites, see [“SequeLink Server” on page 18](#).

The SequeLink Server installer on Windows NT and Windows 2000 requires the Microsoft Windows Installer service. If the SequeLink Server installer detects that the Microsoft Windows Installer service is not installed on your machine, or that an older version is installed, the SequeLink Server installer will install it first. After the installation of the Microsoft Windows Installer service, the SequeLink Server installer may require you to restart your machine (Windows NT only), after which the SequeLink Server installer will resume its installation.

To start the SequeLink Server installer:

- **If installing from the DataDirect CD**, insert the CD into the CD-ROM drive. If you have a local CD-ROM drive, this typically is drive D. If the CD-ROM drive is on a network, mount the CD and create a mapping to the CD-ROM drive. Then, perform one of the following actions:
 - If AutoPlay for CDs is enabled and you have a browser, product information is displayed automatically when you insert the CD. Click the **SequeLink 5.1** link on the left side of the opening window; then, follow the instructions to install the product.
 - If AutoPlay for CDs is not enabled or you do not have a browser, use Windows Explorer to navigate from the root directory of the CD to the folder for the product you want to install. Then, double-click **setup.exe**.
- **If installing from files downloaded from the Web**, follow the instructions on the MERANT Web site to download the appropriate self-extracting ZIP file. Open the contents of the ZIP file into a directory (for example: C:\temp). Then, navigate to the directory containing the unzipped files and double-click **setup.exe** to start the installer.

Installing SequeLink Server

- 1 Start the SequeLink Server installer. When the Welcome window appears, click **Next** to continue.
- 2 The License Agreement window appears. Accept the license agreement by checking the **I accept the terms in the license agreement** option; then, click **Next**.

If you are installing SequeLink Server for Oracle, continue with the next step; otherwise, go to [Step 4 on page 32](#).

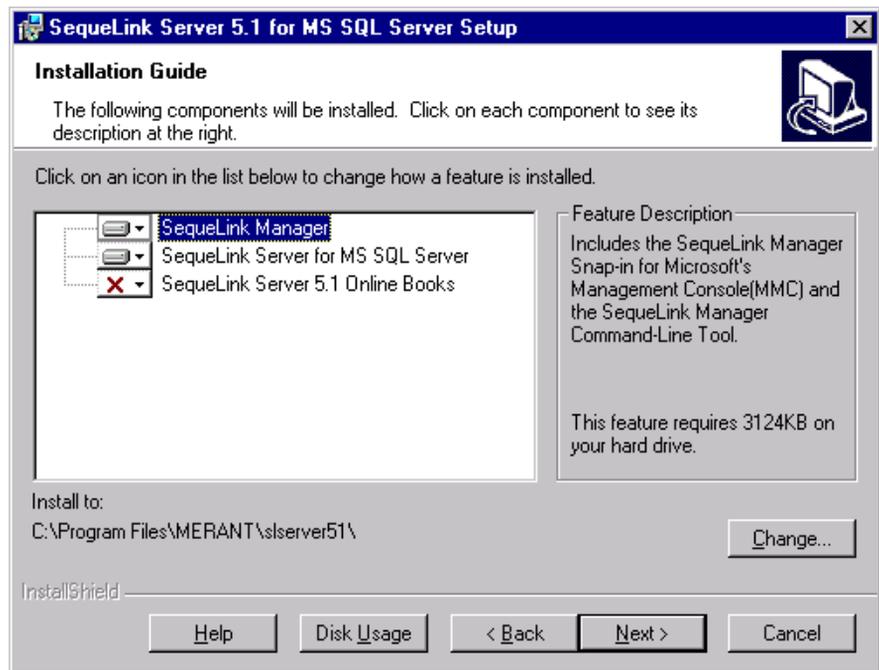
- 3 If you are installing SequeLink Server for Oracle, you will be prompted for your Oracle version. Select your Oracle version and click **OK**.

NOTE: If you select the incorrect version of Oracle, the error message `swora80.exe - Application Error` appears. If you receive this error message, click **OK** and select the correct version of Oracle. When you have selected the correct version of Oracle, click **OK**.

Continue with the next step.

- 4 From the Installation Guide window, choose your installation options.
 - a Click one or multiple component icons to select the components to install. When you select a component, a description of the component appears in the Feature Description box.
 - b To change the installation directory, click **Change**. A window appears allowing you to browse and select an installation directory.

NOTE: Multiple SequeLink Servers can be installed on the same machine; however, if you want to install them in the same directory, the SequeLink Servers must be different service types (for example, SequeLink Server for Oracle and SequeLink Server for Microsoft SQL Server).



When you are satisfied with your settings, click **Next**.

- 5 The next window prompts you for the service names and TCP/IP ports to be used by the SequeLink Agent and SequeLink Server. The SequeLink Agent allows the SequeLink administrator to configure, manage, and monitor this SequeLink Server using the SequeLink Manager.

SequeLink Server 5.1 for MS SQL Server Setup

Setup will install and configure this SequeLink Server with the following settings.

Name for SL Agent:

Port for SL Agent:

Name for SL Server:

Port for SL Server:

Please enter the user account name which will be allowed to administer this SequeLink Server.

Name:

< Back Next > Cancel

If you want to change the default values for the SequeLink Agent and the SequeLink Server, type the service names and TCP/IP ports in the appropriate fields.

NOTE: The service names and TCP/IP ports must be unique (not used by another service). If you do not specify a unique service name or a unique TCP/IP port, the installation will fail. No software will be installed.

Also, you must specify the user ID of the person who is authorized to administer the SequeLink Server. By default, the user ID of the person logged on during the installation appears in this field.

Then, click **Next** to continue. The Ready to Install Program window appears.

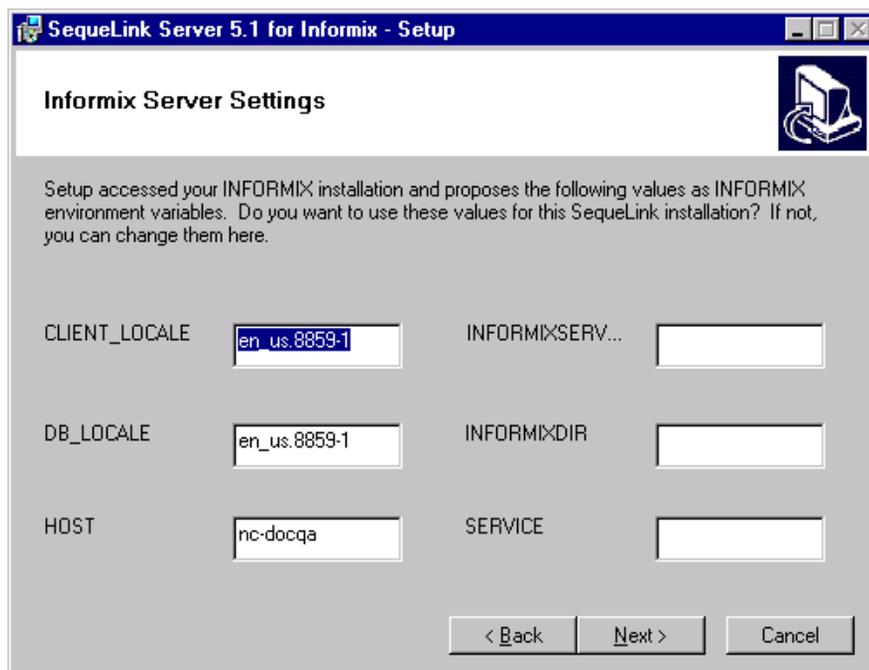
NOTE: If you are installing a different SequeLink Server service type in the same directory as an existing SequeLink Server, the same SequeLink Agent and SequeLink administrator account will be used; you will only be prompted for the service name and TCP/IP port of the SequeLink Server you are installing. Before proceeding, we recommend that you use the SequeLink Manager to stop any running SequeLink services and SequeLink Agent.

If you are installing:

- SequeLink Server for Informix, continue with [Step 6 on page 35](#)
- SequeLink Server for Sybase, skip to [Step 7 on page 36](#)

Otherwise, continue with [Step 8 on page 36](#).

- 6 If you are installing SequeLink Server for Informix, the Informix Server Settings window appears, prompting you for information about your Informix installation.



Provide the following Informix information; then, click **Next**.

CLIENT_LOCALE: Type the value of the CLIENTLOCALE environment variable.

DB_LOCALE: Type the value of the DBLOCALE environment variable.

HOST: Type the value of the INFORMIXHOST environment variable.

INFORMIXSERVER: Type the value of the INFORMIXSERVER environment variable.

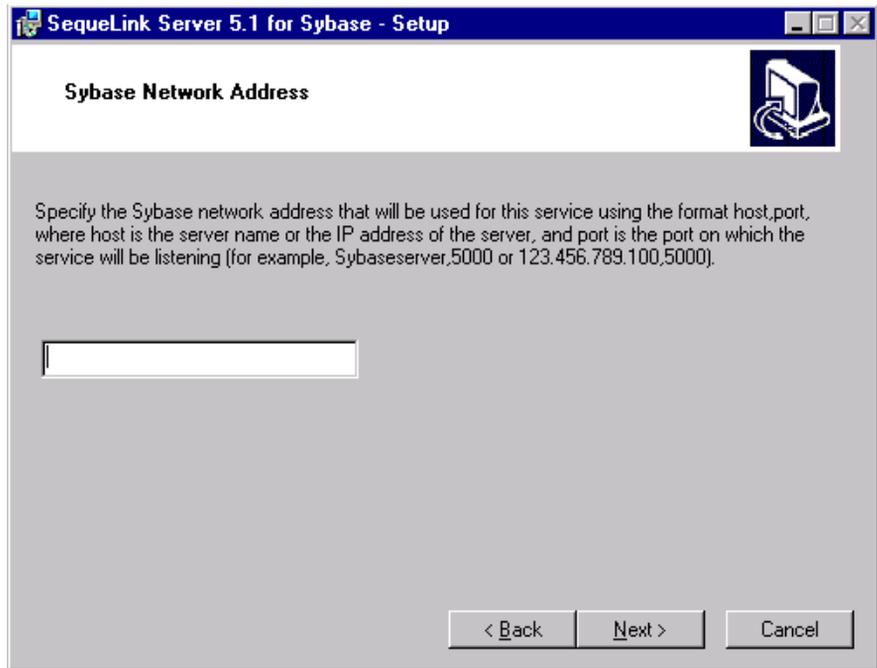
INFORMIXDIR: Type the value of the INFORMIXDIR environment variable.

SERVICE: Type the value of the SERVICE network parameter.

NOTE: Valid values for the fields on this window can be determined using the Informix tool Setnet32, which can be accessed from the Informix program group.

Continue with [Step 8 on page 36](#).

- 7 If you are installing SequeLink Server for Sybase, the Sybase Network Address window appears, prompting you for the network address of the Sybase database.



Specify the network address of the Sybase database. Then, click **Next** to continue. The Ready to Install the Program window appears. Continue with the next step.

- 8 The Ready to install the Program window allows you to go back and review your choices before proceeding. If you are ready to install, click **Install**.

- 9 During the installation, the MERANT Product Registration window appears prompting you to select a SequeLink Server to register.



Select the SequeLink Server you want to register, and click **OK**.

- 10 An additional Product Registration window appears prompting you for your product registration information.

MERANT Product Registration

Please fill in the following information to register product:

SLSQLServer 5.1.0 WINNT

Name:

Company:

Serial: Key:

Expiration Date: 11/29/2000

Next> Cancel

MERANT Product Registration Version: 2.2.00

Type your name and the company name in the appropriate fields. Then, perform one of the following actions:

- If you are installing a *licensed* copy of the product, type the serial number and key provided to you by MERANT.
- If you are installing an *evaluation* copy of the product, type `EVAL` in the Serial field and leave the Key field empty.

When you are finished, click **Next**. The Registration Confirmation window appears.

- 11 If the information on the Registration Confirmation window is incorrect, click **No** to return to the previous window. If the information is correct, click **Yes**. The installation continues.
- 12 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**.

NOTE: To change which components are installed or remove the SequeLink Server from your machine, run the installation program again. When the installer detects an existing SequeLink Server installation on your machine, it will prompt you with the following choices:

- **Modify** allows you to change which components are installed.
- **Remove** uninstalls the SequeLink Server from your machine.

Troubleshooting Installation Problems

When SequeLink Server is installed, the installer creates the SLSERVER.LOG file in your temporary directory (for example, C:\temp). If the installer encounters any Windows NT or Windows 2000 registration errors, it will not install SequeLink Server and will display a message dialog that tells you to examine the SLSERVER.LOG file. The installation is rolled back and no software is installed.

For example, if you specified a TCP/IP port that was already being used by another product, the following message would appear in the SLSERVER.LOG file:

```
[SequeLink error 3145] The TCP port for the service could not be registered because it is registered for another network service.
```

Restart the SequeLink Server installer; then, repeat the installation procedure in ["Installing SequeLink Server" on page 31](#) making sure that you correctly specify the information required during the installation.

Integrating SequeLink Monitoring with Windows NT Performance Monitoring

If you will be integrating SequeLink monitoring with the Windows NT Performance Monitoring tool, you must explicitly set the required counters in the Windows NT/Windows 2000 registry. When the SequeLink Server installation finishes, the files SWEVPERF.INI and SWEVPERF.H appear in your temporary directory (for example, C:\temp). For instructions on integrating SequeLink monitoring with Windows NT performance monitoring, refer to the *SequeLink Administrator's Guide*.

Installing SequeLink Server on UNIX



PREREQUISITE: To install SequeLink Server on UNIX, you must have root privileges. For database prerequisites, see [“SequeLink Server” on page 18](#).

The method you use to install SequeLink Server for UNIX depends on whether you install:

- **From a CD.** The method you use to install SequeLink Server for UNIX from a CD depends on whether your UNIX workstation has a CD-ROM drive:
 - **If your UNIX workstation has a CD-ROM drive,** see [“Installing on a Server With a CD-ROM Drive” on page 41](#).
 - **If your UNIX workstation does not have a CD-ROM drive,** you must transfer the files from another computer which has a CD-ROM drive and an FTP utility to your UNIX workstation, untar the transferred files, and run the SequeLink Server installation script. For instructions on installing SequeLink Server on a server without a CD-ROM drive, see [“Installing on a Server Without a CD-ROM Drive” on page 46](#).
- **From files downloaded from Web.** You extract the downloaded file and run the SequeLink Server installation script. For instructions on installing SequeLink Server from downloaded files, see [“Installing From Files Downloaded From the Web” on page 53](#).

Installing on a Server With a CD-ROM Drive

If your UNIX server has a CD-ROM drive, you can install the SequeLink Server from the DataDirect CD. When the installation completes, the installer window appears, allowing you to install

another product or exit from the installer. Default answers for any questions are displayed in square brackets, []. To accept the default, press ENTER.

When you run the SequeLink Server installer, it prompts you for choices you need to make and information you need to supply. Default answers to questions are enclosed within square brackets, []. To accept the default, press ENTER.

To install SequeLink Server:

- 1 Log on your UNIX system as *root*.
- 2 Mount the CD. For instructions on mounting the CD, see [“Mounting Your MERANT DataDirect CD” on page 25](#).
- 3 Change to the top-level directory on the CD.
- 4 Enter the following command:


```
ksh unixmi.ksh
```
- 5 Select the SequeLink Server to install.
- 6 Verify the SequeLink Server to install (the examples in this procedure show the information that displays when you install SequeLink Server for Informix).

You are installing the product:

```
SequeLink Server for Informix 7.x, Informix 9.x
Version 5.1 on Solaris 2
```

```
-----
Do you want to continue (Y/N) ? [Y]
```

Enter **Y** to continue the installation. Enter **N** to stop the installation; no software is installed.

- 7 Enter the installation directory, or press ENTER to accept the default installation directory. If the directory does not exist, it will be created for you.
- 8 Enter the UNIX account name that was used to install the database software on your machine.

- 9** You are prompted to confirm information about your database installation. Enter the information for which you are prompted, or press ENTER to accept the proposed values.

The installer accessed your current Informix installation and found a list of possible values for the environment variable INFORMIXSERVER.

Please enter the value for the environment variable INFORMIXSERVER applicable to your Informix installation.

Valid values are listed in the first column.

sparky73 ontlitcp

infdinotcp onsoctcp

Enter a value for the INFORMIXSERVER variable

[sparky73]:

- 10** You are prompted for information that is required to create the SequeLink Agent. The SequeLink Agent allows the SequeLink administrator to configure, manage, and monitor this SequeLink Server using the SequeLink Manager. To create a SequeLink Agent service, enter the user ID of the SequeLink administrator account, or press ENTER to accept the default.

Please enter the Unix account name which will be allowed to administer this SequeLink Server [root] :

- 11** Enter the name of the SequeLink Agent service, or press ENTER to accept the default.

Enter the name of this SequeLink agent service [SLAgent]:

- 12** Enter the TCP/IP port that the SequeLink Agent service will use to listen for connection requests.

Enter the TCP/IP port for your SequeLink agent service [19995] :

Enter an available unique port, or press ENTER to accept the default.

NOTE: The port you choose must be unique (not used by another service). If the port you choose is not unique, the installation will fail. No software will be installed.

The installer creates the SequeLink Agent.

- 13** Enter the name of the SequeLink data access service, or press ENTER to accept the default.

```
Enter the name of your SequeLink Informix service
[SLInformix] :
```

- 14** Enter the TCP/IP port that the SequeLink Server will use to listen for connection requests.

```
Enter the TCP/IP port for this SequeLink Informix
service [19996] :
```

Enter an available port, or press ENTER to accept the default. The port you choose must not be used by another service. The installer creates the SequeLink data access service.

