

# HP SOA Systinet

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## Reference Guide

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# About this Guide

Welcome to HP SOA Systinet, the foundation of Service Oriented Architecture, providing an enterprise with a single place to organize, understand, and manage information in its SOA. The standards-based architecture of SOA Systinet maximizes interoperability with other SOA products.



HP Software controls access to components of SOA Systinet with a license. This document describes the full functionality of SOA Systinet including licensed components. If your license does not include these licensed components, their features are not available.

## In this Guide

The SOA Systinet Reference Guide provides a detailed look at the architecture of SOA Systinet.

It contains the following parts:

- [Part I, “SOA Systinet Repository”](#)

A guide to the structure and format of the repository.

- [Part II, “Architecture Model”](#)

A guide to the default SOA Definition Model used in SOA Systinet.

## Document Conventions

This document uses the following typographical conventions:

<b>run.bat make</b>	Script name or other executable command plus mandatory arguments.
<code>--help</code>	Command-line option.
either   or	Choice of arguments.
<i>replace_value</i>	Command-line argument that should be replaced with an actual value.

<code>{ arg1   arg2 }</code>	Choice between two command-line arguments where one or the other is mandatory.
<code>java -jar hpsystinet.jar</code>	User input.
<code>C:\System.ini</code>	File names, directory names, paths, and package names.
<code>a.append(b);</code>	Program source code.
<code>server.Version</code>	Inline Java class name.
<code>getVersion()</code>	Inline Java method name.
<b>Shift+N</b>	Combination of keystrokes.
<b>Service View</b>	Label, word, or phrase in a GUI window, often clickable.
<b>OK</b>	Button in a user interface.
<b>New→Service</b>	Menu option.

## Documentation Updates

This guide's title page contains the following identifying information:

- Software version number, which indicates the software version
- Document release date, which changes each time the document is updated
- Software release date, which indicates the release date of this version of the software

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# Part I. SOA Systinet Repository

This part is a reference to the format and structure of the repository.

This part contains the following chapters:

- [Chapter 1, Repository Element Formats.](#)

The XML representation of elements in the repository.

- [Chapter 2, Collections](#)

The default resource collections contained in SOA Systinet.

- [Chapter 3, Default ACL Configuration](#)

The default user and group permissions applied to newly created artifacts.

- [Chapter 4, Resource Serialization Schema](#)

The XML representation of resources and their metadata.



# 1 Repository Element Formats

The repository is composed of resources. A resource is a document or collection. Collections are containers of documents. Collection can also contain collection.

A resource is described by data and metadata. For each resource, there is an association with various types of data and metadata.

Each resource in the repository can be represented using a canonical XML format. A REST-based application program interface uses this format. For more details, see the API in the Developer Guide.

The sections that follow describe resources in XML elements of this format, starting with the root element resource. The target namespace of the schema for a canonical XML format is

<http://systinet.com/2005/05/soa/resource>. The complete schema is given in [Chapter 4, Resource Serialization Schema](#).

*Metadata from nature of SOA Systinet can be divided into two groups: general metadata and SOA artifacts. General metadata describe documents in general repository terms such as revision, owner or creator. SOA artifacts describe documents in terms of Service Oriented Architecture — represented by SOA Definition Model (SDM) — such as lifecycle stage or relationship. Also descriptor or SDM descriptor are used in SOA Systinet; they're both synonyms for SOA artifacts.*

The types of metadata associated with a resource are summarized in the following table:

**Table 1. Data Associated with Resources**

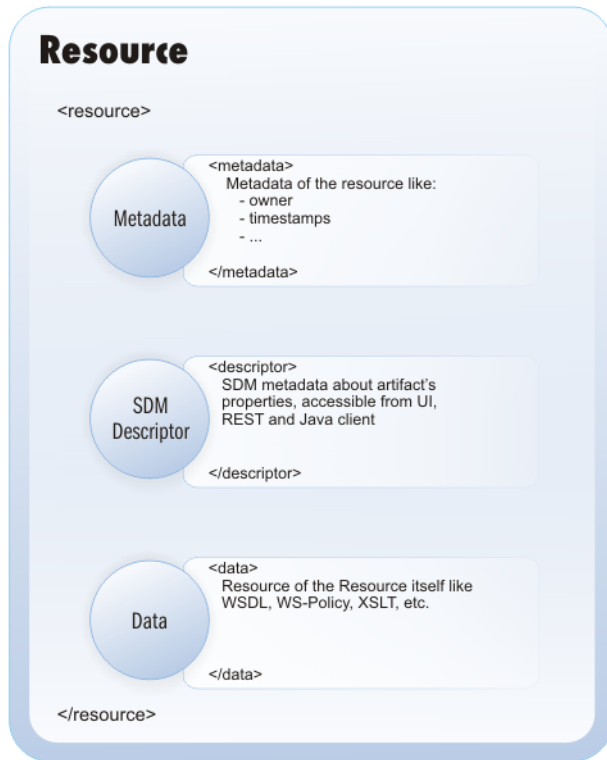
Element	Description
<a href="#">data on page 22</a>	The document content, or if the resource is a collection, a representation listing the resources it contains.
<a href="#">descriptor on page 22</a>	Description of SOA artifacts.

Element	Description
<a href="#">metadata on page 17</a>	Other metadata including: <ul style="list-style-type: none"> <li>• miscellaneous properties of the resource such as its title</li> <li>• relationships with other documents</li> <li>• revision history</li> <li>• extensions. That is, elements of a different namespace used to implement features defined at a higher level.</li> </ul>
<a href="#">acl on page 21</a>	Description of Access Control Lists.

## Resource Layout

SDM metadata is available as artifact descriptors via the REST interface. This metadata forms part of the resource representation.

**Figure 1. REST Resource Layout.**



An artifact descriptor representation of the resource can be obtained using [desc](#) within the REST interface – the URL has a format like this:

```
http://hostname:port/soa/systinet/platform/rest/repository/businessServiceArtifacts/  
FTPBusinessService?desc
```

An XML schema description for the artifact descriptors is available in the directory `SOA_HOME/conf/sdm/xsd`.



The descriptor of the document must be valid for the collection, in which it is located. This means that it is not possible to create a document with descriptor in collection which is not described in SDM or create for example a person artifact in `wsdl:s` collection.

Once the server is started, you may find a low-level technical description of the SDM either in the file `SOA_HOME/conf/sdm/sdmConfig.html` or in the repository:

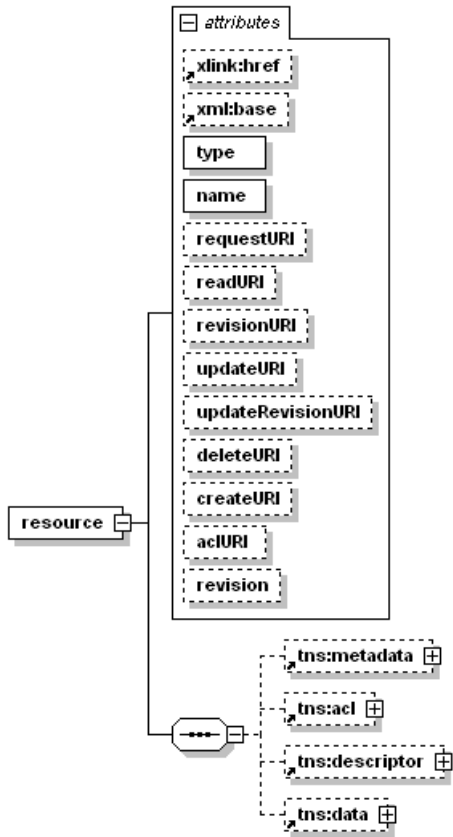
- <http://localhost:8080/soa/systinet/platform/rest/repository/sdm/sdmConfig.html>



Please change the hostname and the port in the URL according to your installation settings.

## resource

This is the root element of the XML representation of resources.



The high level structure was introduced in the Concept Guide and is reflected in [Table 3, "Content"](#).

Many of the attributes are required http responses, as described in REST Representations in the Developer Guide.

**Table 2. Attributes**

Name	Description
xlink:href	URL of this resource (without any URL query parameters)

Name	Description
xml:base	XML Base URL, used as base for relative URIs
type	collection, or document for documents
name	Name (without parent collection path, not the same as SDM artifact name)
revision	Revision of the resource
requestURI	The URL of the http request that resulted in this response
createURI	These URLs can be used to perform the corresponding operations on the resource. To run the correct HTTP operation (GET or POST) must be used
readURI	
updateURI	
deleteURI	
undeleteURI	
purgeURI	
deleteRevisionURI	URI for the delete operation, which fails when the last revision is not this revision (optimistic locking)
purgeRevisionURI	URI for the purge operation, which fails when the last revision is not this revision (optimistic locking)
revisionURI	URL to GET this revision of the resource
updateRevisionURI	URI for the update operation, which fails when the last revision is not this revision (optimistic locking)
aclURI	URL to GET the XML http resource serialization with ACL section
viewURI	URL which redirects the browser to the resource's web UI representation (if available)
viewRevisionURI	URL which redirects the browser to the resource's web UI representation (if available) of this revision

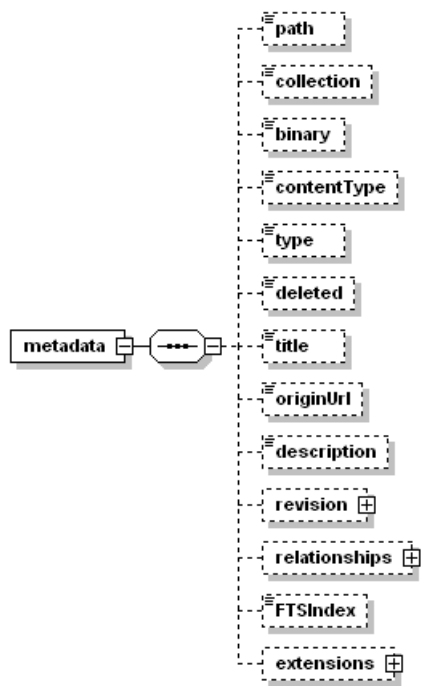
**Table 3. Content**

Element	Description
acl	See <a href="#">acl</a> on page 21



Element	Description
descriptor	See <a href="#">descriptor</a> on page 22
data	See <a href="#">data</a> on page 22
metadata	See <a href="#">metadata</a> on page 17

## metadata

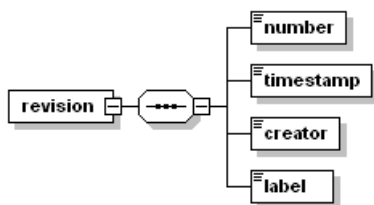


The element `metadata` can contain a number of simple elements representing properties of the resource.

**Table 4. Content**

Element	Description
path	URL of the resource relative to the database path
collection	URL of the containing collection
binary	Is the resource binary (else its content is XML)
contentType	text/xml for XML documents, something else for binary documents
type	collection or document
deleted	0 or 1
title	Metadata title of the resource (not the same as the SDM artifact name)
originUrl	URL of the original data source. Used for synchronization
description	Metadata description of the resource (not the same as the SDM artifact description)
owner	Username who owns the resource (the first creator)
revision	See <a href="#">revision on page 18</a>
relationships	See <a href="#">relationships on page 19</a>
FTSIndex	FullText search flag (for collection only). If set, then on the collection a fulltext searched can be run
cached	Flag indicating if the resource is cached
checksum	Server's resource checksum
extensions	See <a href="#">extensions on page 21</a>

## revision



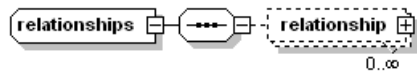
The element `revision` contains the following mandatory elements.

**Table 5. Content**

Element	Description
<code>number</code>	Integer version number
<code>timestamp</code>	When the revision was created
<code>creator</code>	The user who created the revision
<code>label</code>	Text description

For more information see the Revision History section in the HP Systinet User Guide.

relationships

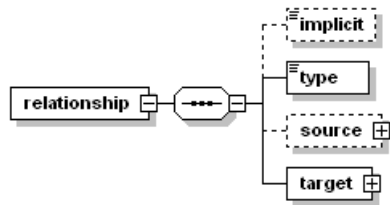


The element `relationships` contains zero or more `relationship` elements.

**Table 6. Content**

Element	Description
<code>relationship</code>	See <a href="#">relationship</a> on page 19

relationship

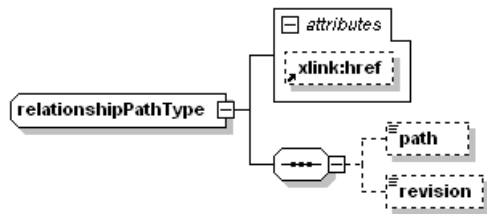


Each element `relationship` contains the following elements.

**Table 7. Content**

Element	Description
deleted	A flag indicating that the relationship points to a deleted or purged resource
type	Specification of the relationship type in the repository
source	Location of the source document in the repository. See <a href="#">relationshipPathType</a> on page 20
target	Location of the target document in the repository. See <a href="#">relationshipPathType</a> on page 20
extensions	See <a href="#">extensions</a> on page 21

## relationshipPathType



This is the element containing the `source` and `target` information for relationship elements.

**Table 8. Attributes**

Name	Description
<code>xlink:href</code>	The relative URI (resolved to <code>xml:base</code> ) of the source or target revision in the repository

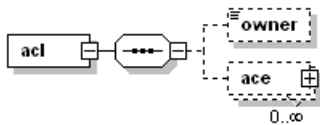
**Table 9. Content**

Element	Description
<code>path</code>	The relative path of the source or target in the repository.
<code>revision</code>	An integer revision number (See Resource Revision Identification in the Developer Guide)
<code>datetime</code>	ISO8601 datetime value of timeslice (See Resource Revision Identification in the Developer Guide)

## extensions

The optional element `extensions` can contain a sequence of elements from any namespace. It is used to meet requirements that the repository does not explicitly cater for.

## acl

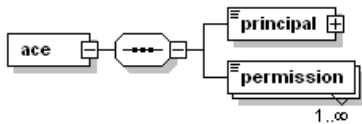


The element `acl` can have an `owner` element and one or more `ace` elements.

**Table 10. Content**

Element	Description
<code>owner</code>	The user who owns the resource
<code>ace</code>	See <a href="#">ace</a> on page 21

## ace



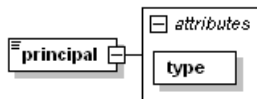
The element `ace` specifies one or more permissions that a user or group has for the resource.

**Table 11. Content**

Element	Description
<code>principal</code>	See <a href="#">principal</a> on page 22
<code>permission</code>	One of:

	<ul style="list-style-type: none"> <li>• read</li> <li>• write</li> </ul>
--	---

## principal



The element `principal` contains the name of a user or group.

**Table 12. Attributes**

Name	Description
type	user OR group

## descriptor

If the resource is an SOA artifact, a `descriptor` element may contain metadata describing it. This metadata represents the properties of the artifact as specified in Artifacts in the Concept Guide. This schema allows any element content from another namespace because it is designed to be general purpose where possible. However, in SOA Systinet the content will comply to one of the schemas included in the distribution directory `etc/sdm/xsd`.

## data

The element `data` contains the content or other representation of the resource. The content is one of the optional elements in [Table 14, "Content"](#).

**Table 13. Attributes**

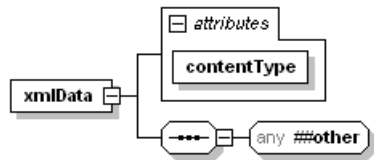
Name	Description
representation	One of:

	<ul style="list-style-type: none"> <li>• <code>list</code> denotes a collection list</li> <li>• <code>data</code> denotes binary data</li> <li>• <code>xmldata</code> denotes XML data</li> <li>• <code>history</code> denotes history</li> <li>• <code>FTSResult</code> denotes a fulltext search result</li> </ul>
--	--

**Table 14. Content**

Element	Description
<code>resource</code>	For collection list, history and fulltext search representations, it holds a number of resource elements. See <a href="#">resource on page 14</a>
<code>binaryData</code>	For binary documents. See <a href="#">binaryData on page 24</a>
<code>xmlData</code>	For XML documents. See <a href="#">xmlData on page 23</a>

## xmlData

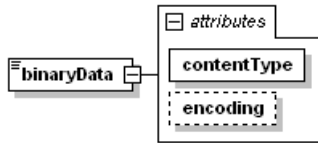


The element `xmlData` is used in `data` to represent the data of an XML document. The content can be any XML element.

