



Installation Guide

Replication Server[®] 15.7.1

SP100

Windows

DOCUMENT ID: DC32236-01-1571100-01

LAST REVISED: May 2013

Copyright © 2013 by Sybase, Inc. All rights reserved.

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

Upgrades are provided only at regularly scheduled software release dates. No part of this publication may be reproduced, transmitted, or translated in any form or by any means, electronic, mechanical, manual, optical, or otherwise, without the prior written permission of Sybase, Inc.

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

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world.

Java and all Java-based marks are trademarks or registered trademarks of Oracle and/or its affiliates in the U.S. and other countries.

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

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

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

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

Contents

Conventions	1
Installation Task Overview	5
Installation Task Flows	5
Replication Server Components	7
Planning Your Installation	9
Replication Server Release Bulletin	9
Mixed-Version Support	9
Obtaining a License at SPDC or SMP	10
SySAM License Server	11
IPv6 Configuration	12
SySAM Licensing Checkout	12
Product Editions and License Types	13
Sub-capacity Licensing	15
System Requirements	17
System Requirements for Replication Server on Windows	17
Installation Directory Structure	20
Installing Replication Server in a Unique Directory on Windows	21
Installation Directory Contents and Layout	23
Installation Setup Options	23
Installation Mode	24
Performing Administrative Tasks	24
Installing Replication Server	25
Installing Replication Server in GUI Mode	25
Installing Replication Server Data Assurance Option	29
Installing Replication Server in Console Mode	29
Installing Replication Server Using a Response File	30
Creating a Response File	30
Installing in GUI Mode Using a Response File	30

- Installing in Silent Mode31
- Installing ODBC Libraries for ExpressConnect for HANA DB32
- Troubleshoot Installation Problems32
- Command Line Options32
- Postinstallation Tasks35**
 - Log Files35
 - Adaptive Server for the RSSD35
 - Sample Replication Server Configuration36
 - Server Entries in the sql.ini File37
 - Environment Variables on Windows37
 - Runserver File38
 - Replication Server Registry Keys38
- Uninstalling Replication Server41**
 - Uninstalling in GUI Mode41
 - Uninstalling in Console Mode42
 - Uninstalling in Silent Mode42
- Obtaining Help and Additional Information45**
 - Technical Support45
 - Downloading Product Updates45
 - Product and Component Certifications46
 - Accessibility Features46
- Index49**

Conventions

These style and syntax conventions are used in Sybase® documentation.

Style conventions

Key	Definition
monospaced (fixed-width)	<ul style="list-style-type: none"> • SQL and program code • Commands to be entered exactly as shown • File names • Directory names
<i>italic monospaced</i>	In SQL or program code snippets, placeholders for user-specified values (see example below).
<i>italic</i>	<ul style="list-style-type: none"> • File and variable names • Cross-references to other topics or documents • In text, placeholders for user-specified values (see example below) • Glossary terms in text
bold san serif	<ul style="list-style-type: none"> • Command, function, stored procedure, utility, class, and method names • Glossary entries (in the Glossary) • Menu option paths • In numbered task or procedure steps, user-interface (UI) elements that you click, such as buttons, check boxes, icons, and so on

If necessary, an explanation for a placeholder (system- or setup-specific values) follows in text. For example:

Run:

```
installation directory\start.bat
```

where *installation directory* is where the application is installed.

Syntax conventions

Key	Definition
{ }	Curly braces indicate that you must choose at least one of the enclosed options. Do not type the braces when you enter the command.
[]	Brackets mean that choosing one or more of the enclosed options is optional. Do not type the brackets when you enter the command.
()	Parentheses are to be typed as part of the command.
	The vertical bar means you can select only one of the options shown.
,	The comma means you can choose as many of the options shown as you like, separating your choices with commas that you type as part of the command.
...	An ellipsis (three dots) means you may repeat the last unit as many times as you need. Do not include ellipses in the command.

Case-sensitivity

- All command syntax and command examples are shown in lowercase. However, replication command names are not case-sensitive. For example, **RA_CONFIG**, **Ra_Config**, and **ra_config** are equivalent.
- Names of configuration parameters are case-sensitive. For example, **Scan_Sleep_Max** is not the same as **scan_sleep_max**, and the former would be interpreted as an invalid parameter name.
- Database object names are not case-sensitive in replication commands. However, to use a mixed-case object name in a replication command (to match a mixed-case object name in the primary database), delimit the object name with quote characters. For example: **pdb_get_tables "TableName"**
- Identifiers and character data may be case-sensitive, depending on the sort order that is in effect.
 - If you are using a case-sensitive sort order, such as “binary,” you must enter identifiers and character data with the correct combination of uppercase and lowercase letters.
 - If you are using a sort order that is not case-sensitive, such as “nocase,” you can enter identifiers and character data with any combination of uppercase or lowercase letters.

Terminology

Replication Agent™ is a generic term used to describe the Replication Agents for Adaptive Server® Enterprise, Oracle, IBM DB2 UDB, and Microsoft SQL Server. The specific names are:

- RepAgent – Replication Agent thread for Adaptive Server Enterprise
- Replication Agent for Oracle

- Replication Agent for Microsoft SQL Server
- Replication Agent for UDB – for IBM DB2 on Linux, Unix, and Windows
- Replication Agent for DB2 for z/OS

Installation Task Overview

To successfully install and configure Replication Server®, use the Replication Server Configuration Guide along with the Installation Guide.

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

The *Replication Server Configuration Guide for Windows* explains how to:

- Gather the information you need to prepare your system for your configuration
- Configure 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

See *Replication Server Configuration Guide for Windows > Preparation for Installing and Configuring Replication Server* for an installation worksheet and a database setup worksheet to help you plan your replication system.

Installation Task Flows

Task flows define a complete path for planning, installing, and uninstalling.

Choose the path that best describes your scenario.

Note: Print this topic and use it as a checklist.

Installing the product for the first time

1. Plan your installation and review system requirements. See *Planning Your Installation* on page 9 and *System Requirements* on page 17.
2. Install Replication Server. See *Installing Replication Server* on page 25.
3. Perform postinstallation. See *Postinstallation Tasks* on page 35.

Uninstalling Replication Server

Uninstall Replication Server. See *Uninstalling Replication Server* on page 41.

Replication Server Components

Replication Server software includes several components, as well as a variety of support files.

Replication Server includes:

- Replication Server
- Replication Server support files (for example, scripts and configuration files)
- SQL Anywhere® for Embedded Replication Server System Database (ERSSD)
- RepAgent for ERSSD
- ExpressConnect for Oracle (ECO) – you can use ECO if you have a licensed Replication Server and have purchased Replication Server Option for Oracle, which includes the additional ECO license.
- ExpressConnect for HANA DB (ECH)

Planning Your Installation

Before you install or upgrade, prepare your environment.

- Identify the components and options to install or upgrade.
- Obtain a license.

Note: If you are using served licenses, you must install the SySAM license server version 2.1 or later.

- Make sure your system meets all requirements for your installation scenario and planned use.

