



BEA AquaLogic Service Bus™

Interoperability Support Matrix

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Interoperability Matrix

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Interoperability Matrix

AquaLogic Service Bus is an Enterprise-class Service Bus designed for connecting, mediating and managing interactions between heterogeneous services. AquaLogic Service Bus 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 AquaLogic Service Bus interoperability. It includes the following topics:

- [Summary of Interoperability](#)
- [FTP and Email Servers](#)
- [Security Providers](#)
- [Web Service Specifications and Standards](#)
- [HTTP Standards](#)
- [XPath and XQuery](#)
- [JMS](#)
- [Databases](#)
- [Platform Interoperability](#)

Summary of Interoperability

The following table summarizes the versions of the platforms, standards, FTP servers, and so on, that are certified to interoperate with AquaLogic Service Bus.

Table 1 AquaLogic Service Bus Interoperability Matrix

AquaLogic Service Bus Interoperates With . . .	Version . . .	For Complete Information . . .
FTP and Email Servers	<ul style="list-style-type: none"> • Microsoft Windows IIS • Sol/Apache 	“FTP and Email Servers” on page 4
Security Providers	<ul style="list-style-type: none"> • WebLogic Server 9.x (for providers, except XACML authorization provider) • WebLogic Server 9.2 XACML authorization provider 	“Security Providers” on page 5
Web Service Standards	<ul style="list-style-type: none"> • SOAP 1.1, 1.2 • WSDL 1.1¹ • WebLogic Platform 8.1 SP4 or later (except security) • WS-Security using WebLogic Server 9.x • WebLogic Server 9.x WS-Policy • WS-I 	“Web Service Specifications and Standards” on page 5
HTTP	<ul style="list-style-type: none"> • 1.0 • 1.1 	“HTTP Standards” on page 7
XQuery	1.0	“XPath and XQuery” on page 7
XPath	2.0	
JMS	<ul style="list-style-type: none"> • WebLogic Server 9.x JMS • IBM WebSphere MQ/JMS 5.3 • MQ Extended transactional client • Tibco Enterprise Messaging Service 4.2 	AquaLogic Service Bus Interoperability Solutions for JMS and WebSphere MQ

Table 1 AquaLogic Service Bus Interoperability Matrix

AquaLogic Service Bus Interoperates With . . .	Version . . .	For Complete Information . . .
Microsoft .NET	<ul style="list-style-type: none"> • 1.1 • 2.0 	“Platform Interoperability” on page 8
Apache Axis	<ul style="list-style-type: none"> • 1.2.1 	
WebLogic JMS	WebLogic Server <ul style="list-style-type: none"> • 8.1 SP4-SP6 • 9.0, 9.1, 9.2 WebLogic Workshop <ul style="list-style-type: none"> • 8.1 • 9.2 	
WebLogic Platform	<ul style="list-style-type: none"> • 8.1 SP4-SP6 • 9.2² 	
WebLogic Integration	<ul style="list-style-type: none"> • WebLogic Integration 8.1 SP4-SP6, 9.2 	
IBM WebSphere MQ	6.0	
AquaLogic Service Registry	2.1	
Web Services for Remote Portlets (WSRP)	WebLogic Portal 8.1 and 9.2	
BEA Tuxedo/WebLogic Tuxedo Connector	8.1/9.0	
iWay 5.5 adapters—over Web Services	5.5	
Cyclone Interchange—over JMS	5.4	

Table 1 AquaLogic Service Bus Interoperability Matrix

AquaLogic Service Bus Interoperates With . . .	Version . . .	For Complete Information . . .
Databases	<ul style="list-style-type: none"> • Oracle 9.2.0.4 and later patch sets of 9.2.x • Oracle 10.1.0.4 and later patch sets of 10.1.x • PointBase 5.1 (in development mode, and non cluster environments only) • DB2 8.2 FixPak2 (equivalent to 8.1 FixPak 9) and later FixPaks • SQL Server 2000 SP3+, SQL Server 2005 • Sybase 12.5.03 and later patch levels of 12.5.x 	<p>. . . about databases and drivers, see Supported Database Configurations in <i>Supported Configurations for AquaLogic Service Bus</i></p>

1. AquaLogic Service Bus supports the WSDL 1.1 Binding Extension for SOAP 1.2 as specified in <http://schemas.xmlsoap.org/wsdl/soap12/WSDL11SOAP12.pdf>

2. ALSB 2.6 RP1 is installed with WebLogic Server 9.2 MP2, but you can upgrade to WebLogic Server 9.2 MP3. The WebLogic Server upgrade requires additional steps for ALSB domains. See the [ALSB Upgrade Guide](#).

