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2 **WSRP – ebXML Registry Technical Note**

3 **Using ebXML Registry to Publish, Manage and**  
4 **Discover WSRP Artifacts**

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## 113 **1 Introduction**

114 This document proposes a standard methodology for publishing and finding WSRP  
115 Producer and Portlet services in an ebXML Registry. It is not the purpose of this  
116 document to educate on WSRP [1], WSDL [4] or ebXML Registry [5,6]. The reader of  
117 this document should have a good understanding of the WSRP specification, the WSDL  
118 specification and the ebXML Registry specifications and data structures.

### 119 **1.1 Terminology**

120 The key words MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD,  
121 SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL in this document are to be  
122 interpreted as described in [RFC2119].

### 123 **1.2 Conventions**

124 Throughout the document the following conventions are employed to define the data  
125 structures used. The following text formatting conventions are used to aide readability:

- 126 • **UML Diagrams**

127 UML diagrams are used as a way to concisely describe concepts. They are not  
128 intended to convey any specific *Implementation* or methodology requirements.

- 129 • **Identifier Placeholders**

130 Listings may contain values that reference ebXML Registry objects by their id  
131 attribute. These id values uniquely identify the objects within the ebXML Registry.  
132 For convenience and better readability, these key values are replaced by meaningful  
133 textual variables to represent such id values.

134 For example, the following placeholder refers to the unique id defined for the  
135 canonical ClassificationNode that defines the WSRP ObjectType defined in section  
136 A.1:

137

```
138 <id="{CANONICAL_OBJECT_TYPE_ID_WSRP}" >
```

- 139 • **Constants**

140 Constant values are printed in the Courier New font always, regardless of whether  
141 they are defined by this document or a referenced document. In addition, constant  
142 values defined by this document are printed using **bold face**. The following  
143 example shows the canonical Slot name defined by this technical note for the  
144 requiresRegistration attribute of a WSRP Producer Service:

```
145 <rim:Slot  
146 name="urn:oasis:names:tc:wsrp:v1:ServiceDescription:requiresRegistration">  
147 <rim:ValueList>  
148 <rim:Value>false</rim:Value>  
149 </rim:ValueList>  
150 </rim:Slot>
```

151

### 152 • **Example Values**

153 These values are represented in *italic* font. In the following, an access point  
154 example value is shown:

155

```
156 <accessPoint useType="http">  
157 http://vendor.com/producer/ServiceDescription  
158 </accessPoint>
```

159

## 160 **2 Overview**

161 This document requires some prior knowledge of WSRP, WSDL and ebXML Registry  
162 specifications. This chapter is not intended to replace the WSRP Primer [RP-PRIM] ,  
163 WSRP Specification [WSRP], WSDL specification [WSDL] or the ebXML Registry  
164 specifications [eBRIM, eBRS]. Instead, it is meant to be a very high level summary of  
165 concepts relevant to this document.

### 166 **2.1 WSRP Actors**

167 The WSRP specification [WSRP] describes the following major actors relevant to this  
168 technical note.

169

- 170 • **End user:** The end user, who uses a user agent such as a *web browser* to see  
171 multiple visually and contextually integrated content sources.
- 172 • **Consumer:** The software system such as a *Portal* that integrates content from  
173 multiple content sources.
- 174 • **Portlet:** The content source that generates markup as well as processing  
175 instructions for use by the consumer.
- 176 • **Producer:** The *web service* that acts as a container for Portlets and exposes the  
177 interfaces used by consumers to interact with Portlets.

178

179 The purpose of this document is to describe how Producer web services and Portlets are  
180 published, managed and discovered within an ebXML Registry.

#### 181 **2.1.1 Portlet**

182 A Consumer does not interact directly with Portlets. Instead it interacts with the Producer  
183 web service that contains the target Portlet. For this reason, the emphasis of this  
184 document is on publishing, management and discovery of Producers web services rather  
185 than Portlets.

186 Portlets are referenced within the service description of the Producer web service by a  
187 “Portlet Handle” identifier.

## 188 2.1.2 Producer

189 A Producer is a web service that hosts and manages Portlets. A Producer exposes two  
190 required and two optional web service interfaces that allow Consumers to interact with it  
191 and specifically with the Portlets hosted within that Producer. These interfaces are  
192 described as PortTypes within the WSDL service description in [RP-INT].

193

194 The WSRP Producer Service has the following interfaces:

- 195 • **Service Description:** Enables Consumer to discover service capabilities including  
196 the Portlets that are available.
- 197 • **Markup:** Enables Consumer to access Portlet markup content.
- 198 • **Registration:** Enables Consumer to register with Producer if needed (optional).
- 199 • **Portlet Management:** Enables Consumer to manage lifecycle and configuration  
200 of hosted Portlets.

201

202 The WSRP specification [WSRP] specifies a WSDL definition that includes a PortType  
203 for each of the above service interfaces. It also defines one or more Bindings for each  
204 PortType. It further requires that a Producer MUST define at least a SOAP Binding to  
205 the required PortTypes.

## 206 2.2 WSDL Description for a WSRP Producer Service

207 [WSRP] defines the normative WSDL description for a WSRP Producer web service  
208 description in three separate parts:

209

- 210 1. **Type Description:** Defines the data types, message and fault definitions for the  
211 WSDL service description. Defined by [RP-TYPE].
- 212 2. **Interface Description:** Defines the abstract interface (PortType) definitions for  
213 the WSDL service description. Defined by [RP-INT]. Imports [RP-TYPE].
- 214 3. **Bindings Description:** Defines the standard SOAP bindings for the abstract  
215 interfaces defined for the WSDL service description. Defined by [RP-BIND].  
216 Imports [RP-INT].

217

218 The above three WSDL files provide the common WSDL definition for all WSRP  
219 Producer services. Each of these file are imported within the next (higher-order) file in  
220 the sequence.

221

222 Each Producer service has to provide its own unique *Service Implementation WSDL*  
223 that contains a Service definition containing WSDL Ports for the various Bindings.  
224 This WSDL MUST import the WSRP *Binding WSDL* [RP-BIND] and supply the  
225 address URL for each Port. [WSRP] provides a template for this *Service*  
226 *Implementation WSDL* is provided in [RP-SERV].

227

228 The focus of this document is the unique *Service Implementation WSDL* for the  
 229 Producer service and its associated metadata that is published within an ebXML  
 230 Registry. The purpose of this document is to specify how the unique *Service  
 231 Implementation WSDL* for the Producer service and its associated metadata is  
 232 published, managed and discovered within an ebXML Registry.

## 233 2.3 Overview of ebXML Registry

### 234 2.3.1 Supported ebXML Registry Version

235 This document is based upon on version 2.5 of the ebXML Registry specifications  
 236 [ebRS, ebRIM]. However, it is expected that it will be largely applicable to other version  
 237 of the ebXML Registry specification.

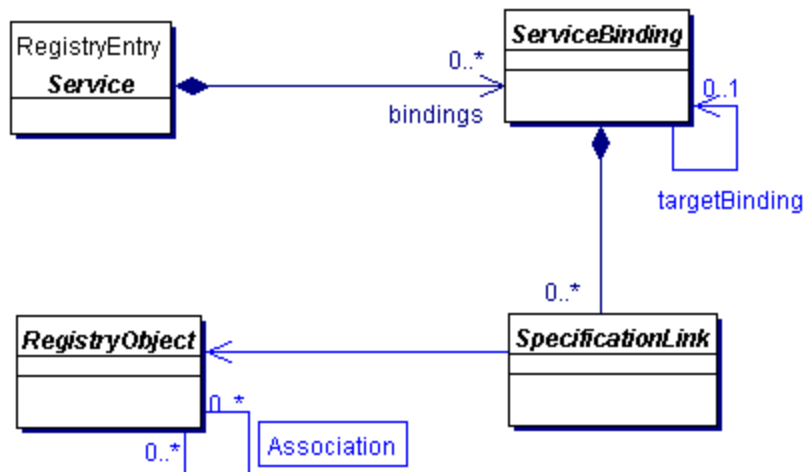
### 238 2.3.2 Summary of ebXML Registry Information Model

239 This section summarizes the ebXML Registry Information Model [ebRIM] with an  
 240 emphasis on those aspects of the model that are required for publishing, managing and  
 241 discovery of WSRP Producer services.

242  
 243 A Web service can be represented in an ebXML Registry through the following Registry  
 244 Information Model [ebRIM] classes:

- 245
- 246 • **Service:** Service instances provide information on services (e.g., Web services).  
 247 A Service has a collection of ServiceBindings.
- 248 • **ServiceBinding:** ServiceBinding instances represent a specific protocol binding  
 249 to a Service instance.
- 250 • **SpecificationLink:** A SpecificationLink associates a ServiceBinding with its  
 251 technical specifications (e.g. a WSDL definition).
- 252

253 The relationship between these RIM classes is illustrated in the figure below.



254  
 255

Figure 1: Relationship between RIM classes Service, ServiceBinding, and SpecificationLink

256

257 In addition to the Service related classes defined by [ebRIM] there are other classes in the  
258 model that provide additional metadata.

259 The reader is referred to the Registry Information Model Specification v3.0 for the  
260 complete set of classes and their attributes and methods.

### 261 **2.3.3 Registering Web Services in an ebXML Registry**

262 The ebXML Registry technical note “Registering Web Services in an ebXML Registry,  
263 Version 1.0” [RR-WSDL] describes how a generic WSDL service description and its  
264 associated metadata MAY be published, managed and discovered within an ebXML  
265 Registry.

266

267 This document specializes in describing how the WSDL service description and  
268 associated metadata for a WSRP web service MAY be published, managed and  
269 discovered within an ebXML Registry. This document supplements and takes precedence  
270 over the [RR-WSDL] document.

### 271 **2.3.4 Use Cases for ebXML Registry**

272 This section describes the various use case scenarios for using ebXML Registry with  
273 WSRP Producer service descriptions. Note that not all use cases are required to be  
274 supported by this technical note.