Replication Server Release Bulletin

Obtain the updated information from the release bulletin.

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

The latest release bulletins are available on the Sybase Product Documentation Web site at <http://www.sybase.com/support/manuals>.

Mixed-Version Support

In a mixed-version environment, Replication Server must be version 12.6 and later.

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

See *Replication Server Configuration Guide for your platform > Requirements for Upgrading to Version 15.5 and Later*.

Note: Upgrading from any version earlier than 12.6 requires an intermediate upgrade. See *Replication Server Configuration Guide for your platform > Upgrading or Downgrading Replication Server*.

Obtaining a License at SPDC or SMP

Before installing your product, choose a SySAM license model, determine license server information, and obtain license files.

When you purchase SySAM 2-enabled Sybase products, you must generate, download, and deploy SySAM product licenses.

- If you purchased your product from Sybase or an authorized Sybase reseller, go to the secure Sybase Product Download Center (SPDC) at <https://sybase.subscribenet.com> and log in to generate license keys. The license generation process may vary slightly, depending on whether you ordered directly from Sybase or from a Sybase reseller
- If you ordered your product under an SAP® contract and were directed to download from SAP Service Marketplace (SMP), you can use SMP at <http://service.sap.com/licensekeys> to generate license keys for Sybase products that use SySAM 2-based licenses.

1. Choose a SySAM license model.

License Model	Description
Unserviced license model	Licenses are obtained directly from the license file. If you are using an unserved license, save the license file to the machine on which you install the product.
Served license model	A license server manages the allocation of licenses among multiple machines.

2. For the served license model, decide whether to use an existing or new license server.

The license server and your product installation need not share the same machine, operating system, or architecture.

3. If you chose the served license model:

- To install on a machine that is running a SySAM 1.0 license server, follow migration instructions in the *SySAM Users Guide* to migrate to the newer SySAM version.

Note: There can be only one instance of a SySAM license server running on a given machine. To set up a SySAM 2 license server on a machine that is already running a SySAM 1.0 license server, you must migrate the old license server to SySAM 2. A migrated license server can serve licenses for both SySAM 1.0 and SySAM 2-enabled products.

4. Get your host IDs.

When you generate licenses at the Sybase Product Download Center (SPDC) or SAP Service Marketplace (SMP), you must specify the host ID of the machine where the licenses will be deployed.

- For unserved licenses – the host ID of the machine where the product will run. If you are running a product with per-CPU or per-chip licensing that supports SySAM sub-capacity and want to run the product in a virtualized environment, see *SySAM Sub-capacity Licensing* in the *SySAM Users Guide*.
 - For served licenses – the host ID of the machine where the license server will run.
5. Before installing your product, get license files from SPDC or from SMP using the access information you receive from Sybase or your Sybase reseller.

Log in to SPDC or SMP by using the information in your welcome e-mail message.

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

If you plan to use sub-capacity licensing, see the *SySAM Users Guide* for information on how to configure using the **sysamcap** utility.

Use **sysadmin lmconfig** to configure and show license management-related information in Replication Server. See *Replication Server Reference Manual > Replication Server Commands > sysadmin lmconfig*.

See also

- *Product Editions and License Types* on page 13

SySAM License Server

Make sure that you have installed the required SySAM license server version. Replication Server 15.5 and later include FLEXnet Publisher license server manager, which is platform-specific.

- License server version
You must install the SySAM license server version 2.1 or later. To determine the current license server version, use the **sysam version** command.

Note: License server version 2.0 and earlier do not include this command.

Download the latest license server from the SySAM License Server and Utilities Install Web site at <http://www.sybase.com/sysam/server>.

- FLEXnet Publisher version

Table 1. FLEXnet Publisher Versions Supported on Windows Platforms

Platforms	FLEXnet Publisher Version
Windows (32-bit)	11.6.1
Windows (64-bit)	11.5

If you use a SySAM license server, you must update the SySAM license server to at least version 2.1, which includes the FLEXnet Publisher version 11.6.1 license server

Planning Your Installation

components on all platforms, before installing Replication Server. To check the version of your license server, examine the license server log or execute:

```
cd %SYBASE%\SYSAM-2_0\bin
lmutil lmver lmgrd
```

IPv6 Configuration

Use the **sysam configure** command to choose the version of the license server based on your environment.

Replication Server includes IPv4 and IPv6 versions of the SySAM license server software. 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, you can access this license server only through the IPv6 protocol. Any host with an IPv4 only network stack cannot obtain licenses from this IPv6 license server. To resolve this issue:

- Use a UNIX host for the license server. License servers on UNIX can serve licenses to both IPv4 and IPv6 client hosts.
- Use two separate Windows machines. Set up two license servers on two different hosts in the network; one to serve the IPv4 network and the other one to serve the IPv6 network.

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

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

For example, to configure use of the IPv4/IPv6 dual stack binaries, use:

```
sysam configure IPv6
```

SySAM Licensing Checkout

If Replication Server was licensed using a per-processor license type in versions earlier than 15.6, the license quantity was determined at start-up.

Replication Server periodically checks the number of processors it can use and attempts to check out additional licenses for any increase. Replication Server shuts down after a 30-day grace period expires if additional licenses are not made available within this period.

See *SySAM Users Guide*.

Product Editions and License Types

Replication Server is released as two separate product editions—Enterprise Edition (EE) and Real-Time Loading Edition (RTLE)—that comprise different base and optional features, and which require separate licences.

Note: In addition to SPDC, Replication Server Enterprise Edition including the base Replication Server, the Advanced Services Option, and Data Assurance Option is available for download and license generation at the SAP Service Marketplace (SMP).

Table 2. Enterprise Edition Features and Licenses

Feature Type	Features	Description	License
Base	Replication Server	Replication Server features, excluding Advanced Services Option, ExpressConnect for Oracle, and real-time loading.	REP_SERVER
Optional	Advanced Services Option	Replication Server performance enhancements. These enhancements include: <ul style="list-style-type: none"> • High Volume Adaptive Replication (HVAR) • Enhanced Data Server Interface (DSI) efficiency • Enhanced RepAgent executor thread efficiency • Enhanced distributor thread read efficiency • Enhanced memory allocation • Increasing queue block size • Multi-Path Replication™ 	REP_HVAR_ASE
	ExpressConnect for Oracle	Provides Replication Server with the capability to connect directly to Oracle. See the Replication Server Options product documentation.	REP_EC_ORA
	Data Assurance Option	Data validation tool.	See the <i>Replication Server Data Assurance Option Installation Guide</i> .

Table 3. Real-Time Loading Edition Features and Licenses

Feature Type	Features	Description	License
Base	Replication Server	Replication Server features, excluding Advanced Services Option, Express-Connect for Oracle, and real-time loading.	REP_SERVER
	Real-Time Loading (RTL)	Allows replication to Sybase® IQ from Adaptive Server® and Oracle. Note: You cannot use the Real-Time Loading Edition to replicate to Adaptive Server or Oracle.	REP_RTL_IQ
	Advanced Services Option	Replication Server performance enhancements. These enhancements include: <ul style="list-style-type: none"> • High Volume Adaptive Replication (HVAR) • Enhanced Data Server Interface (DSI) efficiency • Enhanced RepAgent executor thread efficiency • Enhanced distributor thread read efficiency • Enhanced memory allocation • Increasing queue block size 	REP_HVAR_ASE
	Replication Agent for Oracle.	Includes Replication Agent for Oracle to connect to Oracle as a primary data server.	RTLE includes a license for Replication Server Options.

