

Release Bulletin Sybase® Replication Server® 15.5 for Microsoft Windows

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1. Accessing updated release bulletin

A more recent version of this release bulletin may be available on the Web. To check for critical product or document information added after the product release, use the Sybase® Product Manuals Web site.

- ❖ **Accessing the release bulletin at the Sybase Product Manuals Web site**
 - 1 Go to Product manuals at <http://www.sybase.com/support/manuals/>.
 - 2 Select a product and language and click Go.
 - 3 Select a product version from the Document Set list.
 - 4 Select the Release Bulletins link.
 - 5 From the list of individual documents, select the link to the release bulletin for your platform. You can either download the PDF version or browse the document online.

2. Product summary

Sybase Replication Server® version 15.5 is compatible with the following operating system configurations.

Microsoft Windows (32-bit and 64-bit):

- Windows XP Professional – Service Pack 2 or later
- Windows 2003 R2 – Service Pack 2 or later
- Windows Vista
 - Vista Business – Service Pack 1
 - Vista Enterprise – Service Pack 1
- Windows Server 2008 R2
- Windows 7

You must install the relevant Microsoft Visual Studio 2005 patch for your x86 or x64 Windows platform before you start Replication Server. See Microsoft Visual C++ 2005 Service Pack 1 Redistributable Package ATL Security Update at <http://www.microsoft.com/downloads/details.aspx?familyid=766a6af7-ec73-40ff-b072-9112bab119c2&displaylang=en>.

For a complete list of supported operating systems, see the Sybase Platform Certification Web site at <http://certification.sybase.com/ucr/search.do>.

2.1 Replication Server

For detailed information about new features in Replication Server 15.5, see the *Replication Server New Features Guide*.

For information about administering Replication Server 15.5, see the *Replication Server Administration Guide Volume 1*.

2.2 Replication Manager

Replication Manager, a plug-in to Sybase Central™, Java Edition, is a component of Replication Server 15.5. Replication Manager is available as a separate program.

Note Replication Manager is not certified for use with Adaptive Server® Enterprise Cluster Edition.

For detailed information about Replication Manager, see the *Replication Server Administration Guide Volume 1*.

For information about commands used to manage replication, see *Replication Server Reference Manual*.

2.3 Replication Monitoring Services

Replication Monitoring Services (RMS) is a component of Replication Server 15.5. RMS allows you to monitor various servers and components in your environment, acting as a middle layer between the Replication Manager and the servers in the replication environment. RMS also provides the ability to control the flow of data and set the configuration parameters.

Note RMS is not certified for use with Adaptive Server Enterprise Cluster Edition.

For detailed information about RMS, see the *Replication Server Administration Guide Volume 1*.

2.4 ExpressConnect for Oracle

ExpressConnect for Oracle (ECO), which is available with Replication Server Options 15.5 and later, provides direct communication between Replication Server and a replicate Oracle data server. ECO eliminates the need for installing and setting up a separate gateway server, thereby improving performance and reducing the complexities of managing a replication system.

To use ECO, Replication Server must be installed using the REP_EC_ORA license.

For detailed information about ECO, see the *ExpressConnect for Oracle Installation and Configuration Guide* in Replication Server Options 15.5 release.

2.5 Support for Internet Protocol version 6

The operating systems and their versions that support Internet Protocol version 6 (IPv6) are:

- Windows XP Professional – Service Pack 2 or later
- Windows 2003 R2 – Service Pack 2 or later

- Windows Vista
 - Vista Business – Service Pack 1
 - Vista Enterprise – Service Pack 1
- Windows Server 2008 R2
- Windows 7

2.6 Separately licensed features

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

- Enterprise Edition
- Real-time Loading Edition

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

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

Table 1: Replication Server product edition features and licenses

Edition	Feature type	Features	Description	License
Enterprise	Base	Replication Server		REP_SERVER
	Optional	Advanced Services Option	Replication Server performance enhancements, including the ability to replicate to Adaptive Server. See “Replication Server – Advanced Services Option” on page 6.	REP_HVAR_ASE
		ExpressConnect for Oracle	Provides Replication Server with the capability to connect directly to Oracle. See the Replication Server Options 15.5 documentation.	REP_EC_ORA

Edition	Feature type	Features	Description	License
Real-time Loading Edition	Base	Replication Server		REP_SERVER
		Real-time Loading (RTL)	Allows replication to Sybase® IQ.	REP_RTL_IQ
		Advanced Services Option	Replication Server performance enhancements, excluding the ability to replicate to Adaptive Server. See “Replication Server – Advanced Services Option.”	REP_HVAR_ASE
Optional	None			

To purchase licensed options, contact your Sybase sales representative.

2.6.1 Replication Server – Advanced Services Option

Replication Server 15.5 includes the Replication Server – Advanced Services Option containing these 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

2.6.2 Sybase ExpressConnect for Oracle, Replication Agent, and Enterprise Connect Data Access

Sybase ExpressConnect for Oracle, Replication Agent™, and Enterprise Connect™ Data Access are available as a product called Replication Server Options. You must have Replication Server to obtain Replication Server Options.

Replication Server Options provides bidirectional replication across distributed, heterogeneous systems.

Replication Server Options is available in three data-source-specific versions: Microsoft SQL, Oracle, and IBM DB2 UDB. See the *Release Bulletin for Replication Server Options 15.5 for Linux, Microsoft Windows, and UNIX* for details about supported platforms and compatible Replication Server versions.

3. Special installation instructions

This section includes special installation instructions that are not in the installation guide for your operating system.

3.1 Selecting an installation directory for Replication Server

Consider carefully whether to install Replication Server in its own product directory or in a directory with other Sybase products. *Do not* install Replication Server 15.5 in an existing Sybase installation directory if that directory contains any of these Sybase products:

- Replication Server version 12.5 or earlier
- Adaptive Server version 12.5.0.x or earlier
- Open Client/Server™ version 12.5.0 or earlier
- OpenSwitch™ version 12.5 or earlier
- DirectConnect™ version 12.5 or earlier

Warning! Installing Replication Server 15.5 along with any of the products listed above disables the older versions of these products. You cannot reverse these effects by uninstalling Replication Server 15.5.

