SYBASE®
An SAP® Company

Installation Guide

Replication Server® Data Assurance Option 15.7.1

DOCUMENT ID: DC01637-01-1571-02
LAST REVISED: June 2012
Copyright © 2012 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

Planning Your Installation 1
Obtaining a License at SPDC or SMP 1
License Type 2
Sub-capacity Licensing 2
System Requirements 4
Deployment Types 5
Single-Server Deployment 5
Distributed Deployment 6
Installing Replication Server Data Assurance Option 9
Installing in GUI Mode 9
Installing from the Command Line 14
Installing Using a Response File 15
Creating a Response File 15
Installing in Silent Mode 16
Command Line Options 16
Getting Started After Installing 19
Uninstalling Replication Server Data Assurance Option 21
Uninstalling in GUI Mode 21
Uninstalling in Console Mode 22
Uninstalling in Silent Mode 22
Upgrade Considerations 23
Windows Start Menu Shortcuts 23
Installer Parameters 23
Overwriting a Previous Installation 23
Existing Files Are Overwritten 23
Retain Installation Settings 24
Configuration Settings 24
New Instance Name 25
Java Runtime Environment 26
Obtaining Help and Additional Information 27

Technical Support 27
Downloading Sybase EBFs and Maintenance Reports 27
Sybase Product and Component Certifications 28
Creating a MySybase Profile 28
Accessibility Features 28
Index 31

Planning Your Installation

Before you install or upgrade, prepare your environment.

- Identify the components and options to install or upgrade.
- Obtain a license.
- Make sure your system meets all requirements for your installation scenario and planned use.

Note: If you are upgrading from a previous version, review the update considerations at the end of this document.

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.

These steps summarize the actions you must take to install a Sybase Software Asset Management (SySAM) license. You must refer to the *Sybase Software Asset Management Users Guide* for details.

1. Choose a SySAM license model.

License Model	Description
Unserved license model	Licenses are obtained directly from a 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 do not need to share the same machine, operating system, or architecture.

3. If you chose the served license model, do one of:
   - Install the new license server on a machine that does not have an existing license server.
   - To install on a machine that is running a SySAM 1.0 license server, follow migration instructions in the *Sybase Software Asset Management Users Guide* to migrate to the newer SySAM version.
4. Before installing your product, get license files from SPDC or from SMP using the access information you receive from Sybase or your Sybase reseller.

Next

For more information on SySAM licensing, see the *Sybase Software Asset Management Users Guide* on the Sybase Product Documentation Web site at *http://sybooks.sybase.com*.

License Type

The Replication Server® Data Assurance Option requires the REP_DATA_ASSURANCE license.

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 1. 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, AIX 7	Virtual partition

Vendor	Product	Platform Support	Virtualization Type
	dLPAR		Virtual partition
Oracle	Dynamic System Domains	Solaris 10	Physical partition
	Solaris Containers/Zones with Solaris Resource Manager		OS partition
Intel, AMD	VMWare ESX Server Guest O/ S: Windows, Linux, and Solaris x64 VMWare ESX Server excludes VMWare Workstation and VMWare Server.	VMWare ESX 3.5, ESX 4.0 and ESX 4.1, Guest OS: Windows 2008 R2, Windows 7, Red Hat 5.6, SuSE 11, Solaris x64	Virtual machine
	Xen, DomainU: Windows and Linux Xen excludes Solaris x64.	Windows 2008 R2, Windows 7, Red Hat 5.6, and SuSe 11	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

Make sure your system meets all requirements before you install. See the release bulletin for the most current information about required system patches.