Sybase Control Center License

Sybase Control Center is licensed free when you have a paid license for a product managed by Sybase Control Center such as Replication Server and Replication Server Data Assurance Option. Evaluation licenses are also available.

You need not obtain a license. The installer offers these licensing options:

- Install licensed copy of Sybase Control Center Suite – choose this option if you have a paid license for a product managed by Sybase Control Center. It installs Sybase Control Center under a permanent (nonexpiring) license.
- Evaluate Sybase Control Center Suite – choose this option if you do not have a paid license for a product managed by Sybase Control Center, or if you do not want to install a permanent copy of Sybase Control Center. The evaluation license expires after 30 days.

In *Sybase Control Center 3.2.8*, see *Sybase Control Center 3.2.6 for Replication*.

Replication Server and Sybase IQ InfoPrimer Integration Licenses

Special licensing requirements apply to the integration of Replication Server and Sybase IQ InfoPrimer.

Table 4. Replication Server and Sybase IQ InfoPrimer Integration Licenses

Product	Features	Description	License
Replication Server	Real-Time Loading (RTL)	Allows replication to Sybase IQ from Adaptive Server. Note: You cannot use the Real-Time Loading Edition to replicate to Adaptive Server or Oracle.	REP_RTL_IQ
Sybase IQ InfoPrimer 15.3	Sybase IQ InfoPrimer	Used for the extraction and loading of data from Adaptive Server and transformation of data in Sybase IQ.	SY_INFOPRIMER_SERVER

Sub-capacity Licensing

Sybase offers sub-capacity licensing, which lets you license Sybase products on a subset of the CPUs available on a physical machine.

Platform Support

Table 5. SySAM Virtualization Sub-capacity Compatibility

Vendor	Product	Platform Support	Virtualization Type
HP	nPar	HP IA 11.31	Physical partition
	vPar		Virtual partition
	Integrity Virtual Machines with Resource Manager		Virtual machine
	Secure Resource Partitions		OS containers

Vendor	Product	Platform Support	Virtualization Type
IBM	LPAR	AIX 6.1, AIX 7	Virtual partition
	dLPAR		Virtual partition
Oracle	Dynamic System Domains	Solaris 10	Physical partition
	Solaris Containers/Zones with Solaris Resource Manager		OS partition
	Solaris Logical Domain (LDOM)		Virtual partition
Intel, AMD	VMWare ESX Server Guest O/S: Windows <u>Note: VMWare ESX Server excludes VMWare Workstation and VMWare Server.</u>	VMWare ESX 3.5, ESX 4.0, ESX 4.1, and ESXi 5.0 Guest OS: Windows 2008 R2, Windows 7, Windows 2012, and Windows 8	Virtual machine
	VMWare ESX Server Guest O/S: Linux and Solaris x64	VMWare ESX 3.5, ESX 4.0, ESX 4.1, and ESXi 5.0 Guest OS: Red Hat 5.6, Red Hat 6.1, SuSE 11, and Solaris x64	Virtual machine
	Xen, KVM, DomainU: Windows <u>Note: Xen excludes Solaris x64.</u>	Windows 2008 R2 and Windows 7	Virtual machine
	Xen, KVM, DomainU: Linux	Red Hat 5.6, Red Hat 6.1, and SuSE 11	Virtual Machine
	Hyper-V	Windows 2008 R2 Guest OS: Windows 2008 R2, Windows 7, Windows 2012, and Windows 8	Virtual Machine

Enabling Sybase Sub-capacity Licensing

You must have a sub-capacity licensing agreement with Sybase before you can enable sub-capacity licensing. As with other Sybase licenses, you must generate a license key. For specific steps, see the *SySAM Quick Start Guide*.

Note: Keep your license server up-to-date.

Although the installation media include a copy of the most recent SySAM license server, Sybase recommends that you periodically check for license server updates on the SySAM Standalone License Servers Web site at <http://www.sybase.com/sysam/server>.

Requirements

When using SySAM sub-capacity licensing, set the SYBASE_SAM_CAPACITY environment variable before installing, or, you can copy in the license key after installation.

If you are using sub-capacity licensing, do one of:

- Set the SYBASE_SAM_CAPACITY environment variable before starting your installer. Follow the instructions provided in the *SySAM Users Guide* > *Configuring SySAM Sub-capacity*. However, start your installer instead of starting the sub-capacity-enabled Sybase product. The installer includes the **sysamcap** utility located in `sysam_utilities/bin`.
- Select **Continue installation without a license key** in the Sybase Software Asset Management License pane during installation. After installation, copy your license key to `installed_directory/SYSAM-2_0/licenses` directory where `installed_directory` is where you have installed your components.

System Requirements

Check the system requirements and system patches for the server on which you will install Replication Server.

System Requirements for Replication Server on Windows

Verify that you are running a supported operating system and that you have sufficient space available to set up and run the sample Replication Server on Windows.

Item	Requirement
CPU	A Pentium processor.
RAM	A minimum of 1GB RAM.

Item	Requirement
Disk storage	<p>For a full installation, the total disk space required is approximately 750MB.</p> <p>Disk space required:</p> <ul style="list-style-type: none"> • 450MB for the Replication Server software, supporting files, and log files. • (Optional) A minimum of 700MB if you are installing Data Assurance (DA) Option. • 20MB for each Replication Server disk partition. The disk partition may be on a different disk than your Sybase software. <hr/> <p>Tip: For the best performance, install Replication Server partitions on fast file systems or operating system raw devices.</p> <hr/> <ul style="list-style-type: none"> • 30MB for temporary usage during installation. <p>One of:</p> <ul style="list-style-type: none"> • 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 (ERSSD). 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. <p>More disk space may be required, depending on your replication system application.</p>

Item	Requirement
Operating system	<p>One of:</p> <ul style="list-style-type: none"> • Windows Server 2008 R2 – Service Pack 1 • Windows Server 2012 • Windows 7 – Service Pack 1 • Windows 8 <p>If you are installing Replication Server on Windows 64-bit, download and install the latest security updates from the Microsoft Web site.</p> <p>Before you start the installation, install both Microsoft Visual Studio patches for your x86 or x64 Windows platform, download:</p> <ul style="list-style-type: none"> • Microsoft Visual C++ 2005 Service Pack 1 Redistributable Package ATL Security Update at http://www.microsoft.com/download/en/details.aspx?amp;displaylang=en&id=26347. • Microsoft Visual C++ 2010 Service Pack 1 Redistributable Package MFC Security Update at http://www.microsoft.com/en-us/download/details.aspx?id=26999.
VMware VSphere ES-Xi	<p>VSphere ESXi 5.0</p> <p>Replication Server on Windows 64-bit</p>
Additional hardware	<p>A minimum of 32-bit network card for better performance.</p>
Supported protocols	<p>TCP/IP, IPX/SPX, Microsoft Named Pipes.</p>

Operating System Patch Requirements

Before installing Replication Server, verify that your operating system is at the latest patch level.