**Table 15. Attributes**

Name	Description
<code>contentType</code>	The specific MIME type of this XML document

## binaryData

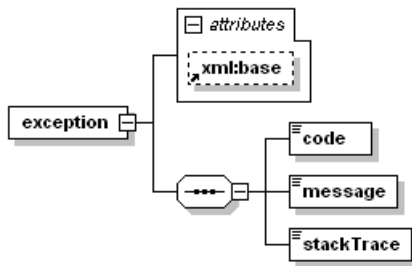


The element `binaryData` is the alternative to `xmlData` and allows for other data formats. If encoding is not set, then the element contains text data.

**Table 16. Attributes**

Name	Description
<code>contentType</code>	The MIME type
<code>encoding</code>	Currently the only allowed value is <code>base64</code>

## exception



The element `exception` is defined in the resource schema for use with the http interface described in REST Interface in the Developer Guide.

**Table 17. Attributes**

Name	Description
<code>xml:base</code>	XML Base URL, used as a base for relative URIs



**Table 18. Content**

Element	Description
code	exception code – string identifying the exception.  If this element was empty, that would mean that the exception was not anticipated internally
message	Exception message
stackTrace	JVM stack trace



---

## 2 Collections

A collection is a type of repository resource. There are two kinds of collections:

- Generic repository collections.
- Collections defined by the SDM.

The list of collections can be found in the `SOA_HOME/conf/sdm/sdm.xml` file.



## 3 Default ACL Configuration

SOA Systinet permits you to configure the default ACL to apply to newly created artifacts.

The default ACL is represented XML in the following structure:

```
<def:defaultAces xmlns:def="http://soa.hp.com/2008/04/security/defaultAcl">
  <!-- all artifacts of type myArtifact will have granted READ to group system#everyone -->
  <def:defaultAce action="READ" principalCategory="GROUP" principalName="system#everyone">
    <def:condition category="RESOURCE_TYPE" value="myArtifact"/>
  </def:defaultAce>

  <!-- all artifacts of type myArtifact created by joe will have granted WRITE to group system#everyone -->
  <def:defaultAce action="WRITE" principalCategory="GROUP" principalName="system#everyone">
    <def:condition category="RESOURCE_TYPE" value="myArtifact"/>
    <def:condition category="USER" value="joe"/>
  </def:defaultAce>

  <!-- all artifacts of type myArtifact created by member of group developers will have granted WRITE to group developer -->
  <def:defaultAce action="WRITE" principalCategory="GROUP" principalName="developer">
    <def:condition category="RESOURCE_TYPE" value="myArtifact"/>
    <def:condition category="GROUP" value="developers"/>
  </def:defaultAce>

  <!-- all artifacts will have granted READ to GROUP managers -->
  <def:defaultAce action="READ" principalCategory="USER" principalName="managers">
  </def:defaultAce>
</def:defaultAces>
```

The default ACL is composed of default ACEs. The default ACE is a normal ACE (used in the artifact ACL) composed of actions (READ, WRITE), a principal identification, and a list of conditions.

When a new artifact is created, the artifact ACL only contains ACEs for which all the ACE conditions are fulfilled or if the ACE has no conditions.

The ACE condition is composed of the following categories and values:

- **category RESOURCE\_TYPE**

The condition matching the artifact type; at most one condition of this category can be given.

The value is the local name of the artifact type. The condition is fulfilled when the value matches the local name of the created artifact.

- **category USER**

The condition matching the creator of the artifact; at most one condition of this category can be given.

The value is the username. The condition is fulfilled when the value matches the creator's username.

- **category GROUP**

The condition matching the group membership of artifact's creator; zero or more conditions of this category can be given (the creator must be member of all given groups).

The value is the group name. The condition is fulfilled when the creator is member of the group identified by value.

## 4 Resource Serialization Schema

This schema specifies the XML representation of resources and their metadata. XQueries act on resources in this format. It is also used by the REST XML communications model described in REST Representations in the Developer Guide.

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xlink="http://www.w3.org/1999/xlink"
  xmlns:rest="http://systinet.com/2005/05/soa/resource"
  xmlns:xml="http://www.w3.org/XML/1998/namespace"
  targetNamespace="http://systinet.com/2005/05/soa/resource"
  elementFormDefault="qualified">

  <xsd:import namespace="http://www.w3.org/1999/xlink" schemaLocation="xlink.xsd"/>
  <xsd:import namespace="http://www.w3.org/XML/1998/namespace" schemaLocation="xml.xsd"/>

  <!-- Serialization of Resource in REST -->
  <xsd:element name="resource">
    <xsd:complexType>
      <xsd:sequence>
        <xsd:element ref="rest:metadata" minOccurs="0" maxOccurs="1"/>
        <xsd:element ref="rest:acl" minOccurs="0" maxOccurs="1"/>
        <xsd:element ref="rest:descriptor" minOccurs="0" maxOccurs="1"/>
        <xsd:element ref="rest:data" minOccurs="0" maxOccurs="1"/>
        <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
      </xsd:sequence>

      <!-- URI of the resource -->
      <xsd:attribute ref="xlink:href" use="optional"/>
      <!-- XML base -->
      <xsd:attribute ref="xml:base" use="optional"/>
      <!-- type of the resource -->
      <xsd:attribute name="type" type="rest:resourceType" use="required"/>
      <!-- name of the resource -->
      <xsd:attribute name="name" type="xsd:string" use="required"/>
      <!-- used request URI -->
      <xsd:attribute name="requestURI" type="xsd:anyURI" use="optional"/>
      <!-- readURI -->
      <xsd:attribute name="readURI" type="xsd:anyURI" use="optional"/>
    </xsd:complexType>
  </xsd:element>
</xsd:schema>
```

```

<!-- revisionURI -->
<xsd:attribute name="revisionURI" type="xsd:anyURI" use="optional"/>
<!-- updateURI -->
<xsd:attribute name="updateURI" type="xsd:anyURI" use="optional"/>
<!-- update revision URI -->
<xsd:attribute name="updateRevisionURI" type="xsd:anyURI" use="optional"/>
<!-- deleteURI -->
<xsd:attribute name="deleteURI" type="xsd:anyURI" use="optional"/>
<!-- delete Revision URI -->
<xsd:attribute name="deleteRevisionURI" type="xsd:anyURI" use="optional"/>
<!-- undeleteURI -->
<xsd:attribute name="undeleteURI" type="xsd:anyURI" use="optional"/>
<!-- purge URI-->
<xsd:attribute name="purgeURI" type="xsd:anyURI" use="optional"/>
<!-- purge Revision URI-->
<xsd:attribute name="purgeRevisionURI" type="xsd:anyURI" use="optional"/>
<!-- view URI -->
<xsd:attribute name="viewURI" type="xsd:anyURI" use="optional"/>
<!-- view revision URI -->
<xsd:attribute name="viewRevisionURI" type="xsd:anyURI" use="optional"/>
<!-- createURI (for collection only)-->
<xsd:attribute name="createURI" type="xsd:anyURI" use="optional"/>
<!-- acl uri -->
<xsd:attribute name="aclURI" type="xsd:anyURI" use="optional"/>
<!-- revision -->
<xsd:attribute name="revision" type="xsd:int" use="optional"/>

<xsd:anyAttribute namespace="##any" processContents="lax"/>
</xsd:complexType>
</xsd:element>

<xsd:element name="metadata">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="path" type="xsd:anyURI" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="collection" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="binary" type="xsd:boolean" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="contentType" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="type" type="rest:resourceType" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="deleted" type="xsd:boolean" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="title" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="originUrl" type="xsd:anyURI" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="description" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="owner" type="xsd:string" minOccurs="0" maxOccurs="1"/>

      <xsd:element name="revision" minOccurs="0" maxOccurs="1">
        <xsd:complexType>

```



```

        <xsd:sequence>
            <xsd:element name="number" type="xsd:int" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="timestamp" type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="creator" type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="label" type="xsd:string" minOccurs="1" maxOccurs="1"/>
            <xsd:element name="last" type="xsd:int" nillable="true" minOccurs="0"
maxOccurs="1"/>
            <xsd:any namespace="##any" processContents="lax" minOccurs="0"
maxOccurs="unbounded"/>
        </xsd:sequence>
    </xsd:complexType>
</xsd:element>

    <xsd:element name="relationships" type="rest:relationships" minOccurs="0" maxOccurs="1"/>
    <xsd:element name="FTSIndex" type="xsd:boolean" minOccurs="0" maxOccurs="1"/>
    <xsd:element name="cached" type="xsd:boolean" minOccurs="0" maxOccurs="1"/>
    <xsd:element name="checksum" type="xsd:long" minOccurs="0" maxOccurs="1"/>

    <xsd:element ref="rest:extensions" minOccurs="0" maxOccurs="1"/>
    <xsd:element name="location" type="xsd:string" minOccurs="0" maxOccurs="1"/>
    <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
</xsd:sequence>
</xsd:complexType>
</xsd:element>

<xsd:complexType name="relationships">
    <xsd:sequence>
        <xsd:element name="relationship" minOccurs="0" maxOccurs="unbounded">
            <xsd:complexType>
                <xsd:sequence>
                    <xsd:element name="deleted" type="xsd:boolean" minOccurs="0" maxOccurs="1"/>
                    <xsd:element name="type" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                    <xsd:element name="source" type="rest:relationshipPathType" minOccurs="0"
maxOccurs="1"/>
                    <xsd:element name="target" type="rest:relationshipPathType" minOccurs="1"
maxOccurs="1"/>
                    <xsd:element ref="rest:extensions" minOccurs="0" maxOccurs="1"/>
                    <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
                </xsd:sequence>
            </xsd:complexType>
        </xsd:element>
    </xsd:sequence>
</xsd:complexType>

<xsd:complexType name="relationshipPathType">
    <xsd:sequence>

```

```

        <xsd:element name="path" type="xsd:anyURI" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="revision" type="xsd:int" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="datetime" type="xsd:dateTime" minOccurs="0" maxOccurs="1"/>
        <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute ref="xlink:href" use="optional"/>
</xsd:complexType>

<xsd:element name="extensions">
    <xsd:complexType>
        <xsd:sequence>
            <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
        </xsd:sequence>
    </xsd:complexType>
</xsd:element>

<xsd:element name="descriptor">
    <xsd:complexType>
        <xsd:sequence>
            <xsd:any namespace="##other" processContents="skip" minOccurs="0" maxOccurs="1"/>
        </xsd:sequence>
    </xsd:complexType>
</xsd:element>

<xsd:element name="data">
    <xsd:complexType>
        <xsd:sequence>
            <!-- for representation of listing of collections-->
            <xsd:element ref="rest:resource" minOccurs="0" maxOccurs="unbounded"/>
            <!-- for representation of binary data (see encoding and contentType)-->
            <xsd:element name="binaryData" minOccurs="0" maxOccurs="1">
                <xsd:complexType>
                    <xsd:simpleContent>
                        <xsd:extension base="xsd:string">
                            <xsd:attribute name="contentType" type="xsd:string" use="required"/>
                            <xsd:attribute name="encoding" use="optional">
                                <xsd:simpleType>
                                    <xsd:restriction base="xsd:string">
                                        <xsd:enumeration value="base64"/>
                                    </xsd:restriction>
                                </xsd:simpleType>
                            </xsd:attribute>
                        </xsd:extension>
                    </xsd:simpleContent>
                </xsd:complexType>
            </xsd:element>
            <!-- for representation of XML data (see contentType on "content")-->

```

```

<xsd:element name="xmlData" minOccurs="0" maxOccurs="1">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:any processContents="skip" namespace="##other" minOccurs="1" maxOccurs="1"/>

      </xsd:sequence>
      <xsd:attribute name="contentType" type="xsd:string" use="optional"/>
      <xsd:attribute ref="xml:base" use="optional"/>
    </xsd:complexType>
  </xsd:element>
  <!-- for representation of XQuery result -->
  <xsd:element name="xqueryResult" minOccurs="0" maxOccurs="unbounded">
    <xsd:complexType>
      <xsd:choice>
        <xsd:element name="textResult" type="xsd:string" minOccurs="1" maxOccurs="1"/>

        <xsd:element name="nodeResult" minOccurs="1" maxOccurs="1">
          <xsd:complexType>
            <xsd:sequence>
              <xsd:any processContents="skip" namespace="##other" minOccurs="1"
maxOccurs="1"/>

              </xsd:sequence>
            </xsd:complexType>
          </xsd:element>
        </xsd:choice>
      </xsd:complexType>
    </xsd:element>

    <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>

  <xsd:attribute name="representation">
    <xsd:simpleType>
      <xsd:restriction base="xsd:string">
        <xsd:enumeration value="list"/>
        <!-- collection's sub-resources -->
        <xsd:enumeration value="data"/>
        <!-- binary document's data -->
        <xsd:enumeration value="xmldata"/>
        <!-- xml document's data-->
        <xsd:enumeration value="history"/>
        <!-- history of document -->
        <xsd:enumeration value="xqueryResult"/>
        <!-- xquery result -->
        <xsd:enumeration value="FTSResult"/>
        <!-- full text search result -->
      </xsd:restriction>

```

```

        </xsd:simpleType>
    </xsd:attribute>

    <!-- page, pageSize and totalItemCount: used only if representation is list and paging is turned
on -->
    <xsd:attribute name="page" use="optional">
        <xsd:simpleType>
            <xsd:restriction base="xsd:unsignedInt">
                <xsd:minInclusive value="1"/>
            </xsd:restriction>
        </xsd:simpleType>
    </xsd:attribute>
    <xsd:attribute name="pageSize" use="optional">
        <xsd:simpleType>
            <xsd:restriction base="xsd:unsignedInt">
                <xsd:minInclusive value="1"/>
            </xsd:restriction>
        </xsd:simpleType>
    </xsd:attribute>
    <xsd:attribute name="totalItemCount" type="xsd:unsignedInt" use="optional"/>

    </xsd:complexType>
</xsd:element>

<xsd:simpleType name="resourceType">
    <xsd:restriction base="xsd:string">
        <xsd:enumeration value="collection"/>
        <xsd:enumeration value="document"/>
        <xsd:enumeration value="service"/>
    </xsd:restriction>
</xsd:simpleType>

<xsd:simpleType name="permission">
    <xsd:restriction base="xsd:string">
        <xsd:enumeration value="read"/>
        <xsd:enumeration value="write"/>
    </xsd:restriction>
</xsd:simpleType>

<xsd:element name="acl">
    <xsd:complexType>
        <xsd:sequence>
            <xsd:element name="owner" type="xsd:string" minOccurs="0" maxOccurs="1"/>
            <xsd:element name="ace" minOccurs="0" maxOccurs="unbounded">
                <xsd:complexType>
                    <xsd:sequence>
                        <xsd:element name="principal" minOccurs="1" maxOccurs="1">

```

```

        <xsd:complexType>
            <xsd:simpleContent>
                <xsd:extension base="xsd:string">
                    <xsd:attribute name="type" use="required">
                        <xsd:simpleType>
                            <xsd:restriction base="xsd:string">
                                <xsd:enumeration value="user"/>
                                <xsd:enumeration value="group"/>
                            </xsd:restriction>
                        </xsd:simpleType>
                    </xsd:attribute>
                </xsd:extension>
            </xsd:simpleContent>
        </xsd:complexType>
    </xsd:element>
    <xsd:element name="permission" type="rest:permission" minOccurs="1"
maxOccurs="unbounded"/>
        </xsd:sequence>
    </xsd:complexType>
</xsd:element>
    <xsd:element name="effectivePermissions" minOccurs="0" maxOccurs="1">
        <xsd:complexType>
            <xsd:sequence>
                <xsd:element name="permission" type="rest:permission" minOccurs="1"
maxOccurs="unbounded"/>
            </xsd:sequence>
        </xsd:complexType>
    </xsd:element>
    <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
</xsd:sequence>
</xsd:complexType>
</xsd:element>

