Installation Guide

Replication Server®
15.5

[ UNIX ]
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<td>45</td>
</tr>
</tbody>
</table>
About This Book

Audience

This book is for system administrators and other qualified installers who are familiar with their system’s environment, networks, disk resources, and media devices.

How to use this book

Before you install Replication Server®, read Chapter 1, “Preparing to Install and Configure Replication Server” in the Replication Server Configuration Guide for UNIX to help you plan your installation. However, the step is unnecessary if you plan to install a sample Replication Server.

This guide contains these chapters:

- Chapter 1, “Before You Begin,” describes Replication Server pre-installation information and tasks.
- Chapter 3, “Postinstallation Tasks,” provides information about the tasks you must perform after installing Replication Server.
- Chapter 4, “Uninstalling Replication Server,” describes how to uninstall Replication Server.
- Chapter 5, “Installing and Uninstalling Replication Manager,” describes how to install and uninstall the Replication Manager.

Related documents

The Sybase® Replication Server documentation set consists of:

- The release bulletin for your platform – contains last-minute information that was too late to be included in the books.
  A more recent version of the release bulletin may be available on the World Wide Web. To check for critical product or document information that was added after the release of the product CD, use the Sybase Product Manuals at http://www.sybase.com/support/manuals/.
• **Configuration Guide** for your platform – describes configuration procedures for all Replication Server and related products.

• **Getting Started with Replication Server** – provides step-by-step instructions for installing and setting up a simple replication system.

• **ASE-to-ASE Replication Quick Start Guide** – provides information for Adaptive Server® users who want to set up a Replication Server to replicate data from one Adaptive Server database to another.

• **New Features Guide** – describes the new features in Replication Server.

• **Administration Guide** – contains an introduction to replication systems. This manual includes information and guidelines for creating and managing a replication system, setting up security, recovering from system failures, and improving performance.

• **Design Guide** – contains information about designing a replication system and integrating heterogeneous data servers into a replication system.

• **Heterogeneous Replication Guide** and the Replication Server Options documentation set – describes how to use Replication Server to replicate data between databases supplied by different vendors.

• **Reference Manual** – contains the syntax and detailed descriptions of Replication Server commands in the Replication Command Language (RCL); Replication Server system functions; Sybase Adaptive Server commands, system procedures, and stored procedures used with Replication Server; Replication Server executable programs; and Replication Server system tables.

• **System Tables Diagram** – illustrates system tables and their entity relationships in a poster format. Available only in print version.

• **Troubleshooting Guide** – contains information to aid in diagnosing and correcting problems in the replication system.

• Replication Manager plug-in help, which contains information about using Sybase Central™ to manage Replication Server.

• **Sybase Software Asset Management Users Guide** – this manual introduces you to Sybase asset management concepts and provides instructions for establishing and managing your license files.

• **FLEXnet Licensing End User Guide** – this Macrovision manual explains FLEXnet Licensing for administrators and end users and describes how to use the tools which are part of the standard FLEXnet Licensing distribution kit from Sybase.
### About This Book

**Other sources of information**

Use the Sybase Getting Started CD and the Sybase Product Manuals Web site to learn more about your product:

- The Getting Started CD is included with your software and contains release bulletins, installation guides in PDF format, and other documents or updated information. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader, which you can download at no charge from the Adobe Web site using a link provided on the CD.

  You can also access the documents available on the Getting Started CD from the Sybase Product Manuals Web site.

- The Sybase Product Manuals Web site, which can be accessed using a standard Web browser, includes the Replication Server documents that are not included in the Getting Started CD. In addition to product manuals, you will find links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

  To access the Sybase Product Manuals Web site, go to Product Manuals at http://www.sybase.com/support/manuals/.

### Sybase certifications on the Web

Technical documentation at the Sybase Web site is updated frequently.

- **Finding the latest information on product certifications**
  
  
  2. Click Partner Certification Report.
  
  3. In the Partner Certification Report filter select a product, platform, and timeframe and then click Go.
  
  4. Click a Partner Certification Report title to display the report.

- **Finding the latest information on component certifications**
  
  
  2. Either select the product family and product under Search by Base Product; or select the platform and product under Search by Platform.
  
  3. Select Search to display the availability and certification report for the selection.
Creating a personalized view of the Sybase Web site (including support pages)

Set up a MySybase profile. MySybase is a free service that allows you to create a personalized view of Sybase Web pages.

2. Click MySybase and create a MySybase profile.

Finding the latest information on EBFs and software maintenance

2. Select EBFs/Maintenance. If prompted, enter your MySybase user name and password.
3. Select a product.
4. Specify a time frame and click Go. A list of EBF/Maintenance releases is displayed.
   Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as a Technical Support Contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click Edit Roles to add the “Technical Support Contact” role to your MySybase profile.
5. Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

Conventions

This section describes the stylistic and syntactic conventions used in this book.

Style conventions Syntax statements (displaying the syntax and options for a command) are printed as follows:

```
alter user user
set password new_passwd
[verify password old_passwd]
```

Examples that show the use of Replication Server commands are printed as follows:

```
alter user louise
set password hFE5t
verify password hFE5t
```
Command names, command option names, program names, program flags, keywords, configuration parameters, functions, and stored procedures are printed as follows:

- Use `alter user` to change the password for a login name.
- Variables, parameters to functions and stored procedures, and user-supplied words are in italics in syntax and in paragraph text, as follows:
  
  The `set password new_passwd` clause specifies a new password.
- Names of database objects, such as databases, tables, columns, and datatypes, are in italics in paragraph text, as follows:

  The `base_price` column in the `Items` table is a `money` datatype.

- Names of replication objects, such as function-string classes, error classes, replication definitions, and subscriptions, are in italics.

**Syntax conventions** Syntax formatting conventions are summarized in Table 1. Examples combining these elements follow.

<table>
<thead>
<tr>
<th>Key</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>variable</code></td>
<td>Variables (words standing for values that you fill in) are in italics.</td>
</tr>
<tr>
<td><code>{ }</code></td>
<td>Curly braces mean you must choose at least one of the enclosed options. Do not include braces in the command.</td>
</tr>
<tr>
<td><code>[ ]</code></td>
<td>Brackets mean you may choose or omit enclosed options. Do not include brackets in the command.</td>
</tr>
<tr>
<td>`</td>
<td>`</td>
</tr>
<tr>
<td><code>,</code></td>
<td>Commas mean you may choose as many options as you need (enclosed in braces or brackets). Separate your choices with commas, to be typed as part of the command. Commas may also be required in other syntax contexts.</td>
</tr>
<tr>
<td><code>()</code></td>
<td>Parentheses are to be typed as part of the command.</td>
</tr>
<tr>
<td><code>...</code></td>
<td>An ellipsis (three dots) means you may repeat the last unit as many times as you need. Do not include ellipses in the command.</td>
</tr>
</tbody>
</table>

**Obligatory choices**

- Curly braces and vertical bars – choose only one option.