Item	Requirement
CPU	A minimum of 1 single core, 2 GHz processor
RAM	A minimum of 512MB RAM
Disk storage	A minimum of 1GB of available hard disk space

Operating system	One of:
	• Microsoft Windows 2008 R2
	• Microsoft Windows 7
	• Microsoft Windows XP
	• HP Itanium (64-bit):
	  • HPUX 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 6.1
	  • AIX 7.x
	• Linux on x64 (64-bit):
	  • Red Hat 5.5
	  • Red Hat 6.0
	  • SuSE Linux Enterprise Server SLES 10
	  • SuSE Linux Enterprise Server SLES 11
	• Linux on IBM p-Series (Linux on POWER) (64-bit):
	  • Red Hat Enterprise Linux 5.5
	  • Red Hat Enterprise Linux 6.0
	  • SuSE Linux Enterprise Server SLES 10
	  • SuSE Linux Enterprise Server SLES 11
	• Solaris (64-bit)
	  • Solaris 10 SPARC
	  • Solaris 10 x64

Deployment Types

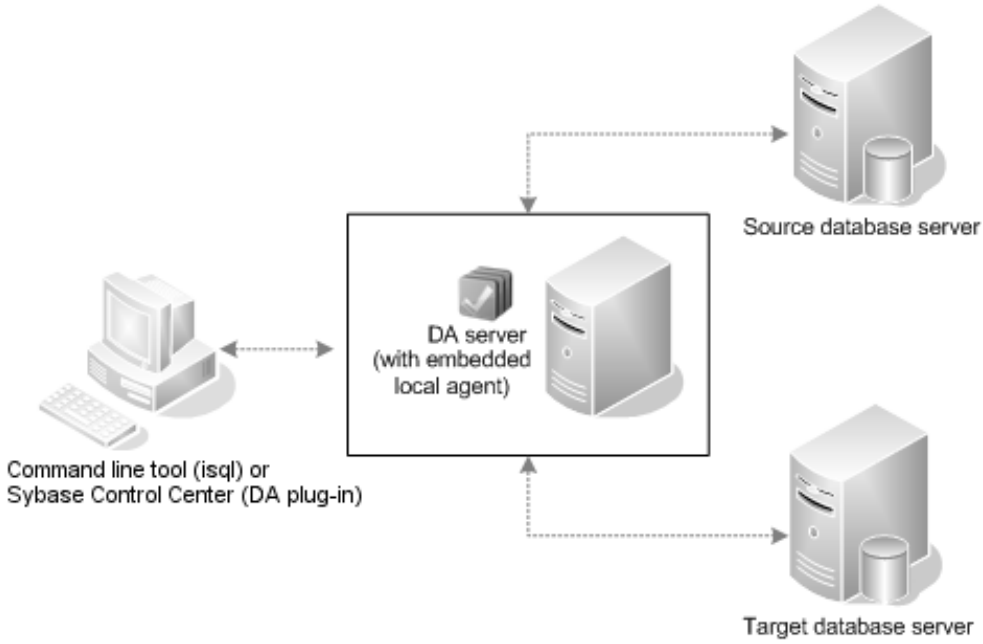
You can set up a single-server or a distributed deployment for Replication Server Data Assurance (DA) Option.

Your choice of deployment type depends on your performance needs and the ease of installation and maintenance required.

Single-Server Deployment

A single-server deployment consists of Data Assurance (DA) server, and the local agent that comes with the DA server installation installed on a single machine. The local agent connects to database servers for simple comparison.

Scenario	Suggested Deployment	Task
• Low network latency between the DA server and database servers • Few concurrent comparisons are required • Ease of deployment and maintenance preferred over maximum performance	Single-server	Install the DA server component on a single machine. **Note:** DA server has a built-in local agent that you can use, which provides the same functionality as the remote DA agent. This is easier to setup, but if the network connection between the database server and DA server is slow, this network latency makes the DA jobs run slower. Avoid using the 'external sort' option when DA is installed as a single server deployment, as the embedded local agent must handle all of the sorting work, which may put DA server under excessive strain. Add one or more DA agents to a single-server deployment to create a distributed deployment.

