

Release Bulletin Replication Server® Options 15.1 for Linux, Microsoft Windows, and UNIX

Document ID: DC73463-01-1510-03

Last revised: March 17, 2009

Topic	Page
1. Accessing current release bulletin information	1
2. Product summary	2
2.1 Version contents	2
2.2 Unsupported software features	3
2.3 Unsupported datatypes	4
3. Special installation instructions	7
3.1 Replication Server Options licenses	7
4. Known issues	8
4.1 Known issue for Red Hat Enterprise Linux 5.0	8
4.2 Known issue for Microsoft SQL Server	8
4.3 Known issue for Oracle	9
5. Technical support	9
6. Other sources of information	9
6.1 Sybase certifications on the Web	10
6.2 Sybase EBFs and software maintenance	11
7. Accessibility features	11

1. Accessing current release bulletin information

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 release bulletins 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

The Replication Server® Options are only available *separately* from Replication Server. Also, you must already have Replication Server to obtain any Replication Server Options.

The Replication Server Options can be used with Replication Server for bidirectional replication across distributed, heterogeneous systems to allow you to perform different operational and decision-support tasks.

Replication Server Options are compatible with the same platform and operating system configurations as Enterprise Connect™ Data Access (ECDA) 15.0 and Replication Agent™ 15.1. For specific hardware and software requirements, refer to the Enterprise Connect Data Access 15.0 *Release Bulletin* and to the Replication Agent 15.1 *Release Bulletin*.

For more information, refer to the Replication Server *Heterogeneous Replication Guide*.

2.1 Version contents

Replication Server Options are available for Microsoft SQL Server, Oracle, and IBM DB2 Universal Database (UDB). Each option requires a license for accessing data only in the specified data source.

- *Replication Server Option for Microsoft SQL Server* consists of the following components:
 - ECDA Option for ODBC – licensed for ODBC
 - Replication Agent – licensed for Microsoft SQL Server
- *Replication Server Option for Oracle* consists of the following components:
 - ECDA Option for Oracle – licensed for Oracle
 - Replication Agent – licensed for Oracle
- *Replication Server Option for IBM DB2 UDB* consists of the following components:

- ECDA Option for ODBC – licensed for ODBC
- Replication Agent – licensed for IBM DB2 UDB

2.2 Unsupported software features

The following is a limited list of features that are not supported for Sybase replication:

- Microsoft SQL Server Cluster
- Microsoft SQL Server 2008
- Oracle index-organized tables
- Oracle materialized views
- Oracle packaged stored procedures and functions (stand-alone procedures and functions are supported)
- Oracle procedures and functions having a BOOLEAN or SIMPLE_INTEGER parameter
- Oracle 10g Flashback and Flashback Recovery Area
- Oracle RMAN utility
- Encryption of the following:
 - Columns since Oracle 10.2
 - Columns and partitions since Oracle 11g
 - Schema objects on encrypted tablespaces since Oracle 11g
- Replication Server parallel DSI (for non-ASE databases)
- Replication Server warm standby (for non-ASE databases)
- Replication Server rs_init utility (for non-ASE databases)
- Replication Server rs_subcomp utility (for non-ASE databases)
- Replication Server automatic materialization (for non-ASE databases)

- Replication Server when replicating in an environment where other vendors are replicating (for non-ASE databases)

Note Only features and functionality covered in the Replication Server Options documentation are supported for that solution. If a feature or type of functionality is not documented, it is not supported.

Sybase welcomes your feedback on features that are not currently supported and that you would like to see in a future release.

2.3 Unsupported datatypes

The following identifies the datatypes that are not supported.

2.3.1 No or limited support for replicating datatypes into IBM DB2 Universal Database datatypes

ECDA 15.0 ESD #1 or earlier does not support replicating these Sybase datatypes. However, as of ECDA 15.0 ESD #2, these datatypes are supported:

- bigint
- unsigned bigint
- unsigned integer
- unsigned smallint
- unsigned tinyint
- unichar
- univarchar
- unitext

ECDA 15.0 ESD #1 or earlier does not support replicating these IBM DB2 UDB datatypes. However, as of ECDA 15.0 ESD #2, these datatypes are supported:

- bigint
- graphic
- vargraphic
- dbclob

None of the replication components (Replication Agent, Replication Server, or ECDA) supports replicating these DB2 UDB datatypes:

- DATALINK
- DECFLOAT
- XML
- large identifier
- user-defined types

Workaround: None.

2.3.2 No or limited support for replicating datatypes into Microsoft SQL Server datatypes

ECDA 15.0 ESD #1 or earlier does not support replicating these Sybase datatypes. However, as of ECDA 15.0 ESD #2, these datatypes are supported:

- bigint
- unsigned bigint
- unsigned integer
- unsigned smallint
- unsigned tinyint
- unichar
- univarchar
- unitext

ECDA 15.0 ESD #1 or earlier does not support replicating these Microsoft SQL Server datatypes. However, as of ECDA 15.0 ESD #2, these datatypes are supported:

- bigint
- nchar
- nvarchar
- ntext

ECDA 15.0 ESD #2 or earlier does not support replicating these Microsoft SQL Server datatypes.

- varbinary(max)

- varchar(max)
- nvarchar(max)
- sql_variant

Replication Server 15.0.1 or earlier does not support replicating the sql_variant Microsoft SQL Server datatype as an opaque type.

None of the replication components (Replication Agent, Replication Server, or ECDA) supports replicating the following Microsoft SQL Server datatypes:

- cursor
- table
- xml

Workaround: For sql_variant datatype, replicate it as varbinary. For other datatypes there is *no* workaround.