3.1.1 Installing Replication Server in an existing directory

Installing Replication Server 15.5 in an existing directory that contains other Sybase products might result in Replication Server and the other Sybase products not working correctly. Before you install Replication Server in an existing directory, consider these points:

- You can install Replication Server 15.5 in an existing Sybase installation directory if that directory contains Adaptive Server Enterprise 15.0.x or Open Client/Server version 15.0. If you have newer versions of the *locales* or *charset* files, the installation program prompts you to specify whether 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.”

- Replication Server 15.5 includes a new version of Replication Server and many of its supporting components. Other Sybase products may contain earlier versions of the same components. Installing Replication Server 15.5 into the same directory containing these existing products will not impact the products.

However, if you are using other Sybase products, installing Replication Server 15.5 can cause some environment variables to change. Reset the environment variables to make the individual products work. For information about setting environment variables, see the *Replication Server Installation Guide* for your operating system.

Note You can install Replication Server 15.5 in the same directory as Adaptive Server and Open Client/Server versions 12.5.1 or later.

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

- If you install Replication Server 15.5 on a system that has Replication Server 15.0.1, Replication Server version 15.5 replaces version 15.0.1. If you require version 15.0.1, create a copy of the Replication Server 15.0.1 directory and subdirectories before installing version 15.5.
- You can install Replication Server 15.5 on top of Replication Server 12.6 or later in the same `%SYBASE%` directory. Installing version 15.5 on top of Replication Server 12.6 or later creates a duplicate entry in the `sql.ini` file for `SAMPLE_RS`, which is the sample Replication Server. `rs_init` warns you about the duplicate entry and uses the first instance of `SAMPLE_RS` found in the `sql.ini` file.

- If you have installed Replication Server 15.5 and Replication Server 12.6 or later in the same directory, Sybase recommends that you do not uninstall either version from this common directory.

Note When you uninstall Replication Server version 15.5, or version 12.6 or later, the uninstallation program prompts you to specify whether you want to delete files that have been modified since installation. Select “No to all.”

3.1.2 Installing Replication Server in a unique directory

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

To install Replication Server in a separate installation directory:

- 1 Terminate all Sybase processes running on the system on which you are installing Replication Server, including SySAM.

Note If you do not know which processes are running on the system, see the system administrator.

To stop SySAM:

- a Go to `%SYBASE%\%SYBASE_SYSAM%\bin`.
 - b Run `sysam stop`.
- 2 If you have an existing Adaptive Server that runs as a Windows service, disable the service:
 - a Click Start | Settings | Control Panel | Administrative Tools | Services.
 - b In the Services window, right-click the Adaptive Server service, shown as Sybase SQLServer servername in the Services list.
 - c Select Properties.
 - d Set Startup Type to Disabled.
 - e Close the Services window.
 - 3 Record the current environment variable settings by running the following command:

```
set > env.orig
```

This command saves the environment variables in a file called *env.orig*. You can read this file with a text editor.

Specifically, record the current values of:

- INCLUDE
- LIB
- LM_LICENSE_FILE
- PATH
- SYBASE
- SYBASE_JRE

- 4 Insert the Replication Server product CD into the CD drive.
- 5 Install Replication Server 15.5 as described in the *Replication Server Installation Guide for Windows*.
- 6 Specify a unique directory for the Replication Server product.
- 7 Specify the host name and port number of the license server.
- 8 Change the environment variables to the original settings that you recorded in step 3:
 - a Go to Start | Settings | Control Panel | System.
 - b Click the Advanced tab.
 - c Select Environment Variables.
 - d Under System Variables, change the values of the variables listed in step 3.
- 9 Configure Adaptive Server to start automatically:
 - a Go to Start | Settings | Control Panel | Administrative Tools | Services.
 - b Right-click the Adaptive Server service shown as Sybase SQLServer *servername* in the Services list.
 - c Click Properties.
 - d Set Startup Type to Automatic.

10 Restart your system.

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

3.2 Coexisting with older versions of SySAM

Replication Server version 15.5 uses a newer version of Sybase Software Asset Management System (SySAM) and an updated license format. You can run only one instance of a license server on a computer. To use earlier versions of Sybase products with Replication Server 15.5, you must modify SySAM.

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

3.3 Other sources of installation information

For installation and configuration information other than what the Replication Server 15.5 release bulletin provides, see:

- *Replication Server Installation Guide for Windows*. This guide contains instructions for installing Replication Server version 15.5.
If you are using Adaptive Server Enterprise, see the sections of *Adaptive Server Enterprise Installation Guide for Windows* that are related to using Replication Server and upgrading replicated databases.
- *Replication Server Configuration Guide for Windows*. This guide contains general information about installing Replication Server and instructions for using the *rs_init* file to configure Replication Server.

4. Special upgrade and downgrade instructions

Replication Server Configuration Guide for Windows contains detailed upgrade and downgrade instructions. Sybase strongly recommends that you read this information before you upgrade or downgrade Replication Server.

This section provides special upgrade and downgrade instructions for Replication Server version 15.5.

Warning! Before upgrading the user database to support Replication Server 15.5, upgrade Adaptive Server Enterprise to version 12.5 or later. Otherwise, the upgrade fails.

4.1 Upgrading and mixed-version requirements

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

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

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

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

4.2 Using enhanced monitors and counters

To use enhanced monitors and counters, perform the following steps:

❖ **Using enhanced monitors and counters**

1 Load this script into the RSSD after upgrading to Replication Server 15.5:

```
%SYBASE%\%SYBASE_REP%\scripts\rs_install_statreport_v1510_[ase|asa].sql
```

2 Run the `rs_stat_populate` and `rs_stat_genreport` stored procedures to produce the following information:

- Replication Server performance overview, such as the Distributor (DIST) processing, DSI processing, and so on.

- Replication Server performance analysis and tuning suggestions based on the critical Replication Server counters.

4.3 Updating Log Transfer Language version

When the Replication Agent connects to the Replication Server, a Log Transfer Language (LTL) version is returned.

