Oracle® Service Bus

Product Support Information

10*g* Release 3 Maintenance Pack 1 (10.3.1)

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Contents

Product Support Information

CHAPTER 1

Product Support Information

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

Oracle 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 Oracle Service Bus interoperability. It includes the following topics:

Supported Configurations

For support information on vendor operating systems, JDK, hardware, and database support, see Supported Configurations for Oracle Service Bus.

Supported Standards and Implementations

Oracle Service Bus supports the following standards and implementations.

Table 1 Supported Standards and Implementations

Standard or Implementation. . .	Version . . .
Email Servers	• Microsoft Windows IIS SMTP Server • Sol/Apache SMTP Server
FTP Servers	• Microsoft Windows IIS FTP Server • Sol/Apache FTP Server
Security Providers	For WebLogic Server 9.2 and later, Oracle Service Bus supports the following security providers: • WebLogic Server default authentication provider • WebLogic Server default credential mapper • WebLogic Server PKI credential mapper/provider • WebLogic Server Java KeyStores (JKS) • WebLogic Server default User Name Token and X509 Token handlers • WebLogic Server XACML authorization provider • WebLogic Server XACML Role Mapping provider • WebLogic SAML Identity Assertion Provider V2 • 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/WSDL11SOAP12.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. Oracle 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. For information about supported Web Services Security Policy Assertions and Reliable Messaging Assertions, see the Oracle Service Bus Security Guide. • Oracle Web Services Manager 10.1.3.x and later, with support for: – SOAP 1.1 – SAML token profile 1.0 – SAML 1.0, 1.1 – WS-Security token profile 1.0 – Username token profile 1.0 – X509 token profile 1.0 For more information, see Securing Oracle Service Bus with Oracle Web Services Manager in the *Oracle Service Bus Security Guide*.

Table 1 Supported Standards and Implementations

Standard or Implementation. . .	Version . . .
WS-I Basic Security Profile	Oracle 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, Oracle 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 Oracle Service Bus Console to specify whether you want Oracle 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 Oracle Service Bus in the *Oracle Service Bus User Guide*.
BPEL	Oracle BPEL Process Manager: • Oracle SOA Suite 10.1.3.4 MLR#3 on WebLogic Server 9.2 • Oracle SOA Suite 10.1.3.4 MLR#2 on OC4J
HTTP	1.0 1.1

Table 1 Supported Standards and Implementations

Standard or Implementation. . .	Version . . .
WebLogic JMS	WebLogic Server • 8.1 SP4-SP6 • 9.0, 9.1, 9.2 • 10.0 Workshop for WebLogic • 8.1 • 9.2 • 10.2 See Oracle 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** • Oracle Service Bus supports document-literal and interoperates with .NET services. • Oracle 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. • Oracle Service Bus Service Callouts may fail to interoperate with .NET rpc-encoded services. **Note**: DIME attachments is not supported by Oracle Service Bus. **.NET 1.1 Security Configurations Limitations** The following security configurations in the .NET 1.1 framework are not interoperable with the Oracle Service Bus message-level security: • 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 Oracle 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 Oracle Service Bus interoperability with .NET, the *replay detection attribute*, `<replayDetection>`, must be set to `disabled` on the .NET side. See also ".NET–Oracle Service Bus Interoperability Limitations" on page 1-11.
Microsoft .NET 2.0 with SOAP 1.1 and SOAP 1.2	See ".NET–Oracle Service Bus Interoperability Limitations" on page 1-11.

Table 1 Supported Standards and Implementations

Standard or Implementation. . .	Version . . .
Microsoft .NET 3.0 with SOAP 1.1 and SOAP 1.2	See ".NET–Oracle Service Bus Interoperability Limitations" on page 1-11.
Microsoft .NET 3.5 with SOAP 1.1 and SOAP 1.2	See ".NET–Oracle Service Bus Interoperability Limitations" on page 1-11.

Platform Interoperability

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

Oracle Service Bus interoperates with the platforms described in the following table.

Table 2 Oracle Service Bus Platform Interoperability

Interoperability	Version	Comment
Oracle WebLogic Family Platforms		
WebLogic Server	• 8.1 SP4-SP6 • 9.0, 9.1, 9.2 (except WS-Security) • 10.0 (except WS-Security) • 10.3	
WS-* and JMS interoperability with WebLogic Platform	• 8.1 SP4-SP6 (except WS-Security • 9.0, 9.1, 9.2 (except WS-Security) • 10.0 (except WS-Security) • 10.3	For information about Oracle Service Bus and JMS interoperability, see Oracle Service Bus Interoperability Solutions for JMS.

