

# Installation and Release Bulletin ASE Real Time Services Option 12.5.1 for Windows and UNIX

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Topic	Page
1. Accessing current release bulletin information	2
2. Product summary	2
2.1 What is ASE Enterprise Edition Real Time Services Option?	2
2.2 Version contents	2
3. Installation instructions	3
3.1 Post-installation tasks for Windows	4
3.2 Post-installation tasks for UNIX	6
4. Configuration instructions	8
5. Troubleshooting	9
6. Technical support	11
7. Other sources of information	12
7.1 Sybase certifications on the Web	12
7.2 Sybase EBFs and software maintenance	13

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# 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 release of the product CD, use the Sybase® Technical Library Product Manuals Web site.

## ❖ Accessing release bulletins at the Technical Library Product Manuals Web site

- 1 Go to Product Manuals at <http://www.sybase.com/support/manuals/>.
- 2 Follow the links to the appropriate Sybase product.
- 3 Select the Release Bulletins link.
- 4 Select the Sybase product version from the Release Bulletins list.
- 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

Enclosed is Sybase ASE Enterprise Edition Real Time Services Option, version 12.5.1, which is compatible with the following platform and operating system configurations:

- Solaris 2.9
- Windows 2000
- IBM AIX 5.1

## 2.1 What is ASE Enterprise Edition Real Time Services Option?

ASE Real Time Services Option enables you to capture transactions (data changes) in an Adaptive Server Enterprise (ASE) database and deliver them as events to external applications in real time. The data changes are captured using replication (provided by Sybase Replication Server and RepConnector™) and the events are delivered to applications through a JMS message bus (provided by TIBCO Enterprise™ for JMS).

## 2.2 Version contents

ASE Enterprise Edition Real Time Services Option, version 12.5.1, contains the following software components:

- ASE Real Time Services CD, which contains TIBCO Enterprise for JMS
- RepConnector, version 2.0.2, which includes all the software necessary to install and configure RepConnector

## 3. Installation instructions

The following sections describe how to install ASE Enterprise Edition Real Time Services Option. This information supplements the TIBCO Enterprise for JMS documentation and the *RepConnector 2.0.2 Installation and User's Guide*. See these guides for more details about installing RepConnector and TIBCO Enterprise for JMS.

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**Note** Sybase recommends that you install TIBCO Enterprise for JMS before you install RepConnector 2.0.2.

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### ❖ Installing TIBCO Enterprise for JMS

- 1 Insert the ASE Enterprise Edition Real Time Services Option CD into the CD drive.
- 2 On Windows, in the CD directory, double-click *TIB\_ejms\_3.1.1\_w32.exe*.  
On UNIX, mount the CD, then go to the CD directory and enter:  

```
tibinstall
```

The UNIX install script starts.
- 3 Follow the InstallShield or UNIX install script instructions to install TIBCO Enterprise for JMS.
- 4 See the README file on the product CD for instructions about obtaining more documentation for TIBCO Enterprise for JMS.

### ❖ Installing RepConnector 2.0.2

- Insert the RepConnector CD into the CD drive and follow the installation instructions in the *RepConnector 2.0.2 Installation and User's Guide* up to the "Post-installation tasks" section (page 8 for Windows and page 11 for UNIX). Then continue with the following section.

## 3.1 Post-installation tasks for Windows

### ❖ Adding the Repra and TIBCO libraries to CLASSPATH and BOOTCLASSPATH

RepConnector requires that additional jar file locations be added to the CLASSPATH and BOOTCLASSPATH environment variables. The following procedure describes how to add these jar file locations.

- 1 If it does not already exist, create *user\_setenv.bat* in the *%JAGUAR%\bin* directory using a text editor.

---

**Note** This file must reside in the *%JAGUAR%\bin* directory so that it is called by the *serverstart.bat* file, which starts EAServer.

---

- 2 Set the TIBCO\_HOME environment variable. For example:

```
set TIBCO_HOME=C:\TIBCO
```

- 3 Locate these four jar files, which should reside in the *%JAGUAR%\repra\lib* directory: *jconn2.jar*, *jTDS2.jar*, *log4j-1.2.6.jar*, and *dom4j-full.jar*.
- 4 Verify the directory path to *jconn2.jar*, *jTDS2.jar*, *log4j-1.2.6.jar*, and *dom4j-full.jar*, then add these locations to the head of the CLASSPATH and BOOTCLASSPATH environment variables in *%JAGUAR%\bin\user\_setenv.bat*.
- 5 Locate these three jar files, which should reside in the *%TIBCO\_HOME%\JMS\clients\java\* directory: *jms.jar*, *tibjms.jar*, and *tibrvjms.jar*.
- 6 Verify the directory path to *jms.jar*, *tibjms.jar*, and *tibrvjms.jar*, then add these locations to the head of the CLASSPATH and BOOTCLASSPATH environment variables in *%JAGUAR%\bin\user\_setenv.bat*.

