

Overview Guide Replication Server[®] Option for Oracle 15.7.1 ESD #2

Linux, Microsoft Windows, and UNIX

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About Replication Server Option for Oracle

Replication Server[®] Option for Oracle is used with Replication Server for replication across distributed Oracle databases to enable different operational and decision-support tasks.

Replication Server Option for Oracle contains the replication components for replication with Oracle databases.

- The Replication Server Option for Oracle components are:
 - Replication AgentTM for Oracle
 - ExpressConnect for Oracle

Replication Server Option for Oracle is available separately from Replication Server. However, to implement the solutions described in this document, you must have both the Replication Server Option for Oracle and Replication Server. With Replication Server and Replication Server Option for Oracle, you can:

- Replicate data across heterogeneous environments using Oracle, allowing data to be shared among different operational and decision-support systems without affecting business performance.
- Integrate disparate business systems, including legacy data, into a coordinated, easily accessed, and powerful corporate business enterprise.

Replication Server Option for Oracle Components

Replication Server Option for Oracle components include Replication Agent for Oracle and ExpressConnect for Oracle (ECO).

For special instructions on installing option components, see the *Replication Server Option* for Oracle Release Bulletin.

Replication Agent for Oracle

Replication Agent for Oracle extends the capabilities of Replication Server by allowing Oracle database servers to be data sources in a Sybase[®] replication system.

Replication Agent for Oracle captures transactions in the primary database and transfers them to Replication Server for distribution to replicate databases.

Standalone Application

Replication Agent for Oracle runs as a server application. Replication Agent for Oracle can reside on the same host machine as any other component of the replication system, or it can reside on a machine that is separate from other replication system components. Replication Agent must reside on the same type of hardware and operating system as the primary database.

Replication Agent for Oracle Monitoring

Replication Agent for Oracle instances can be monitored by Sybase Control Center for Replication. In addition, you can use any Open ClientTM application (such as isql) that is capable of communicating with the Sybase Tabular Data StreamTM (TDS) protocol to configure, manage, and monitor a Replication Agent for Oracle instance.

For more information, see the documentation for Replication Agent for Oracle.

ExpressConnect for Oracle

ExpressConnect for Oracle (ECO) is an embedded library loaded by Replication Server for Oracle replication.

ExpressConnect for Oracle provides direct communication between Replication Server and a replicate Oracle data server. ExpressConnect for Oracle eliminates the need to install and set up a separate gateway server, thereby improving performance and reducing the complexities of managing a replication system.

See the ExpressConnect for Oracle Installation and Configuration Guide.

Sample Solutions

The scenarios for using Replication Server Options and Replication Server in a heterogeneous replication environment.

Consolidation of Data into a Central Repository

The scenario describes a sample solution for setting up unidirectional consolidation of data into a central repository using RSO for Oracle components.

A telecommunications company has satellite offices in Walldorf and Singapore that use Oracle to store local customer information. Company headquarters, in Houston, uses Oracle to store company-wide customer information. Replication Agent captures the changes to data at the satellite offices and passes them to Replication Server. Replication Server then applies data changes to the headquarters consolidated Oracle customer database.

To set up unidirectional consolidation into a central repository, the company uses these components:

- Oracle
- Replication Server
- Replication Agent for Oracle
- ExpressConnect for Oracle

Figure 1: Unidirectional Consolidation into a Central Repository



Distribution of Enterprise Data Between Multiple Central Databases

The scenario describes a sample solution for replicating Oracle data using RSO for Oracle components.

A large regional supplier maintains its enterprise data in a central database in Hong Kong before merging with a second regional supplier of comparable size in Walldorf. The Hong Kong and Walldorf enterprises maintain data on Oracle systems, and both organizations implement a bidirectional replication system.

To set up bidirectional, enterprise-wide replication, the Hong Kong enterprise uses these components:

- Oracle
- Replication Server
- Replication Agent for Oracle
- ExpressConnect for Oracle



Figure 2: Bidirectional, Enterprise-Wide Replication

Multi-Path Replication

The scenario describes a sample Multi-Path Replication[™] solution using RSO components.

A financial institution using Oracle as its primary and replicate database demands a high level of replication performance. To increase replication throughput and reduce latency and contention, the company is using a multipath replication environment that includes default and alternate connections for the primary and replicate database.

The corresponding replication definitions and subscriptions provide a multiple-replicateconnection replication system. There are two primary replication paths from the primary database to a Replication Server. Each primary path consists of a Replication Agent path with an associated primary connection. Each primary path replicates a different set of primary tables, stored procedures, or both. A dedicated route in the replicate Replication Server replicates high-priority transactions. For a description of end-to-end multipath replication scenarios, see the *Replication Server Heterogeneous Replication Guide*.

To set up multipath replication, the company uses these components:

- Oracle
- Replication Server
- Replication Agent for Oracle
- ExpressConnect for Oracle



Figure 3: Multipath Replication with Oracle Primary and Replicate Databases

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.

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 - a) Point your Web browser to http://www.sybase.com/support.
 - b) Select **Support > EBFs/Maintenance**.
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 - a) Point your browser to http://service.sap.com/swdc and log in if prompted.
 - b) Select **Search for Software Downloads** and enter the name of your product. Click **Search**.

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.

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Obtaining Help and Additional Information