

WSDL - <BINDING> ELEMENT

http://www.tutorialspoint.com/wsdl/wsdl_binding.htm

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The **<binding>** element provides specific details on how a *portType* operation will actually be transmitted over the wire.

- The bindings can be made available via multiple transports including HTTP GET, HTTP POST, or SOAP.
- The bindings provide concrete information on what protocol is being used to transfer *portType* operations.
- The bindings provide information where the service is located.
- For SOAP protocol, the binding is **<soap:binding>**, and the transport is SOAP messages on top of HTTP protocol.
- You can specify multiple bindings for a single *portType*.

The binding element has two attributes : *name* and *type* attribute.

```
<binding name="Hello_Binding" type="tns:Hello_PortType">
```

The *name* attribute defines the name of the binding, and the *type* attribute points to the port for the binding, in this case the "tns:Hello_PortType" port.

SOAP Binding

WSDL 1.1 includes built-in extensions for SOAP 1.1. It allows you to specify SOAP specific details including SOAP headers, SOAP encoding styles, and the SOAPAction HTTP header. The SOAP extension elements include the following:

- **soap:binding**
- **soap:operation**
- **soap:body**

soap:binding

This element indicates that the binding will be made available via SOAP. The *style* attribute indicates the overall style of the SOAP message format. A style value of *rpc* specifies an RPC format.

The *transport* attribute indicates the transport of the SOAP messages. The value <http://schemas.xmlsoap.org/soap/http> indicates the SOAP HTTP transport, whereas <http://schemas.xmlsoap.org/soap/smtp> indicates the SOAP SMTP transport.

soap:operation

This element indicates the binding of a specific operation to a specific SOAP implementation. The *soapAction* attribute specifies that the SOAPAction HTTP header be used for identifying the service.

soap:body

This element enables you to specify the details of the input and output messages. In the case of HelloWorld, the *body* element specifies the SOAP encoding style and the namespace URN associated with the specified service.

Here is the piece of code from the Example chapter:

```
<binding name="Hello_Binding" type="tns:Hello_PortType">
  <soap:binding style="rpc" transport="http://schemas.xmlsoap.org/soap/http" />
```

```
<operation name="sayHello">
  <soap:operation soapAction="sayHello"/>

  <input>
    <soap:body
      encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      namespace="urn:examples:helloservice" use="encoded"/>
  </input>

  <output>
    <soap:body
      encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      namespace="urn:examples:helloservice" use="encoded"/>
  </output>
</operation>
</binding>
```