- 15** Review the installation settings.

Ready to start installation with the following settings:

```
SequeLink home directory : ../slserver50
SequeLink Agent settings: Administrator : root
                          Service name : SLAgent
                          TCP/IP port: 19995
SequeLink Informix settings : Service name : SLInformix
                          TCP/IP port : 19996
Informix home directory : /db/informix73
INFORMIXSERVER : sparky73
Link service executables : No
```

You will need approx. 20000 kBytes free disk space in your SequeLink home directory (depending on your platform and configuration.).

- ```

1) Start installation with these settings
2) Change SequeLink home directory
3) Change SequeLink Agent settings
```

```

4) Change SequeLink Informix settings
5) Change Informix home directory
6) Change INFORMIXSERVER value
7) Abort installation
Enter your choice [1] ?

```

You can choose to continue with the installation using these settings, change any settings, or end the installation. Enter the appropriate choice, or press ENTER to start the installation with the current settings.

- 16** You are prompted for your product registration. Enter your name, company name, serial number, and key. The serial number and key are printed on the Product Registration Information card that is shipped with the product. If you are installing an evaluation copy of SequeLink Server, leave the Key field empty.
- 17** The installer prompts you to review the information. Enter **C** to change the information, or press ENTER to continue.
- 18** The license agreement is displayed. Enter **YES** to accept the license agreement or **NO** to decline the agreement and end the installation.
- 19** The installer prompts you to continue with the installation. Press ENTER to continue. The installer installs the files.
- 20** When the installation of the SequeLink Agent is complete, the installer prompts you to start the SequeLink Agent service.

```

Starting SequeLink Agent service

```

```

Would you like to start the SequeLink Agent (Y/N) ? [Y]

```

Enter **Y** to start the SequeLink Agent service. Enter **N** if you do not want to start the SequeLink Agent service at this time. You can start the SequeLink Agent at a later time.

- 21 The installer prompts you to start the SequeLink Server data access service.

```
Would you like to start the SequeLink Server for
Informix (Y/N) ? [Y]
```

Enter **Y** to start the SequeLink Server data access service. Enter **N** if you do not want to start the service at this time. You can start the SequeLink service at a later time.

- 22 The installer prompts you for the password of the SequeLink administrator account you entered in [Step 10](#).

```
Password:
```

Enter the password of the SequeLink administrator account. A message appears when SequeLink Server successfully starts and publishes itself on the TCP/IP port.

## Installing on a Server Without a CD-ROM Drive

Installing SequeLink Server when your server does not have a CD-ROM drive involves:

- Transferring files to your UNIX server
- Extracting the files
- Running the installation script

If your server does not have a CD-ROM drive, you can mount a CD on another computer with a CD-ROM drive and transfer the tar file in *binary* format to your server using file transfer software (for example, FTP). After the tar file is transferred or copied to your server, you must extract the files from the tar file to run the installation script.

The SequeLink Server tar file you transfer depends on the database you are using. To identify the correct SequeLink Server

tar file, see the following table for a list of SequeLink Server tar file names:

| Database | SequeLink Server Tar Files |
|----------|----------------------------|
| DB2      | sldb2.tar                  |
| Informix | slinf.tar                  |
| Oracle   | slora.tar                  |
| Sybase   | slyb.tar                   |

### ***Transferring SequeLink Server Files***

- 1 Mount the CD on a computer with a CD-ROM drive and FTP capability. For instructions on mounting the CD, see [“Mounting Your MERANT DataDirect CD” on page 25](#).
- 2 Log on to your UNIX server as *root*.
- 3 If a SequeLink home directory does not exist, create a target directory on the server. For example, to create a SequeLink home directory called *sqlnk* in the *usr* directory, enter:

```
mkdir /usr/sqlnk
```

- 4 On the machine from which you will be transferring the files, change to the directory on the CD for your server platform (for example, `\sqlnk51\solaris\server`).

From this machine, transfer the appropriate tar file (in binary format) to the SequeLink home directory on the server (for example, `/usr/sqlnk`).

How you transfer files from another system to the server depends on your TCP/IP product and your system's operating system. For more information about transferring files, refer to the documentation supplied with your TCP/IP product.

**IMPORTANT:** Transfer the tar file in binary format. If you transfer files in the wrong format, the SequeLink Server installation will fail.

## ***Extracting SequeLink Server Files***

On the server, access the tar file you transferred to the SequeLink home directory and extract it. For example, to extract the tar file for SequeLink Server for Informix, you would enter:

```
tar -xvf slinf.tar
```

NOTE: On Solaris, using the `-xvf` argument with the tar command may cause warnings to appear; use the `-xof` argument instead. For example, enter:

```
tar -xof slinf.tar
```

## ***Running the Installation Script***

When you run the installation script, it prompts you for choices you need to make and information you need to supply. Default answers to questions are enclosed within square brackets, [ ]. To accept the default, press ENTER.

### **To run the installation script:**

- 1** On the server, change to the SequeLink home directory. For example, enter:

```
cd /usr/sqlnk
```

- 2** Enter the following command:

```
ksh install.sh
```

- 3** Select the SequeLink Server to install.

- 4** Verify the SequeLink Server to install (the examples in this procedure show the information that displays when you install SequeLink Server for Informix).

You are installing the product:

```
SequeLink Server for Informix 7.x, Informix 9.x
Version 5.1 on Solaris 2
```

```

```

```
Do you want to continue (Y/N) ? [Y]
```

Enter **Y** to continue the installation. Enter **N** to stop the installation; no software is installed.

- 5** Enter the installation directory, or press **ENTER** to accept the default installation directory. If the directory does not exist, it will be created for you.
- 6** Enter the UNIX account name that was used to install the database software on your machine.
- 7** You are prompted to confirm information about your database installation. Enter the information for which you are prompted, or press **ENTER** to accept the proposed values.

```
The installer accessed your current Informix
installation and found a list of possible values for
the environment variable INFORMIXSERVER.
```

```
Please enter the value for the environment variable
INFORMIXSERVER applicable to your Informix
installation.
```

```
Valid values are listed in the first column.
```

```
sparky73 ontlitcp
infdinotcp onsoctcp
```

```
Enter a value for the INFORMIXSERVER variable
```

```
[sparky73]:
```

```

```

- 8** You are prompted for information that is required to create the SequeLink Agent. The SequeLink Agent allows the SequeLink administrator to configure, manage, and monitor this SequeLink Server using the SequeLink Manager. To

create a SequeLink Agent service, enter the user ID of the SequeLink administrator account, or press ENTER to accept the default.

Please enter the Unix account name which will be allowed to administer this SequeLink Server [root] :

- 9** Enter the name of the SequeLink Agent service, or press ENTER to accept the default.

Enter the name of this SequeLink agent service [SLAgent] :

- 10** Enter the TCP/IP port that the SequeLink Agent service will use to listen for connection requests.

Enter the TCP/IP port for your SequeLink agent service [19995] :

Enter an available unique port, or press ENTER to accept the default.

**NOTE:** The port you choose must be unique (not used by another service). If the port you choose is not unique, the installation will fail. No software will be installed.

The installer creates the SequeLink Agent.

- 11** Enter the name of the SequeLink data access service, or press ENTER to accept the default.

Enter the name of your SequeLink Informix service [SLInformix] :

- 12** Enter the TCP/IP port that the SequeLink Server will use to listen for connection requests.

Enter the TCP/IP port for this SequeLink Informix service [19996] :

Enter an available unique port, or press ENTER to accept the default.

**NOTE:** The port you choose must be unique (not used by another service). If the port you choose is not unique, the installation will fail. No software will be installed.

The installer creates the SequeLink data access service.

### 13 Review the installation settings.

Ready to start installation with the following settings:

```
SequeLink home directory : ../slserver50
SequeLink Agent settings: Administrator : root
 Service name : SLAgent
 TCP/IP port: 19995
SequeLink Informix settings : Service name : SLInformix
 TCP/IP port : 19996
Informix home directory : /db/informix73
INFORMIXSERVER : sparky73
Link service executables : No
```

You will need approx. 20000 kBytes free disk space in your SequeLink home directory (depending on your platform and configuration.).

```

1) Start installation with these settings
2) Change SequeLink home directory
3) Change SequeLink Agent settings
4) Change SequeLink Informix settings
5) Change Informix home directory
6) Change INFORMIXSERVER value
7) Abort installation
Enter your choice [1] ?
```

You can choose to continue with the installation using these settings, change any settings, or end the installation. Enter the appropriate choice, or press ENTER to start the installation with the current settings.

### 14 You are prompted for your product registration. Enter your name, company name, serial number, and key. The serial number and key are printed on the Product Registration

Information card that is shipped with the product. If you are installing an evaluation copy of SequeLink Server, leave the Key field empty.

- 15 The installer prompts you to review the information. Enter **C** to change the information, or press **ENTER** to continue.
- 16 The license agreement is displayed. Enter **YES** to accept the license agreement or **NO** to decline the agreement and end the installation.
- 17 The installer prompts you to continue with the installation. Press **ENTER** to continue. The installer installs the files.
- 18 When the installation of the SequeLink Agent is complete, the installer prompts you to start the SequeLink Agent service.

```

Starting SequeLink Agent service

Would you like to start the SequeLink Agent (Y/N) ? [Y]

Enter Y to start the SequeLink Agent service. Enter N if you do
not want to start the SequeLink Agent service at this time.
You can start the SequeLink Agent at a later time.
```

- 19 The installer prompts you to start the SequeLink Server data access service.

```
Would you like to start the SequeLink Server for
Informix (Y/N) ? [Y]

Enter Y to start the SequeLink Server data access service. Enter
N if you do not want to start the service at this time. You can
start the SequeLink service at a later time.
```

- 20** The installer prompts you for the password of the SequeLink administrator account you entered in [Step 10](#).

Password:

Enter the password of the SequeLink administrator account. A message appears when SequeLink Server successfully starts and publishes itself on the TCP/IP port.

## Installing From Files Downloaded From the Web

The SequeLink Server tar file you download from the MERANT Web site depends on the database you are using. To identify the correct SequeLink Server tar file, see the following table for a list of SequeLink Server tar file names:

| Database | SequeLink Server Tar Files |
|----------|----------------------------|
| DB2      | sldb2.tar                  |
| Informix | slinf.tar                  |
| Oracle   | slora.tar                  |
| Sybase   | slyb.tar                   |

### To install SequeLink Server from files downloaded from the Web:

- 1 Download the SequeLink Server tar file from the MERANT Web site. Download instructions are available on the MERANT Web site.

If you are downloading to a machine other than the target machine, you will need to transfer the file (in binary format) to your UNIX workstation. How you transfer files from another system to your UNIX workstation depends on your TCP/IP product and your system's operating system. For more information about transferring files, refer to the documentation supplied with your TCP/IP product.

**IMPORTANT:** Transfer the file in binary format. If you transfer the file in the wrong format, the installation will fail.

- 2 On your UNIX server, access the downloaded tar file and extract it. For example, to extract the tar file for SequeLink Server for Informix, you would enter:

```
tar -xvf slinf.tar
```

**NOTE:** On Solaris, using the `-xvf` argument with the `tar` command may cause warnings to appear; use the `-xof` argument instead. For example, enter:

```
tar -xof slinf.tarR
```

- 3 Issue the following command to run the installation script:

```
ksh install.sh
```

When you run the installation script, it prompts you for choices you need to make and information you need to supply. Default answers to questions are enclosed within square brackets, [ ]. To accept the default, press ENTER.

- 4 Verify the SequeLink Server to install (the examples in this procedure show the information that displays when you install SequeLink Server for Informix).

You are installing the product:

```
SequeLink Server for Informix 7.x, Informix 9.x
Version 5.1 on Solaris 2
```

```

```

```
Do you want to continue (Y/N) ? [Y]
```

Enter **Y** to continue the installation. Enter **N** to stop the installation; no software is installed.

- 5 Enter the installation directory, or press ENTER to accept the default installation directory. If the directory does not exist, it will be created for you.

- 6 Enter the UNIX account name that was used to install the database software on your machine.
- 7 You are prompted to confirm information about your database installation. Enter the information for which you are prompted, or press ENTER to accept the proposed values.

The installer accessed your current Informix installation and found a list of possible values for the environment variable INFORMIXSERVER.

Please enter the value for the environment variable INFORMIXSERVER applicable to your Informix installation.

Valid values are listed in the first column.

```
sparky73 ontlitcp
```

```
infdinotcp onsoctcp
```

Enter a value for the INFORMIXSERVER variable

```
[sparky73]:
```

```

```

- 8 You are prompted for information that is required to create the SequeLink Agent. The SequeLink Agent allows the SequeLink administrator to configure, manage, and monitor this SequeLink Server using the SequeLink Manager. To create a SequeLink Agent service, enter the user ID of the SequeLink administrator account, or press ENTER to accept the default.

Please enter the Unix account name which will be allowed to administer this SequeLink Server [root] :

- 9 Enter the name of the SequeLink Agent service, or press ENTER to accept the default.

Enter the name of this SequeLink agent service [SLAgent]:

- 10** Enter the TCP/IP port that the SequeLink Agent service will use to listen for connection requests.

Enter the TCP/IP port for your SequeLink agent service [19995] :

Enter an available port, or press ENTER to accept the default. The port you choose must not be used by another service. The installer creates the SequeLink Agent.

- 11** Enter the name of the SequeLink data access service, or press ENTER to accept the default.

Enter the name of your SequeLink Informix service [SLInformix] :

- 12** Enter the TCP/IP port that the SequeLink Server will use to listen for connection requests.

Enter the TCP/IP port for this SequeLink Informix service [19996] :

Enter an available port, or press ENTER to accept the default. The port you choose must not be used by another service. The installer creates the SequeLink data access service.

- 13** Review the installation settings.

Ready to start installation with the following settings:

SequeLink home directory : ../slserver50  
SequeLink Agent settings: Administrator : root  
Service name : SLAgent  
TCP/IP port: 19995  
SequeLink Informix settings : Service name : SLInformix  
TCP/IP port : 19996  
Informix home directory : /db/informix73  
INFORMIXSERVER : sparky73  
Link service executables : No

You will need approx. 20000 kBytes free disk space in your SequeLink home directory (depending on your platform and configuration.).

```

1) Start installation with these settings
2) Change SequeLink home directory
3) Change SequeLink Agent settings
4) Change SequeLink Informix settings
5) Change Informix home directory
6) Change INFORMIXSERVER value
7) Abort installation
Enter your choice [1] ?
```

You can choose to continue with the installation using these settings, change any settings, or end the installation. Enter the appropriate choice, or press ENTER to start the installation with the current settings.

- 14** You are prompted for your product registration. Enter your name, company name, serial number, and key. The serial number and key are printed on the Product Registration Information card that is shipped with the product. If you are installing an evaluation copy of SequeLink Server, leave the Key field empty.
- 15** The installer prompts you to review the information. Enter **C** to change the information, or press ENTER to continue.
- 16** The license agreement is displayed. Enter **YES** to accept the license agreement or **NO** to decline the agreement and end the installation.
- 17** The installer prompts you to continue with the installation. Press ENTER to continue. The installer installs the files.

- 18** When the installation of the SequeLink Agent is complete, the installer prompts you to start the SequeLink Agent service.

```

Starting SequeLink Agent service

Would you like to start the SequeLink Agent (Y/N) ? [Y]
```

Enter **Y** to start the SequeLink Agent service. Enter **N** if you do not want to start the SequeLink Agent service at this time. You can start the SequeLink Agent at a later time.

- 19** The installer prompts you to start the SequeLink Server data access service.

```
Would you like to start the SequeLink Server for
Informix (Y/N) ? [Y]
```

Enter **Y** to start the SequeLink Server data access service. Enter **N** if you do not want to start the service at this time. You can start the SequeLink service at a later time.

- 20** The installer prompts you for the password of the SequeLink administrator account you entered in [Step 10](#).

```
Password:
```

Enter the password of the SequeLink administrator account. A message appears when SequeLink Server successfully starts and publishes itself on the TCP/IP port.

---

# Installing SequeLink Server on OS/390

OS/390 Installing SequeLink Server involves the following steps:

- [“Step 1. Unloading the Install Job” on page 62](#)
- [“Step 2. Customizing the Install Job” on page 63](#)
- [“Step 3. Running the Install Job” on page 63](#)
- [“Step 4. Allocating the SequeLink ISPF Libraries to a TSO Session \(Optional\)” on page 64](#)
- [“Step 5. Modifying the APF List” on page 65](#)
- [“Step 6. Configuring SequeLink Server” on page 66](#)
- [“Step 7. Configuring the DB2 Environment” on page 82](#)
- [“Step 8. Using RUNSRVR for DB2” on page 83](#)
- [“Step 9. Configuring SequeLink Service Security” on page 83](#)

## Security Requirements for SequeLink Data Sets

This section describes the minimum RACF permissions required by the SequeLink administrator and the ServerUID (the user ID connected to the SequeLink Server’s started task or job) for the data sets that are created by SequeLink during your SequeLink installation and subsequent configuration. These include:

- Installation data sets
- Data sets that are allocated during the server configuration
- Data sets dynamically allocated at runtime

## ***Installation Data Sets***

Installation data sets are prefixed with *HLQ* where *HLQ* is the high-level qualifier. Set RACF permissions for these data sets as shown in the following table.

| <b>Data Sets</b>           | <b>Required Permissions</b>          |
|----------------------------|--------------------------------------|
| TABLES                     | UPDATE for administrator             |
| CLIST, MSGS, PANELS, SKELS | READ for administrator               |
| LINKLIB, LOADLIB           | READ for administrator and ServerUID |
| SWANDM.INI                 | READ for administrator               |
| DBRM                       | READ for administrator               |
| README                     | READ for administrator               |

NOTE: ServerUID is the user ID connected to the SequeLink Server's started task or job

For more information about the SequeLink installation data sets, see ["Step 3. Running the Install Job" on page 63](#).

