



# **BEA WebLogic Server<sup>R</sup> WS-Trust, WS-Trust Client, and WS-SecureConversation**

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## WS-Trust

The implementation of Web Service Trust Language (WS-Trust) has been updated to support WS-Trust 1.3. The WS-Trust version from 02/2005 continues to be supported. The version of WS-Trust for a particular Web Service is configured through `WS-Policy` and `WS-SecurityPolicy`. See `WS-SecureConversation` for information about configuring trust policy.

## Overview of WS-Trust Client Features

The WS-Trust client uses `WS-Trust` to retrieve security tokens from a Security Token Service (STS) for use in Web Services Security (WSS). It is integrated into the WebLogic WSS runtime through an implementation of the internal WSS `CredentialProvider` application programming interface (API).

Configuration of the WS-Trust Client is done through MBeans for a Web Service client running on the server, or through properties set on the Stub for a standalone client. It can be used to define the URI of an external (meaning not co-located) STS.

Supported versions of WS-Trust are WS-Trust 1.3 and WS-Trust from 02/2005.

In the WebLogic Server 10.3 Tech Preview, only Web Service Secure Conversation Language (WS-SecureConversation) tokens are supported. If no STS URI is configured, it will use the URI for the co-located STS.

Supported versions of WS-SecureConversation are WS-SecureConversation 1.3 and WS-SecureConversation from 02/2005.

There are multiple potential sources for the URI of the STS. The order of precedence is as follows:

1. URI from policy's Issuer assertion
2. Configured STS URI
3. Co-located STS URI (default if there is no other source)

## Configuring the STS URI

### Standalone Client

The following code examples demonstrates setting the STS URI on a client stub:

```
String wsdl = "http://myserver/wsscsecuredservice?wsdl";
WsscSecuredService service = new WsscSecuredService_Impl(wsdl);
WsscSecured port = service.getWsscSecuredSoapPort();
Stub stub = (Stub) port;
String sts = "https://stsserver/standaloneSTS/wssc13/STS";
stub._setProperty("weblogic.wsee.wst.sts_endpoint_uri", sts);
```

### Client Running On The Server Side

The following code example demonstrates using the WebLogic Scripting Tool (WLST) to configure the STS URI:

```

userName = sys.argv[1]
passWord = sys.argv[2]
host = sys.argv[3]+":"+sys.argv[4]
sslhost = sys.argv[3]+":"+sys.argv[5]
url="t3://" + host
connect(userName, passWord, url)
edit()
startEdit()

defaultWss = cmo.lookupWebserviceSecurity('default_wss')
#Create credential provider for SCT Trust Client
wtm = defaultWss.createWebserviceCredentialProvider('trust_client_sct_cp')
wtm.setClassName('weblogic.wsee.security.wssc.v13.sct.ClientSCCredentialProvide
r')
wtm.setTokenType('sct_trust')
cpm = wtm.createConfigurationProperty('StsUri')
cpm.setValue("https://" + sslhost + "/standaloneSTS/wssc13/STS")

save()
activate(block="true")
disconnect()
exit()

```

## Using the console to configure the STS URI

Use the following steps to configure the STS URI through the WebLogic Server Administration Console:

1. Go to the Create a WebServices Security Credential Provider page  
([http://hostname:port/console/console.portal?\\_nfpb=true&\\_pageLabel=CreateWebServiceSecurityCredentialProviderPage](http://hostname:port/console/console.portal?_nfpb=true&_pageLabel=CreateWebServiceSecurityCredentialProviderPage)).
2. Enter a provider name, provider class name, and the type of token the provider handles; SCT provider class name:  
(weblogic.wsee.security.wssc.v200502.sct.ClientSCCredentialProvider), and token type (sct).  
  
Note the token type is just a short name to identify the token, the actual token type this provider handles is <http://schemas.xmlsoap.org/ws/2005/02/sct>.
3. Go to the existing Create a Credential Provider property page
4. Enter name/value pairs for the STS URI; property name: StsUri.

## WS-SecureConversation

The implementation of Web Service Secure Conversation Language (WS-SecureConversation) has been updated to support WS-SecureConversation 1.3. The WS-SecureConversation version from 02/2005 continues to be supported. The version of WS-SecureConversation for a particular Web Service is configured through WS-Policy and WS-SecurityPolicy.

Code or configure your application to use the policy through policy annotations, policy attached to the application's WSDL, or runtime policy configuration

Use one of the following policies for WS-Trust 1.3 and WS-SecureConversation 1.3:

- Wsspl.2-2007-Wssc1.3-Bootstrap-Https-BasicAuth.xml
- Wsspl.2-2007-Wssc1.3-Bootstrap-Https-ClientCertReq.xml

- Wsspl.2-2007-Wssc1.3-Bootstrap-Https.xml
- Wsspl.2-2007-Wssc1.3-Bootstrap-Wssl.0.xml
- Wsspl.2-2007-Wssc1.3-Bootstrap-Wssl.1.xml

For WS-Trust from 02/2005 and WS-SecureConversation from 02/2005 use:

- Wsspl.2-Wssc200502-Bootstrap-Https.xml
- Wsspl.2-Wssc200502-Bootstrap-Wssl.0.xml
- Wsspl.2-Wssc200502-Bootstrap-Wssl.1.xml

You can write your own policy, but the use of provided policies is recommended.