If your operating system requires a service pack, install it before you install Replication Server. Contact your operating system representative for a complete list of service packs, or check the latest Replication Server release bulletin for your platform. First, determine which service pack operating system level and build number are installed on the system.

Note: Do not use a service pack that is earlier than the version suggested for your operating system. If a service pack has been superseded by a newer service pack, use the newer service pack.

Determining Service Pack on Windows

Determine the current service pack system level and build number on Windows.

1. Select **Start > Programs > Accessories > Windows Explorer**.

2. Select the **Help** menu, and click **About Windows**.
3. Find the Service Pack number on the Version line.

In the following example, *xxxx* is the build number and *n* is the service pack number:

```
Version 5.0 (Build xxxx: Service Pack n)
```

Installation Directory Structure

Provides an overview of the installation directory, subdirectory hierarchy, and the naming convention used for the installed components.

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.

Replication Server 15.7.1 SP100 includes a new version of Replication Server and many of its supporting components. Other Sybase products may contain earlier versions of the same components. You can install Replication Server into the same directory containing these existing products.

However, if you are using other Sybase products, installing Replication Server 15.7.1 SP100 may cause some environment variables to change. Reset the environment variables to make individual products work.

Note: You can install Replication Server 15.7.1 SP100 in the same directory as Adaptive Server Enterprise and Open Client and Open Server versions 15.5 or later.

Sybase recommends that you do not uninstall Replication Server 15.7.1 SP100 if it has been installed in the same directory as older Sybase products that are installed using InstallShield installer, otherwise, these products may not work correctly.

You can install Replication Server 15.7.1 SP100 on top of Replication Server 12.6 and later, in the same %SYBASE% directory. Doing so creates a duplicate entry in the `sql.ini` file for `SAMPLE_RS`, which is the sample Replication Server. `rs_init` warns you about the duplicate entry and uses the first instance of `SAMPLE_RS` found in the `sql.ini` file. See *Upgrades and Downgrades Using Existing Directories* in the *Replication Server Configuration Guide*.

Constraints

Do not install Replication Server version 15.7.1 SP100 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 may 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 15.7.1 SP100. For this reason, Sybase recommends that you back up your current directory before installing Replication Server version 15.7.1 SP100.

If you are installing Replication Server 15.7.1 SP100 in an existing Sybase installation directory that contains Adaptive Server version 15.0.x, you may be asked if you want 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.”

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, which is installed in `%SYBASE%\REP-15_5\ASA12`, 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.

Tip: If your earlier installation includes custom applications or scripts that refer to `%SYBASE%` subdirectories, change them to reflect the new installation directory structure.

A diagnostic server (`REP-15_5\bin\drepsrvr.exe`) 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: Your actual directory structure may differ from what is documented, depending on the components you install.

Installing Replication Server in a Unique Directory on Windows

Installing Replication Server in a unique directory may reset environment variables for other Sybase products and produce unpredictable results.

1. Terminate all Sybase processes running on the system on which you are installing Replication Server, including the SySAM License Server if you plan to upgrade it.

Note: If you do not know which processes are running, contact your system administrator.

To stop the SySAM license server, see the *SySAM Users Guide*.

2. If you have an existing Adaptive Server that runs as a Windows service, disable the service.

- a) Click **Start > Settings > Control Panel > Administrative Tools > Services**.
 - b) In the Services list, right-click **Sybase SQLServer** *server name*.
 - c) Select **Properties**.
 - d) Set Startup Type to Disabled.
 - e) Close the Services window.
3. Record the current environment variable settings in a file called `env.orig` by entering:

```
set > env.orig
```

You can read this file with a text editor.

Specifically, record the current values of:

- INCLUDE
 - LIB
 - LM_LICENSE_FILE
 - PATH
 - SYBASE
 - SYBASE_JRE
4. Insert the Replication Server media in the appropriate drive, or download and extract the Replication Server installation image from the Sybase Product Download Center (SPDC) or the SAP Service Marketplace (SMP).
 5. Install Replication Server.
 6. Specify a unique directory for the Replication Server product.
 7. Specify the host name and port number of the license server.
 8. Change the environment variables to the original settings that you recorded in step 3:
 - a) Select **Start > Settings > Control Panel > System**.
 - b) Click the **Advanced** tab.
 - c) Select **Environment Variables**.
 - d) Under System Variables, change the values of the variables listed in step 3.
 9. Configure Adaptive Server to start automatically:
 - a) Select **Start > Settings > Control Panel > Administrative Tools > Services**.
 - b) In the Services list, right-click the **Sybase SQLServer** *server name*.
 - c) Click **Properties**.
 - d) Set Startup Type to Automatic.
 10. Restart your system.

Note: When you install Replication Server in a unique installation directory, you must maintain two `sql.ini` files: one for Replication Server components and one for your other Sybase applications.

See also

- *Environment Variables on Windows* on page 37
- *Installing Replication Server in GUI Mode* on page 25

Installation Directory Contents and Layout

Check the list of Replication Server components that are installed in the Sybase installation directory on your machine.

Within %SYBASE%:

- `charsets` – character sets and sort order.
- `collate` – Unicode.
- `ini` – initialization files, including `mnemonic.dat`, `objectid.dat`, `sql.ini`, and `trusted.txt`.
- `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`, `dll`, `include`, `ini`, `lib`, `lib3p`, `sample`, and `scripts`.
- `REP-15_5` – Replication Server 15.7.1 SP100 files, including `ASA12`, `bin`, `certificates`, `connector`, `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_repsrver`, `scripts`, `sysam`, `ThirdPartyLegal`, and `upgrade`.
- `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! Modifying or removing `si_reg.xml` 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`, `locales`, and `log`.
- `SYBASE.bat`, `SYBASE.env` – files created by the installer that you use to reset environment variables.

Installation Setup Options

Decide the Replication Server installation option that is appropriate for your setup. Typical is the default option.

The Replication Server **setup** program provides these installation options:

Planning Your Installation

- Typical (default) – installs the Replication Server components considered to be useful for most customers. In this type of installation, only the English language module and its supported character sets are installed. You see a list of components that will be installed and the total disk space required before the installation begins.
- Full – installs every Replication Server component including all the supported language modules from the installation media. You see a list of components that will be installed and the total disk space required before the installation begins.
- 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.

Installation Mode

Decide which installation mode you want to use. GUI mode is the default option.

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 – 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 – install interactively, but with all the responses already filled in, so 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.

Performing Administrative Tasks

Complete the administrative tasks before you begin the installation process.

1. Back up your current replication system.
2. Log in using an account with Windows administrator privileges
3. Close any open applications or utilities, including currently installed Sybase components, to free disk space and system resources.
4. Verify that the installation directory does not have a space in the directory name.