  `{red | yellow | blue}`

- Curly braces and commas – choose one or more options. If you choose more than one, separate your choices with commas.
Optional choices

- One item in square brackets – choose it or omit it.
  [anchovies]

- Square brackets and vertical bars – choose none or only one.
  [beans | rice | sweet_potatoes]

- Square brackets and commas – choose none, one, or more options. If you choose more than one, separate your choices with commas.
  [extra_cheese, avocados, sour_cream]

Repeating elements  
An ellipsis (...) means that you may repeat the last unit as many times as you need. For the alter function replication definition command, for example, you can list one or more parameters and their datatypes for either the add clause or the add searchable parameters clause:

```sql
alter function replication definition function_rep_def
  {deliver as 'proc_name' | 
   add @parameter datatype, @parameter datatype... | 
   add searchable parameters @parameter [, @parameter]... | 
   send standby {all | replication definition} 
   parameters}
```

Accessibility features

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

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

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

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

**If you need help**

Each Sybase installation that has purchased a support contract has one or more designated people who are authorized to contact Sybase Technical Support. If you cannot resolve a problem using the manuals or online help, please have the designated person contact Sybase Technical Support or the Sybase subsidiary in your area.
CHAPTER 1

Before You Begin

This chapter provides information about system and licensing requirements for installing Replication Server. It also discusses other preinstallation tasks you must complete before you install Replication Server.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Preinstallation tasks</td>
<td>2</td>
</tr>
</tbody>
</table>

Introduction

This section describes the components of Replication Server and provides an overview of the tasks involved in installing and setting up Replication Server.

Note Embedded Replication Server System Database (ERSSD) requires Sybase SQL Anywhere®.

ERSSD is not supported for 64-bit Linux on Power.

Replication Server components

Replication Server consists of:

- Replication Server
- Replication Server support files (for example, scripts and configuration files)
- SQL Anywhere for Embedded Replication Server System Database (ERSSD)
- RepAgent for ERSSD
Preinstallation tasks

- Replication Monitoring Services (RMS)

Installation task overview

The Replication Server Installation Guide for UNIX explains how to unload the Replication Server software from the distribution media to your hard disk.

The Replication Server Configuration Guide for UNIX explains how to:
- Gather the information you need to prepare your system for the installation
- Install Replication Servers and add databases to your replication system
- Upgrade existing Replication Server System Databases (RSSDs)
- Downgrade existing RSSDs and then reinstall an earlier version of the software
- Enable password encryption for a Replication Server or RepAgent
- Start and stop Replication Server or RepAgent

Preinstallation tasks

Before you install Replication Server, follow the steps outlined in this section.

Reading the release bulletin

The release bulletin contains last-minute information about installing and upgrading Replication Server software.

Planning your replication system

The Replication Server Configuration Guide for UNIX provides the necessary information, including an installation worksheet and a database setup worksheet to help you plan your replication system. Become familiar with Chapter 1, “Preparing to Install and Configure Replication Server” and the requirements of your replication system before continuing with the installation.

Upgrading and mixed-version requirements

If a replication system domain has Replication Server 15.5 and later, then the system version and route versions in the replication system domain must be version 12.6 and later. With Replication Server 15.5, mixed-version environments containing versions earlier than 12.6 are not supported.

You can upgrade directly to Replication Server 15.5 from versions 12.6, 15.0, 15.0.1, and 15.2 and subsequent ESDs.

If the Replication Server version, the site version, and the route version are earlier than 12.6, you must upgrade Replication Server to version 12.6 or later, set site version to 12.6 or later, and upgrade routes to 12.6 or later, before you can install Replication Server 15.5.

You must upgrade the Adaptive Server containing the RSSD to version 15.0 or later, before you can install Replication Server 15.5.

Note Upgrading from any earlier version requires an intermediate upgrade. See Chapter 3, “Upgrading or Downgrading Replication Server” in the Replication Server Configuration Guide for your platform.

Obtaining a license

Replication Server works for a 30-day grace period without a license. You can use the Sybase Software Asset Management (SySAM) system that comes with Replication Server to register your Replication Server product.
Preinstallation tasks

Before you begin the installation, get your license files from the Sybase Product Download Center (SPDC) at https://sybase.subscribenet.com, to which you are automatically enrolled in when you purchase a Sybase product. Log in to SPDC by using the information in your SPDC welcome e-mail.

Note If you have purchased your Sybase software from a Sybase reseller, you will receive a Web key rather than an e-mail message.

For information about SySAM 2, see the Sybase Software Asset Management Users Guide.

Product edition license

Replication Server 15.5 is released as two product editions that contain different base and optional features that require separate licences:

- Enterprise Edition
- Real-time Loading Edition

Table 1-1 describes the base and optional features in each edition and lists the license names for each feature.

Note You cannot use the “Replication Server – Real-Time Loading Edition” to replicate to Adaptive Server.

<table>
<thead>
<tr>
<th>Edition</th>
<th>Feature type</th>
<th>Features</th>
<th>Description</th>
<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>Base</td>
<td>Replication Server</td>
<td></td>
<td>REP_SERVER</td>
</tr>
<tr>
<td>Optional</td>
<td>Advanced Services Option</td>
<td>Replication Server performance enhancements.</td>
<td>REP_HVAR_ASE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ExpressConnect for Oracle</td>
<td>Provides Replication Server with the capability to connect directly to Oracle. See the Replication Server Options 15.5 documentation.</td>
<td>REP_EC_ORA</td>
<td></td>
</tr>
<tr>
<td>Real-Time Loading Edition</td>
<td>Base</td>
<td>Replication Server</td>
<td></td>
<td>REP_SERVER</td>
</tr>
<tr>
<td></td>
<td>Real-time Loading (RTL)</td>
<td>Allows replication to Sybase® IQ.</td>
<td>REPRTL_IQ</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Services Option</td>
<td>Replication Server performance enhancements.</td>
<td>REP_HVAR_ASE</td>
<td></td>
</tr>
<tr>
<td>Optional</td>
<td>None</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Installing SySAM

Before you install Replication Server, you must plan the type of SySAM license configuration you want to use. Depending on your configuration choice, you may also need to perform additional preinstallation tasks before installing Replication Server.

SySAM allows you to acquire a license using a local file or you can acquire a license from a network license server. For more information about SySAM licensing concepts and choosing a license model, see the *Sybase Software Asset Management Users Guide*.

**Note**  There can only be one instance of a SySAM license server running on a machine. To set up a SySAM 2 license server on a machine that is already running SySAM 1, migrate the SySAM 1 license to SySAM 2. A migrated license server can serve licenses for products that are licensed under both SySAM 1 and SySAM 2.

For instructions on migrating a license server, see the *Sybase Software Asset Management Users Guide*.

Replication Server 15.5 is linked with the FLEXnet Publisher version, which is platform-specific. Table 1-2 lists the FLEXnet Publisher version supported on each of these platforms.

<table>
<thead>
<tr>
<th>Platforms</th>
<th>FLEXnet Publisher version</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP Itanium (64-bit)</td>
<td>11.6</td>
</tr>
<tr>
<td>IBM AIX (64-bit)</td>
<td>10.8.5</td>
</tr>
<tr>
<td>IBM p-Series (Linux on POWER) (64-bit)</td>
<td>11.5</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux (RHEL) (32-bit and 64-bit)</td>
<td>11.5</td>
</tr>
<tr>
<td>SuSE Linux Enterprise Server (SLES) (32-bit and 64-bit)</td>
<td>11.5</td>
</tr>
<tr>
<td>Sun Solaris SPARC 8, 9, and 10 (64-bit)</td>
<td>11.5</td>
</tr>
<tr>
<td>Sun Solaris 10 x86-64 (64-bit)</td>
<td>11.5</td>
</tr>
</tbody>
</table>

If you use a SySAM license server, you must update the SySAM license server to at least this version of FLEXnet Publisher before installing Replication Server 15.5. To check the version of your license server, examine the license server log or executing the following command:

```
    cd $SYBASE/SYSAM-2_0/bin
    ./lmutil lmver lmgrd
```
Configuring SySAM for IPv6

Replication Server includes IPv4 and IPv6 versions of the SySAM license server software. You can choose the version of the license server based on your environment using the `sysam configure` command. By default, the installer configures SySAM for IPv4 support.