275 These use cases are:

- 276 • Publishing WSRP Producer Service and Portlet descriptions to an ebXML  
277 Registry
- 278 • Managing the life cycle of WSRP Producer Service and Portlet descriptions that  
279 have been published to an ebXML Registry. Life cycle operations include  
280 approval, deprecation and deletion of WSRP Producer service and Portlet  
281 descriptions.
- 282 • Discovering WSRP Producer service and Portlet descriptions within an ebXML  
283 Registry
- 284 • Managing access control to WSRP artifacts that have been published to an  
285 ebXML Registry<sup>1</sup>.
- 286 • Receiving notification of changes to WSRP Producer service descriptions that  
287 have been published to an ebXML Registry

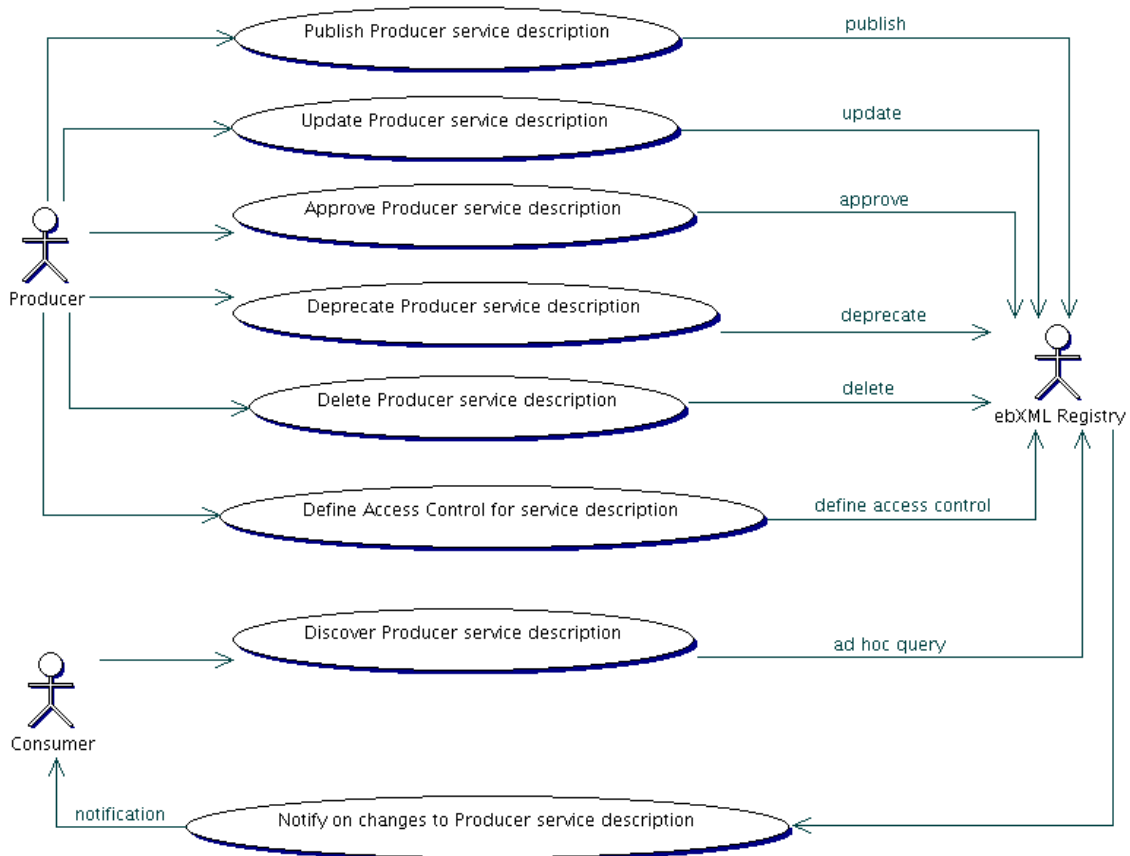
288

289 Figure 2 shows these use cases as a UML diagram. Each of above use cases will be  
290 explored in detail in subsequent chapters of this document.

---

<sup>1</sup> This is not the same as any access control provided by the actual Producer Service. It is only access control on the published WSRP artifacts to control which roles, groups and individuals are able to read, write or delete the WSRP artifacts.





291  
292

Figure 2: WSRP Use Cases for ebXML Registry

### 293 3 Publishing

294 This chapter describes the detailed steps required to publish WSRP Producer service  
 295 descriptions to an ebXML Registry. It includes publishing of all metadata including  
 296 Portlet descriptions as well as the actual Producer Service Implementation WSDL.

#### 297 3.1 Overview

298 The ebXML registry is both a metadata registry as well as a content repository. This  
 299 document describes the publishing of the following major WSRP artifacts:

- 300 • WSDL description for a WSRP Producer service
- 301 • Metadata describing a Producer service and the Organization provides it  
 302 (optional)
- 303 • Metadata describing one or more WSRP Portlets hosted within Producer services  
 304 (optional)

305  
 306 Figure 3 shows a simplified UML instance diagram showing the various ebXML Registry  
 307 Information Model [ebRIM] objects representing a WSRP Producers and its Portlets.

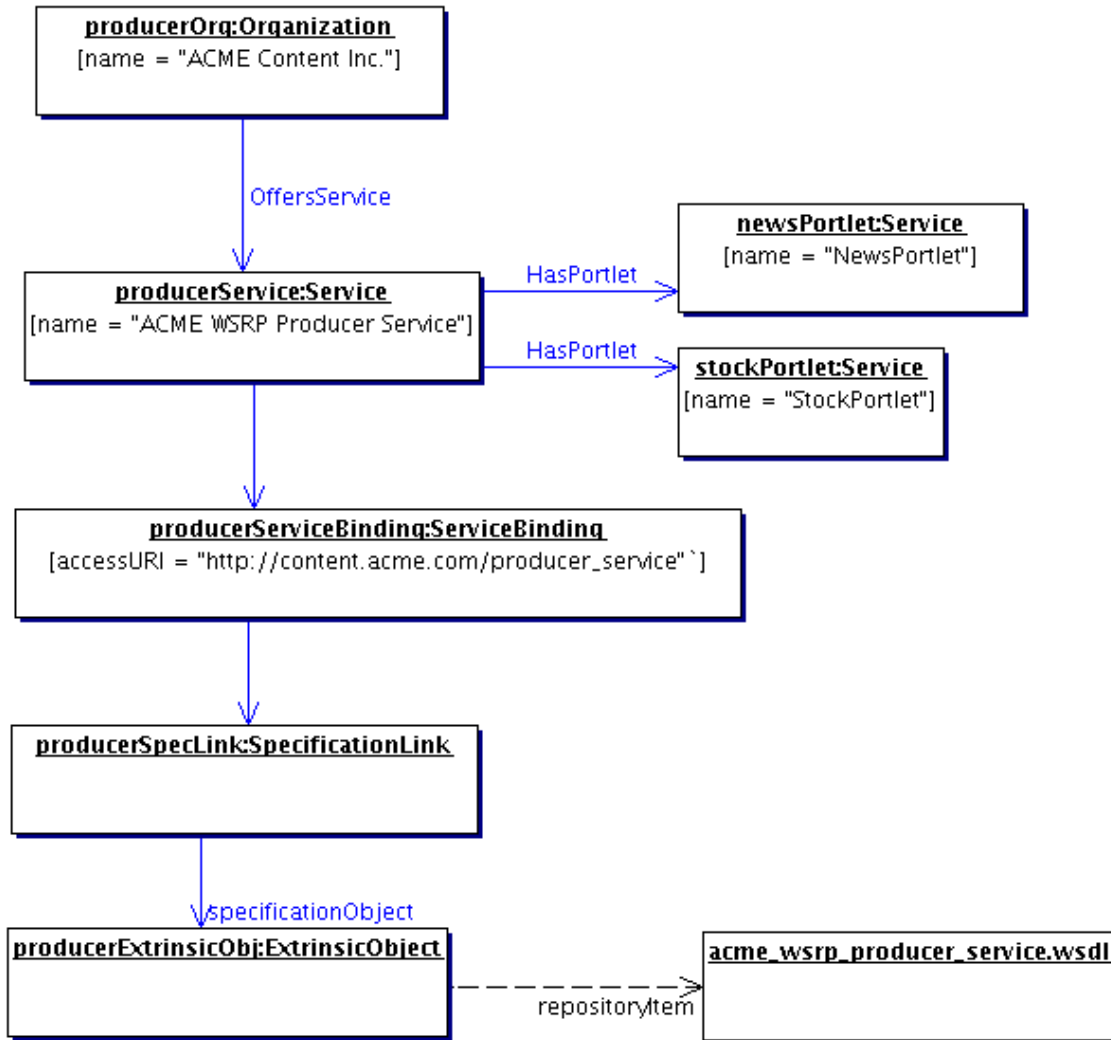


Figure 3: WSRP Producer Registration Simplified Instance Diagram

The following is a summary of main concepts represented in Figure 3:

- An Organization object MAY be published that represents the Organization that is offering the Producer Service.
- A Service object MUST be published that represents the Producer Service being offered.
- The Service MUST be classified by the canonical ClassificationNode defined for a WSRP Producer Service within the canonical ObjectType ClassificationScheme.
- The Service MUST be classified by a ClassificationNode defined for WSRP version within the canonical WSRPVersion ClassificationScheme.
- The Organization and Producer Service MUST be related by an Association whose associationType is the canonical “OffersService” association type defined by [ebRIM].

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- 345
- A Service object MAY be published for each Portlet hosted by the Producer Service.
  - The Producer Service and each published Portlet Service MUST be related by an Association whose associationType is the “HasPortlet” association type defined by this document in section A.2.
  - The Producer Service MUST contain one or more ServiceBinding instance depending upon the number of service endpoints available. The ServiceBinding instance MAY specify the endpoint URL for the Producer service through its accessURI attribute. The value of the accessURI attribute, if specified, MUST match the value of the location attribute of the wsdl:port Address defined within the *Service implementation WSDL*. For example, in case of HTTP/S transport it must match the URL specified by the location attribute of the http:address element.
  - The ServiceBinding instance MUST contain a SpecificationLink that associates it to either:
    - The ExtrinsicObject instance that serves at metadata for the *Service Implementation WSDL* that is uniquely defined for this Producer Service.
    - Or the ExternalLink instance that references the URL for the *Service Implementation WSDL* that is uniquely defined for this Producer Service.
  - The ExtrinsicObject instance for the WSDL MUST be published with a companion repository item that is the actual *Service Implementation WSDL* that is uniquely defined for this Producer Service.

