

WSRF provider

Implementation Reference

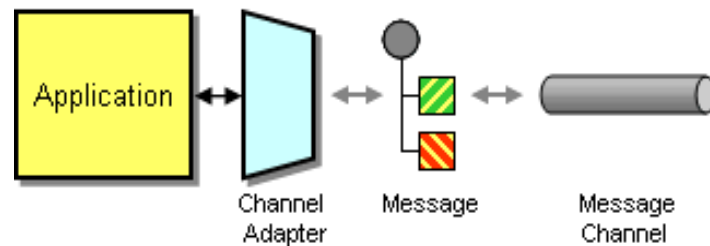
Document version: 1.0

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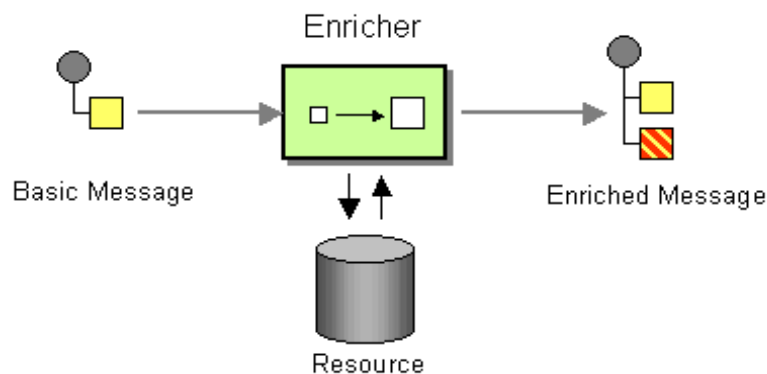
Tuesday, July 22, 2008

Fast Implementation guidelines

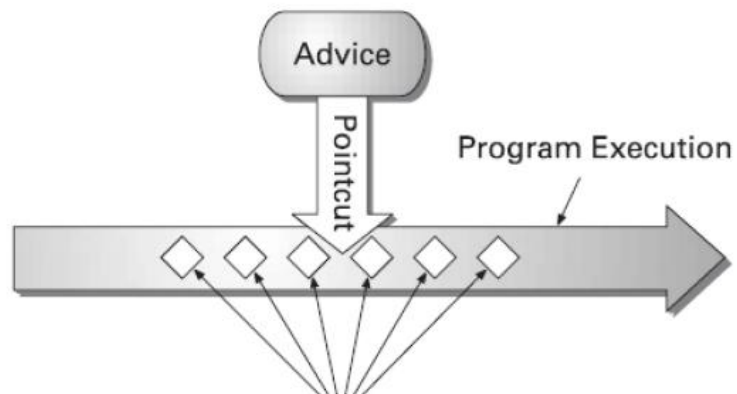
WSRF provider is a channel adapter in outgoing mode, so a Mule message received from channel to its endpoint came to be used in order to create a Globus Grid Services (WSRF) axis invocation. WSRD provider extends WSDL Provider.



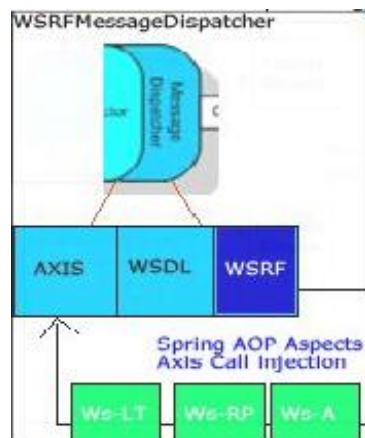
This invocation is originated from WSDL provider (AXIS SOAP based) and enriched with additional information in order to render invocation WSRF compliant.