## ***Data Sets Allocated During the Server Configuration***

Data sets that are allocated during the server configuration are prefixed with *HLQ.ServerId* where *HLQ* is the high-level qualifier. These include data sets that are created during JCL generation and data sets created by the EVLDEF job.

Set RACF permissions for data sets created during JCL generation as shown in the following table.

| <b>Data Sets (JCL Generation)</b> | <b>Required Permissions</b>                     |
|-----------------------------------|-------------------------------------------------|
| CNTL                              | ALTER for administrator                         |
| SWANDM.INI                        | ALTER for administrator<br>UPDATE for ServerUID |

NOTE: ServerUID is the user ID connected to the SequeLink Server's started task or job

Set RACF permissions for the SWEVLOG data set created by the EVLDEF job as shown in the following table.

| <b>Data Sets (EVLDEF Job)</b> | <b>Required Permissions</b>                     |
|-------------------------------|-------------------------------------------------|
| SWEVLOG                       | ALTER for administrator<br>UPDATE for ServerUID |

NOTE: ServerUID is the user ID connected to the SequeLink Server's started task or job

### ***Data Sets Dynamically Allocated at Runtime***

Data sets that are **dynamically allocated at runtime** are prefixed with *HLQ.Servicename* where *HLQ* is the high-level qualifier and *Servicename* is the name of the SequeLink service. Set RACF permissions for the LOG.*thrdid* data set as shown in the following table.

| <b>Data Sets</b>   | <b>Required Permissions</b> |
|--------------------|-----------------------------|
| LOG. <i>thrdid</i> | ALTER for ServerUID         |

NOTE: ServerUID is the user ID connected to the SequeLink Server's started task or job

## Step 1. Unloading the Install Job

The first file you unload contains JCL code you can use to unload the remaining files. This file is a sequential file that can be placed in a sequential or partitioned data set on a disk.

**To allow the OS/390 job to read the first file (the install job):**

- 1 Customize a JCL deck, using the following code as an example:

```
//--add a valid jobcard
//* Unload install-job from tape
//UNLOAD EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=*
//SYSIN DD DUMMY
//SYSUT1 DD DSN=SQLNK.INSTALL,DISP=OLD,
// UNIT=tape_unit,
// VOL=SER=tape_volser,
// LABEL=(1,SL)
//SYSUT2 DD DSN=dest_dataset,
// DISP=(NEW,CATLG,DELETE),
// UNIT=disk_unit,
// VOL=SER=disk_volser,
// SPACE=(TRK,(1,1))
//*
```

where:

*tape\_unit* is the unit name of the tape reader.

*tape\_volser* is the volume serial number of the SequeLink tape.

*dest\_dataset* is the name of the destination data set that will be created to receive the install job stream.

*disk\_unit* is the unit name to be used for disk storage.

*disk\_volser* is the volume serial number of the disk to be used.

- 2 Submit the JCL deck for processing as a batch job.

## Step 2. Customizing the Install Job

Submitting the job you created in the previous section places the first file from the SequeLink tape on disk. This unloaded file, now called the *Install Job*, contains a job that unloads all other SequeLink data sets to disk. Before running this job, customize it for your environment following the instructions contained in the JCL of the Install Job.

## Step 3. Running the Install Job

After you have customized the JCL deck with values for your environment, submit the Install Job to unload the files from the SequeLink tape to the disk specified in the job. [Table 2-1](#) describes the SequeLink Server for OS/390 installation files.

---

**Table 2-1. SequeLink Server for OS/390 Installation Files**

---

| <b>Data Set</b> | <b>Description</b>                                                                                                       |
|-----------------|--------------------------------------------------------------------------------------------------------------------------|
| CLIST           | A data set that contains REXX executables used by the SequeLink Manager for OS/390.                                      |
| DBRM            | A partitioned data set that contains the DB2 Database Request Module (DBRM) used to create the plan for the DB2 service. |
| LOADLIB         | A partitioned data set that contains all the system load modules for SequeLink Server.                                   |
| LINKLIB         | The SAS/C runtime library.                                                                                               |
| MSGS            | A data set that contains ISPF messages generated by the SequeLink Manager for OS/390.                                    |
| PANELS          | A data set that contains ISPF panels used by the SequeLink Manager for OS/390.                                           |
| README          | A README data set containing installation information for SequeLink Server on OS/390.                                    |

**Table 2-1. SequeLink Server for OS/390 Installation Files (cont.)**

| Data Set   | Description                                                                                                                                         |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| SKELS      | A data set that is used to generate JCL.                                                                                                            |
| SWANDM.INI | The SequeLink configuration file used for all SequeLink services on the OS/390 machine. <i>Do not alter this file.</i>                              |
| TABLES     | A data set containing ISPF tables used by the SequeLink Manager for OS/390. This library is also used to store the list of known SequeLink Servers. |

## Step 4. Allocating the SequeLink ISPF Libraries to a TSO Session (Optional)

Allocating the SequeLink ISPF libraries to your TSO session allows you to use a simpler command syntax for starting the SequeLink Manager for OS/390 as described in [“A. Starting the SequeLink Manager for OS/390” on page 67](#).

If you are planning to use the SequeLink Manager for OS/390 regularly, we recommend that you allocate the SequeLink ISPF libraries to the TSO session as shown in [Table 2-2](#).

**Table 2-2. SequeLink ISPF Library Allocation (OS/390)**

| SequeLink ISPF Libraries      | Allocate to...     |
|-------------------------------|--------------------|
| <i>SequeLink_HLQ</i> .CLIST   | SYSPROC or SYSEXEC |
| <i>SequeLink_HLQ</i> .LOADLIB | ISPLLIB            |
| <i>SequeLink_HLQ</i> .MSGS    | ISPMLIB            |
| <i>SequeLink_HLQ</i> .PANELS  | ISPLLIB            |

NOTE: *SequeLink\_HLQ* is the SequeLink high-level qualifier identifying the libraries.

---

**Table 2-2. SequeLink ISPF Library Allocation (OS/390) (cont.)**


---

| <b>SequeLink ISPF Libraries</b> | <b>Allocate to...</b> |
|---------------------------------|-----------------------|
| <i>SequeLink_HLQ.SKELS</i>      | ISPSLIB               |
| <i>SequeLink_HLQ.TABLES</i>     | ISPTLIB               |

NOTE: *SequeLink\_HLQ* is the SequeLink high-level qualifier identifying the libraries.

---

## Step 5. Modifying the APF List

Before you can use the SequeLink Server for OS/390, you must modify the APF list to contain entries for the following items:

- LOADLIB data set containing the executable modules of the SequeLink Server.
- LINKLIB (the SAS/C runtime library distributed with SequeLink). It must be APF-authorized.

### To authorize LOADLIB and LINKLIB:

- 1 Locate the SYS1.PARMLIB data set.
- 2 To APF-authorize the libraries dynamically, modify the PROGxx member of the SYS1.PARMLIB to include an entry for each SequeLink Server data set LOADLIB and LINKLIB SAS/C runtime library. Issue the operator command `/SET PROG=xx` to activate the change.

Alternatively, you can copy the executable modules into an existing APF-authorized library.

## Step 6. Configuring SequeLink Server

Configuring SequeLink Server involves the following stages:

- “A. Starting the SequeLink Manager for OS/390” on page 67
- “B. Creating a SequeLink Server” on page 69
- “C. Selecting the DB2 Attachment Facility” on page 73
- “D. Defining a DB2 Interface” on page 74
- “E. Creating a SequeLink Service” on page 75
- “F. Reviewing the SequeLink Service Configuration” on page 77
- “G. Configuring SequeLink Server for Interlink TCPAccess (Optional)” on page 78
- “H. Generating JCL” on page 79
- “I. Creating the EventTrace Data Set” on page 81

**IMPORTANT:** Do not directly edit the *SequeLink\_HLQ*.SWANDM.INI file (where *SequeLink\_HLQ* is the SequeLink high-level qualifier). When you define a SequeLink Server, copies of these master files are created for the SequeLink Server definition using the name of the SequeLink Server. The server-specific configuration file must be maintained by the SequeLink Manager for OS/390 and must not be edited directly.

## A. Starting the SequeLink Manager for OS/390

- 1 Start the SequeLink Manager for OS/390. How you start the SequeLink Manager for OS/390 depends on whether you allocated the SequeLink ISPF libraries to the TSO session as described in the previous section:

- If you allocated the ISPF libraries, continue with [Step 2](#).
- If you did not allocate the ISPF libraries, continue with [Step 3](#).

- 2 **Starting the SequeLink Manager When ISPF Libraries Are Allocated:**

Type the following command:

```
TSO %SSMC [HLQ(SequeLink_HLQ)]
```

where *SequeLink\_HLQ* is the SequeLink high-level qualifier that identifies the libraries. Then, press ENTER. You are required to enter the SequeLink high-level qualifier only the first time you start the SequeLink Manager for OS/390 because this qualifier is saved after this first time in the user's ISPF profile.

For example:

```
TSO %SSMC HLQ(MERANT.SL500)
```

or

```
TSO %SSMC
```

- 3 **Starting the SequeLink Manager When ISPF Libraries Are Not Allocated:**

Type the following command:

```
TSO EX 'SequeLink_HLQ.CLIST(SSMC)'
['HLQ(SequeLink_HLQ)']
```

where *SequeLink\_HLQ* is the SequeLink high-level qualifier that identifies the libraries. Then, press ENTER. You are

required to enter the SequeLink high-level qualifier only the first time you start the SequeLink Manager for OS/390 because this qualifier is saved after this first time in the user's ISPF profile.

For example:

```
TSO EX 'MERANT.SL500.CLIST(SSMC)' 'HLQ(MERANT.SL500)'
```

or

```
TSO EX 'MERANT.SL500.CLIST(SSMC)'
```

- 4 When you start the SequeLink Manager for OS/390, a copyright appears. Press ENTER to continue. The SequeLink Manager for OS/390 main menu appears.

```
DataDirect SequeLink Manager for OS/390 - Main menu
Command ===>
Choose a dialog to start and press Enter:
 0. Settings
 1. Sequelink Server management dialog

F1=Help F3=End F5=View Err F12=Cancel
```

- 5 Type 1 (SequeLink Server management dialog); then, press ENTER. The ServerList panel appears.

```

DataDirect SequeLink Manager for OS/390 - ServerList Row 1 to 3 of 3

Allowed actions or commands are:

o (S)elect a server o (G)enerate JCL
o (A)dd a server o (O)perator interface
o (D)elete a server

 Name Description

***** Bottom of data *****

Command ==> Scroll > PAGE

 F1=Help F3=End F5=View Err F7=Up F8=Down F10=Left
 F11=Right F12=Cancel

```

## ***B. Creating a SequeLink Server***

On OS/390, a SequeLink Server definition is a collection of SequeLink services that run in the same address space. You can define multiple SequeLink Servers on the same OS/390 machine. Each SequeLink Server includes a SequeLink Agent service, which is automatically created when you define the SequeLink Server, and one or multiple SequeLink data access services. For example, if you define a SequeLink Server named ACCT1, a SequeLink Agent service is automatically created named ACCT1.

**To create a SequeLink Server:**

- 1 From the ServerList panel, type A at the Command prompt to create a SequeLink Server; then press ENTER. The Add server panel appears.

```

DataDirect SequeLink Manager for OS/390 - Add server
Complete the following fields for the new server:

Server name
Description

Hostname/IP-address

Agent portnumber

Command ==>

F1=Help F3=End F5=View Err F12=Cancel

```

- 2 Provide the following information; then press ENTER.

**Server name:** Type the name of the new SequeLink Server definition. The server name you choose must be the same name as the jobname or started task name under which the server will run.

**Description:** Type a description for the new SequeLink Server definition.

**Hostname/IP-address:** Type the TCP/IP host name or the TCP/IP address of the SequeLink Server definition. Typically, the TCP/IP address will be the 127.0.0.1 TCP/IP loopback address; however, in some instances, such as when the TSO session for the SequeLink Manager is running on another IP stack than the server, you must specify the TCP/IP address of the server machine.

**Agent portnumber:** Type the port to be used by the SequeLink Agent.

**NOTE:** When you create a server, a server-specific configuration file is created. If such a file already exists, you are prompted to confirm whether you want to overwrite the existing configuration file.

- 3 The ServerList panel shows the SequeLink Server you just created.

```

DataDirect SequeLink Manager for OS/390 - ServerList Row 1 to 2 of 2

Allowed actions or commands are:

o (S)elect a server o (D)elete a server
o (A)dd a server o (O)perator interface
 o (G)enerate JCL

 Name Description

 ACCT1 DB2 V6 SERVICE-USING IBM TCP/IP
 SL50B6 DB2 V6 SERVICE-USING IBM TCP/IP
***** Bottom of data *****

Command ==> Scroll > PAGE

F1=Help F3=End F5=View Err F7=Up F8=Down F10=Left
F11=Right F12=Cancel

```

Once you have created a SequeLink Server, type **S** beside it to view the server management tree. You can use the server management tree to add, view, or change elements defined within the SequeLink Server, such as:

- Global settings
- DB2 interfaces
- User ID (UID) maps
- SequeLink services and their configuration settings

Press the **TAB** key to navigate to the tree nodes on the server management tree.

To perform an action on a tree node, type the action code at the tree node. To find which actions each node accepts, type ? beside the node you want information about and press ENTER. For example, when you type ? beside a SequeLink service, a message appears telling you that the node will accept D (Delete), S (Select), / (Expand or Contract), + (Expand), and - (Contract).

You can also type the following commands at the Command prompt:

- **EXP** or **EXPAND** expands the tree so that all nodes become visible.
- **SAVE** saves the current configuration to disk.
- **REFRESH** rebuilds the tree (if the server is online, the monitor data is refreshed also).
- **ERRSTK** displays the error stack.

When working with the SequeLink Manager for OS/390, you can use the function keys listed in [Table 2-3](#).

---

**Table 2-3. SequeLink Manager for OS/390 Function Keys**

---

| Key | Description              |
|-----|--------------------------|
| F1  | Panel/field help         |
| F2  | Split                    |
| F3  | End with save of changes |
| F5  | Display errors           |
| F7  | Scroll up                |
| F8  | Scroll down              |
| F9  | Swap                     |
| F10 | Scroll left              |

NOTE: You can use the standard ISPF command `FKA ON` to switch on the display of the function key labels at the bottom of each panel.

---

**Table 2-3. SequeLink Manager for OS/390 Function Keys (cont.)**

---

| <b>Key</b> | <b>Description</b>                                          |
|------------|-------------------------------------------------------------|
| F11        | Scroll right                                                |
| F12        | Cancel without save of changes or clear validation messages |

NOTE: You can use the standard ISPF command `FKA ON` to switch on the display of the function key labels at the bottom of each panel.

---

### ***C. Selecting the DB2 Attachment Facility***

The DB2 Attachment Facility allows the SequeLink Server to connect to and use DB2 to process SQL statements. From DB2 V5, two attachments are available for the SequeLink Server: CAF and RRSAF. The installation default is CAF. You can change this setting in the Global Settings node of the SequeLink Server.

When using RRSAF, RRS must be installed. The SequeLink Server registers itself with RRS. It uses SEQUELINK.MERANT.xxxx as a resource manager name where xxxx is the value for the MVSDB2SubsystemName service attribute. When using RRSAF as the DB2 Attachment Facility, MVSDB2SubsystemName is a required service attribute.

## D. Defining a DB2 Interface

- 1 From the server management tree, type A beside the DB2 Interfaces node to add a DB2 interface to the SequeLink Server; then, press ENTER. The Add DB2 interface panel appears.

```

DataDirect SequeLink Manager for OS/390

DataDirect SequeLink Manager for OS/390 - Add DB2 Interface
|
| Enter the parameters for the new interface from server ACCT1 to DB2:
|
| Interface ID . . . DB2 Subsystem ID
| DB2 Version . . . (eg.:V510)
|
| Description
|
| DB2 Loadlib
| DB2 Exitlib
|
| Command ==>
F1=Help F3=End F5=View Err F12=Cancel

```

- 2 Provide the following information; then, press ENTER.
  - Interface ID:** Type the ID that identifies the DB2 Interface, for example, DSN7.
  - DB2 Version:** Type the version of DB2 that will be used.
  - Description:** Type a description of the DB2 interface.
  - DB2 Loadlib:** Type the name of the DB2 load library.
  - DB2 Exitlib:** Type the name of the DB2 exit library.
- 3 You are returned to the server management tree. If the DB2 interface was created successfully, a message appears to confirm it.

## E. Creating a SequeLink Service

NOTE: A SequeLink service must reference a DB2 interface. Before you create a SequeLink service, make sure that you have already defined your DB2 interfaces. To define DB2 interfaces, see [“D. Defining a DB2 Interface” on page 74](#).

To create a SequeLink service:

- 1 Type A beside the SequeLink Services node to add a service to the SequeLink Server; then, press ENTER. The Add service panel appears.

```

DataDirect SequeLink Manager for OS/390

DataDirect SequeLink Manager for OS/390 - Add service
Command ===>

Complete the following fields for the new service for server ACCT1:

Service name
Description
Portnumber 0

F1=Help F3=End F5=View Err F12=Cancel

+ ACCT1
+ MVSDB26
+ Service Templates

F1=Help F3=End F5=View Err F7=Up F8=Down F10=Left
F11=Right F12=Cancel

```

- 2 Provide the following information; then, press ENTER.