The IPv4 version of the license server cannot be used properly if you have enabled IPv6 on the license server host. If this is the case you can:

- Disable IPv6 TCP/IP protocol on the license server host.
- Use another Windows host that does not have IPv6 enabled.
- Use a UNIX host for the license server. You can use the IPv4 version of the license even if both IPv4 and IPv6 are enabled on UNIX.

If you are using the IPv6 version of the license server on a Windows host, then this license server can be accessed only through IPv6 protocol. Any host with an IPv4 only network stack will not be able to obtain licenses from this IPv6 license server. To resolve this issue:

- Use a UNIX host for the license server. License servers on UNIX are able to serve licenses to both IPv4 and IPv6 client hosts.
- If you need to use a Windows host for the license server and have both IPv4 and IPv6 clients to the license server, setup two license servers one serving the IPv4 network and the other serving the IPv6 network.

You can use the SySAM script to configure the appropriate version of the license server:

```
sysam configure [IPv6|IPv4]
```

For example, this command configures use of the IPv4/IPv6 dual stack binaries:

```
sysam configure IPv6
```

Reviewing system requirements

Replication Server requires a computer with the system configuration described in Table 1-3.

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM</td>
<td>A minimum of 512MB RAM.</td>
</tr>
</tbody>
</table>
Disk storage

A minimum of 1GB of available hard disk space:
- 950MB for the Replication Server software, supporting files, and log files.
- An additional 20MB for each Replication Server disk partition. The disk partition may be on a different disk than your Sybase software.
- One of the following:
  - Disk space for your Adaptive Server® Enterprise database, which serves as your Replication Server System Database (RSSD) if you are not using the Embedded RSSD (ERRSD). See your Adaptive Server Enterprise documentation for system requirements.
  - 80MB for your SQL Anywhere database, which serves as your ERSSD. The database directory, transaction log directory, and backup directory that make up the 80MB should each reside on different disks.

More disk space may be required, depending on your replication system application.
Preinstallation tasks

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>One of the following platforms:</td>
</tr>
<tr>
<td></td>
<td>• HP-UX Itanium (64-bit):</td>
</tr>
<tr>
<td></td>
<td>• HP-UX 11.23</td>
</tr>
<tr>
<td></td>
<td>• HP-UX 11.31</td>
</tr>
<tr>
<td></td>
<td>The installer requires the gzip utility. Ensure</td>
</tr>
<tr>
<td></td>
<td>that the path to gzip is set in the $PATH</td>
</tr>
<tr>
<td></td>
<td>environment variable.</td>
</tr>
<tr>
<td></td>
<td>• IBM AIX (64-bit):</td>
</tr>
<tr>
<td></td>
<td>• AIX 5.3</td>
</tr>
<tr>
<td></td>
<td>• AIX 6.1</td>
</tr>
<tr>
<td></td>
<td>Before you start Replication Server, you must</td>
</tr>
<tr>
<td></td>
<td>install the IBM XL C/C++ Runtime for AIX and the</td>
</tr>
<tr>
<td></td>
<td>SMP Runtime Libraries for AIX that is suitable</td>
</tr>
<tr>
<td></td>
<td>for your version of AIX. Obtain the libraries</td>
</tr>
<tr>
<td></td>
<td>from your IBM AIX operating system installation</td>
</tr>
<tr>
<td></td>
<td>media.</td>
</tr>
<tr>
<td></td>
<td>These libraries are also available from the IBM</td>
</tr>
<tr>
<td></td>
<td>AIX Web site:</td>
</tr>
<tr>
<td></td>
<td>• The IBM XL C/C++ Runtime for AIX is available</td>
</tr>
<tr>
<td></td>
<td>on the Web site under “Latest updates for</td>
</tr>
<tr>
<td></td>
<td>supported IBM C and C++ compilers”.</td>
</tr>
<tr>
<td></td>
<td>• The SMP Runtime Libraries for AIX is available</td>
</tr>
<tr>
<td></td>
<td>on the Web site under “IBM XL C/C++</td>
</tr>
<tr>
<td></td>
<td>Enterprise Edition for AIX, Runtime Environment</td>
</tr>
<tr>
<td></td>
<td>and Utilities”.</td>
</tr>
<tr>
<td></td>
<td>• Linux on x86 (32-bit and 64-bit):</td>
</tr>
<tr>
<td></td>
<td>• Linux x86 Red Hat Enterprise Linux 4.0 update:</td>
</tr>
<tr>
<td></td>
<td>• kernel-2.6.9-55.EL</td>
</tr>
<tr>
<td></td>
<td>• glibc-2.3.4-2.36</td>
</tr>
<tr>
<td></td>
<td>• Red Hat Enterprise Linux 5.0 update: 1</td>
</tr>
<tr>
<td></td>
<td>• kernel-2.6.18-53.1.13.el5</td>
</tr>
<tr>
<td></td>
<td>• glibc-2.5-18</td>
</tr>
<tr>
<td></td>
<td>• SuSE Linux Enterprise Server SLES 10</td>
</tr>
<tr>
<td></td>
<td>• kernel-smp-2.6.16.21-0.8</td>
</tr>
<tr>
<td></td>
<td>• glibc-2.4-31.2</td>
</tr>
<tr>
<td></td>
<td>• SuSE Linux Enterprise Server SLES 11</td>
</tr>
<tr>
<td></td>
<td>• kernel-*-2.6.27.19-5.1</td>
</tr>
<tr>
<td></td>
<td>• glibc-2.9-13.2</td>
</tr>
</tbody>
</table>
CHAPTER 1  Before You Begin

Review operating system patch requirements

**On Sun Solaris**  Install the latest Solaris recommended patch cluster appropriate for your system. In addition, install these patches if Sun has not yet included the patch in the latest Solaris recommended patch cluster.

<table>
<thead>
<tr>
<th>Operating systems</th>
<th>Recommended patch cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Solaris SPARC 8</td>
<td>111721-04</td>
</tr>
<tr>
<td>Sun Solaris SPARC 9</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Sun Solaris SPARC 10</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Sun Solaris 10 x86-64</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**On Linux**  Linux distributors that supply Linux Kernel Version 2.4.x should provide all the libraries you require. If you are alerted to any outdated or missing libraries, download them from your Linux distributor’s Web site.

**Operating system**

- **Linux on IBM p-Series (Linux on POWER) (64-bit):**
  - Linux x86 Red Hat Enterprise Linux 4.0 update: 5
    - kernel-2.6.9-55.EL
    - glibc-2.3.4-2.36
  - Red Hat Enterprise Linux 5.0 update: 1
    - kernel-2.6.18-53.1.13.el5
    - glibc-2.5-18
  - SuSE Linux Enterprise Server SLES 10
    - kernel-smp-2.6.16.21-0.8
    - glibc-2.4-31.2
  - Sun Solaris on Sun SPARC (64-bit):
    - Solaris 8
    - Solaris 9
    - Solaris 10
  - Sun Solaris 10 x86-64 (64-bit)

**Note**  To run Replication Server 15.5 with an ERSSD on Sun Solaris x86-64 machines, install these patches: 118345-03 and 119964-07.
Contact your operating system provider for any patches recommended for your installation, or check the Replication Server release bulletin for your platform.

If your operating system requires patches, install them before you install Replication Server components.

