



2 WS-Coordination Framework Demo 3 Application

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13 **Abstract:**

14 This document describes an application that demonstrates the coordination of an activity group
15 through the creation, manipulation and propagation of a WS-CAF Coordination Framework
16 [WSCF] context. The application extends the WS-CAF Context Demo Application
17 [WSCTXDEMO] to include a simple notification mechanism for participants registered with the
18 activity group.

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21 implement@lists.oasis-open.org list. Others should use the comment form at <http://www.oasis->
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2 Terminology

- 1 The key words *must*, *must not*, *required*, *shall*, *shall not*, *should*, *should not*, *recommended*, *may*, and *optional* in this document are to be interpreted as described in IETF RFC 2119 [RFC2119].

2.1 Namespace

- 2 The XML namespace URI that *must* be used by implementations of this specification is:

3 <http://docs.oasis-open.org/wscaf/2005/08/wscfdemo>

2.1.1 Prefix Namespace

- 2 The following table contains the namespace prefixes used within this document.

Prefix	Namespace
wscfdemo	http://docs.oasis-open.org/wscaf/2005/08/wscfdemo
wsctxdemo	http://docs.oasis-open.org/wscaf/2005/06/wsctxdemo
wsctx	http://docs.oasis-open.org/wscaf/2005/06/wsctx
wscf	http://docs.oasis-open.org/wscaf/2005/07/wscf
xsd	http://www.w3.org/2001/XMLSchema
wsdl	http://schemas.xmlsoap.org/wsdl
soap	http://schemas.xmlsoap.org/wsdl/soap
wsa	http://schemas.xmlsoap.org/ws/2004/08/addressing
tns	http://docs.oasis-open.org/wscaf/2005/08/wscfdemo