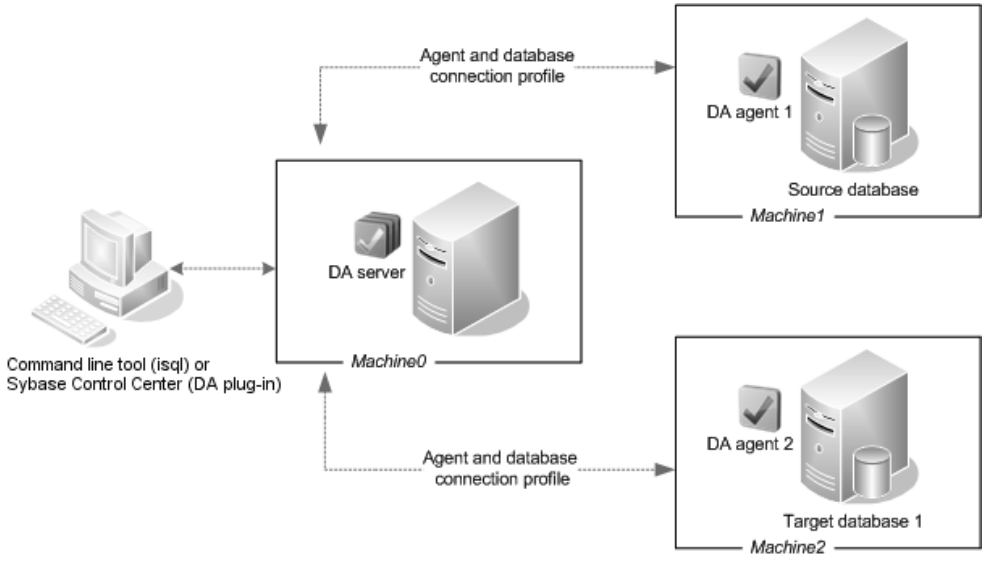


Distributed Deployment

A distributed deployment consists of Data Assurance (DA) server installed on one machine, and DA agents installed on or near the machines where the target and source databases are

residing. The DA server stores the agent and database connection profiles used to establish the connection required for comparing databases.

Scenario	Suggested Deployment	Task
• High network latency between the DA server and database servers • Many concurrent comparisons • The external sort function is used to work with very large tables • Performance takes precedence over ease of deployment and maintenance	Distributed	**1.** Install the DA server component to *Machine0*. **2.** Install DA agent components to *Machine1* and *Machine2*. **3.** Install additional DA agents to other machines if necessary. To achieve maximum performance, a standalone DA agent can be installed on the same machine as the database server. This configuration removes any network latency between the database and the DA agent. Typically, the DA agent is a lightweight process and does not negatively impact the host machine. However, in cases where the DA agent requires more CPU-time and disk space when used with the 'external sort' option (to avoid using SQL 'order by' when selecting data to compare), the preferred configuration is to install a standalone DA agent on a separate machine, which shares a fast ethernet connection with the database server. **4.** Complete the distributed deployment by creating an agent connection for each DA agent in the DA server, then assign database connections to the DA agent nearest the database servers.


Agent and database
connection profile
DA agent 1
Source database
Machine1
DA server
Machine0
Command line tool (isql) or
Sybase Control Center (DA plug-in)
Agent and database
connection profile
DA agent 2
Target database 1
Machine2

Installing Replication Server Data Assurance Option

Install Replication Server Data Assurance (DA) Option server and agents using your chosen deployment option.

Prerequisites

Before installing a Data Assurance (DA) server, identify the:

- Java RMI port – the Java RMI port used by outside applications to connect to the DA server's Java API. The default is 4500.
- TDS port – the port used by the command line tool (CLT) or **isql** utility. The default is 4501.
- DASD port – the port on which the system database runs if you enable the system database to accept outside connections. The default is 4503.

Before installing a DA agent, identify the:

- Java RMI port – the Java RMI port used by the DA server to connect to the DA agent. The default is 4510.
- TDS port – the port used by command line tool (CLT) or **isql** utility. The default is 4511.
- DTS port – the port used by the DA agent to stream fingerprints back to the DA server during comparisons. The default is 4512.

Installing in GUI Mode

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

The installer for DA server and agents is on the same CD used to install Replication Server. Although you can install one DA server and one DA agent at a time from the installer on a machine, you must run the installer again to install additional DA agents. You cannot install DA server and agents remotely, so you may need to mount the CD and install on more than one machine, depending on your chosen deployment.

1. Verify that the drive on which you will install the DA server and agents has enough disk space.
2. Insert the Replication Server DA Option media in the appropriate drive, or download and extract the installation image from the Sybase Product Download Center (SPDC) or the SAP Service Marketplace (SMP).
3. (Windows) Launch the **setup** program.