Table 2 Oracle Service Bus Platform Interoperability

Web Services for Remote Portlets (WSRP) with Oracle WebLogic Portal	• 9.2 • 10.0 • 10.2 • 10.3	For information about Oracle Service Bus and WSRP interoperability, see Oracle Service Bus Interoperability Solutions for WSRP.
Oracle WebLogic Portal	• 8.1 SP6 • 9.2 • 10.0 • 10.2 • 10.3	
WebLogic Integration	• 8.1 SP6 • 9.2 • 10.2 • 10.3	
MQ event generator and control in WebLogic Integration	• 8.1 SP4 or later • 9.2	
Workshop for WebLogic	• 10.2 • 10.3	
Oracle Family Platforms		
Oracle Service Bus	• 2.6 • 2.6 RP1 • 3.0 • 10*g*R3 (10.3)	
Oracle Service Registry	3.0	To learn about importing and exporting business services from and to UDDI Registries in general, and Oracle Service Registry in particular, see UDDI in the *Oracle Service Bus User Guide*. To learn about Oracle Service Registry, see the product documentation at the following URL: `http://download.oracle.com/docs/cd/E13173_01/alsr/docs30/`

Table 2 Oracle Service Bus Platform Interoperability

Oracle Data Service Integrator	• 2.5 • 3.0 (on WebLogic Server 9.2) • 3.01 (on WebLogic Server 9.2) • 3.2 (on WebLogic Server 10.0.1)	http://download.oracle.com/docs/cd/E13167_01/aldsp/docs25/ http://download.oracle.com/docs/cd/E13167_01/aldsp/docs30/ http://download.oracle.com/docs/cd/E13167_01/aldsp/docs32/
Oracle Enterprise Security	• 3.0 • 10.3	Oracle Enterprise Security can be used to manage access control to the Oracle Service Bus runtime resources, using the Oracle Enterprise Security WebLogic Server 9.x Security Service Module. For more information, see Integrating Oracle Enterprise Security with Application Environments.
Oracle Enterprise Repository	• 2.6 • 3.0 RP1 • 10.3	http://download.oracle.com/docs/cd/E13168_01/aler/docs26/ http://download.oracle.com/docs/cd/E13168_01/aler/docs30/ http://download.oracle.com/docs/cd/E13164_01/oer/docs10134/index.html
Oracle Service Registry	• 3.0 • 10.3	http://download.oracle.com/otndocs/tech/soa/OSR103ProductDocumention.pdf
Oracle Web Services Manager	• 10.1.3.x and later • 11.1.1	http://download.oracle.com/docs/cd/E10291_01/doc.1013/e10299/toc.htm
Oracle BPEL Process Manager	• 10.1.3.4.x and later	http://download.oracle.com/docs/cd/B31017_01/integrate.1013/b28982/toc.htm
Oracle Application Server AQ Adapter	• 10.1.3.4	http://download.oracle.com/docs/cd/E11036_01/integrate.1013/b28994/toc.htm

Table 2 Oracle Service Bus Platform Interoperability

Oracle Application Server Database Adapter	• 10.1.3.4	http://download.oracle.com/docs/cd/E11036_01/integrate.1013/b28994/toc.htm
Oracle Application Server E-Business Suite (Apps) Adapter	• 10.1.3.4	http://download.oracle.com/docs/cd/E11036_01/integrate.1013/b28994/toc.htm
Oracle Tuxedo Family Platforms		
Oracle Tuxedo/WebLogic Tuxedo Connector	• 8.1 • 9.x • 10.0	For information about Oracle Service Bus and Oracle Tuxedo interoperability, see Oracle Service Bus Interoperability Solution for Tuxedo.
Third Party Platforms		
IBM WebSphere MQ	• 5.3 • 6.0	Supported with SOAP 1.1, not SOAP 1.2 See: • "WebSphere –Oracle Service Bus Interoperability Limitations" on page 1-12 • Oracle Service Bus Interoperability Solutions for WebSphere MQ.
IBM WebSphere EJB/RMI	• 6.0	
IBM WebSphere WS	• 6.1 (Fixpack 15)	Supported with SOAP 1.1, not SOAP 1.2 See: • "WebSphere –Oracle Service Bus Interoperability Limitations" on page 1-12 • Oracle Service Bus Interoperability Solutions for WebSphere MQ.
Tibco Enterprise Message Service	• 4.2.0 • 4.3.0	See Oracle Service Bus Interoperability Solutions for JMS.
Apache Axis	• 1.2.1 • 1.4.1	Supported with SOAP 1.1, not SOAP 1.2 See also "Apache Axis–Oracle Service Bus Interoperability Limitations" on page 1-11.

Table 2 Oracle Service Bus Platform Interoperability

Cyclone Interchange—over JMS	5.4	http://download.oracle.com/docs/cd/E13214_01/wli/passport/cyclone/ This is a password protected Web site—contact your Oracle Sales Representative about the Cyclone Interchange product
BMC Patrol ®		http://www.softwareinnovations.co.uk/products/patrol.html

.NET–Oracle Service Bus Interoperability Limitations

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

Apache Axis–Oracle 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 Oracle Service Bus, 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 Oracle Service Bus 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 Oracle Service Bus 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 Oracle Service Bus 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 Oracle Service Bus 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 Oracle Service Bus 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 Oracle Service Bus 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 Oracle Service Bus proxy or business service to send the same 500 Internal Server Error response to their clients violating the expected results.

WebSphere –Oracle Service Bus Interoperability Limitations

- **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, WebSphere is expected to send an empty HTTP response with status code 202 OK to the client. However, WebSphere 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 Oracle Service Bus proxy or business service to send the same 200 OK response code to their clients violating the expected results.