2.3.3 No or limited support for replicating certain datatypes into Oracle datatypes

ECDA 15.0 ESD #1 or earlier does not support replicating these Sybase datatypes. However, as of ECDA 15.0 ESD #2, these datatypes are supported:

- bigint
- unsigned bigint
- unsigned integer
- unsigned smallint
- unsigned tinyint
- unichar
- univarchar
- unitext

ECDA 15.0 ESD #1 or earlier does not support replicating the nclob Oracle datatype. However, as of ECDA 15.0 ESD #2, this datatype is supported.

None of the replication components (Replication Agent, Replication Server, or ECDA) supports replicating these Oracle datatypes:

- UROWID
- REF

- MLSLABEL
- VARRAY
- Nested Tables
- Associative arrays
- Oracle-supplied datatypes
 - “Any” Types (SYS.ANYTYPE, SYS.ANYDATA, SYS.ANYDATASET)
 - XML Types (XMLType, URIType, DBURIType, XDBURIType, HTTPURIType)
 - Spatial Types (MDSYS.SDO_GEOMETRY, SDO_TOPO_GEOMETRY, SDO_GEORASTER)
 - Media Types (ORDSYS.ORDAudio, ORDSYS.ORDImage, ORDSYS.ORDImageSignature, ORDSYS.ORDVideo, ORDSYS.ORDDoc, SI_StillImage, SI_Color, SI_AverageColor, SI_ColorHistogram, SI_PositionalColor, SI_Texture, SI_FeatureList)
 - Expression Filter Type
 - User-defined datatypes (UDDs) that contain a LOB column
 - User-defined datatypes (UDDs) that are not final

Workaround: None.

3. Special installation instructions

This section documents installation issues not covered in Replication Server Options installation guides.

Sybase recommends that you install Replication Server, ECDA, and the target database on the same machine. This eliminates multiple network hops and improves performance.

3.1 Replication Server Options licenses

Review Chapter 2 of the Sybase Software Asset Management 2 *Users Guide*.

4. Known issues

For known issues concerning Replication Agent and ECDA, see the following documents:

- Replication Agent 15.1 *Release Bulletin*
- Enterprise Connect Data Access 15.0 *Release Bulletin* for Microsoft Windows
- Enterprise Connect Data Access 15.0 *Release Bulletin* for Linux and UNIX
- Replication Server 15.1 *Release Bulletin* for your platform

The known issues for the Replication Server Options that are listed in the following sections are in addition to those described in the individual product release bulletins.

4.1 Known issue for Red Hat Enterprise Linux 5.0

This section describes an issue when running Replication Server Options components on Red Hat Enterprise Linux 5.0.

4.1.1 Error while loading shared libraries

You may be unable to start either Replication Agent or ECDA due to an “error while loading shared libraries” message.

Workaround: Check the firewall configuration and change it from “*enforcing*” to “*permissive*.” You must have root or sudo permission to make this change.

4.2 Known issue for Microsoft SQL Server

This section describes a replication issue for Microsoft SQL Server.

4.2.1 ECDA 15.0 ESD #2 or higher required for partial large-object (LOB) updates

Now that Replication Agent for Microsoft SQL Server 15.1 is log-based, it reads and processes log records for each operation, including those operations that partially update a LOB column. For example:

```
UPDATETEXT mytable.lobdata @ptrval 88 1 'b';
```


However, the capability for replicating this type of operation is not available in Replication Server 15.0.1 or earlier, or in ECDA 15.0 or earlier.

Workaround: None.

4.3 Known issue for Oracle

This section describes a replication issue for Oracle.

4.3.1 No support for automatic failover when replicating into a Real Application Cluster (RAC) system

ECDA 15.0 or earlier supports replication into an Oracle instance, even if that instance is a node in a RAC system. However, if the configured node fails, ECDA 15.0 or earlier does not support automatically going to another node in the RAC system.

Note As of ECDA 15.0 ESD #1 automatic failover when replicating into a RAC system is supported.

Workaround: If the node that the ECDA service is connected to fails, reconfigure the ECDA service to use a different node in the RAC system.

5. 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.

6. Other sources of information

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

- The Getting Started CD contains release bulletins and installation guides in PDF format, and may also contain other documents or updated information not included on the SyBooks CD. It is included with your software. 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.
- The SyBooks CD contains product manuals and is included with your software. The Eclipse-based SyBooks browser allows you to access the manuals in an easy-to-use, HTML-based format.

Some documentation may be provided in PDF format, which you can access through the PDF directory on the SyBooks CD. To read or print the PDF files, you need Adobe Acrobat Reader.

Refer to the *SyBooks Installation Guide* on the Getting Started CD, or the *README.txt* file on the SyBooks CD for instructions on installing and starting SyBooks.

- The Sybase Product Manuals Web site is an online version of the SyBooks CD that you can access using a standard Web browser. 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/>.

6.1 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 Certification Report.
- 3 In the Certification Report filter, select a product, platform, and time frame, and then click Go.
- 4 Click a 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 platform and product under Search by Platform.
 - 3 Select Search to display the availability and certification report for the selection.
- ❖ **Creating a personalized view of the Sybase Web site (including support pages)**
- Set up a MySybase profile. MySybase is a free service that allows you to create a personalized view of Sybase Web pages.
- 1 Point your Web browser to Technical Documents at <http://www.sybase.com/support/techdocs/>.
 - 2 Click MySybase and create a MySybase profile.

6.2 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.

7. 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 Options 15.1 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.

The online help for this product is also provided in HTML, which you can navigate using a screen reader.

For a section 508 compliance statement for Replication Server Options, go to the Voluntary Product Assessment Template at http://www.sybase.com/detail_list?id=52484.

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.