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# **BEA**AquaLogic Service Bus™

## BEA AquaLogic Service Bus Product Support Information

Version 3.0
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# Contents

## Product Support Information

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ALSB is an Enterprise-class Service Bus designed for connecting, mediating and managing interactions between heterogeneous services. ALSB helps accelerate service configuration, integration and deployment, and simplifies management of shared services across the SOA.

AquaLogic Service Bus supports broad compliance with messaging standards including SOAP 1.1 and 1.2, HTTP, JMS, SMTP/POP/IMAP, FTP, SSL, XML 1.0, XML Schema, WSDL 1.1, WSRP 1.0, and WS-Security.

This section includes information about ALSB interoperability. It includes the following topics:

- Supported Configurations
- Supported Standards and Implementations
- Platform Interoperability

## Supported Configurations

For support information on vendor operating systems, JDK, hardware, and database suport, see Supported Configurations for BEA ALSB 3.0.

# Supported Standards and Implementations

ALSB supports the following standards and implementations.

**Table 1  Supported Standards and Implementations**

| Standard or Implementation. . . | Version . . . |
| --- | --- |
| Email Servers | • Microsoft Windows IIS SMTP Server<br>• Sol/Apache SMTP Server |
| FTP Servers | • Microsoft Windows IIS FTP Server<br>• Sol/Apache FTP Server |
| Security Providers | For WebLogic Server 9.2 and later, ALSB supports the following security providers:<br>• WebLogic Server default authentication provider<br>• WebLogic Server default credential mapper<br>• WebLogic Server PKI credential mapper/provider<br>• WebLogic Server Java KeyStores (JKS)<br>• WebLogic Server default User Name Token and X509 Token handlers<br>• WebLogic Server XACML authorization provider<br>• WebLogic Server XACML Role Mapping provider<br>• WebLogic SAML Identity Assertion Provider V2<br>• WebLogic SAML Credential Mapping Provider V2 |

**Table 1  Supported Standards and Implementations**

| Standard or Implementation. . . | Version . . . |
| --- | --- |
| Web Services | • SOAP 1.1, SOAP 1.2 |
| | • WSDL 1.1 (and the *WSDL 1.1 Binding Extension for SOAP 1.2* as specified in http://schemas.xmlsoap.org/wsdl/soap12/WSDL11 SOAP12.pdf) |
| | • WS-Addressing |
| | • WS-Security using WebLogic Server WS client or WebLogic Server business services. |
| | • WSDL attached WS-Policies as supported by WebLogic Server 9.x and 10.0. |
| | • WebLogic Server WS-Policy—identity, integrity, confidentiality and timestamp assertions. |
| | ALSB supports a WebLogic Server-proprietary format that is based on the assertions described in the December 18, 2002 version of the Web Services Security Policy Language (WS-SecurityPolicy) specification. |
| | For information about supported Web Services Security Policy Assertions and Reliable Messaging Assertions, see the AquaLogic Service Bus Security Guide. |

**Table 1  Supported Standards and Implementations**

| Standard or Implementation. . . | Version . . . |
| --- | --- |
| WS-I Basic Security Profile | BEA complies with the Basic Security Profile Version 1.0 specifications from the Web Services Interoperability Organization a (WS-I) and considers it to be the baseline for Web Services interoperability. |
| | However, in some cases, AquaLogic Service Bus does not reject SOAP/HTTP messages that are not WS-I compliant. This enables you to build implementations with service endpoints which are not strictly WS-I compliant. |
| | When you configure a proxy service or business service, you can use the ALSB Console to specify whether you want ALSB to enforce WS-I compliance for the service. When you configure WS-I compliance for a proxy service, WS-I compliance checks are performed when the proxy service receives a message as a response from an invoked service with a Service Callout, a route node, or on a proxy service. |
| | For information about the types of messages to which the compliance checks are applied and the nature of those checks, see "WS-I Compliance" in Modeling Message Flow in AquaLogic Service Bus in the *AquaLogic Service Bus User Guide*. |
| HTTP | 1.0 |
| | 1.1 |
| XQuery | BEA XQuery Mapper 1.0.0.0 plug-in for Eclipse 3.1 |
| | ALSB uses the BEA AquaLogic Data Services Platform implementation of the XQuery engine. |
| | To learn more, see XQuery Implementation in the *AquaLogic Service Bus User Guide*. |
| Format Builder | BEA Format Builder 1.0.0.0. |