The following example shows the required contents of the *user\_setenv.bat* file:

```
REM *****
REM ** Set CLASSPATH **
REM *****
REM ** set CLASSPATH environment variable
REM *****
set CLASSPATH=.

REM ** these are the RepConnector required class files
set CLASSPATH=%CLASSPATH%;%JAGUAR%\repra\lib\log4j-1.2.6.jar
set CLASSPATH=%CLASSPATH%;%JAGUAR%\repra\lib\dom4j-full.jar
```

```

set CLASSPATH=%CLASSPATH%;%JAGUAR%\repra\lib\jTDS2.jar
set CLASSPATH=%CLASSPATH%;%JAGUAR%\repra\lib\jconn2.jar

REM ** these are the TIBCO Enterprise for JMS required class files
set CLASSPATH=%CLASSPATH%;%TIBCO_HOME%\JMS\clients\java\jms.jar
set CLASSPATH=%CLASSPATH%;%TIBCO_HOME%\JMS\clients\java\tibjms.jar
set CLASSPATH=%CLASSPATH%;%TIBCO_HOME%\JMS\clients\java\tibrvjms.jar
REM ** end of set CLASSPATH environment variable

REM *****
REM ** Set BOOTCLASSPATH **
REM *****
set BOOTCLASSPATH=.

REM ** these are the RepConnector required class files
set BOOTCLASSPATH=%BOOTCLASSPATH%;%JAGUAR%\repra\lib\log4j-1.2.6.jar
set BOOTCLASSPATH=%BOOTCLASSPATH%;%JAGUAR%\repra\lib\dom4j-full.jar
set BOOTCLASSPATH=%BOOTCLASSPATH%;%JAGUAR%\repra\lib\jTDS2.jar
set BOOTCLASSPATH=%BOOTCLASSPATH%;%JAGUAR%\repra\lib\jconn2.jar

REM ** these are the TIBCO Enterprise for JMS required class files
set BOOTCLASSPATH=%BOOTCLASSPATH%;%TIBCO_HOME%\JMS\clients\java\jms.jar
set BOOTCLASSPATH=%BOOTCLASSPATH%;%TIBCO_HOME%\JMS\clients\java\tibjms.jar
set BOOTCLASSPATH=%BOOTCLASSPATH%;%TIBCO_HOME%\JMS\clients\java\tibrvjms.jar
REM ** end of set BOOTCLASSPATH environment variable

```

#### ❖ Restarting EAServer

- 1 Go to `%JAGUAR%\bin` directory and enter:

```
jagtool -h <hostname> -n <port number> shutdown
```

This shuts down EAServer.

- 2 In the same directory, restart EAServer by entering:

```
serverstart.bat
```

## 3.2 Post-installation tasks for UNIX

### ❖ Adding the Repra and TIBCO libraries to CLASSPATH and BOOTCLASSPATH

RepConnector requires that additional jar file locations be added to the CLASSPATH and BOOTCLASSPATH environment variables. The following procedure describes how to add these jar file locations.

---

**Note** Verify that you are using the proper case for all directory path and file names.

---

- 1 If it does not already exist, create *user\_setenv.sh* in the *\$JAGUAR/bin* directory using a text editor.

---

**Note** This file must reside in the *\$JAGUAR/bin* directory so that it is called by the *serverstart.sh* file, which starts EAServer.

---

- 2 Set the TIBCO\_HOME environment variable. For example:  

```
set TIBCO_HOME=/usr/env/TIBCO
```
- 3 Locate these four jar files, which should reside in the *\$JAGUAR/repra/lib* directory: *log4j-1.2.6.jar*, *jconn2.jar*, *jTDS2.jar*, and *dom4j-full.jar*.
- 4 Verify the directory path to *log4j-1.2.6.jar*, *jconn2.jar*, *jTDS2.jar*, and *dom4j-full.jar*, then add these locations to the head of the CLASSPATH and BOOTCLASSPATH environment variables in *\$JAGUAR/bin/user\_setenv.sh*.
- 5 Locate these three jar files, which should reside in the *\$TIBCO\_HOME/jms/clients/java* directory: *jms.jar*, *tibjms.jar*, and *tibrvjms.jar*.

---

**Note** UNIX installations of TIBCO Enterprise for JMS might not have a *jms* directory, that is, the jar files might reside in *\$TIBCO\_HOME/clients/java* instead of *\$TIBCO\_HOME/jms/clients/java*.