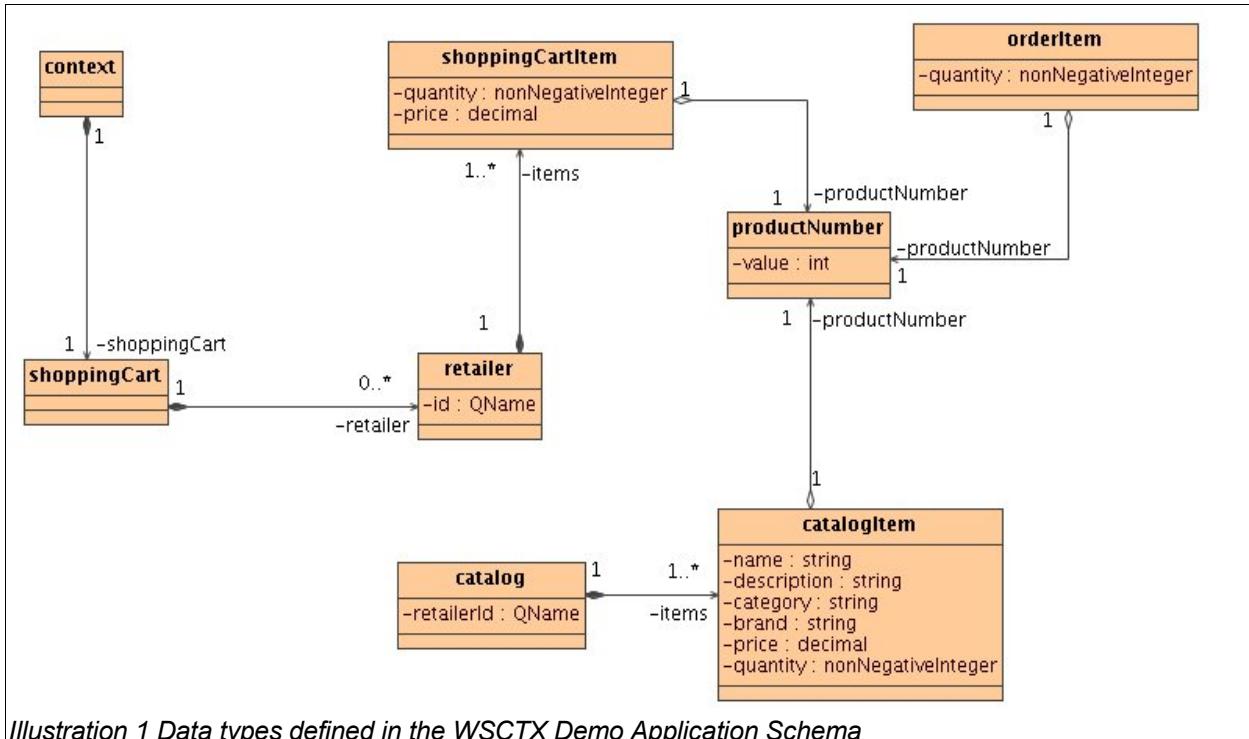
1 3 Overview

- 2 This document specifies an application used to demonstrate the creation, manipulation and propagation
3 of a WS-CAF Coordination Framework context. It demonstrates a customer making purchases from a
4 number of retailers via an online store using a notification mechanism to inform registered participants of
5 significant events. The retailer services are provided by different implementations of this application.
- 6 The specification of the application is divided into seven sections
- 7 • The XML Schema documents describing the elements used within the application context and the
8 application WSDL messages.
- 9 • The Context Service for creating and destroying the context.
- 10 • The Registration Service for managing activity group participants.
- 11 • The Notification Service for initiating activity group protocol notifications.
- 12 • The Participant service for receiving activity group protocol notifications.
- 13 • The Retailer Service supplying items for purchase by a Store.
- 14 • The Web based Store allowing a user to purchase items from the Retailer services.
- 15 This version of the demo application does not support context propagation by reference. It is intended to
16 add this functionality at a later date.
- 17

4 Schema Document

This application is an extension of the WS-CAF Context Demo Application [WSCTXDEMO] and, as such, makes use of the application types and elements defined within that document. The schema is extended to define a WS-CAF Coordination Framework [WSCF] context and a qualified name for the application context.

6



8 The contents of the WSCF Demo Application Schema are included in the appendix.

5 Context Service

The Context Service is an implementation of the Context Service as specified in the Web Services Context Specification [WSCTX]. The Context Service is responsible for the lifecycle management of a context, specifically the context identified by the qualified name wscfdemo:context, as specified in the appendix.

All Context Service communication adheres to the normative one way binding as specified in [WSCTX]. Service endpoints used as part of the Context Service communication are identified using the WS-Addressing specification [WSADDR].

5.1 Context examples

The initial context created by the Context Service *must* contain an empty shopping cart.

```
<wscfdemo:context>
  <wsctx:context-identifier>
    http://www.arjuna.com/wscafdemo/context/12345
  </wsctx:context-identifier>
  <wsctx:context-service>
    <wsa:EndpointReference>
      <wsa:Address>http://www.arjuna.com/demoContextService</wsa:Address>
    </wsa:EndpointReference>
  </wsctx:context-service>
  <wscf:registration-service>
    <wsa:EndpointReference>
      <wsa:Address>http://www.arjuna.com/demoRegistrationService</wsa:Address>
    </wsa:EndpointReference>
  </wscf:registration-service>
  <wscfdemo:notification-service>
    <wsa:EndpointReference>
      <wsa:Address>http://www.arjuna.com/demoNotificationService</wsa:Address>
    </wsa:EndpointReference>
  </wscfdemo:notification-service>
  <wsctxdemo:shoppingCart/>
<wscfdemo:context>
```

The context will be extended as the customer chooses products from each store.

```
<wscfdemo:context>
  <wsctx:context-identifier>
    http://www.arjuna.com/wscafdemo/context/12345
  </wsctx:context-identifier>
  <wsctx:context-service>
    <wsa:EndpointReference>
      <wsa:Address>http://www.arjuna.com/demoContextService</wsa:Address>
    </wsa:EndpointReference>
  </wsctx:context-service>
  <wscf:registration-service>
    <wsa:EndpointReference>
      <wsa:Address>http://www.arjuna.com/demoRegistrationService</wsa:Address>
    </wsa:EndpointReference>
  </wscf:registration-service>
  <wscfdemo:notification-service>
    <wsa:EndpointReference>
      <wsa:Address>http://www.arjuna.com/demoNotificationService</wsa:Address>
    </wsa:EndpointReference>
  </wscfdemo:notification-service>
  <wsctxdemo:shoppingCart>
    <wsctxdemo:retailer>
      <wsctxdemo:id>arjuna:retail1</wsctxdemo:id>
      <wsctxdemo:item>
        <wsctxdemo:productNumber>12345</wsctxdemo:productNumber>
        <wsctxdemo:quantity>2</wsctxdemo:quantity>
        <wsctxdemo:price>10.55</wsctxdemo:price>
      </wsctxdemo:item>
      <wsctxdemo:item>
        <wsctxdemo:productNumber>314</wsctxdemo:productNumber>
        <wsctxdemo:quantity>1</wsctxdemo:quantity>
        <wsctxdemo:price>4.99</wsctxdemo:price>
      </wsctxdemo:item>
    </wsctxdemo:retailer>
    <wsctxdemo:retailer>
      <wsctxdemo:id>arjuna:retail2</wsctxdemo:id>
```

```
60      <wsctxdemo:item>
61          <wsctxdemo:productNumber>12345<wsctxdemo:productNumber>
62              <wsctxdemo:quantity>3<wsctxdemo:quantity>
63                  <wsctxdemo:price>9.55<wsctxdemo:price>
64          </wsctxdemo:item>
65      </wsctxdemo:retailer>
66  </wsctxdemo:shoppingCart>
67 <wscfdemo:context>
```