**Service name:** Type the name of the new SequeLink service.

**Description:** Type a description of the SequeLink service you are creating.

**Portnumber:** Type the port number on which the SequeLink service will be listening for connection requests.

- 3 You are prompted to select a DB2 interface for the SequeLink service you are creating.

```

DataDirect SequeLink Manager for OS/390
----- DataDirect SequeLink Manager for OS/390-----
|
| Row 1 to 1 of 1 |
| COMMAND ===> SCROLL > CSR |
| MORE >>> |
|
| You have to choose a DB2-interface |
| for service ACCTDB21 |
|
| Use (S) or (/) to select an interface. |
|
| Name SubsysId Description |
|-----|-----|-----|
| DSN6 DB6R DB2 v61 |
| ***** Bottom of data ***** |
|
| F1=Help F3=End F5=View Err F7=Up F8=Down |
| F10=Left F11=Right F12=Cancel |
|-----|-----|-----|

```

- 4 Type *s* beside the DB2 interface you want this SequeLink service to reference; then, press ENTER. You are returned to the server management tree. If the SequeLink service was created successfully, a message appears to confirm it.

## F. Reviewing the SequeLink Service Configuration

If the SequeLink service was created successfully, a message appears confirming the creation and reminding you to check the configuration settings of the service.

### To review your SequeLink service configuration:

- 1 From the server management tree, type / beside the Service Settings node of the SequeLink service to expand it; then, press ENTER. The server management tree shows the attribute categories for the service.
- 2 Type s beside the attribute category for which you want to view attributes; then, press ENTER. The AttributeList panel appears for that category, listing all the attributes and their values.

For example, if you selected the Administration Security category, the following AttributeList panel appears.

```

DataDirect SequeLink Manager for OS/390

----- DataDirect SequeLink Manager for OS/390 - AttributeList -----
 Row 1 to 2 of 2
 MORE >>>

Service ACCTDB21
Enter the 'ADD'-command to add an attribute or
perform one of the actions below on a specific attribute
o (S)elect o (C)hange o (D)elete o (?)Help

Name Value

MVSServiceAdminSecurity SAFBASIC
ServiceAdminAuthMethods OSLogon (UID, PWD)
***** Bottom of data *****

COMMAND ===>
F1=Help F3=End F5=View Err F7=Up SCROLL > PAGE
F10=Left F11=Right F12=Cancel F8=Down

```

NOTE: To display help about an attribute, type ? beside the attribute; then, press ENTER.

For instructions on adding, changing, and deleting attributes, including server data source attributes, refer to the *SequeLink Administrator's Guide*.

## **G. Configuring SequeLink Server for Interlink TCPaccess (Optional)**

When you create a SequeLink Server, it is configured by default for IBM TCP/IP access. If you require Interlink TCPaccess, complete the following steps:

- 1 Start the SequeLink Manager for OS/390 as described in ["A. Starting the SequeLink Manager for OS/390" on page 67](#).
- 2 Type s beside the SequeLink Server you want to configure for Interlink TCPaccess.
- 3 In the server management tree, type / beside the Global Settings node.
- 4 Delete the MVSTcpJobName attribute from the Global Settings. For instructions on deleting attributes using the SequeLink Manager for OS/390, refer to the *SequeLink Administrator's Guide*.
- 5 Add the MVSICSSubsysID and MVSICSLinkLibrary attributes to the Global Settings. For instructions on adding attributes using the SequeLink Manager for OS/390 and information about valid values for these attributes, refer to the *SequeLink Administrator's Guide*.

## H. Generating JCL

After a SequeLink Server is created and configured for the first time, you must generate the JCL. The SequeLink Manager adapts the JCL from the *SequeLink\_HLQ.SKELS* data set and saves the adapted output in a server-specific data set named *SequeLink\_HLQ.Severname.CNTL*, where *SequeLink\_HLQ* is the high-level qualifier and *Servername* is the name of the SequeLink Server.

The following list shows the JCL members that are generated and the tasks they perform. Also, this list notes any tasks you must perform for the JCL member.

- **BIND:** This member binds all required SequeLink packages and plans. The tailored job contains a job-step for each defined DB2 interface and bind statements for all data sources that use this interface.

NOTE: If services, interfaces, or server data sources are added later, or the plan name or collection-prefixes of a data source are changed, you must regenerate and submit this member.

- **CFGPRINT:** A summary member you can use for debugging purposes that reports the content of all variables at the time of JCL generation. This member also lists the user and date and time of the last JCL generation.
- **EVLDEF:** This member creates the event trace file for the server.
- **INIT:** This member contains operator interface commands that will be executed after the successful startup of the server.

NOTE: To add or delete operator interface commands you want to execute after the successful startup of the server, edit this member.

- **RUNSMF:** A sample job that allows SMF records to be printed.

- **RUNSRVR:** This member is the started task or job that is used to start the server.

NOTE: If interfaces are added or deleted later, you must regenerate this member, and stop and start the server.

- **RUNWHAT:** This member is a diagnostic job that prints all versions of the software components and can be used for debugging.

### To generate JCL:

- 1 Type **G** beside the SequeLink Server on the ServerList panel; then, press **ENTER**. The JCL Settings panel appears.

```

DataDirect SequeLink Manager for OS/390 - ServerList Row 1 to 3 of 3

| DataDirect SequeLink Manager for OS/390 - JCL Settings |
| Change the default settings used for JCL generation: |
| |
| Job prefix |
| Job Class |
| Output Class |
| Accounting Info . . . |
| Generate server as: |
| 1. Started Task (recommended) |
| 2. Normal Job |
| |
| Press Enter to continue, F12 to cancel dialog. |
| |
| Command ==> |
F1=Help F3=End F5=View Err F12=Cancel

```

- 2 If you want to change the default settings used for JCL generation, provide the following information:

**Job profile:** Type the name of the site-specific job name.

**Job Class:** Type the name of the site-specific job class.

**Output Class:** Type the name of the site-specific output class.

**Accounting Info:** Type your site-specific jobcard account information.

- 3 Choose whether to generate the JCL for the server as a started task (recommended) or as a normal job:
  - Type 1 to generate the JCL for the server as a started task; then, press ENTER.
  - Type 2 to generate the JCL for the server as a normal job; then, press ENTER.

## ***I. Creating the EventTrace Data Set***

Create the EventTrace data set by running the EVLDEF job you created in [“H. Generating JCL” on page 79](#). This job can be found in the data set *HLQ.ServerId.CNTL* (where *HLQ* is the high-level qualifier). By running EVLDEF, a VSAM data set is created that can be used by the Event Trace and Monitoring components of the SequeLink Server.

## Step 7. Configuring the DB2 Environment

Configuring the DB2 environment for SequeLink Server involves:

- [“A. Binding the SequeLink Plan” on page 82](#)
- [“B. Granting Access to the SequeLink Server Plan” on page 83](#)

### A. Binding the SequeLink Plan

The server-specific CNTL library contains a generated bind job to bind the SequeLink DBRMs into packages and a plan.

NOTE: Because SequeLink Server for DB2 can change isolation level dynamically, each DBRM is bound into a package using a different isolation level for each package. The collection ID name of each package is created by concatenating the DB2 collection prefix and the DB2 collection suffix as shown in [Table 2-4](#).

---

**Table 2-4. Isolation Levels of SequeLink DBRMs**

---

| Data Source<br>Transaction Isolation | Data Source DB2<br>Collection Prefix | Data Source DB2<br>Collection Suffix | Collection ID | Isolation |
|--------------------------------------|--------------------------------------|--------------------------------------|---------------|-----------|
| Uncommitted                          | SWDB2                                | U                                    | SWDB2_U       | UR        |
| Committed                            | SWDB2                                | S                                    | SWDB2_S       | CS        |
| RepeatableRead                       | SWDB2                                | T                                    | SWDB2_T       | RS        |
| Serializable                         | SWDB2                                | R                                    | SWDB2_R       | RR        |

NOTE: The collection prefix is set when you create the SequeLink data source (SequeLink Manager attribute DataSourceDB2CollectionPrefix). The collection suffix is set when you configure the transaction isolation level of the data source (SequeLink Manager attribute DataSourceTransactionIsolation). For a list of SequeLink Manager attributes, refer to the *SequeLink Administrator's Guide*.

---

## ***B. Granting Access to the SequeLink Server Plan***

Grant access to the SequeLink plan for all users that will be connecting to the SequeLink Server. When granting access to the SequeLink plan, remember to include the user ID associated with the SequeLink Server for each DB2 subsystem to which the SequeLink server will connect. To grant access to the SequeLink plan for all users, you can use the following SQL statement:

```
GRANT EXECUTE ON PLAN planname TO PUBLIC
```

where *planname* is the name of the SequeLink plan.

## **Step 8. Using RUNSRVR for DB2**

Use the generated RUNSRVR member in the server-specific CNTL data set to start the SequeLink Server for DB2 service. The startup JCL can be a batch job or a started task.

## **Step 9. Configuring SequeLink Service Security**

For more information about configuring SequeLink's security features for OS/390, refer to the *SequeLink Administrator's Guide*.

## **Step 10. Configuring Security for the SequeLink Manager for OS/390 Operator Interface**

Some Operator Interface commands can be useful in performing administration tasks. These commands can be issued using the Operator Interface of the SequeLink Manager for OS/390. For more information about configuring security for the Operator Interface of the SequeLink Manager for OS/390, refer to the chapter on using the SequeLink Manager in the *SequeLink Administrator's Guide*.

---

# Upgrading or Extending an Evaluation Version

If you are using an evaluation version of SequeLink Server, you can upgrade to a licensed version or extend your evaluation for another 30 days. How you do this depends on your platform.

NOTE: After upgrading to a licensed version, you must restart the SequeLink Agent and SequeLink Server for the change to become active.



## Windows NT or Windows 2000

- 1 Call MERANT sales to obtain an 8-digit key to upgrade your evaluation version to a licensed version or an 8-digit key to extend your evaluation version for another 30 days.
- 2 Select **Start / Programs**, and select the appropriate SequeLink Server application. Then, select **MERANT Product Registration** to display the MERANT Product Registration dialog box. In this dialog box, type the 8-digit key.
- 3 Click **Next** to continue with the registration. The Registration Configuration window appears. This window lists the information you entered in the MERANT Product Registration dialog box. If it is correct, click **Yes**. Otherwise, click **No** to return to the MERANT Product Registration dialog box and correct your registration information.
- 4 After confirmation, a MERANT Product License Agreement window appears. The text on this window points you to a printed version of the software license agreement. If you accept the agreement, the upgrade continues. If you do not, the upgrade stops.
- 5 Follow the on-screen instructions to complete the SequeLink Server registration.



- 1 Call MERANT sales to obtain an 8-digit key to upgrade your evaluation version to a licensed version or an 8-digit key to extend your evaluation version for another 30 days.
- 2 Log on as root.
- 3 Change to the `ipe` subdirectory of your SequeLink home directory. For example:  

```
cd /usr/slserver/ipe
```
- 4 Run the `ipeexe.sh` shell script. For example:  

```
./ipeexe.sh
```
- 5 Follow the on-screen instructions to provide the serial number and key.

# 3 Installing the SequeLink Manager



The SequeLink Manager tool allows you to centrally configure and manage your SequeLink environment. This chapter provides installation instructions for the SequeLink Manager Snap-in and SequeLink Manager Command-Line Tool on a networked client.

**NOTE:** The SequeLink Manager is installed by default with the SequeLink Server. You only need to install the SequeLink Manager as described in this chapter if you want to run the SequeLink Manager on a Windows NT/2000 machine other than the machine running SequeLink Server.

For instructions on installing the SequeLink Manager locally on the SequeLink Server, see [Chapter 2 “Installing SequeLink Server”](#) on page 29.

---

## Installing the SequeLink Manager

The SequeLink Manager installer requires the Microsoft Windows Installer service. If the SequeLink Manager installer detects that the Microsoft Windows Installer service is not installed on your machine, or that an older version is installed, the SequeLink Manager installer will install it first. After the installation of the Microsoft Windows Installer service, the SequeLink Manager installer may require you to restart your machine (Windows NT only), after which the SequeLink Manager installer will resume its installation.

**To start the SequeLink Manager installer:**

- **If installing from the DataDirect CD**, insert the CD into the CD-ROM drive. If you have a local CD-ROM drive, this typically is drive D. If the CD-ROM drive is on a network, mount the CD and create a mapping to the CD-ROM drive. Then, perform one of the following actions:
  - If AutoPlay for CDs is enabled and you have a browser, product information is displayed automatically when you insert the CD. Click the **SequeLink 5.1** link on the left side of the opening window; then, follow the instructions to install the product.
  - If AutoPlay for CDs is not enabled or you do not have a browser, use Windows Explorer to navigate from the root directory of the CD to the folder for the SequeLink Manager (\sqlnk51\win\manager). Then, double-click **setup.exe**.
- **If installing from files downloaded from the Web**, follow the download instructions on the MERANT Web site to download the appropriate self-extracting ZIP file. Open the contents of the ZIP file into a directory (for example: C:\temp). Then, navigate to the directory that contains the unzipped files and double-click **setup.exe** to start the installer.

**To install the SequeLink Manager:**

- 1 Start the SequeLink Manager installer. When the Welcome window appears, click **Next** to continue.
- 2 The License Agreement window appears. Accept the license agreement by clicking the **I accept the terms of the license agreement** option; then, click **Next**. The Installation Guide window appears. If you choose not to accept the license agreement, the installer exits.

- 3 The Installation Guide window allows you choose specific installation options.
- a Click one or multiple component icons to select the components to install. When you select a component, a description of the component appears in the Feature Description box.

NOTE: If you want the SequeLink Manager to be installed on a drive other than the local drive, click the **Manager** component icon and select its installation option.

- b To change the installation directory, click **Change**. A window appears allowing you to browse and select an installation directory. The default directory is C:\Program Files\MERANT\slmanager51.



When you are satisfied with your settings, click **Next**.

- 4 The Ready to install the Program window allows you to go back and review your choices before proceeding. If you are ready to install, click **Install**.
- 5 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**. For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

NOTE: To change which components are installed or remove the SequeLink Manager from your machine, run the installation program again. When the installer detects an existing SequeLink Manager installation on your machine, it will prompt you with the following choices:

- **Modify** allows you to change which components are installed.
- **Remove** uninstalls the SequeLink Manager from your machine.

# 4 Installing SequeLink ODBC Client

This chapter provides installation instructions for the SequeLink ODBC Client.

**IMPORTANT:** You must install both the SequeLink Server and the SequeLink Client. If you have not already done so, install the SequeLink Server after installing the Client.

---

## Installing SequeLink ODBC Client on Windows



The SequeLink ODBC Client installer on Windows requires the Microsoft Windows Installer service. If the SequeLink ODBC Client installer detects that the Microsoft Windows Installer service is not installed on your machine, or that an older version is installed, the installer will install it first. After the installation of the Microsoft Windows Installer service, the SequeLink ODBC Client installer may require you to restart your machine (Windows 9x, Windows ME, and Windows NT only), after which the SequeLink ODBC Client installer will resume its installation.

The SequeLink ODBC Client installer also checks for Microsoft Data Access Components (MDAC) and DCOM (Windows 9x and Windows ME only). If the installer detects that:

- MDAC is not installed, or that an older version is installed, it installs the current version of MDAC. The installer may require you to restart your machine.

- DCOM is not installed on your Windows 9x or Windows ME machine, an error message is generated. You must install DCOM.

#### To start the SequeLink ODBC Client installer:

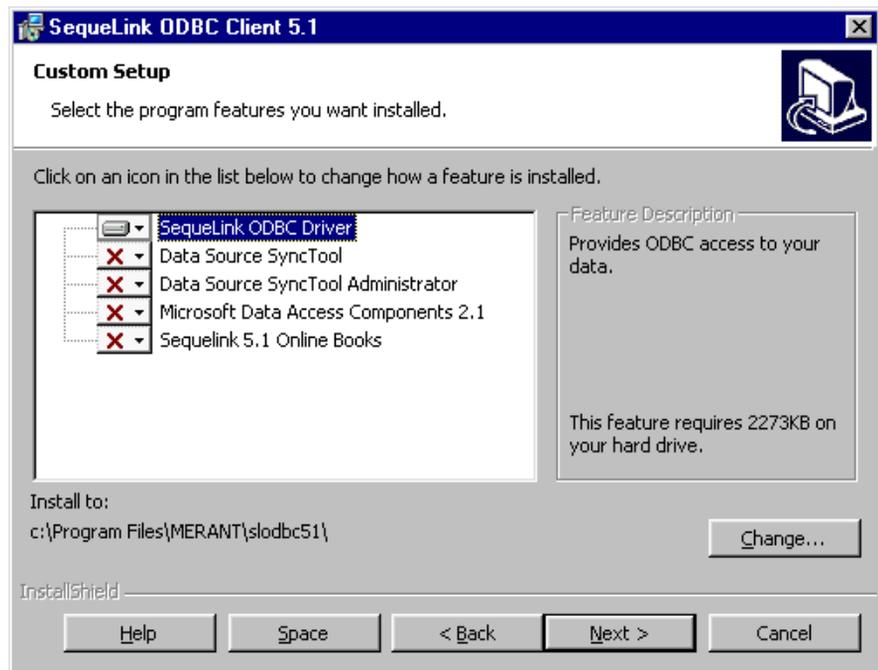
- **If installing from the DataDirect CD**, insert the CD into the CD-ROM drive. If you have a local CD-ROM drive, this typically is drive D. If the CD-ROM drive is on a network, mount the CD and create a mapping to the CD-ROM drive. Then, perform one of the following actions:
  - If AutoPlay for CDs is enabled and you have a browser, product information is displayed automatically when you insert the CD. Click the **SequeLink 5.1** link on the left side of the opening window; then, follow the instructions to install the product.
  - If AutoPlay for CDs is not enabled or you do not have a browser, use Windows Explorer to navigate from the root directory of the CD to the folder for the product that you want to install (sqlnk51\win\odbc). Then, double-click **setup.exe**.
- **If installing from files downloaded from the Web**, follow the download instructions on the MERANT Web site to download the appropriate self-extracting ZIP file. Open the contents of the ZIP file into a directory (for example: C:\temp). Then, navigate to the directory that contains the unzipped files and double-click **setup.exe** to start the installer.

