TIBCO Rendezvous

This topic covers TIBCO Rendezvous technology, which provides a message bus that simplifies the process of exchanging data among large scale networks. It offers an efficient, yet simple way for applications to communicate with one another. With its increasing popularity, more and more corporations are planning to integrate TIBRV as their main communication link among applications.

SOAtest enables you to test web services that use TIBCO Rendezvous. Functionality tests are generated automatically from the WSDL. You can choose from a variety of transports available. The following documentation provides step-by-step instructions on how to configure SOAtest to run with TIBRV.

Sections include:

- Configuring TIBCO for Use in SOAtest
- Configuring SOAtest to Use TIBCO Rendezvous

Configuring TIBCO for Use in SOAtest

Prerequisites

Before configuring TIBCO protocol properties, you must have TIBRV installed on your machine. Once TIBRV is installed on your machine, you must then add the TIBRV jar file to SOAtest's classpath through SOAtest's System properties.

For information on obtaining a license or downloading TIBCO Rendezvous, see http://www.tibco.com/products/automation/messaging/high-performance-messaging/rendezvous/default.jsp.

Configuration

To configure TIBCO for use in SOAtest:

1. Run the installation file.
   - For the component selection screen, make sure the **Run TimeComponent** is selected.
   - There are two protocols available, (TRDP and PGM). Be sure to select the appropriate protocol which matches the protocol that daemon uses. If you are unsure about which protocol to select, please consult the system administrator.
2. Once TIBCO Rendezvous is installed on your machine, add the appropriate JAR files to SOAtest's classpath as follows:
   1. Choose **Parasoft> Preferences**.
   2. Open the **Parasoft> System Properties** page.
   3. Click the **Add JARS** button and choose and select the necessary JAR files to be added. In this case, add `<TIBRV>\lib\tibrv j.jar` to the classpath.

Configuring SOAtest to Use TIBCO Rendezvous

To configure SOAtest to use TIBCO Rendezvous:

1. Complete the WSDL test creation wizard as normal (see Creating Tests From a WSDL for details).
2. Double-click the node for the test that will be using TIBCO.
3. In the right GUI panel, select the **Transport** tab and select **TIBCO** from the **Transport** drop-down menu.
4. Configure the following options:
   - **Message Exchange Pattern:** Specifies whether or not SOAtest receives a response. If **Get Response** is selected, SOAtest sends a message and receives a response. If **Get Response** is not selected, SOAtest sends a one-way message and does not receive a response.
   - **Daemon:** Specifies the server name or the server's IP followed by a colon (:) and the port number (e.g. 10.10.32.34:7500 or host_name:7500).
   - **Network:** Specifies the network where the transport objects are located. The network parameter consists of up to three parts separated by a semicolon (;) in the form of `network; multicast groups; send address` (e.g. `lan0; 224.1.1.1; 244.1.1.6`). For more information, please refer to the Network Selection section of the TIBCO Rendezvous documentation.
   - **Service:** Specifies TIBCO's service name.
   - **Keep-Alive Connection:** Indicates whether the test should share or close the current connection. A shared connection will be returned to the connection pool to be used across the test suite. A pooled connection will be reused if its Daemon, Network, and Service parameter values match those of the test transport. The life cycle of a connection pool is as follows:
     - For a single test, it is destroyed at the end of the test execution.
     - For a test suite, it is destroyed at the end of the test suite execution.
     - For a load test, it is destroyed at the end of the load testing.
   - **Send Subject:** Specifies the subject name that the TIBCO daemon listens for.

- **Send Field Name:** Specifies the field name from which the SOAP message is extracted.
- **Message Delivery:** Indicates what type of messages the SOAtest should look for on the bus. This should correspond to the delivery type established by the message sender.
- **Time limit:** Applies in **Certified** delivery mode only. It tells the outgoing TIBCO message the maximum time allowed before the receiver gets the message. SOAtest provides this to the TIBCO API using: `com.tibco.tibrv.TibrvCmMsg.setTimeLimit (double)`
- **Create inbox for unicast (point-to-point) delivery:** When this option is selected, a random subject name is created and SOAtest automatically listens for a response message on that subject. This is a point-to-point messaging pattern in TIBCO RV (synchronous request/response). When this option is unselected, you must specify a subject name.
- **Reply Subject:** Specifies the subject name that the TIBCO daemon listens for.
- **Reply Field Name:** Specifies the field name from which the SOAP message is extracted.

Notice that when **point-to-point** is selected for receiving, it automatically constrains the delivery mode in SOAtest to the same mode as the one set in the send area (because in that pattern, you send and receive messages using the same delivery mode). However, when the point-to-point check box is not selected, you can select how the Reply message should be delivered (because in that mode, the pattern is asynchronous, and a response message could be expected to come as certified or reliable mode, depending on how your TIBCO app is set up).

Once you are done setting up TIBCO Properties, you should now be able to send and receive messages using SOAtest.