**Note** Do not use a patch that is earlier than the version suggested for your operating system. If a patch has been superseded by a newer patch, use the most recent one.

To list all currently installed patches and display the operating system version level, enter:

- **On HP Itanium:**
  
  `/usr/sbin/swlist -l patch`

- **On IBM AIX:**

  `/usr/sbin/instfix -a`

- **On Sun Solaris:**

  `showrev -p`

- **On Linux:**

  `rpm -q -a`

### Understanding the installation directory structure

Most components of Replication Server are installed in their own subdirectories, with the executable program, installation and configuration tools, and display-related files needed by the component. The naming convention for subdirectories includes a component identifier, such as REP (for Replication Server) or OCS (for Open Client™ and Open Server™), and the software release version, such as 15_5.

Replication Server 15.5 includes a new version of Replication Server and many of its supporting components. Other Sybase products may contain earlier versions of the same components. Installing Replication Server 15.5 into the same directory containing these existing products, will not impact the products.
However, if you are using other Sybase products, installing Replication Server 15.5 may cause some environment variables to change. You will have to reset the environment variables in order to make the individual products work.

**Note** Replication Server 15.5 can be installed in the same directory as Adaptive Server Enterprise and Open Client and Open Server versions 12.5.1 or later.

However, if you have installed Replication Server 15.5 and other Sybase products versions earlier than 15.5 in the same directory, Sybase recommends that you do not uninstall any of these products from this common directory. Otherwise, these products can no longer be used after uninstallation.

You can install Replication Server 15.5 on top of Replication Server 12.6 and later, in the same $SYBASE directory. Installing 15.5 on top of Replication Server 12.6 and later versions will create a duplicate entry in the interfaces file for SAMPLE_RS, which is the sample Replication Server. rs_init will warn you about the duplicate entry and will use the first instance of SAMPLE_RS found in the interfaces file.

*Do not* install Replication Server version 15.5 on top of these Sybase products:

- Replication Server version 12.5 or earlier
- Adaptive Server version 12.5.0.x or earlier
- Adaptive Server version 12.x (64-bit)
- Open Client and Open Server version 12.5.0 or earlier
- OpenSwitch™ version 12.5 or earlier
- DirectConnect™ version 12.5 or earlier

Doing so incapacitates older versions of these products, and can also adversely affect other Sybase products. If you perform one of these installations, you cannot reverse it with an uninstallation, as uninstalling might remove required components of the older Sybase products updated by Replication Server version 15.5. For this reason, Sybase recommends that you back up your current directory before installing Replication Server version 15.5.

**Note** If you are installing Replication Server 15.5 in an existing Sybase installation directory that contains Adaptive Server version 15.0.x, you may be asked if you wish to install older locales or charset files on top of newer files. To ensure that you have the latest version of these files select “No to all.”
Preinstallation tasks

Shared components are installed in subdirectories that are separate from component subdirectories. For example, the Replication Server subdirectory is $SYBASE/REP-15_5. However, Open Client is installed in $SYBASE/OCS-15_0. The exception is SQL Anywhere (SA), which is installed in $SYBASE/REP-15_5/ASA11, because it is used only for Replication Server. As a result, the directory structure enables you to install into an existing $SYBASE directory structure, as well as to install and use multiple versions of some components.

Note If your earlier installation includes custom applications or scripts that refer to $SYBASE, change them to reflect the new installation directory structure.

A diagnostic server REP-15_5/bin/repserver.diag is installed to capture and display information about internal processes. Do not delete this program as you may need to use it at the direction of Sybase Technical Support, to diagnose and resolve Replication Server problems.

Note The directory structure listed in this section is a partial directory structure. Your actual directory structure may differ, depending on the components you choose to install.

Reviewing the Sybase installation directory contents

The section lists the contents of the Sybase installation directory in alphabetical order.

Installation directory after installing Replication Server

The following items are installed on your machine.

Within $SYBASE:

- charsets – character sets and sort order.
- collate – Unicode.
- config – configuration files.
- interfaces – interfaces file for UNIX.
- jre32 – files used by the installer on the 32-bit platform.
- jre64 – files used by the installer on the 64-bit platform.
locales – localization files for Open Client and Open Server, and other components used by Replication Server. Does not include Replication Server specific localization files.

log – log files of the installation process.

OCS-15_0 – Open Client and Open Server directories and files, including bin, config, devlib, include, lib, lib3p, sample, scripts, sybhelp, and xappdefaults.

REP-15_5 – Replication Server 15.5 files, including ASA11, bin, certificates, devlib (32-bit platforms), devlib64 (64-bit platforms), doc, init, install, lib (32-bit platforms), lib64 (64-bit platforms), lib3p (32-bit platforms), lib3p64 (64-bit platforms), locales, REFIMP-01_0, samp_repserver, scripts, sample, sysam, ThirdPartyLegal, and upgrade.

Shared – common components shared across products, including the Java runtime environment and files and directories for Unified Agent Framework 2.5.

Sybase_Install_Registry – used for storing Sybase product registry information to keep track of version of installed and uninstalled software. The si_reg.xml file gets installed in the $SYBASE/Sybase_Install_Registry directory.

**Warning!** Do not modify or remove si_reg.xml. Modifying or removing this file prevents the installer from accurately managing installed component versions when you install or uninstall Sybase software subsequent to this installation.

sybuninstall – files used by the uninstaller to uninstall Replication Server software.

SYSAM-2_0 – software license manager files including bin, licenses, and log. Linux has an additional software license manager file called META-INF.

UAF-2_5 – the Unified Agent Framework files for the Replication Monitoring Services (RMS), including bin, common, conf, ldap, log, plugins, rtlib, server, services, thirdparty, and utility.

SYBASE.csh, SYBASE.sh, SYBASE.env – files created by the installer that you use to reset environment variables.
Determining the installation type

The Replication Server setup program provides these installation options:

- **Typical (default)** – installs the Replication Server components considered to be useful for most customers. In this type of installation, only the U.S. English language module and its supported character sets are installed. The components that will be installed and the total disk space required display prior to installation.

- **Full** – installs every Replication Server component including all the supported language modules from the installation media. The components that will be installed and the total disk space required display prior to installation.

- **Custom** – allows you to select the components to install. Recommended for advanced users.

*Note* Certain components are automatically installed if they are required to run other selected components.

Determining the installation mode

You can install Replication Server using:

- **Graphical user interface (GUI)** – lets you install the components in an interactive user mode.

- **Console** – lets you install components in a command line environment.

- **Response file** – lets you record or create a response file. You can install Replication Server in two different ways using a response file:
  - **Silent** – lets you save the installation settings in a response file and install the product without any interaction required on your part. This is convenient if you are performing identical installations on multiple machines.
  - **Interactive installation using response file** – lets you install interactively but with all the responses already filled in, so that you can accept all the defaults and install Replication Server according to the responses in the response file. This can be convenient if several sites are installing Replication Server in a nongraphical user interface environment and must conform to a standard installation with minor changes.
Using *dsedit* utility to update *interfaces* file

The Replication Server installation also includes a utility called *dsedit*.

Use *dsedit* utility to update *interfaces* file.

The *dsedit* utility creates and modifies network connection information in the *interfaces* file. The utility is located in $SYBASE/$SYBASE_OCS/bin.

Source *SYBASE.csh* or *SYBASE.sh* to set the required environment variables before executing *dsedit*.

See “Set environment variables” on page 29 for more information.

For more information about *dsedit*, see the *Adaptive Server Enterprise Utility Guide*.