1 6 Registration Service

- 2 The Registration Service is an implementation of the Registration Service as specified in the Web
3 Services Coordination Framework Specification [WSCF]. The Service is responsible for managing the
4 registration of participants that wish to enlist in the notification protocol., identified by the URI defined in
5 Chapter . Participants registered for this protocol *must* implement the service endpoint as identified in
6 Chapter .
- 7 All Registration Service communication adheres to the normative one way binding as specified in
8 [WSCF]. Service endpoints used as part of the Registration Service communication are identified using
9 the WS-Addressing specification [WSADDR].

7 Notification Service

1 The Notification Service is responsible for coordinating delivery of notifications to registered participants.
2 Services wishing to send a notification to registered participants *must* send a one way message to the
3 notification service endpoint specified in the wscfdemo:notification-service element of the
4 wscfdemo:context.

5
6 The notifications service exposes its functionality through the NotificationPortType Web Service.

```
7 <wsdl:portType name="NotificationPortType">
8   <wsdl:operation name="itemAddedToCart">
9     <wsdl:input message="tns:itemAddedToCartRequest" name="itemToCartRequest"/>
10  </wsdl:operation>
11  <wsdl:operation name="itemRemovedFromCart">
12    <wsdl:input message="tns:itemRemovedFromCartRequest"
13      name="itemRemovedFromCartRequest"/>
14  </wsdl:operation>
15  <wsdl:operation name="orderSubmitted">
16    <wsdl:input message="tns:orderSubmittedRequest"
17      name="orderSubmittedRequest"/>
18  </wsdl:operation>
19 </wsdl:portType>
```

20 There are three operations defined

- itemAddedToCart

21 This operation receives a notification that an item has been added to the shopping cart.

- itemRemovedFromCart

22 This operation receives a notification that an item has been removed from the shopping cart.

- orderSubmitted

23 This operation receives notification that the contents of the shopping cart have been submitted as an
24 order on behalf of the customer.

25 The notification service *must* attempt to deliver all notifications to the participants registered with the
26 registration service. The ordering of those notifications and the handling of failed deliveries are
27 implementation dependent. As such no assumptions should be made by the participants with regards to
28 the sequencing, timing or successful delivery of notifications.

8 Participant Service

- 1 2 The Participant Service receives notifications from the Notification Service.
- 3 The participant service exposes its functionality through the ParticipantPortType Web Service.

```
4   <wsdl:portType name="ParticipantPortType">
5     <wsdl:operation name="itemAddedToCart">
6       <wsdl:input message="tns:itemAddedToCartRequest" name="itemToCartRequest"/>
7     </wsdl:operation>
8     <wsdl:operation name="itemRemovedFromCart">
9       <wsdl:input message="tns:itemRemovedFromCartRequest"
10      name="itemRemovedFromCartRequest"/>
11    </wsdl:operation>
12    <wsdl:operation name="orderSubmitted">
13      <wsdl:input message="tns:orderSubmittedRequest"
14      name="orderSubmittedRequest"/>
15    </wsdl:operation>
16  </wsdl:portType>
```

- 17 There are three operations defined
 - 18 • itemAddedToCart
 - 19 This operation receives a notification that an item has been added to the shopping cart.
 - 20 • itemRemovedFromCart
 - 21 This operation receives a notification that an item has been removed the shopping cart.
 - 22 • orderSubmitted
 - 23 This operation receives notification that the contents of the shopping cart have been submitted as an order on behalf of the customer.
- 25 The functionality of the registered participant is implementation dependent.

1 9 Retailer Service

2 The Retailer Service provides is responsible for providing the Web Store with information about the
3 products to be purchased, modifying the contents of the context shopping cart and fulfilling any
4 submitted orders. Any modification to the shopping cart or fulfilment of a submitted order *must* result in
5 a notification being raised via the Notification Service.

