

Geronimo 2.0 Web Services support

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This table below is used to track the progress of the Apache Geronimo Java EE 5.0 Web Services implementation. This table is needed in addition to the Java EE 5 Report Card as this table shows the current status of the detailed functions. The function items are obtained from JSR 109 only based on the assumption that we only need to implement JSR 109 to integrate either Axis2 or CXF into Geronimo.

JAX-WS

Web Service Support Function Items	Axis2	CXF
Supports WSDL 1.1	✓	✓
Supports SOAP 1.1 over HTTP	✓ Default	✓ Default
Supports SOAP 1.2 over HTTP	⚠ G2985	⚠ G2985
Supports XML over HTTP	⚠ G2985	⚠ G2985
Supports SOAP 1.1 over HTTP with MTOM enabled	⚠ G2985	⚠ G2985
Supports SOAP 1.2 over HTTP with MTOM enabled	⚠ G2985	⚠ G2985
POJO support		
Supports web service deployment (new deployment)	✓	✓
Supports web service deployment (expose existing deployed Java EE components as a web service)	Jarek	Jarek
Supports optional web.xml file	+ G2986	+
Optional web.xml - ServiceName attribute of the webservice annotation prefixed with "/" maps to <url-pattern> element in web.xml	✓	✓
Supports optional wsdl file	Axis2 ? G2988	✓
Supports javax.jws.WebService annotation	+	+
Supports javax.xml.ws.WebServiceProvider annotation	⚠ G2987	⚠ G2987
Supports web service annotation without web service descriptor file	✓	✓
Supports web service descriptor file without annotation	Lin - need to check spec on this	
Supports web service annotation with web service descriptor file - web service deployment descriptor file override or enhance web service annotations	+	✓
deployment a webservice without SEI	✓	✓
webservice doesn't not have to implement SEI when there is one.	G2987	G2987
Only methods annotated with @WebMethod in the service implementation bean are exposed to the client	G2987	✓
Supports optional @PostConstruct, @PreDestroy annotations for lifecycle event callbacks. (p44)	✓	✓
Supports @Resource annotation to access WebServiceContext (p44)	✓	✓
Injects @EJB, @WebServiceRef, and other @Resource annotations	✓	✓
Allows a developer able to specify protocol binding on a web service endpoint by using javax.xml.ws.BindingType annotation	axis2.GeronimoHandlerChainBuilder needs update	+
Able to ignore JAX-RPC mapping file for JAX-WS projects (p47)	✓	✓
Supports OASIS XML Catalogs 1.1 specification to be used to resolve web service description document (wsdl/xsd) (p47)	G2990	+
Supports HandlerChain (both logical and protocol types)	Axis2 ? AXIS2-2218	
- handlers must be able to transform the SOAP header	Axis2 ? AXIS2-2218	⚠

- handlers must be able to transform just parts of the body	Axis2  AXIS2-2218	
- handlers must be able to just read a message where no additions/modifications to the message are made	Axis2  AXIS2-2218	
- handler chains must be properly filtered by service name, port name or protocol binding information	Axis2  AXIS2-2218	 #cxf1
- Supports javax.jws.HandlerChain annotation	 AXIS2-2218	 #cxf2
- The handler-chain element in deployment descriptor overwrites the @HandlerChain annotation and the order of the handlers is maintained	 AXIS2-2218	
- Supports handler run after the container has performed the security constraint checks or method level authorization	Axis2  AXIS2-2218	
- Supports optional @PostConstruct, @PreDestroy annotations for lifecycle event callbacks		
- a handler may access the env-entries of the component by JNDI lookup or @Resource injection	Axis2  AXIS2-2218	
Publish the service-ref WSDL (getWsdLocation method is available for use.)	 G2987	 G2987
supports service-ref overwrite	G2991	
Publish the deployed WSDL	G2988	
Make the required service interface implementation available at the JNDI namespace location java:comp/env/service-ref-name. (p135)		
Deployment time binding info (for example, bind port-component with port-component-link)	ask Jeff	
Security - basic auth	 G2987	 G2987
Security - symmetric HTTPS	 G2987	 G2987
EJB Support		
Supports javax.ejb.Stateless annotation	G2992	
Supports optional deployment descriptor file (ejb-jar.xml)		
Supports optional wsdl file		
Supports javax.jws.WebService annotation		
Supports javax.xml.ws.WebServiceProvider annotation		
Supports web service annotation without web service descriptor file		
Supports web service descriptor file without annotation		
Supports web service annotation with web service descriptor file - web service deployment descriptor file override or enhance web service annotations		
Supports optional @PostConstruct or @PreDestroy annotation for lifecycle event callbacks. (p44)		
Supports @Resource annotation to access message context and security info (p44)		
Allows a developer able to specify protocol binding on a web service endpoint by using javax.xml.ws.BindingType annotation		
Supports HandlerChain (both logical and protocol types)	Axis2  AXIS2-2218	
-handlers must be able to transform the SOAP header	Axis2 	
-handlers must be able to transform just parts of the body	Axis2 	
-handlers must be able to just read a message where no additions/modifications to the message is made	Axis2 	
-Supports javax.jws.HandlerChain annotation	Axis2 	
-Supports handler run after the container has performed the security constraint checks or method level authorization	Axis2 	
-a handler may access the env-entry-names and env-entries by JNDI lookup.	Axis2 	
-the handler-chain in DD can be processed and the ordering of the handler must be maintained	Axis2 	
Publish the service-ref WSDL		
Publish the deployed WSDL		
Make the required service interface implementation avail at the JNDI namespace location java:comp/env/service-ref-name. (p135)		
Deployment time binding info (for example, bind port-component with port-component-link)		

Security - basic auth		
Security - symmetric HTTPS		
Client support	AXIS2-2452	
May reside in a Java EE container (e.g. an EJB that uses a web service)		
May reside in a Java EE client container	AXIS2-2353	
Allows the client to locate a service interface by using JNDI APIs		

JAX-RPC

Web Service Support Function Items	Axis2	CXF
POJO support		
JAX-RPC 1.1 based web service applications should continue to work (handled by Axis1)		
EJB Support		
JAX-RPC 1.1 based web service applications should continue to work (handled by Axis1)		

CXF Notes

- cxf1 CXF1: Handler chain filtering ignores namespaces for service or port name.
- cxf2 CXF2: The file specified by the @HandlerChain annotation can only be read from within a classloader of the module.
- cxf3 CXF3: Automatic @WebServiceRef/@WebServiceRefs dependency injection is not yet supported in Geronimo but user can specify the Web Service reference via service-ref element in the deployment descriptor.

Legend

- Developed and tested.
- Developed but needs more testing.
- Not tested but JAX-WS engine support it.
- Incomplete functionality.