346 The above descriptions omits several details to match the simplicity of Figure 3. The

347 omitted details include several additional metadata such as Classifications,

348 ExternalLinks, ExternalIdentifiers, Slots and access control defined for the objects

349 shown. The reader should refer to [RR-WSDL] and [ebRIM, ebRS] for these details.

## 350 **3.2 Producer Service Description (Optional)**

351 A WSRP Producer Service is a web service that conforms to the interface and behavior

352 described by [WSRP].

### 353 **3.2.1 Producer Service Mapping to ebRIM Service**

354 A Producer Service instance maps to an instance of a Service as defined by [ebRIM]. A

355 Producer Service is a web service that is described by a Service Implementation WSDL

356 specification. The ebXML Registry TC has defined how WSDL descriptions of web

357 services are published, managed and discovered in [RR-WSDL]. This document defines

358 how to published, managed and discovered WSRP Producer Service in an ebXML

359 Registry.

#### 360 **3.2.1.1 ServiceDescription Mapping**

361 [WSRP] define the following attributes for a Producer Service Description:

362	ServiceDescription	
363	[R] boolean	requiresRegistration
364	[O] <a href="#">PortletDescription</a>	offeredPortlets[]
365	[O] <a href="#">ItemDescription</a>	userCategoryDescriptions[]
366	[O] <a href="#">ItemDescription</a>	customUserProfileItemDescriptions[]
367	[O] <a href="#">ItemDescription</a>	customWindowStateDescriptions[]
368	[O] <a href="#">ItemDescription</a>	customModeDescriptions[]
369	[O] <a href="#">CookieProtocol</a>	requiresInitCookie
370	[O] <a href="#">ModelDescription</a>	registrationPropertyDescription
371	[O] string	locales[]
372	[O] <a href="#">ResourceList</a>	resourceList
373	[O] <a href="#">Extension</a>	extensions[]

Listing 1: Producer ServiceDescription Attributes

375

376 Mapping of all of the attributes in Listing 1 is optional. The mapping of some important  
377 attributes is described as follows:

- 378 • **requiresRegistration:** Maps to a Slot with name urn:oasis:names:tc:wsrp:<wsrp  
379 version>:ServiceDescription:requiresRegistration and value of “true” or “false”
- 380 • **PortletDescription:** Each PortletDescription is mapped to a separate ebRIM  
381 Service. See section 3.3 for detail.
- 382 • **requiresInitCookie:** Maps to a Slot with name urn:oasis:names:tc:wsrp:<wsrp  
383 version>:ServiceDescription:requiresInitCookie and value of “none”, “perUser” or  
384 “perGroup”.

385

386 Listing 2 shows a minimal example of an ebRIM Service instance representing a WSRP  
387 Producer Service. Within this ebRIM Service instance are composed the ebRIM  
388 ServiceBinding and SpecificationLink instances that together with the Service instance  
389 provide a complete Service description for the Producer Service.

390

```

391 <rim:Service id="{ACME_PRODUCER_SERVICE_ID}">
392   <rim:Name>
393     <rim:LocalizedString value="ACME WSRP Producer Service" xml:lang="en-US"/>
394   </rim:Name>
395   <rim:Description>
396     <rim:LocalizedString value="A WSRP Producer Service. Contains news and stock Portlets"
397 xml:lang="en-US"/>
398   <!-- optional Slots for attributes of the Producer ServiceDescription goes here -->
399   <!--Classify this Service with the canonical objectType for a Producer Service -->
400   <rim:Classification id="{PRODUCER_CLASSIFICATION_ID}"
401 classificationNode="{CANONICAL_CLASSIFICATION_NODE_PRODUCER_ID}"
402 classifiedObject="{ACME_PRODUCER_SERVICE_ID}">
403     </ rim:Classification>
404   <!--Classify this Service as supporting version 1.0 of WSRP specs -->
405   <rim:Classification id="{WSRP_VERSION_CLASSIFICATION_ID}"
406 classificationNode="{CANONICAL_CLASSIFICATION_NODE_VERSION1.0_ID}"
407 classifiedObject="{ACME_PRODUCER_SERVICE_ID}">
408     </rim:Classification>
409   <rim:ServiceBinding accessURI="http://content.acme.com/producer_service"
410 id="{PRODUCER_SERVICE_SOAP_BINDING_ID}">
411     <!-- optional name goes here -->
412     <!-- optional description goes here -->
413     <rim:SpecificationLink id="{PRODUCER_SERVICE_SOAP_BINDING_SPECLINK_ID}"
414 specificationObject="{V1_TYPES_XSD_ID}">

```

```
415         </rim:SpecificationLink>
416     </rim:ServiceBinding>
417 </rim:Service>
```

### Listing 2: Minimal XML Sample Representing a Producer Service

#### Fields:

- 421 • **id**: The unique id identifying this Service instance.
- 422 • **Name**: The name of the Service. Though optional this SHOULD be present.
- 423 • **Description**: The description for this Service. Though optional this  
424 SHOULD be present.
- 425 • **Classification**: Defines any number of Classifications that classify or  
426 categorize this object. A Producer Service MUST be classified by the Producer  
427 ClassificationNode and a WSRPVersion ClassificationNode defined in section  
428 A.1.
- 429 • **ServiceBinding**: Defines a binding for the Producer Service. It includes  
430 the URL for accessing the Service. We are skipping the usual id, Name,  
431 Description, Classification and Slot elements that may be specified on any  
432 object in ebRIM.
  - 433 ○ **SpecificationLink**: Defines an association between the  
434 ServiceBinding instance and the Producer Service Implementation  
435 WSDL specification. Its specificationObject attribute is a reference to the  
436 ExtrinsicObject that represents the Service Implementation WSDL  
437 specification.

## 3.3 Portlet Description (Optional)

440 Publishing Portlets associated with the Producer Service is optional since the Producer  
441 already provides an interface to discover and manage its associated Portlets. This  
442 document recommends that Portlets be published to the ebXML Registry in addition to  
443 the Producer Service because it improves the ability of the End User to perform a direct  
444 ad hoc query and discover Portlets based upon their description.

### 3.3.1 Portlet Mapping to ebRIM Service

446 A Portlet instance maps to an instance of a Service as defined by [ebRIM]. Portlets do not  
447 expose interfaces, access points or bindings directly. Instead a Consumer interacts with  
448 Portlets indirectly via the Producer service, addressing them by their Portlet Handles.  
449 Thus the Service representation of Portlet MUST not contain any ServiceBinding or  
450 SpecificationLink instances.

#### 3.3.1.1 PortletDescription Mapping

453 [WSRP] define the following attributes for a Portlet Description:

455	PortletDescription	
456	[R] <a href="#">Handle</a>	portletHandle
457	[R] <a href="#">MarkupType</a>	markupTypes[]
458	[O] <a href="#">ID</a>	groupID
459	[O] <a href="#">LocalizedString</a>	description
460	[O] <a href="#">LocalizedString</a>	shortTitle
461	[O] <a href="#">LocalizedString</a>	title
462	[O] <a href="#">LocalizedString</a>	displayName
463	[O] <a href="#">LocalizedString</a>	keywords[]
464	[O] string	userCategories[]
465	[O] string	userProfileItems[]
466	[O] boolean	usesMethodGet
467	[O] boolean	defaultMarkupSecure
468	[O] boolean	onlySecure
469	[O] boolean	userContextStoredInSession
470	[O] boolean	templatesStoredInSession
471	[O] boolean	hasUserSpecificState
472	[O] boolean	doesUrlTemplateProcessing
473	[O] <a href="#">Extension</a>	extensions[]

**Listing 3: PortletDescription Metadata**

475 This section describes the rules that are used to map nearly all of the attributes of a  
 476 Portlet Description to metadata associated with the Portlet Service instance.

477  
 478 Table 1 shows the mapping for a subset of the attributes defined by [WSRP] for a Portlet  
 479 Description.

480  
 481

Portlet Attribute	Mapping to ebRIM	Comments
Description	Service.description	
DisplayName	Service.name	
<All other attributes...>	Service.Slot	

**Table 1: Portlet Description Attribute Mapping**

482  
 483  
 484 Any other attribute whose domain is a primitive value or a Collection of primitive values  
 485 for which a mapping is not defined in this table MUST map to a Slot within the Portlet's  
 486 Service instance. The Slot name MUST match the following name pattern:

487  
 488 **urn:oasis:names:tc:wsrp:<wsrp version>:PortletDescription:<attribute**  
 489 **name>**

490  
 491 The Slots value contains the single or collection value as described by [WSRP]  
 492 For example the portletHandle attribute name maps as follows:

493  
 494 **urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle**

495  
 496 For example the markupType attribute name maps as follows:

497  
 498 **urn:oasis:names:tc:wsrp:v1:PortletDescription:markupType**

499

500 The provider **MUST** provide the PortletHandle attribute. The provider **SHOULD**  
 501 minimally also provide the displayName and description for the Portlet. Beyond that it is  
 502 up to the provider of the Portlet as to how much of the Portlet Description is published as  
 503 metadata for the Portlet within an ebXML Registry.

504

505 Listing 4 below shows a minimal sample XML fragment for an ebRIM Service  
 506 representing a WSRP Portlet and its metadata.