Performing administrative tasks

This section describes administrative tasks that you must complete before you begin the installation process.

1. Back up your current replication system.

2. Create the “sybase” user account and make sure it has read, write, and execute permissions. See “Creating the “sybase” user account” on page 15 for more information.

3. Verify that the directory location for the Sybase installation has sufficient space.

4. Verify that your network software is configured.

   Sybase software uses network software, even if Replication Server and Sybase client applications are installed on a machine that is not connected to a network.

5. If you are using an RSSD, verify that Adaptive Server Enterprise is up and running.

Creating the “sybase” user account

To make sure that Sybase product files and directories are created with consistent ownership and privileges, one user (typically the Sybase System Administrator, who has read, write, and execute privileges) should perform all installation, configuration, and upgrade tasks.
To create a Sybase System Administrator account, choose an existing account, or create a new account and assign a user ID, group ID, and password for it. This account is sometimes called the “sybase” user account. See your operating system documentation for instructions on creating a new user account.

If you have already installed other Sybase software, the “sybase” user probably already exists. Verify that you can log in to the machine using this account.
Installing Replication Server

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

Installing Replication Server in GUI mode

Follow the procedure to install Replication Server components in GUI mode.

❖ Installing in GUI mode

1 Verify that the drive on which you install the Replication Server has enough disk space for the components being installed, and at least 100MB of extra disk space for the installation program.

2 Note The location of the mount command is site-specific and may differ from the instructions shown here. If you cannot mount the CD drive using the path shown, check your operating system documentation or contact your system administrator.

Mount and install the CD.

• On HP Itanium:
Installing Replication Server

a  Log out, log in as “root”, and mount the CD using:

   mount -F cdfs -o ro device_name /mnt/cdrom

b  Log out as “root” and log in again as “sybase.”

c  Start the installer:

   cd /cdrom
   ./setup.bin

• On IBM AIX:

   a  Log in as “sybase” and mount the CD:

      mount -v 'cdrfs' -r device_name /mnt/cdrom

   b  Start the installer:

      cd /device_name
      ./setup.bin

• On Sun Solaris:

   a  The operating system mounts the CD automatically. Log in as
      “sybase.” If you get CD-reading errors, check your operating
      system kernel to make sure the ISO 9660 option is turned on.

   CD-reading errors  Check your operating system kernel to make sure
   the ISO 9660 option is turned on.

   CD pathname with a # sign  If you have previously installed a Sybase
   CD on your system. The # sign will interfere with the installation
   process. To avoid this, perform one of the following actions
   before installing your current CD:

   •  Restart your system.

   •  Eject the CD. Delete the Volume Label file in /vol/dsk, and
      reinsert the CD.

   b  Start the installer:

      cd /cdrom/Volume Label
      ./setup.bin

• On Linux and Linux on POWER:

   a  Log in as “sybase” and mount the CD:

      # mount -t iso9660 /dev/cdrom /mnt/cdrom
b Start the installer:

```
cd /mnt/cdrom
./setup.bin
```

where:

- `cdrom` and `/mnt/cdrom` is the directory (mount-point) you specified when mounting the CD drive.
- `device_name` is the name of the CD device drive.
- `setup.bin` is the executable file name to install Replication Server.

**Installer does not have enough space to run**  Set the environment variable IATEMPDIR to `tmp_dir` before running the installer again, where `tmp_dir` is the temporary directory to which the installation program writes the temporary installation files. When specifying the `tmp_dir`, include the full path.

3 In the Introduction window, click Next.

4 Indicate where to install Replication Server:

- To select an installation directory, click Choose. A window appears, and from that window browse for and select the directory.
- To create a new directory, enter a new directory path.
- To restore to the default directory if you do not want to use the directory that you have entered, click Restore Default Folder.

One of these occurs:

- If the installation directory you chose does not exist, this message appears:
  
  The directory `<directory_name>` does not exist. Do you want to create it?

  Click Yes.

- If the installation directory you selected exists, and contains a prior installation, this message appears:

  Warning: You have chosen to install into an existing directory.  
  If you proceed with this installation, any older versions of the products you choose to install that are detected in this directory will be replaced.

  Click Next.
5 Select the type of installation:

- Typical – installs the default components. This is recommended for most users.
- Full – installs every Replication Server component, including all the supported language modules.
- Custom – selects the components to install. Some components are automatically installed if they are required to run your selected components.

Click Next.

6 Read the License and Copyright Agreement:

1 Select the geographic location from where you are installing to display the agreement for your region.
2 Select “I agree to the terms of the Sybase license for the install location specified.” You must agree to the license and copyright agreement before you can continue with the installation.
3 Click Next.

7 On the Sybase Software Asset Management License Server window, select one of:

- Specify License Keys – click Browse to select the license file. To select multiple license files, use Shift+Click or Ctrl+Click. The license pane displays the license information.
  Alternatively, copy and paste the license information directly in the license pane. Click Next.

  If you specify a served license key, the installer prompts you to install a new SySAM license server. Click one of:
  - Next – to install the new SySAM license server and follow the installation prompts.
  - Previous – and select the “Use previously deployed license server” option if you have an existing SySAM license server on the same host.
  - Use Previously Deployed License Server – if you have a previously deployed license server, enter the host name of the machine where the license server is running, and the port number if the port number you are using is not default. Click Next.
• Continue installation without a license key – if you do not have licenses for any of the Replication Server components, you can select this option, and click Next to proceed. The installer allows you to install and use the Replication Server components without a license for a grace period of 30 days. To continue using these components after the end of the grace period, obtain valid licenses from the SPDC, and install these licenses using the Replication Server License Installer.

For more information on SySAM licensing, see the Sybase Software Asset Management Users Guide.

8 Configuring your server for e-mail notification enables designated users receive information about license management events requiring attention.

Provide the following information:
• SMTP server host name
• SMTP server port number
• E-mail Return Address
• Recipient e-mail addresses
• Message severity that triggers e-mail messages

Click Next.

9 The installation summary window displays the selections you have made.

Review the information, and click Install.

10 On the Start Sample Replication Server window, select:
• Yes – to configure and start a sample Replication Server. The installer displays the configuration information for the sample Replication Server. Write this information down.
• No – to complete the installation and configure a fully-featured Replication Server manually.

If you select No, you can configure and start a sample Replication Server after installation.

Click Next.

11 If you chose to configure and start a sample Replication Server, the installer will proceed with the process to configure and start the sample Replication Server.

Click Next when done.
12 If Replication Server is installed successfully, a final window appears, indicating a successful installation. Click Done to exit the installer.

After the successful installation:

- Verify the installation. See “Checking for a valid installation” on page 24.
- Perform the postinstallation tasks. See Chapter 3, “Postinstallation Tasks.”

Installing Replication Server in console mode

To run the installation program without the GUI, launch the installer in console mode. If the installer launches automatically, click Cancel to cancel the GUI installation, then launch the setup program from a terminal or console.

❖ Installing in console mode

The steps for installing components in an interactive text mode are the same as those described in “Installing Replication Server in GUI mode” on page 17, except that you execute the installer from the command line using the setup -i console command, and you enter text to select installation options.

1 At the command prompt, enter:

   ./setup.bin -i console

2 The flow of the installation is identical to a GUI installation, except that the display is written to a terminal window and responses are entered using the keyboard. Follow the remaining prompts to install Replication Server.

Installing Replication Server using a response file

To perform a silent, or “unattended” installation, run the installer and provide a response file that contains your preferred installation configuration.

