SYBASE®

Installation Guide

Replication Server® 15.6

UNIX

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Conventions

Learn about the style and syntax conventions used in Sybase® documentation.

Style conventions

Key	Definition
`monospaced(fixed-width)`	• SQL and program code • Commands to be entered exactly as shown • File names • Directory names
`italic monospaced`	In SQL or program code snippets, placeholders for user-specified values (see example below).
italic	• 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	• 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 ODBC – Replication Agent for IBM DB2 UDB and Microsoft SQL Server
- Replication Agent for Oracle – Replication Agent for Oracle

Before You Begin

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.

See also

- *SySAM License Server* on page 8

Replication Server Components

Along with the Replication Server® software, the product includes several additional 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)

  Note: Embedded Replication Server System Database (ERSSD) requires Sybase SQL Anywhere. It is not supported for 64-bit Linux on POWER.
- RepAgent for ERSSD
- Replication Monitoring Services (RMS)

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 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 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

Preinstallation Tasks

Review the preinstallation tasks before installing Replication Server.

Read the 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 at the Product Documentation Web page at *http://www.sybase.com/support/manuals*.

Plan Your Replication System

Review the requirements of your replication system.

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

Mixed-Version Support

Replication Server supports mixed-version environments. 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

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

1. Decide which SySAM license model to use:
   - The unserved license model – obtains licenses directly from the license file. To use an unserved license, save the license to the same machine on which you are installing the Sybase product.
   - The served license model – uses a license server to manage the license allocation to 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 do not need to 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 2.0 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), you must specify the host ID of the machine where the licenses will be deployed.
   - For unserved licenses – it is 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 *SySAM Users Guide* .
   - For served licenses – it is the host ID of the machine where the license server will run.
5. Before installing your product, get license files from SPDC at *https://sybase.subscribenet.com* using SPDC access information you receive from Sybase or your Sybase reseller.

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

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

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

For more information on SySAM licensing, see the *SySAM Users Guide*.

SySAM License Server

Learn about the required SySAM license server version to install.

- 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
  Replication Server 15.5 and later are linked with the FLEXnet Publisher version, which is platform-specific.