## Installing the SequeLink ODBC Client

- 1 Start the SequeLink ODBC Client installer. When the Welcome window appears, click **Next** to continue.
- 2 The License Agreement window appears. Accept the license agreement by checking the **I accept the terms in the license**

**agreement** option; then, click **Next**. The Custom Setup window appears.

- 3 The Custom Setup window allows you to choose specific installation options.
  - a Click one or multiple component icons to select the components to install. When you select a component, a description of the component appears in the Feature Description box.
  - b To change the installation directory, click **Change**. A window appears allowing you to browse and select an installation directory. The default installation directory is C:\Program Files\MERANT\slodbc51.



When you are satisfied with your settings, click **Next**.

- 4 The Ready to install the Program window allows you to go back and review your choices before proceeding. If you are ready to install, click **Install**.

- 5 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**.
- 6 For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

NOTE: To change which components are installed or remove the SequeLink ODBC Client from your machine, run the installation program again. When the installer detects an existing SequeLink ODBC Client installation on your machine, it will prompt you with the following choices:

- **Modify** allows you to change which components are installed.
- **Remove** uninstalls the SequeLink Client from your machine.

Uninstalling can also be accomplished in silent mode. See [“Silent Installations” on page 94](#) for details.

## Silent Installations

When the Microsoft Windows Installer service is installed, the MSIEXEC.EXE file resides in the system directory of your workstation to make silent installations possible. Make sure that this directory is on your path so that you can execute this file from a command-line prompt. Refer to the Microsoft Windows Installer SDK documentation for complete details about all command-line options supported by the Microsoft Windows Installer service.

You can use MSIEXEC.EXE to install and uninstall SequeLink ODBC Clients from the command line without any user interaction. This can be useful for administrators who want to run multiple installations using batch files.

**To install the SequeLink ODBC Client silently:**

Open a command-line window on your workstation and change to the directory where the installation file is located. For example, to install from the CD, change to the directory `sqlnk51\win\odbc`. Type the command:

```
msiexec.exe /q /i "SequeLink ODBC Client 5.1.Msi"
```

Then, press ENTER. The installation will proceed, using defaults, without requiring any further interaction. The `/q` switch specifies a silent installation. Other switches and properties can also be used to customize the installation; see the Microsoft Windows Installer SDK documentation.

**To uninstall the SequeLink ODBC Client silently:**

Open a command-line window on your workstation and type the command:

```
msiexec.exe /q /x "SequeLink ODBC Client 5.1.Msi"
```

Then, press ENTER. The SequeLink ODBC Client is removed without requiring any further interaction.

## Quick Install Images

When the Microsoft Windows Installer service is installed, the `MSIEXEC.EXE` file resides in the system directory of your workstation to make Quick Install images possible. Make sure that this directory is on your path so that you can execute this file from a command-line prompt. Refer to the Microsoft Windows Installer SDK documentation for complete details about all command-line options supported by the Microsoft Windows Installer service.

A Quick Install Image is a predefined, customized installation image that you can use to install the same SequeLink ODBC Client configuration, including data source definitions, on

multiple workstations. It helps ensure that all SequeLink Clients in your organization or workgroup are installed and configured in the same way. Minimal user interaction is required to install the Quick Install Image.

You can configure a Quick Install Image with the following options:

- **Workstation or Network Installation.** If you configure:
  - A workstation installation, all SequeLink ODBC Client files must be installed on each workstation.
  - A network installation, the SequeLink ODBC Client is installed at a network location and each workstation can share this network version. Before the network version can be used, the Quick Install Image must be run on each workstation.
- **Installation Directory.** On a workstation installation, you can specify the directory where SequeLink ODBC Client will be installed. The default directory is C:\Program Files\MERANT\slodbc51.
- **Default Data Sources.** Your Quick Install image can create a set of default data sources. First, you must create a data source file (.DSF) using the SequeLink Data Source SyncTool Administrator. For instructions on exporting ODBC data source definitions to data source files, refer to the *SequeLink Administrator's Guide*.

NOTE: Quick Install images only support data source files that specify import in Merge or Overwrite mode.

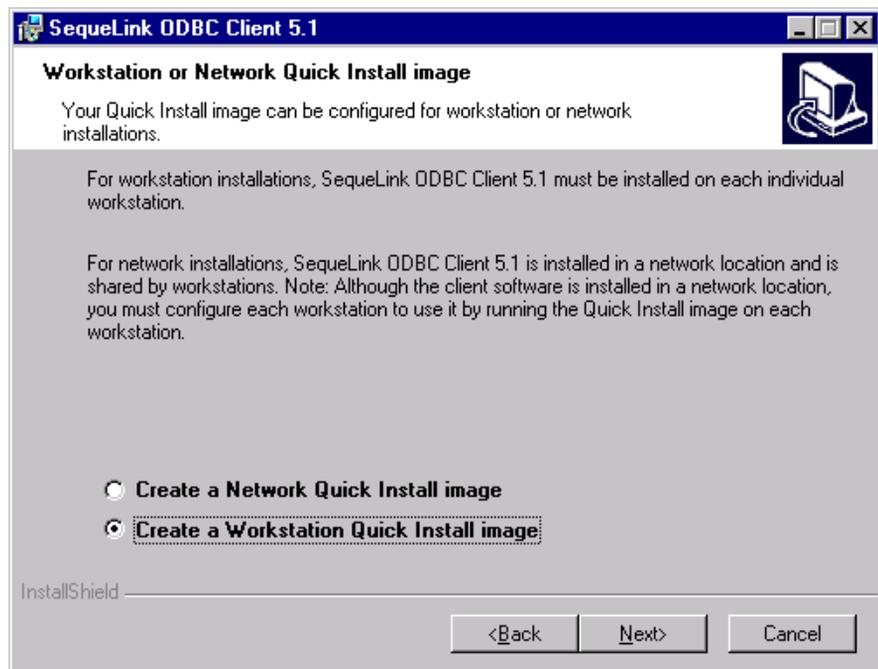
## Creating a Quick Install Image

- 1 Verify that MSIEXEC.EXE is on your path and open a command prompt window.
- 2 Change to the sqlnk51\win\odbc directory on the CD and type the following:

```
msiexec.exe /a "SequeLink ODBC Client 5.1.Msi"
```

Then, press ENTER.

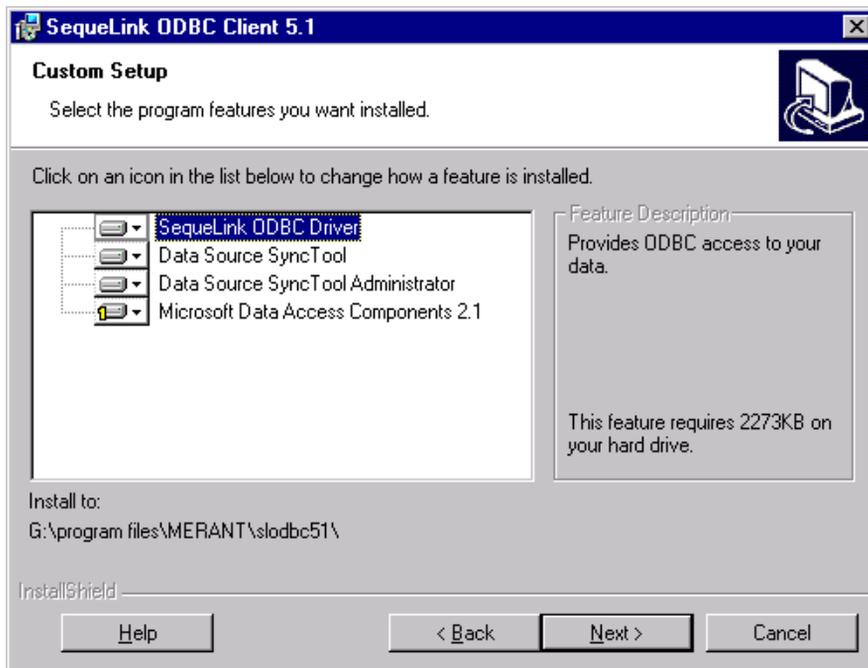
- 3 The Welcome window appears. Click **Next** to continue.
- 4 The next window prompts allows you to choose a Workstation or Network Quick Install image.



Select the type of Quick Install image to create:

- For a Network Quick Install image, select the **Create a Network Quick Install image** option and click **Next**. Skip to [Step 6](#).

- For a Workstation Quick Install image, select the **Create a Workstation Quick Install image** option and click **Next**. Continue with [Step 5](#).
- 5 If you are creating a Workstation image, the Destination Folder window allows you to specify a folder on the workstation where the SequeLink ODBC Client will be installed. Click **Next** to continue. Continue with the next step.
  - 6 The Custom Setup window allows you choose specific installation options. Click one or multiple component icons to select the components to install. When you select a component, a description of the component appears in the Feature Description box.



After setting all options, click **Next**.

- 7 The Create Default Data Sources window allows you to choose whether to create default data sources.
  - If you click **No**, skip to [Step 9](#).
  - If you click **Yes**, continue with [Step 8](#).
- 8 If you choose to create default data sources, the DSF File Location window appears. Specify the path to the appropriate data source file. Then, click **Next**.

NOTE: Quick Install images only support data source files that specify import in Merge or Overwrite mode.
- 9 In the Network Location window, specify the directory where the Quick Install image will be saved; then, click **Install**.
- 10 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**.

## ***Running a Quick Install Image***

To run a Quick Install image, the Microsoft Windows Installer must be available on each workstation. The Quick Install image can also be installed silently. For more information about silent installations, see [“Silent Installations” on page 94](#).

### **To perform a Quick Install:**

- 1 Use one of the following methods to run the Quick Install image from your workstation:
  - Use Windows Explorer to navigate to the network directory containing the Quick Install image file. Double-click **SequeLink ODBC Client 5.1.Msi**.
  - Verify that the Windows installer is on your path and open a command prompt window. Type the following:

```
msiexec.exe /i "network_location\SequeLink ODBC
Client 5.1.Msi"
```

where *network\_location* is the location of the Quick Install Image file; then, press ENTER.

- 2 The Welcome window appears. Click **Next** to continue.
- 3 The Ready to install the Program window appears. If you are ready to install, click **Install**.
- 4 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**.
- 5 For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

---

# Installing SequeLink ODBC Client on UNIX



If you are installing:

- **From a CD**, see either of the following sections:
  - [“Installing On a UNIX Workstation Without a CD-ROM Drive”](#) on this page
  - [“Installing On a UNIX Workstation With a CD-ROM Drive”](#) on page 104
- **From files downloaded from the Web**, see [“Installing From Files Downloaded From the Web”](#) on page 106

## Installing On a UNIX Workstation Without a CD-ROM Drive

Installing SequeLink ODBC Client on a UNIX workstation without a CD-ROM drive involves the following steps:

- Transferring files to your UNIX workstation
- Extracting the files
- Running the installation script
- Setting up the SequeLink environment for your users

If your workstation does not have a CD-ROM drive, you must mount the CD on another computer with a CD-ROM drive and transfer the tar file in binary format to your UNIX workstation using file transfer software (for example, FTP). After the tar file is transferred to your UNIX workstation, extract the files from the tar file and run the installation script.

For information on mounting the CD, see [“Mounting Your MERANT DataDirect CD”](#) on page 25.

## ***Transferring Files to Your UNIX Workstation***

- 1 Mount the CD on a computer with a CD-ROM drive and FTP capability.
- 2 Log on the UNIX workstation where you want to install the SequeLink ODBC Client software.
- 3 Create a temporary directory on the UNIX workstation. This directory will be used to run the installation script and can be deleted after installation. For example, enter:

```
mkdir /tmp/sqlnk
```

- 4 On the system from which you will be transferring the files, change to the directory on the CD that applies to your system and client. For example, to install SequeLink ODBC Client on Solaris, change to the sqlnk51/solaris/odbc/ directory on the CD.
- 5 From this system, transfer the file slclient.tar in binary format using file transfer software to the temporary directory you created in [Step 3](#).

How you transfer files from another system to your UNIX workstation depends on your TCP/IP product and your system's operating system. For more information about transferring files, refer to the documentation supplied with your TCP/IP product.

**IMPORTANT:** Transfer the files in binary format. If you transfer files in the wrong format, the installation will fail.

## ***Extracting SequeLink ODBC Client Files***

On your UNIX workstation, access the tar file you transferred to the temporary directory and extract it. For example, enter:

```
tar -xvf slclient.tar
```

NOTE: On Solaris, using the `-xvf` argument with the `tar` command may cause warnings to appear. Use the `-xof` argument with the `tar` command instead. For example, enter:

```
tar -xof slclient.tar
```

## ***Running the Installation Script***

When you run the SequeLink ODBC installer, it prompts you for choices you need to make and information you need to supply. Default answers to questions are enclosed within square brackets, [ ]. To accept the default, press ENTER.

### **To run the installation script:**

- 1 Enter the following command to run the installation script:

```
ksh unixpi.ksh
```

- 2 The product information summary displays:

NOTE: The following example shows the information for installing SequeLink ODBC Client on Solaris; your messages may be different.

```
The Product Setup is preparing the installation for
SequeLink ODBC Client on Solaris.
Do you want to continue (Y/N) ? [Y]
```

Enter **Y** to continue the installation. Enter **N** to stop the installation; no software will be installed.

- 3 A Product License Agreement screen appears. The text on this screen points you to a printed version of the software license agreement.

Enter **YES** to accept the agreement and continue the installation. Enter **NO** to stop the installation; no software will be installed.

- 4 Enter the fully qualified path of the target directory for the SequeLink ODBC Client software. If this directory does not exist, it will be created for you.
- 5 If the Product Setup detects a previously installed version of SequeLink ODBC Client in the directory you specified, it asks you if you want to make a backup of your existing installation.

Enter `Y` to create a backup of your existing installation. The backup will be created in the *installdir/backup* directory, where *installdir* is your SequeLink ODBC Client installation directory, in a file with the format *slclientmmddyy.tar*, where *mmddyy* is the date the file was created.

- 6 SequeLink ODBC Client is installed. A message appears, informing you when the installation is complete.
- 7 After your installation is complete, you must set up the SequeLink environment for your users. For instructions on setting up the SequeLink environment for your users, see [“Setting Up the SequeLink Environment for Users” on page 108](#).
- 8 For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator’s Guide*.

## Installing On a UNIX Workstation With a CD-ROM Drive

If your UNIX workstation has a CD-ROM drive, you can use the Product Setup to install SequeLink ODBC Client and other MERANT products on your DataDirect CD. The Product Setup prompts you for information you need to supply during installation and provides default values for this information. Default answers to questions are enclosed within brackets, [ ]. To accept the default, press ENTER.

**To install the SequeLink ODBC Client:**

- 1 Mount the CD.
- 2 Change to the top-level directory on the CD.
- 3 Enter the following command to run the Product Setup:

```
ksh unixmi.ksh
```

The Product Setup displays a list of all available products.

- 4 Select the product you want to install. For example, select one of the following products:
  - SequeLink ODBC Client for Solaris
  - SequeLink ODBC Client for AIX
  - SequeLink ODBC Client for HP 10.20 - aCC Enabled
  - SequeLink ODBC Client for HP 11 - aCC Enabled
- 5 The product information summary displays:

**NOTE:** The following example shows the information for installing SequeLink ODBC Client on Solaris; your messages may be different.

```
The Product Setup is preparing the installation for
SequeLink ODBC Client on Solaris.
Do you want to continue (Y/N) ? [Y]
```

Enter **Y** to continue the installation. Enter **N** to stop the installation; no software will be installed.

- 6 A Product License Agreement screen appears. The text on this screen points you to a printed version of the software license agreement.  
  
Enter **YES** to accept the agreement and continue the installation. Enter **NO** to stop the installation; no software will be installed.
- 7 Enter the fully qualified path of the target directory for the SequeLink ODBC Client software. If this directory does not exist, it will be created for you.

- 8 If the Product Setup detects a previously installed version of SequeLink ODBC Client in the directory you specified, it asks you if you want to make a backup of your existing installation.

Enter `Y` to create a backup of your existing installation. The backup will be created in the *installdir/backup* directory, where *installdir* is your SequeLink ODBC Client installation directory, in a file with the format *slclientmmdyy.tar*, where *mmdyy* is the date the file was created.

- 9 SequeLink ODBC Client is installed. A message appears, informing you when the installation is complete.
- 10 After your installation is complete, you must set up the SequeLink environment for your users. For instructions on setting up the SequeLink environment for your users, see [“Setting Up the SequeLink Environment for Users” on page 108](#).
- 11 For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator’s Guide*.

## Installing From Files Downloaded From the Web

- 1 Download the appropriate tar file from the MERANT Web site. Download instructions are available on the MERANT Web site.