FTP and Email Servers

AquaLogic Service Bus is certified against the following FTP and Email servers:

- FTP
 - Microsoft Windows IIS FTP Server
 - Sol/Apache FTP Server
- Email
 - Microsoft Windows IIS SMTP Server
 - Sol/Apache SMTP Server

Security Providers

AquaLogic Service Bus is certified against the following security providers:

- WebLogic Server 9.x default authentication provider
- WebLogic Server 9.x default authorization provider (Deprecated)
- WebLogic Server 9.x default credential mapper
- WebLogic Server 9.x PKI credential mapper
- WebLogic Server 9.x PKI credential provider
- WebLogic Server 9.x Java KeyStores (JKS)
- WebLogic Server 9.x default User Name Token and X509 Token handlers
- WebLogic Server 9.2 XACML authorization provider
- WebLogic Server 9.2 XACML Role Mapping provider
- WebLogic SAML Identity Assertion Provider V2
- WebLogic SAML Credential Mapping Provider V2

For more information about managing and configuring AquaLogic Service Bus security, see [AquaLogic Service Bus Security Guide](#).

Note: The defaults for WebLogic Server 9.2 are the XACML Authorization provider and XACML Role Mapping provider.

Web Service Specifications and Standards

AquaLogic Service Bus supports the following Web Service standards:

- 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/WSDL11SOAP12.pdf>)
- WS-Addressing
- WS-Security using WebLogic Server 9.x WS client or WebLogic Server 9.x business services.

- WSDL attached WS-Policies as supported by WebLogic Server 9.0 and 9.1, and 9.2.
- WebLogic Server 9.x WS-Policy—identity, integrity, confidentiality and timestamp assertions.

AquaLogic Service Bus 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. This release of AquaLogic Service Bus does not incorporate the latest update of the specification (13 July 2005). While the WS-Policy specification defines both security and reliable messaging assertions, AquaLogic Service Bus supports only security assertions. The syntax and usage of AquaLogic Service Bus security assertions differ from the WS-Policy specification, but the assertions are similar in meaning and are fully compatible with security assertions used in WebLogic Server 9.0 and 9.1, and 9.2 Web services.

Note: BEA AquaLogic Service Bus does not support the following:

- WS-ReliableMessaging assertions
- WS-policy on SOAP faults

WS-I Basic Security Profile

BEA complies with the [Basic Security Profile Version 1.0](#) specifications from the Web Services Interoperability Organization (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 AquaLogic Service Bus Console to specify whether you want AquaLogic Service Bus 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 Standards

AquaLogic Service Bus is certified against the following HTTP protocols:

- HTTP 1.0 and 1.1
- Transport-Layer Security (TLS) Secure Sockets Layer (/SSL) protocols

Note: TLS/SSL support is the same as for WebLogic Server 9.x

XPath and XQuery

AquaLogic Service Bus is certified against the following protocols:

- BEA's implementation of XQuery 1.0—AquaLogic Service Bus 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*.

- BEA's implementation of XPath 2.0

JMS

AquaLogic Service Bus is certified against the following JMS implementations:

- WebLogic Server 9.2 JMS
- IBM WebSphere MQ/JMS 5.3

For information about AquaLogic Service Bus and JMS and MQ interoperability, see [AquaLogic Service Bus Interoperability Solutions for JMS and WebSphere MQ](#).

Databases

For complete information about supported databases and drivers, see [Supported Database Configurations](#) in *Supported Configurations for AquaLogic Service Bus*.

Platform Interoperability

AquaLogic Service Bus is certified to interoperate with the platforms described in the following table.