507

508

```

509 <!--The News Portlet-->
510 <rim:Service id="{ACME_PORTLET_SERVICE_ID}">
511   <rim:Name>
512     <rim:LocalizedString value="ACME News Portlet" xml:lang="en-US"/>
513   </rim:Name>
514   <rim:Description>
515     <rim:LocalizedString value="A WSRP Portlets that provides News." xml:lang="en-US"/>
516   </rim:Description>
517   <!-- optional Slots for attributes of the Producer ServiceDescription goes here -->
518   <!--Provide portletHandle for this Portlet-->
519   <rim:Slot name="urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle">
520     <rim:ValueList>
521       <rim:Value>NewsPortlet</rim:Value>
522     </rim:ValueList>
523   </rim:Slot>
524   <!--Classify this Service with the canonical objectType for a Portlet -->
525   <rim:Classification id="{PORTLET_CLASSIFICATION_ID}"
526     classificationNode="{CANONICAL_CLASSIFICATION_NODE_PORTLET_ID}"
527     classifiedObject="{ACME_PORTLET_SERVICE_ID}">
528   </rim:Classification>
529   <!--Classify this Service as supporting version 1.0 of WSRP specs -->
530   <rim:Classification id="{WSRP_VERSION_CLASSIFICATION_ID_2}"
531     classificationNode="{CANONICAL_CLASSIFICATION_NODE_VERSION1.0_ID}"
532     classifiedObject="{ACME_PORTLET_SERVICE_ID}">
533   </rim:Classification>
534 </rim:Service>

```

534

#### Listing 4: Minimal XML Sample Representing a Portlet Service

#### 535 Fields:

536

537

- **id**: The unique id identifying this Service instance.
- **Name**: The name of the Service. Though optional this **SHOULD** be present.
- **Description**: The description for this Service. Though optional this **SHOULD** be present.
- **Slot**: Represents any other attribute of the PortletDescription that does not map directly into an [ebRIM] standard attribute. Note that the Slot for portletHandle attribute **MUST** be published.
- **Classification**: Defines any number of Classifications that classify or categorize this object. A Portlet Service **MUST** be classified by the Portlet ClassificationNode and a WSRPVersion ClassificationNode defined in section A.1.

547

548

549

## 550 3.4 Producer's Organization Description

551 A Producer Service when published to an ebXML Registry MAY be optionally  
552 associated with a description of the Organization that offers the Producer Service.  
553 This is done by publishing an ebRIM Organization instance.  
554

555 Listing 5 shows a sample XML fragment for an Organization instance that offers the  
556 Producer Service described in Listing 2.

```
557
558 <rim:Organization id="{ACME_ORG_ID}" primaryContact="{ACME_PRIMARY_CONTACT_ID}">
559 <rim:Name>
560 <rim:LocalizedString value="ACME Content Inc." xml:lang="en-US"/>
561 </rim:Name>
562 <rim:Description>
563 <rim:LocalizedString value="Provides WSRP Producer service for news and stock content." xml:lang="en-
564 US"/>
565 </rim:Description>
566 <!--Classify Organization by geography of United States-->
567 <rim:Classification id="{US_CLASSIFICATION_ID}"
568 classificationNode="{CANONICAL_CLASSIFICATION_NODE_GEO_US}"
569 classifiedObject="{ACME_ORG_ID}">
570 </rim:Classification>
571 <rim:Address city="Burlington" country="USA" postalCode="01867" stateOrProvince="MA" street="Network
572 Dr." streetNumber="1"/>
573 <rim:TelephoneNumber areaCode="123" countryCode="1" number="456-7890"/>
574 </rim:Organization>
```

575 **Listing 5: Sample XML fragment representing the Organization offering the Producer Service**

576

### 577 **Fields:**

- 578 • **id**: The unique id identifying this Organization instance.
- 579 • **Name**: The name of the Organization. Though optional this SHOULD be  
580 present.
- 581 • **Description**: The description for this Organization. Though optional this  
582 SHOULD be present.
- 583 • **Classification**: Once or more Classifications MAY be used to classify or  
584 categorize the Organization using any ClassificationScheme (taxonomy).  
585 Though optional there SHOULD be some classifications present.
- 586 • **ExternalIdentifier**: Defines zero or more additional identifiers for this  
587 Organization besides its id attribute.
- 588 • **Address**: The PostalAddress for this Organization.
- 589 • **TelephoneNumber**: Defines one or more TelephoneNumbers for this  
590 Organization.  
591

### 592 3.4.1 Association Producer Organization and Service

593 The Organization instance MAY be associated with the Producer Service instance using  
594 an Association instance that has an associationType of "OffersService".

595

```
596 <!--Associate Org and Service with OffersService canonical associationType -->
```



```

597 <rim:Association associationType="{CANONICAL_CLASSIFICATION_NODE_OFFERS_SERVICE}"
598 id="{OFFERS_SERVICE_ASSOCIATION1_ID}" sourceObject="{ACME_ORG_ID}"
599 targetObject="{ACME_PRODUCER_SERVICE_ID}"/>

```

Listing 6: Sample XML Fragment for Association between Producer’s Organization and Service

### 3.5 Portlet’s Organization Description

It is possible that a Portlet MAY be provided by a different Organization than the one that provides the Producer Service that hosts the Portlet. In such cases the Portlet provider Organization may be associated with the ebRIM Service describing the Portlet in the same manner as defined in section 3.4.1.

### 3.6 Publishing the Service Implementation WSDL

The Service Implementation WSDL for the Producer Service may be published in one of two ways:

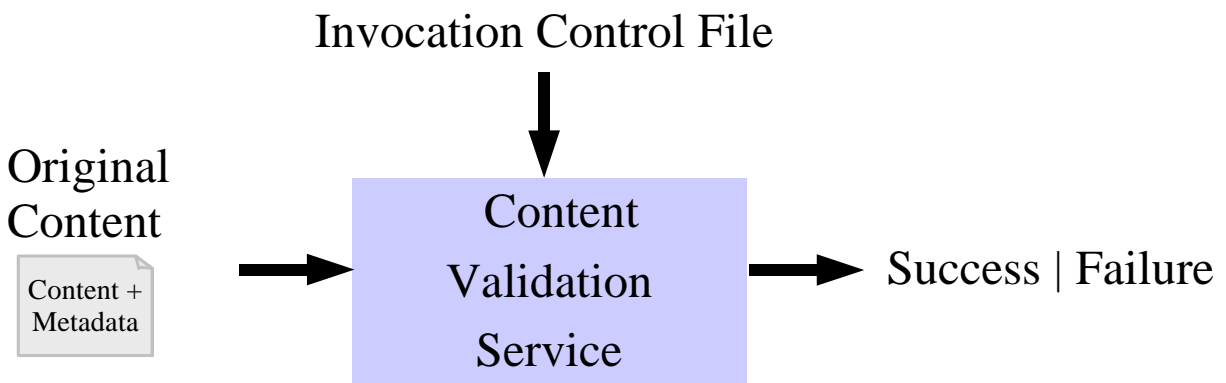
1. Publish the WSDL directly into the ebXML Registry’s repository as a repository item.
2. Publish a reference to the WSDL into the ebXML Registry as an ExternalLink instance.

A Producer SHOULD publish the WSDL directly into the ebXML Registry’s repository because this enables the WSDL to benefit from all the use cases identified in this document for the Portlet and Producer metadata.

Alternatively, a Producer MAY publish the WSDL into the ebXML Registry as an ExternalLink instance if the WSDL is generated dynamically or if there is some other compelling reason for keeping it outside the ebXML Registry. In such cases the WSDL will not be able to benefit from all the use cases identified in this document for the Portlet and Producer metadata.

### 3.7 Validation of WSRP Producer Service Descriptions

The ebXML Registry Content Management Services support the ability to enforce domain specific business validation rules upon submitted content and metadata in a content specific manner.



628

**Figure 4: Content Validation Service**

629 An ebXML Registry uses one or more Content Validation Services to automatically  
630 validate<sup>2</sup> the Content and Metadata when it is submitted to the registry. According to  
631 [ebRS] a registry **MUST** reject a submission request in its entirety if it contains invalid  
632 data as deemed by a content validation service.

633 The following are suggested validation rules that **SHOULD** be encapsulated in a Content  
634 Validation service for WSRP Producer Services and Portlets.

- 635 • **PortletHandle MUST Be Specified:** Enforce that when a WSRP Portlet is  
636 published that it **MUST** have its PortletHandle specified.
- 637 • **Valid Attribute Values MUST be Specified:** Enforce that all attribute values  
638 specified by Slots for Producer Service or Portlet have a valid value. For example  
639 specifying a value other than “true” or “false” for the requiresRegistration  
640 attribute of Producer Service is not valid.

## 641 4 Discovery

642 So far we have described how the Producer publishes descriptions of WSRP Producer  
643 Services and Portlets to an ebXML Registry. In this chapter we describe how consumers  
644 subsequently discover these descriptions.

645

646 The ebXML Registry allows a Consumer to discover WSRP Producer Services and  
647 Portlets within it using ad hoc queries. By their very nature ad hoc queries are user-  
648 defined and open-ended. This means that a Consumer **MAY** use *any* ad hoc query to  
649 search the registry as long as the query syntax is supported by [ebRS].

650

651 The subsequent section will show ad hoc queries of varying complexity that cover  
652 anticipated discovery needs for Portlets and Producer Services. It is expected that UI  
653 tools would provide simplified form based parameter entry to hide the details of these  
654 underlying queries from the user.

### 655 4.1 Producer Service Discovery

656 Producer Services may be discovered using queries that may be as general or as specific  
657 as needed.

#### 658 4.1.1 Find All WSRP Producers

659 Listing 7 shows a query that finds all WSRP Producer Services. It looks for all ebRIM  
660 Services that are classified as a WSRP Producer.

661

662

---

<sup>2</sup> Such business rule based validation is distinct and orthogonal to syntax validation offered by validating XML parsers.

```
663
664     SELECT * from Service producer
665     WHERE
666     (producer.id IN ( SELECT classifiedObject FROM Classification WHERE
667     classificationNode IN ( SELECT id
668     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
669     41fb-be9f-
670     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
671     roducer%" ) ))
672
```

Listing 7: Find All Producers - Query

674

#### 675 4.1.2 Find All WSRP Producer Supporting Specified WSRP 676 Version

677 Listing 8 shows a query that finds all WSRP Producer Services that support a specified  
678 WSRP version. The query shows the WSRPVersion query parameter with the parameter  
679 name prefixed by a '\$'. This should be replaced with the actual parameter value.

680

```
681
682     SELECT * from Service producer
683     WHERE
684     (producer.id IN ( SELECT classifiedObject FROM Classification WHERE
685     classificationNode IN ( SELECT id
686     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
687     41fb-be9f-
688     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
689     roducer%" ) )) AND
690     (producer.id IN ( SELECT classifiedObject FROM Classification WHERE
691     classificationNode IN ( SELECT id
692     FROM ClassificationNode WHERE path LIKE "/urn:uuid:bd0c092a-cb38-
693     4578-8520-81274054f678/$WSRPVersion%" ) ))
694
695
```

Listing 8: Find All Producers Supporting Specified WSRP Version - Query

#### 697 4.1.3 Find Producer By Name

698 Listing 9 shows a query that finds all ebRIM Services that are classified as a Producer  
699 Service and match the specified name pattern.