When you upgrade to Replication Server version 15.5, the Replication Agents are still connected to Replication Server using the older negotiated LTL version. Restart the Replication Agents to use the new LTL version.

5. New and modified functionality

For detailed descriptions of new features and functionality in Replication Server 15.5, see the *Replication Server New Features Guide*.

6. Known problems

This section describes known problems in Replication Server version 15.5 and workarounds where available. These problems are marked with the corresponding Change Request (CR) numbers. Mention the appropriate CR number when you contact Sybase Technical Support regarding Replication Server issues.

Replication Server version 15.2 and later do not include these problem report files:

- *spr_rs*
- *cpr_rs*
- *spr_rms*
- *cpr_rms*

6.1 Replication Server problems

This section describes problems identified in Replication Server.

6.1.1 Replication Server does not support SSL on Windows

[CR #622259] Replication Server 15.5 does not support Secure Sockets Layer (SSL) on a 32-bit and 64-bit version of Windows platform.

6.1.2 Unable to upgrade RSSD in Replication Server from version 15.2 to version 15.5

[CR #622028] When upgrading from Replication Server 15.2 to Replication Server 15.5, the rs_init encounters this error:

Cannot drop the table 'rs_updown_status', because it doesn't exist in the system catalogs.

Workaround: Create a dummy table, rs_updown_status in the RSSD.

6.1.3 Incremental compilations are not handled properly in HVAR

[CR #621246] The mechanism for incremental compilation involving groups of transactions having more commands than what is set with dsi_compile_max_cmds, is not working correctly.

Workaround: Set dsi_compile_max_cmds to a very large value, avoiding incremental compilation from occurring.

6.1.4 Unable to use rs_init to configure Replication Server with an existing RSSD

[CR #620380] When configuring Replication Server 15.5 using the rs_init with an existing RSSD, an error occurs in rs_init.

Workaround: Drop the RSSD before configuring the Replication Server.

6.1.5 Partial update support for Microsoft SQL Server to Microsoft SQL Server replication

[CR #619438] Replication Server 15.5 does not support partial updates for large-objects (LOB) data including text, ntext, image and varchar(max), nvarchar(max), varbinary(max), in Microsoft SQL Server 2005 and later. Using Replication Server 15.5, LOB data can only be changed as full update in Microsoft SQL Server database.

Workaround: None

6.1.6 Insufficient number of threads in Replication Server

[CR #618624] If you increase the number of client connections and did not increase the number of Open Server™ threads that the Replication Server can use, this may cause the Replication Server to shut down.

Workaround:

- 1 Log in to RSSD.
- 2 Increase the value of num_threads.
- 3 Restart Replication Server.

6.1.7 Stack tracing error at startup when sort order is not in the *objectid.dat* file

[CR #616941] If the sort order is not set correctly in the [collate] section of %SYBASE%\ini\objectid.dat, a stack trace error occurs at Replication Server startup.

Workaround:

- 1 Make sure that the character set and set order have been set correctly in Rep_Server_name.cfg file. For example:
 - RS_charset=cp850
 - RS_sortorder=scannocp
- 2 Go to %SYBASE%\charsets\<character set> directory; for example, %SYBASE%\charsets/cp850 directory.
- 3 Locate and open corresponding sort order file; for example, scannocp.srt.
- 4 Check the line that has an “id” and find the sort order ID, for example,

```
id = 0x30; Unique ID # (48) for the sort order
```

Note that the sort order ID is 48.
- 5 In %SYBASE%\ini\objectid.dat, check that there is a line for that sort order under the [collate] section:

```
1.3.6.1.4.1.897.4.9.3.48 = scannocp
```

The last number is the sort order ID (48), all other numbers are identical for all lines. If you have a custom sort order, add this line for it.
- 6 Restart Replication Server.

6.1.8 Issue with different character set on Replication Server and Adaptive Server

[CR #616158] If Replication Server uses the utf8 character set and the target Adaptive Server uses the gb18030 character set, an error occurs if a table has text and image column with `dsi_bulk_copy` or `dsi_compile_enable` parameter set to “on”. The DSI will shut down.

Workaround: Set the `dsi_bulk_copy` and `dsi_compile_enable` parameters to “off”.

6.1.9 Issues with *parallel_dsi* parameter

[CR #614717] When you change the value of the `parallel_dsi` parameter using the `alter connection` command or `configure replication server` command, Replication Server changes the existing configuration values of these parameters:

- `dsi_num_threads`
- `dsi_num_large_xact_threads`
- `dsi_serialization_method`
- `dsi_sq_max_cache_size`

This may impact your replication performance.

Workaround: You should set the `parallel_dsi` parameter first, and then manually set the desired values for the above-mentioned parameters for your environment if you do not want to use the default values.

6.1.10 SQT thread fails during ERSSD defragment process

[CR #611876] When the ERSSD is being defragmented using the `sysadmin erssd` command and the `defrag` parameter, and the Stable Queue Transaction (SQT) thread tries to access it, the SQT thread fails and this error is stored in the log file.

```
"SQT (103:1) could not get sqm_reader=8"
```

This also causes the distributor to shutdown.

Workaround: Wait until the defragmentation process finishes and then resume the distributor.

6.1.11 *rs_helprep* on preASE15 RSSD fails

[CR #607273] When the RSSD is loaded in an Adaptive Server 12.5.4 *x* server, *rs_helprep* fails when the *repdef_name* is greater than 30 characters.

Workaround:

- Use single quote (') or double quote(") around the long *repdef_name*.
- Use a truncated *repdef_name*. Truncate the *repdef_name* to the first 29 characters when issuing the *rs_helprep* request. The *rs_helprep* then appends the % wildcard at the end when it queries the RSSD tables.
- Upgrade RSSD data server to Adaptive Server 15.x.

6.1.12 Query failure when using quoted identifiers with custom function string containing a quoted constant

[CR #571435] During subscription materialization, using quoted identifiers with a custom function string that includes a quoted constant, causes a query failure. The failure occurs because the replicate data server identifies the quoted constant as a column instead of a constant.

Workaround: Create the subscription without a quoted constant or create the subscription without materialization.