<!-- Serialization of exception in REST -->
<xsd:element name="exception">
    <xsd:complexType>
        <xsd:sequence>
            <xsd:element name="code" type="xsd:QName"/>
            <xsd:element name="message" type="xsd:string"/>
            <xsd:element name="stackTrace" type="xsd:string"/>
            <xsd:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
        </xsd:sequence>
        <xsd:attribute ref="xml:base" use="optional"/>
        <!-- XML base -->
    </xsd:complexType>
</xsd:element>
</xsd:schema>

```



# Part II. Architecture Model

This part describes the structure and content of the SDM model used in SOA Systinet. It contains the following chapters:

- [Chapter 5, SOA Definition Model](#)

A guide to the content and hierarchy of the SDM model.

- [Chapter 6, Taxonomy Schema](#)

A guide to the format of significant taxonomies in SOA Systinet.

- [Chapter 7, Policy Schema](#)

The schema structure on which Policy Manager bases technical policies.

- [Chapter 8, Assertion Schema](#)

The schema of assertions and collections of assertions. Assertions are the atomic level of policies created by Policy Manager.





## 5 SOA Definition Model

The SOA Definition Model (SDM) defines a hierarchy of artifacts and their properties.

This chapter describes the default SDM in the following sections:

- [SOA Definition Model Artifacts Summary on page 41](#)

The list of all the artifact types in the SDM.

- [Property Groups on page 45](#)

Describes the sets of properties that artifact types can inherit.

- [Artifacts on page 50](#)

Describes each artifact and its properties and inheritance.

- [Property Types on page 235](#)

Describes the various property types in the SDM.

### SOA Definition Model Artifacts Summary

**Table 19. SOA Definition Model Artifacts Summary**

Name	Description
<a href="#">Agreement on page 50</a>	Represents agreement artifacts
<a href="#">Aoi Preparation Tool on page 51</a>	Aoi Preparation Tool
<a href="#">Artifact on page 53</a>	Represents an SOA artifact
<a href="#">Assertion on page 56</a>	A definition of a ws-policy assertion.

<b>Name</b>	<b>Description</b>
<a href="#">BAC Service Discovery Tool on page 59</a>	Provides Service Discovery for HP Business Availability Center, BAC (version 7.5 and higher)
<a href="#">BAC Entity on page 60</a>	BAC entity - UCMDB CI
<a href="#">BAC / UCMDB Server on page 63</a>	Represents a BAC / UCMDB Server
<a href="#">Business Policy on page 65</a>	Document in the format described by the WS-Policy attachment
<a href="#">Business Service on page 67</a>	Service described in business terms that can be implemented using one of more Web Services or other Implementations. Contracts enable re-use of Business Services
<a href="#">Categorization on page 72</a>	Represents an artifact used for categorization
<a href="#">Collection on page 73</a>	Artifact modeling location space collections
<a href="#">Contact on page 75</a>	Describes a contact
<a href="#">Contract on page 78</a>	Represents a contract
<a href="#">Request on page 81</a>	Represents a contract request
<a href="#">Documentation on page 84</a>	Information about a service or related items
<a href="#">DTD on page 88</a>	DTD document
<a href="#">Endpoint on page 91</a>	Endpoint of implementation.
<a href="#">External entity on page 95</a>	Represents any external entity.
<a href="#">Application on page 97</a>	Application artifact
<a href="#">BPEL Process on page 102</a>	BPEL Process
<a href="#">Process Implementation on page 107</a>	Represents business process implementations
<a href="#">Operation on page 112</a>	Represents a web service operation
<a href="#">Business Process on page 115</a>	Represents business processes.
<a href="#">Project on page 119</a>	Represents a Project
<a href="#">SCA on page 122</a>	SCA Artifact
<a href="#">STM Server on page 126</a>	Service Test Management (STM) Server

<b>Name</b>	<b>Description</b>
<a href="#">Impact Tool on page 128</a>	Impact Tool provides the ability to list all artifacts related to a specific artifact
<a href="#">Implementation on page 130</a>	Implementation of a service
<a href="#">Interface on page 134</a>	Metadata representing a Web Service
<a href="#">Job Tool on page 136</a>	Starts a simple job
<a href="#">Lifecycle Validation Scheduling Tool on page 137</a>	Provides Service Lifecycle Validation Scheduling
<a href="#">SOA on page 139</a>	Intangible artifact of a type significant at the architectural level
<a href="#">Organizational Unit on page 140</a>	Represents an organizational unit
<a href="#">User Profile on page 142</a>	Represents a User Profile
<a href="#">Policy on page 144</a>	Describes a policy
<a href="#">Validate Compliance Tool on page 146</a>	Validate Compliance Tool
<a href="#">Integration on page 147</a>	Registries used for governance
<a href="#">Report on page 149</a>	Report is the result of a tool or task execution
<a href="#">Reporting Tool on page 152</a>	Posts a document to a specified URL to execute build of a report
<a href="#">Content on page 153</a>	SOA related documents
<a href="#">Resource Information Tool on page 155</a>	Resource Information Tool provides basic information about repository resources
<a href="#">Schema on page 156</a>	Represents a schema artifact
<a href="#">Schematron on page 157</a>	Schematron schema in a version of the Schematron language
<a href="#">Schematron Tool on page 160</a>	Schematron Integrity Tool provides the ability to validate resources using the schematron validation language
<a href="#">Schematron XSLT on page 162</a>	Schematron schema preprocessed to XSLT
<a href="#">Schema Validity Tool on page 165</a>	Validity Tool provides the ability to validate XML documents against XML schema documents

<b>Name</b>	<b>Description</b>
<a href="#">Search And Transform on page 167</a>	Document defining a search, query or transformation
<a href="#">SLO on page 168</a>	Represents a Service Level Objective (SLO)
<a href="#">SOA Policy Enforcer Server on page 173</a>	SOA Policy Enforcer Server
<a href="#">Saved Search on page 175</a>	Representation of criteria for a search
<a href="#">Sync Tool on page 178</a>	Provides resource synchronization
<a href="#">System on page 179</a>	System Artifacts
<a href="#">Task on page 180</a>	A task is a tool prepared for execution. It can be scheduled for automatic execution
<a href="#">Taxonomy on page 182</a>	UDDI compatible taxonomy definition
<a href="#">Tool on page 185</a>	Represents a tool
<a href="#">Compliance Trend Data Cleaner on page 187</a>	Compliance Trend Data Cleaner
<a href="#">Policy Compliance Tool on page 189</a>	Automatically run validations required for trend report construction
<a href="#">UDDI Channel on page 190</a>	UDDI Registry account used for synchronization
<a href="#">UDDI Entity on page 192</a>	UDDI entity - Business Entity, Business Service, Binding Template or TModel
<a href="#">UDDI Registry on page 195</a>	Represents a UDDI Registry
<a href="#">Usage Plan on page 197</a>	Represents a usage plan for a contract
<a href="#">Web Application on page 200</a>	A web application (or web interface) is also a service. While it is accessible only by a human, it uses other services (soap services, databases) to function
<a href="#">SOAP Service on page 204</a>	Web service is a software module whose functionality is accessible using the SOAP protocol. Web services are HTTP based and usually described using WSDL
<a href="#">WSDL on page 209</a>	Web Services Description Language document describing a Web Service
<a href="#">WS-Policy on page 214</a>	Document in the format described by the WS-Policy specification

Name	Description
<a href="#">XML Schema on page 218</a>	XML Schema document
<a href="#">XML Service on page 222</a>	Any XML Service is in fact a Web Service that does not conform to the existing WS-Standards. It usually provides HTTP GET access for ease of use, avoiding the need for sophisticated SOAP frameworks
<a href="#">XQuery on page 226</a>	XQuery Document
<a href="#">XQuery Tool on page 230</a>	XQuery Tool provides the ability to execute XQuery resources
<a href="#">XSLT on page 231</a>	XSLT Transformation Document

## Property Groups

### Consumer Properties

LocalName: consumerProperties

**Table 20. Properties summary**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
consumptionRequest (Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]

### Data attachement properties

LocalName: dataAttachmentProperties

**Table 21. Properties summary**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

## Incoming side of the project content relationship

LocalName: incomingProjectProperties

**Table 22. Properties summary**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from [ <a href="#">Project on page 119</a> ]	[0..1]

## Model Properties

LocalName: modelProperties

**Table 23. Properties summary**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

## Project Properties

LocalName: projectProperties

**Table 24. Properties summary**

LocalName (Label)	Type	Cardinality
completion (Completion [%])	integer	[0..1]
contentRelationshipType (Content)	relation -----> to <a href="#">[Application on page 97, Business Service on page 67, Implementation on page 130, WSDL on page 209, Business Process on page 115, BPEL Process on page 102, SCA on page 122]</a>	[0..*]
endDate (End Date)	date	[0..1]
plannedDate (Planned End Date)	date	[0..1]
startDate (Start Date)	date	[0..1]

## Provider Properties

LocalName: providerProperties

**Table 25. Properties summary**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]

LocalName (Label)	Type	Cardinality
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]
provisionContract (Provision Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
provisionRequest (Provided Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
revokedContract (Revoked Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

## Service Properties

LocalName: serviceProperties

**Table 26. Properties summary**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

## systemProperties

LocalName: systemProperties



**Table 27. Properties summary**

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Version Properties

LocalName: versionProperties

**Table 28. Properties summary**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [WSDL on page 209, XQuery on page 226, XML Schema on page 218, XSLT on page 231, Taxonomy on page 182, Documentation on page 84, DTD on page 88, Schematron XSLT on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, WS-Policy on page 214, Application on page 97, Project on page 119, Business Process on page 115, SCA on page 122, Web Application on page 200, SOAP Service on page 204, XML Service on page 222, BPEL Process on page 102]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [WSDL on page 209, XQuery on page 226, XML Schema on page 218, XSLT on page 231, Taxonomy on page 182, Documentation on page 84, DTD on page 88, Schematron XSLT on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]	[0..1]
version (Version)	text	[0..1]

## Artifacts

### Agreement

LocalName: agreementArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Agreement

Implemented property groups

- [systemProperties on page 48](#)

Description: Represents agreement artifacts

Properties inherited from property groups

**Table 29. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Aoi Preparation Tool

LocalName: aoiPreparationToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Aoi Preparation Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Aoi Preparation Tool

Properties inherited from property groups

**Table 30. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]

LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Artifact

LocalName: artifactBase

Artifact Inheritance Hierarchy:

- [Artifact](#)

Implemented property groups

- [systemProperties on page 48](#)

Direct known subartifacts

- [Agreement on page 50](#)
- [Assertion on page 56](#)
- [Business Policy on page 65](#)
- [Business Service on page 67](#)
- [Categorization on page 72](#)
- [Collection on page 73](#)
- [Contact on page 75](#)
- [Contract on page 78](#)
- [Request on page 81](#)

- Documentation on page 84
- DTD on page 88
- Endpoint on page 91
- External entity on page 95
- Application on page 97
- Process Implementation on page 107
- Operation on page 112
- Business Process on page 115
- Project on page 119
- SCA on page 122
- Implementation on page 130
- Interface on page 134
- SOA on page 139
- Policy on page 144
- Integration on page 147
- Report on page 149
- Content on page 153
- Schema on page 156
- Schematron on page 157
- Schematron XSLT on page 162
- Search And Transform on page 167

- SLO on page 168
- Saved Search on page 175
- System on page 179
- Task on page 180
- Taxonomy on page 182
- Tool on page 185
- UDDI Channel on page 190
- Usage Plan on page 197
- WSDL on page 209
- WS-Policy on page 214
- XML Schema on page 218
- XQuery on page 226
- XSLT on page 231

Description: Represents an SOA artifact

**Table 31. Properties summary**

LocalName (Label)	Type	Cardinality
externalDefinition (Defines)	relation <----- from [ <a href="#">UDDI Entity on page 192</a> , <a href="#">BAC Entity on page 60</a> ]	[0..*]

Properties inherited from property groups

**Table 32. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Assertion

LocalName: assertionArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Assertion



Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: A definition of a ws-policy assertion.

**Table 33. Properties summary**

LocalName (Label)	Type	Cardinality
applicableSourceMimeType (Applicable source MIME type)	text	[0..*]
applicableSourceQName (Applicable source QName)	text	[0..*]
assertionClassification (Assertion Classification)	taxonomy [val, name, taxonomyURI]	[0..1]
assertionQName (Assertion QName)	text	[1..1]
associatedApplication (Associated Application)	taxonomy [val, name, taxonomyURI]	[0..1]
importedBy (Imported by)	relation <----- from [ <a href="#">WS-Policy on page 214</a> , <a href="#">Assertion on page 56</a> , <a href="#">Business Policy on page 65</a> ]	[0..*]
imports (Imports)	relation -----> to [ <a href="#">WS-Policy on page 214</a> , <a href="#">Business Policy on page 65</a> , <a href="#">Assertion on page 56</a> ]	[0..*]
uddiDefinition (UDDI Definition)	relation <----- from [ <a href="#">UDDI Entity on page 192</a> ]	[0..*]

Properties inherited from property groups

**Table 34. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 35. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 36. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## BAC Service Discovery Tool

LocalName: bacDiscoveryToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - BAC Service Discovery Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Provides Service Discovery for HP Business Availability Center, BAC (version 7.5 and higher)

Properties inherited from property groups

**Table 37. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## BAC Entity

LocalName: bacEntityArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- [External entity on page 95](#)
- BAC Entity

Implemented property groups

- [Data attachement properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: BAC entity - UCMDB CI

**Table 38. Properties summary**

LocalName (Label)	Type	Cardinality
externalId (External ID)	text	[0..1]

Properties inherited from property groups

**Table 39. Properties inherited from [Data attachement properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 40. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 41. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## BAC / UCMDB Server

LocalName: bacServerArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Integration on page 147](#)
    - BAC / UCMDB Server

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Represents a BAC / UCMDB Server

**Table 42. Properties summary**

LocalName (Label)	Type	Cardinality
baseUrl (Base URL)	nameUrlPair [url, name]	[1..1]
encryptedPassword (Password)	text	[0..1]
environment (Environment)	taxonomy [val, name, taxonomyURI]	[0..1]
resourceOfUsagePlan [Deprecated] (Usage Plan Resource)	relation <----- from [ <a href="#">Usage Plan on page 197</a> ]	[0..*]
runtimePolicy (Runtime Policy)	relation -----> to [ <a href="#">WS-Policy on page 214</a> ]	[0..*]
ucmdbEncryptedPassword (UCMDB Password)	text	[0..1]
ucmdbUsername (UCMDB Username)	text	[0..1]
username (Username)	text	[0..1]

Properties inherited from property groups

**Table 43. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation ----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation ----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 44. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]



LocalName (Label)	Type	Cardinality
name (Name)	text	[1..1]

## Business Policy

LocalName: businessPolicyArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Business Policy

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Document in the format described by the WS-Policy attachment

**Table 45. Properties summary**

LocalName (Label)	Type	Cardinality
artifactTypeSelector (Artifact Type Selector)	text	[0..1]
associatedApplication (Associated Application)	taxonomy [val, name, taxonomyURI]	[0..1]
excludedArtifactSelector (Excluded Artifact Selector)	text	[0..*]
excludedPropertySelector (Excluded Property Selector)	nameValuePair [val, name]	[0..*]
importedBy (Imported by)	relation <----- from [ <a href="#">WS-Policy on page 214</a> , <a href="#">Assertion on page 56</a> , <a href="#">Business Policy on page 65</a> ]	[0..*]

LocalName (Label)	Type	Cardinality
imports (Imports)	relation -----> to <a href="#">[WS-Policy on page 214, Business Policy on page 65, Assertion on page 56]</a>	[0..*]
includedArtifactSelector (Included Artifact Selector)	text	[0..*]
includedPropertySelector (Included Property Selector)	nameValuePair [val, name]	[0..*]
uddiDefinition (UDDI Definition)	relation <----- from <a href="#">[UDDI Entity on page 192]</a>	[0..*]

Properties inherited from property groups

**Table 46. Properties inherited from [Data attachement properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 47. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]

LocalName (Label)	Type	Cardinality
documentation (Documentation)	relation ----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 48. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Business Service

LocalName: businessServiceArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Business Service

Implemented property groups

- [Consumer Properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Service described in business terms that can be implemented using one of more Web Services or other Implementations. Contracts enable re-use of Business Services

**Table 49. Properties summary**

LocalName (Label)	Type	Cardinality
externalDefinition (Defines)	relation <----- from [ <a href="#">UDDI Entity on page 192</a> , <a href="#">BAC Entity on page 60</a> ]	[0..*]
hpsoaProvidingApplication (Providing Application)	relation <----- from [ <a href="#">Application on page 97</a> ]	[0..*]
providedBy (Provided by)	relation <----- from [ <a href="#">Organizational Unit on page 140</a> , <a href="#">User Profile on page 142</a> ]	[0..*]
r_bsConsistsOf (Consists of)	relation -----> to [ <a href="#">Business Service on page 67</a> ]	[0..*]
r_bsPartOf (Part of)	relation <----- from [ <a href="#">Business Service on page 67</a> ]	[0..*]

LocalName (Label)	Type	Cardinality
r_businessProcess (Business Process)	relation -----> to [Process Implementation on page 107, Business Process on page 115]	[0..*]
r_dependsOn (Depends on)	relation -----> to [Business Service on page 67, Application on page 97, Process Implementation on page 107, Business Process on page 115]	[0..*]
r_hasImpactOn (Has impact on)	relation <----- from [Business Service on page 67, Application on page 97, Business Process on page 115, BPEL Process on page 102]	[0..*]
r_implementsProcess (Process implements)	relation <----- from [Business Process on page 115]	[0..1]
r_serviceType (Service Type)	taxonomy [val, name, taxonomyURI]	[1..1]
service (Implementation)	relation -----> to [Implementation on page 130]	[0..*]
uddiDefinition (UDDI Definition)	relation <----- from [UDDI Entity on page 192]	[0..*]

Properties inherited from property groups

**Table 50. Properties inherited from Consumer Properties on page 45**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [Contract on page 78]	[0..*]
consumptionRequest (Request)	relation <----- from [Request on page 81]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]

**Table 51. Properties inherited from Incoming side of the project content relationship on page 46**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from [Project on page 119]	[0..1]

**Table 52. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 53. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]
provisionContract (Provision Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
provisionRequest (Provided Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
revokedContract (Revoked Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 54. Properties inherited from [Service Properties](#) on page 48**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 55. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 56. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## Categorization

LocalName: categorizationArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Categorization

Implemented property groups

- [systemProperties on page 48](#)



Description: Represents an artifact used for categorization

Properties inherited from property groups

**Table 57. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Collection

LocalName: collectionArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- Collection

Implemented property groups

- [Data attachement properties on page 45](#)
- [systemProperties on page 48](#)

Description: Artifact modeling location space collections

Properties inherited from property groups

**Table 58. Properties inherited from [Data attachement properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 59. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]

LocalName (Label)	Type	Cardinality
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Contact

LocalName: contactArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- Contact

Implemented property groups

- [Consumer Properties on page 45](#)

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Direct known subartifacts

- [Organizational Unit on page 140](#)
- [User Profile on page 142](#)

Description: Describes a contact

**Table 60. Properties summary**

LocalName (Label)	Type	Cardinality