700

701 The query shows the name query parameter with the parameter name prefixed by a '\$'.  
702 This should be replaced with the actual parameter value.

703

```

704
705     SELECT * from Service producer, Name nm
706     WHERE
707         (nm.parent = producer.id AND UPPER ( nm.value ) LIKE UPPER ( '$name' ) )
708     AND (producer.id IN ( SELECT classifiedObject FROM Classification WHERE
709     classificationNode IN ( SELECT id
710     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
711     41fb-be9f-
712     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
713     roducer%" ) ))
714

```

Listing 9: Find Producer By Name - Query

#### 4.1.4 Find Producer for Specified Portlet

Listing 10 shows a query that finds all ebRIM Services that are classified as a Producer Service and hosts the Portlet specified by its portletHandle.

The query shows the portletHandle query parameter with the parameter name prefixed by a '\$'. This should be replaced with the actual parameter value.

```

723
724     SELECT * from Service producer, Service portlet, Association ass
725     WHERE
726     (producer.id IN ( SELECT classifiedObject FROM Classification WHERE
727     classificationNode IN ( SELECT id
728     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
729     41fb-be9f-
730     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
731     roducer%" ) ))
732     AND (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
733     classificationNode IN ( SELECT id
734     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
735     41fb-be9f-
736     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
737     ortlet%" ) ))
738     AND (ass.sourceObject = producer.id AND ass.targetObject = portlet.id AND
739     ass.associationType =
740     "${CANONICAL_CLASSIFICATION_NODE_HAS_PORTLET_ID}")
741     AND (Slot.parent = portlet, Slot.name =
742     "urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle"
743     AND Slot.value LIKE "$portletHandle")

```

Listing 10: Find Producer For Specified Portlet

#### 4.1.5 Complex Producer Discovery Query

Listing 11 shows a more complex query that finds all ebRIM Services that are classified as a Producer Service based upon zero or more of following criteria:

- 748 • Service name
- 749 • Service description
- 750 • Portlet handle of hosted Portlet

- 751 • Value of requiresRegistration attribute
- 752 • Value of initCookies

753

754 The query shows all query parameters with the parameter name prefixed by a '\$'. These  
 755 should be replaced with the actual parameter value. If a parameter is not relevant to the  
 756 query then the entire query predicate for that parameter SHOULD be pruned.

757

758

```

759 SELECT * from Service producer, Service portlet, Association ass, Name nm,
760 Description d
761 WHERE
762     (nm.parent = producer.id AND UPPER ( nm.value ) LIKE UPPER ( "$name" ) )
763     AND (d.parent = producer.id AND UPPER ( d.value ) LIKE UPPER ( "$description"
764     ) )
765     AND (producer.id IN ( SELECT classifiedObject FROM Classification WHERE
766     classificationNode IN ( SELECT id
767     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
768     41fb-be9f-
769     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
770     roducer%" ) ) )
771     AND (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
772     classificationNode IN ( SELECT id
773     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
774     41fb-be9f-
775     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
776     ortlet%" ) ) )
777     AND (ass.sourceObject = producer.id AND ass.targetObject = portlet.id AND
778     ass.associationType =
779     "${CANONICAL_CLASSIFICATION_NODE_HAS_PORTLET_ID}")
780     AND (Slot.parent = portlet, Slot.name =
781     "urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle"
782     AND Slot.value LIKE "$portletHandle")
783     AND (Slot.parent = producer, Slot.name =
784     "urn:oasis:names:tc:wsrp:v1:ServiceDescription:requiresRegistration"
785     AND Slot.value LIKE "$ requiresRegistration")
786     AND (Slot.parent = producer, Slot.name =
787     "urn:oasis:names:tc:wsrp:v1:ServiceDescription:requiresInitCookie"
788     AND Slot.value LIKE "$ requiresInitCookie")
789
790

```

791

**Listing 11: Complex Producer Service Discovery Query**

792

## 793 4.2 Portlet Discovery

794 Portlets may be discovered using queries that may as general or as specific as needed.  
 795 Simple queries are less specific while complex queries are most specific.

## 796 4.2.1 Find All Portlets

797 Listing 12 shows a query that finds all ebRIM Services that are classified as a Portlet  
798 Service.

799

800

```
801 SELECT * from Service portlet
```

```
802 WHERE
```

```
803 (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
```

```
804 classificationNode IN ( SELECT id
```

```
805 FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
```

```
806 41fb-be9f-
```

```
807 99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
```

```
808 ortlet%" ) )
```

```
809
```

810

**Listing 12: Find All Portlets - Query**

## 811 4.2.2 Find All Portlets Supporting Specified WSRP Version

812 Listing 13 shows a query that finds all ebRIM Services that are classified as a Portlet  
813 Service and that support the specified WSRP specification version. The query shows the  
814 WSRPVersion query parameter with the parameter name prefixed by a '\$'. This should  
815 be replaced with the actual parameter value.

816

817

```
818 SELECT * from Service portlet
```

```
819 WHERE
```

```
820 (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
```

```
821 classificationNode IN ( SELECT id
```

```
822 FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
```

```
823 41fb-be9f-
```

```
824 99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
```

```
825 ortlet%" ) ) AND
```

```
826 AND
```

```
827 (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
```

```
828 classificationNode IN ( SELECT id
```

```
829 FROM ClassificationNode WHERE path LIKE "/urn:uuid:bd0c092a-cb38-
```

```
830 4578-8520-81274054f678/$WSRPVersion" ) )
```

831

**Listing 13: Find All Portlets Supporting Specified WSRP Version - Query**

## 832 4.2.3 Find Portlet By Portlet Handle

833 Listing 14 shows a query that finds all ebRIM Services that are classified as a Portlet  
834 Service and match the specified portletHandle.

835

836 The query shows the portletHandle query parameter with the parameter name prefixed by  
837 a '\$'. This should be replaced with the actual parameter value.

838

```

839
840     SELECT * from Service portlet, Slot slot
841     WHERE
842     (Slot.parent = portlet, Slot.name =
843     "urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle"
844     AND Slot.value LIKE "$portletHandle")
845     AND (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
846     classificationNode IN ( SELECT id
847     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
848     41fb-be9f-
849     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
850     ortlet%" ) ))
851

```

Listing 14: Find Portlet By Portlet Handle - Query

#### 853 4.2.4 Find All Portlets for a Producer

854 Listing 15 shows a query that finds all Portlets offered by a specified Producer.

855

856 The query shows the producerId query parameter with the parameter name prefixed by a  
857 '\$'. This should be replaced with the actual parameter value that identifies the producer  
858 Service. Note that a variation on this query could also specify the Producer by name,  
859 description or classification.

860

861

```

862
863     SELECT * from Service portlet, Service producer, Association ass
864     WHERE
865     (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
866     classificationNode IN ( SELECT id
867     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
868     41fb-be9f-
869     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
870     ortlet%" ) ))
871     AND (ass.sourceObject = producer.id AND ass.targetObject = portlet.id AND
872     ass.associationType = "
873     ${CANONICAL_CLASSIFICATION_NODE_HAS_PORTLET_ID}"
874     AND (producer.id IN ( SELECT classifiedObject FROM Classification WHERE
875     classificationNode IN ( SELECT id
876     FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
877     41fb-be9f-
878     99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
879     roducer%" ) ))
880     AND (producer.id = $producerid)
881
882

```

Listing 15: Find All Portlets for a Producer - Query

884

## 885 4.2.5 Complex Portlet Discovery Query

886 Listing 16 shows a query that finds all ebRIM Services that are classified as Portlets  
887 based upon zero or more of following criteria:

- 888 • Portlet displayName (specified as Name element of Portlet Service)
- 889 • Portlet description
- 890 • Portlet handle
- 891 • Supported markupType

892

893 The query shows all query parameters with the parameter name prefixed by a '\$'. These  
894 should be replaced with the actual parameter value. If a parameter is not relevant to the  
895 query then the entire query predicate for that parameter SHOULD be pruned.

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

```

SELECT * from Service portlet, Name nm, Description d, Slot slot
WHERE
(nm.parent = portlet.id AND UPPER ( nm.value ) LIKE UPPER ( "$name" ) )
AND (d.parent = portlet.id AND UPPER ( d.value ) LIKE UPPER ( "$description" ) )
AND (Slot.parent = portlet, Slot.name =
"urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle"
AND Slot.value LIKE "$portletHandle")
AND (Slot.name =
"urn:oasis:names:tc:wsrp:v1:PortletDescription:markupType"
AND Slot.value LIKE "$markupType")
AND (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE
classificationNode IN ( SELECT id
FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
41fb-be9f-
99aladca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/P
ortlet%" ) ) )

```

Listing 16: Complex Portlet Discovery Query

915

916

## 917 5 Lifecycle Management

918 In addition to publish and discovery of WSRP Portlets and Producer Services, the  
919 ebXML Registry MAY also be used to perform the following life cycle management  
920 operations on WSRP Portlets and Producer Services.

### 921 5.1 Approve Portlets and Producer Services

922 WSRP Portlets and Producer Services MAY be approved using the  
923 ApproveObjectsRequest protocol defined by [ebRIM]. The request specifies Portlets and  
924 Producer Services to be approved using the id attribute of their Service instances. A  
925 publisher SHOULD approve WSRP Portlets and Producer Services once they feel the  
926 description is ready for deployment or broader use.



## 927 **5.2 Update of Portlets and Producer Services**

928 The metadata for WSRP Portlets and Producer Services MAY be updated using the  
929 UpdateObjectsRequest protocol defined by [ebRIM].

## 930 **5.3 Versioning of Portlets and Producer Services**

931 WSRP Portlets and Producer Services MAY be versioned using the  
932 SubmitObjectsRequest protocol defined by [ebRIM] to submit the new versions of the  
933 Service representing the Portlet or Producer Service. The new version MUST have a new  
934 unique id. The Service instance representing the new version MAY be associated with the  
935 Service instance of the next older version using an Association of association type  
936 “Supercedes”. The new Service MUST be the sourceObject while the old Service MUST  
937 be the targetObject.