---

- 6 Verify the directory path to *jms.jar*, *tibjms.jar*, and *tibrvjms.jar*, then add these locations to the head of the CLASSPATH and BOOTCLASSPATH environment variables in *\$JAGUAR/bin/user\_setenv.sh*.

The following example shows the required contents of the *user\_setenv.sh* file:

```

## *****
# ** set CLASSPATH environment variable
# *****
#!/bin/sh
CLASSPATH=.

# ** these are the RepConnector required class files
CLASSPATH=$CLASSPATH:$JAGUAR/repra/lib/log4j-1.2.6.jar
CLASSPATH=$CLASSPATH:$JAGUAR/repra/lib/dom4j-full.jar
CLASSPATH=$CLASSPATH:$JAGUAR/repra/lib/jTDS2.jar
CLASSPATH=$CLASSPATH:$JAGUAR/repra/lib/jconn2.jar

# ** these are the TIBCO Enterprise for JMS required class files
CLASSPATH=$CLASSPATH:$TIBCO_HOME/jms/clients/java/jms.jar
CLASSPATH=$CLASSPATH:$TIBCO_HOME/jms/clients/java/tibjms.jar
CLASSPATH=$CLASSPATH:$TIBCO_HOME/jms/clients/java/tibrvjms.jar
# ** end of set CLASSPATH environment variable

# *****
# ** Set BOOTCLASSPATH **
# *****
BOOTCLASSPATH=.

# ** these are the RepConnector required class files
BOOTCLASSPATH=$BOOTCLASSPATH:$JAGUAR/repra/lib/log4j-1.2.6.jar
BOOTCLASSPATH=$BOOTCLASSPATH:$JAGUAR/repra/lib/dom4j-full.jar
BOOTCLASSPATH=$BOOTCLASSPATH:$JAGUAR/repra/lib/jTDS2.jar
BOOTCLASSPATH=$BOOTCLASSPATH:$JAGUAR/repra/lib/jconn2.jar

# ** these are the TIBCO Enterprise for JMS required class files
BOOTCLASSPATH=$BOOTCLASSPATH:$TIBCO_HOME/clients/java/jms.jar
BOOTCLASSPATH=$BOOTCLASSPATH:$TIBCO_HOME/clients/java/tibjms.jar
BOOTCLASSPATH=$BOOTCLASSPATH:$TIBCO_HOME/clients/java/tibrvjms.jar
# ** end of set BOOTCLASSPATH environment variable

```

#### ❖ Restarting EAServer

- 1 Go to the *\$JAGUAR/bin* directory and enter:

```
jagtool -h <hostname> -n <port number> shutdown
```

This shuts down EAServer.

- 2 In the same directory, restart EAServer by entering:

```
serverstart.sh
```

## 4. Configuration instructions

To configure TIBCO Enterprise for JMS with RepConnector, you must follow these steps, which supplement the configuration steps described in the *RepConnector 2.0.2 Installation and User's Guide*.

### ❖ **Configuring TIBCO Enterprise for JMS for use with RepConnector**

- 1 Start TIBCO Enterprise for JMS Administration Tool. See the *TIBCO Enterprise for JMS User's Guide* for more information.
- 2 Connect to TIBCO Enterprise for JMS Server.
- 3 Follow this procedure to create the factory and the queue:

- a At the command line, connect to the TIBCO host:

```
connect tcp://<TIBCO Enterprise for JMS Server
host name >:port.
```

For example:

```
connect tcp://cntester:7222
```

- b Create the factory, where *[URL[clientID]]* is optional:

```
create factory <factory-name> <type> [URL
[clientID]]
```

For example:

```
tcp://cntester:7222> create factory
com.tibco.tibjms.TibjmsQueueConnectionFactory
queue
```

- c Create the queue:

```
create queue <queuename>
```

For example:

```
tcp://cntester:7222> create queue INQ
```

### ❖ **Configuring RepConnector Managed Connection Factory properties**

Before you configure RepConnector Managed Connection Factory properties, you must configure RepConnector. See the *RepConnector 2.0.2 Installation and User's Guide* for more information.

- 1 Connect to EAServer using Jaguar Manager to configure RepConnector Managed Connection Factory properties.
- 2 Enter the values of each property as follows:



Property	Value
Client_Protocol	The type of client protocol to which RepConnector will send the event. This value must be set to JMS
Client_Username	A TIBCO Enterprise for JMS Server login, such as tibadmin.
Client_Password	The password that corresponds with the TIBCO Enterprise for JMS Server login, such as tibadmin_psw.
JMS_Provider URL	An URL in the form of tcp://<TIBCO Enterprise for JMS Server host name >:port; for example, tcp://cntester:7222.
JMS_InitialContext Factory	The initial context factory; for example, com.tibco.tibjms.naming.TibjmsInitialContextFactory.
JMS_QCF	The Queue Connection Factory created in “Configuring TIBCO Enterprise for JMS for use with RepConnector” on page 8; for example, com.tibco.tibjms.TibjmsQueueConnectionFactory.
JMS_LocalQueue	The name of the TIBCO Enterprise for JMS queue created in the previous procedure; for example, INQ.