address (Address)	address [addressLines.value, postalCode, stateProvince, addressLines, addressLines.useType, country, city]	[0..1]
contactRole (Contact Role)	taxonomy [val, name, taxonomyURI]	[0..*]
email (Email)	text	[0..*]
geographicalLocation (Geographic Location)	taxonomy [val, name, taxonomyURI]	[0..*]
hpsoaApplicationContact [Deprecated] (Application Contact)	relation -----> to <a href="#">[Application on page 97]</a>	[0..*]
instantMessenger (Instant Messenger)	text	[0..*]
languageCode (Language Code)	taxonomy [val, name, taxonomyURI]	[0..1]
loginName (Login Name)	text	[0..1]
phone (Phone)	text	[0..*]
provides (Provides)	relation -----> to <a href="#">[Business Service on page 67, Implementation on page 130, Project on page 119, Application on page 97, Process Implementation on page 107, Business Process on page 115]</a>	[0..*]

LocalName (Label)	Type	Cardinality
r_contactClassification (Contact classification)	taxonomy [val, name, taxonomyURI]	[0..1]
r_memberOf (Part of)	relation <----- from [ <a href="#">Organizational Unit on page 140</a> ]	[0..*]

Properties inherited from property groups

**Table 61. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
consumptionRequest (Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]

**Table 62. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [ <a href="#">WS-Policy on page 214</a> ]	[0..*]
documentation (Documentation)	relation -----> to [ <a href="#">Documentation on page 84</a> ]	[0..*]

**Table 63. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Contract

LocalName: contractArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Contract

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Represents a contract

**Table 64. Properties summary**

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
acceptedRequest (Accepted Request)	relation -----> to <a href="#">[Request on page 81]</a>	[0..1]
consumerContractor (Consumer)	relation -----> to <a href="#">[Application on page 97, Business Service on page 67, Implementation on page 130, Contact on page 75, Process Implementation on page 107, Business Process on page 115]</a>	[0..1]
contractAcceptedBy (Accepted Contract of)	relation <----- from <a href="#">[WSDL on page 209, XML Schema on page 218, Business Service on page 67, Endpoint on page 91, Application on page 97, Operation on page 112, Business Process on page 115, Web Application on page 200, SOAP Service on page 204, XML Service on page 222, BPEL Process on page 102]</a>	[0..1]
contractState (Contract State)	taxonomy [val, name, taxonomyURI]	[0..1]
obsoletedByContract (Made obsolete by Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..1]
obsoletedByRequest (Made obsolete by Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..1]
obsoletedContract (Obsolete Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
providerContractor (Provider)	relation -----> to <a href="#">[Application on page 97, Business Service on page 67, Implementation on page 130, WSDL on page 209, XML Schema on page 218, Operation on page 112, Endpoint on page 91, Process Implementation on page 107, Business Process on page 115]</a>	[0..1]
r_consumerOwner (Consumer Owner)	relation -----> to <a href="#">[Application on page 97, Business Service on page 67, Implementation on page 130, Contact on page 75, Process Implementation on page 107, Business Process on page 115]</a>	[0..1]
r_ProviderOwner (Provider Owner)	relation -----> to <a href="#">[Application on page 97, Business Service on page 67, Implementation on page 130, WSDL on page 209, XML Schema on page 218, Operation on page 112, Endpoint on page 91, Process Implementation on page 107, Business Process on page 115]</a>	[0..1]

	<a href="#">91, Process Implementation on page 107, Business Process on page 115]</a>	
LocalName (Label)	Type	Cardinality
rejectedContractOf (Rejected Contract of)	relation <----- from [ <a href="#">WSDL on page 209, XML Schema on page 218, Business Service on page 67, Endpoint on page 91, Application on page 97, Operation on page 112, Business Process on page 115, Web Application on page 200, SOAP Service on page 204, XML Service on page 222, BPEL Process on page 102]</a>	[0..1]
rejectedRequest (Rejected Request)	relation -----> to [ <a href="#">Request on page 81]</a>	[0..1]
revokedContractOf (Revoked Contract of)	relation <----- from [ <a href="#">WSDL on page 209, XML Schema on page 218, Business Service on page 67, Endpoint on page 91, Application on page 97, Operation on page 112, Business Process on page 115, Web Application on page 200, SOAP Service on page 204, XML Service on page 222, BPEL Process on page 102]</a>	[0..1]
revokedRequest (Revoked Request)	relation -----> to [ <a href="#">Request on page 81]</a>	[0..1]
slo (SLO)	relation -----> to [ <a href="#">SLO on page 168]</a>	[0..*]
usagePlan [Deprecated] (Usage Plan)	relation -----> to [ <a href="#">Usage Plan on page 197]</a>	[0..1]

Properties inherited from property groups

**Table 65. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [ <a href="#">WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to [ <a href="#">Documentation on page 84]</a>	[0..*]



**Table 66. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Request

LocalName: contractRequestArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Request

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Represents a contract request

**Table 67. Properties summary**

LocalName (Label)	Type	Cardinality
acceptedRequestOfContract (Accepted Request of)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..1]
consumer (Consumer)	relation -----> to [ <a href="#">Application on page 97</a> , <a href="#">Business Service on page 67</a> , <a href="#">Implementation on page 130</a> , <a href="#">Contact on page 75</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> ]	[0..1]
contractToObsolete (Contract to make obsolete)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]
provider (Provider)	relation -----> to [ <a href="#">Application on page 97</a> , <a href="#">Business Service on page 67</a> , <a href="#">Implementation on page 130</a> , <a href="#">WSDL on page 209</a> , <a href="#">XML Schema on page 218</a> , <a href="#">Operation on page 112</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> ]	[0..1]
r_consumerOwner (Consumer Owner)	relation -----> to [ <a href="#">Application on page 97</a> , <a href="#">Business Service on page 67</a> , <a href="#">Implementation on page 130</a> , <a href="#">Contact on page 75</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> ]	[0..1]
r_ProviderOwner (Provider Owner)	relation -----> to [ <a href="#">Application on page 97</a> , <a href="#">Business Service on page 67</a> , <a href="#">Implementation on page 130</a> , <a href="#">WSDL on page 209</a> , <a href="#">XML Schema on page 218</a> , <a href="#">Operation on page 112</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> ]	[0..1]
rejectedRequestOfContract (Rejected Request of)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..1]

LocalName (Label)	Type	Cardinality
requestSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
requestUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..1]
revokedRequestOfContract (Revoked Request of)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..1]

Properties inherited from property groups

**Table 68. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 69. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI,	[0..1]

	categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	
LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Documentation

LocalName: documentationArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- Documentation

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Information about a service or related items

**Table 70. Properties summary**

LocalName (Label)	Type	Cardinality
documentationOf (Documentation of)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Operation on page 112</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">UDDI Channel on page 190</a> , <a href="#">UDDI Registry on page 195</a> , <a href="#">Assertion on page 56</a> , <a href="#">Business Policy on page 65</a> , <a href="#">STM Server on page 126</a> , <a href="#">SOA Policy Enforcer Server on page 173</a> , <a href="#">BAC / UCMDB Server on page 63</a> , <a href="#">Organizational Unit on page 140</a> , <a href="#">User Profile on page 142</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> , <a href="#">UDDI Entity on page 192</a> , <a href="#">BAC Entity on page 60</a> ]	[0..*]
documentType (Type)	taxonomy [val, name, taxonomyURI]	[0..1]
escalationProcedureDocumentationInverse [Deprecated] (Escalation Procedure)	relation <----- from [ <a href="#">SLO on page 168</a> ]	[0..*]
failureProcedureDocumentationInverse [Deprecated] (Failure Procedure)	relation <----- from [ <a href="#">SLO on page 168</a> ]	[0..*]
filteringRulesDocumentationInverse [Deprecated] (Filtering Rules)	relation <----- from [ <a href="#">SLO on page 168</a> ]	[0..*]
linkToUrl (Link to URL)	nameUrlPair [url, name]	[0..1]
volumeDistributionDocumentationInverse [Deprecated] (Volume Distribution)	relation <----- from [ <a href="#">SLO on page 168</a> ]	[0..*]

Properties inherited from property groups

**Table 71. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 72. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 73. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 74. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT</a> ]	[0..1]

	on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
LocalName (Label)	Type	Cardinality
version (Version)	text	[0..1]

## DTD

LocalName: dtdArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - DTD

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: DTD document

**Table 75. Properties summary**

LocalName (Label)	Type	Cardinality
dtdImportedBy (Imported by)	relation <----- from <a href="#">[XML Schema on page 218, DTD on page 88]</a>	[0..*]



LocalName (Label)	Type	Cardinality
importedDtdDocument (Imported DTD)	relation -----> to <a href="#">[DTD on page 88]</a>	[0..*]
schemaInstanceConsumedBy (Instance Consumed by)	relation <----- from <a href="#">[XQuery on page 226, XSLT on page 231, Schematron XSLT on page 162]</a>	[0..*]
schemaInstanceProducedBy (Instance Produced by)	relation <----- from <a href="#">[XQuery on page 226, XSLT on page 231, Schematron XSLT on page 162]</a>	[0..*]

Properties inherited from property groups

**Table 76. Properties inherited from [Data attachement properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 77. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 78. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 79. Properties inherited from [Version Properties](#) on page 49**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL</a> on page 209, <a href="#">XQuery</a> on page 226, <a href="#">XML Schema</a> on page 218, <a href="#">XSLT</a> on page 231, <a href="#">Taxonomy</a> on page 182, <a href="#">Documentation</a> on page 84, <a href="#">DTD</a> on page 88, <a href="#">Schematron XSLT</a> on page 162, <a href="#">Saved Search</a> on page 175, <a href="#">Schematron</a> on page 157, <a href="#">SLO</a> on page 168, <a href="#">Usage Plan</a> on page 176]	[0..1]

	<a href="#">197, Business Service on page 67, Endpoint on page 91, WS-Policy on page 214, Application on page 97, Project on page 119, Business Process on page 115, SCA on page 122, Web Application on page 200, SOAP Service on page 204, XML Service on page 222, BPEL Process on page 102]</a>	
LocalName (Label)	Type	Cardinality
r_previousVersion (Previous Major Version)	relation ----> to [ <a href="#">WSDL on page 209, XQuery on page 226, XML Schema on page 218, XSLT on page 231, Taxonomy on page 182, Documentation on page 84, DTD on page 88, Schematron XSLT on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]</a>	[0..1]
version (Version)	text	[0..1]

## Endpoint

LocalName: endpointArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Endpoint

Implemented property groups

- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Endpoint of implementation.

**Table 80. Properties summary**

LocalName (Label)	Type	Cardinality
accessPoint (Endpoint URL)	nameUrlPair [url, name]	[0..1]
endpointOf (Implementation of endpoint)	relation <----- from [ <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> ]	[0..*]
environment (Environment)	taxonomy [val, name, taxonomyURI]	[0..1]
externalDefinition (Defines)	relation <----- from [ <a href="#">UDDI Entity on page 192</a> , <a href="#">BAC Entity on page 60</a> ]	[0..*]
instanceDetail (Binding Template Instance Detail)	instanceDetail [overviewdoc, tmodelKey, instanceParms]	[0..*]
portName (WSDL Port Name)	text	[0..1]
r_managementType (Type)	taxonomy [val, name, taxonomyURI]	[0..1]
uddiDefinition (UDDI Definition)	relation <----- from [ <a href="#">UDDI Entity on page 192</a> ]	[0..*]

Properties inherited from property groups

**Table 81. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [ <a href="#">WS-Policy on page 214</a> ]	[0..*]
documentation (Documentation)	relation -----> to [ <a href="#">Documentation on page 84</a> ]	[0..*]

**Table 82. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]

LocalName (Label)	Type	Cardinality
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]
provisionContract (Provision Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
provisionRequest (Provided Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
revokedContract (Revoked Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 83. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]

LocalName (Label)	Type	Cardinality
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 84. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> ,	[0..1]

	Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
version (Version)	text	[0..1]

## External entity

LocalName: externalEntityArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - External entity

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Direct known subartifacts

- [BAC Entity on page 60](#)
- [UDDI Entity on page 192](#)

Description: Represents any external entity.

**Table 85. Properties summary**

LocalName (Label)	Type	Cardinality
definesArtifact (Defines)	relation -----> to [ <a href="#">Artifact on page 53</a> ]	[0..1]
integrationProperty (Integration Property)	nameValuePair [val, name]	[0..*]

LocalName (Label)	Type	Cardinality
lastSynchHash (Last synchronized hashcode)	text	[0..1]
lastSynchRevision (Last synchronized revision)	integer	[0..1]
lastSynchronized (Last synchronized)	date	[0..1]
registeredIn (Registered in)	relation -----> to <a href="#">[Integration on page 147]</a>	[0..1]

Properties inherited from property groups

**Table 86. Properties inherited from [Data attachement properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 87. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]



LocalName (Label)	Type	Cardinality
documentation (Documentation)	relation ----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 88. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Application

LocalName: hpsoaApplicationArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Application

Implemented property groups

- [Consumer Properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Provider Properties on page 47](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Application artifact

**Table 89. Properties summary**

LocalName (Label)	Type	Cardinality
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]
hpsoaAlias (Alias)	text	[0..1]
hpsoaContactToApplication [Deprecated] (Contact)	relation <----- from <a href="#">[Organizational Unit on page 140, User Profile on page 142]</a>	[0..*]
hpsoaOwningOrganization [Deprecated] (Owning Organization)	relation <----- from <a href="#">[Organizational Unit on page 140]</a>	[0..*]
hpsoaProvidesBusinessService (Consists of)	relation -----> to <a href="#">[Business Service on page 67, Business Process on page 115]</a>	[0..*]
providedBy (Provided by)	relation <----- from <a href="#">[Organizational Unit on page 140, User Profile on page 142]</a>	[0..*]

LocalName (Label)	Type	Cardinality
r_dependsOn (Depends on)	relation -----> to <a href="#">[Business Service on page 67, Application on page 97, Process Implementation on page 107, Business Process on page 115]</a>	[0..*]
r_hasImpactOn (Has impact on)	relation <----- from <a href="#">[Business Service on page 67, Application on page 97, Business Process on page 115, BPEL Process on page 102]</a>	[0..*]

Properties inherited from property groups

**Table 90. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
consumptionRequest (Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]

**Table 91. Properties inherited from [Incoming side of the project content relationship on page 46](#)**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from <a href="#">[Project on page 119]</a>	[0..1]

**Table 92. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]

LocalName (Label)	Type	Cardinality
provisionContract (Provision Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
provisionRequest (Provided Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]
revokedContract (Revoked Contract)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 93. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI,	[0..1]

	categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	
LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 94. Properties inherited from [Version Properties](#) on page 49**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL</a> on page 209, <a href="#">XQuery</a> on page 226, <a href="#">XML Schema</a> on page 218, <a href="#">XSLT</a> on page 231, <a href="#">Taxonomy</a> on page 182, <a href="#">Documentation</a> on page 84, <a href="#">DTD</a> on page 88, <a href="#">Schematron XSLT</a> on page 162, <a href="#">Saved Search</a> on page 175, <a href="#">Schematron</a> on page 157, <a href="#">SLO</a> on page 168, <a href="#">Usage Plan</a> on page 197, <a href="#">Business Service</a> on page 67, <a href="#">Endpoint</a> on page 91, <a href="#">WS-Policy</a> on page 214, <a href="#">Application</a> on page 97, <a href="#">Project</a> on page 119, <a href="#">Business Process</a> on page 115, <a href="#">SCA</a> on page 122, <a href="#">Web Application</a> on page 200, <a href="#">SOAP Service</a> on page 204, <a href="#">XML Service</a> on page 222, <a href="#">BPEL Process</a> on page 102]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL</a> on page 209, <a href="#">XQuery</a> on page 226, <a href="#">XML Schema</a> on page 218, <a href="#">XSLT</a> on page 231, <a href="#">Taxonomy</a> on page 182, <a href="#">Documentation</a> on page 84, <a href="#">DTD</a> on page 88, <a href="#">Schematron XSLT</a> on page 162, <a href="#">Saved Search</a> on page 175, <a href="#">Schematron</a> on page 157, <a href="#">SLO</a> on page 168, <a href="#">Usage Plan</a> on page 197, <a href="#">Business Service</a> on page 67, <a href="#">Endpoint</a> on page 91, <a href="#">Implementation</a> on page 130, <a href="#">WS-Policy</a> on page 214, <a href="#">Application</a> on page 97, <a href="#">Project</a> on page 119, <a href="#">Process Implementation</a> on page 107, <a href="#">Business Process</a> on page 115, <a href="#">SCA</a> on page 122]	[0..1]
version (Version)	text	[0..1]

## BPEL Process

LocalName: hpsoaBpelProcessArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Process Implementation on page 107](#)
    - BPEL Process

Implemented property groups

- [Consumer Properties on page 45](#)
- [Data attachment properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: BPEL Process

**Table 95. Properties summary**

LocalName (Label)	Type	Cardinality
exitOnStandardFault (Exit on Standard Fault)	boolean	[0..1]
expressionLanguage (Expression Language)	text	[0..1]

LocalName (Label)	Type	Cardinality
importedWsdldocument (Imported WSDL)	relation -----> to <a href="#">[WSDL on page 209]</a>	[0..*]
importedXsdDocument (Imported XSD)	relation -----> to <a href="#">[XML Schema on page 218]</a>	[0..*]
partnerLink (Partner Link)	nameValuePair [val, name]	[0..*]
queryLanguage (Query Language)	text	[0..1]
soapInterface (Soap Interface)	relation -----> to <a href="#">[SOAP Service on page 204]</a>	[0..*]
suppressJoinFailure (Suppress Join Failure)	boolean	[0..1]
targetNamespace (Target Namespace)	text	[0..1]

Properties inherited from property groups

**Table 96. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
consumptionRequest (Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]

**Table 97. Properties inherited from [Data attachement properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]

LocalName (Label)	Type	Cardinality
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 98. Properties inherited from [Incoming side of the project content relationship on page 46](#)**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from <a href="#">[Project on page 119]</a>	[0..1]

**Table 99. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 100. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]



LocalName (Label)	Type	Cardinality
provisionContract (Provision Contract)	relation <----- from [Contract on page 78]	[0..*]
provisionRequest (Provided Request)	relation <----- from [Request on page 81]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [Contract on page 78]	[0..*]
revokedContract (Revoked Contract)	relation -----> to [Contract on page 78]	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 101. Properties inherited from Service Properties on page 48**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 102. Properties inherited from systemProperties on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 103. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT</a> ]	[0..1]

	on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
version (Version)	text	[0..1]

## Process Implementation

LocalName: `hpsoaBusinessProcessArtifact`

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Process Implementation](#)

Implemented property groups

- [Consumer Properties on page 45](#)
- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Direct known subartifacts

- [BPEL Process on page 102](#)

Description: Represents business process implementations

**Table 104. Properties summary**

LocalName (Label)	Type	Cardinality
providedBy (Provided by)	relation <----- from [ <a href="#">Organizational Unit on page 140</a> , <a href="#">User Profile on page 142</a> ]	[0..*]
r_dependsOn (Depends on)	relation -----> to [ <a href="#">Business Service on page 67</a> , <a href="#">Application on page 97</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> ]	[0..*]