Table 2 AquaLogic Service Bus Platform Interoperability

Interoperability ¹	Version	Comment
BEA WebLogic Family Platforms		
WS-* and JMS interoperability with WebLogic Platform	<ul style="list-style-type: none"> 8.1 SP4-SP6 (except WS-Security) 9.0, 9.1, 9.2 (except WS-Security) 	For information about AquaLogic Service Bus and JMS interoperability, see AquaLogic Service Bus Interoperability Solutions for JMS and WebSphere MQ .
Web Services for Remote Portlets (WSRP) with BEA WebLogic Portal	<ul style="list-style-type: none"> 8.1 9.2 	For information about AquaLogic Service Bus and WSRP interoperability, see AquaLogic Service Bus Interoperability Solutions for WSRP .
WebLogic Integration ²	<ul style="list-style-type: none"> 8.1 SP6 9.2 	http://edocs.bea.com/wli/docs81/ http://edocs.bea.com/wli/docs92/
MQ event generator and control in WebLogic Integration	<ul style="list-style-type: none"> 8.1 SP4 or later 9.2 	
WebLogic Platform	<ul style="list-style-type: none"> 8.1 SP4-SP6 9.2 	ALSB 2.6 RP1 is installed with WebLogic Server 9.2 MP2, but you can upgrade to WebLogic Server 9.2 MP3. The WebLogic Server upgrade requires additional steps for ALSB domains. See the ALSB Upgrade Guide .
WebLogic Workshop	<ul style="list-style-type: none"> 8.1 SP5 8.1 SP6 9.2 	http://edocs.bea.com/workshop/docs81/
BEA AquaLogic Family Platforms		

Table 2 AquaLogic Service Bus Platform Interoperability

AquaLogic Service Registry	2.1	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 <i>AquaLogic Service Bus User Guide</i> . To learn about AquaLogic Service Registry, see the product documentation at the following URL: http://e-docs.bea.com/alsr/docs21/
AquaLogic Data Services Platform	2.5	http://edocs.bea.com/al dsp/docs25/
AquaLogic User Interaction	6.0	http://e-docs.bea.com/alui/
AquaLogic Enterprise Security	2.2	AquaLogic Enterprise Security can be used to manage access control to the AquaLogic Service Bus runtime resources, using the ALES WebLogic Server 9.x Security Service Module. For more information, see Integrating ALES with Application Environments .
BEA Tuxedo Family Platforms		
BEA Tuxedo/WebLogic Tuxedo Connector	8.1/9.0	For information about AquaLogic Service Bus and BEA Tuxedo interoperability, see AquaLogic Service Bus Interoperability Solution for Tuxedo .
Third Party Platforms		
IBM WebSphere MQ	6.0	Supported with SOAP 1.1, not SOAP 1.2
Tibco E4JMS	4.2	
Apache Axis	1.2.1	Supported with SOAP 1.1, not SOAP 1.2
iWay 5.5 adapters—over Web Services	5.5 /WebLogic 9.x	http://egeneration.bea.com/iwaydocs/iway55/index.html
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

Table 2 AquaLogic Service Bus Platform Interoperability

<p>Microsoft .NET</p>	<p>1.1 with SOAP 1.1</p>	<p>Style-encoding: document-literal, rpc-encoded</p> <ul style="list-style-type: none"> • AquaLogic Service Bus supports document-literal and interoperates with .NET services. • AquaLogic Service Bus interoperates with .NET rpc-encoded services in cases of inbound and outbound (routing/publish). In these cases, interoperability is possible regardless of parameter types. • AquaLogic Service Bus Service Callouts may fail to interoperate with .NET rpc-encoded services. <p>Note: DIME attachments is not supported by AquaLogic Service Bus.</p> <p>.NET 1.1 Security Configurations Limitations</p> <p>The following security configurations in the .NET 1.1 framework are not interoperable with the AquaLogic Service Bus message-level security:</p> <ul style="list-style-type: none"> • 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, <code>WS-Addressing</code> and <code>timestamp</code>. Therefore, to make AquaLogic Service Bus 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 • To ensure AquaLogic Service Bus interoperability with .NET, the <code>replay detection attribute</code>, <code><replayDetection></code>, must be set to <code>disabled</code> on the .NET side. <p>See also “.NET–AquaLogic Service Bus Interoperability Limitations” on page 11.</p>
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Table 2 AquaLogic Service Bus Platform Interoperability

Microsoft .NET	2.0 with SOAP 1.1 and SOAP 1.2	See “.NET–AquaLogic Service Bus Interoperability Limitations” on page 11.
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1. See the [AquaLogic Service Bus Release Notes](#) for the latest information about patches or updates that may be required to support your interoperability scenarios.
2. WebLogic Integration 7.0 is not supported with AquaLogic Service Bus.

.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](#).

Interoperability Matrix