Creating a response file

To create a response file when installing in GUI or console mode, specify the -r command line argument. The -r argument records your responses to the installation wizard’s prompts and creates a response file when the installation wizard exits. The response file is a text file that you can edit to change any responses prior to using it in any subsequent installations.
To generate a response file during installation, on the command line:

```bash
./setup.bin -r responseFileName
```

where `responseFileName` is the file name you choose for the response file. When specifying the response file, include its full path. For example:

```
/home/sybase/REP/ResponseFile.txt
```

**Note** You must provide the full path name for the response file you create.

### Interactive installation using a response file

An interactive installation using a response file lets you either accept the default values supplied by the response file or enter a different value. This is useful when installing multiple instances of Replication Server that have similar but not identical settings.

To run the GUI installation using the response file, enter:

```bash
./setup.bin -f responseFileName
```

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

### Installing in silent mode

A silent or unattended installation does not involve user interaction; and all installation configuration information is taken from the response file. This is useful when you want multiple identical installations or a fully automated.

To install in silent mode, run:

```bash
./setup.bin -f responseFileName -i silent -DAGREE_TO_SYBASE_LICENSE=true
```

Where:

- `responseFileName` – is the absolute path of the file containing the installation options you chose.
- `-D` option– specifies that you agree with the Sybase License Agreement text.
Checking for a valid installation

Except for the absence of the GUI screens, all actions of the installer are the same, and the result of an installation in silent mode is exactly the same as one done in GUI mode with the same responses.

**Note** You must agree to the Sybase License Agreement when installing in silent mode. You can either:

- Include the option `-DAGREE_TO_SYBASE_LICENSE=true` in the command line argument.
- Edit the response file to include the property `AGREE_TO_SYBASE_LICENSE=true`.

Checking for a valid installation

1. View the logs files in `$SYBASE/log` directory to check for errors. A valid installation does not contain the word “error.”

2. Check that the date of the `si_reg.xml` file reflects the date of this current installation.

Troubleshooting installation problems

For troubleshooting during installation:

Set the environment variable `LAX_DEBUG` to “true” before running the installer. This installer will generate additional detailed installation information that is useful for debugging installer issues.

**Note** If you encounter errors during installation, check the installation log file to see a record of the installation process. The log file is located in `$SYBASE/log` directory.

If this is the first time you have installed a Sybase product on this machine, the installer creates a Sybase installation directory. This directory contains the support files for all Sybase products.
CHAPTER 2   Installing Replication Server

Command line options

Table 2-1 lists the command line options that you can use when running an installer or uninstaller.

Table 2-1: Command line options

<table>
<thead>
<tr>
<th>Option</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>-i swing</td>
<td>Uses the GUI mode.</td>
</tr>
<tr>
<td>-i console</td>
<td>Uses the console interface mode, where messages during installation are displayed on the Java console and the wizard is run in console mode.</td>
</tr>
<tr>
<td>-i silent</td>
<td>Installs or uninstalls the product in silent mode, where the installation or uninstallation is performed with no user interaction and the installation is “silent.”</td>
</tr>
<tr>
<td>-D</td>
<td>Passes custom variables and properties. For example, if you want to override the default installation directory when you run the installer, enter: <code>&lt;install_launcher_name&gt;</code> -DUSER_INSTALL_DIR=E:\Sybase</td>
</tr>
<tr>
<td>-r</td>
<td>Generates a response file and a reference.</td>
</tr>
<tr>
<td>-f</td>
<td>References response files.</td>
</tr>
<tr>
<td>-l</td>
<td>Sets the installer’s locales.</td>
</tr>
<tr>
<td>-?</td>
<td>Displays the installer help.</td>
</tr>
</tbody>
</table>
CHAPTER 3

Postinstallation Tasks

This chapter describes the postinstallation tasks that you need to perform after installing the Replication Server software.

For more information, see the Replication Server Configuration Guide for UNIX.

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<tr>
<td>Start Adaptive Server for the RSSD</td>
<td>28</td>
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<tr>
<td>Configure and start the sample Replication Server</td>
<td>28</td>
</tr>
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<td>29</td>
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</tbody>
</table>

Review the log files

Information about the configuration of Replication Server is stored in the following log files:

- Replication Server installer error log file:
  
  $SYBASE/log

- Sample Replication Server error logs:
  
  $SYBASE/REP-15_5/SAMPLE_RS.log

- Sample Replication Server SQL Anywhere error logs:
  
  $SYBASE/REP-15_5/samp_repserver/errorlog/

- rs_init log file:
  
  $SYBASE/REP-15_5/init/logs/logmmdd.xxx
  For example: $SYBASE/REP-15_5/init/logs/log1106.001

- Replication Server log file:
  
  $SYBASE/REP-15_5/install/rs_name.log
  For example: $SYBASE/REP-15_5/install/REP_redtail.log
Start Adaptive Server for the RSSD

To use the RSSD stored on Adaptive Server Enterprise, install the Adaptive Server Enterprise database, if you have not done so already. For installation instructions, see the Adaptive Server Enterprise Installation Guide for your platform.

After successful installation, start Adaptive Server Enterprise. For more information, see the Adaptive Server Enterprise Configuration Guide for your platform.

Note If you are upgrading to a later version of Adaptive Server Enterprise and you have replicated databases, see the Adaptive Server Enterprise Installation Guide for your platform.

Configure and start the sample Replication Server

During installation, the installer prompts you if you want to configure and start a sample Replication Server. Regardless of your choice, the installer creates a resource file, $SYBASE/REP-15_5/samp_repserver/SAMPLE_RS.res, for the sample Replication Server and updates the interfaces file. If you selected No, you can still configure and start the sample Replication Server after installation using this resource file.

To create and start the sample Replication Server after installation, at the command prompt, enter:

```
  cd $SYBASE/REP-15_5/samp_repserver
  ./rs_init-SAMPLE_RS.sh
```

The rs_init utility in this script displays commands as it executes them, and writes this output to its log.

If you encounter errors during configuration and start-up of the sample Replication Server, read this log file, $SYBASE/REP-15_5/init/logs/logmmdd.xxx, where:

- `mm` – is the month.
- `dd` – is the day.
- `xxx` – is the number of that instance of the log on that day.
The sample Replication Server is configured using the `SAMPLE_RS.res` resource file. All files and logs associated with the sample Replication Server are in the directory `$SYBASE/REP-15_5/samp_repserv`.

Table 3-1 contains the sample Replication Server configuration information. Keep this information in a safe place for later reference.

<table>
<thead>
<tr>
<th>Sample Replication Server item</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>SAMPLE_RS</td>
</tr>
<tr>
<td>Port</td>
<td>11752</td>
</tr>
<tr>
<td>User name</td>
<td>sa</td>
</tr>
<tr>
<td>Password</td>
<td>None</td>
</tr>
<tr>
<td>ERSSD server name</td>
<td>SAMPLE_RS_ERSSD</td>
</tr>
<tr>
<td>ERSSD server port</td>
<td>11751</td>
</tr>
<tr>
<td>ERSSD user name</td>
<td>SAMPLE_RS_RSSD_prim</td>
</tr>
<tr>
<td>ERSSD password</td>
<td>SAMPLE_RS_RSSD_prim_ps</td>
</tr>
</tbody>
</table>

For more information about `rs_init`, see Chapter 2, “Configuring Replication Server and Adding Databases with `rs_init`,” in the *Replication Server Configuration Guide for UNIX*.