6.1.13 Creating replication definition fails when using gb18030 character set and the ERSSD on Windows

[CR #558253] On Windows, when you are creating the replication definition table using create replication definition, the gb18030 character set does not work correctly if you are:

- Using the ERSSD, and
- Using multibyte characters in the replication definition name or the table name.

Workaround: Set the environment variable SACHARSET to GBK before starting the Replication Server.

6.1.14 Parallel DSI threads may cause deadlock with Adaptive Server

[CR #452806] An application deadlock involving Replication Server and Adaptive Server may occur when Replication Server is configured to use parallel DSI while applying transactions to a table containing text and image columns.

Workaround: Suspend and resume the DSI connection. If the DSI thread does not suspend, restart the Replication Server.

6.2 Replication Agent problem

This section documents a problem identified in Replication Agent.

6.2.1 Owner information is not supported in function replication for Oracle warm standby

[CR #596321, CR #596320] Replication Server does not support specifying owner information of stored procedures in the function replication definition for Oracle. As such, Replication Agent does not send that information to Replication Server. Because the owner information is not available, the replicated stored procedure fails to execute at the Oracle standby database.

Workaround: For each stored procedure replicate from active to standby database, you need to create a corresponding function string for this procedure. You can specify owner information of the target stored procedure.

To alter the function string class of the standby connection to a customized function string class, which is inherited from `rs_oracle_function_class`:

```
alter connection to dco2stb.ordb (standby connection)
set function string class to my_oracle_function_class
go
```

6.3 Sybase Central problem

This section documents a problem identified in Sybase Central.

6.3.1 Users must have write privileges to home directory

[CR #343973] Sybase Central writes a registry file in the user's home directory, and uses this registry file to store environment information from the Replication Manager. You must have write privileges on the user's home directory, or Sybase Central cannot save the environment information.

Workaround: Ensure that each user has write privileges on the user's home directory.

6.4 Replication Manager problems

This section documents problems identified in Replication Manager.

6.4.1 *block_size* configuration parameter is not supported

[CR #616057] The Replication Manager plug-in (RMP) does not support configuration of the new “*block_size*” parameter. Configuring this parameter in RMP displays this error:

```
"Option WITH SHUTDOWN required for block size change"
```

6.4.2 Cannot select roman8 character set

[CR #611031] You cannot select the roman8 character set in Replication Manager because Java does not support the roman8 character set.

Workaround: When adding a server to an environment:

- Enter a user name and password that will let you access the environment.
- Do not select roman8 in the Character Set field for a server connection.
- Do not select “default” in the Character Set field for a server connection if the server default is roman8.

You must select another character set such as, iso_1, utf8, or cp850, that is compatible with the server and Replication Manager.

6.4.3 Unable to display the newer Replication Server parameters in a three-tier environment

[CR #606691] In a three-tier replication environment, RMP does not display the newer Replication Server parameters.

Workaround:

- Add the replication environment in a normal two-tier Replication Manager environment.
- Add the servers for which you want to access the configuration parameters in this new environment.

6.5 RMS problem

This section documents a problem identified in RMS.

6.5.1 RMS does not support Replication Server dynamic configuration of parameters

[CR #616051] RMS does not support dynamic configuration of parameters from Replication Server. Executing the `configure server` command or the `configure component` command may not return all parameters from a Replication Server. The new parameters are also not displayed correctly in the RMP when using a three-tier environment.

Workaround: When configuring a Replication Server or its components, use a two-tier environment in RMP to connect and configure.

6.6 Problems with replication to Sybase IQ

This section documents known problems when replicating to Sybase IQ from Adaptive Server using real-time loading (RTL) in Replication Server.

6.6.1 NULL *text* or *unitext* replication can lead Sybase IQ to core dump

[CR #622322] In some circumstances, replication of tables containing text or unitext columns into Sybase IQ causes a Sybase IQ core dump. Until Sybase addresses this issue, replication of text or unitext columns into Sybase IQ replicate database is not supported.

Note This is specific to Sybase IQ replicate databases and text or unitext columns. Replication of tables into other supported replicate databases, such as Adaptive Server, is expected to work.

Workaround: Do not mark tables containing text or unitext columns for replication into Sybase IQ until this issue is addressed.

6.6.2 Incremental compilations are not handled properly in RTL

[CR #621246] The mechanism for incremental compilation involving groups of transactions having more commands than what is set with `dsi_compile_max_cmds`, is not working correctly.

Workaround: Set `dsi_compile_max_cmds` to a very large value, avoiding incremental compilation from occurring.

6.6.3 Data corruption when replicating data to Sybase IQ 15.x in RTL

[CR #620097] When RTL replicates data to Sybase IQ 15.x, data inserted into time and timestamp columns may be corrupted. There is no warning nor error message indicating that the data is corrupted.

Workaround: Select one of:

- If there is no text or image in the table, this table can be marked as non-compilable. RTL uses the function string to process instead of insert-location. Issue this command:

```
alter connection to data_server.database for replicate table named  
table_name set dsi_compile_enable "off"
```

This will effectively slow down the process.

- If there is text or image in the table, apply Sybase IQ 15.1 ESD #3 or use Sybase IQ 12.7 ESD #4 and later.

6.6.4 Truncated text and image column values

[CR #619358] Text and image column values get truncated when inserted into a Sybase IQ 15.1 database. This problem occurs in Sybase IQ 15.1 GA, ESD #1, and ESD #2.

Workaround: Apply Sybase IQ 15.1 ESD #3 or use Sybase IQ 12.7 ESD #4 and later.

6.6.5 Right string truncation error

[CR #594620] When inserting data from Replication Server to Sybase IQ 15.0 and later using the insert-location, the right truncation of string data error may occur.

Workaround: On Sybase IQ system, apply this command:

```
set option public.STRING_RTRUNCATION = "OFF"
```

By default, the STRING_RTRUNCATION option is set to "on" in Sybase IQ 15.0 and later.

6.7 Installer problems

This section describes the known problems with the installer you might encounter when installing Replication Server or Replication Manager.

6.7.1 Installer cannot register the install date

[CR #622057] In some cases when installing Replication Server on Windows 7, the installer cannot register the install date. Replication Server will not go into a grace period.

