# WS-Routing & WS-Referral

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"Learning is fun!"



#### **Agenda**

- What is and Why WS-Routing?
- SOAP Router
- What is WS-Referral?

# What is & Why WS-Routing

#### **Motivation for WS-Routing**

- Without WS-Routing, routing depends on transport protocols such as HTTP and SMTP, which define their own message path models and message exchange patterns
  - It is not possible to use these protocol bindings alone to describe the exchange of a SOAP message from one point to another over multiple transports

### **WS-Routing**

- Defines how SOAP messages can be delivered using various transports through intermediary nodes
- Entire path for a SOAP message (as well as its return path) can be described directly within SOAP messages
  - > Routing information is carried from one intermediary to another inside the SOAP header element.

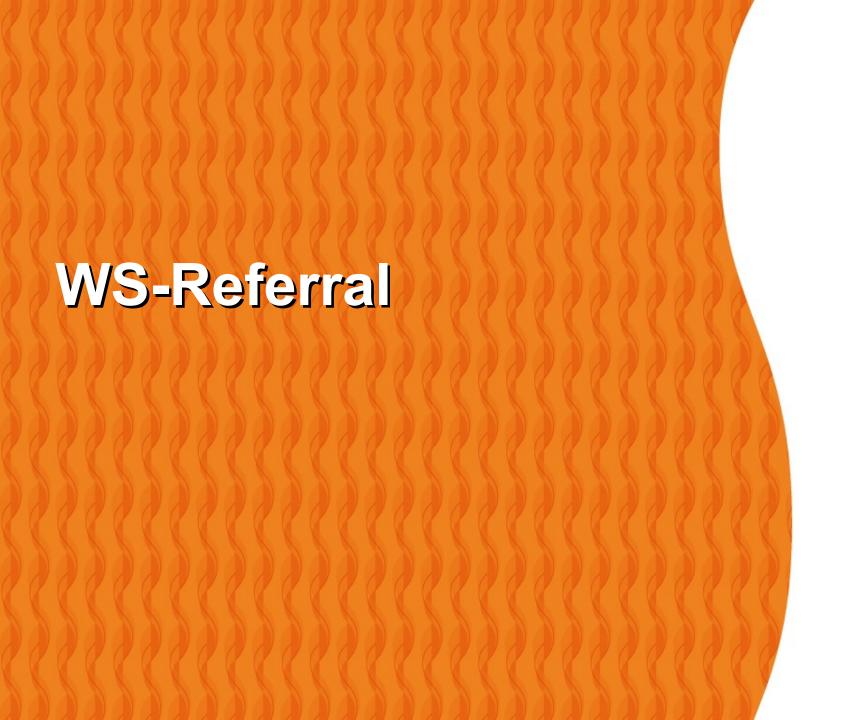
#### **Example: SOAP Message with Routing**

```
<SOAP-ENV:Header>
  <mm:path xmlns:mm="http://schemas.xmlsoap.org/rp/"</pre>
     SOAP-ENV:actor="http://schemas.xmlsoap.org/soap/actor/next" SOAP-ENV:mustUnderstand="1">
      <mm:action></mm:action>
  <mm:to>http://services.xmethods.net:80/soap/servlet/rpcrouter</mm:to>
       <mm:id>3cf74010-e395-11d5-a2d9-00a0246e4ce3</mm:id>
         <mm:fwd>
  <mm:via>http://www.whitemesa.net/interop/std/multihop</mm:via>
             <mm:via>http://www.4s4c.com/services/log.ashx</mm:via>
             <mm:via>http://soapclient.com/SoapRouter</mm:via>
         </mm:fwd>
       <mm:rev><mm:via/></mm:rev>
  </mm:path>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
  <mns:getTemp xmIns:mns="urn:xmethods-Temperature">
     <zipcode xsi:type="xsd:string">20876</zipcode>
  </mns:getTemp>
</SOAP-ENV:Body> </SOAP-ENV:Envelope>
```

#### **SOAP Router**

#### **SOAP** Router

 A SOAP node that exposes SOAP message relaying as a Web service, either as a standalone service or in combination with other services



#### **WS-Referral**

- Stateless protocol for inserting, deleting, querying routing entries in a SOAP Router
  - Enables dynamic route configuration
- While WS-Routing defines a message path ("Send message from A to C via B"), WS-Referral enables route configuration

## Thank you!

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