## 938 **5.4 Deprecation of Portlets and Producer Services**

939 The ebXML registry allows marking objects as deprecated. Once an object is deprecated  
940 the registry will allow no new references to that object. This is the registry mechanism to  
941 mark an object as obsolete and on its way to deletion.

942  
943 WSRP Portlets and Producer Services MAY be deprecated using the  
944 DeprecateObjectsRequest protocol defined by [ebRIM]. The request specifies Portlets  
945 and Producer Services to be deprecated using the id attribute of their Service instances.

## 946 **5.5 Un-Deprecation of Portlets and Producer Services**

947 WSRP Portlets and Producer Services MAY be un-deprecated using the  
948 UndeprecateObjectsRequest protocol defined by [ebRIM]. The request specifies Portlets  
949 and Producer Services to be un-deprecated using the id attribute of their Service  
950 instances.

951

## 952 **5.6 Deletion of Portlets and Producer Services**

953 WSRP Portlets and Producer Services MAY be deleted from the registry using the  
954 RemoveObjectsRequest protocol defined by [ebRIM]. The request specifies Portlets and  
955 Producer Services to be deleted using the id attribute of their Service instances.

## 956 **6 Event Notification**

957 A WSRP Consumer MAY wish to be notified when a WSRP Portlet or Producer Service  
958 is published or affected by any other life cycle event. The ebXML Registry allows  
959 content-based event notification to enable this use case. In most cases the Consumer  
960 MAY further narrow their interest to Portlets or Producer Services that match certain  
961 specific interest criteria (e.g. Portlets that support text/xml markup).

## 962 6.1 Subscribing to Events

963 A WSRP Consumer MAY create a subscription with a registry to receive notifications of  
 964 events related to WSRP Portlets and Producer Services of interest. A Consumer creates a  
 965 subscription by submitting an ebRIM Subscription instance to a registry using the  
 966 SubmitObjectsRequest protocol.

967  
 968 A Subscription instance references an ad hoc query that has been published to the registry  
 969 by the Consumer. Such a persistent ad hoc query is similar in concept to stored  
 970 procedures in relational databases. The role of this ad hoc query is to select events in the  
 971 registry that the Consumer wishes to be notified of.

## 972 6.2 Selector Query for WSRP Events

973 The following query subscribes to all events on all Portlets and Producer Services within  
 974 the registry. The Consumer MAY add additional predicates to narrow their interest.

975

976

977

978

979

980

981

982

983

984

985

```

SELECT * from Service s
WHERE
AND (s.id IN ( SELECT classifiedObject FROM Classification WHERE
classificationNode IN ( SELECT id
FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-
41fb-be9f-
99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/
%" ) ))
  
```

986

**Listing 17: Simple Selector Query for WSRP Events**

987

988

## 989 6.3 Receiving Notification of Events

990 A Consumer MAY receive notification of WSRP related events of interest by email or by  
 991 providing a NotificationListener web service. The web service needs to be compatible  
 992 with the WSDL described for EventListeners in [ebRS]. A Consumer MAY also wish to  
 993 receive notifications to an email address. Listing 18 covers both scenarios.

## 994 6.4 A Complete Subscription Example

995 Listing 18 shows a complete example of publishing a Subscription to receive events  
 996 related to WSRP Portlets and Producer Services.

997

998

999

1000

1001

1002

1003

1004

1005

```

<SubmitObjectsRequest>
  <rim:RegistryObjectList>
    <rim:Subscription id="{SUBSCRIPTION1_ID}"
    objectType="{CANONICAL_OBJECT_TYPE_SUBSCRIPTION_ID}"
    selector="{WSRP_EVENT_SELECTOR_QUERY1_ID}">
      <!-- Next endPoint is an email address -->
      <rim:NotifyAction notificationOption="Objects" endPoint="mailto:farrukh.najmi@sun.com"/>
      <!-- Next endPoint is a service via reference to its ServiceBinding object -->
  
```

```

1006         <rim:NotifyAction notificationOption="Objects"
1007 endPoint="{NOTIFICATION_LISTENER_SERVICE_BINDING_ID}"/>
1008     </rim:Subscription>
1009     <!--The query used as a selector for Subscription. -->
1010     <query:SQLQuery id="{WSRP_EVENT_SELECTOR_QUERY1_ID}">
1011         <query:QueryString>
1012 SELECT * from Service s, Name nm, Description d, Slot slot
1013 WHERE
1014 AND (nm.parent = portlet.id AND UPPER ( nm.value ) LIKE UPPER ( "$name" ) )
1015 AND (d.parent = portlet.id AND UPPER ( d.value ) LIKE UPPER ( "$description" ) )
1016 AND (Slot.parent = portlet, Slot.name =
1017 "urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle"
1018     AND Slot.value LIKE "$portletHandle")
1019 AND (Slot.name = 'urn:oasis:names:tc:wsrp:v1:PortletDescription:markupType'
1020     AND Slot.value LIKE "$markupType"
1021 AND (portlet.id IN ( SELECT classifiedObject FROM Classification WHERE classificationNode IN ( SELECT id
1022 FROM ClassificationNode WHERE path LIKE "/urn:uuid:3188a449-18ac-41fb-be9f-
1023 99a1adca02cb/RegistryObject/RegistryEntry/ExtrinsicObject/WSRP/Portlet%" ) ) )
1024 </query:QueryString>
1025 </query:SQLQuery>
1026 <!--The listener service and its binding-->
1027 <rim:Service id="{NOTIFICATION_LISTENER_SERVICE_ID}">
1028     <rim:Name>
1029         <rim:LocalizedString value="WSRP Event Listener Service" xml:lang="en-US"/>
1030     </rim:Name>
1031     <rim:Description>
1032         <rim:LocalizedString value="Consumer provided WSRP Listener Service" xml:lang="en-US"/>
1033     </rim:Description>
1034     <rim:ServiceBinding
1035 accessURI="http://listener.consumer.com:8080/NotificationListener/notificationListener"
1036 id="{NOTIFICATION_LISTENER_SERVICE_BINDING_ID}">
1037         <rim:Name>
1038             <rim:LocalizedString value="WSRP Event Listener Service binding" xml:lang="en-US"/>
1039         </rim:Name>
1040     </rim:ServiceBinding>
1041 </rim:Service>
1042 </rim:RegistryObjectList>
1043 </SubmitObjectsRequest>
1044

```

Listing 18: A Complete Example of a Publishing a Subscription for WSRP Events

## 1046 Appendix A Canonical Metadata

1047 This section described the canonical metadata defined by this document. Such metadata  
1048 is used to enable the publishing, management and discovery of WSRP Portlets and  
1049 Producer Services.

### 1050 A.1 New Object Types Defined

1051 The ebXML Registry defines a Canonical ObjectType ClassificationScheme  
1052 (taxonomy). It further allows clients to extend the canonical object type definitions in a  
1053 domain specific manner.

1054  
1055 This document defines new ClassificationNodes (nodes) tree within the ObjectType  
1056 ClassificationScheme under the existing ExtrinsicObject object type as follows:

- 1057
- 1058 • **WSRP:** Base node for all WSRP object types

- 1059 ○ **Portlet:** Object type representing a Portlet
- 1060 ○ **Producer:** Object type representing a Producer Service

1061

1062 This document defines a new WSRPVersion ClassificationScheme as follows:

1063

- 1064 • **WSRPVersion:** Defines versions for WSRP specification(s).
  - 1065 ○ **1.0:** WSRP version 1.0 specification

1066

1067

## 1068 A.2 New Association Types Defined

1069 The ebXML Registry defines a Canonical AssociationType ClassificationScheme  
 1070 (taxonomy) that allows giving meaning to an Association between two objects. It further  
 1071 allows clients to extend the canonical association type definitions in a domain specific  
 1072 manner.

1073

1074 This document defines a new ClassificationNodes (nodes) tree within the ObjectType  
 1075 ClassificationScheme as follows:

1076

- 1077 • **HasPortlet:** Used to Associate a Producer Service as sourceObject to a Portlet  
 1078 Service as targetObject. Indicates that a Producer Service has specified Portlets.

1079

## 1080 A.3 Canonical Data to Publish

1081 Listing 19 gives the complete request to publish WSRP canonical metadata to an ebXML  
 1082 Registry. Note that all id attribute values are canonical and MUST be exactly as  
 1083 specified.

```

1084 <?xml version="1.0" encoding="UTF-8"?>
1085 <!-- $Header:
1086 /cvsroot/ebxmlrr/omar/misc/samples/demoDB/SubmitObjectsRequest_WSRPCanonical.xml,v
1087 1.2 2004/03/31 19:12:07 farrukh_najmi Exp $ -->
1088 <SubmitObjectsRequest xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0"
1089 xmlns:lcm="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0"
1090 xmlns:query="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0"
1091 xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
1092 xmlns:rs="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0"
1093 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" >
1094   <rim:RegistryObjectList>
1095     <!-- Add canonical objectType tree for WSRP -->
1096     <rim:ClassificationNode code="WSRP" id="urn:uuid:88f464d7-5488-4720-9b52-
1097 a1119f6807f7" parent="urn:uuid:baa2e6c8-873e-4624-8f2d-b9c7230eb4f8">
1098       <rim:Name>
1099         <rim:LocalizedString charset="UTF-8" value="WSRP"/>
1100       </rim:Name>
1101       <rim:Description>
1102         <rim:LocalizedString charset="UTF-8" value="Base node for all WSRP
1103 object types."/>
1104       </rim:Description>
1105       <rim:ClassificationNode code="Portlet" id="urn:uuid:68be52c4-63ab-43ec-
1106 976b-aa5dfc00af23">
1107         <rim:Name>
1108           <rim:LocalizedString charset="UTF-8" value="Portlet"/>