r_hasImpactOn (Has impact on)	relation <----- from [ <a href="#">Business Service on page 67</a> , <a href="#">Application on page 97</a> , <a href="#">Business Process on page 115</a> , <a href="#">BPEL Process on page 102</a> ]	[0..*]
r_hpsoaProcessImplOf (Process Implementation Of)	relation <----- from [ <a href="#">Business Process on page 115</a> ]	[0..*]
r_processImplementationOf (SCA Component Implementation Of)	relation <----- from [ <a href="#">SCA on page 122</a> ]	[0..*]
r_processOf (Process Of)	relation <----- from [ <a href="#">Business Service on page 67</a> ]	[0..*]

Properties inherited from property groups

**Table 105. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
consumptionRequest (Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]

**Table 106. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 107. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 108. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]

LocalName (Label)	Type	Cardinality
provisionContract (Provision Contract)	relation <----- from [Contract on page 78]	[0..*]
provisionRequest (Provided Request)	relation <----- from [Request on page 81]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [Contract on page 78]	[0..*]
revokedContract (Revoked Contract)	relation -----> to [Contract on page 78]	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 109. Properties inherited from Service Properties on page 48**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 110. Properties inherited from systemProperties on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 111. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT</a> ]	[0..1]

	on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
version (Version)	text	[0..1]

## Operation

LocalName: hpsoaOperationArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Operation

Implemented property groups

- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [systemProperties on page 48](#)

Description: Represents a web service operation

**Table 112. Properties summary**

LocalName (Label)	Type	Cardinality
faultTypes (Fault types)	text	[0..*]
inputTypes (Input types)	text	[0..*]
operationName (Operation name)	text	[0..1]



LocalName (Label)	Type	Cardinality
outputTypes (Output types)	text	[0..*]
portType (Port type)	text	[0..1]
r_operationOf (Operation of)	relation <----- from [Web Application on page 200, SOAP Service on page 204, XML Service on page 222]	[0..*]
runtimePolicy (Runtime Policy)	relation -----> to [WS-Policy on page 214]	[0..*]
targetNamespace (Target Namespace)	text	[0..1]

Properties inherited from property groups

**Table 113. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [WS-Policy on page 214]	[0..*]
documentation (Documentation)	relation -----> to [Documentation on page 84]	[0..*]

**Table 114. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to [Contract on page 78]	[0..*]
artifactSlo (SLO)	relation -----> to [SLO on page 168]	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to [Usage Plan on page 197]	[0..*]
provisionContract (Provision Contract)	relation <----- from [Contract on page 78]	[0..*]
provisionRequest (Provided Request)	relation <----- from [Request on page 81]	[0..*]

LocalName (Label)	Type	Cardinality
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [Contract on page 78]	[0..*]
revokedContract (Revoked Contract)	relation -----> to [Contract on page 78]	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 115. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]

LocalName (Label)	Type	Cardinality
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Business Process

LocalName: hpsoaProcessArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Business Process

Implemented property groups

- [Consumer Properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Represents business processes.

**Table 116. Properties summary**

LocalName (Label)	Type	Cardinality
hpsoaProvidingApplication (Providing Application)	relation <----- from [ <a href="#">Application on page 97</a> ]	[0..*]
providedBy (Provided by)	relation <----- from [ <a href="#">Organizational Unit on page 140</a> , <a href="#">User Profile on page 142</a> ]	[0..*]
r_callableAs (Callable as)	relation -----> to [ <a href="#">Business Service on page 67</a> ]	[0..1]
r_dependsOn (Depends on)	relation -----> to [ <a href="#">Business Service on page 67</a> , <a href="#">Application on page 97</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> ]	[0..*]
r_hasImpactOn (Has impact on)	relation <----- from [ <a href="#">Business Service on page 67</a> , <a href="#">Application on page 97</a> , <a href="#">Business Process on page 115</a> , <a href="#">BPEL Process on page 102</a> ]	[0..*]
r_hpsoaProcessImpl (Process Implementation)	relation -----> to [ <a href="#">Process Implementation on page 107</a> ]	[0..*]
r_processOf (Process Of)	relation <----- from [ <a href="#">Business Service on page 67</a> ]	[0..*]
r_subProcess (Sub process)	relation -----> to [ <a href="#">Business Process on page 115</a> ]	[0..*]
r_subProcessOf (Sub process of)	relation <----- from [ <a href="#">Business Process on page 115</a> ]	[0..*]

Properties inherited from property groups

**Table 117. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
consumptionRequest (Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]

**Table 118. Properties inherited from Incoming side of the project content relationship on page 46**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from [Project on page 119]	[0..1]

**Table 119. Properties inherited from Model Properties on page 46**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [WS-Policy on page 214]	[0..*]
documentation (Documentation)	relation -----> to [Documentation on page 84]	[0..*]

**Table 120. Properties inherited from Provider Properties on page 47**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to [Contract on page 78]	[0..*]
artifactSlo (SLO)	relation -----> to [SLO on page 168]	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to [Usage Plan on page 197]	[0..*]
provisionContract (Provision Contract)	relation <----- from [Contract on page 78]	[0..*]
provisionRequest (Provided Request)	relation <----- from [Request on page 81]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [Contract on page 78]	[0..*]

LocalName (Label)	Type	Cardinality
revokedContract (Revoked Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 121. Properties inherited from [Service Properties on page 48](#)**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 122. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]

LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 123. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## Project

LocalName: hpsoaProjectArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Project

Implemented property groups

- [Project Properties on page 47](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Represents a Project

**Table 124. Properties summary**

LocalName (Label)	Type	Cardinality
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]
providedBy (Provided by)	relation <----- from <a href="#">[Organizational Unit on page 140, User Profile on page 142]</a>	[0..*]

Properties inherited from property groups

**Table 125. Properties inherited from [Project Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
completion (Completion [%])	integer	[0..1]
contentRelationshipType (Content)	relation -----> to <a href="#">[Application on page 97, Business Service on page 67, Implementation on page 130, WSDL on page 209, Business Process on page 115, BPEL Process on page 102, SCA on page 122]</a>	[0..*]
endDate (End Date)	date	[0..1]



LocalName (Label)	Type	Cardinality
plannedDate (Planned End Date)	date	[0..1]
startDate (Start Date)	date	[0..1]

**Table 126. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 127. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## SCA

LocalName: `hpsoaScaArtifact`

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - SCA

Implemented property groups

- [Data attachment properties on page 45](#)

- Incoming side of the project content relationship on page 46
- Model Properties on page 46
- systemProperties on page 48
- Version Properties on page 49

Description: SCA Artifact

**Table 128. Properties summary**

LocalName (Label)	Type	Cardinality
componentQName (Component QName)	text	[0..*]
compositeImplementation (Composite Implementation)	relation -----> to <a href="#">[SCA on page 122]</a>	[0..*]
compositeImplementationOf (Composite Implementation Of)	relation <----- from <a href="#">[SCA on page 122]</a>	[0..*]
hasScaDependency (Has SCA Dependency)	relation <----- from <a href="#">[SCA on page 122]</a>	[0..*]
r_processImplementation (SCA Component Implementation)	relation -----> to <a href="#">[Process Implementation on page 107]</a>	[0..*]
r_serviceDefinition (SCA Service Definition)	relation -----> to <a href="#">[WSDL on page 209]</a>	[0..*]
referenceDefinition (SCA Reference Definition)	relation -----> to <a href="#">[WSDL on page 209]</a>	[0..*]
scaDefines (Defines)	relation <----- from <a href="#">[Web Application on page 200, SOAP Service on page 204, XML Service on page 222]</a>	[0..*]
scaDepends (Depends on SCA)	relation -----> to <a href="#">[SCA on page 122]</a>	[0..*]
scaInclude (Include SCA)	relation -----> to <a href="#">[SCA on page 122]</a>	[0..*]
scaIncludedBy (Included by SCA)	relation <----- from <a href="#">[SCA on page 122]</a>	[0..*]

LocalName (Label)	Type	Cardinality
scaName (SCA Name)	text	[0..1]
scaType (SCA Type)	taxonomy [val, name, taxonomyURI]	[1..1]
targetNamespace (Target Namespace)	text	[0..1]

Properties inherited from property groups

**Table 129. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 130. Properties inherited from [Incoming side of the project content relationship on page 46](#)**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from <a href="#">[Project on page 119]</a>	[0..1]

**Table 131. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 132. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 133. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## STM Server

LocalName: `hpsoaStmServerArtifact`

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Integration on page 147](#)
    - STM Server

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Service Test Management (STM) Server

**Table 134. Properties summary**

LocalName (Label)	Type	Cardinality
allowHttpBasicAuth (HTTP Basic Authentication)	boolean	[0..1]
baseUrl (Base URL)	nameUrlPair [url, name]	[0..1]
environment (Environment)	taxonomy [val, name, taxonomyURI]	[0..1]
simplePassword (Password)	text	[0..1]
stmDomain (STM Domain)	text	[0..1]
stmProject (STM Project)	text	[0..1]
username (Username)	text	[0..1]

Properties inherited from property groups

**Table 135. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 136. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]

LocalName (Label)	Type	Cardinality
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Impact Tool

LocalName: impactToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Impact Tool

Implemented property groups



- [systemProperties on page 48](#)

Description: Impact Tool provides the ability to list all artifacts related to a specific artifact

**Table 137. Properties summary**

LocalName (Label)	Type	Cardinality
impactType (Impact Type)	text	[0..1]

Properties inherited from property groups

**Table 138. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]

LocalName (Label)	Type	Cardinality
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Implementation

LocalName: implementationArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Implementation

Implemented property groups

- [Consumer Properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Direct known subartifacts

- [Web Application on page 200](#)
- [SOAP Service on page 204](#)
- [XML Service on page 222](#)

Description: Implementation of a service

**Table 139. Properties summary**

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
accessPoint (Endpoint URL)	nameUrlPair [url, name]	[0..*]
endpoint (Endpoint)	relation -----> to <a href="#">[Endpoint on page 91]</a>	[0..*]
externalDefinition (Defines)	relation <----- from <a href="#">[UDDI Entity on page 192, BAC Entity on page 60]</a>	[0..*]
inBusinessService (In Business Service)	relation <----- from <a href="#">[Business Service on page 67]</a>	[0..*]
providedBy (Provided by)	relation <----- from <a href="#">[Organizational Unit on page 140, User Profile on page 142]</a>	[0..*]
r_operation (Operation)	relation -----> to <a href="#">[Operation on page 112]</a>	[0..*]
resourceOfUsagePlan [Deprecated] (Usage Plan Resource)	relation <----- from <a href="#">[Usage Plan on page 197]</a>	[0..*]
runtimePolicy (Runtime Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
scaDefinition (SCA Definition)	relation -----> to <a href="#">[SCA on page 122]</a>	[0..*]
uddiDefinition (UDDI Definition)	relation <----- from <a href="#">[UDDI Entity on page 192]</a>	[0..*]

Properties inherited from property groups

**Table 140. Properties inherited from [Consumer Properties on page 45](#)**

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
consumptionContract (Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
consumptionRequest (Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]

**Table 141. Properties inherited from Incoming side of the project content relationship on page 46**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from [Project on page 119]	[0..1]

**Table 142. Properties inherited from Model Properties on page 46**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [WS-Policy on page 214]	[0..*]
documentation (Documentation)	relation -----> to [Documentation on page 84]	[0..*]

**Table 143. Properties inherited from Provider Properties on page 47**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to [Contract on page 78]	[0..*]
artifactSlo (SLO)	relation -----> to [SLO on page 168]	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to [Usage Plan on page 197]	[0..*]
provisionContract (Provision Contract)	relation <----- from [Contract on page 78]	[0..*]
provisionRequest (Provided Request)	relation <----- from [Request on page 81]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [Contract on page 78]	[0..*]

LocalName (Label)	Type	Cardinality
revokedContract (Revoked Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 144. Properties inherited from [Service Properties on page 48](#)**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 145. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]

LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 146. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## Interface

LocalName: interfaceArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Interface

Implemented property groups

- [systemProperties on page 48](#)

Description: Metadata representing a Web Service

Properties inherited from property groups

**Table 147. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]

LocalName (Label)	Type	Cardinality
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Job Tool

LocalName: jobToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Job Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Starts a simple job

**Table 148. Properties summary**

LocalName (Label)	Type	Cardinality
jobClassId (Job Implementation Class ID)	text	[0..1]

Properties inherited from property groups

**Table 149. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]



LocalName (Label)	Type	Cardinality
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Lifecycle Validation Scheduling Tool

LocalName: lifecycleValidationToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Lifecycle Validation Scheduling Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Provides Service Lifecycle Validation Scheduling

**Table 150. Properties summary**

LocalName (Label)	Type	Cardinality
jobRunType (Lifecycle Tool Run Type)	text	[0..1]

Properties inherited from property groups

**Table 151. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]

LocalName (Label)	Type	Cardinality
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## SOA

LocalName: modelArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- SOA

Implemented property groups

- [systemProperties on page 48](#)

Description: Intangible artifact of a type significant at the architectural level

Properties inherited from property groups

**Table 152. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]

LocalName (Label)	Type	Cardinality
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Organizational Unit

LocalName: organizationUnitArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Contact on page 75](#)
    - Organizational Unit

Implemented property groups

- [Consumer Properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Represents an organizational unit

**Table 153. Properties summary**

LocalName (Label)	Type	Cardinality
externalDefinition (Defines)	relation <----- from [UDDI Entity on page 192, BAC Entity on page 60]	[0..*]
hpsoaOwnedApplication [Deprecated] (Owned Application)	relation -----> to [Application on page 97]	[0..*]
r_containsMember (Consists of)	relation -----> to [Contact on page 75]	[0..*]
uddiDefinition (UDDI Definition)	relation <----- from [UDDI Entity on page 192]	[0..*]

Properties inherited from property groups

**Table 154. Properties inherited from Consumer Properties on page 45**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [Contract on page 78]	[0..*]
consumptionRequest (Request)	relation <----- from [Request on page 81]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]

**Table 155. Properties inherited from Model Properties on page 46**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [WS-Policy on page 214]	[0..*]
documentation (Documentation)	relation -----> to [Documentation on page 84]	[0..*]

**Table 156. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## User Profile

LocalName: personArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Contact on page 75](#)

- User Profile

Implemented property groups

- [Consumer Properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Represents a User Profile

**Table 157. Properties summary**

LocalName (Label)	Type	Cardinality
accountState (Account State)	taxonomy [val, name, taxonomyURI]	[0..1]
primaryGroup (Primary Group)	text	[0..1]

Properties inherited from property groups

**Table 158. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
consumptionRequest (Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]

**Table 159. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [ <a href="#">WS-Policy on page 214</a> ]	[0..*]
documentation (Documentation)	relation -----> to [ <a href="#">Documentation on page 84</a> ]	[0..*]

**Table 160. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Policy

LocalName: policyArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Policy



Implemented property groups

- [systemProperties on page 48](#)

Description: Describes a policy

Properties inherited from property groups

**Table 161. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Validate Compliance Tool

LocalName: policyComplianceToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Validate Compliance Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Validate Compliance Tool

Properties inherited from property groups

**Table 162. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val,	[0..1]

	categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Integration

LocalName: registryArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Integration

Implemented property groups

- [systemProperties on page 48](#)

Direct known subartifacts

- [BAC / UCMDB Server on page 63](#)
- [STM Server on page 126](#)
- [SOA Policy Enforcer Server on page 173](#)
- [UDDI Registry on page 195](#)

Description: Registries used for governance

**Table 163. Properties summary**

LocalName (Label)	Type	Cardinality
publishLocation (Publish Location)	text	[0..1]
registers (Registers)	relation <----- from <a href="#">[UDDI Entity on page 192, BAC Entity on page 60]</a>	[0..*]

Properties inherited from property groups

**Table 164. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]

LocalName (Label)	Type	Cardinality
name (Name)	text	[1..1]

## Report

LocalName: reportArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- Report

Implemented property groups

- [Data attachment properties on page 45](#)
- [systemProperties on page 48](#)

Description: Report is the result of a tool or task execution

**Table 165. Properties summary**

LocalName (Label)	Type	Cardinality
associatedApplication (Associated Application)	taxonomy [val, name, taxonomyURI]	[0..1]
businessPolicyArtifact (Business Policy artifact)	text	[0..1]
closed (Closed)	boolean	[0..1]
created (Created)	date	[0..1]
errorSubreports (Error Subreports)	integer	[0..1]
indexReport (Index Report)	relation -----> to <a href="#">[Report on page 149]</a>	[0..1]
notApplicableSubreports (Not Applicable Subreports)	integer	[0..1]

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
okSubreports (OK Subreports)	integer	[0..1]
reportCategory (Report Category)	taxonomy [val, name, taxonomyURI]	[0..1]
reportPhase (Report Phase)	integer	[0..1]
reportPhaseComplete (Report Phase Complete)	boolean	[0..1]
reportPhaseCount (Report Phase Count)	integer	[0..1]
reportRendererId (Report Renderer Id)	text	[0..1]
reportResultCode (Result Code)	taxonomy [val, name, taxonomyURI]	[0..1]
reports (Reports)	relation <----- from [ <a href="#">Report on page 149</a> ]	[0..*]
reportStatus (Status)	taxonomy [val, name, taxonomyURI]	[0..1]
reportType (Report Type)	taxonomy [val, name, taxonomyURI]	[0..1]
reviewSubreports (Review Subreports)	integer	[0..1]
sourceArtifact (Source Artifact)	text	[0..1]
sourceURI (Source URI)	text	[0..1]
task (Task)	relation -----> to [ <a href="#">Task on page 180</a> ]	[0..1]
technicalPolicyArtifact (Technical Policy artifact)	text	[0..1]
undefinedSubreports (Undefined Subreports)	integer	[0..1]

Properties inherited from property groups

**Table 166. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 167. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val,	[0..1]

	categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	
LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Reporting Tool

LocalName: reportingToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Reporting Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Posts a document to a specified URL to execute build of a report

**Table 168. Properties summary**

LocalName (Label)	Type	Cardinality
reportingRequestContent (Request Content)	text	[0..1]
reportingRequestContentType (Request Content Type)	text	[0..1]



LocalName (Label)	Type	Cardinality
reportingUrl (Target URI)	nameUrlPair [url, name]	[0..1]