Installing Replication Server

Install Replication Server using your chosen method.

Prerequisites

Complete installation planning tasks.

Task

1. Choose an installation method:
 - GUI mode (recommended)
 - Console mode
 - Response file
2. Follow the instructions for your chosen method.
3. Perform postinstallation steps.

Installing Replication Server in GUI Mode

The installer creates the target directory and installs the selected components into that directory.

Prerequisites

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.

Task

1. Insert the Replication Server installation media in the appropriate drive, or download and extract the Replication Server installation image from the Sybase Product Download Center (SPDC) or the SAP Service Marketplace (SMP).
2. Launch the **setup** program.

If the installer does not start automatically, double-click `setup.exe` or select **Start > Run** and enter the following, where *x* is your CD or DVD drive:

```
x:\setup.exe
```

If there is not enough disk space in the temporary disk space directory, set the environment variable `TMP` to *directory_name* before running the installer again, where *directory_name*

Installing Replication Server

is where the installation program writes the temporary installation files. When specifying the *directory_name*, include its full path.

3. In the Introduction window, click **Next**.
4. Specify where to install Replication Server:

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

- If the directory you chose does not exist, click **Yes** to create it.
- If it does exist, and already contains a Replication Server installation, you are warned that you will overwrite the older version. Click **Next**.

The installer checks that the version you want to update is compatible with the version of Replication Server you are installing. If the version is incompatible, the Check Upgrade Incompatible Version dialog appears, and you see this:

```
Warning: The current "Sybase Replication Server" in your
destination directory is not compatible with this version
upgrade; some bug fixes may be unavailable
if you proceed. See the release note for more information.
```

You may see a similar message if your Replication Server is an out-of-band release, such as an emergency bug fix, one-off, controlled, or instrumental release:

```
Warning: The current "Sybase Replication Server" in your
destination directory is an out-of-band release; some bug fixes
may be unavailable if you proceed.
Verify that the bug fixes you need are in this newer version
before proceeding with the upgrade.
```

If you see such messages, click **Cancel** to stop the installation process. To override the error and continue with the installation, select **Proceed installation with incompatible version** and click **Next**.

Warning! Upgrading to an incompatible version may cause software regression. SAP recommends that you cancel the installation and obtain a compatible version of Replication Server.

Note: If you perform the installation in a silent, or unattended mode, and the versions are incompatible, the installer prompts you to rerun the installer with this argument, then quit:

DALLOW_UPGRADE_TO_INCOMPATIBLE_VERSION=true

5. Select the type of installation:

Option	Description
Typical	Installs the default components. This is recommended for most users.
Full	Installs every Replication Server component, including all the supported language modules.
Custom	Lets you select the components to install. Some components are automatically installed if they are required to run your selected components.

Click **Next**.

6. Select the geographic location, agree to the license agreement, then click **Next**.
7. In the Sybase Software Asset Management License Server window:

Option	Choose
Specify license keys	<p>Either:</p> <ul style="list-style-type: none"> • Click Browse to select the license file. • Use Shift+Click or Ctrl+Click to select multiple license files. The license pane displays the license information. • Copy and paste the license information directly in the license pane. <p>Click Next.</p> <p>If you specify a served license key, the installer prompts you to install a new SySAM license server. Select:</p> <ul style="list-style-type: none"> • Next – to install the new SySAM license server. Follow the installation prompts. • Previous – and select Use previously deployed license server if you have an existing SySAM license server on the same host.
Use previously deployed license server	<p>Enter the:</p> <ul style="list-style-type: none"> • Host name of the machine where the license server is running • Port number if the port number you are using is not the default <p>Click Next.</p>

Option	Choose
Continue installation without a license key	<p>If you do not have licenses for any of the Replication Server components, select this option, then click Next to proceed.</p> <p>The installer allows you to install and use 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, and install these licenses using the Replication Server License Installer.</p>

Use **sysadmin lmconfig** to configure and show license management-related information in Replication Server. See *Replication Server Reference Manual > Replication Server Commands > sysadmin lmconfig*.

8. Set SySAM e-mail configuration if necessary. Click **Next**.
9. The installation summary window displays the selections you have made. Review the information, and click **Install**.
10. In the Start Sample Replication Server window, select:

Option	Description
Yes	<p>To configure and start a sample Replication Server. The installer displays the configuration information for the sample Replication Server. Record this information.</p> <p>You can enter a maximum of 30 bytes in the password field. For a:</p> <ul style="list-style-type: none"> • Single-byte character – enter 6 to 30 characters. • Double-byte character – enter 3 to 15 characters.
No	<p>To manually configure a full-featured Replication Server and start a sample Replication Server after installation. The installer prompts you to either create a sample Replication Server directory or to proceed with the installation. Select either:</p> <ul style="list-style-type: none"> • Yes – to create a sample Replication Server directory without starting the sample Replication Server, or, • No – to continue with the installation.

Click **Next**.

11. Click **Done**.

Next

Verify that the installation is valid and successful.

- View the log files in the `log` directory to check for errors. A valid installation does not contain the word “ERROR.”
- Check that the date of the `si_reg.xml` file in the `Sybase_Install_Registry` directory reflects the date of the current installation.

See also

- *Postinstallation Tasks* on page 35
- *Runserver File* on page 38

Installing Replication Server Data Assurance Option

Replication Server Data Assurance (DA) Option is available as a separately licensed product for Replication Server. Obtain the **setup** program from where you have extracted the installation image.

See the *Replication Server Data Assurance Option Installation Guide* for details.

Installing Replication Server in Console Mode

Choose command line installation if you prefer a nonwindowing interface or for developing custom installation scripts.

Prerequisites

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.

Task

The steps for installing components in an interactive text mode are the same as those for GUI mode, except you use **setup -i console** to execute the installer from the command line, and you specify options by entering text.

1. At the command prompt, enter:

```
x:\setupConsole.exe -i console
```

where *x* is the location of the installer.

2. Follow the remaining prompts to install Replication Server. Output is written to a terminal window, and you must use the keyboard to enter responses.

See also

- *Installing Replication Server in GUI Mode* on page 25

Installing Replication Server Using a Response File

Unattended or silent installations are typically used to update multiple systems across the enterprise.

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

Record installation responses into a response file, which is a text file you can edit to change any responses before using it in subsequent installations.

Note: Replication Server versions 15.6 and later use a rearchitected installation program that is incompatible with response files generated for versions 15.5.x and earlier. Do not use response files from these versions; instead, create a new one from a 15.7.1 SP100 installation.

When installing in GUI or console mode, the **-r** command line argument records your responses to the installation wizard’s prompts and creates a response file when the installation wizard exits.

To generate a response file during installation, enter:

```
x:\setupConsole.exe -r responseFileName
```

where *responseFileName* is the file name you choose for the response file and *x* is the location of the installer. When specifying the response file name, include its full path. For example:

```
C:\Sybase\REP\ResponseFile.txt
```

Installing in GUI Mode 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 different values. This is useful when installing multiple instances of Replication Server that have similar but not identical settings.