## 5. Troubleshooting

The following tips can help you troubleshoot your installation and configuration.

Repra/RepraService  
not installed

Occasionally during installation, Repra/RepraService is not installed. Verify that it is installed by following the steps in the *RepConnector 2.0.2 Installation and User’s Guide* (page 7 for Windows, or page 10 for UNIX).

If Repra/RepraService is not there, go to `%JAGUAR%\Repository\Server\Jaguar.props` and add “,Repra\RepraService” for Windows or “,Repra/RepraService” for UNIX to the end of the services line:

```
#Sybase EAServer 4.1 Properties
.
.
.
com.sybase.jaguar.server.services=CtsComponents/Messag
eService,Repra/RepraService
```

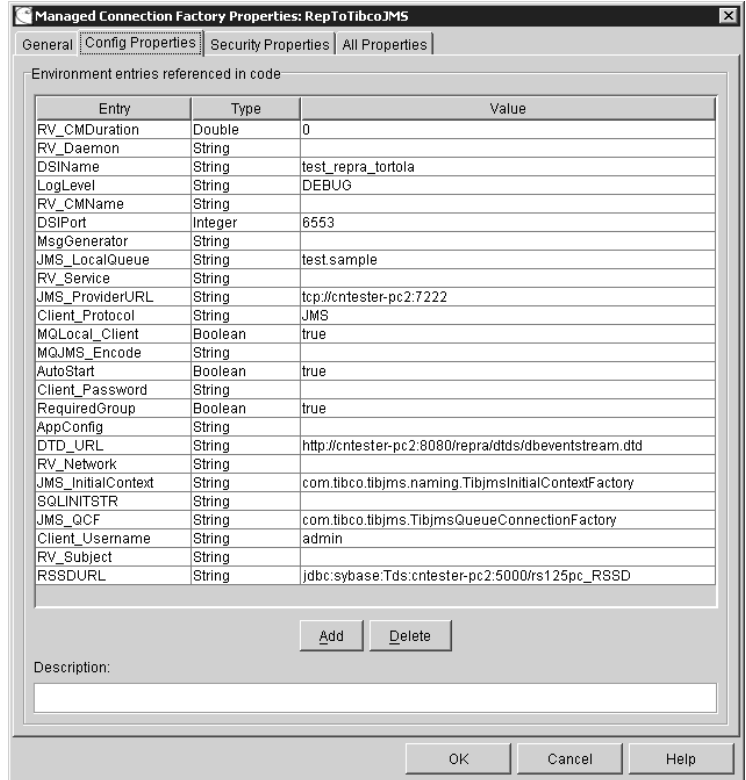
Connections not  
running

If connections are not running successfully:

- Verify that your TIBCO Enterprise for JMS server is running.
- Verify that the location of the TIBCO Enterprise for JMS jar files added to `user_setenv.sh` are correct and in the proper case.

- Verify that you added the user name and password for the Replication Server System Database (RSSD) to the Security Properties tab on the Jaguar Manager's Managed Connection Factory Properties dialog box for the connection.

The following figure shows valid values for the *Connection.props* file, as viewed from the Config Properties tab on the Managed Connection Factory Properties: RepToTibcoJMS dialog box in Jaguar Manager:



**Note** See the EAServer documentation for more information about using Jaguar Manager.

## 6. 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.

## 7. Other sources of information

Use the Sybase Getting Started CD, the Sybase Technical Library CD, and the Technical Library 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 Technical Library CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader (downloadable at no charge from the Adobe Web site, using a link provided on the CD).
- The Technical Library CD contains product manuals and is included with your software. The DynaText reader (included on the Technical Library CD) allows you to access technical information about your product in an easy-to-use format.

Refer to the *Technical Library Installation Guide* in your documentation package for instructions on installing and starting the Technical Library.

- The Technical Library Product Manuals Web site is an HTML version of the Technical Library CD that you can access using a standard Web browser. In addition to product manuals, you will find links to EBFs/Updates, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

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

### 7.1 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 Select Products from the navigation bar on the left.
- 3 Select a product name from the product list and click Go.
- 4 Select the Certification Report filter, specify a time frame, and click Go.
- 5 Click a Certification Report title to display the report.

❖ **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.

## 7.2 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. Enter user name and password information, if prompted (for existing Web accounts) or create a new account (a free service).
- 3 Select a product.
- 4 Specify a time frame and click Go.
- 5 Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