### Set environment variables

Replication Server installer automatically sets the required system environment variables. The installer installs three files that contain these environment variables:

- `$SYBASE/SYBASE.sh`
- `$SYBASE/SYBASE.csh`
- `$SYBASE/SYBASE.env`

After exiting Replication Server installer, you may need to reset the environment variables, for example, if someone other than the Sybase administrator must use the software.

To set these environment variables, you can either:
Set environment variables

- Source `SYBASE.sh` or `SYBASE.csh` to change the component’s environment variables immediately for your current session, before invoking any component, or
- Update the environment variables in the shell files to permanently change the component’s environment variables.

Table 3-2 describes the environment variables.

**Table 3-2: Environment variables for UNIX and Linux**

<table>
<thead>
<tr>
<th>Environment variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$LD_LIBRARY_PATH</td>
<td>Specifies the subdirectory path to the Open Client and Open Server runtime shared library.</td>
</tr>
<tr>
<td>$PATH</td>
<td>Specifies the directory path to Replication Server files.</td>
</tr>
<tr>
<td>$SYBASE</td>
<td>Specifies the home directory where you install all Sybase products.</td>
</tr>
<tr>
<td>$SYBASE_JRE6</td>
<td>Specifies the subdirectory path to the Java Runtime Environment (JRE).</td>
</tr>
<tr>
<td>$SYBASE_JRE6_32</td>
<td>Specifies the subdirectory path to the Java Runtime Environment (JRE).</td>
</tr>
<tr>
<td>$SYBASE_JRE6_64</td>
<td>Specifies the subdirectory path to the Java Runtime Environment (JRE).</td>
</tr>
<tr>
<td>$SYBASE_OCS</td>
<td>Specifies the subdirectory path to Open Client files.</td>
</tr>
<tr>
<td>$SYBASE_REP</td>
<td>Specifies the subdirectory path to Replication Server.</td>
</tr>
<tr>
<td>$SYBASE_UA</td>
<td>Specifies the subdirectory path to the Unified Agent Framework and Replication Monitoring Services.</td>
</tr>
</tbody>
</table>
CHAPTER 4

Uninstalling Replication Server

Before uninstalling:

- Log on to your machine using an account with administrator privileges.
- Shut down all Sybase applications and processes.
- Determine the mode of uninstallation—GUI or silent mode. Sybase recommends that you use the GUI mode to uninstall.

Note The uninstaller removes only those files that were loaded from the installation media. Some Sybase files, such as log and configuration files, are left intact for administrative purposes. jre and other installed directories are also not removed by the uninstaller. You must remove these directories manually.

Uninstallation procedures

You can invoke the uninstall procedure using either GUI or console methods. Sybase recommends that you use the GUI method.

- **Uninstalling in GUI mode**
  1. To uninstall, enter:
     ```bash
     $SYBASE/sybuninstall/RepServer_Suite/uninstall
     ```
  2. Click Next.
  3. Select one of:
Uninstallation procedures

- Complete Uninstall – completely remove all features and components of Replication Server. The files and folders created after the installation are not affected.
- Uninstall Specific Features – uninstall specific features of Replication Server.
  Click Next.

4 The uninstallation summary window displays the selections you have made. Review the information, and click Next.

**Note** If you have installed SySAM during installation, this window shows SySAM license utility. Sybase recommends that you do not uninstall the SySAM license utility if you are using SySAM license server.

The Uninstall Complete window lists the items that cannot be removed.

5 Click Done to exit from the installer.

❖ **Uninstalling in console mode**

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

```bash
$SYBASE/sybuninstall/RepServer_Suite/uninstall -i console
```

The uninstall program starts.

2 The flow of the uninstall program is identical to a regular GUI uninstall, except that the display is written to a terminal window and responses are entered using the keyboard. Follow the remaining prompts to uninstall Replication Server.

For a complete list of command line options, see “Command line options” on page 25.

**Note** You may be prompted to decide whether to remove shared files. Sybase recommends that you do not remove shared files.

❖ **Uninstalling in silent mode**

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

```bash
$SYBASE/sybuninstall/RepServer_Suite/uninstall -i silent
```

The uninstall program starts.
For a complete list of command line options, see “Command line options” on page 25.

**Note** You may be prompted to decide whether to remove shared files. Sybase recommends that you do not remove shared files.
CHAPTER 5

Installing and Uninstalling Replication Manager

Overview

Replication Manager is a utility for creating, managing, and monitoring replication environments, and is available as a plug-in to Sybase Central, Java Edition. Replication Manager communicates directly with Replication Server and Adaptive Server Enterprise servers.

Depending upon the scale and complexity of your replication environment, you can set up either a two-tier or a three-tier solution for your environment. In a two-tier management solution, Replication Manager connects directly to the servers in the environment without communicating through the management layer.

In a three-tier management solution, Replication Manager monitors large and complex replication environments with the help of Replication Monitoring Services (RMS). Replication Manager connects to the servers in the environment through RMS.

Replication Manager:

- Uses a graphical user interface.
- Allows you to manage, monitor, and troubleshoot replication system components, such as connections, routes, replication definitions, subscriptions, and so forth.
Installing Replication Manager

You can install Replication Manager using either GUI mode, console mode, or silent mode. However, Sybase recommends that you use GUI mode.

Installing Replication Manager in GUI mode

Follow the procedures in this section to install the Replication Manager.

❖ Installing in GUI mode

1 Launch the installer.

• On IBM AIX:
  /ibmaix64/RMP_Suite/setupaix.bin

• On HP Itanium:
  /hpia64/RMP_Suite/setuphpi64.bin

• On Linux on POWER (IBM pSeries):
  /ibmplinux64/RMP_Suite/setuplinuxppc64.bin

• On Linux (32-bit):
In the Introduction window, click Next.

3 Read the License and Copyright Agreement:
   1 Select the geographic location from where you are installing to display the agreement for your region.
   2 Select “I agree to the terms of the Sybase license for the install location specified.” You must agree to the license and copyright agreement before you can continue with the installation.
   3 Click Next.

4 Indicate where to install Replication Manager:
   • To select an installation directory, click Choose. A window appears, and from that window browse for and select the directory.
   • To create a new directory, enter a new directory path.
   • To restore to the default directory if you do not want to use the directory that you have entered, click Restore Default Folder.

One of these occurs:
   • If the installation directory you chose does not exist, this message appears:

   The directory <directory name> does not exist. Do you want to create it?

   Click Yes.

   • If the installation directory you selected exists, and contains a prior installation, this message appears:

   Warning: You have chosen to install into an existing directory.
   If you proceed with this installation, any older versions of the products you choose to install that are detected in this directory will be
Installing Replication Manager

Replacing.

Click Next.

5 The installation summary window displays the selections you have made. Review the information, and click Install.

6 If Replication Manager is installed successfully, a final window appears, indicating a successful installation. Click Done to exit the installer.

Installing Replication Manager in console mode

To run the installation program without the GUI, launch the installer in console mode. If the installer launches automatically, click Cancel to cancel the GUI installation, then launch the setup program from a terminal or console.

❖ Installing in console mode

The steps for installing components in an interactive text mode are the same as those described in “Installing in GUI mode” on page 36, except that you execute the installer from the command line using the setup -i console command, and you enter text to select installation options.