Prerequisites

Create an installation response file.

Task

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

```
x:\setupConsole.exe -f responseFileName
```

where *responseFileName* is the file name containing the installation options you chose and *x* is the location of the installer. When specifying the response file name, include its full path.

See also

- *Command Line Options* on page 32
- *Creating a Response File* on page 30
- *Installing Replication Server in GUI Mode* on page 25

Installing in Silent Mode

Unattended or silent installations are typically used to update multiple systems across the enterprise.

Prerequisites

Create an installation response file.

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 to fully automate installation.

Task

To install in silent mode, run:

```
x:\setupConsole.exe -f responseFileName -i silent  
-DAGREE_TO_SYBASE_LICENSE=true
```

where:

- *x* – is the location of the installer.
- *responseFileName* – is the absolute path of the file name containing the installation options you chose.
- **-D** – specifies that you agree with the Sybase License Agreement text.

Warning! When running in silent installation mode, Sybase recommends that you use `setupConsole.exe`. The normal `setup.exe` runs the installation program in the background, and gives the impression that the installation has terminated immediately. This may result in additional installation attempts, which can corrupt the Windows Registry and lead to an operating system restart failure.

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 performed 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, or,
 - Edit the response file to include the property `AGREE_TO_SYBASE_LICENSE=true`.
-

See also

- *Command Line Options* on page 32
- *Creating a Response File* on page 30
- *Installing Replication Server in GUI Mode* on page 25

Installing ODBC Libraries for ExpressConnect for HANA DB

ExpressConnect for HANA DB (ECH) uses the HANA ODBC driver to communicate with a HANA database. However, Replication Server does not include the required HANA ODBC driver. After you have installed Replication Server, download these libraries from the SAP Service Marketplace and install them.

See the *Replication Server Release Bulletin > Special Installation Instructions > Installing ODBC Libraries for ExpressConnect for HANA DB*.

Troubleshoot Installation Problems

Set the installer to debug mode to troubleshoot problems encountered during installation.

While starting the installer, press the Ctrl key until a console window appears. The installer then generates additional detailed installation information that is useful for debugging installer issues.

Tip: If you encounter errors during installation using any installation mode, check the installation log file to see a record of the installation process. The log file is located in %SYBASE%\log.

If this is the first time you have installed a Sybase product on this machine, the installer creates a Sybase installation directory that contains the support files for all Sybase products.

Command Line Options

Options for installing or uninstalling Replication Server in console mode.

Option	Purpose
-i console	Uses the console interface mode, where messages during installation appear on the Java console and the wizard is run in console mode.
-i silent	Installs or uninstalls the product in silent mode, where the installation or uninstallation is performed with no user interaction.

Option	Purpose
-D	Passes custom variables and properties. For example, to override the default installation directory when you run the installer, enter: <pre><i>install_launcher_name</i> -DUSER_INSTALL_DIR=E:\Sybase</pre>
-r	Generates a response file and a reference.
-f	References a response files.
-l	Sets installer locales.
-\?	Displays installer help.

Postinstallation Tasks

After installing Replication Server, perform the postinstallation tasks necessary for your site.

See the *Replication Server Configuration Guide for Windows*.

Log Files

Check the information about the configuration of Replication Server that is stored in the log files.

- Replication Server installer error log file:
%SYBASE%\log
- Sample Replication Server error logs:
%SYBASE%\REP-15_5\samp_repserver\SAMPLE_RS.log

Note: The installer creates the SAMPLE_RS.log file only if you choose to start sample Replication Server during installation.

- Sample Replication Server SQL Anywhere error logs:
%SYBASE%\REP-15_5\samp_repserver\errorlog

Note: The installer creates the errorlog directory only if you choose to create a sample Replication Server directory without starting the sample Replication Server during installation.

- rs_init log file:
%SYBASE%\REP-15_5\init\logs\logmdd.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

Adaptive Server for the RSSD

Start the RSSD stored on Adaptive Server.

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

After successful installation, start Adaptive Server Enterprise. See the *Adaptive Server Enterprise Configuration Guide* for your platform.

Note: If you are upgrading Adaptive Server Enterprise and you have replicated databases, see the *Adaptive Server Enterprise Installation Guide* for your platform.

Sample Replication Server Configuration

If you have not configured the sample Replication Server during installation, you can use the resource file created by the installer to configure and start the sample Replication Server.

During installation, the installer prompts you 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 sql.ini file. Use this resource file to configure and start the sample Replication Server after installation. The sample Replication Server resource file creates an ERSSD.

At the command prompt, enter:

```
cd %SYBASE%\REP-15_5\samp_repserver
rs_init-SAMPLE_RS.bat
```

A setup window shows configuration status. The **rs_init** utility in this script displays commands in a DOS window as it executes them, and writes any output to its log.

If you encounter errors during configuration and start-up of the sample Replication Server, read the 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.

All files and logs associated with the sample Replication Server are in %SYBASE%\REP-15_5\samp_repserver.

Table 6. Sample Replication Server Configuration Information

Sample Replication Server Item	Definition
Name	<i>SAMPLE_RS</i>
Port	11752
User name	<i>sa</i>

Sample Replication Server Item	Definition
Password	sa user password for the <i>SAMPLE_RS</i> . You can enter a maximum of 30 bytes in the password field. For a: <ul style="list-style-type: none"> • Single-byte character – enter 6 to 30 characters. • Double-byte character – enter 3 to 15 characters.
ERSSD server name	<i>SAMPLE_RS_ERSSD</i>
ERSSD server port	11751
ERSSD user name	<i>SAMPLE_RS_RSSD_prim</i>
ERSSD password	Same as the password for <i>SAMPLE_RS</i>

See *Replication Server Configuration Guide for Windows > Configure Replication Server and Add Databases Using rs_init*.

Server Entries in the sql.ini File

Modify network connection information using the **dsedit** utility.

If either the primary or the replicate Adaptive Server is not on the Replication Server machine, you must change the default host name “localhost” in the Replication Server `sql.ini` file to the actual server name. Use **dsedit** to update the `sql.ini` file.

dsedit creates and modifies network connection information in the `sql.ini` file. The utility is located in `%SYBASE%\%SYBASE_OCS%\bin`.

Execute `SYBASE.bat` to set the required environment variables before executing **dsedit**.

See *Adaptive Server Enterprise Utility Guide > Using dsedit*.

Environment Variables on Windows

The Replication Server installer automatically sets the required system environment variables, such as `PATH`, as well as additional environment variables used by your newly installed Sybase software.

The environment variables are in these files:

- `%SYBASE%\SYBASE.bat`
- `%SYBASE%\SYBASE.env`

After exiting the Replication Server installer, you can reset the environment variables using these files, if needed.

Environment Variable	Description
%LIB%	Subdirectory path to the Open Client and Open Server runtime shared library and the connector libraries
%PATH%	Includes directories that are needed to execute Replication Server (such as Replication Server executables and OCS libraries)
%SYBASE%	Home directory where you install all Sybase products
%SYBASE_OCS%	Subdirectory path to Open Client files
%SYBASE_REP%	Subdirectory path to Replication Server

Runserver File

The runserver file is an executable script that contains the complete command line required to start a Replication Server. When you install a new Replication Server to your replication system, **rs_init** creates a runserver file in the Sybase installation directory.