6 The retailer service exposes its functionality through the RetailerPortType Web Service.

```
7 <wsdl:portType name="RetailerPortType">
8   <wsdl:operation name="getCatalog">
9     <wsdl:input message="tns:getCatalogRequest" name="getCatalogRequest"/>
10    <wsdl:output message="tns:getCatalogResponse" name="getCatalogResponse"/>
11  </wsdl:operation>
12  <wsdl:operation name="addItemToCart">
13    <wsdl:input message="tns:addItemToCartRequest" name="addItemToCartRequest"/>
14    <wsdl:output message="tns:addItemToCartResponse"
15      name="addItemToCartResponse"/>
16    <wsdl:fault message="tns:invalidProductCodeFault" name="invalidProductCode"/>
17  </wsdl:operation>
18  <wsdl:operation name="removeItemFromCart">
19    <wsdl:input message="tns:removeItemFromCartRequest"
20      name="removeItemFromCartRequest"/>
21    <wsdl:output message="tns:removeItemFromCartResponse"
22      name="removeItemFromCartResponse"/>
23    <wsdl:fault message="tns:invalidProductCodeFault" name="invalidProductCode"/>
24  </wsdl:operation>
25  <wsdl:operation name="submitOrder">
26    <wsdl:input message="tns:submitOrderRequest" name="submitOrderRequest"/>
27    <wsdl:output message="tns:submitOrderResponse" name="submitOrderResponse"/>
28    <wsdl:fault message="tns:badOrderFault" name="badOrder"/>
29  </wsdl:operation>
30 </wsdl:portType>
```

31 There are four operations defined

- getCatalog

33 This operation *must* provide the Web Store with information regarding all products that can be
34 purchased from the retailer.

- addItemToCart

36 This operation *must* add the specified quantity of the product to the shopping cart context associated
37 with the current invocation and initiate an itemAddedToCart notification.

- removeItemFromCart

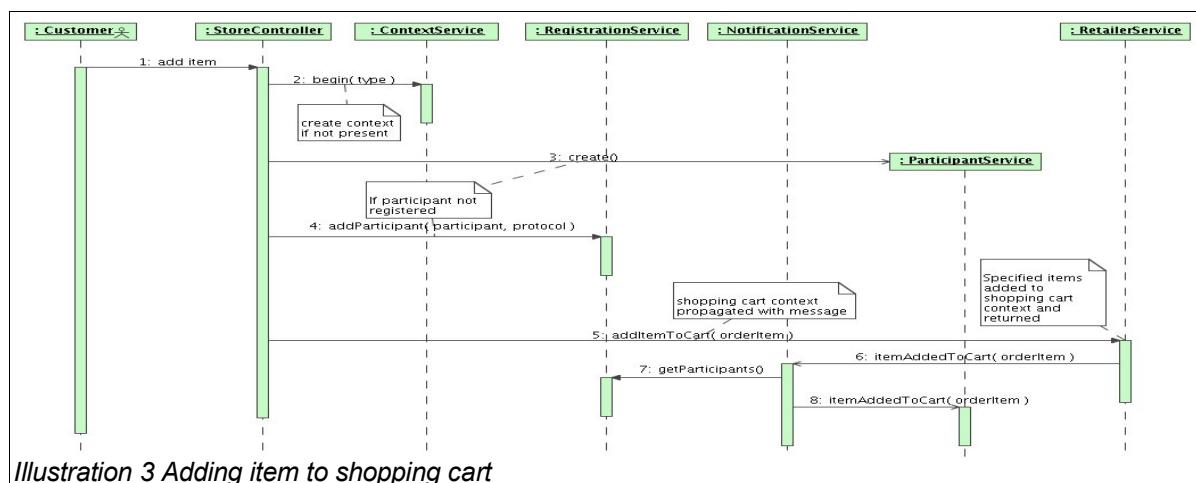
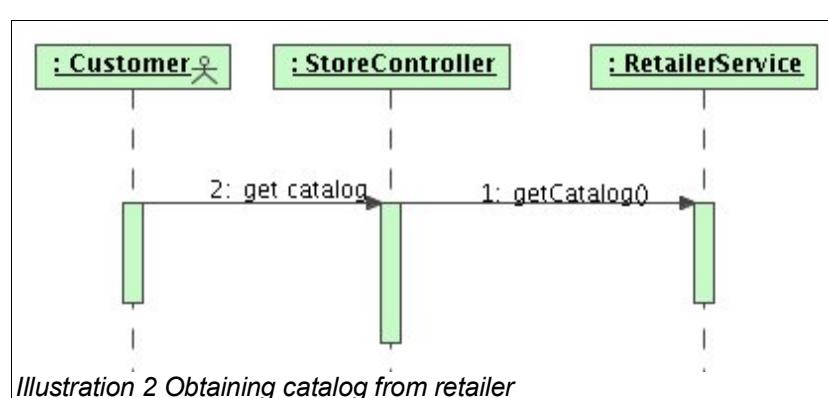
39 This operation *must* remove the specified quantity of the product to the shopping cart context
40 associated with the current invocation and initiate an itemRemovedFromCart notification.