Properties inherited from property groups

**Table 169. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Content

LocalName: repositoryArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Content

Implemented property groups

- [systemProperties on page 48](#)

Description: SOA related documents

Properties inherited from property groups

**Table 170. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]

LocalName (Label)	Type	Cardinality
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Resource Information Tool

LocalName: resourceInfoToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Resource Information Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Resource Information Tool provides basic information about repository resources

Properties inherited from property groups

**Table 171. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]

LocalName (Label)	Type	Cardinality
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Schema

LocalName: schemaArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- Schema

Implemented property groups

- [systemProperties on page 48](#)

Description: Represents a schema artifact

Properties inherited from property groups

**Table 172. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Schematron

LocalName: schematronArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Schematron

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Schematron schema in a version of the Schematron language

**Table 173. Properties summary**

LocalName (Label)	Type	Cardinality
importedSchematronDocument (Imported Schematron)	relation -----> to <a href="#">[Schematron on page 157]</a>	[0..*]
importedSchematronDocumentInverse (Imported Schematron)	relation <----- from <a href="#">[Schematron on page 157]</a>	[0..*]
schematronOf (Schematron of)	relation <----- from <a href="#">[Schematron Tool on page 160]</a>	[0..*]

Properties inherited from property groups

**Table 174. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]

LocalName (Label)	Type	Cardinality
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 175. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 176. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]

LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 177. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## Schematron Tool

LocalName: schematronIntegrityToolArtifact



Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Schematron Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Schematron Integrity Tool provides the ability to validate resources using the schematron validation language

**Table 178. Properties summary**

LocalName (Label)	Type	Cardinality
accessMode (Resource Access Mode)	text	[0..1]
resourceRevision (Resource Revision)	integer	[0..1]
schematron (Schematron)	relation ----> to <a href="#">[Schematron on page 157]</a>	[0..1]
schematronXslt (Schematron XSLT)	relation ----> to <a href="#">[Schematron XSLT on page 162]</a>	[0..1]

Properties inherited from property groups

**Table 179. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]

LocalName (Label)	Type	Cardinality
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Schematron XSLT

LocalName: schematronXsltArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Schematron XSLT

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)

- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Schematron schema preprocessed to XSLT

**Table 180. Properties summary**

LocalName (Label)	Type	Cardinality
importedXslDocument (Imported XSL)	relation -----> to <a href="#">[XSLT on page 231]</a>	[0..*]
inputSchemaDocument (Input Schema)	relation -----> to <a href="#">[XML Schema on page 218, DTD on page 88]</a>	[0..*]
outputSchemaDocument (Output Schema)	relation -----> to <a href="#">[DTD on page 88, XML Schema on page 218]</a>	[0..*]
schematronXsltOf (Schematron XSLT of)	relation <----- from <a href="#">[Schematron Tool on page 160]</a>	[0..*]
xslOutputMethod (XSLT Output Method)	taxonomy [val, name, taxonomyURI]	[0..1]

Properties inherited from property groups

**Table 181. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]

LocalName (Label)	Type	Cardinality
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 182. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 183. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]

LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 184. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## Schema Validity Tool

LocalName: schemaValidityToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Schema Validity Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Validity Tool provides the ability to validate XML documents against XML schema documents

**Table 185. Properties summary**

LocalName (Label)	Type	Cardinality
validitySchema (XML Schema)	relation ----> to <a href="#">XML Schema on page 218</a>	[0..1]

Properties inherited from property groups

**Table 186. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]

LocalName (Label)	Type	Cardinality
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Search And Transform

LocalName: searchAndTransformArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Search And Transform

Implemented property groups

- [systemProperties on page 48](#)

Description: Document defining a search, query or transformation

Properties inherited from property groups

**Table 187. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]

LocalName (Label)	Type	Cardinality
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## SLO

LocalName: sloArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - SLO

Implemented property groups

- [Model Properties on page 46](#)



- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Represents a Service Level Objective (SLO)

**Table 188. Properties summary**

LocalName (Label)	Type	Cardinality
acceptableDowntime [Deprecated] (Acceptable Downtime [hours])	integer	[0..1]
artifactSloOf (SLO of)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XML Schema on page 218</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Application on page 97</a> , <a href="#">Operation on page 112</a> , <a href="#">Business Process on page 115</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..*]
availability (Availability [%])	double	[0..1]
businessImpact (Business Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
dailyPeekPeriod (Daily Peak Period)	dailyInterval [to, dayName, from]	[0..1]
dependsOnArtifact [Deprecated] (Depends on Artifact)	relation -----> to [ <a href="#">SLO on page 168</a> ]	[0..*]
developmentEnvironmentAvailability [Deprecated] (Development Environment Availability)	date	[0..1]
disasterRecoveryEnvironmentAvailability [Deprecated] (Disaster Recovery Environment Availability)	date	[0..1]

LocalName (Label)	Type	Cardinality
escalationProcedureDocumentation [Deprecated] (Escalation Procedure)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..1]
expectedMessagesPerDay (Expected Messages Per Day)	bigInteger	[0..1]
failureProcedureDocumentation [Deprecated] (Failure Procedure)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..1]
filteringRulesDocumentation [Deprecated] (Filtering Rules)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]
guaranteedDelivery [Deprecated] (Guaranteed Delivery)	boolean	[0..1]
hasDependingArtifact [Deprecated] (Depending Artifact)	relation <----- from <a href="#">[SLO on page 168]</a>	[0..*]
hourOfConsumerOperation [Deprecated] (Hours of Consumer Operation)	dailyInterval [to, dayName, from]	[0..*]
hourOfProviderOperation (Hours of Provider Operation)	dailyInterval [to, dayName, from]	[0..*]
hourOfServiceOperation (Hours of Service Operation)	dailyInterval [to, dayName, from]	[0..*]
maximumMessageSize [Deprecated] (Maximum Message Size [kB])	bigInteger	[0..1]
maximumMessagesPerDay (Maximum Messages Per Day)	bigInteger	[0..1]
peakMsg (Peak [Msg/Min])	double	[0..1]
performance (Performance [%])	double	[0..1]

LocalName (Label)	Type	Cardinality
productionEnvironmentAvailability [Deprecated] (Production Environment Availability)	date	[0..1]
requestSloOf (SLO of)	relation <----- from <a href="#">Request on page 81</a>	[0..*]
responseTime (Response Time [sec])	double	[0..1]
serviceAvailability (Service Availability)	date	[0..1]
serviceTermination (Service Termination)	date	[0..1]
sloOf (SLO of)	relation <----- from <a href="#">Contract on page 78</a>	[0..*]
sloOfPlan [Deprecated] (Usage Plan)	relation <----- from <a href="#">Usage Plan on page 197</a>	[0..*]
throughput (Throughput [Msg/Min])	double	[0..1]
timingRequired [Deprecated] (Timing Required)	boolean	[0..1]
uatEnvironmentAvailability [Deprecated] (UAT Environment Availability)	date	[0..1]
volumeDistributionDocumentation [Deprecated] (Volume Distribution)	relation -----> to <a href="#">Documentation on page 84</a>	[0..1]

Properties inherited from property groups

**Table 189. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">WS-Policy on page 214</a>	[0..*]

LocalName (Label)	Type	Cardinality
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 190. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 191. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## SOA Policy Enforcer Server

LocalName: soamServerArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Integration on page 147](#)
    - SOA Policy Enforcer Server

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: SOA Policy Enforcer Server

**Table 192. Properties summary**

LocalName (Label)	Type	Cardinality
allowHttpBasicAuth (HTTP Basic Authentication)	boolean	[0..1]
baseUrl (Base URL)	nameUrlPair [url, name]	[0..1]
simplePassword (Password)	text	[0..1]
username (Username)	text	[0..1]

Properties inherited from property groups

**Table 193. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 194. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Saved Search

LocalName: storedSearchArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Saved Search

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Representation of criteria for a search

**Table 195. Properties summary**

LocalName (Label)	Type	Cardinality
collectionName (Collection Name)	text	[0..1]
xqueryDocument (XQuery)	relation -----> to <a href="#">[XQuery on page 226]</a>	[0..1]

Properties inherited from property groups

**Table 196. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 197. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]



LocalName (Label)	Type	Cardinality
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 198. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> ,	[0..1]

	Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
version (Version)	text	[0..1]

## Sync Tool

LocalName: syncToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Sync Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Provides resource synchronization

Properties inherited from property groups

**Table 199. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]

LocalName (Label)	Type	Cardinality
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## System

LocalName: systemArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - System

Implemented property groups

- [systemProperties on page 48](#)

Description: System Artifacts

Properties inherited from property groups

**Table 200. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Task

LocalName: taskArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Task

Implemented property groups

- [systemProperties on page 48](#)

Description: A task is a tool prepared for execution. It can be scheduled for automatic execution

**Table 201. Properties summary**

LocalName (Label)	Type	Cardinality
scheduled (Scheduled)	scheduled [schedulingDetails.lastRunTime, schedulingDetails.time, nodeId, schedulingDetails.repeatMax, schedulingDetails.customRepeatTime, schedulingDetails, schedulingDetails.scheduledRunTime, schedulingDetails.recurrence, schedulingDetails.repeated, enabled, temporary, running, schedulingDetails.repeatUntil, schedulingDetails.type, schedulingDetails.runImmediatelyAfterRestart]	[0..1]
selector (Selector)	selector [storedSearchPath, collectionLocalName, collectionPath, selectorType, documentPaths]	[0..1]
taskReports (Reports)	relation <----- from <a href="#">Report on page 149</a>	[0..*]
tool (Tool)	relation -----> to <a href="#">Tool on page 185</a>	[0..1]

Properties inherited from property groups

**Table 202. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]

LocalName (Label)	Type	Cardinality
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Taxonomy

LocalName: taxonomyArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Taxonomy

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: UDDI compatible taxonomy definition

**Table 203. Properties summary**

LocalName (Label)	Type	Cardinality
checked (Checked)	boolean	[0..1]
hierarchical (Hierarchical)	boolean	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]
valueDisplayFormat (Value Display Format)	taxonomy [val, name, taxonomyURI]	[0..1]

Properties inherited from property groups

**Table 204. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 205. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]

LocalName (Label)	Type	Cardinality
documentation (Documentation)	relation ----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 206. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]



**Table 207. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## Tool

LocalName: toolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Tool

Implemented property groups

- [systemProperties on page 48](#)

Direct known subartifacts

- [Aoi Preparation Tool on page 51](#)
- [BAC Service Discovery Tool on page 59](#)
- [Impact Tool on page 128](#)
- [Job Tool on page 136](#)
- [Lifecycle Validation Scheduling Tool on page 137](#)
- [Validate Compliance Tool on page 146](#)
- [Reporting Tool on page 152](#)
- [Resource Information Tool on page 155](#)
- [Schematron Tool on page 160](#)
- [Schema Validity Tool on page 165](#)
- [Sync Tool on page 178](#)
- [Compliance Trend Data Cleaner on page 187](#)
- [Policy Compliance Tool on page 189](#)
- [XQuery Tool on page 230](#)

Description: Represents a tool

**Table 208. Properties summary**

LocalName (Label)	Type	Cardinality
toolInverse (Tool)	relation <----- from <a href="#">[Task on page 180]</a>	[0..*]

Properties inherited from property groups

**Table 209. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Compliance Trend Data Cleaner

LocalName: trendCleanerToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)

- Compliance Trend Data Cleaner

Implemented property groups

- [systemProperties on page 48](#)

Description: Compliance Trend Data Cleaner

Properties inherited from property groups

**Table 210. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Policy Compliance Tool

LocalName: trendPreparationToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - Policy Compliance Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: Automatically run validations required for trend report construction

Properties inherited from property groups

**Table 211. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val,	[0..1]

	categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	
LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## UDDI Channel

LocalName: uddiChannelArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - UDDI Channel

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: UDDI Registry account used for synchronization

**Table 212. Properties summary**

LocalName (Label)	Type	Cardinality
password (Password)	text	[0..1]
resourceOfUsagePlan [Deprecated] (Usage Plan Resource)	relation <----- from <a href="#">[Usage Plan on page 197]</a>	[0..*]

LocalName (Label)	Type	Cardinality
runtimePolicy (Runtime Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
uddiRegistry [Deprecated] (UDDI Registry)	relation -----> to <a href="#">[UDDI Registry on page 195]</a>	[0..1]
username (Username)	text	[0..1]

Properties inherited from property groups

**Table 213. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 214. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val,	[0..1]

	categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## UDDI Entity

LocalName: uddiEntityArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [External entity on page 95](#)
    - UDDI Entity

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: UDDI entity - Business Entity, Business Service, Binding Template or TModel

**Table 215. Properties summary**

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
crc (CRC)	text	[0..1]



LocalName (Label)	Type	Cardinality
defines (Definition)	relation -----> to <a href="#">[Organizational Unit on page 140, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Business Policy on page 65, Assertion on page 56]</a>	[0..*]
uddiEntityKey (UDDI Entity Key)	text	[0..1]
uddiEntityType (UDDI Entity Type)	taxonomy [val, name, taxonomyURI]	[0..1]
uddiImport (UDDI Import Flag)	boolean	[0..1]
uddiRegistryArtifact (UDDI Registry Artifact)	text	[0..1]

Properties inherited from property groups

**Table 216. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 217. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 218. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## UDDI Registry

LocalName: uddiRegistryArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Integration on page 147](#)
    - UDDI Registry

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)

Description: Represents a UDDI Registry

**Table 219. Properties summary**

LocalName (Label)	Type	Cardinality
allowExport (Allow Export)	boolean	[0..1]
allowHttpBasicAuth (HTTP Basic Authentication)	boolean	[0..1]
allowImport (Allow Import)	boolean	[0..1]
environment (Environment)	taxonomy [val, name, taxonomyURI]	[0..*]
fullVersion (Full Version)	text	[0..1]
inquiryUrl (Inquiry URL)	nameUrlPair [url, name]	[0..1]
publishingUrl (Publishing URL)	nameUrlPair [url, name]	[0..1]
resourceOfUsagePlan [Deprecated] (Usage Plan Resource)	relation <----- from [ <a href="#">Usage Plan on page 197</a> ]	[0..*]

LocalName (Label)	Type	Cardinality
runtimePolicy (Runtime Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
securityUrl (Security URL)	nameUrlPair [url, name]	[0..1]
simplePassword (Password)	text	[0..1]
systinetRegistry (HP SOA Registry)	boolean	[0..1]
taxonomyUrl (Taxonomy URL)	nameUrlPair [url, name]	[0..1]
technicalDetail (Technical Detail)	nameValuePair [val, name]	[0..*]
uddiApiVersion (UDDI API Version)	taxonomy [val, name, taxonomyURI]	[1..1]
uddiChannel [Deprecated] (UDDI Channel)	relation <----- from <a href="#">[UDDI Channel on page 190]</a>	[0..*]
username (Username)	text	[0..1]
version (Version)	text	[0..1]
webAdminConsoleUrl (Web Admin Console URL)	nameUrlPair [url, name]	[0..1]
webUserConsoleUrl (Web User Console URL)	nameUrlPair [url, name]	[0..1]

Properties inherited from property groups

**Table 220. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 221. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## Usage Plan

LocalName: usagePlanArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - Usage Plan

Implemented property groups

- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Represents a usage plan for a contract

**Table 222. Properties summary**

LocalName (Label)	Type	Cardinality
associatedResource [Deprecated] (Resource)	relation -----> to <a href="#">[Implementation on page 130, UDDI Registry on page 195, UDDI Channel on page 190, BAC / UCMDB Server on page 63]</a>	[0..*]
associatedSlo [Deprecated] (SLA)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
usagePlanOfContract [Deprecated] (Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
usagePlanOfProvider [Deprecated] (Provider)	relation <----- from <a href="#">[WSDL on page 209, XML Schema on page 218, Business Service on page 67, Endpoint on page 91, Application on page 97, Operation on page 112, Business Process on page 115, Web Application on page 200, SOAP Service on page 204, XML Service on page 222, BPEL Process on page 102]</a>	[0..*]
usagePlanOfRequest [Deprecated] (Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]

Properties inherited from property groups

**Table 223. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]

LocalName (Label)	Type	Cardinality
documentation (Documentation)	relation ----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 224. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 225. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## Web Application

LocalName: webArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Implementation on page 130](#)
    - [Web Application](#)

Implemented property groups



- [Consumer Properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: A web application (or web interface) is also a service. While it is accessible only by a human, it uses other services (soap services, databases) to function

Properties inherited from property groups

**Table 226. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
consumptionRequest (Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]

**Table 227. Properties inherited from [Incoming side of the project content relationship on page 46](#)**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from [ <a href="#">Project on page 119</a> ]	[0..1]

**Table 228. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 229. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]
provisionContract (Provision Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
provisionRequest (Provided Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
revokedContract (Revoked Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 230. Properties inherited from [Service Properties](#) on page 48**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 231. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 232. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## SOAP Service

LocalName: webServiceArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Implementation on page 130](#)
    - SOAP Service

Implemented property groups

- [Consumer Properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Web service is a software module whose functionality is accessible using the SOAP protocol. Web services are HTTP based and usually described using WSDL

**Table 233. Properties summary**

LocalName (Label)	Type	Cardinality
definition (Definition)	relation -----> to <a href="#">[XML Schema on page 218, WSDL on page 209]</a>	[0..*]
serviceName (WSDL Service Name)	text	[0..1]
serviceNamespace (WSDL Service Namespace)	text	[0..1]
soapInterfaceOf (Soap Interface Of)	relation <----- from <a href="#">[BPEL Process on page 102]</a>	[0..*]
wsdlPortRelationship [Deprecated] (WSDL Port)	relation -----> to <a href="#">[WSDL on page 209]</a>	[0..*]

Properties inherited from property groups