Note: If the installer does not start automatically, double-click `setup.exe` or select **Start** > **Run** and enter:

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

where *x*: is your CD drive.

If there is not enough disk space in the temporary disk space directory, set the environment variable TMP to *directory_name*, where *directory_name* is the name of the temporary directory to which the installation program writes the temporary installation files. For example:

```
set TMP=C:\WINDOWS\Temp
```

When specifying the *directory_name*, include its full path. Reexecute `setup.exe`.

4. (UNIX) If you downloaded the product from SPDC or SMP, go to the directory where you extracted the installation image and start the installer:

   ```
   ./da_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:

   a) Log out, log in as "root", and mount the CD using:

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

   b) Log out as "root" and log in again as "sybase."
   c) Start the installer:

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

   - On IBM AIX:

   a) Log in as "sybase" and mount the CD:

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

   b) Start the installer:

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

   - On Solaris:

   a) 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 product on your system using a CD, the # sign interferes with the installation process. Before using the current CD, either:

- Restart your system, or,
- Eject the CD. Delete the *Volume Label* file in `/vol/dsk`, and reinsert the CD.

b) Start the installer:

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

- On Linux and Linux on POWER:

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

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

b) Start the installer:

```
cd /mnt/cdrom
./da_installer/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 DA Option.

Set the environment variable IATEMPDIR to *tmp_dir*, where *tmp_dir* is the temporary directory to which the installation program writes the temporary installation files. For example, in C shell:

```
setenv IATEMPDIR "/usr/bin/tmp_dir"
```

When specifying the *tmp_dir*, include the full path. Reexecute `setup.bin`.

5. In the Introduction window, click **Next**.
6. Select the geographic location, agree to the license agreement, then click **Next**.
7. Specify where to install Replication Server DA Option and click **Next**.
8. Select an install set, then click **Next**:

Option	Description
Data Assurance server	Installs the DA server.
Data Assurance agent	Installs the DA agent. For the best performance, Sybase recommends that you install the DA agent on the machine where your database resides.

9. Specify the configuration settings for DA server or DA agent:

Table 2. DA Server

Field	Description
Data Assurance Server Instance Name	Unique name for the DA server instance, which: • Cannot be blank • Can contain only letters, digits, and underscores • Cannot be longer than 30 characters in length Default: myserver
Data Assurance Server Password	Password for the DA server login da_admin, which: • Must be 6 – 30 characters in length • Can contain only letters, digits, hyphens, and underscores Default: <blank>
Data Assurance Server Confirm Password	Password that must match with the chosen password for the installation to continue. Default: <blank>
Data Assurance Server RMI Port	Java RMI port used by outside applications to connect to the DA server's Java API, such as Sybase Control Center for Data Assurance. Default: 4500
Data Assurance Server TDS Port	Port used by the command line tool (CLT) or **isql** utility. Default: 4501
Data Assurance Server DASD Name	Unique name for the system database, which: • Cannot be blank • Can contain only letters, digits, and underscores • Cannot be longer than 30 characters in length Default: dasd
Data Assurance Server DASD Password	Password for the system database, which: • Must be 6 – 30 characters in length • Can contain only letters, digits, hyphens, and underscores Default: <blank>
Data Assurance Server Confirm DASD Password	Password that must match with the chosen password for the system database password. Default: <blank>

Field	Description
Data Assurance Server DASD Port	Port on which the system database runs. Default: 4503 **Note:** By default, the system database is not set up to accept outside connections, so this port is not in use.

Table 3. DA Agent

Field	Description
Data Assurance Agent Instance Name	Unique name for the DA agent instance, which: • Cannot be blank • Can contain only letters, digits, and underscores • Cannot be longer than 30 characters in length Default: myagent
Data Assurance Agent Password	(Required) Password for the DA agent login da_admin, which: • Must be 6 – 30 characters in length • Can contain only letters, digits, hyphens, and underscores Default: <blank>
Data Assurance Agent Confirm Password	(Required) Password that must match with the chosen password for the installation to continue. Default: <blank>
Data Assurance Agent RMI Port	Java RMI port used by the DA server to connect to the DA agent. Default: 4510
Data Assurance Agent TDS Port	Port used by command line tool (CLT) or **isql** utility. Default: 4511
Data Assurance Agent DTS Port	Port used by the DA agent to stream data back to the DA server during comparisons. Default: 4512

If you are installing only a DA agent, proceed to step 12.