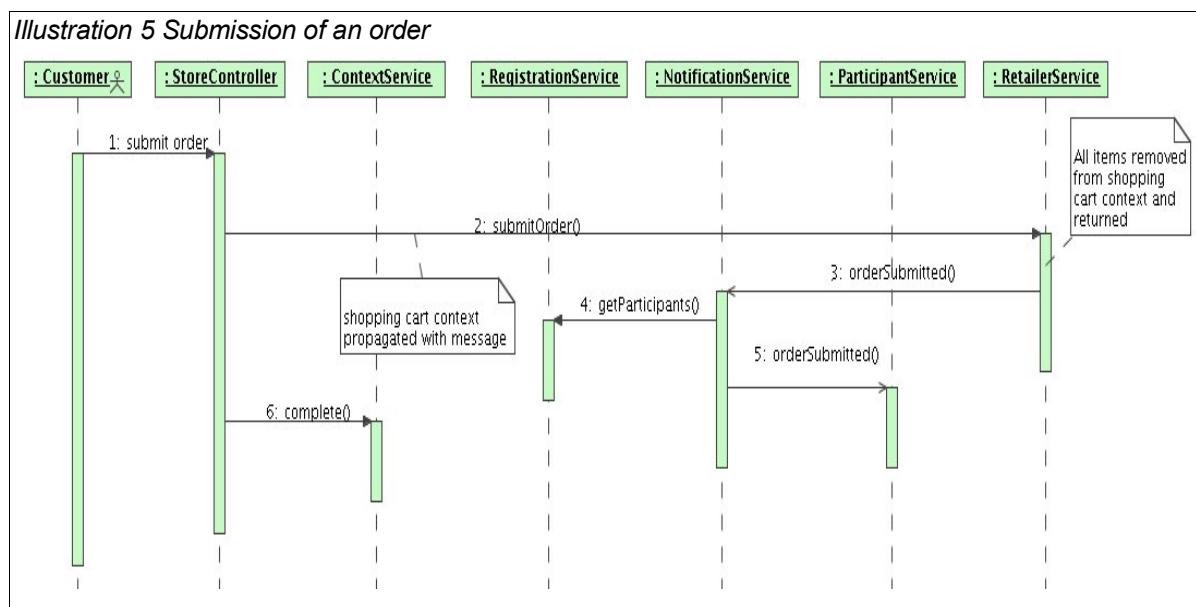
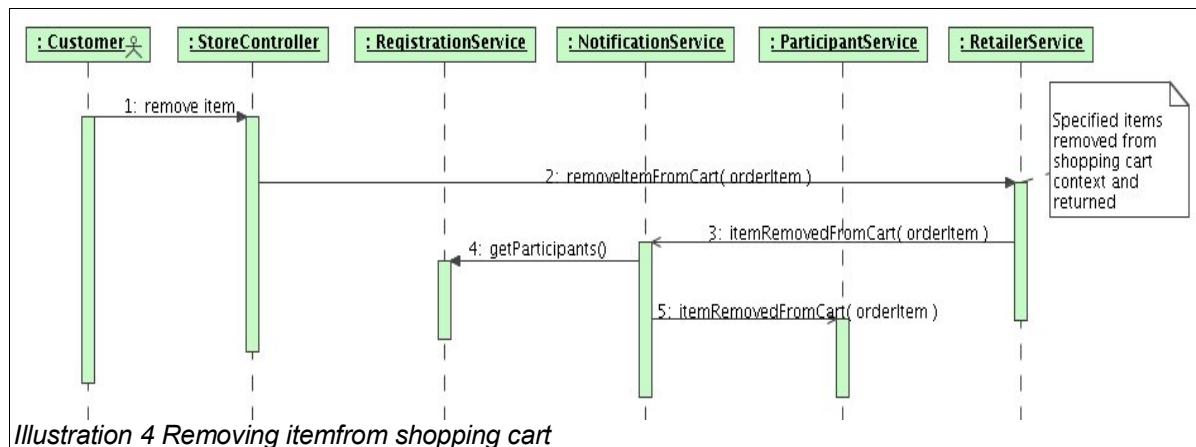
- submitOrder

42 This operation *must* remove all products from the shopping cart context associated with the current
43 invocation, initiate an orderSubmitted notification and return the details of the order to the caller.