If you are downloading to a machine other than the target machine, you will need to transfer the files (in binary format) to your UNIX workstation. How you transfer files from another system to your UNIX workstation depends on your TCP/IP product and your system’s operating system. For more information about transferring files, refer to the documentation supplied with your TCP/IP product.

**IMPORTANT:** Transfer the file in binary format. If you transfer files in the wrong format, the installation will fail.

- 2 On your UNIX workstation, access the tar file and extract it. For example, enter:

```
tar -xvf slclient.tar
```

**NOTE:** On Solaris, using the `-xvf` argument with the `tar` command may cause warnings to appear. Use the `-xof` argument with the `tar` command instead. For example, enter:

```
tar -xof slclient.tar
```

- 3 Enter the following command to run the installation script:

```
ksh unixpi.ksh
```

- 4 The product information summary displays:

**NOTE:** The following example shows the information for installing SequeLink ODBC Client on Solaris; your messages may be different.

```
The Product Setup is preparing the installation for
SequeLink ODBC Client on Solaris.
```

```
Do you want to continue (Y/N) ? [Y]
```

Enter `Y` to continue the installation. Enter `N` to stop the installation; no software will be installed.

- 5 A Product License Agreement screen appears. The text on this screen points you to a printed version of the software license agreement.

Enter `YES` to accept the agreement and continue the installation. Enter `NO` to stop the installation; no software will be installed.

- 6 Enter the fully qualified path of the target directory for the SequeLink ODBC Client software. If this directory does not exist, it will be created for you.

- 7 If the Product Setup detects a previously installed version of SequeLink ODBC Client in the directory you specified, it asks you if you want to make a backup of your existing installation.

Enter `Y` to create a backup of your existing installation. The backup will be created in the *installdir/backup* directory, where *installdir* is your SequeLink ODBC Client installation directory, in a file with the format *slclientmmdyy.tar*, where *mmdyy* is the date the file was created.

- 8 SequeLink ODBC Client is installed. A message appears, informing you when the installation is complete.
- 9 After your installation is complete, you must set up the SequeLink environment for your users. For instructions on setting up the SequeLink environment for your users, see [“Setting Up the SequeLink Environment for Users” on page 108](#).
- 10 For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator’s Guide*.

## Setting Up the SequeLink Environment for Users

For each SequeLink user, set up a SequeLink environment by running the appropriate shell script in the SequeLink directory:

- If using the Korn or Bourne shell, enter: `. .sqlnk.sh`

NOTE: This script can also be sourced from the user’s `.profile` script.

- If using the C shell, enter: `source .sqlnk.csh`

NOTE: This script can also be sourced from the user’s `.login` script.

# 5 Installing SequeLink ADO Client



This chapter provides installation instructions for SequeLink ADO Client.

**IMPORTANT:** You must install both the SequeLink Server and the SequeLink Client. If you have not already done so, install the SequeLink Server after installing the Client.

---

## Installing SequeLink ADO Client on Windows

The SequeLink ADO Client installer on Windows requires the Microsoft Windows Installer service. If the SequeLink ADO Client installer detects that the Microsoft Windows Installer service is not installed on your machine, or that an older version is installed, the SequeLink ADO Client installer will install it first. After the installation of the Microsoft Windows Installer service, the SequeLink ADO Client installer may require you to restart your machine (Windows 9x, Windows ME, and Windows NT only), after which the SequeLink ADO Client will resume its installation.

The SequeLink ADO Client installer also checks for Microsoft Data Access Components (MDAC) and DCOM (Windows 9x and Windows ME only). If the installer detects that:

- MDAC is not installed, or that an older version is installed, it installs the current version of MDAC. The installer may require you to restart your machine.

- DCOM is not installed on your Windows 9x or Windows ME machine, an error message is generated. You must install DCOM.

**To start the SequeLink ADO Client installer:**

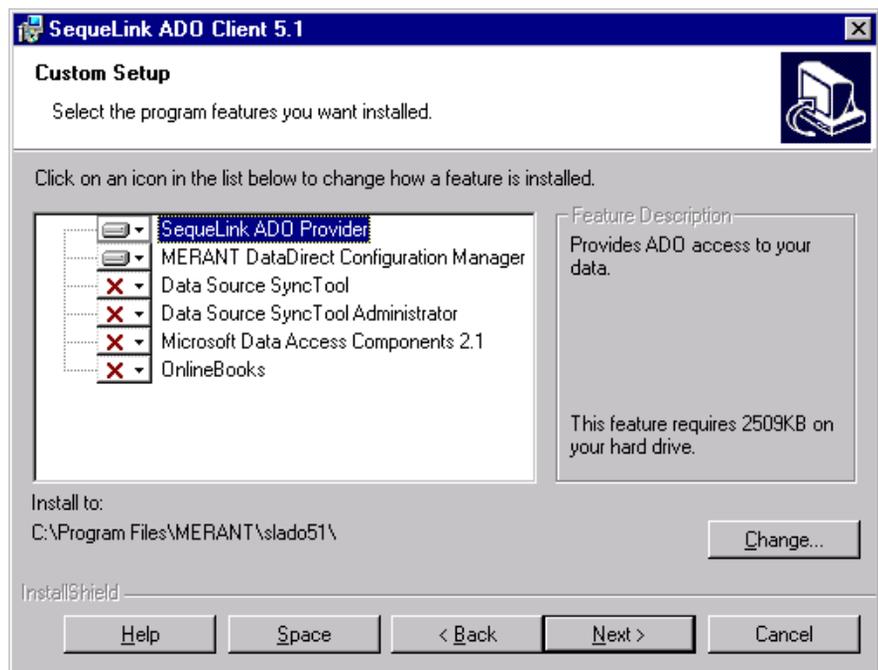
- **If installing from the DataDirect CD**, insert the CD into the CD-ROM drive. If you have a local CD-ROM drive, this typically is drive D. If the CD-ROM drive is on a network, mount the CD and create a mapping to the CD-ROM drive. Then, perform one of the following actions:
  - If AutoPlay for CDs is enabled and you have a browser, product information is displayed automatically when you insert the CD. Click the **SequeLink 5.1** link on the left-hand side of the opening window; then, follow the instructions to install the product.
  - If AutoPlay for CDs is not enabled or you do not have a browser, use Windows Explorer to navigate from the root directory of the CD to the folder for the product that you want to install (sqlnk51\win\ado). Then, double-click **setup.exe**.
- **If installing from files downloaded from the Web**, follow the download instructions on the MERANT Web site to download the appropriate self-extracting ZIP file. Open the contents of the ZIP file into a directory (for example: C:\temp). Then, navigate to the directory that contains the unzipped files and double-click **setup.exe** to start the installer.

## Installing the SequeLink ADO Client

- 1 Start the SequeLink ADO installer. When the Welcome window appears, click **Next** to continue.
- 2 The License Agreement window appears. Accept the license agreement by checking the **I accept the terms in the license**

**agreement** option; then, click **Next**. The Custom Setup window appears.

- 3 The Custom Setup window allows you choose specific installation options.
  - a Click one or multiple component icons to select the components to install. When you select a component, a description of the component appears in the Feature Description box.
  - b To change the installation directory, click **Change**. A window appears allowing you to browse and select an installation directory. The default directory is C:\Program Files\MERANT\slado51.



When you are satisfied with your settings, click **Next**.

- 4 The Ready to install the Program window allows you to go back and review your choices before proceeding. If you are ready to install, click **Install**.

- 5 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**.
- 6 For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

NOTE: To change which components are installed or remove the SequeLink ADO Client from your machine, run the installation program again. When it detects an existing SequeLink ADO Client installation on your machine, the installer will prompt you with the following choices:

- **Modify** allows you to change which components are installed.
- **Remove** uninstalls the SequeLink Client from your machine

Uninstalling can also be accomplished in silent mode. See [“Silent Installations” on page 112](#) for details.

## Silent Installations

When the Microsoft Windows Installer service is installed, the MSIEXEC.EXE file resides in the system directory of your workstation to make silent installations possible. Make sure that this directory is on your path so that you can execute this file from a command-line prompt. Refer to the Microsoft Windows Installer SDK documentation for complete details about all command-line options supported by the Microsoft Windows Installer service.

You can use MSIEXEC.EXE to install and uninstall SequeLink ADO Clients from the command line without any user interaction. This can be useful for administrators who want to run multiple installations using batch files.

**To install the SequeLink ADO Client silently:**

Open a command-line window on your workstation and change to the directory where the installation file is located. For example, to install from the CD, change to the directory `sqlnk51\win\ado`. Type the command:

```
msiexec.exe /q /i "SequeLink ADO Client 5.1.Msi"
```

Then, press ENTER. The installation will proceed, using defaults, without requiring any further interaction. The `/q` switch specifies a silent installation. Other switches and properties can also be used to customize the installation; see the Microsoft Windows Installer SDK documentation.

**To uninstall the SequeLink ADO Client silently:**

Open a command-line window on your workstation and type the command:

```
msiexec.exe /q /x "SequeLink ADO Client 5.1.Msi"
```

Then, press ENTER. The SequeLink ADO Client is removed without requiring any further interaction.

## Quick Install Images

When the Microsoft Windows Installer service is installed, the `MSIEXEC.EXE` file resides in the system directory of your workstation to make Quick Install images possible. Make sure that this directory is on your path so that you can execute this file from a command-line prompt. Refer to the Microsoft Windows Installer SDK documentation for complete details about all command-line options supported by the Microsoft Windows Installer service.

A Quick Install Image is a predefined, customized installation image that you can use to install the same SequeLink ADO Client configuration, including data source definitions, on multiple

workstations. It helps ensure that all SequeLink Clients in your organization or workgroup are installed and configured in the same way. Minimal user interaction is required to install the Quick Install Image.

You can configure a Quick Install Image with the following options:

- **Workstation or Network Installation.** If you configure:
  - A workstation installation, the SequeLink ADO Client must be installed on each workstation.
  - A network installation, the SequeLink ADO Client is installed at a network location and each workstation can share this network version. Before the network version can be used, the Quick Install Image must be run on each workstation.
- **Installation Directory.** On a workstation installation, you can specify the directory where SequeLink ADO Client will be installed. The default directory is C:\Program Files\MERANT\slado51.
- **Default Data Sources.** Your Quick Install image can create a set of default data sources. First, you must create a data source file (.OSF) using the SequeLink Data Source SyncTool Administrator. For more information about exporting data source definitions to data source files, refer to the *SequeLink Administrator's Guide*.

NOTE: Quick Install images only support data source files that specify import in Merge or Overwrite mode.

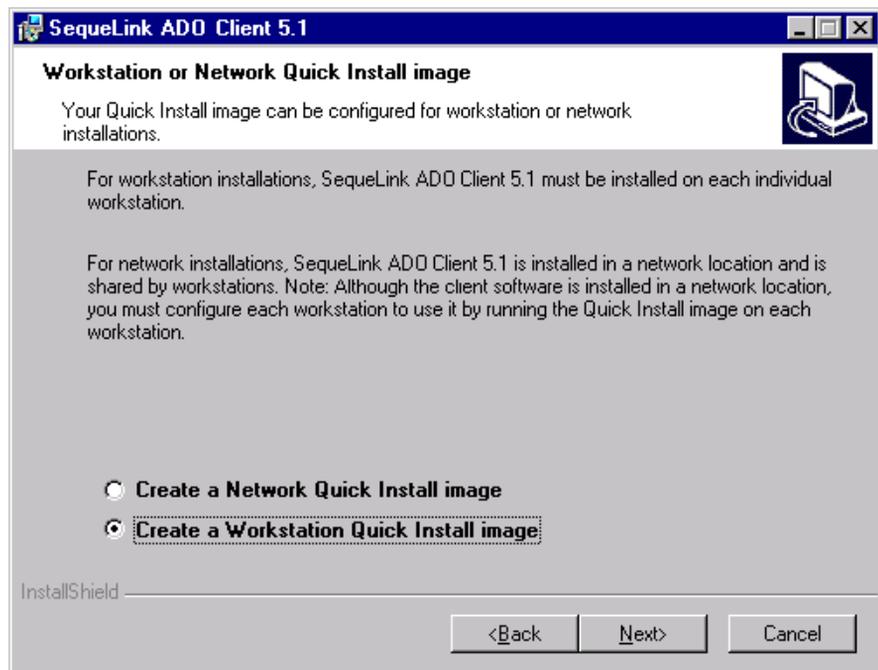
## Creating a Quick Install Image

- 1 Verify that MSIEXEC.EXE is on your path and open a command prompt window.
- 2 Change to the sqlnk51\win\ado directory on the CD and type the following:

```
msiexec.exe /a "SequeLink ADO Client 5.1.Msi"
```

Then, press ENTER.

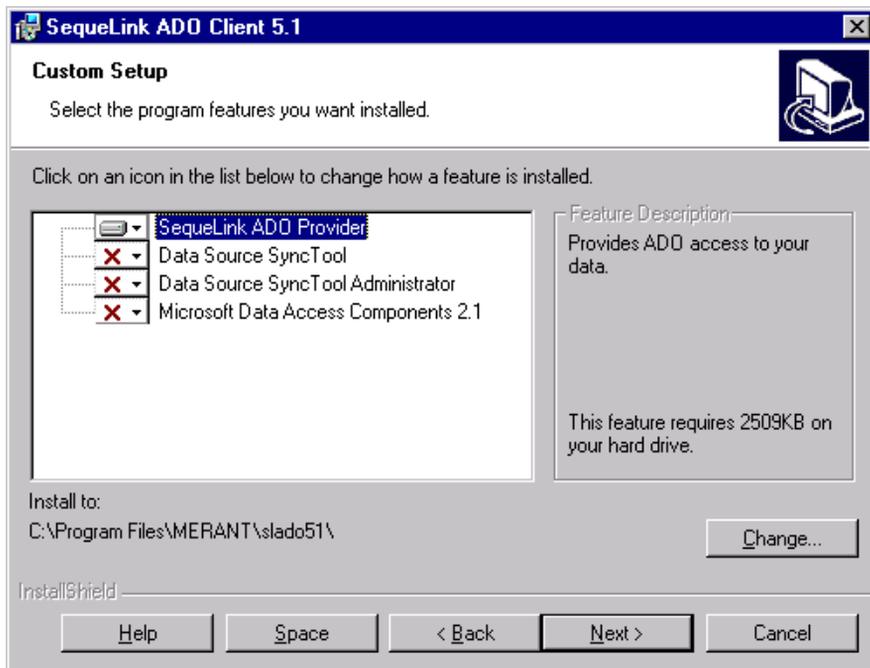
- 3 The Welcome window appears. Click **Next** to continue.
- 4 The next window prompts allows you to choose a Network or a Workstation Quick Install image.



Select the type of Quick Install image to create:

- For a Network Quick Install image, select the **Create a Network Quick Install image** option and click **Next**. Skip to [Step 6](#).

- For a Workstation Quick Install image, select the **Create a Workstation Quick Install image** option and click **Next**. Continue with [Step 5](#).
- 5 If you are creating a Workstation image, the Destination Folder window allows you to specify a folder on the workstation where the SequeLink ADO Client will be installed. Click **Next** to continue.
- 6 The Custom Setup window allows you choose specific installation options. Click one or multiple component icons to select the components to install. When you select a component, a description of the component appears in the Feature Description box.



When you are satisfied with your settings, click **Next**.

- 7 The Create Default Data Sources window allows you to choose whether or not to create default data sources.
  - If you click **No**, skip to [Step 9](#).
  - If you click **Yes**, go to [Step 8](#).
- 8 If you choose to create default data sources, the OSF File Location window is displayed. Specify the path to the appropriate data source file. Then, click **Next**.

NOTE: Quick Install images only support data source files that specify import in Merge or Overwrite mode.
- 9 In the Network Location window, specify the directory where the Quick Install image is to be saved; then, click **Install**.
- 10 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**.

## ***Running a Quick Install Image***

To run a Quick Install image, the Microsoft Windows Installer must be available on each workstation. The image can also be installed silently. For more information about silent installations, see [“Silent Installations” on page 112](#).

### **To perform a Quick Install:**

- 1 Use one of the following methods to run the Quick Install image from your workstation:
  - Use Windows Explorer to navigate to the network directory containing the Quick Install image file. Double-click **SequeLink ADO Client 5.1.Msi**.
  - Verify that the Windows installer is on your path and open a command prompt window. Type the following:

```
msiexec.exe /i "network_location\SequeLink ADO
Client 5.1.Msi"
```

where *network\_location* is the location of the Quick Install Image file; then, press ENTER.

- 2 The Welcome window appears. Click **Next** to continue.
- 3 The Ready to install the Program window appears. If you are ready to install, click **Install**.
- 4 The Setup Finish window appears when the installation has been completed successfully. Click **Finish**.
- 5 For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

## 6 Installing SequeLink Java Client

This chapter provides installation instructions for SequeLink Java Client.

**IMPORTANT:** You must install both the SequeLink Server and the SequeLink Client. If you have not already done so, install the SequeLink Server after installing the Client.