Workaround: Obtain the license files from the Sybase Product Download Center (SPDC) at <https://sybase.subscribenet.com>.

6.7.2 Avoiding an installation failure

[CR #619817] If the `df` command fails, the installer stops responding before the preinstallation summary pane appears.

Workaround: Execute `strace -e staffs, staffs64 df` to identify the NFS mounts that have a problem. Then execute `umount -l <path>` to unmount all trouble NFS mounts. Re-run the installer.

6.7.3 Console mode installations in Windows

[CR #619813] The console mode installer is not able to correctly validate licenses entered during installation. This will result in license validation errors during installation.

Workaround: Use the GUI installer instead.

6.7.4 Installer cannot create installer directory on Windows 2008

[CR #619807] On Microsoft Windows 2008, the installer can create the SDK installation directory only when you are logged in as an administrator, even if your role has permission to create directories.

Workaround: Create the installation directory before running the installer.

6.7.5 Installer fails on Microsoft Windows Vista and Windows 2008 x86-64 64-bit

[CR #619805] The installer fails on Microsoft Windows Vista and Windows 2008 on x86-64 64-bit because the installer cannot set up the environment variables.

Workaround: In Windows Explorer, right-click `setup.exe` or `setupConsole.exe`, and select Properties. On the Compatibility tab, select the Windows Vista compatibility mode.

6.7.6 Cannot navigate the Choose Product Features window with a keyboard

[CR #619793] You cannot use the Tab and arrow keys to navigate the Choose Product Features window of the installation or uninstallation program.

Workaround:

- Uninstaller – Use the mouse to click the Choose Product Features window. This sets the focus on the window and you will be able to use your keyboard.
- Installer – Use the mouse to select the features in the Choose Product Features window.

6.7.7 Uninstallation process stops responding

[CR #619771] The uninstallation program stops responding when you select Delete from the Delete User Files screen and then click Previous from the Uninstall Complete screen. Delete User Files and Uninstall Complete are the last two screens shown in the uninstallation program.

Workaround: Do not return to the Delete User Files screen after you have selected Delete.

6.7.8 Interactive installation using response file does not work

[CR #618722] When installing Replication Server in an interactive mode using a response file, the installer does not use the values stored in the file. The response file will work as expected in silent mode.

6.7.9 Sybase Central compatibility issue

[CR #616595] If you install Adaptive Server 15.0.3 after Replication Manager has been installed, Replication Manager is removed from Sybase Central. Re-register Replication Manager using Sybase Central:

- 1 From Sybase Central, select Tools | Plug-ins.
- 2 Click Register.
- 3 Select the Register a plug-in by specifying a plug-in registration file option.
- 4 Click Browse to select the `%SYBASE%\RMP-15_5\lib` directory.
- 5 Select `RMP1550_PlugIn.jpr` file.
- 6 Click Finish.

6.7.10 UAF issue when installing Adaptive Server into the same directory as Replication Server

[CR #613393] If you install Adaptive Server 15.0.3 before you install Replication Server 15.5 and into the same top directory, the environment variable SYBASE_UA is set to %SYBASE%\UAF-2_0 instead of %SYBASE%\UAF-2_5. To use the Replication Monitoring Service for Replication Server 15.5, the environment variable must be set to %SYBASE%\UAF-2_5.

Workaround: Select one of:

- Install Replication Server 15.5 last
- Reinstall Replication Server
- Reset the SYBASE_UA environment variable to %SYBASE%\UAF-2_5 in these files:
 - %SYBASE%\SYBASE.bat
 - %SYBASE%\SYBASE.env

6.8 Highlighted *rs_init* problem

This section documents a problem identified in the Replication Server configuration utility *rs_init*.

6.8.1 Limitation of reading entries from the *sql.ini* file

The *rs_init* utility uses a 20KB buffer to read server entries from the *sql.ini* file. If the average length of server entries is 10 bytes, the *rs_init* utility cannot read more than 2000 server entries.

6.9 Unsupported operations

These Adaptive Server operations may cause incorrect replication:

- Disabling the secondary truncation point with *dbcc settrunc* and then truncating the log can cause lost transactions.
- Replication Server does not support nested transactions within replicated stored procedures.

When you enable replication for a stored procedure using `sp_setreproc` or `sp_setreplicate`, Adaptive Server always runs the stored procedure within a transaction. If you have not explicitly run the replicated stored procedure within a transaction, Adaptive Server places an implicit `begin transaction` command at the start of the procedure.

If the replicated stored procedure contains nested transaction commands such as `begin transaction`, `commit transaction`, or `rollback transaction`, you might get errors when you run the procedure. For example, a `rollback transaction` command rolls back to the start of the stored procedure, rather than to the nested `begin transaction` command, which was the intended rollback point.

- Data that is inserted into a primary table using an unlogged bulk copy operation is not replicated.
- To use the atomic method of subscription materialization:
 - The user who enters the `create subscription` command or the database owner must own the primary table. Alternatively, you must use user-defined function strings for `select` operations at the primary database.
 - If the database owner or maintenance user does not own the replicate table, use user-defined function strings for `select` operations at the replicate database. If the owner of the replicate table is different from the owner of the primary table, create a unique function string by using a distinct function-string class.

7. Product compatibility

This section contains information about products that are compatible with Replication Server version 15.5.

7.1 Adaptive Server

Replication Server version 15.5 is fully compatible with both 32-bit and 64-bit versions of Adaptive Server Enterprise version 12.5 and later on Windows.

A replication system can include Adaptive Servers, Replication Servers, DirectConnect products, and RepAgents on multiple operating systems.

Note SQL Server versions 11.0.x and Adaptive Server 12.0 and earlier are no longer supported.

7.2 Interoperability of Adaptive Server, Open Client/Server, Replication Server, and Sybase IQ

Table 2 shows the interoperability of Adaptive Server, Open Client/Server products, Replication Server, and Sybase IQ across versions.