```

```

1109         </rim:Name>
1110     </rim:ClassificationNode>
1111     <rim:ClassificationNode code="Producer" id="urn:uuid:5ba75b99-ea59-4bcf-
1112 8921-ecfbc8d00031">
1113         <rim:Name>
1114             <rim:LocalizedString charset="UTF-8" value="Producer"/>
1115         </rim:Name>
1116     </rim:ClassificationNode>
1117 </rim:ClassificationNode>
1118 <!-- Add canonical associationTypes tree for WSRP -->
1119 <rim:ClassificationNode code="HasPortlet" id="urn:uuid:b2522e35-b2e3-4fc5-
1120 8c33-b565900c3969" parent="urn:uuid:6902675f-2f18-44b8-888b-c91db8b96b4d">
1121     <rim:Name>
1122         <rim:LocalizedString charset="UTF-8" value="HasPortlet"/>
1123     </rim:Name>
1124     <rim:Description>
1125         <rim:LocalizedString charset="UTF-8" value="The Producer Service
1126 identified by the sourceObject hosts the Portlet identified by targetObject."/>
1127     </rim:Description>
1128 </rim:ClassificationNode>
1129 <!--Add new canonical WSRPVersion canonical scheme -->
1130 <rim:ClassificationScheme nodeType="urn:uuid:bd0c092a-cb38-4578-8520-
1131 81274054f678" isInternal="true" id="urn:uuid:c03bed66-f554-40ec-9ed4-a9033d7a51cd">
1132     <rim:Name>
1133         <rim:LocalizedString value="WSRPVersion" charset="UTF-8" xml:lang="en-
1134 US"/>
1135     </rim:Name>
1136     <rim:Description>
1137         <rim:LocalizedString value="Defines valid versions for the WSRP
1138 Specification." charset="UTF-8" xml:lang="en-US"/>
1139     </rim:Description>
1140     <rim:ClassificationNode parent="urn:uuid:c03bed66-f554-40ec-9ed4-
1141 a9033d7a51cd" code="1.0" id="urn:uuid:8d8ffcd3-2430-40c6-bf57-fcdaac0ec391">
1142         <rim:Name>
1143             <rim:LocalizedString value="1.0" charset="UTF-8" xml:lang="en-US"/>
1144         </rim:Name>
1145         <rim:Description>
1146             <rim:LocalizedString value="WSRP 1.0 specification." charset="UTF-8"
1147 xml:lang="en-US"/>
1148         </rim:Description>
1149     </rim:ClassificationNode>
1150 </rim:ClassificationScheme>
1151 </rim:RegistryObjectList>
1152 </SubmitObjectsRequest>

```

1153 **Listing 19: WSRP Canonical Metadata**

## 1154 **Appendix B The Complete Example**

```

1155 <?xml version="1.0" encoding="UTF-8"?>
1156 <!-- $Header: /cvsroot/ebxmlrr/omar/misc/samples/demoDB/SubmitObjectsRequest_WSRP.xml,v 1.3 2004/05/16
1157 21:17:31 farrukh_najmi Exp $ -->
1158 <SubmitObjectsRequest xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0"
1159 xmlns:lcm="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0" xmlns:query="urn:oasis:names:tc:ebxml-
1160 regrep:xsd:query:3.0" xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
1161 xmlns:rs="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
1162 instance">
1163     <rim:RegistryObjectList>
1164         <!--The main Producer Service. The Portlets it hosts are modeled as related Services-->
1165         <rim:Service id="{ACME_PRODUCER_SERVICE_ID}">
1166             <rim:Name>
1167                 <rim:LocalizedString value="ACME WSRP Producer Service" xml:lang="en-US"/>
1168             </rim:Name>
1169             <rim:Description>

```

```

1170         <rim:LocalizedString value="A WSRP Producer Service. Contains news and stock Portlets"
1171 xml:lang="en-US"/>
1172     </rim:Description>
1173     <!--Slot for the requiresRegistration attribute-->
1174     <rim:Slot
1175 name="urn:oasis:names:tc:wsrp:v1:ServiceDescription:requiresRegistration">
1176         <rim:ValueList>
1177             <rim:Value>false</rim:Value>
1178         </rim:ValueList>
1179     </rim:Slot>
1180     <!--Slot for the requiresInitCookie attribute-->
1181     <rim:Slot
1182 name="urn:oasis:names:tc:wsrp:v1:ServiceDescription:requiresInitCookie">
1183         <rim:ValueList>
1184             <rim:Value>perUser</rim:Value>
1185         </rim:ValueList>
1186     </rim:Slot>
1187     <!--Classify this Service with the canonical objectType for a Producer Service -->
1188     <rim:Classification id="{PRODUCER_CLASSIFICATION_ID}"
1189 classificationNode="{CANONICAL_CLASSIFICATION_NODE_PRODUCER_ID}"
1190 classifiedObject="{ACME_PRODUCER_SERVICE_ID}">
1191         <rim:Name>
1192             <rim:LocalizedString value="Producer" xml:lang="en-US"/>
1193         </rim:Name>
1194     </rim:Classification>
1195     <!--Classify this Service as supporting version 1.0 of WSRP specs -->
1196     <rim:Classification id="{WSRP_VERSION_CLASSIFICATION_ID}"
1197 classificationNode="{CANONICAL_CLASSIFICATION_NODE_VERSION1.0_ID}"
1198 classifiedObject="{ACME_PRODUCER_SERVICE_ID}">
1199         <rim:Name>
1200             <rim:LocalizedString value="1.0" charset="UTF-8" xml:lang="en-US"/>
1201         </rim:Name>
1202     </rim:Classification>
1203     <rim:ServiceBinding accessURI="http://content.acme.com/producer_service"
1204 id="{PRODUCER_SERVICE_SOAP_BINDING_ID}">
1205         <rim:Name>
1206             <rim:LocalizedString value="ACME WSRP Producer Service SOAP binding" xml:lang="en-
1207 US"/>
1208         </rim:Name>
1209     <rim:Description>
1210         <rim:LocalizedString value="SOAP binding to ACME WSRP Producer Service" xml:lang="en-
1211 US"/>
1212     </rim:Description>
1213     <rim:SpecificationLink id="{PRODUCER_SERVICE_SOAP_BINDING_SPECLINK_ID}"
1214 specificationObject="{V1_TYPES_XSD_ID}">
1215         <rim:Name>
1216             <rim:LocalizedString value="Link to ACME Producer Service WSDL" xml:lang="en-US"/>
1217         </rim:Name>
1218     <rim:Description>
1219         <rim:LocalizedString value="Link to ACME Producer Service WSDL" xml:lang="en-US"/>
1220     </rim:Description>
1221     </rim:SpecificationLink>
1222 </rim:ServiceBinding>
1223 </rim:Service>
1224 <!--Associate Org and Service with OffersService canonical associationType -->
1225 <rim:Association associationType="{CANONICAL_CLASSIFICATION_NODE_OFFERS_SERVICE}"
1226 id="{OFFERS_SERVICE_ASSOCIATION1_ID}" sourceObject="{ACME_ORG_ID}"
1227 targetObject="{ACME_PRODUCER_SERVICE_ID}"/>
1228 <!--The News Portlet-->
1229 <rim:Service id="{ACME_PORTLET_SERVICE_ID}">
1230     <rim:Name>
1231         <rim:LocalizedString value="ACME News Portlet" xml:lang="en-US"/>
1232     </rim:Name>
1233     <rim:Description>

```

```

1234         <rim:LocalizedString value="A WSRP Portlets that provides News." xml:lang="en-US"/>
1235     </rim:Description>
1236     <!--Provide portletHandle for this Portlet-->
1237     <rim:Slot name="urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle">
1238         <rim:ValueList>
1239             <rim:Value>NewsPortlet</rim:Value>
1240         </rim:ValueList>
1241     </rim:Slot>
1242     <!--Provide MarkupTypes supported by this Portlet-->
1243     <rim:Slot name="urn:oasis:names:tc:wsrp:v1:PortletDescription:markupType">
1244         <rim:ValueList>
1245             <rim:Value>text/html</rim:Value>
1246             <rim:Value>text/xml</rim:Value>
1247         </rim:ValueList>
1248     </rim:Slot>
1249     <!--Classify this Service with the canonical objectType for a Portlet -->
1250     <rim:Classification id="{PORTLET_CLASSIFICATION_ID}"
1251 classificationNode="{CANONICAL_CLASSIFICATION_NODE_PORTLET_ID}"
1252 classifiedObject="{ACME_PORTLET_SERVICE_ID}">
1253         <rim:Name>
1254             <rim:LocalizedString value="Portlet" xml:lang="en-US"/>
1255         </rim:Name>
1256     </rim:Classification>
1257     <!--Classify this Service as supporting version 1.0 of WSRP specs -->
1258     <rim:Classification id="{WSRP_VERSION_CLASSIFICATION_ID_2}"
1259 classificationNode="{CANONICAL_CLASSIFICATION_NODE_VERSION1.0_ID}"
1260 classifiedObject="{ACME_PORTLET_SERVICE_ID}">
1261         <rim:Name>
1262             <rim:LocalizedString value="1.0" charset="UTF-8" xml:lang="en-US"/>
1263         </rim:Name>
1264     </rim:Classification>
1265 </rim:Service>
1266 <!--Associate host Producer service with Portlet service. Association type is HasPortlet. -->
1267 <rim:Association associationType="{CANONICAL_CLASSIFICATION_NODE_HAS_PORTLET_ID}"
1268 id="{HAS_PORTLET_ASSOCIATION1_ID}" sourceObject="{ACME_PRODUCER_SERVICE_ID}"
1269 targetObject="{ACME_PORTLET_SERVICE_ID}"/>
1270 <!--The Stock Portlet-->
1271 <rim:Service id="{STOCK_PORTLET_SERVICE_ID}">
1272     <rim:Name>
1273         <rim:LocalizedString value="ACME Stock Portlet" xml:lang="en-US"/>
1274     </rim:Name>
1275     <rim:Description>
1276         <rim:LocalizedString value="A WSRP Portlets that provides Stock quotes." xml:lang="en-US"/>
1277     </rim:Description>
1278     <!--Provide portletHandle for this Portlet-->
1279     <rim:Slot name="urn:oasis:names:tc:wsrp:v1:PortletDescription:portletHandle">
1280         <rim:ValueList>
1281             <rim:Value>StockPortlet</rim:Value>
1282         </rim:ValueList>
1283     </rim:Slot>
1284     <!--Provide MarkupTypes supported by this Portlet-->
1285     <rim:Slot name="urn:oasis:names:tc:wsrp:v1:PortletDescription:markupType">
1286         <rim:ValueList>
1287             <rim:Value>text/html</rim:Value>
1288             <rim:Value>text/xml</rim:Value>
1289         </rim:ValueList>
1290     </rim:Slot>
1291     <!--Classify this Service with the canonical objectType for a Portlet -->
1292     <rim:Classification id="{STOCK_PORTLET_OBJECT_TYPE_CLASSIFICATION_ID}"
1293 classificationNode="{CANONICAL_CLASSIFICATION_NODE_PORTLET_ID}"
1294 classifiedObject="{STOCK_PORTLET_SERVICE_ID}">
1295         <rim:Name>
1296             <rim:LocalizedString value="Portlet" xml:lang="en-US"/>
1297     </rim:Name>