For information about mounting the SequeLink CD on the most common java-enabled platforms, see ["Mounting Your MERANT DataDirect CD" on page 25](#).

|                                                                                     | <b>To install<br/>SequeLink Java Client...</b> | <b>See...</b>                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <i>From a CD on Windows</i>                    | The installation instructions in <a href="#">"Installing From a CD on Windows Platforms" on page 121</a> .                                                                                                                                     |
|  | <i>From a CD on Solaris</i>                    | The installation instructions in <a href="#">"Installing From a CD on Solaris" on page 123</a> .<br>For all other UNIX platforms, see the installation instructions in <a href="#">"Installing From a CD on Other Platforms" on page 125</a> . |
|                                                                                     | <i>From a CD on all other platforms</i>        | The installation instructions in <a href="#">"Installing From a CD on Other Platforms" on page 125</a> .                                                                                                                                       |
|                                                                                     | <i>On a workstation without a CD-ROM drive</i> | The installation instructions in <a href="#">"Installing on a Workstation Without a CD-ROM Drive" on page 127</a> .                                                                                                                            |

| <b>To install<br/>SequeLink Java Client...</b>                  | <b>See...</b>                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>From installable files that you download from a Web site</i> | Contact your MERANT sales representative for information about downloading installable files. After you have downloaded the installable files, continue with the installation instructions in <a href="#">"Installing From Files Downloaded From the Web"</a> on page 129. |
| <i>On OS/390</i>                                                | The installation instructions in <a href="#">"Installing on OS/390"</a> on page 132.                                                                                                                                                                                       |

NOTE: The SequeLink Java Client installer is GUI-based. If your environment does not support GUIs, you can start the installer in silent mode and specify the appropriate parameters using the command line. For instructions on installing without a GUI, see ["Installing Without a GUI"](#) on page 131.

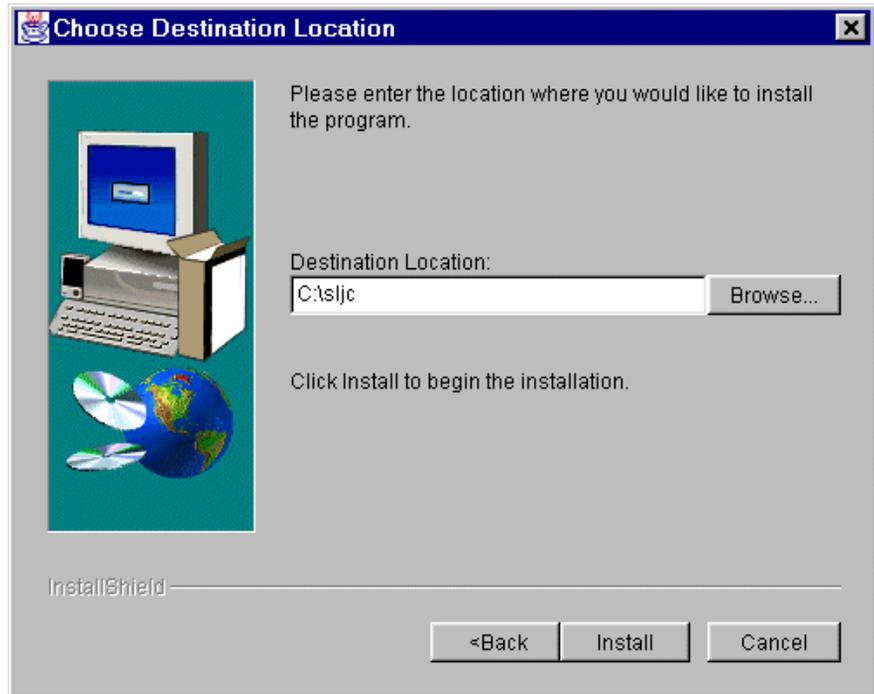
---

# Installing From a CD on Windows Platforms



- 1 Insert the CD into the CD-ROM drive. If you have a local CD-ROM drive, this typically is drive D. If the CD-ROM drive is on a network, mount the CD and create a mapping to the CD-ROM drive.
- 2 Perform one of the following actions:
  - If AutoPlay for CDs is enabled and you have a browser, product information is displayed automatically when you insert the CD. Click the **SequeLink 5.1** link on the left side of the opening window; then, follow the instructions to install the product.
  - If AutoPlay for CDs is not enabled or you do not have a browser, use Windows Explorer to navigate from the root directory of the CD to the folder for the product that you want to install. Then, double-click **setup.exe**.
- 3 The Welcome window appears. Click **Next** to continue.
- 4 The Software License Agreement window appears. Accept the license agreement by selecting the **Accept all terms of the license** check box; then, click **Next**.

- 5 The Choose Destination Location window appears.



In the Destination Location field, type the directory in which you want to install the SequeLink Java Client, or click the **Browse** button to select a directory. Then, click **Install** to install the software. The installer copies the required files.

- 6 After copying the files, the Finish window appears. Click **Finish** to exit. For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

---

# Installing From a CD on Solaris



NOTE: For UNIX platforms other than Solaris, follow the installation instructions in “[Installing From a CD on Other Platforms](#)” on page 125.

- 1 Mount the CD.
- 2 Change to the top-level directory on the CD.
- 3 Enter the following command to start the SequeLink Java Client Setup.

```
ksh unixmi.ksh
```

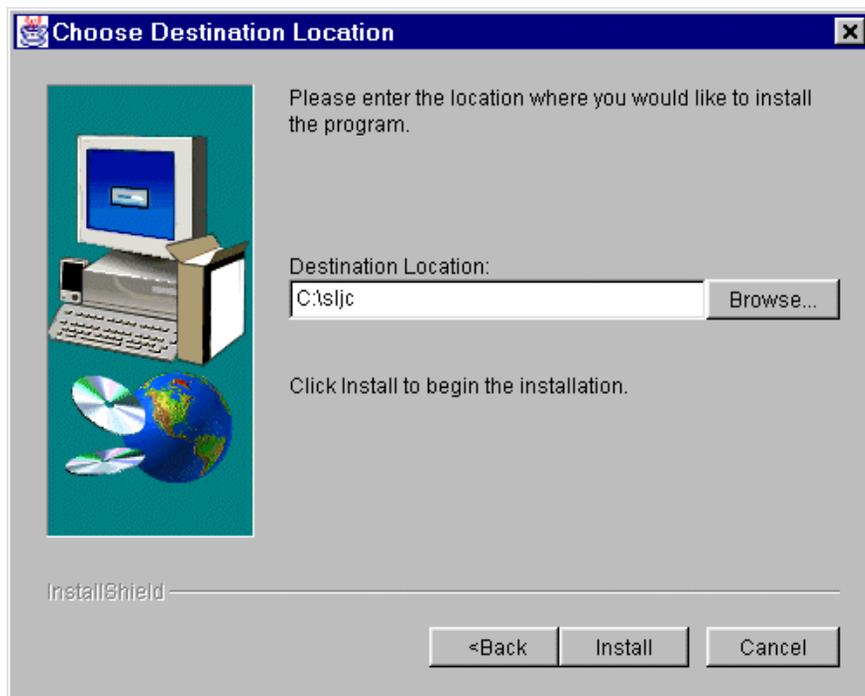
- 4 Setup prepares for installation by determining which UNIX operating system you have:

```
The following operating system has been detected:
Solaris
```

```
Is this the current operating system on your
machine (Y/N) ? [Y]
```

- If Setup has detected the correct operating system, press ENTER and continue with the next step.
  - If Setup did not detect the correct operating system, enter N. The installation will be cancelled.
- 5 If you accepted the operating system that Setup detected, a Product Selection prompt appears, listing the products that you can choose to install. Select the **SequeLink 5.1 Java Client**.
  - 6 The Welcome window appears. Click **Next** to continue.
  - 7 The Software License Agreement window appears. Accept the license agreement by selecting the **Accept all terms of the license** check box; then, click **Next**.

- 8 The Choose Destination Location window appears.



In the Destination Location field, type the directory in which you want to install the SequeLink Java Client, or click the **Browse** button to select a directory. Then, click **Install** to install the software. The installer copies the required files.

- 9 After copying the files, the Finish window appears. Click **Finish** to exit. For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

---

# Installing From a CD on Other Platforms

NOTE: The following procedure applies to any Java-enabled platform.

- 1 Mount the CD.
- 2 Change to the directory containing the SequeLink Java Client installer. For example:

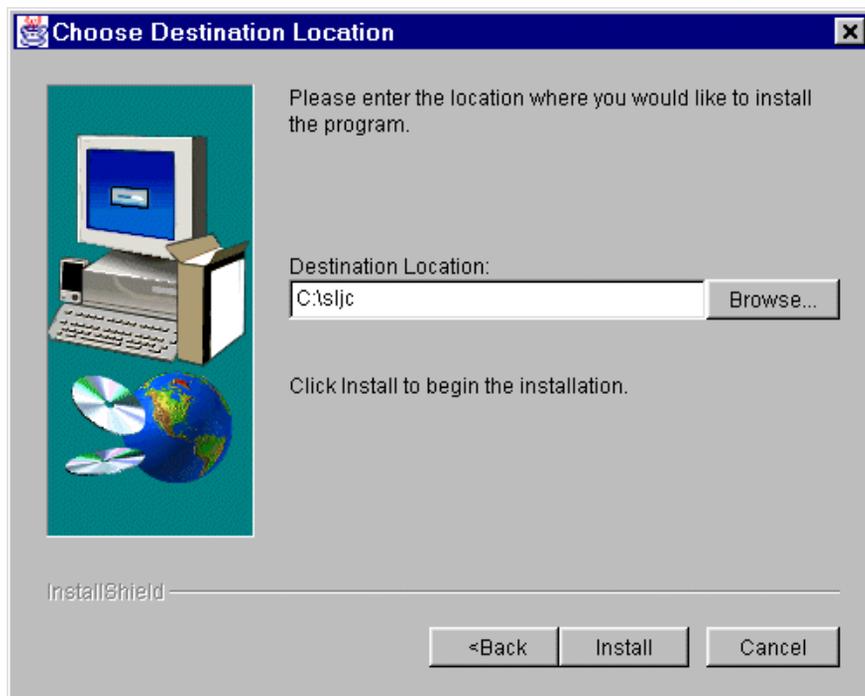
```
cd sqlnk51/java/
```

- 3 Start the installer. The installer is a pure Java application. For information about starting the Java application setup, refer to your Java Virtual Machine documentation. For example, if you are using the standard JDK and your current directory is specified in your CLASSPATH variable, you would use the following command:

```
java setup
```

- 4 The Welcome window appears. Click **Next** to continue.
- 5 The Software License Agreement window appears. Accept the license agreement by selecting the **Accept all terms of the license** check box; then, click **Next**.

## 6 The Choose Destination Location window appears.



In the Destination Location field, type the directory in which you want to install the SequeLink Java Client, or click the **Browse** button to select a directory. Then, click **Install** to install the software. The installer copies the required files.

7 After copying the files, the Finish window appears. Click **Finish** to exit. For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

NOTE: If you are installing SequeLink Java Client on OS/390, you must perform an additional step. See ["Installing on OS/390" on page 132](#) for more information.

---

## Installing on a Workstation Without a CD-ROM Drive

If your workstation does not have a CD-ROM drive, you must mount the CD on another computer with a CD-ROM drive and transfer the necessary file *in binary format* to your workstation using file transfer software (for example, FTP). After the files are transferred, you run the installer on your workstation.

### To install on a workstation without a CD-ROM drive:

- 1 Mount the CD on a computer with a CD-ROM drive and FTP capability.
- 2 Transfer the `setup.class` file (located in the `/sqlnk51/java/` directory) in binary format to your workstation. Change to the workstation directory where you have copied this file.

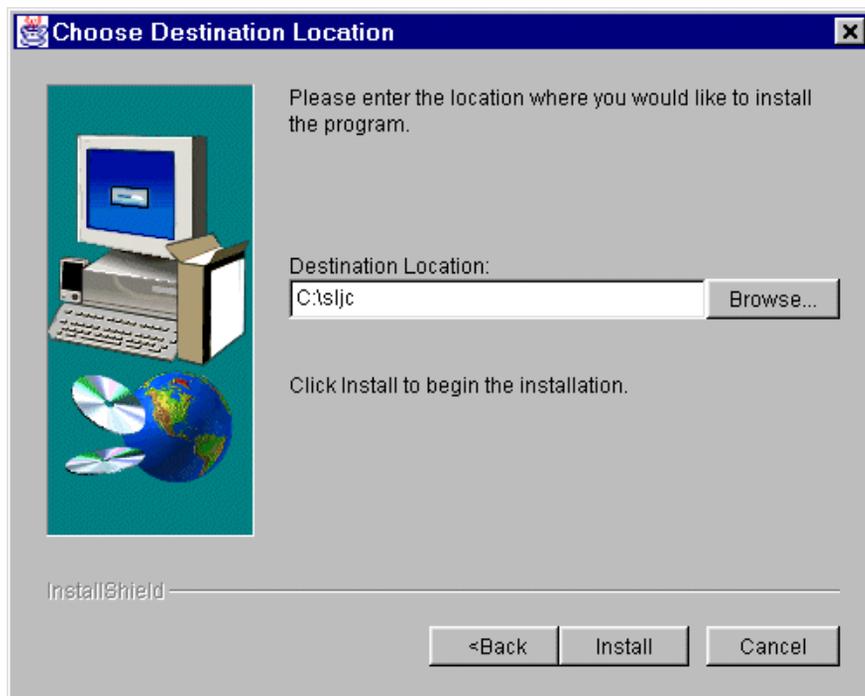
**IMPORTANT:** Transfer the file in binary format. If you transfer the file in the wrong format, the installation will fail.

- 3 On your workstation, start the installer. The installer is a pure Java application. For information about starting the Java application setup, refer to your Java Virtual Machine documentation. For example, if you are using the standard JDK and your current directory is specified in your `CLASSPATH` variable, you would use the following command:

```
java setup
```

- 4 The Welcome window appears. Click **Next** to continue.
- 5 The Software License Agreement window appears. Accept the license agreement by selecting the **Accept all terms of the license** check box; then, click **Next**.

- 6 The Choose Destination Location window appears.



In the Destination Location field, type the directory in which you want to install the SequeLink Java Client, or click the **Browse** button to select a directory. Then, click **Install** to install the software. The installer copies the required files.

- 7 After copying the files, the Finish window appears. Click **Finish** to exit. For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

NOTE: If you are installing SequeLink Java Client on OS/390, you must perform an additional step. See ["Installing on OS/390" on page 132](#) for more information.

---

# Installing From Files Downloaded From the Web

- 1 Download the setup.class file from the MERANT Web site. Download instructions are available on the MERANT Web site.

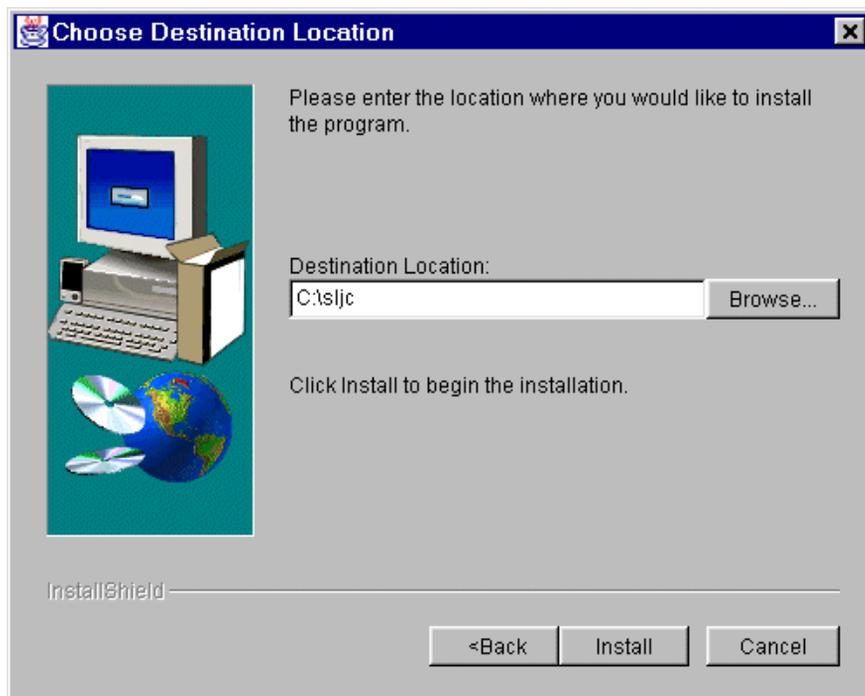
NOTE: If you are installing the SequeLink Java Client on OS/390, you must perform the additional step of executing the ascii2ebcdic.sh shell script after you complete this procedure. Make sure that you download this script also from the MERANT Web site.

- 2 Change to the workstation directory where you have copied the software.
- 3 Start the installer. The installer is a pure Java application. For information about starting the Java application setup, refer to your Java Virtual Machine documentation. For example, if you are using the standard JDK and your current directory is specified in your CLASSPATH variable, you would use the following command:

```
java setup
```

- 4 The Welcome window appears. Click **Next** to continue.
- 5 The Software License Agreement window appears. Accept the license agreement by selecting the **Accept all terms of the license** check box; then, click **Next**.

- 6 The Choose Destination Location window appears.



In the Destination Location field, type the directory in which you want to install the SequeLink Java Client, or click the **Browse** button to select a directory. Then, click **Install** to install the software. The installer copies the required files.

- 7 After copying the files, the Finish window appears. Click **Finish** to exit. For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

NOTE: If you are installing SequeLink Java Client on OS/390, you must perform an additional step. See ["Installing on OS/390" on page 132](#) for more information.

---

# Installing Without a GUI

The SequeLink Java Client installer is GUI-based; however, if your environment does not support GUIs, you can start the installer in silent mode and specify the parameters using the command line.

## To install without a GUI:

1 Mount the CD or download the setup.class file from the MERANT Web site. Download instructions are available on the MERANT Web site.

2 Perform one of the following actions:

- If installing from a downloaded file, change to the workstation directory where you have downloaded the file.
- If installing From the CD, change to the directory containing the SequeLink Java Client installer. For example:

```
cd sqlnk51/java
```

3 Start the installer. The installer is a pure Java application. For information about starting the Java application setup, refer to your Java Virtual Machine documentation. For example, if you are using the standard JDK and your current directory is specified in your CLASSPATH variable, you would use the following command:

```
java setup -o installdir
```

where *installdir* is the installation directory. For example, on UNIX: /usr/sequelnk

4 The installer copies the required files. For instructions on testing your SequeLink installation, refer to the *SequeLink Administrator's Guide*.