Table 2: Interoperability between Adaptive Server, Open Client/Server, Replication Server, and Sybase IQ

Operating systems	Adaptive Server			Open Client/Server			Replication Server					Sybase IQ		
	15.5	15.0.x	12.5.x	15.5	15.0	12.5.1	15.5	15.2	15.1	15.0.1	12.6	15.1	15.0	12.7
HP-UX Itanium 64-bit	x	x	x	x	x	x	x	x	x	n/a	n/a	x	n/a	x
IBM AIX POWER 64-bit	x	x	x	x	x	x	x	n/a	n/a	n/a	n/a	x	n/a	x
Linux x86 32-bit	x	x	x	x	x	x	x	x	x	x	x	x	n/a	x
Linux x86-64 64-bit	x	x	x	x	x	x	x	n/a	n/a	n/a	n/a	x	n/a	x
Linux POWER 32-bit	n/a	n/a	n/a	x	x	x	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Linux POWER 64-bit	x	x	x	x	x	x	x	x	x	n/a	n/a	x	n/a	x
Sun Solaris SPARC 64-bit	x	x	x	x	x	x	x	n/a	n/a	n/a	n/a	x	n/a	x
Sun Solaris x86-64 64-bit	x	x	x	x	x	x	x	n/a	n/a	n/a	n/a	x	n/a	x
Microsoft Windows x86 32-bit	x	x	x	x	x	x	x	x	x	x	x	x	n/a	x
Microsoft Windows x86-64 64-bit	x	x	n/a	x	x	n/a	x	n/a	n/a	n/a	n/a	x	n/a	x

LEGEND: x = compatible; n/a = product not available or does not work with Replication Server on that platform.

Replication Server is available as 32-bit and 64-bit application. The 32-bit Replication Server on Linux and Windows have been certified on both the 32-bit and 64-bit versions of Linux and Windows operating systems listed in Table 2. The 64-bit version of Replication Server on Linux and Windows are *not* certified on the 32-bit version of Linux and Windows operating systems listed in Table 2.

Even though two or more products may be interoperable, features introduced in a newer version of a product are not likely to be supported by older versions of the same products.

8. Documentation updates and clarifications

This section contains updates and clarifications to Replication Server and Replication Manager documentation.

8.1 SQL Anywhere Replication support

For information on SQL Anywhere® support as a primary or a replicate database, see the SQL Anywhere documentation at <http://www.sybase.com/support/manuals/>.

8.2 Replication Server Configuration Guide

8.2.1 No requirement for upgrading RSSD to version 15.0 and later

You do not need to upgrade the Adaptive Server containing the RSSD to version 15.0 or later, before you can install Replication Server 15.5.

Disregard the following text in “Requirements for upgrading to version 15.5 and later,” in Chapter 3, “Upgrading or Downgrading Replication Server”:

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

8.2.2 Correction to the directory names specified in the example log file for the *erssd_start_cmd* and *erssd_ra_start_cmd* parameters

The directory names specified in the example log file for the *erssd_start_cmd* and *erssd_ra_start_cmd* parameters in the “Upgrading an RSSD or an ERSSD” procedure in “Upgrading a RSSD or an ERSSD” in Chapter 3, “Upgrading or Downgrading Replication Server” are incorrect.

These directory names are:

As documented	Should be
<i>REP-15_5</i>	<i>REP-15_1</i>
<i>ASA11</i>	<i>ASA9</i>
<i>dbsrv11</i>	<i>dbsrv9</i>

In step 3b, the example of the `erssd_start_cmd` parameter in the log file should be:

```
erssd_start_cmd=c:\sybase\REP-15_1\ASA9\bin\dbspawn
-f -q c:\sybase\REP-15_1\ASA9\bin\dsrv9
-ct- -ti 0 -x "tcpip(PORT=11751;DOBROAD=NO;BLISTENER=NO) "
-o c:\sybase\REP-15_1\samp_repserver\errorlog\SAMP_RS_ERSSD.out
c:\sybase\REP-15_1\samp_repserver\dbfile\SAMP_RS_ERSSD.db
```

In step 4b, the example of the `erssd_ra_start_cmd` parameter in the log file should be:

```
erssd_ra_start_cmd=c:\sybase\REP-15_1\ASA9\bin\dbltn
-ud -S SAMP_RS_ERSSD_ra
-C c:\sybase\REP-15_1\samp_repserver\SAMP_RS_ERSSD_ra.cfg
-ot c:\sybase\REP-15_1\samp_repserver\SAMP_RS_ERSSD_ra.out
-I c:\sybase\sql.ini
```

8.3 Replication Server Getting Started

8.3.1 Correction to Windows 2003 system requirement

The operating system requirement for Windows 2003 documented in Table 1-1 in “System requirements for Replication Server on Windows platforms” is incorrect. This should be Windows 2003 R2, Service Pack 2 or later.

8.4 Replication Server Heterogeneous Replication Guide

8.4.1 Corrections to the procedures in the scenarios for Oracle database resynchronization

The sequence of steps in the procedures for these scenarios documented in “Database resynchronization scenarios,” in Chapter 13, “Resynchronizing Oracle Replicate Databases” are incorrect:

- Resynchronizing one or more replicate databases directly from a primary database
- Resynchronizing using a third-party dump utility
- Resynchronizing the active and standby databases in a warm standby application

The correct procedures are:

❖ Resynchronizing directly from a primary database

- 1 Stop replication processing by Replication Agent. Do not alter the truncation point. In Replication Agent, execute:

```
suspend
```

- 2 Suspend the Replication Server DSI connection to the replicate database:

```
suspend connection to dataserver.database
```

- 3 Instruct Replication Server to remove data from the replicate database outbound queue and wait for a resync marker from the primary database Replication Agent:

```
resume connection to data_server.database skip to  
resync marker
```

- 4 If the truncation point has not been moved, proceed to step 5. Otherwise, reinitialize the Replication Agent repository before you obtain a dump of the primary database contents. In the Replication Agent, execute:

```
ra_init force  
go
```

- 5 Obtain a dump of the primary database contents. See your database documentation. If you use the Recovery Manager (RMAN) for Oracle, obtain the last System Change Number (SCN) of the RMAN backup using the Oracle list backup command. In Replication Agent, set this SCN as the value of `lr_dump_marker`:

```
lr_dump_marker oracle scn
```

- 6 Instruct Replication Agent to start in resync mode and send a resync marker to Replication Server:

```
resume resync  
go
```

- 7 In the Replication Server system log, verify that DSI has received and accepted the resync marker from Replication Agent by looking for this message:

```
DSI for data_server.database received and processed  
Resync Database Marker. Waiting for Dump Marker.
```

After DSI processes the resync marker for the replicate database, you can apply the dump to the replicate database.