**Table 1  Supported Standards and Implementations**

| Standard or Implementation. . . | Version . . . |
| --- | --- |
| WebLogic JMS | WebLogic Server<br>• 8.1 SP4-SP6<br>• 9.0, 9.1, 9.2<br>• 10.0<br>WebLogic Workshop<br>• 8.1<br>• 9.2<br>• 10.2<br>See AquaLogic Service Bus Interoperability Solutions for JMS. |

**Table 1  Supported Standards and Implementations**

| Standard or Implementation. . . | Version . . . |
|---|---|
| Microsoft .NET 1.1 with SOAP 1.1 | **Style-encoding: document-literal, rpc-encoded**<br><br>• ALSB supports document-literal and interoperates with .NET services.<br><br>• ALSB interoperates with .NET rpc-encoded services in cases of inbound and outbound (routing/publish). In these cases, interoperability is possible regardless of parameter types.<br><br>• ALSB Service Callouts may fail to interoperate with .NET rpc-encoded services.<br><br>**Note**: DIME attachments is not supported by ALSB.<br><br>**.NET 1.1 Security Configurations Limitations**<br><br>The following security configurations in the .NET 1.1 framework are not interoperable with the ALSB message-level security:<br><br>• Signing the message body from WebLogic to .NET WSE 2.0 (Webservices Security Extension) is interoperable. However, by default, WSE requires additional headers—for example, `WS-Addressing` and `timestamp`. Therefore, to make ALSB message-level security for .NET Web services interoperable, you must remove all of the message predicate other than the message body from .NET security policy configuration<br><br>• To ensure ALSB interoperability with .NET, the *replay detection attribute*, `<replayDetection>`, must be set to `disabled` on the .NET side.<br><br>See also ".NET–AquaLogic Service Bus Interoperability Limitations" on page 1-9. |
| Microsoft .NET 2.0 with SOAP 1.1 and SOAP 1.2 | See ".NET–AquaLogic Service Bus Interoperability Limitations" on page 1-9. |

# Platform Interoperability

**Note:**  See the AquaLogic Service Bus Release Notes for the latest information about patches or updates that may be required to support your interoperability scenarios.

ALSB interoperates with the platforms described in the following table.

**Table 2  ALSB Platform Interoperability**

| Interoperability | Version | Comment |
|---|---|---|
| **BEA WebLogic Family Platforms** | | |
| WS-* and JMS interoperability with WebLogic Platform | • 8.1 SP4-SP6 (except WS-Security <br> • 9.0, 9.1, 9.2 (except WS-Security) <br> • 10.0 (except WS-Security) | For information about ALSB and JMS interoperability, see AquaLogic Service Bus Interoperability Solutions for JMS. |
| Web Services for Remote Portlets (WSRP) with BEA WebLogic Portal | • 9.2 <br> • 10.0 <br> • 10.2 | For information about ALSB and WSRP interoperability, see AquaLogic Service Bus Interoperability Solutions for WSRP. |
| WebLogic Integration | 9.2 | |
| MQ event generator and control in WebLogic Integration | • 8.1 SP4 or later <br> • 9.2 | |
| Workshop for Weblogic | 10.2 | |
| **BEA AquaLogic Family Platforms** | | |
| AquaLogic Service Bus | • 2.6 <br> • 2.6 RP1 <br> • 3.0 | |
| AquaLogic Service Registry | 3.0 | To learn about importing and exporting business services from and to UDDI Registries in general, and AquaLogic Service Registry in particular, see UDDI in the *AquaLogic Service Bus User Guide*. <br><br> To learn about AquaLogic Service Registry, see the product documentation at the following URL: <br> http://e-docs.bea.com/alsr/docs30/ |