Table 1. FLEXnet Publisher Versions Supported on UNIX Platforms

Platforms	FLEXnet Publisher Version
HP Itanium (64-bit)	11.6
IBM AIX (64-bit)	10.8.5
IBM p-Series (Linux on POWER) (64-bit)	11.5
Red Hat Enterprise Linux (RHEL) (32-bit and 64-bit)	11.5
SuSE Linux Enterprise Server (SLES) (32-bit and 64-bit)	11.5
Sun Solaris SPARC 8, 9, and 10 (64-bit)	11.5
Sun Solaris 10 x86-64 (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 components on all platforms, before installing Replication Server 15.6. 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, 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 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, this command configures use of the IPv4/IPv6 dual stack binaries:

```
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 the *SySAM Users Guide*.

Replication Server 15.6 Product Editions and Licenses

Replication Server 15.6 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.

Changes in RTLE for Replication Server 15.6

You can replicate from Oracle to Sybase IQ with Replication Server 15.6. Besides Replication Server, RTLE includes Replication Agent for Oracle to allow you to connect to an Oracle primary data server. The documentation for RTLE includes Replication Server Options product documentation in addition to Replication Server product documentation.

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.	REP_HVAR_ASE
	ExpressConnect for Oracle	Provides Replication Server with the capability to connect directly to Oracle. See the Replication Server Options 15.5 product documentation.	REP_EC_ORA

Table 3. Real-Time Loading 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
	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.	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.
Optional	None		

Replication Server — Advanced Services Option

The Advanced Services Option, which is a separately licensed product option, includes several performance enhancements.

- 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

Sub-capacity Licensing

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

Platform Support

Table 4. 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
IBM	LPAR	AIX 6.1	Virtual partition
	dLPAR		Virtual partition
Sun	Dynamic System Domains	Solaris 10	Physical partition
	Solaris Containers/Zones with Solaris Resource Manager		OS partition

Vendor	Product	Platform Support	Virtualization Type
Intel, AMD	VMWare ESX Server* Guest OS: Windows	VMWare ESX 3.5, Guest OS: Windows 2003, RH 5.3, SuSe 10	Virtual machine
	VMWare ESX Server Guest OS: Linux	VMWare ESX 3.5, Guest OS: Windows 2003, RH 5.3, SuSe 10	Virtual machine
	Xen,** DomainU: Windows	Windows 2003	Virtual machine
	Xen, DomainU: Linux	RH 5.3, SuSe 10	Virtual machine

* VMWare ESX Server excludes Sun Solaris x64, VMWare Workstation, and VMWare Server.

** Xen excludes Sun Solaris x64.

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*.

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 UNIX

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 UNIX platforms.

Table 5. System Requirements for Replication Server on UNIX Platforms

Item	Requirement
RAM	A minimum of 512MB RAM.

Item	Requirement
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: • 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. More disk space may be required, depending on your replication system application.

Item	Requirement

Operating system	One of:
	• HP Itanium (64-bit):
	  • HP-UX 11.23
	  • HP-UX 11.31
	  The installer requires the **gzip** utility. Ensure that the path to **gzip** is set in the $PATH environment variable.
	• IBM AIX (64-bit):
	  • AIX 5.3
	  • AIX 6.1
	  Before you start Replication Server, you must install the IBM XL C/C++ Runtime for AIX and the SMP Runtime Libraries for AIX that are suitable for your version of AIX. Obtain the libraries from your IBM AIX operating system installation media.
	  These libraries are also available from the IBM AIX Web site:
	  • The IBM XL C/C++ Runtime for AIX is available on the Web site under “Latest updates for supported IBM C and C++ compilers.”
	  • The SMP Runtime Libraries for AIX are available on the Web site under “IBM XL C/C++ Enterprise Edition for AIX, Runtime Environment and Utilities.”
	• Linux on x86 (32-bit and 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
	  • SuSE Linux Enterprise Server SLES 11
	  • kernel-*-2.6.27.19-5.1
	  • glibc-2.9-13.2
	• 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

Item	Requirement
	• 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)
Supported protocols	TCP/IP

Operating System Patch Requirements

Verify that the latest patches are installed on your operating system.

- 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.

Operating System	Recommended Patch Cluster
Sun Solaris SPARC 8	111721-04
Sun Solaris SPARC 9	Not applicable
Sun Solaris SPARC 10	Not applicable
Sun Solaris 10 x86-64	118345-03 and 119964-07 — to run Replication Server 15.6 with an ERSSD.

- 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.

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.

Determining Operating System Patch Level on UNIX Platforms

Determine the current installed patches and display the operating system version level on UNIX platforms.

- On HP Itanium, enter:
  ```
  /usr/sbin/swlist -l patch
  ```
- On IBM AIX, enter:
  ```
  /usr/sbin/instfix -a
  ```
- On Sun Solaris, enter:
  ```
  showrev -p
  ```
- On Linux, enter:
  ```
  rpm -q -a
  ```

Installation Directory Structure

Learn about the Replication Server installation directory and the subdirectories into which components are installed.

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_6.

Replication Server 15.6 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 15.6 into the same directory containing these existing products.

However, if you are using other Sybase products, installing Replication Server 15.6 may cause some environment variables to change. Reset the environment variables to make individual products work.

Note: You can install Replication Server 15.6 in the same directory as Adaptive Server Enterprise and Open Client and Open Server versions 12.5.1 or later.

Sybase recommends that you do not uninstall Replication Server 15.6 if it has been installed in the same directory as older Sybase products that have a version number lower than 15.5, otherwise, these products may not work correctly.

You can install Replication Server 15.6 on top of Replication Server 12.6 and later, in the same `$SYBASE` directory. Doing so creates a duplicate entry in the `interfaces` 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 `interfaces` file.

Constraints

Do not install Replication Server version 15.6 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 15.6. For this reason, Sybase recommends that you back up your current directory before installing Replication Server version 15.6.

Note: If you are installing Replication Server 15.6 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."

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 `$SYBASE/REP-15_5/ASA11`, because it is used only for Replication Server. As a result, the directory structure enables you to install into an existing `$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` subdirectories, 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 from what is documented, depending on the components you install.

Replication Server Installation in a Unique Directory on UNIX Platforms

You can install Replication Server in a unique directory without affecting Sybase environment variables on UNIX platforms.

Note: When you install Replication Server in a unique installation directory, you must maintain two `interfaces` files. One `interfaces` file is required for Replication Server components and another for your other Sybase applications.

See also

- *Environment Variables on UNIX* on page 31
- *Installing Replication Server in GUI Mode* on page 21

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.
- `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 15.6 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, locales, 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.

Installation Setup Options

Learn about 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:

- 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.

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 – 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.

Performing Administrative Tasks

Complete the administrative tasks 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.
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

Create a Sybase user account to ensure 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.

1. 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 installed other Sybase software, the “sybase” user should already exist.
2. Verify that you can log in to the machine using this account.

Replication Server Installation

Install Replication Server using GUI mode (recommended), console mode, or silent mode.

Installing Replication Server in GUI Mode

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

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. 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).
3. If you downloaded the product from SPDC, go to the directory where you extracted the installation image and start the installer:

   ```
   ./setup.bin
   ```

   If you are installing using the CD, mount it and start the installer.

   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.

   - On HP-UX Itanium:
     1. Log out, log in as “root”, and mount the CD using:

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

     2. Log out as “root” and log in again as “sybase.”
     3. Start the installer:

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

   - On IBM AIX:
     1. Log in as “sybase” and mount the CD:

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

     2. Start the installer:

        ```
        cd /device_name
        ./setup.bin
        ```

   - On Sun Solaris:
     1. The operating system automatically mounts the CD. Log in as “sybase.”

Note: If you get CD-reading errors, check your operating system kernel to make sure that the ISO 9660 option is turned on.

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.

2. Start the installer:

```
cd /cdrom/Volume Label
./setup.bin
```

- On Linux and Linux on POWER:
  1. Log in as "sybase" and mount the CD:

```
# mount -t iso9660 /dev/cdrom /mnt/cdrom
```

  2. 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.

If there is not enough disk space in the temporary disk space directory, 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.

4. In the Introduction window, click **Next**.
5. 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, you see:

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

     Click **Yes**.
   - If the installation directory you selected exists, and already contains an Replication Server installation, you see:

```
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**.

6. 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** – lets you select the components to install. Some components are automatically installed if they are required to run your selected components.

   Click **Next**.
7. Read the License and Copyright Agreement:
   a) Select the geographic location from where you are installing to display the agreement for your region.
   b) 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.
   c) Click **Next**.
8. 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 **Use previously deployed license server** 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.

   See the *SySAM Users Guide*.

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

   Provide:

   - 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**.

10. The installation summary window displays the selections you have made. Review the information, and click **Install**.
11. 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 manually configure a full-featured Replication Server.

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

      Click **Next**.
12. If you chose to configure and start a sample Replication Server, the installer proceeds to configure and start the sample Replication Server.

    Click **Next** when done.
13. When the final window appears, indicating a successful installation, click **Done** to exit the installer.

See also

- *Installation Verification* on page 27
- *Postinstallation Tasks* on page 29
- *Runserver File* on page 33

Installing Replication Server in Console Mode

Choose command line installation if you prefer a non-windowing 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.

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

Task

1. At the command prompt, enter:

   ```
   ./setup.bin -i console
   ```
2. The flow of the installation is identical to a GUI installation, except output is written to a terminal window and responses are entered using the keyboard. Follow the remaining prompts to install Replication Server.

See also

- *Installing Replication Server in GUI Mode* on page 21

Installing Replication Server Using a Response File

Unattended or silent installations are typically used for updating 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 that you can edit to change any responses before using it in subsequent installations.

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.

To generate a response file during installation, enter:

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

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/REP/ResponseFile.txt
```

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

Installing in GUI Mode Using a Response File

Unattended or silent installations are typically used for updating multiple systems across the enterprise.

Prerequisites

Create an installation 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.

Task

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

```
./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.

See also

- *Command Line Options* on page 28
- *Creating a Response File* on page 25
- *Installing Replication Server in GUI Mode* on page 21

Installing in Silent Mode

Unattended or silent installations are typically used for updating 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 a fully automated installation.

Task

To install in silent mode, run:

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

where:

- *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.