```

```

1298     </rim:Classification>
1299     <!--Classify this Service as supporting version 1.0 of WSRP specs -->
1300     <rim:Classification id="{STOCK_PORTLET_WSRP_VERSION_CLASSIFICATION_ID}"
1301 classificationNode="{CANONICAL_CLASSIFICATION_NODE_VERSION1.0_ID}"
1302 classifiedObject="{STOCK_PORTLET_SERVICE_ID}">
1303     <rim:Name>
1304     <rim:LocalizedString value="1.0" charset="UTF-8" xml:lang="en-US"/>
1305     </rim:Name>
1306     </rim:Classification>
1307 </rim:Service>
1308 <!--Associate host Producer service with Portlet service. Association type is HasPortlet. -->
1309 <rim:Association associationType="{CANONICAL_CLASSIFICATION_NODE_HAS_PORTLET_ID}"
1310 id="{HAS_PORTLET_ASSOCIATION2_ID}" sourceObject="{ACME_PRODUCER_SERVICE_ID}"
1311 targetObject="{STOCK_PORTLET_SERVICE_ID}"/>
1312 <rim:Organization id="{ACME_ORG_ID}" primaryContact="{ACME_PRIMARY_CONTACT_ID}">
1313 <rim:Name>
1314 <rim:LocalizedString value="ACME Content Inc." xml:lang="en-US"/>
1315 </rim:Name>
1316 <rim:Description>
1317 <rim:LocalizedString value="Provides WSRP Producer service for news and stock content."
1318 xml:lang="en-US"/>
1319 </rim:Description>
1320 <!--Classify Organization by geography of United States-->
1321 <rim:Classification id="{US_CLASSIFICATION_ID}"
1322 classificationNode="{CANONICAL_CLASSIFICATION_NODE_GEO_US}"
1323 classifiedObject="{ACME_ORG_ID}">
1324 <rim:Name>
1325 <rim:LocalizedString value="United States" xml:lang="en-US"/>
1326 </rim:Name>
1327 </rim:Classification>
1328 <rim:Address city="Burlington" country="USA" postalCode="01867" stateOrProvince="MA"
1329 street="Network Dr." streetNumber="1"/>
1330 <rim:TelephoneNumber areaCode="123" countryCode="1" number="456-7890"/>
1331 </rim:Organization>
1332 <!-- ClassificationNode for "United States" -->
1333 <rim:ObjectRef id="{CANONICAL_CLASSIFICATION_NODE_GEO_US}"/>
1334 <!--Reference the URL to wsrp_v1_types.xsd -->
1335 <rim:ExternalLink externalURI="http://www.oasis-
1336 open.org/committees/wsrp/specifications/version1/wsrp_v1_types.xsd"
1337 id="{EXTERNAL_LINK_TYPES_ID}">
1338 <rim:Name>
1339 <rim:LocalizedString value="WSRP WSDL Data Type Definition"/>
1340 </rim:Name>
1341 <rim:Description>
1342 <rim:LocalizedString value="Defines data types used by WSRP WSDL"/>
1343 </rim:Description>
1344 </rim:ExternalLink>
1345 <!--Association of associationType ExternallyLinks-->
1346 <rim:Association associationType="{CANONICAL_ASSOCIATION_TYPE_EXTERNALLY_LINKS_ID}"
1347 id="{ASSOCIATION_EXTERNALLY_LINKS_TYPES_ID}" sourceObject="{EXTERNAL_LINK_TYPES_ID}"
1348 targetObject="{ACME_PRODUCER_SERVICE_ID}"/>
1349 <!--Reference the URL to wsrp_v1_interfaces.xsd -->
1350 <rim:ExternalLink externalURI="http://www.oasis-
1351 open.org/committees/wsrp/specifications/version1/wsrp_v1_interfaces.xsd"
1352 id="{EXTERNAL_LINK_INTERFACES_ID}">
1353 <rim:Name>
1354 <rim:LocalizedString value="WSRP WSDL Interface Definition"/>
1355 </rim:Name>
1356 <rim:Description>
1357 <rim:LocalizedString value="Defines abstract interfaces or PortTypes for WSRP WSDL"/>
1358 </rim:Description>
1359 </rim:ExternalLink>
1360 <!--Association of associationType ExternallyLinks-->

```



```

1361     <rim:Association associationType="{CANONICAL_ASSOCIATION_TYPE_EXTERNALLY_LINKS_ID}"
1362 id="{ASSOCIATION_EXTERNALLY_LINKS_INTERFACES_ID}"
1363 sourceObject="{EXTERNAL_LINK_INTERFACES_ID}" targetObject="{ACME_PRODUCER_SERVICE_ID}"/>
1364     <!--Reference the URL to wsrp_v1_bindings.xsd -->
1365     <rim:ExternalLink externalURI="http://www.oasis-
1366 open.org/committees/wsrp/specifications/version1/wsrp_v1_bindings.xsd"
1367 id="{EXTERNAL_LINK_BINDINGS_ID}">
1368         <rim:Name>
1369             <rim:LocalizedString value="WSRP WSDL Bindings Definition"/>
1370         </rim:Name>
1371         <rim:Description>
1372             <rim:LocalizedString value="Defines Service Bindings for WSRP WSDL"/>
1373         </rim:Description>
1374     </rim:ExternalLink>
1375     <!--Association of associationType ExternallyLinks-->
1376     <rim:Association associationType="{CANONICAL_ASSOCIATION_TYPE_EXTERNALLY_LINKS_ID}"
1377 id=" ASSOCIATION_EXTERNALLY_LINKS_BINDINGS_ID " sourceObject="{EXTERNAL_LINK_BINDINGS_ID}"
1378 targetObject="{ACME_PRODUCER_SERVICE_ID}"/>
1379     </rim:RegistryObjectList>
1380 </SubmitObjectsRequest>

```

**Listing 20: Complete Example of a Publishing a WSDL Producer Service, Portlets and Organization**

1384

## 1385 **Appendix C Revision History**

Rev	Date	By Whom	What
0.1	Feb 7, 2004	Farrukh Najmi	Initial version.
0.2	Feb 12, 2004	Farrukh Najmi	Minor changes based on comments received.
0.3	Mar 2, 2004	Farrukh Najmi	Version reviewed at WSRP f2f
0.4	June 3, 2004	Farrukh Najmi	Changes based on f2f review feedback
0.5	July 1, 2004	Farrukh Najmi	Changes based upon review in PFB meeting and Andre's comment. Adds several new queries based upon PFB Abstract Model 1.02. Added new WSRPVersion canonical ClassificationScheme.
0.6	Sep 10, 2004	Farrukh Najmi	Changes to conform to WSRP specification notational convention. All listing were updated to conform.
Draft-1.0	Sep 22. 2004	Farrukh Najmi	Added OASIS logo, updated version number and added link to comments form after final SC review.
1.0-final	Sep 30, 2004	Farrukh Najmi	Added Notices Appendix and changed status from Draft to TC approved. Updated link to primer to latest version.

1386

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1420 PURPOSE.

## 1421 **References**

### 1422 **6.5 Normative**

1423 [RFC2119] S. Bradner, Key words for use in RFCs to Indicate Requirement Levels, IETF  
1424 RFC 2119, March 1997.

1425 <http://www.ietf.org/rfc/rfc2119.txt>

1426

1427 [WSRP] web services for Remote Portlets Specification version 1.0

1428 <http://www.oasis-open.org/committees/download.php/3343/oasis-200304-wsrp-specification-1.0.pdf>

1429

1430 [WSDL] W3C Note. Web Services Description Language (WSDL) 1.1

1431 <http://www.w3.org/TR/wsdl>

1432

1433 [ebRIM] ebXML Registry Information Model version 2.5

1434 <http://www.oasis-open.org/committees/regrep/documents/2.5/specs/ebRIM.pdf>

1435

1436 [ebRS] ebXML Registry Services Specification version 2.5

1437 <http://www.oasisopen.org/committees/regrep/documents/2.5/specs/ebRS.pdf>

1438

1439 [RP-BIND] WSRP Bindings WSDL

1440 [http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp\\_v1\\_bindings.wsdl](http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp_v1_bindings.wsdl)

1441

1442 [RP-INT] WSRP Interfaces WSDL

1443 [http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp\\_v1\\_interfaces.wsdl](http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp_v1_interfaces.wsdl)

1444

1445 [RP-TYPE] WSRP Types Schema

1446 [http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp\\_v1\\_types.xsd](http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp_v1_types.xsd)

1447

## 6.6 Informative

1448 [RP-SERV] WSRP Sample Service Implementation WSDL

1449 [http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp\\_service.wsdl](http://www.oasis-open.org/committees/wsrp/specifications/version1/wsrp_service.wsdl)

1450

1451 [RR-WSDL] Registering web services in an ebXML Registry version 1.0.

1452 <http://www.oasis-open.org/apps/org/workgroup/regrep/download.php/1636/OASIS-Registry-TC-Registering-web-services-in-an-ebXML-Registry.doc>

1453

1454

1455

[RP-PRIM] WSRP Primer

1456

<http://www.oasis-open.org/committees/download.php/9165/wsrp-primer-1.0-draft-0.9.pdf>

1457

1458

[WSDL-Primer] Web Services Description Language (WSDL) Version 2.0 Part 0: Primer

1459

<http://dev.w3.org/cvsweb/~checkout~/2002/ws/desc/wsdl20/wsdl20-primer.html>

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