10. On the Sybase Software Asset Management License Configuration window, select either:

Option	Description
Served License	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 the default.
Unserved License	(Default) Specify a directory where an unserved license is located, or accept the default.

You can install and use the Replication Server DA Option components without a license for 30 days. To continue using these components after the grace period, obtain valid licenses. See the *SySAM Users Guide*.

Click **Next**.

11. Set your SySAM e-mail configuration if necessary. Click **Next**.
12. Review the installation summary information, and click **Install**.
13. When the installation is complete, click **Done**.

Next

If you encounter an error after installation, check the log files in the `log` directory:

- On Windows
  `%SYBASE%\log`
- On UNIX
  `$SYBASE/log`

Installing from the Command Line

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

Prerequisites

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.

Note: On Windows, use `setupConsole.exe` when installing in console or silent mode.

1. Launch the installer in console mode from the command prompt:
   - On Windows
     ```
     x:\da_installer\setupConsole.exe -i console
     ```
     where *x* is the location of the installer
   - On UNIX
     ```
     ./da_installer/setup.bin -i console
     ```
2. Follow the remaining prompts. Output is written to a terminal window, and you must use the keyboard to enter responses.

Installing Using a Response File

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

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

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.

When installing in GUI or console mode, 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 Windows
  ```
  x:\da_installer\setup.exe -r responseFileName
  ```
  Note: On Windows, use `setupConsole.exe` when installing in console or silent mode.
- On UNIX
  ```
  ./da_installer/setup.bin -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 Silent Mode

Silent installation requires no user interaction, and all installation configuration is taken from the response file. This is useful when you want multiple identical installations, or to fully automate installation.

Prerequisites

Create an installation response file.

Task

Navigate to the installation directory and enter:

- On Windows

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

- On UNIX

```
./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** – to pass value for an installation parameter to the installer.

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`.

Command Line Options

Options for installing or uninstalling Data Assurance (DA) in console mode.

Option	Purpose
-i swing	Uses GUI mode.
-i console	Uses the console **interface** mode, where installation messages appear on the Java console and the installation wizard is run in console mode.

Option	Purpose
-i silent	Installs or uninstalls the product in silent mode, where the installation or uninstallation is performed with no user interaction.

-D	Passes custom variables and properties. For example, to override the default installation directory when you run the installer, enter:
	• On Windows
	`install_launcher_name -DUSER_INSTALL_DIR=C:\Sybase`
	• On UNIX
	`install_launcher_name -DUSER_INSTALL_DIR=/sybase`

-r	Generates a response file and a reference.
-f	References a response file.
-l	Sets installer locales. The available locales are en, ja, and zh_CN.
-\?	Displays installer help.

Getting Started After Installing

After you install Replication Server Data Assurance (DA) Option, you need start the DA server and agents, **isql**, and create connection profiles.

Note: Replication Server DA versions 15.5 and later install into a directory named `DA-15_5`.

1. Start the Data Assurance (DA) server and agents. Enter:
   - DA server
     - On Windows 32-bit
       `%SYBASE%\DA-15_5\server\instance\RUN_instance_32.bat`
     - On Windows 64-bit
       `%SYBASE%\DA-15_5\server\instance\RUN_instance_64.bat`
     - On UNIX 64-bit
       `$SYBASE/DA-15_5/server/instance/RUN_instance_64.sh`
   - DA agent
     - On Windows 32-bit
       `%SYBASE%\DA-15_5\agent\instance\RUN_instance_32.bat`
     - On Windows 64-bit
       `%SYBASE%\DA-15_5\agent\instance\RUN_instance_64.bat`
     - On UNIX 64-bit
       `$SYBASE/DA-15_5/agent/instance/RUN_instance_64.sh`
2. From **isql**, log in to DA server as an administrator:

```
$SYBASE/OCS-15_0/bin/isql -S host:4501 -U da_admin -P password -w 250
```

   where *host* is the name of the machine on which DA server is installed. DA server supports only one login, da_admin, which is assigned all administrator privileges. 4501 is the default TDS port number for DA server.