The runserver file name is constructed based on the name of the server, truncated to eight characters, if necessary, and a .bat extension. For example, for a Replication Server named ROME_RS, the runserver file is named `run_rome.bat`.

Replication Server Registry Keys

When you install Replication Server for Windows, the installation program and server configuration store configuration information to several branches, called keys, in the Windows Registry.

In some cases, you may be able to manually change the registry to configure Replication Server features. However, if you make incorrect changes, you can seriously impair your Windows system.

Warning! Do not modify key values in the registry unless you are an experienced Windows administrator, and you are familiar with the **regedt32** utility. See your system Windows documentation for information about using **regedt32**.

HKEY_LOCAL_MACHINE\SOFTWARE\SYBASE\Replication Server
 Registry values that contain information about the Replication Server software.

Key Name	Default	Description
CurrentVersion	15.7	Version number of the Replication Server installed on the computer
Description	Replication Server	Name of the software installed

HKEY_LOCAL_MACHINE\SOFTWARE\SYBASE\Replication Server\server_name
 Registry values that contain basic information about the Replication Server *server_name*.

Key Name	Default	Description
ServerType	REP	Type of server

HKEY_LOCAL_MACHINE\SOFTWARE\SYBASE\Server\server_name
\Parameters

Registry values that contain start-up parameters for the Replication Server *server_name* when *server_name* is started as a Windows service.

Key Name	Default	Description
Arg0	<i>-Sserver_name</i>	Name of the Replication Server
Arg1	<i>-C:installed_directory\path\server_name.cfg</i>	Location and name of the configuration file for Replication Server <i>server_name</i>
Arg2	<i>-E:installed_directory\path\server_name.log</i>	Location and name of the log file for Sample Replication Server <i>server_name</i>
Arg3	<i>-Iinstalled_directory\ini\sql.ini</i>	Location of the <i>sql.ini</i> file

HKEY_LOCAL_MACHINE\SOFTWARE\SYBASE\Server\server_name
\Environment

Registry values that contain environment variables for the Replication Server *server_name* when *server_name* is started as a Windows service. The key values in this branch take precedence over other values for these variables.

Key Name	Default	Description
SYBASE	<i>installed_directory</i>	Value for the SYBASE variable

Postinstallation Tasks

Key Name	Default	Description
SYBASE_REP	15.5	Value for the SYBASE_REP variable

Uninstalling Replication Server

Uninstall the product.

Prerequisites

- Log in to your machine using an account with administrator privileges.
- Shut down all Sybase applications and processes.

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 manually remove these directories.

Task

1. Choose an uninstallation method:
 - GUI mode (recommended)
 - Console mode
 - Silent mode
2. Follow the instructions for your chosen method.

Uninstalling in GUI Mode

Uninstall Replication Server in GUI mode.

1. Choose one of:
 - Select **Start > Settings > Control Panel > Add or Remove Programs**.
 - From the command line, enter:


```
%SYBASE%\sybuninstall\RepServer_Suite\uninstall.exe
```
 - Click **Start > Run** and enter:


```
%SYBASE%\sybuninstall\RepServer_Suite\uninstall.exe
```
 - Open Windows Explorer, navigate to `%SYBASE%\sybuninstall\RepServer_Suite`, and double-click `uninstall.exe`.
2. Click **Next**.
3. Select one of:

Option	Description
Complete Uninstall	To completely remove all components. Files and folders created after the installation are unaffected.
Uninstall Specific Features	Lets you select the components to uninstall.

Uninstalling Replication Server

Click **Next**.

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

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

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

5. Click **Done**.

Uninstalling in Console Mode

Uninstall Replication Server in console mode.

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

```
%SYBASE%\sybuninstall\RepServer_Suite\uninstall.exe -i  
console
```

The **uninstall** program starts.

2. Follow the remaining prompts to uninstall Replication Server. Output is written to a terminal window, and you must use the keyboard to enter responses.

Note: If you are prompted to remove shared files, Sybase recommends that you do not do so.

See also

- *Command Line Options* on page 32
- *Uninstalling in GUI Mode* on page 41

Uninstalling in Silent Mode

Uninstall Replication Server in silent mode.

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

```
%SYBASE%\sybuninstall\RepServer_Suite\uninstall.exe -i silent
```

The **uninstall** program starts.

Note: If you are prompted to remove files that are created outside the installer, Sybase recommends that you do not do so.

See also

- *Command Line Options* on page 32
- *Uninstalling in GUI Mode* on page 41

Uninstalling Replication Server

Obtaining Help and Additional Information

Use the Product Documentation site and online help to learn more about this product release.

- Product Documentation at <http://sybooks.sybase.com/> – online documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. The Web site also has links to other resources, such as white papers, community forums, maintenance releases, and support content.
- Online help in the product, if available.

To read or print PDF documents, you need Adobe Acrobat Reader, which is available as a free download from the *Adobe* Web site.

Note: A more recent release bulletin, with critical product or document information added after the product release, may be available from the Product Documentation Web site.

Technical Support

Get support for SAP® products.

If your organization has purchased a support contract for this product, then one or more of your colleagues is designated as an authorized support contact. If you have any questions, or if you need assistance during the installation process, ask a designated person to contact Technical Support as specified in your contract:

- Sybase Technical Support or the Sybase subsidiary in your area
- SAP Technical Support

Customers with an SAP support contract can obtain support for this product at the SAP support site, <http://service.sap.com/sybase/support>. You can also find information about Sybase support migration at this location (login may be required).

Customers with a Sybase support contract can obtain support for this product at <http://www.sybase.com/support> (login required).

Downloading Product Updates

Get maintenance releases, support packages and patches, and related information.

- If you purchased the product directly from Sybase or from an authorized Sybase reseller:
 - a) Go to <http://www.sybase.com/support>.
 - b) Select **Support > EBFs/Maintenance**.

Obtaining Help and Additional Information

- c) If prompted, enter your MySybase user name and password.
- d) (Optional) Select a filter, a time frame, or both, and click **Go**.
- e) Select a product.

Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as an authorized support contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click **My Account** to add the “Technical Support Contact” role to your MySybase profile.

- f) Click the **Info** icon to display the EBF/Maintenance report, or click the product description to download the software.
- If you ordered your product under an SAP contract:
 - a) Go to <http://service.sap.com/swdc> and log in if prompted.
 - b) Select **Search for Software Downloads** and enter the name of your product. Click **Search**.

Product and Component Certifications

Certification reports verify Sybase product performance on a particular platform.

To find the latest information about certifications:

- For partner product certifications, go to http://www.sybase.com/detail_list?id=9784
- For platform certifications, go to <http://certification.sybase.com/ucr/search.do>

Accessibility Features

Accessibility ensures access to electronic information for all users, including those with disabilities.

Documentation for this product is available in an HTML version that is designed for accessibility.