10 Web Store

- 1 The Web Store is responsible for all interactions with the customer and has to provide the following
2 functionality
- 3
- 4 • Configuration of Context Service
5 The endpoint for the Context Service *must* be configurable through the GUI.
- 6 • Identification and Display of Retailer Services
7 The customer *must* be able to choose a Retailer Service from which to purchase goods. The details
8 of how and when these services are chosen are implementation dependent.
- 9 • Display of Retailer Service catalog
10 The catalog of products offered for purchase by the Retailer Service *must* be displayed to the
11 Customer.
- 12 • Display and modification of the shopping cart contents.
13 The customer *must* be able to view and modify the shopping cart.
- 14 • Checkout of shopping cart
15 The customer *must* be able to fulfil the purchase of the items in the shopping cart from any Retailer
16 Service configured. The GUI *should* display a receipt of all products purchased after the order has
17 been submitted.
- 18
- 19 The following sequence diagrams are not prescriptive, their purpose is to provide an illustration of the
20 interactions expected during the purchase of product from a Retailer Service.
- 21





11 References

11.1 Normative References

- | | |
|----------------|---|
| 2 [RFC2119] | S. Bradner, <i>Key words for use in RFCs to Indicate Requirement Levels</i> , IETF
3 RFC 2119, March 1997, http://www.ietf.org/rfc/rfc2119.txt |
| 5 [WSCF] | 6 Web Services Coordination Framework Specification, Oasis Committee Draft
7 0.2, August 2005, http://www.oasis-open.org/apps/org/workgroup/ws-caf/documents.php |
| 9 [WSCTX] | 10 Web Services Context Specification, Oasis Committee Draft 0.9, May 2005,
11 http://www.oasis-open.org/apps/org/workgroup/ws-caf/documents.php |
| 12 [WSADDR] | 13 Web Services Addressing Specification, 10 th August 2004,
14 http://www.w3.org/Submission/ws-addressing/ |
| 15 [WSCTXDEMO] | 16 K. Conner, G. Tully, J. Fuller, WS-Context Demo Application, Oasis WS-CAF
Implementation TC, August 2004 |

1 12 Acknowledgements

- 2 The editors would like to acknowledge the contributions of the OASIS Web Services Composite
3 Application Framework Technical Committee, especially the original editors of the WS-Context Demo
4 Application:
- 5 • Malik Saheb, Arjuna Technologies
6 • Martin Chapman, Oracle
7 • Simeon M. Greene, Oracle
8 • Jeff Mischkinsky, Oracle
9 • Greg Pavlik, Oracle

1 A. Application Schema

```
2 <?xml version="1.0" encoding="UTF-8"?>
3 <xsd:schema elementFormDefault="qualified"
4   targetNamespace="http://docs.oasis-open.org/wscaf/2005/08/wscfdemo"
5   xmlns:xsd="http://www.w3.org/2001/XMLSchema"
6   xmlns:tns="http://docs.oasis-open.org/wscaf/2005/08/wscfdemo"
7   xmlns:wscf="http://docs.oasis-open.org/wscaf/2005/07/wscf"
8   xmlns:wsctxdemo="http://docs.oasis-open.org/wscaf/2005/06/wsctxdemo"
9   xmlns:ref="http://docs.oasis-open.org/wsrm/2004/06/reference-1.1.xsd">
10  <xsd:import namespace="http://docs.oasis-open.org/wscaf/2005/07/wscf"/>
11  <xsd:import namespace="http://docs.oasis-open.org/wscaf/2005/06/wsctxdemo"/>
12  <xsd:import
13    namespace="http://docs.oasis-open.org/wsrm/2004/06/reference-1.1.xsd"/>
14
15  <!-- context type and element -->
16  <xsd:complexType name="context">
17    <xsd:complexContent>
18      <xsd:extension base="wscf:RegistrationContextType">
19        <xsd:sequence>
20          <xsd:element name="notification-service" type="ref:ServiceRefType"/>
21          <xsd:element ref="wsctxdemo:shoppingCart"/>
22        </xsd:sequence>
23      </xsd:extension>
24    </xsd:complexContent>
25  </xsd:complexType>
26
27  <xsd:element name="context" type="tns:context"/>
28
29  <!-- The QName used for /ctx:begin/ctx:type -->
30  <xsd:simpleType name="BeginContextQName">
31    <xsd:restriction base="xsd:QName">
32      <xsd:enumeration value="tns:context"/>
33    </xsd:restriction>
34  </xsd:simpleType>
35 </xsd:schema>
```