   Tip: To encrypt your password, use the **-X** option, for example:

```
$SYBASE/OCS-15_0/bin/isql -S host:4501 -U da_admin -P password -X
```

   You can stop the DA server by issuing the **shutdown** command from the command line.
3. Create an agent connection profile with **create agent** (see the *Replication Server Data Assurance Option Users Guide*). An agent connection profile allows the DA server to use the standalone DA agents for database access.

   Note: You need not create connection profiles if you are using a single-server deployment.

4. Create a database connection with **create connection** (see the *Replication Server Data Assurance Option Users Guide*). A database connection profile specifies the primary and replicate databases to be compared.

Uninstalling Replication Server Data Assurance Option

Uninstall the product in GUI, console, or silent mode.

Prerequisites
Stop any DA components that are running before starting the uninstaller.

Uninstalling in GUI Mode

Uninstall Replication Server Data Assurance (DA) Option server and agents.

You cannot uninstall DA server and agents remotely, so you must run the uninstaller on each machine where you have installed components.

1. On Windows, choose one of:
   - Select **Start > Settings > Control Panel > Add or Remove Programs**.
   - From the command line, enter:
     ```
     %SYBASE%\sybuninstall\da\uninstall.exe
     ```
   - Click **Start > Run** and enter:
     ```
     %SYBASE%\sybuninstall\da\uninstall.exe
     ```
   - Open Windows Explorer, navigate to `%SYBASE%\sybuninstall\da`, and double-click `uninstall.exe`.
2. On UNIX, enter:
   ```
   $SYBASE/sybuninstall/da/uninstall
   ```
3. Click **Next**.
4. 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.

   Click **Next**.
5. Review the uninstallation summary information, and click **Next**.

Note: Do not uninstall the SySAM license utility if you are using a SySAM license server.

6. Click **Done**.

Uninstalling in Console Mode

Uninstall Replication Server Data Assurance (DA) server and agents using console mode.

1. Navigate to the installation directory and enter:
   - On Windows
     ```
     %SYBASE%\sybuninstall\da\uninstall.exe -i console
     ```
   - On UNIX
     ```
     $SYBASE/sybuninstall/da/uninstall -i console
     ```
2. Follow the remaining prompts. 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.

Uninstalling in Silent Mode

Uninstall Replication Server Data Assurance (DA) server and agents using silent mode.

Navigate to the installation directory and enter:

- On Windows
  ```
  %SYBASE%\sybuninstall\da\uninstall.exe -i silent
  ```
- On UNIX
  ```
  $SYBASE/sybuninstall/da/uninstall -i silent
  ```

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

Upgrade Considerations

You can upgrade Replication Server Data Assurance Option 15.6 and later to Replication Server Data Assurance Option 15.7.1. Review these upgrade considerations before you upgrade Replication Server Data Assurance Option.

Windows Start Menu Shortcuts

If you upgrade to Replication Server Data Assurance Option 15.7.1 without first uninstalling the previous version, the Windows Start Menu still contains shortcuts for Replication Server Data Assurance Option 15.6 or 15.7, even if it has been overwritten.

To avoid this, uninstall the previous version before upgrading to 15.7.1.

Installer Parameters

Replication Server Data Assurance Option installer includes two parameters for configuring the DASD password: DA_SERVER_DASD_PASSWORD and DA_SERVER_DASD_PASSWORD_CONFIRM.

The GUI and console installation modes prompt you for these parameter values. However, if you are upgrading in silent mode using an installation response file from Replication Server Data Assurance Option 15.6, add these two lines to the file before you upgrade:

```
DA_SERVER_DASD_PASSWORD=sybase
DA_SERVER_DASD_PASSWORD_CONFIRM=sybase
```

Overwriting a Previous Installation

Replication Server Data Assurance Option 15.7.1 is backwardly compatible with the Replication Server Data Assurance Option 15.6 and 15.7 data structures, but additional considerations apply when you are overwriting an existing installation.