**Table 2  ALSB Platform Interoperability**

| AquaLogic Data Services Platform | • 2.5 | http://edocs.bea.com/aldsp/docs25/ |
|---|---|---|
| | • 3.0 | http://edocs.bea.com/aldsp/docs30/ |
| AquaLogic User Interaction | 6.0 | http://e-docs.bea.com/alui/ |
| AquaLogic Enterprise Security | 3.0 | AquaLogic Enterprise Security can be used to manage access control to the ALSB runtime resources, using the ALES WebLogic Server 9.x Security Service Module. For more information, see Integrating ALES with Application Environments. |
| AquaLogic Enterprise Repository | • 2.6 | http://e-docs.bea.com/aler/docs26/ |
| | • 3.0 RP1 | http://e-docs.bea.com/aler/docs30/ |
| **BEA Tuxedo Family Platforms** | | |
| BEA Tuxedo/WebLogic Tuxedo Connector | • 8.1<br>• 9.x<br>• 10.0 | For information about ALSB and BEA Tuxedo interoperability, see AquaLogic Service Bus Interoperability Solution for Tuxedo. |
| **Third Party Platforms** | | |
| IBM WebSphere MQ | • 5.3<br>• 6.0 | Supported with SOAP 1.1, not SOAP 1.2<br>See AquaLogic Service Bus Interoperability Solutions for WebSphere MQ. |
| Tibco Enterprise Message Service | 4.2 | See AquaLogic Service Bus Interoperability Solutions for JMS. |
| Apache Axis | 1.2.1 | Supported with SOAP 1.1, not SOAP 1.2<br>See also "Apache Axis–AquaLogic Service Bus Interoperability Limitations" on page 1-9. |
| iWay 5.5 adapters—over Web Services | 5.5 /WebLogic 9.x | http://egeneration.bea.com/iwaydocs/iway55/index.html |

**Table 2  ALSB Platform Interoperability**

| | | |
|---|---|---|
| Cyclone Interchange—over JMS | 5.4 | http://edocs.bea.com/wli/passport/cyclone/ |
| | | This is a password protected Web site—contact your BEA Sales Representative about the Cyclone Interchange product |
| BMC Patrol ® | | http://www.softwareinnovations.co.uk/products/patrol.html |

## .NET–AquaLogic Service Bus Interoperability Limitations

- .NET clients that need to communicate with AquaLogic Service Bus using basic authentication must send the authentication information in the first request. Otherwise, the invocation fails because AquaLogic Service Bus does not challenge the .NET client for credentials.

- AquaLogic Service Bus interoperability with .NET using Basic Authentication works successfully when configured with Windows 2003/IIS 6.0; however, interoperability with .NET using Basic Authentication on Windows XP/IIS 5.1 is not supported.

- Message-level security interoperability for .NET clients works only with SOAP 1.1. The WSE Soap Protocol Factory does not support security with SOAP 1.2. See Configuring Message-Level Security Between .NET 2.0 and ALSB.

## Apache Axis–AquaLogic Service Bus Interoperability Limitations

- **Unresolved references when you import RPC-encoded Axis-generated WSDLs**

  When you import an RPC encoded WSDL, generated by Axis, into ALSB, you may experience a warning message indicating that the WSDL contains references that must be resolved.

  If you open the structural view of the imported WSDL in the **View a WSDL** page in the ALSB Console, unresolved schema imports are displayed in the Imports section.

  Note that this issue does not affect your ability to use the WSDL in the ALSB environment. You can eliminate the warning by removing unresolved schemas from the WSDL file.

- **SOAPAction attribute in Axis-generated WSDLs initialized to empty string**

  The WSDL generated by Axis have the SOAPAction attribute initialized to an empty string. Configuring an ALSB business service with this WSDL, causes invocations to this web service to fail generating a "No SOAPAction" fault.

  To workaround the issue and ensure successful web service invocations from ALSB to Axis, you must configure a transport header in the proxy service message flow Specifically, you must add a **Set Transport Headers** request action in the message flow route and enable the **Pass all headers through Pipeline** option.

  This issue also causes invocations from the ALSB test console to fail (and generates a "No SOAPAction" fault) even when the workaround is in place. To make test console invocations work, you must set the SOAPAction HTTP header in the **Set Transport Header** request action in the message flow route.

- **HTTP response and status code for one-way operations**

  For both document literal and RPC encoded types of web services, on invocation of a one-way operation, Axis is expected to send an empty HTTP response with status code 202 OK to the client. However, Axis sends an non-empty HTTP response with status code 200 OK. The body of this HTTP response contains an empty SOAP envelope.

  This causes the ALSB proxy or business service to send the same 200 OK response code to their clients violating the expected results.

- **HTTP response and status code for nne-way operations generating a fault**

  For both document literal and RPC encoded types of web services, on invocation of a one-way operation generating a fault, Axis is expected to send an empty HTTP response with status code 202 OK to the client. However, Axis sends a non-empty HTTP response with status code 500 Internal Server Error with an empty SOAP envelope as a body.

  This causes the ALSB proxy or business service to send the same 500 Internal Server Error response to their clients violating the expected results.