Vision impaired users can navigate through the online document with an adaptive technology such as a screen reader, or view it with a screen enlarger.

HTML documentation has been tested for compliance with accessibility requirements of Section 508 of the U.S Rehabilitation Act. 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 may 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 the Sybase Accessibility site: <http://www.sybase.com/products/accessibility>. The site includes links to information about Section 508 and W3C standards.

You may find additional information about accessibility features in the product documentation.

Obtaining Help and Additional Information

Index

A

- Adaptive Server
 - for the Replication Server System Database 35
 - upgrading 35
- administration tasks 24

C

- charsets subdirectory 23
- check upgrade incompatible version
 - emergency bug fix, one-off, controlled, or instrumental release 25
- checking for a valid installation
 - in Replication Server 25
- choose update installation 25
- collate subdirectory 23
- command line installation
 - Replication Server 30
- components of Replication Server 7
- configuration information
 - environment variables 38
 - start-up parameters 38
 - Windows Registry 38
- console mode
 - installing Replication Server 29
 - response file, installing Replication Server with 30
 - troubleshooting 32
 - uninstalling Replication Server 42
- conventions
 - style 1
 - syntax 1
- CPU requirements 17
- creating
 - response files for Replication Server 30
- custom installation 23, 25

D

- D flag and setup
 - Replication Server 31
- default directory 25
- definitions
 - runserver 38

- diagnosing software problems 20
- directories
 - default 25
 - installation, structure of 20
 - Sybase_Install_Registry 25
- disk storage requirements 17
- drepsrvr.exe program 20
- dsedit utility 37

E

- Embedded Replication Server System Database (ERSSD) 7, 17
- environment variables
 - %LIB% 37
 - %PATH% 37
 - %SYBASE_OCS% 37
 - %SYBASE_REP% 37
 - %SYBASE% 37
 - required for dsedit 37
 - setting 37
 - SYBASE_SAM_CAPACITY 17
- errors
 - while starting installer 25
- ExpressConnect for HANA DB (ECH) 7
 - install ODBC libraries 32
- ExpressConnect for Oracle (ECO) 7

F

- files
 - installation log, Replication Server 25, 32
 - log.txt 23, 32
 - runserver 38
 - si_reg.xml 25
 - SYBASE.bat 23, 37
 - SYBASE.env 23, 37
- full installation 23, 25

G

- graphical user interface (GUI) installation 24
- GUI mode
 - installing Replication Server 25
 - uninstalling Replication Server 41

Index

H

hardware requirements 17

I

ini subdirectory 23

installation

- check upgrade incompatible version 25
- GUI mode 25
- log file, Replication Server 32
- overview 5
- plan 9
- starting 25
- troubleshooting during silent or console mode 32
- typical software components 25

Installation

- task flow 5

installation directories

- contents 23

installer

- custom installation 23, 25
- errors in starting 25
- full 23
- full installation 25
- standard installation, typical 23
- typical installation 25

installing

- Adaptive Server for the Replication Server System Database 35
- ODBC libraries for ExpressConnect for HANA DB 32
- Replication Server Data Assurance (DA) Option 29
- Replication Server, using -D flag 31

interactive mode

- response file, installing Replication Server with 24

L

%LIB% 37

license

- sub-capacity 15

licenses

- check number of processors 12
- license model 10

obtaining 10

sub-capacity 17

Sybase Control Center 14

Sybase IQ InfoPrimer integration 15

types of 13, 15

log files, reviewing after installation 35

log.txt file 23, 32

M

methods of installation

Replication Server 25

Microsoft Visual C++ 2010 17

Microsoft Visual Studio 2005 17

mixed-version requirements 9

modifying

- remove si_reg.xml file 23

O

obtaining licenses 10

OCS-15_0 subdirectory 23

operating system

- determining service pack levels for 19
- service pack levels 19
- service pack requirements for 19

operating system requirements 17

overview

- installation 5
- SySAM licensing 10
- SySAM sub-capacity licensing 10

P

%PATH% 37

planning replication system 5

postinstallation tasks

- Replication Server 35

preinstallation tasks 9

product editions, types of 13

programs

- drepsrvr.exe 20

R

RAM requirements 17

regedt32 utility 38

registry keys 38

release bulletin 9

- REP-15_5 subdirectory 23
- Replication Server
 - components 7
 - details 7
 - in console mode 24, 29
 - in GUI mode 24, 25
 - in silent mode 24, 31
 - installing in command line mode 24, 30
 - installing in silent mode, unattended 30
 - licenses 10
 - uninstalling, prerequisites 41
 - with response files 24
- Replication Server Configuration Guide for Windows 5
- requirements
 - CPU 17
 - disk storage 17
 - hardware 17
 - operating system 17
 - operating system service packs 19
 - RAM 17
 - VMware 17
- response files
 - installing command line mode 24
 - installing with, Replication Server 24
 - Replication Server, creating for 30
- reviewing log files after installing 35
- rs_init utility 36

S

- SAP Service Marketplace (SMP) 10, 25, 32
- setting environment variables 37
- si_reg.xml file 23
- silent mode
 - uninstalling Replication Server 42
- silent mode installations
 - Replication Server 24, 31
 - response file, installing Replication Server with 31
 - troubleshooting 32
- software, diagnosing problems 20
- standard installation 23, 25
- starting
 - installation 25
 - the sample Replication Server 36
- subdirectories
 - charsets 23
 - ini 23
 - OCS-15_0 23

- REP-15_5 23
- Sybase_Install_Registry 23
- sybuninstall 23
- SYSAM-2_0 23
- supported protocols 17
- %SYBASE% environment variable 37
- Sybase installation directories
 - contents 23
- Sybase IQ InfoPrimer 15
- Sybase Product Download Center (SPDC) 10, 25
- Sybase_Install_Registry subdirectory 23
- %SYBASE_OCS% environment variable 37
- %SYBASE_REP% environment variable 37
- SYBASE_SAM_CAPACITY 17
- SYBASE.bat file 23, 37
- SYBASE.env file 23
- sybuninstall subdirectory 23
- SySAM 25
 - configure IPv6 12
 - FLEXnet Publisher 11
 - license checkout 12
 - license server version 11
 - sub-capacity licensing 11, 15
- SySAM license model 10
- SySAM license server 11
- SySAM sub-capacity 15
 - requirements 17
- SYSAM-2_0 subdirectory 23
- sysamcap utility 10
- system requirements 17

T

- tables
 - system requirements 17
- tasks, administration 24
- troubleshooting
 - during console or silent mode installation 32
- types of installations
 - custom 23, 25
 - full 23, 25
 - standard 25
 - typical 23, 25
- typical installation 23, 25

U

- uninstalling
 - in console mode, Replication Server 42

Index

- in GUI mode, Replication Server 41
 - in silent mode, Replication Server 42
- upgrading
 - Adaptive Server Enterprise 35
 - mixed-version environments 9
- utilities
 - dsedit 37
 - regedt32 38

- rs_init 36
 - sysamcap 10, 17

V

- version restrictions, when upgrading 9
 - VMware 17