

## BEA WebLogic Server R Web Services Reliable Messaging

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## **WS-ReliableMessaging Enhancements**

WebLogic Server 10.0 included an implementation of the WS-ReliableMessaging 1.0 protocol. This release updates that support to the new <u>WS-ReliableMessaging (WS-RM) 1.1</u> version protocol approved by the OASIS WS-RX Working Group in June of 2007.

WS-RM 1.1 includes several protocol-level enhancements and changes, but does not significantly impact how clients interact with reliable services using WebLogic Service facilities (for example, stubs, WsrmUtils). Existing documentation for web services reliable messaging (based on the WS-RM 1.0 specification) is still useful and valid. The remainder of this section assumes you are familiar with that existing documentation.

## Notable changes to the WS-RM 1.1 protocol

The following changes have been made to the WS-RM 1,1 protocol:

- 1. The addition of a close sequence protocol message. Reliable clients may now choose to 'close' a reliable sequence, and get a full and complete accounting of the acknowledged messages in that sequence, prior to terminating the sequence.
- 2. The concept of a 'last message' has been removed for WS-RM 1.1. If you are using the WS-RM 1.1 protocol, you may not perform any operation which would attempt to set 'LastMessage' on a sequence message sent to the reliable messaging destination. Examples include the use of the WsrmUtils.setLastMessage and WsrmUtils.sendEmptyLastMessage methods.

## Using WS-Reliable Messaging

In order to use the WS-RM 1.1 protocol in your web services, simply attach a WS-RM 1.1 policy to you reliable service (just like you would have attached a WS-RM 1.0 policy to your WS-RM 1.0 reliable service). This involves using the <code>@Policy</code> annotation on your reliable JWS. This release packages a <code>DefaultReliability1.1.xml</code> policy file to make it easy for you to enable your services for WS-RM 1.1. For example, the following JWS defines a reliable service using the WS-RM 1.1 protocol:

```
@WebService
@WLHttpTransport(contextPath="Wsrm11Simple",
serviceUri="ReliableEchoService")
@Policy(uri="policy:DefaultReliability1.1")
public class ReliableEchoService {
   private static String onewaySavedMsg = null;
    @WebMethod
    @Oneway
   public void echoOneway(String msg) {
        System.out.println("Echoing " + msg);
        onewaySavedMsg = msg;
    }
}
```

```
@WebMethod
public String echo(String msg) {
   return msg + onewaySavedMsg;
}
```

To close a reliable sequence, you can use the WsrmUtils.closeSequence method.