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

See also

- *Command Line Options* on page 28
- *Creating a Response File* on page 25
- *Installing Replication Server in GUI Mode* on page 21

Installation Verification

Verify that the installation is valid and successful.

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.

Troubleshoot Installation Problems

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

Set the environment variable LAX_DEBUG to true before running the installer. The installer then generates 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`.

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.

Command Line Options

The command line options you can use when installing or uninstalling Replication Server in console mode.

Table 6. Command Line Options

Option	Purpose
-i swing	Uses GUI mode.
-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 and the installation is "silent."
-D	Passes custom variables and properties. For example, to override the default installation directory when you run the installer, enter: `install_launcher_name -DUSER_INSTALL_DIR=/sybase`
-r	Generates a response file and a reference.
-f	References response files.
-l	Sets the installer's locales.
-\?	Displays the installer help.

Postinstallation Tasks

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

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

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/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`

Adaptive Server for the RSSD

Learn how to 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 `interfaces` file. Use this resource file to configure and start the sample Replication Server after installation. The sample Replication Server resource file will create an ERSSD.

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.

All files and logs associated with the sample Replication Server are in `$SYBASE/REP-15_5/samp_repserver`.

Table 7. Sample Replication Server Configuration Information

Sample Replication Server Item	Definition
Name	*SAMPLE_RS*
Port	11752
User name	*sa*
Password	None
ERSSD server name	*SAMPLE_RS_ERSSD*
ERSSD server port	11751
ERSSD user name	*SAMPLE_RS_RSSD_prim*
ERSSD password	*SAMPLE_RS_RSSD_prim_ps*

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

Server Entries in the Interfaces File

Use **dsedit** that comes with Replication Server installation to modify network connection information.

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 `interfaces` file to the actual server name. Use **dsedit** to update `interfaces` file.

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

Note: If your system does not have X-Windows, use **dscp** to configure server entries in the `interfaces` file. The utility is located in `$SYBASE/$SYBASE_OCS/bin`.

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

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

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

Environment Variables on UNIX

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:

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

After exiting the 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:

- Source `SYBASE.sh` (Bourne, Korn, or BASH shell) or `SYBASE.csh` (C shell) 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 8. Environment Variables for UNIX and Linux

Environment Variable	Description
• For HP Itanium, Sun Solaris, Linux, and Linux on POWER (IBM pSeries): $LD_LIBRARY_PATH $SHLIB_PATH • For Sun Solaris SPARC: $LD_LIBRARY_PATH_64 • For IBM AIX: $LIBPATH	Subdirectory path to the Open Client and Open Server runtime shared library
$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_JRE6	Subdirectory path to where the Java Runtime Environment (JRE) resides
For HP Itanium, Sun Solaris, and Linux: • $SYBASE_JRE6_32	Subdirectory path to where the Java Runtime Environment (JRE) resides
For HP Itanium, IBM AIX, Sun Solaris, and Linux on POWER (IBM pSeries): • $SYBASE_JRE6_64	Subdirectory path to where the Java Runtime Environment (JRE) resides
$SYBASE_OCS	Subdirectory path to Open Client files
$SYBASE_REP	Subdirectory path to Replication Server
$SYBASE_UA	Subdirectory path to the Unified Agent Framework and Replication Monitoring Services

Runserver File

You can start a Replication Server using the runserver file created by `rs_init` in the Sybase installation directory. The runserver file is an executable script that contains the complete command line required to start a Replication Server.

See the *Replication Server Configuration Guide for UNIX > Start or Stop a Replication Server*.

Replication Server Uninstallation

Learn about the prerequisites before uninstalling Replication Server.

- Log on to your machine using an account with administrator privileges.
- Shut down all Sybase applications and processes.
- Determine the mode of uninstallation—GUI (recommended) or silent mode.

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.

Uninstalling in GUI Mode

Uninstall Replication Server in GUI mode.

1. Enter:

   ```
   $SYBASE/sybuninstall/RepServer_Suite/uninstall
   ```
2. Click **Next**.
3. Select one of:
   - **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 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 a 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

Uninstall Replication Server in console mode.

