

Multiple Fault in WSDL

There can be multiple faults in an operations in WSDL as it is clear from the WSDL Schema given below.

```
<xs:complexType name="tBindingOperation" >
  <xs:complexContent>
    <xs:extension base="wsdl:tExtensibleDocumented" >
      <xs:sequence>
        <xs:element name="input" type="wsdl:tBindingOperationMessage" minOccurs="0" />
        <xs:element name="output" type="wsdl:tBindingOperationMessage" minOccurs="0" />
        <xs:element name="fault" type="wsdl:tBindingOperationFault" minOccurs="0"
maxOccurs="unbounded" />
      </xs:sequence>
      <xs:attribute name="name" type="xs:NCName" use="required" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

There will be only one Fault in SOAP response XML. The Fault schema in the soap XML is given below.

```
<xs:element name="Fault" type="tns:Fault" />
<xs:complexType name="Fault" final="extension" >
  <xs:annotation>
    <xs:documentation>
      Fault reporting structure
    </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="faultcode" type="xs:QName" />
    <xs:element name="faultstring" type="xs:string" />
    <xs:element name="faultactor" type="xs:anyURI" minOccurs="0" />
    <xs:element name="detail" type="tns:detail" minOccurs="0" />
  </xs:sequence>
</xs:complexType>

<xs:complexType name="detail">
  <xs:sequence>
    <xs:any namespace="##any" minOccurs="0" maxOccurs="unbounded" processContents="lax" />
  </xs:sequence>
  <xs:anyAttribute namespace="##any" processContents="lax" />
</xs:complexType>
```

The SOAP Fault Element

The optional SOAP Fault element is used to indicate error messages.

The SOAP Fault element holds errors and status information for a SOAP message.

If a Fault element is present, it must appear as a child element of the Body element. A Fault element can only appear once in a SOAP message.

The SOAP Fault element has the following sub elements:

Sub Element	Description
<faultcode>	A code for identifying the fault
<faultstring>	A human readable explanation of the fault
<faultactor>	Information about who caused the fault to happen
<detail>	Holds application specific error information related to the Body element

SOAP Fault Codes

The faultcode values defined below must be used in the faultcode element when describing faults:

Error	Description
VersionMismatch	Found an invalid namespace for the SOAP Envelope element
MustUnderstand	An immediate child element of the Header element, with the mustUnderstand attribute set to "1", was not understood
Client	The message was incorrectly formed or contained incorrect information
Server	There was a problem with the server so the message could not proceed