NOTE: If you are installing SequeLink Java Client on OS/390, you must perform an additional step. See [“Installing on OS/390” on page 132](#) for more information.

---

## Installing on OS/390

OS/390 After you have installed the SequeLink Java Client on OS/390 using one of the previously described methods, you must perform the additional step of executing the `ascii2ebcdic.sh` shell script. This script is located on the CD in `\sqlnk51\java` or as part of your download package from the MERANT Web site. Execute the script and follow the instructions.

---

## Installed Files

[Table 6-1](#) shows the SequeLink Java Client directory after installation and provides a description of the files.

---

**Table 6-1. SequeLink Java Client Directory and Files**

---

| Directories and Files                                                                                                                                          | Description                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| driver/examples/CheckAgainstCertificateFromFile.java<br>driver/examples/CheckAgainstCertificateFromJar.java<br>driver/examples/KeyStoreCertificateChecker.java | Contains Java source files that provide examples of certificate checkers.                                                                                           |
| driver/examples/JNDI_FILESYSTEM_Example.java<br>driver/examples/JNDI_LDAP_Example.java                                                                         | Contains Java source files that allows you to create JDBC data sources. These source files must be adapted for your environment, and subsequently compiled and run. |

**Table 6-1. SequeLink Java Client Directory and Files** (cont.)

| Directories and Files                                   | Description                                                                                                                                                                              |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| driver/lib/sljc.jar                                     | JAR file containing all classes of the SequeLink JDBC Driver implementing the JDBC 2.0 Core API. To load the driver, add this path to your CLASSPATH variable.                           |
| driver/lib/sljcx.jar                                    | JAR file containing all classes of the SequeLink JDBC Driver implementing the JDBC 2.0 Optional Package. To use the JDBC 2.0 Optional Package, add this path to your CLASSPATH variable. |
| driver/lib/slrsa_rc4.jar<br>driver/lib/slrsa_rc4_11.jar | JAR files containing implementations of the RSA and RC4 algorithms.<br><br>NOTE: slrsa_rc4_11.jar is the applet/JDK 1.1 version.                                                         |
| driver/lib/slssl.jar<br>driver/lib/slssl_11.jar         | JAR files containing all classes of the SequeLink JDBC Driver that implement Secure Socket Layer (SSL) encryption.<br><br>NOTE: slssl_11.jar is the applet/JDK 1.1 version.              |
| jdbctest/classes                                        | Contains all the JDBCTest classes. To use JDBCTest, add this path to your CLASSPATH variable.                                                                                            |
| jdbctest/jdbctest.bat                                   | Batch file that starts JDBCTest.                                                                                                                                                         |
| jdbctest/jdbctest.html                                  | HTML file that starts JDBCTest as an applet.                                                                                                                                             |
| jdbctest/jdbctest.sh                                    | UNIX shell script that starts JDBCTest.                                                                                                                                                  |
| install.idb                                             | Support file for the uninstaller.                                                                                                                                                        |

**Table 6-1. SequeLink Java Client Directory and Files** (cont.)

| Directories and Files                                                                                                                                                                                                 | Description                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| proxy/cmdsrv.exe                                                                                                                                                                                                      | Executable that registers the SequeLink Proxy Server as a Windows service.                                                       |
| proxy/decrypt.bat<br>proxy/encrypt.bat                                                                                                                                                                                | Batch files that decrypt and encrypt the private key of the SequeLink Proxy Server certificate.                                  |
| proxy/decrypt.sh<br>proxy/encrypt.sh                                                                                                                                                                                  | UNIX shell scripts that decrypt and encrypt the private key of the SequeLink Proxy Server certificate.                           |
| proxy/proxyserver.bat                                                                                                                                                                                                 | Batch file that starts the SequeLink Proxy Server.                                                                               |
| proxy/proxyserver.sh                                                                                                                                                                                                  | UNIX shell script that starts the SequeLink Proxy Server.                                                                        |
| proxy/cert/                                                                                                                                                                                                           | Contains demo certificates.                                                                                                      |
| proxy/demos/com/merant/sequelink/demo/<br>demo.properties<br>proxy/demos/com/merant/sequelink/demo/<br>GenerateDemoCertificates\$DN.class<br>proxy/demos/com/merant/sequelink/demo/<br>GenerateDemoCertificates.class | Contains Java files you can use to generate certificates.                                                                        |
| proxy/demos/com/merant/sequelink/demo/<br>KeyTool.class                                                                                                                                                               | Contains a Java class file that extracts certificates from a Java2 KeyStore and converts certificates to different formats.      |
| proxy/lib/slproxy.jar                                                                                                                                                                                                 | Jar file containing all classes for the SequeLink Proxy Server.                                                                  |
| proxy/lib/slrsa_rc4.jar<br>proxy/lib/slrsa_rc4_11.jar                                                                                                                                                                 | JAR files containing implementations of the RSA and RC4 algorithms.<br><br>NOTE: slrsa_rc4_11.jar is the applet/JDK 1.1 version. |

**Table 6-1. SequeLink Java Client Directory and Files** (cont.)

| Directories and Files                                                                                      | Description                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| driver/lib/slssl.jar<br>driver/lib/slssl_11.jar                                                            | JAR files containing all classes of the SequeLink Proxy Server that implement Secure Socket Layer (SSL) encryption.<br><br>NOTE: slssl_11.jar is the applet/JDK 1.1 version. |
| proxy/log                                                                                                  | The directory that contains all messages logged by the SequeLink Proxy Server.                                                                                               |
| spy/lib/spy.jar                                                                                            | JAR file containing all Spy classes. To use Spy, add this path to your CLASSPATH variable.                                                                                   |
| sun/lib/jdbc2_0-stdext.jar                                                                                 | JAR file containing redistributable Sun Microsystems components for the JDBC 2.0 Optional Package.                                                                           |
| sun/lib/jndi.jar                                                                                           | JAR file containing redistributable Sun Microsystems components for JNDI 1.2.                                                                                                |
| sun/lib/jta-spec1_0_1.jar                                                                                  | JAR file containing redistributable Sun Microsystems components for JTA 1.0.1.                                                                                               |
| sun/lib/fs/fscontext.jar<br>sun/lib/fs/providerutil.jar                                                    | JAR files containing redistributable Sun Microsystems components for the File System JNDI Provider.                                                                          |
| sun/lib/ldap/jaas.jar<br>sun/lib/ldap/ldap.jar<br>sun/lib/ldap/ldapbp.jar<br>sun/lib/ldap/providerutil.jar | JAR files containing redistributable Sun Microsystems components for the LDAP JNDI Provider.                                                                                 |
| uninstall.class                                                                                            | Executable that uninstalls SequeLink Java Client.                                                                                                                            |



# 7 Installing and Viewing Online Books

The DataDirect CD and the MERANT Web site provide online books for the MERANT DataDirect Product Series. In addition, they provide Adobe Acrobat Reader, which is required to view the online books.

Some of the DataDirect product installers allow you to install the online books along with the product. In this case, the books are installed in the product's installation directory in a directory named books. To install the books when installing the product, remember to select the Online Books component.

This chapter explains how to:

- Install the online books without using a product installer
- View the online books
- Customize the online books
- Install Acrobat Reader from the CD

NOTE: Instructions for downloading the online books and Acrobat Reader from the Web are provided on the MERANT Web site.

## About DataDirect's Online Books

You can view the online books from the CD or install them to a local or network location. You must view the online books using Acrobat Reader 3.x, or later, licensed from Adobe Systems. The DataDirect CD includes Acrobat Reader 4.x with Search.

You can print the online books to create high-quality, hard-copy books. While viewing an online book in the Acrobat Reader, select **File / Print** to print the entire file (book), the current page, or a range of pages.

**NOTE:** If you want to view the online books on a Windows 3.1x machine, you must view the online books with Acrobat Reader 3.x.

---

## Installing the Online Books

If you want to install the online books without using a product installer, you must maintain the same directory structure that is on the CD. You can install all the online books or specific ones:

- **To install all product books**, copy the entire \books directory to your local or network drive.
- **To install a specific set of books**, copy that book's directory structure (beneath the \books directory) to your local or network drive. For example, to install the Connect ODBC books, you would copy the entire odbc directory beneath the books directory (\books\odbc).

---

# Viewing the Online Books

To help you navigate through a DataDirect product's online books, an Acrobat file, called **books.pdf**, is provided. This file lists each online book provided for a product. We recommend that you open this file first and, from this file, open the book you want to view.

If you want to keep the books.pdf file open until you choose to close it, go to the Reader menu bar and select **File / Preferences / General**. Clear the check box for the **Open Cross-Document Links in Same Window** option.

NOTE: If you do not already have Acrobat Reader installed, you must install it before you can view the books. See ["Installing Acrobat Reader" on page 144](#) for details.

## To view the online books:

- 1 Start Acrobat Reader in one of the following ways:
  - For **Windows**, click **Start** on the Taskbar and select **Programs**. Select the Adobe Acrobat folder that was created during the installation of the Acrobat Reader, and click the **Acrobat Reader** icon.
  - For **UNIX**, you can start the Reader from the command line by using its launch script:
    - If the launch script directory is in the search path set by the PATH environment variable, type the following to start Acrobat Reader:

```
% acroread
```
    - If the launch script directory is not set in the PATH environment variable, type:

```
% /acrobatreaderinstalldir/bin/acroread
```

- 2 On the Reader menu bar, select **File / Open**, and choose the path where the books.pdf file resides. For example, for SequeLink:

D:\Program Files\Merant\slodbc51\books\slnk\books.pdf

or for Connect ODBC:

D:\Program Files\Merant\books\lodbc\books.pdf

- 3 Click **Open**.

While viewing the online books, you can use *hypertext links*, perform *text searches*, and use *bookmarks*.

## Using Hypertext Links

Cross-reference links within online books allow you to jump to related topics and other books within a product's documentation set. These links are displayed in blue and allow you to jump to a cross reference with a single click of the mouse. Some links take you to a URL on MERANT's World Wide Web site (if you have an HTML browser installed on your computer). The page numbers in the table of contents and index are also hypertext links.

## Performing Text Searches

With Acrobat Reader with Search, you can perform full-text, boolean searches across all of a product's online books. You type a query and Acrobat Reader displays the matching text.

**NOTE:** If you will be performing searches across online books on the CD over a non-UNIX network, you must explicitly map to the network drive that contains the CD to enable the Search tool.

The search indexes for DataDirect online books were created with the word stemming search option. This option finds words that share a stem with a search word. For example, if you search

for “programming,” the Reader will also find “program” and “programs.” The search indexes were not created using the Sounds Like and Case Sensitive options. Therefore, you cannot use these options when searching online books. Finally, numbers are not included in the search index and will not be found by a search.

## Using Bookmarks

All of the online books contain predefined bookmarks that make it easy for you to quickly jump to a specific topic. By default, the bookmarks are displayed to the left of each online book. For more information about using Acrobat Reader, refer to the online help for the product.

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# Customizing the Online Books

If you have Adobe Acrobat Exchange 3.0 or higher, you can customize the online books to reflect information specific to your work environment. For example:

- **Notes.** You can embed notes within an online book to help identify import procedures or helpful hints specific to your organization. A note appears in the online books as a note icon; double-click the icon to view the embedded note text.
- **Bookmarks.** You can also add customized bookmarks to an online book to help you find topics even faster. Bookmarks can be used to jump to topics within a book, or to other PDF files.

For specific instructions on how to customize a book, refer to the Acrobat documentation.

## About Acrobat Reader

You must view the online books using Acrobat Reader 3.x, or later, licensed from Adobe Systems. This CD includes the English version of Acrobat Reader 4.x with Search for the following platforms: Windows 9x, Windows NT, Windows 2000, Solaris, IBM-AIX, and HP-UX. The CD also includes Acrobat Reader 4.x without search for the Linux platform; Acrobat Reader 4.x with Search is not available at this time on Linux.

DataDirect software products may support platforms that are not supported by the Reader. To view the online books for these products, you must do so on a platform that the Reader does support.

NOTE: For the latest information about supported platforms for Acrobat Reader, refer to the Adobe Web site at:

<http://www.adobe.com/prodindex/acrobat/readstep.html>

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## Product Requirements for Acrobat Reader 4.x

NOTE: If you want to view the online books on a Windows 3.1x machine, you must view the online books with Acrobat Reader 3.x.

### *Windows Platforms*

- 486 or Pentium processor-based personal computer
- Microsoft Windows 9x, Windows NT 4.0 with Service Pack 3 or later, Windows 2000

- 10 MB of RAM for Windows 9x (16 MB recommended); 16 MB of RAM for Windows NT and Windows 2000 (24 MB recommended)
- A hard disk with at least 10 MB of free disk space
- CD-ROM drive, locally or on a network

### ***Sun SPARCstation Workstations***

- Solaris 2.3 or later operating system (Acrobat Reader will not run on SunOS, Solaris 2.0, 2.1, or 2.2)
- Sun OpenWindows 3.0 or later, Motif 1.2.3 or later, OpenLook 3.0, or Common Desktop Environment (CDE) 1.0 or later
- A hard disk with at least 12 MB of free disk space
- 32 MB of RAM
- CD-ROM drive, locally or on a network

### ***HP Workstations***

- HP 9000 Series Workstations model 700 or 800
- HP-UX 9.0.3 or later operating system
- X Window System X11R5 running HP-VUE or Common Desktop Environment (CDE) 1.0 or later
- 32 MB of RAM
- A hard disk with at least 12 MB of free disk space
- CD-ROM drive, locally or on a network

### ***IBM-AIX Workstations***

- RS/6000 workstation
- AIX 4.2.1 or later operating system
- Common Desktop Environment (CDE) 1.0 or later, or Motif
- 32 MB of RAM
- A hard disk with at least 12 MB of free disk space
- CD-ROM drive

### ***Linux***

- Red Hat Linux 5.1 or later (non-glibc versions)
- 32 MB of RAM
- A hard disk with at least 12 MB of free disk space

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## **Installing Acrobat Reader**

The CD contains Acrobat Reader 4.x. To view the online books, you must have Acrobat Reader 3.x or later installed on a local or network location. You cannot start the Reader directly from the CD. If you already have a copy of the correct version of Acrobat Reader with Search installed on your machine, you can skip the procedure documented in this section.

**Network Administrators:** To allow users to install Acrobat Reader from a network location, copy the entire `\Readers\platform` directory and its contents from the CD into a directory on the network server.

## Windows Platforms

The instructions to install the Reader are the same whether you install it locally or to the network.

### To install Acrobat Reader:

- 1 Insert the MERANT DataDirect CD into the CD-ROM drive. If the CD-ROM drive is on a network, you must mount the CD and create a mapping to the CD-ROM drive.
- 2 Start the Setup program as follows, substituting the appropriate CD-ROM drive letter if necessary.

From Windows Explorer, navigate to the drive and directory containing the Reader; then, double-click the self-extracting program:

```
drive:\Readers\Win95nt\rs405eng.exe
```

- 3 Follow the on-screen instructions to complete the installation.

## UNIX Platforms

### To install Acrobat Reader on UNIX:

- 1 Insert the CD into the CD-ROM drive.
- 2 Mount the drive on a local workstation as a file system.

NOTE: To mount a CD-ROM drive, you must know your system's root password. If you do not know the password, contact your system administrator.

The following examples assume that the /cdrom mount point is available on your UNIX system. If not, replace /cdrom with a valid mount point.

- a Open a UNIX shell.
- b Change to the root user and type the root password:

```
su - root
Password: root_password
```

- c On Solaris, by default the CD-ROM drive mounts automatically when you insert the CD. The other UNIX platforms supported do not automatically mount the CD by default. If your workstation is not configured to automatically mount a CD, you must enter the command for mounting the drive.

- For HP-UX, enter:

```
mount -F cdfs -o cdcase device mount_point
```

where *device* is the device name assigned to your CD-ROM drive. The device name can be found using the HP-UX tool `sam`.

For example, if the device name for your CD-ROM drive is `/dev/dsk/c0t4d0` and you want to mount it over the directory `/cdrom`, you would enter the following command:

```
mount -F cdfs -o cdcase /dev/dsk/c0t4d0 /cdrom
```

- For IBM-AIX, enter:

```
mount -r -v cdrfs /dev/device /cdrom
```

where *device* is the device name assigned to your CD-ROM drive. The device name can be found using the AIX tool `smit`.

- For Linux, enter:

```
mount -r -t iso9660 /dev/device /mnt/cdrom
```

where *device* is the device name assigned to your CD-ROM drive.

- 3 Verify that the drive containing the CD is mounted by entering:

```
mount
```

You should see a list of mounted file systems, including the CD-ROM drive you just mounted.

- 4 Copy the appropriate Acrobat Reader compressed file (.Z file) from the CD to your UNIX machine:
  - For AIX, /readers/Aix/AIXRS.tar.Z
  - For HP-UX, /readers/Hpux/HPUXRS.tar.Z
  - For Linux, /readers/Linux/ILINXR.tar.Z
  - For Solaris, /readers/Solaris/SSOLR.tar.Z

- 5 Uncompress the file by entering:

```
uncompress compressed_filename
```

- 6 Untar the .tar file that was extracted from the compressed file:

```
tar -xvf filename.tar
```

- 7 Use the instructions in the Instguid.txt file to complete the Acrobat Reader installation. This file is one of the files that was extracted from the .tar file.



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