Note If you are resynchronizing multiple databases, verify that the DSI connection for each of the databases you want to resynchronize has accepted the resync marker.

- 8 Apply the dump of the primary database to the replicate database. See your database documentation.
- 9 Verify that Replication Server has processed the dump database marker by looking for this message in the Replication Server system log:

```
DSI for data_server.database received and processed
Dump Marker. DSI is now suspended. Resume after
database has been reloaded.
```

When Replication Server receives the dump marker, the DSI connection automatically suspends.

- 10 After you apply the dump to the replicate database, resume DSI using:

```
resume connection to data_server.database
```

❖ **Resynchronizing after using a third-party utility to create a dump**

- 1 Stop replication processing by Replication Agent. Do not alter the truncation point. In Replication Agent, execute:

```
suspend
```

- 2 Suspend the Replication Server DSI connection to the replicate database:

```
suspend connection to dataserver.database
```

- 3 Instruct Replication Server to remove data from the replicate database outbound queue and wait for a resync marker from the primary database Replication Agent:

```
resume connection to data_server.database skip to
resync marker
```

- 4 If the truncation point has not been moved, proceed to step 5. Otherwise, reinitialize the Replication Agent repository before you obtain a dump of the primary database contents. In the Replication Agent, execute:

```
ra_init force
go
```

- 5 Obtain a dump of the primary database contents using the third-party dump utility.
- 6 Determine the dump point based on information from the primary database when you took the dump, or information from the third-party tool. With a third-party tool, you are responsible for determining the dump point. For example, if you are using a disk replication tool, you can temporarily halt activity at the primary database to eliminate transactions in progress from the disk snapshot, and then use the “end of transaction log” point as the dump database marker.
- 7 Execute the stored procedure on the primary database for Replication Agent to mark the end of the dump position that you obtained in step 5:

```
lr_dump_marker oracle scn
```

- 8 Instruct Replication Agent to start in resync mode and send a resync marker to Replication Server:

```
resume resync  
go
```

Replication Agent automatically generates a dump database marker at a time based on the end of dump position that you obtained in step 6 and set in step 7, and sends the dump database marker to Replication Server.

- 9 Verify that DSI has received and accepted the resync marker from Replication Agent by looking for this message in the Replication Server system log:

```
DSI for data_server.database received and processed  
Resync Database Marker. Waiting for Dump Marker.
```

- 10 Apply the dump of the primary database from the third-party tool to the replicate database. See your database and third-party tool documentation.
- 11 Verify that Replication Server has processed the dump database marker by looking for this message in the Replication Server system log:

```
DSI for data_server.database received and processed  
Dump Marker. DSI is now suspended. Resume after  
database has been reloaded.
```

When Replication Server receives the dump marker, the DSI connection automatically suspends.

- 12 After you apply the dump to the replicate database, resume DSI:

```
resume connection to data_server.database
```

❖ **Resynchronizing the active and standby databases when the warm standby environment is the replicate site**

- 1 Stop replication processing by both the primary database Replication Agent and the warm standby active database Replication Agent. Do not alter the truncation point. In Replication Agent, execute:

```
suspend
```

- 2 Suspend the Replication Server DSI connection to the active and standby databases:

```
suspend connection to dataserver.database
```

- 3 Instruct Replication Server to remove data from the outbound queue of the active and standby databases, and wait for a resync marker from the primary database Replication Agent:

```
resume connection to data_server.database skip to  
resync marker
```

- 4 If the truncation point has not been moved, proceed to step 5. Otherwise, reinitialize the Replication Agent repository before you obtain a dump of the primary database contents. In the primary Replication Agent, execute:

```
ra_init force  
go
```

- 5 Obtain a dump of the primary database contents. See your database documentation. If you use the Recovery Manager (RMAN) for Oracle, obtain the last System Change Number (SCN) of the RMAN backup using the Oracle list backup command. In Replication Agent, set this SCN as the value of lr_dump_marker:

```
lr_dump_marker oracle scn
```

- 6 Instruct the primary Replication Agent to start in resync mode and send a resync marker to Replication Server:

```
resume resync  
go
```

- 7 Verify that DSI for the active database has received and accepted the resync marker from the primary database Replication Agent by looking for this message in the Replication Server system log:

```
DSI for data_server.database received and processed  
Resync Database Marker. Waiting for Dump Marker.
```


- 8 Verify that the Replication Server DSI for the active database has processed the dump database marker by looking for this message from the active database In the Replication Server system log:

```
DSI for data_server.database received and processed
Dump Marker. DSI is now suspended. Resume after
database has been reloaded.
```

- 9 Apply the dump of the primary database to the active database. See your database documentation.
- 10 Move the truncation point to the end of the transaction log for the active database. In Replication Agent, execute:

```
pdb_xlog move_truncpt
go
```

- 11 Reinitialize Replication Agent repository based on the latest system data from the active database:

```
ra_init force
go
```

- 12 Instruct Replication Agent for the active database to start in resync mode with the init option. In Replication Agent, execute:.

```
resume resync, init
```

- 13 Verify that DSI for the standby database has received and accepted the resync marker from the active database Replication Agent by looking for this message In the Replication Server system log:

```
DSI for data_server.database received and processed
Resync Database Marker. DSI is now suspended. Resume
after database has been reloaded.
```

When Replication Server receives and processes the resync database with init marker, the DSI connection suspends.

- 14 Obtain a dump of the active database contents and apply the dump to the standby database. You can also apply the dump of the primary database from step 5 if the dump does not include database configuration information.

- 15 Resume DSI to the active and standby databases:

```
resume connection to data_server.database
```

8.5 Replication Server Installation Guide

8.5.1 Correction to Windows 2003 system requirement

The operating system requirement for Windows 2003 documented in Table 1-2 in “Reviewing system requirements” is incorrect. This should be Windows 2003 R2, Service Pack 2 or later.