Existing Files Are Overwritten

When you upgrade or reinstall Replication Server Data Assurance Option, the installer overwrites most existing files from a previous installation.

The installer does not overwrite the files in:

- `$SYBASE/DA-15_5/server/`*`instanceName`*`/security/`
  or,

- `$SYBASE/DA-15_5/agent/instanceName/security/`

This ensures that any previously chosen Data Assurance administrator (da_admin) or DASD administrator (dba) passwords are not updated.

The installer replaces previously installed JAR files with more current files. You cannot downgrade to an earlier version once these files have been removed.

Installing Replication Server Data Assurance Option 15.7.1 over an earlier version overwrites the installation logs, which contain a record of the installation parameter values used in the earlier version. You may want to make a copy of the `log` directory before you upgrade.

Installing Replication Server Data Assurance Option 15.7.1 over an earlier version also overwrites the uninstaller files, which means the previous uninstaller will be unavailable.

Retain Installation Settings

The installer reads some existing installation settings, such as instance name and port numbers, but does not read most other settings, such as SySAM license settings.

If you are upgrading Replication Server Data Assurance Option by installing version 15.7.1 over an existing installation, use the same existing installation settings. You can obtain these settings from an earlier version installation response file.

Configuration Settings

During an upgrade or reinstallation, the installer uses the configuration settings from the previous installation.

The installer automatically searches the $SYBASE directory for DA installations. If there are multiple instances, the installer uses the valid instance directory that has been most recently modified. A "valid" instance directory must contain a readable configuration file that matches the directory instance name. For example:

```
$SYBASE/DA-15_5/server/instance/instance.cfg
```

or,

```
$SYBASE/DA-15_5/agent/instance/instance.cfg
```

The installer uses existing values for instance name, RMI port, TDS port, DTS port, DASD name, and DASD port. Each installation mode handles these existing values differently:

- GUI – existing configuration values are dimmed, and cannot be altered.
- Silent – silent installation parameters are ignored, and this warning message is added to the DA log file:

  ```
  Using the config variables from the existing installation.
  ```
- Console – does not prompt for DA server input values, and displays this message:

  ```
  Using the config values from the existing installation
  (server instance instance)
  ```

The installer does not overwrite any existing password file in $SYBASE/DA-15_5/server/*instance*/security. Each installation mode handles this differently:

- GUI – you cannot change the password fields, which are dimmed.
- Silent – silent installation parameters are ignored, and this warning message is added to the DA log file depending on the password files found:

  ```
  Not using the given da_admin password, as an existing installation
  has been found.
  ```

  and/or,

  ```
  Not using the given DASD password, as an existing installation has
  been found.
  ```
- Console – does not prompt for DA server input values, and displays this message depending on the password files found:

  ```
  Using the password settings from the existing installation.
  ```

  and/or,

  ```
  Using the DASD password settings from the existing installation.
  ```

New Instance Name

By default, the installer automatically searches the $SYBASE directory for existing DA installations and uses the configuration values from the valid instance directory that has been most recently modified. You may install another instance into same directory for your upgrade or reinstallation.

To install another instance into the same $SYBASE directory, you must force the installer to use the new instance name, to stop it automatically choosing an existing one. If you choose a new instance name for an existing installation, the installation process is similar to an upgrade which reuses the existing configuration values.

Note: Sybase recommends that you do not install two or more instances of the same type into the same folder structure. The installer's registry records the most recently installed instance. If you uninstall DA, the most recent instance created is removed.

Specify the agent or server instance name, issue these commands:

- DA server:
  - GUI mode

    ```
    setup.exe/bin -i swing -DDA_SERVER_INSTANCE_NAME=myserver2
    ```
  - Console mode

    ```
    setup.exe/bin -i console -DDA_SERVER_INSTANCE_NAME=myserver2
    ```
  - Silent mode – make sure the **DA_SERVER_INSTANCE_NAME** in the silent install installation properties file uses a different instance name than any existing instances.
- DA agent – use the **DA_AGENT_INSTANCE_NAME** parameter.