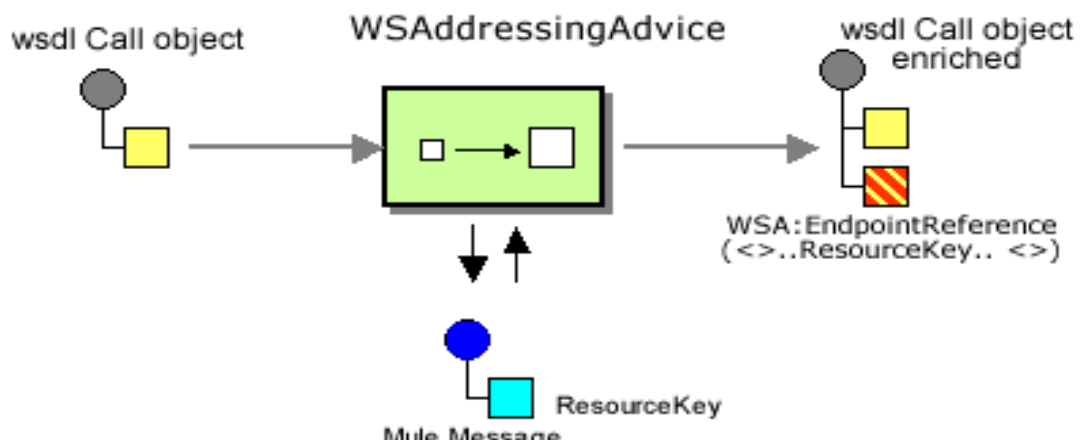
Enricher is implemented using SPRING AOP Framework. Each advice intercept `getCall()` method of `MessageDispatcher` class in WSDL Provider and enriches / uses message properties to perform WSRF operations.



The core of WSRF provider is WSRFMessageDispatcher class .The doSend() method is overloaded from WSDL dispatcher in order to add spring aop context.



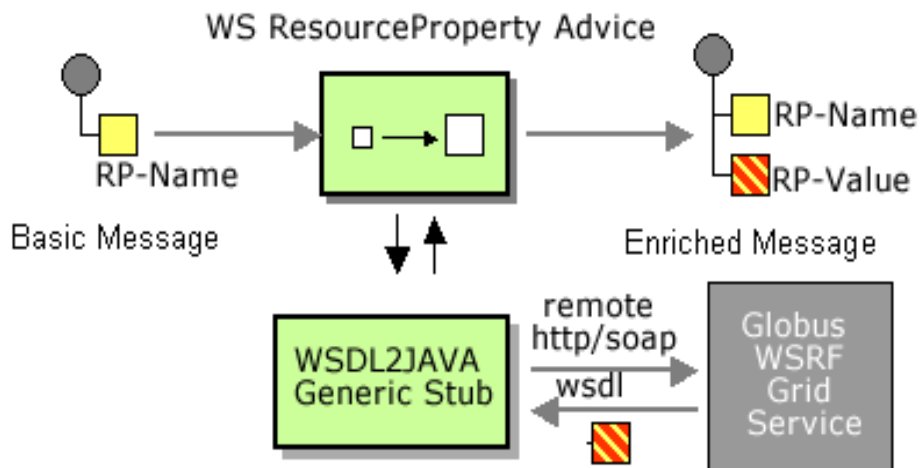
Ws Addressing Advice inject into Call object (just created from WSDL Provider) WSA:EndpointReference used from Grid Service Container (globus toolkit) to perform statefull invocation on service resource instance. ResourceKey is a number property needs to add in mule message in order to be used from this advice to add WS-Addressing header information.



WS ResourceProperty advice intercepts getCall method of WSDL Provider to perform WS-ResourceProperties operations. It needs several message properties to invoke client transparently Globus grid service. Response is added into a message property of result message.

Note: Payload of message result is just used from wsdL provider to add return class object of wsdL invocation. (not WSRF operation).

Provider support standalone mode in order to avoid method invocation performing only WSRF operation. So in this mode, response is in payload of message result.



WS-Lifetime advice implement as WsResourceProperty other operation useful to manage lifecycle of grid resources.

For more information , javadoc , code examples and message specification visit dashboard online:

<http://www.mulesource.org/display/WSRF/Home> *(development section on confluence)*