3.2 Anonymous Element

WS-Addressing defines a wsaw:~~Anonymous~~ NewConnection element that is only used in conjunction with wsaw:UsingAddressing (or its equivalent wsoap:module, see section **3.3 WSDL SOAP Module**) element. The usage of wsaw:~~Anonymous~~ NewConnection element is associated with the usage constraints specified for the wsaw:UsingAddressing element. Hence, it MUST NOT contain the wsdl:required attribute.

A WSDL or policy based service description that includes the wsaw:UsingAddressing but no wsaw:~~Anonymous~~ NewConnection marker makes no assertion regarding a requirement or a constraint i~~o~~n the response ~~use of the anonymous URI in~~ EPRs contained in messages sent to the endpoint. In this cases, endpoint service descriptions have to rely on additional metadata, such as WSDL bindings or additional policy assertions, to indicate any requirements or restrictions on the use of response EPRs~~the anonymous URI~~ by clients. However, in the absence of additional metadata, clients of the endpoint MAY assume that the service endpoint follows the behavior indicated by the 'optional' value of the wsaw:~~Anonymous~~ NewConnection marker. ~~An endpoint SHOULD send a wsa:OnlyAnonymousAddressSupported or a wsa:OnlyNonAnonymousAddressSupported fault back to the client if a message received includes a response epr with an [address] that is unsupported by the endpoint.~~

~~The wsaw:Anonymous element, if present, MUST have one of three distinct values that indicate three different levels of support for handling anonymous addresses in EPRs.~~ In the following text, the term response endpoint EPR refers to the [reply endpoint] and [fault endpoint] message addressing properties collectively, and the term addressable EPR refers to the ability ~~of the sender of the message~~ to initiate a new connection to ~~that URI~~ that EPR. Examples of non-addressable EPRs are EPRs containing "http://www.w3.org/2005/08/addressing/anonymous" as the value of wsa:Address, EPRs containing a URI that matches the URI template defined in WS-ReliableMessaging Section 3.7 [informative ref] as the value of wsa:Address. The wsaw:NewConnection element, if present, MUST have one of three distinct values that indicate three different levels of support for handling addressable response endpoints ~~addresses in~~ EPRs.

- "optional": This value indicates that a response endpoint EPR in a request message MAY be addressable ~~contain an anonymous~~ ~~addressable URI as an address~~.

- "required":This value indicates that all response endpoint EPRs in a request message MUST be ~~always use an anonymous~~ addressable ~~URI as an address~~.

  If a response endpoint EPR is not ~~does not contain an~~ addressable ~~the anonymous~~ URI ~~as an address value~~, then a predefined InvalidAddressingHeader fault defined in Web Services Addressing 1.0 - SOAP Binding [*WS-Addressing SOAP Binding*] MUST be generated.

- "prohibited":This value indicates that any response EPRs in a request message MUST NOT be addressable~~use an addressable anonymous URI as an address~~.

  If a response endpoint EPR is ~~contains~~ an addressable ~~the anonymous URI as an address value~~, then a predefined InvalidAddressingHeader fault defined in Web Services Addressing 1.0 - SOAP Binding [*WS-Addressing SOAP Binding*] MUST be generated.

This element MAY appear as a child of an operation element in a binding element in WSDL 1.1, or as a binding operation extension element in WSDL 2.0.

Example 3-3. Indicating use of addressable~~anonymous~~ ~~addresses~~response endpoints -using wsaw:~~Anonymous~~NewConnection.

```
<binding name="reservationSOAPBinding"
type="tns:reservationInterface">
  <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http" />
  <wsaw:UsingAddressing wsdl:required="true" />
  <operation name="opCheckAvailability">
    <soap:operation
soapaction="http://greath.example.com/2004/wsdl/resSvc/opCheckAvailab
ility" />
    <input>
      <soap:body use="literal" />
    </input>
    <output>
      <soap:body use="literal" />
    </output>

<wsaw:NewConnectionAnonymous>required</wsaw:NewConnectionAnonymous>
  </operation>
</binding>
```

3.2.1 WSDL 2.0 Component Model Changes

Use of the NewConnection~~Anonymous~~ element adds the following property to the WSDL 2.0 component model:

- {~~anonymous~~ addressable response endpoint~~addresses~~} OPTIONAL, of type xs:string, to the Binding Operation component.

Table 3-3 shows the mapping from the XML representation to the WSDL 2.0 component model.

Table 3-3. Mapping from XML Representation to Binding Operation component Extension Properties

Property	Value
{~~anonymous~~ addressable response endpoint~~addresses~~}	The value of the `wsaw:NewConnectionAnonymous` *element information item*, if present. Otherwise, it is not present.

Update 3.1.2, 3.3's refer to wsaw:Anonymous accordingly.