B. Application WSDL

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <wsdl:definitions
3      targetNamespace="http://docs.oasis-open.org/wscaf/2005/08/wscfdemo"
4      xmlns:tns="http://docs.oasis-open.org/wscaf/2005/08/wscfdemo"
5      xmlns:wscfdemo="http://docs.oasis-open.org/wscaf/2005/08/wscfdemo"
6      xmlns:wsctxdemo="http://docs.oasis-open.org/wscaf/2005/06/wsctxdemo"
7      xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
8      xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
9      xmlns:xs="http://www.w3.org/2001/XMLSchema">
10     <wsdl:types>
11         <xss:schema targetNamespace="xx">
12             <xss:import namespace="http://docs.oasis-open.org/wscaf/2005/08/wscfdemo"/>
13         </xss:schema>
14     </wsdl:types>
15
16     <!-- context -->
17     <wsdl:message name="context">
18         <wsdl:part name="context" element="wscfdemo:context"/>
19     </wsdl:message>
20
21     <!-- get catalog -->
22     <wsdl:message name="getCatalogRequest"/>
23     <wsdl:message name="getCatalogResponse">
24         <wsdl:part name="response" element="wsctxdemo:catalog"/>
25     </wsdl:message>
26     <!-- add item -->
27     <wsdl:message name="addItemToCartRequest">
28         <wsdl:part name="request" element="wsctxdemo:orderItem"/>
29     </wsdl:message>
30     <wsdl:message name="addItemToCartResponse"/>
31     <!-- remove item -->
32     <wsdl:message name="removeItemFromCartRequest">
33         <wsdl:part name="request" element="wsctxdemo:orderItem"/>
34     </wsdl:message>
35     <wsdl:message name="removeItemFromCartResponse"/>
36     <!-- submit order -->
37     <wsdl:message name="submitOrderRequest"/>
38     <wsdl:message name="submitOrderResponse">
39         <wsdl:part name="response" element="wsctxdemo:shoppingCart"/>
40     </wsdl:message>
41
42     <!-- item added -->
43     <wsdl:message name="itemAddedToCartRequest">
44         <wsdl:part name="request" element="wsctxdemo:orderItem"/>
45     </wsdl:message>
46     <!-- item removed -->
47     <wsdl:message name="itemRemovedFromCartRequest">
48         <wsdl:part name="request" element="wsctxdemo:orderItem"/>
49     </wsdl:message>
50     <!-- order submitted -->
51     <wsdl:message name="orderSubmittedRequest">
52         <wsdl:part name="request" element="wsctxdemo:shoppingCart"/>
53     </wsdl:message>
54
55     <!-- faults -->
56     <wsdl:message name="invalidProductCodeFault"/>
57     <wsdl:message name="badOrderFault">
58         <wsdl:part name="fault" element="wsctxdemo:badOrder"/>
59     </wsdl:message>
60
61
62     <!-- retailer port type -->
63     <wsdl:portType name="RetailerPortType">
64         <wsdl:operation name="getCatalog">
65             <wsdl:input message="tns:getCatalogRequest" name="getCatalogRequest"/>
66             <wsdl:output message="tns:getCatalogResponse" name="getCatalogResponse"/>
67         </wsdl:operation>
68         <wsdl:operation name="addItemToCart">
69             <wsdl:input message="tns:addItemToCartRequest"
70                         name="addItemToCartRequest"/>
71             <wsdl:output message="tns:addItemToCartResponse"
72                         name="addItemToCartResponse"/>
73             <wsdl:fault message="tns:invalidProductCodeFault"
```

```

74           name="invalidProductCode"/>
75     </wsdl:operation>
76     <wsdl:operation name="removeItemFromCart">
77       <wsdl:input message="tns:removeItemFromCartRequest"
78         name="removeItemFromCartRequest"/>
79       <wsdl:output message="tns:removeItemFromCartResponse"
80         name="removeItemFromCartResponse"/>
81       <wsdl:fault message="tns:invalidProductCodeFault"
82         name="invalidProductCode"/>
83     </wsdl:operation>
84     <wsdl:operation name="submitOrder">
85       <wsdl:input message="tns:submitOrderRequest" name="submitOrderRequest"/>
86       <wsdl:output message="tns:submitOrderResponse" name="submitOrderResponse"/>
87       <wsdl:fault message="tns:badOrderFault" name="badOrder"/>
88     </wsdl:operation>
89   </wsdl:portType>
90
91   <!-- notification port type -->
92   <wsdl:portType name="NotificationPortType">
93     <wsdl:operation name="itemAddedToCart">
94       <wsdl:input message="tns:itemAddedToCartRequest" name="itemToCartRequest"/>
95     </wsdl:operation>
96     <wsdl:operation name="itemRemovedFromCart">
97       <wsdl:input message="tns:itemRemovedFromCartRequest"
98         name="itemRemovedFromCartRequest"/>
99     </wsdl:operation>
100    <wsdl:operation name="orderSubmitted">
101      <wsdl:input message="tns:orderSubmittedRequest"
102        name="orderSubmittedRequest"/>
103    </wsdl:operation>
104  </wsdl:portType>
105
106  <!-- participant port type -->
107  <wsdl:portType name="ParticipantPortType">
108    <wsdl:operation name="itemAddedToCart">
109      <wsdl:input message="tns:itemAddedToCartRequest" name="itemToCartRequest"/>
110    </wsdl:operation>
111    <wsdl:operation name="itemRemovedFromCart">
112      <wsdl:input message="tns:itemRemovedFromCartRequest"
113        name="itemRemovedFromCartRequest"/>
114    </wsdl:operation>
115    <wsdl:operation name="orderSubmitted">
116      <wsdl:input message="tns:orderSubmittedRequest"
117        name="orderSubmittedRequest"/>
118    </wsdl:operation>
119  </wsdl:portType>
120
121  <!-- retailer soap binding -->
122  <wsdl:binding name="RetailerSoapBinding" type="tns:RetailerPortType">
123    <soap:binding style="document"
124      transport="http://schemas.xmlsoap.org/soap/http"/>
125    <wsdl:operation name="getCatalog">
126      <wsdl:input>
127        <soap:body use="literal"/>
128      </wsdl:input>
129      <wsdl:output>
130        <soap:body use="literal"/>
131      </wsdl:output>
132    </wsdl:operation>
133    <wsdl:operation name="addItemToCart">
134      <wsdl:input>
135        <soap:body use="literal"/>
136        <soap:header use="literal" message="tns:context" part="context"/>
137      </wsdl:input>
138      <wsdl:output>
139        <soap:body use="literal"/>
140        <soap:header use="literal" message="tns:context" part="context"/>
141      </wsdl:output>
142      <wsdl:fault name="invalidProductCode">
143        <soap:fault name="invalidProductCode" use="literal"/>
144      </wsdl:fault>
145    </wsdl:operation>
146    <wsdl:operation name="removeItemFromCart">
147      <wsdl:input>
148        <soap:body use="literal"/>
149        <soap:header use="literal" message="tns:context" part="context"/>

```