8.5.2 No requirement for upgrading RSSD to version 15.0 and later

You do not need to upgrade the Adaptive Server containing the RSSD to version 15.0 or later, before you can install Replication Server 15.5

Disregard the following text in “Upgrading and mixed-version requirements,” in Chapter 1, “Before You Begin”:

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

8.6 Replication Server Reference Manual

8.6.1 Correction to the trace option for *alter connection* and *alter connector*

The *trace* parameter in *alter connection* and *trace option* in *alter connector* documented in Chapter 3, “Replication Server Commands” are incorrect.

Changes to set trace clause in *alter connection* include:

- *trace_value* parameter is now *value*.
- Revision to the *value* parameter description.

There is a change to the description of *value* in the *option* parameter of *alter connector*.

alter connection

Syntax

```
alter connection to data_server.database {...
    set trace [to] 'value'}
```

Parameters

trace

Allows ExpressConnect tracing at the DSI level.

value

A character string containing a new value for the option.

If you are using the trace option, the syntax for *value* takes the form “*module, condition,[on/off]*”, where:

- *module* – Specifies the module type. Valid value is *econn*.
- *condition* – Specifies the trace condition to set.
- *on* or *off* – Specifies the state of the condition that is desired.

Note The trace parameter in the alter connection command allows empty string. For example:

```
alter connection to data_server.database
set trace to ''
```

An empty string disables ExpressConnect tracing values after the connection or when the Replication Server is restarted.

alter connector

Parameters

option

Provides you with choices for various trace options for a connector.

The supported options are:

- trace
- trace_logpath

value

A character string containing a new value for the option.

If you are using the trace option, the syntax for *value* takes the form “*module, condition,[on/off]*”, where:

- *module* – Specifies the module type. Valid value is *econn*.
- *condition* – Specifies the trace condition to set.
- *on* or *off* – Specifies the state of the condition that is desired.

See “alter connection” .

If you are using trace_logpath option, the syntax for the *value* parameter is *full_path_name*.

9. Language and globalization issues

This section describes language and globalization issues for Replication Server.

9.1 Hankaku Katakana conversion

In general, Japanese character sets are compatible. However, Hankaku Katakana characters, although they exist in both the `euclj` and `sjis` character sets, cannot be converted. Converting data that contains Hankaku Katakana characters between `euclj` and `sjis` does not work. This conversion problem occurs with character datatypes and the text datatype and is documented in Chapter 10, “Configuring Client/Server Character Set Conversions,” of the *Adaptive Server Enterprise System Administration Guide Volume 1*.

This conversion problem affects both Adaptive Server and the Sybase Open Client™ and Open Server libraries. Because Replication Server uses these libraries for all conversions, this problem also affects Replication Server.

In Replication Server, this type of failure is treated in the same way as is the case of a single character missing from the target character set. The remainder of the conversion succeeds and replication proceeds, and problem characters are replaced by question marks in the target data area. There is currently no way to escape this restriction with the Sybase connectivity libraries. However, in Adaptive Server, if you turn on trace flag number 2402, you can remove this restriction.

9.1.1 Using trace flag 2402

Generally, Sybase recommends that you set up your replication system so that Replication Server handles all character set conversions at the replicate Replication Server and prevents the replicate data server from performing any conversions. In this case, you can work around the Hankaku Katakana restriction if you set up your system so that the replicate data server performs the conversion.

The following table shows how this might look if the primary data server used the `sjis` character set and the replicate data server used `euclj`. Communication in this system is between each data server and its Replication Server and between the two Replication Servers.

Primary Replication Server	sjis
Replicate Replication Server	sjis
Primary data server	sjis
Replicate data server	ejjis

The primary and replicate Replication Servers are configured to use the same character set as the primary data server. (If only one Replication Server manages the primary and replicate data servers, configure it with the character set of the primary data server.)

In this configuration, when the replicate Replication Server connects to the replicate data server with character set sjis, the replicate data server detects this condition and converts data into its own character set, ejjis. If trace flag 2402 is activated in the replicate data server, then the conversion includes the Hankaku Katakana characters.

❖ **Setting up this workaround**

- 1 Configure your system as suggested.
- 2 Turn on trace flag 2402 in the replicate data server (Adaptive Server) by including `-T2402` on the command line when you start Adaptive Server.

9.2 Changing default date format for a language

If you modify the *common.loc* file to change the default date format for a given language, make the corresponding change to the *syslanguages* table on all affected Adaptive Servers.

10. Technical support

Each Sybase installation that has purchased a support contract has one or more designated people who are authorized to contact Sybase Technical Support. If you have any questions about this installation or if you need assistance during the installation process, ask the designated person to contact Sybase Technical Support or the Sybase subsidiary in your area.

11. Other sources of information

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

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

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

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

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

11.1 Sybase certifications on the Web

Technical documentation at the Sybase Web site is updated frequently.

❖ Finding the latest information on product certifications

- 1 Point your Web browser to Technical Documents at <http://www.sybase.com/support/techdocs/>.
- 2 Click Partner Certification Report.
- 3 In the Partner Certification Report filter select a product, platform, and timeframe and then click Go.
- 4 Click a Partner Certification Report title to display the report.

❖ Finding the latest information on component certifications

- 1 Point your Web browser to Availability and Certification Reports at <http://certification.sybase.com/>.
- 2 Either select the product family and product under Search by Base Product; or select the operating system and product under Search by Platform.
- 3 Select Search to display the availability and certification report for the selection.

❖ **Creating a personalized view of the Sybase Web site (including support pages)**

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

- 1 Point your Web browser to Technical Documents at <http://www.sybase.com/support/techdocs/>.
- 2 Click MySybase and create a MySybase profile.

11.2 Sybase EBFs and software maintenance

❖ **Finding the latest information on EBFs and software maintenance**

- 1 Point your Web browser to the Sybase Support Page at <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. A list of EBF/Maintenance releases is displayed.

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

- 5 Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

12. Accessibility features

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

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

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

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