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

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

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

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

See also

- *Command Line Options* on page 28
- *Uninstalling in GUI Mode* on page 35

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 -i silent
```

The **uninstall** program starts.

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.

See also

- *Command Line Options* on page 28
- *Uninstalling in GUI Mode* on page 35

Installation and Uninstallation of Replication Manager

There are several different methods available for setting up and uninstalling Replication Manager; however, Sybase recommends that you use GUI mode.

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 on the scale and complexity of your replication environment, you can set up either a two-tier or a three-tier solution. In a two-tier management solution, Replication Manager connects directly to the servers 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 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.
- Runs on Microsoft Windows operating systems as well as all UNIX operating systems that Replication Server supports.
- Runs within the same Sybase Central framework as the Adaptive Server plug-in.
- Manages a warm standby environment.
- Supports multisite availability (MSA).
- Supports an ERSSD.
- Provides for logging and tracing of server commands.
- Provides two-tier and three-tier management solutions by supporting RMS.

See Chapter 3, “Managing Replication Server with Sybase Central” in the *Replication Server Administration Guide Volume 1* .

Installing Replication Manager in GUI Mode

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

1. Launch the installer.

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

2. In the Introduction window, click **Next**.
3. Read the License and Copyright Agreement:
   a) Select the geographic location from where you are installing to display the agreement for your region.
   b) 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.
   c) 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 replaced.
     ```

Click **Next**.

5. The installation summary window displays the selections you have made. Review the information, and click **Install**.
6. When the final window appears, indicating a successful installation, click **Done** to exit the installer.

Installing Replication Manager in Console Mode

Choose command line installation if you prefer a non-windowing 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.

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

Task

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

See also

- *Command Line Options* on page 28
- *Installing Replication Manager in GUI Mode* on page 37

Installing with a Response File

Unattended or silent installations are typically used for updating 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 that you can edit to change any responses before using it in subsequent installations.

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.

To generate a response file during installation, enter:

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

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

Unattended or silent installations are typically used for updating multiple systems across the enterprise.

Prerequisites

Create an installation response file.

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.

Task

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:

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

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.`

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.

See also

- *Command Line Options* on page 28
- *Creating a Response File* on page 40

Installation Verification

Verify that the installation is valid and successful.

Make sure your Replication Manager installation has successfully installed:

- View the `$SYBASE/RMP-15_5/InstallAndRegister.log` file and also view all logs in `$SYBASE/log` to check for errors. A valid installation does not contain the word "error."
- Ensure that the date of the `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.

Replication Manager Uninstallation

Learn about the prerequisites before uninstalling Replication Manager.

- Log on to your machine using an account with administrator privileges.
- Shut down all Sybase applications and processes.
- Determine the mode of uninstallation—GUI (recommended) or silent mode.

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

Uninstall Replication Manager in GUI mode.

1. Enter:

   ```
   $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. When 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.

Uninstalling in Console Mode

Uninstall Replication Manager 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 uninstallation, except output is written to a terminal window and responses are entered using the keyboard. Follow the remaining prompts to uninstall Replication Manager.

   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.

See also

- *Command Line Options* on page 28

- *Uninstalling in GUI Mode* on page 43

Obtaining Help and Additional Information

Use the Sybase Getting Started CD, Product Manuals site (SyBooks™ Online), and online help to learn more about this product release.

- The Getting Started CD (or download) – contains release bulletins and installation guides in PDF format, and may contain other documents or updated information.
- Product Manuals at *http://sybooks.sybase.com/* – is an online version of Sybase documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. In addition to product documentation, the Web site also has links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, Community Forums/Newsgroups, and other resources.
- 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 Manuals Web site.

Technical Support

Get support for Sybase 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 Sybase Technical Support or the Sybase subsidiary in your area.

Downloading Sybase EBFs and Maintenance Reports

Get EBFs and maintenance reports from the Sybase Web site.

1. Point your Web browser to *http://www.sybase.com/support*.
2. Select EBFs/Maintenance. If prompted, enter your MySybase user name and password.
3. Select a product.
4. Specify a time frame and click **Go**. You see a list of EBF/Maintenance releases.

   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 **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.

Sybase 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*

Creating a MySybase Profile

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

1. Go to *http://www.sybase.com/mysybase*.
2. Click **Register Now**.

Accessibility Features

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

Documentation for Sybase products 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.

Sybase 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.

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