```

150      </wsdl:input>
151      <wsdl:output>
152          <soap:body use="literal"/>
153          <soap:header use="literal" message="tns:context" part="context"/>
154      </wsdl:output>
155      <wsdl:fault name="invalidProductCode">
156          <soap:fault name="invalidProductCode" use="literal"/>
157      </wsdl:fault>
158  </wsdl:operation>
159  <wsdl:operation name="submitOrder">
160      <wsdl:input>
161          <soap:body use="literal"/>
162          <soap:header use="literal" message="tns:context" part="context"/>
163      </wsdl:input>
164      <wsdl:output>
165          <soap:body use="literal"/>
166          <soap:header use="literal" message="tns:context" part="context"/>
167      </wsdl:output>
168      <wsdl:fault name="badOrder">
169          <soap:fault name="badOrder" use="literal"/>
170      </wsdl:fault>
171  </wsdl:operation>
172</wsdl:binding>
173
174  <!-- notification soap binding -->
175  <wsdl:binding name="NotificationSoapBinding" type="tns:NotificationPortType">
176      <soap:binding style="document"
177          transport="http://schemas.xmlsoap.org/soap/http"/>
178      <wsdl:operation name="itemAddedToCart">
179          <wsdl:input>
180              <soap:body use="literal"/>
181              <soap:header use="literal" message="tns:context" part="context"/>
182          </wsdl:input>
183      </wsdl:operation>
184      <wsdl:operation name="itemRemovedFromCart">
185          <wsdl:input>
186              <soap:body use="literal"/>
187              <soap:header use="literal" message="tns:context" part="context"/>
188          </wsdl:input>
189      </wsdl:operation>
190      <wsdl:operation name="orderSubmitted">
191          <wsdl:input>
192              <soap:body use="literal"/>
193              <soap:header use="literal" message="tns:context" part="context"/>
194          </wsdl:input>
195      </wsdl:operation>
196  </wsdl:binding>
197
198  <!-- participant soap binding -->
199  <wsdl:binding name="ParticipantSoapBinding" type="tns:ParticipantPortType">
200      <soap:binding style="document"
201          transport="http://schemas.xmlsoap.org/soap/http"/>
202      <wsdl:operation name="itemAddedToCart">
203          <wsdl:input>
204              <soap:body use="literal"/>
205              <soap:header use="literal" message="tns:context" part="context"/>
206          </wsdl:input>
207      </wsdl:operation>
208      <wsdl:operation name="itemRemovedFromCart">
209          <wsdl:input>
210              <soap:body use="literal"/>
211              <soap:header use="literal" message="tns:context" part="context"/>
212          </wsdl:input>
213      </wsdl:operation>
214      <wsdl:operation name="orderSubmitted">
215          <wsdl:input>
216              <soap:body use="literal"/>
217              <soap:header use="literal" message="tns:context" part="context"/>
218          </wsdl:input>
219      </wsdl:operation>
220  </wsdl:binding>
221</wsdl:definitions>
```

1 C. Revision History

Rev	Date	By Whom	What
01	3 Aug 2005	Kevin Conner	The initial draft of the demo application specification.

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