Java Runtime Environment

The installer for Replication Server Data Assurance Option 15.7.1 installs JRE 6.0 Update 24, but it does not remove JRE 6.0 Update 20, which is used by Replication Server Data Assurance Option 15.6. However, the corresponding registry entry indicates only JRE 6.0 Update 24.

Obtaining Help and Additional Information

Use the Sybase Getting Started CD, Product Documentation site, 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 Documentation 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 Documentation 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 or the SAP® Service Marketplace (SMP). The location you use depends on how you purchased the product.

- If you purchased the product directly from Sybase or from an authorized Sybase reseller:
  a) Point your Web browser to *http://www.sybase.com/support*.
  b) Select **Support > EBFs/Maintenance**.
  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 Sybase product under an SAP contract:
  a) Point your browser to *http://service.sap.com/swdc*.
  b) Select **Search for Software Downloads** and enter the name of your product. Click **Search**.

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.

Index

C

command line tool (CLT) 9
configuration setting
    configuration files 24
    log files 24
console mode
    installing Replication Server Data Assurance Option agent 14
    installing Replication Server Data Assurance Option server 14
    uninstalling Data Assurance agent 22
    uninstalling Data Assurance server 22
CPU requirements 4
creating
    response file 15

D

default directory 9
diagram
    distributed deployment 6
    single-server deployment 5
directories
    default 9
disk storage requirements 4

E

environment variables
    SYBASE_SAM_CAPACITY 3
errors
    while starting installer 9

G

GUI mode
    installing Replication Server Data Assurance agent 9
    installing Replication Server Data Assurance server 9
    uninstalling Replication Server DA Option agent 21
    uninstalling Replication Server DA Option server 21

H

hardware requirements 4

I

installation
    deployment types 5
    GUI mode 9
    plan 1
    Replication Server Data Assurance Option CD or DVD, mounting 9
    starting 9
    typical software components 9
installing
    Replication Server Data Assurance Option server and agent in silent mode 16
    using a response file 15
Installing
    deployment option 9
    preinstallation tasks 9
    Replication Server Data Assurance Option 9
isql utility 9

L

license 2
license agreement 9
license, obtaining 1
licenses
    sub-capacity 2, 3

M

mount commands by platform 9
mounting the Replication Server Data Assurance Option installation media 9

O

operating system requirements 4
overwrite existing files
    uninstaller files 23

P

platform
    mount commands 9
postinstallation 19
preinstallation tasks 1

R

RAM requirements 4
Replication Server Data Assurance Option
    in GUI mode 9
Replication Server Data Assurance Option agent
    in console mode 14
Replication Server Data Assurance Option server
    in console mode 14
requirements
    CPU 4
    disk storage 4
    hardware 4
    operating system 4
    RAM 4
response file
    creating 15

S

SAP Service Marketplace (SMP) 1, 9
served license model 1
silent mode
    uninstalling Replication Server Data Assurance Option agent 22
    uninstalling Replication Server Data Assurance Option server 22
starting
    installation 9
Sybase Product Download Center (SPDC) 1, 9
Sybase Software Asset Management for licenses 1
SYBASE_SAM_CAPACITY 3
SySAM
    sub-capacity licensing 2
SySAM license server 1
SySAM sub-capacity 2
    requirements 3
system requirements 4

U

uninstalling
    in console mode, Data Assurance agent 22
    in console mode, Data Assurance server 22
    in GUI mode, Replication Server Data Assurance Option agent 21
    in GUI mode, Replication Server Data Assurance Option server 21
    in silent mode, Replication Server Data Assurance Option agent 22
    in silent mode, Replication Server Data Assurance Option server 22
unserved license model 1
upgrade considerations 23
    back up log directory 23
    configuration setting 24
    installation modes 24
    installation response file 24
    installer parameters 23
    JRE 26
    new instance name 25
    overwrites existing files 23
    overwriting a previous installation 23
    retain installation settings 24
    Windows shortcuts 23
utilities
    isql 9
    sysamcap 3