

ISSUE:

Support of both wsdl 1.1 and 2.0 in CDL presents a possible incompatibility with respect to the Message Exchange Patterns (MEP) supported by each. In particular, an issue was raised concerning the deprecated Notification and Solicit-response MEPs from wsdl 1.1. What is the impact of the deprecation of these MEPs in wsdl 2.0 on CDL, given that support of wsdl 2.0 is part of the WS-Choreography?

ANALYSIS:

All wsdl 1.1 MEPs are actually subsumed by equivalents in the wsdl 2.0 specification. The wsdl 2.0 Out-Only MEP is functionally equivalent to the wsdl 1.1 Notification MEP, while the wsdl 2.0 Out-In MEP is functionally equivalent to the wsdl 1.1 Solicit-response MEP.

Below is a table providing a comparison between wsdl 1.1 and wsdl 2.0 MEPs:

Message Exchange Patterns	WSDL 1.1	WSDL 2.0	Comparison
	One-way	In-Only	Functionally equivalent
	Request-Response	In-Out	Functionally equivalent
	Notification	Out-Only	Functionally equivalent
	Solicit-Response	Out-In	Functionally equivalent
		Robust In-Only	Introduced in 2.0
		Robust Out-Only	Introduced in 2.0
		In-Optional-Out	Introduced in 2.0
		Out-Optional-In	Introduced in 2.0

At the binding level (especially the most common SOAP binding level), WSDL 2.0 limits itself to the MEPs defined in SOAP 1.2, which are SOAP Request/Response and SOAP-Response MEPs. The HTTP binding (the only other binding defined in WSDL 2.0) also supports only In-Out and In-Only. Though WSDL 2.0 defines an exhaustive set of useful MEPs, practical support (at the binding level) is only available for the In-Out and In-Only patterns. Therefore, with WSDL 2.0, we are limited to BP 1.1 sanctioned WSDL MEPs.

However, if we support WS-Reliability 1.0, which in essence specifies support of robust in-out and in-only MEPs, we can support these MEPs in WSDL 2.0. WS-Reliability support is transparent to CDL. As WS-Reliability specifies an MEP analogous to Robust In-only, support of WS-Reliability implicitly provides support for it in WSDL 2.0.

PROPOSAL:

At this time it has already been agreed upon that CDL should only support WSDL 1.1 MEPs per BP 1.1 – i.e. One-way and Request-Response.

As we are limited in practice to BP 1.1 sanctioned WSDL MEPs, yet we are chartered to support WS-Reliability, I propose that we specify support of WSDL 2.0 MEPs as conforming to BP 1.1, with the inclusion of WSDL 2.0 Robust In-out and Robust In-only MEPs.