1 At the command prompt, enter.

• On IBM AIX:
  /ibmaix64/RMP_Suite/setupaix.bin -i console
• On HP Itanium:
  /hpia64/RMP_Suite/setuphpia64.bin -i console
• On Linux on POWER (IBM pSeries):
  /ibmplinux64/RMP_Suite/setuplinuxppc64.bin -i console
• On Linux (32-bit):
  /linuxia32/RMP_Suite/setuplinux32.bin -i console
• On Linux (64-bit):
  /linuxamd64/RMP_Suite/setuplinux64.bin -i console
• On Sun Solaris SPARC:
  /sunsparc64/RMP_Suite/setupsolarissparc.bin -i console
• On Sun Solaris 10 x86/x64:
  /sunx64/RMP_Suite/setupsolarisx86.bin -i console
The flow of the installation is identical to a GUI installation, except that the display is written to a terminal window and responses are entered using the keyboard. Follow the remaining prompts to install Replication Manager.

For a complete list of command line options, see Table 2-1 on page 25.

**Installing using a response file**

To perform a silent, or “unattended” installation, run the installer and provide a response file that contains your preferred installation configuration.

**Creating a response file**

To create a response file when installing in GUI or console mode, specify the `-r` command line argument. The `-r` argument records your responses to the installation wizard’s prompts and creates a response file when the installation wizard exits. The response file is a text file that you can edit to change any responses prior to using it in any subsequent installations.

To generate a response file during installation, on the command line:

- On **IBM AIX**:
  ```bash
  /ibmaix64/RMP_Suite/setupaix.bin -r responseFileName
  ```
- On **HP Itanium**:
  ```bash
  /hpia64/RMP_Suite/setuphpia64.bin -r responseFileName
  ```
- On **Linux on POWER (IBM pSeries)**:
  ```bash
  /ibmplinux64/RMP_Suite/setuplinuxppc64.bin -r responseFileName
  ```
- On **Linux (32-bit)**:
  ```bash
  /linuxia32/RMP_Suite/setuplinux32.bin -r responseFileName
  ```
- On **Linux (64-bit)**:
  ```bash
  /linuxamd64/RMP_Suite/setuplinux64.bin -r responseFileName
  ```
- On **Sun Solaris SPARC**:
  ```bash
  /sunsparc64/RMP_Suite/setupsolarisSparc.bin -r responseFileName
  ```
- On **Sun Solaris 10 x86/x64**:
  ```bash
  /sunx64/RMP_Suite/setupsolarisx86.bin -r responseFileName
  ```
Installing Replication Manager

where responseFileName is the file name you choose for the response file. When specifying the response file name, include its full path. For example:

/home/sybase/RMP/ResponseFile.txt

**Note** You must provide the full path name for the response file you create.

Installing in silent mode

A silent or unattended installation requires no user interaction, and all installation configuration information is taken from the response file. This is useful when you want multiple identical installations or a fully automated installation process.

To install in silent mode, run:

- **On IBM AIX:**
  
  /ibmaix64/RMP_Suite/setupaix.bin -f responseFileName -i silent -DAGREE_TO_SYBASE_LICENSE=true

- **On HP Itanium:**
  
  /hpia64/RMP_Suite/setuphpia64.bin -f responseFileName -i silent -DAGREE_TO_SYBASE_LICENSE=true

- **On Linux on POWER (IBM pSeries):**
  
  /ibmplinux64/RMP_Suite/setuplinuxppc64.bin -f responseFileName -i silent -DAGREE_TO_SYBASE_LICENSE=true

- **On Linux (32-bit):**
  
  /linuxia32/RMP_Suite/setuplinux32.bin -f responseFileName -i silent -DAGREE_TO_SYBASE_LICENSE=true

- **On Linux (64-bit):**
  
  /linuxamd64/RMP_Suite/setuplinux64.bin -f responseFileName -i silent -DAGREE_TO_SYBASE_LICENSE=true

- **On Sun Solaris SPARC:**
  
  /sunsparc64/RMP_Suite/setupSolarisSparc.bin -f responseFileName -i silent -DAGREE_TO_SYBASE_LICENSE=true

- **On Sun Solaris 10 x86/x64:**
  
  /sunx64/RMP_Suite/setupSolarisx86.bin -f responseFileName -i silent
-DAGREE_TO_SYBASE_LICENSE=true

Where:

- \textit{responseFileName} is the absolute path of the file name containing the installation options you chose.
- The \texttt{-D} option specifies that you agree with the Sybase License Agreement text.

\textbf{Note} You must agree to the Sybase License Agreement when installing in silent mode. You can either:

- Include the option \texttt{-DAGREE_TO_SYBASE_LICENSE=true} in the command line argument.
- Edit the response file to include the property \texttt{AGREE_TO_SYBASE_LICENSE=true}

Except for the absence of the GUI screens, all actions of the installer are the same, and the result of an installation in silent mode is exactly the same as one done in GUI mode with the same responses.

\section*{Checking for a valid installation}

Check the following to make sure that your Replication Manager installation is valid and successful:

- View the \texttt{$SYBASE/RMP-15_5/InstallAndRegister.log} file and also view all logs in \texttt{$SYBASE/log} to check for errors. A valid installation does not contain the word “error.”
- Ensure that the date of the \texttt{si_reg.xml} file reflects the date of the current installation.
- Ensure that you can access Replication Manager from Sybase Central.
For information about using Sybase Central, the Replication Manager, and the Replication Manager plug-in online help, see Chapter 3, “Managing Replication Server with Sybase Central” in the Replication Server Administration Guide Volume 1.

**Note** Before you use the Replication Manager, make sure that the Replication Manager is registered with Sybase Central. See the “Preparing to manage a replication environment” section in the Replication Manager plug-in online help for information.

---

### Uninstalling Replication Manager

**Before uninstalling:**

- Log on to your machine using an account with administrator privileges.
- Shut down all Sybase applications and processes.
- Determine the mode of uninstallation—GUI or silent mode. Sybase recommends that you use the GUI mode to uninstall.

**Note** The uninstaller removes only those files that were loaded from the installation media in the uninstallation process. Some Sybase files, such as log and configuration files, are left intact for administrative purposes.

- **Uninstalling in GUI mode**
  1. To uninstall in GUI mode, enter:
     ```bash
     $SYBASE/sybuninstall/ReplicationManager/uninstall
     ```
  2. In the Introduction window, click Next.
  3. The uninstallation summary window displays the location where you have installed Replication Manager. Click Next.
4 The Uninstall Complete window appears. Click Done to exit from the installer.

**Note** You may be prompted to decide whether to remove files that are created outside the installer. Sybase recommends that you do not remove these files.

5 If you are uninstalling the Replication Manager plug-in from Sybase Central, Java Edition, and you have previously installed both the Replication Manager plug-in and the Adaptive Server plug-in to Sybase Central, Java Edition, unregister the Replication Manager plug-in inside Sybase Central.

See the Replication Manager plug-in online help for more information.

❖ **Uninstalling in console mode**

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

```
$SYBASE/sybuninstall/ReplicationManager/uninstall -i console
```

The uninstall program starts.

2 The flow of the uninstall program is identical to a regular GUI uninstall, except that the display is written to a terminal window and responses are entered using the keyboard. Follow the remaining prompts to uninstall Replication Manager.

For a complete list of command line options, see “Command line options” on page 25.

**Note** You may be prompted to decide whether to remove files that are created outside the installer. Sybase recommends that you do not remove these files.

3 If you are uninstalling the Replication Manager plug-in from Sybase Central, Java Edition, and you have previously installed both the Replication Manager plug-in and the Adaptive Server plug-in to Sybase Central, Java Edition, unregister the Replication Manager plug-in inside Sybase Central.

See the Replication Manager plug-in online help for more information.
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