**Table 234. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
consumptionRequest (Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]

**Table 235. Properties inherited from [Incoming side of the project content relationship on page 46](#)**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from [ <a href="#">Project on page 119</a> ]	[0..1]

**Table 236. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [ <a href="#">WS-Policy on page 214</a> ]	[0..*]
documentation (Documentation)	relation -----> to [ <a href="#">Documentation on page 84</a> ]	[0..*]

**Table 237. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]
artifactSlo (SLO)	relation -----> to [ <a href="#">SLO on page 168</a> ]	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to [ <a href="#">Usage Plan on page 197</a> ]	[0..*]

LocalName (Label)	Type	Cardinality
provisionContract (Provision Contract)	relation <----- from [Contract on page 78]	[0..*]
provisionRequest (Provided Request)	relation <----- from [Request on page 81]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [Contract on page 78]	[0..*]
revokedContract (Revoked Contract)	relation -----> to [Contract on page 78]	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 238. Properties inherited from Service Properties on page 48**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 239. Properties inherited from systemProperties on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 240. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT</a>	[0..1]



	on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
version (Version)	text	[0..1]

## WSDL

LocalName: wsdlArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - WSDL

Implemented property groups

- [Data attachment properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Web Services Description Language document describing a Web Service

**Table 241. Properties summary**

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
bindingQName (Web service binding QName)	text	[0..*]
definitionOf (Definition of)	relation <----- from [ <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> ]	[0..*]
endpointQName (WSDL Endpoint QName)	text	[0..*]
importedWsdldocument (Imported WSDL)	relation -----> to [ <a href="#">WSDL on page 209</a> ]	[0..*]
importedXsdDocument (Imported XSD)	relation -----> to [ <a href="#">XML Schema on page 218</a> ]	[0..*]
interfaceQName (Web service interface QName)	text	[0..*]
r_serviceDefinedBy (Service Defined By)	relation <----- from [ <a href="#">SCA on page 122</a> ]	[0..*]
referenceDefinedBy (Reference Defined By)	relation <----- from [ <a href="#">SCA on page 122</a> ]	[0..*]
serviceQname (Web service QName)	text	[0..*]
targetNamespace (Target Namespace)	text	[0..1]
wsdlImportedBy (Imported by)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">BPEL Process on page 102</a> ]	[0..*]
wsdlPortUsedBy [Deprecated] (Port Used by)	relation <----- from [ <a href="#">SOAP Service on page 204</a> ]	[0..*]
wsdlServiceRelationship (WSDL Service)	relation -----> to [ <a href="#">WSDL on page 209</a> ]	[0..*]
wsdlServiceUsedBy (Service Used by)	relation <----- from [ <a href="#">WSDL on page 209</a> ]	[0..*]

Properties inherited from property groups

**Table 242. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 243. Properties inherited from [Incoming side of the project content relationship on page 46](#)**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from <a href="#">[Project on page 119]</a>	[0..1]

**Table 244. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 245. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]
artifactSlo (SLO)	relation -----> to [ <a href="#">SLO on page 168</a> ]	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to [ <a href="#">Usage Plan on page 197</a> ]	[0..*]
provisionContract (Provision Contract)	relation <----- from [ <a href="#">Contract on page 78</a> ]	[0..*]
provisionRequest (Provided Request)	relation <----- from [ <a href="#">Request on page 81</a> ]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [ <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> ]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]
revokedContract (Revoked Contract)	relation -----> to [ <a href="#">Contract on page 78</a> ]	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 246. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]

LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 247. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT</a> ]	[0..1]

	on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
LocalName (Label)	Type	Cardinality
version (Version)	text	[0..1]

## WS-Policy

LocalName: wsPolicyArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - WS-Policy

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Document in the format described by the WS-Policy specification

**Table 248. Properties summary**

LocalName (Label)	Type	Cardinality
associatedApplication (Associated Application)	taxonomy [val, name, taxonomyURI]	[0..1]

LocalName (Label)	Type	Cardinality
designTimePolicyOf (Design-time Policy of)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">Contract on page 78</a> , <a href="#">Request on page 81</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Operation on page 112</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">UDDI Channel on page 190</a> , <a href="#">UDDI Registry on page 195</a> , <a href="#">Assertion on page 56</a> , <a href="#">Business Policy on page 65</a> , <a href="#">STM Server on page 126</a> , <a href="#">SOA Policy Enforcer Server on page 173</a> , <a href="#">BAC / UCMDB Server on page 63</a> , <a href="#">Organizational Unit on page 140</a> , <a href="#">User Profile on page 142</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> , <a href="#">UDDI Entity on page 192</a> , <a href="#">BAC Entity on page 60</a> ]	[0..*]
externalDefinition (Defines)	relation <----- from [ <a href="#">UDDI Entity on page 192</a> , <a href="#">BAC Entity on page 60</a> ]	[0..*]
importedBy (Imported by)	relation <----- from [ <a href="#">WS-Policy on page 214</a> , <a href="#">Assertion on page 56</a> , <a href="#">Business Policy on page 65</a> ]	[0..*]
imports (Imports)	relation -----> to [ <a href="#">WS-Policy on page 214</a> , <a href="#">Business Policy on page 65</a> , <a href="#">Assertion on page 56</a> ]	[0..*]
policyType (Policy type)	taxonomy [val, name, taxonomyURI]	[0..1]
runtimePolicyOf (Runtime Policy of)	relation <----- from [ <a href="#">Operation on page 112</a> , <a href="#">UDDI Channel on page 190</a> , <a href="#">UDDI Registry on page 195</a> , <a href="#">BAC / UCMDB Server on page 63</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> ]	[0..*]
uddiDefinition (UDDI Definition)	relation <----- from [ <a href="#">UDDI Entity on page 192</a> ]	[0..*]

Properties inherited from property groups

**Table 249. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 250. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 251. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]



LocalName (Label)	Type	Cardinality
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 252. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT</a> ]	[0..1]

	on page 162, Saved Search on page 175, Schematron on page 157, SLO on page 168, Usage Plan on page 197, Business Service on page 67, Endpoint on page 91, Implementation on page 130, WS-Policy on page 214, Application on page 97, Project on page 119, Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
version (Version)	text	[0..1]

## XML Schema

LocalName: xmlSchemaArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - XML Schema

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: XML Schema document

**Table 253. Properties summary**

<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
definitionOf (Definition of)	relation <----- from [ <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> ]	[0..*]

LocalName (Label)	Type	Cardinality
importedDtdDocument (Imported DTD)	relation -----> to <a href="#">[DTD on page 88]</a>	[0..*]
importedXsdDocument (Imported XSD)	relation -----> to <a href="#">[XML Schema on page 218]</a>	[0..*]
schemaInstanceConsumedBy (Instance Consumed by)	relation <----- from <a href="#">[XQuery on page 226, XSLT on page 231, Schematron XSLT on page 162]</a>	[0..*]
schemaInstanceProducedBy (Instance Produced by)	relation <----- from <a href="#">[XQuery on page 226, XSLT on page 231, Schematron XSLT on page 162]</a>	[0..*]
targetNamespace (Target Namespace)	text	[0..1]
validitySchemaInverse (XML Schema)	relation <----- from <a href="#">[Schema Validity Tool on page 165]</a>	[0..*]
xsdImportedBy (Imported by)	relation <----- from <a href="#">[WSDL on page 209, XML Schema on page 218, BPEL Process on page 102]</a>	[0..*]

Properties inherited from property groups

**Table 254. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]

LocalName (Label)	Type	Cardinality
syncStatus (Synchronization status)	text	[0..1]

**Table 255. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 256. Properties inherited from [Provider Properties on page 47](#)**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
artifactSlo (SLO)	relation -----> to <a href="#">[SLO on page 168]</a>	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to <a href="#">[Usage Plan on page 197]</a>	[0..*]
provisionContract (Provision Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
provisionRequest (Provided Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]
revokedContract (Revoked Contract)	relation -----> to <a href="#">[Contract on page 78]</a>	[0..*]

LocalName (Label)	Type	Cardinality
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 257. Properties inherited from [systemProperties](#) on page 48**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 258. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## XML Service

LocalName: xmlServiceArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Implementation on page 130](#)
    - XML Service

Implemented property groups

- [Consumer Properties on page 45](#)
- [Incoming side of the project content relationship on page 46](#)
- [Model Properties on page 46](#)
- [Provider Properties on page 47](#)
- [Service Properties on page 48](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: Any XML Service is in fact a Web Service that does not conform to the existing WS-Standards. It usually provides HTTP GET access for ease of use, avoiding the need for sophisticated SOAP frameworks

**Table 259. Properties summary**

LocalName (Label)	Type	Cardinality
definition (Definition)	relation -----> to <a href="#">[XML Schema on page 218, WSDL on page 209]</a>	[0..*]

Properties inherited from property groups

**Table 260. Properties inherited from [Consumer Properties on page 45](#)**

LocalName (Label)	Type	Cardinality
consumptionContract (Contract)	relation <----- from <a href="#">[Contract on page 78]</a>	[0..*]
consumptionRequest (Request)	relation <----- from <a href="#">[Request on page 81]</a>	[0..*]
r_consumerOwner2contract (Consumer owner to artifact)	relation <----- from <a href="#">[Contract on page 78, Request on page 81]</a>	[0..*]

**Table 261. Properties inherited from Incoming side of the project content relationship on page 46**

LocalName (Label)	Type	Cardinality
incomingContentRelationshipType (Project)	relation <----- from [Project on page 119]	[0..1]

**Table 262. Properties inherited from Model Properties on page 46**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to [WS-Policy on page 214]	[0..*]
documentation (Documentation)	relation -----> to [Documentation on page 84]	[0..*]

**Table 263. Properties inherited from Provider Properties on page 47**

LocalName (Label)	Type	Cardinality
acceptedContract (Accepted Contract)	relation -----> to [Contract on page 78]	[0..*]
artifactSlo (SLO)	relation -----> to [SLO on page 168]	[0..*]
providerUsagePlan [Deprecated] (Usage Plan)	relation -----> to [Usage Plan on page 197]	[0..*]
provisionContract (Provision Contract)	relation <----- from [Contract on page 78]	[0..*]
provisionRequest (Provided Request)	relation <----- from [Request on page 81]	[0..*]
r_ProviderOwner2contract (Provider owner to artifact)	relation <----- from [Contract on page 78, Request on page 81]	[0..*]
readyForConsumption (Consumable)	boolean	[0..1]
rejectedContract (Rejected Contract)	relation -----> to [Contract on page 78]	[0..*]



LocalName (Label)	Type	Cardinality
revokedContract (Revoked Contract)	relation ----> to <a href="#">[Contract on page 78]</a>	[0..*]
stakeholderEmail (Stakeholder Email)	text	[0..*]

**Table 264. Properties inherited from [Service Properties on page 48](#)**

LocalName (Label)	Type	Cardinality
criticality (Failure Impact)	taxonomy [val, name, taxonomyURI]	[0..1]
productionStage (Lifecycle Stage)	taxonomy [val, name, taxonomyURI]	[0..1]

**Table 265. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]

LocalName (Label)	Type	Cardinality
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 266. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## XQuery

LocalName: xqueryArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - XQuery

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: XQuery Document

**Table 267. Properties summary**

LocalName (Label)	Type	Cardinality
executeQueryInverse (Execute Query)	relation <----- from <a href="#">[XQuery Tool on page 230]</a>	[0..*]
inputSchemaDocument (Input Schema)	relation -----> to <a href="#">[XML Schema on page 218, DTD on page 88]</a>	[0..*]
outputSchemaDocument (Output Schema)	relation -----> to <a href="#">[DTD on page 88, XML Schema on page 218]</a>	[0..*]
xqueryDocumentInverse (XQuery)	relation <----- from <a href="#">[Saved Search on page 175]</a>	[0..*]
xqueryInputParameterType (Input Parameter Type)	nameValuePair [val, name]	[0..*]
xqueryInputType (Input Type)	taxonomy [val, name, taxonomyURI]	[0..1]
xqueryOutputMultipleCardinality (Returns Multiple Results)	boolean	[0..1]
xqueryOutputType (Output Type)	taxonomy [val, name, taxonomyURI]	[0..*]

Properties inherited from property groups

**Table 268. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 269. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 270. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]

LocalName (Label)	Type	Cardinality
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 271. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]

LocalName (Label)	Type	Cardinality
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Process Implementation on page 107</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> ]	[0..1]
version (Version)	text	[0..1]

## XQuery Tool

LocalName: xqueryToolArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)
  - [Tool on page 185](#)
    - XQuery Tool

Implemented property groups

- [systemProperties on page 48](#)

Description: XQuery Tool provides the ability to execute XQuery resources

**Table 272. Properties summary**

LocalName (Label)	Type	Cardinality
executeQuery (Execute Query)	relation -----> to [ <a href="#">XQuery on page 226</a> ]	[0..1]
xqueryParameter (XQuery Parameters)	parameterList [parameters, parameters.paramName, parameters.paramValue]	[0..1]

Properties inherited from property groups

**Table 273. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

## XSLT

LocalName: xsltArtifact

Artifact Inheritance Hierarchy:

- [Artifact on page 53](#)

- XSLT

Implemented property groups

- [Data attachment properties on page 45](#)
- [Model Properties on page 46](#)
- [systemProperties on page 48](#)
- [Version Properties on page 49](#)

Description: XSLT Transformation Document

**Table 274. Properties summary**

LocalName (Label)	Type	Cardinality
importedXslDocument (Imported XSL)	relation -----> to <a href="#">[XSLT on page 231]</a>	[0..*]
importedXslDocumentInverse (Imported XSL)	relation <----- from <a href="#">[XSLT on page 231, Schematron XSLT on page 162]</a>	[0..*]
inputSchemaDocument (Input Schema)	relation -----> to <a href="#">[XML Schema on page 218, DTD on page 88]</a>	[0..*]
outputSchemaDocument (Output Schema)	relation -----> to <a href="#">[DTD on page 88, XML Schema on page 218]</a>	[0..*]
xslOutputMethod (XSLT Output Method)	taxonomy [val, name, taxonomyURI]	[0..1]

Properties inherited from property groups

**Table 275. Properties inherited from [Data attachment properties on page 45](#)**

LocalName (Label)	Type	Cardinality
checksum (Checksum)	bigInteger	[0..1]
contentType (Content type)	text	[0..1]



LocalName (Label)	Type	Cardinality
dataLength (Data length)	integer	[0..1]
isCached (Cached)	boolean	[0..1]
location (Location)	text	[0..1]
originUrl (Original URL)	nameUrlPair [url, name]	[0..1]
r_filename (File name)	text	[0..1]
syncLastChecked (Date of last synchronization check)	date	[0..1]
syncStatus (Synchronization status)	text	[0..1]

**Table 276. Properties inherited from [Model Properties on page 46](#)**

LocalName (Label)	Type	Cardinality
designTimePolicy (Design-time Policy)	relation -----> to <a href="#">[WS-Policy on page 214]</a>	[0..*]
documentation (Documentation)	relation -----> to <a href="#">[Documentation on page 84]</a>	[0..*]

**Table 277. Properties inherited from [systemProperties on page 48](#)**

LocalName (Label)	Type	Cardinality
_artifactType (Artifact Type)	taxonomy [val, name, taxonomyURI]	[1..*]
_checksum	bigInteger	[0..1]
_contentType	text	[0..1]
_deleted	boolean	[1..1]
_owner	text	[1..1]
_revision (Revision)	integer	[1..1]
_revisionCreator	text	[1..1]
_revisionTimestamp	date	[1..1]

LocalName (Label)	Type	Cardinality
_uuid	uuid	[1..1]
categoryBag (Categories)	categoryBag [categoryGroups.categories, categoryGroups, categoryGroups.categories.name, categories.taxonomyURI, categories, categoryGroups.categories.val, categoryGroups.taxonomyURI, categoryGroups.categories.taxonomyURI, categories.val, categories.name]	[0..1]
description (Description)	text	[0..1]
identifierBag (Identifier Bag)	identifierBag [categories.taxonomyURI, categories, categories.val, categories.name]	[0..1]
keyword (Keyword)	taxonomy [val, name, taxonomyURI]	[0..*]
name (Name)	text	[1..1]

**Table 278. Properties inherited from [Version Properties on page 49](#)**

LocalName (Label)	Type	Cardinality
r_nextVersion (Next Version)	relation <----- from [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> , <a href="#">Business Process on page 115</a> , <a href="#">SCA on page 122</a> , <a href="#">Web Application on page 200</a> , <a href="#">SOAP Service on page 204</a> , <a href="#">XML Service on page 222</a> , <a href="#">BPEL Process on page 102</a> ]	[0..1]
r_previousVersion (Previous Major Version)	relation -----> to [ <a href="#">WSDL on page 209</a> , <a href="#">XQuery on page 226</a> , <a href="#">XML Schema on page 218</a> , <a href="#">XSLT on page 231</a> , <a href="#">Taxonomy on page 182</a> , <a href="#">Documentation on page 84</a> , <a href="#">DTD on page 88</a> , <a href="#">Schematron XSLT on page 162</a> , <a href="#">Saved Search on page 175</a> , <a href="#">Schematron on page 157</a> , <a href="#">SLO on page 168</a> , <a href="#">Usage Plan on page 197</a> , <a href="#">Business Service on page 67</a> , <a href="#">Endpoint on page 91</a> , <a href="#">Implementation on page 130</a> , <a href="#">WS-Policy on page 214</a> , <a href="#">Application on page 97</a> , <a href="#">Project on page 119</a> ,	[0..1]

	Process Implementation on page 107, Business Process on page 115, SCA on page 122]	
<b>LocalName (Label)</b>	<b>Type</b>	<b>Cardinality</b>
version (Version)	text	[0..1]

## Property Types

The following table lists predefined property types.

Type	Description
address	A full postal address
boolean	Boolean value - TRUE or FALSE
category	Used to assign several categories from a taxonomy to the artifact
categoryBag	Categorizes an artifact by taxonomies
dailyInterval	A time interval defined by a start day and end day, e.g. Monday to Friday
dateTime	A specific date and time
documentRelationship	Used to reference other artifacts etc.
identifierBag	Identifies the artifact by taxonomy. For categorization, use category bag instead
instanceDetail	Property type used by UDDI integration.
integer	Integer number
double	A double precision floating point number
nameUrlPair	URL with an optional name assigned
nameValuePair	A name and value pair
plainText	One-line text, suitable for textual information such as names
portDocumentRelationship	Port-document relationship
qualifiedDocumentRelationship	Used to reference parts of WSDLs, WS-Policies, etc.
scheduled	Property type used to display scheduling information for task
selector	Property type used to display selector for a task
text	One-line text, suitable for machine readable information such as e-mail addresses

Type	Description
textarea	Multi-line text, suitable for information such as descriptions
xqueryParameter	Property type used to display parameters for executing an XQuery
encryptedPassword	Encrypted Password

## 6 Taxonomy Schema

Each *taxonomy* is represented as an XML document with root element `taxonomy`.

The following sections each describe an element of the schema significant in the context of the *SDM*. Generally, the format of each section is:

- 1 Diagram;
- 2 Attribute specifications in the context of the *SDM*;
- 3 Additional detail if any;

In the current release these details are of limited significance to users, but will be increasingly of interest to architects and developers who wish to extend the *SDM*.

Other details of the schema are of some interest for the purpose of governance and the implementation of policies. The schema defines elements used for purposes, such as listing and referencing taxonomies on APIs. For more information see the HP SOA Registry Foundation documentation.



Details in diagrams, such as whether attributes and elements are optional, reflect the schema but descriptions reflect use of taxonomies in the *SDM* to define property types.

The target namespace of this schema is `http://systinet.com/uddi/taxonomy/v3/5.0` and the namespace prefix `taxonomy:` is used.


The schema uses definitions from the *UDDI V3* schema with *URN* `urn:uddi-org:api_v3` for which the namespace prefix `uddi:` is used.

Taxonomies in SOA Systinet are compatible with taxonomies in HP SOA Registry Foundation. They are represented as XML documents using the same schema shown in [Taxonomy Schema on page 242](#).

However, this schema defines elements used for other purposes, such as listing and referencing taxonomies on API's, and since SOA Systinet only uses a subset of possible taxonomies, it is only possible to import taxonomies satisfying additional constraints. These are described in [Chapter 6, Taxonomy Schema](#) in [HP SOA Systinet](#).

You can see which taxonomies are installed by accessing the taxonomy collection as a URL such as:

```
http://hostname:8080/soa/systinet/platform/rest/repository/taxonomies/?view
```

 Adjust the URL according to your installation (hostname, deployment context and port).

taxonomy

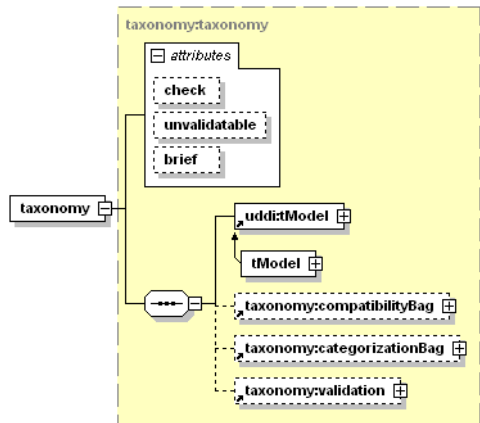


Table 279. Attributes

Name	Required	Description
check	In SOA Systinet	Always yes.
unvalidateable	no	Ignored.
brief	no	Ignored.

A taxonomy:validation element is always required in SOA Systinet.

tModel

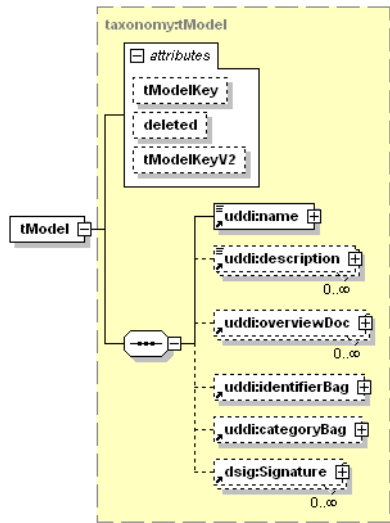
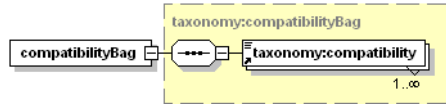


Table 280. Attributes

Name	Required	Description
tModelKey	no	Should be uddi:uddi.org:categorization:types in SOA Systinet.
deleted	no	Ignored
tModelKeyV2	no	Should be uuid:clacf26d-9672-4404-9d70-39b756e62ab4 in SOA Systinet.

The type of element taxonomy:tModel extends the type of uddi:tModel by adding attribute tModelKeyV2. For full details of other attributes and elements, see the UDDI V3 specification.

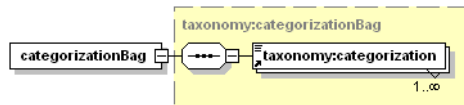
## compatibilityBag (and compatibility)



`taxonomy:compatibilityBag` contains one or more `taxonomy:compatibility` elements each containing one of the following text values:

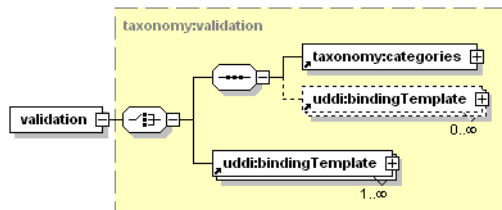
- `tModel`
- `businessEntity`
- `businessService`
- `bindingTemplate`

## categorizationBag (and categorization)



`taxonomy:categorizationBag` contains one or more `taxonomy:categorization` elements.

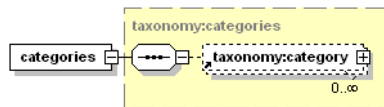
## validation





In SOA Systinet a taxonomy:validation element is required and it must contain a taxonomy:categories element first. It may be followed by zero or more uddi:bindingTemplate elements, which are ignored.

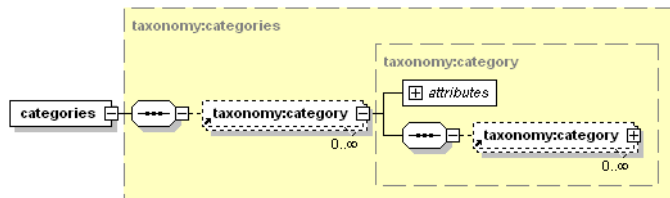
## categories



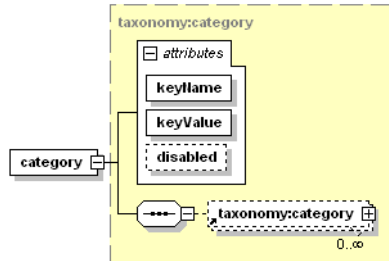
A `taxonomy:categories` element contains zero or more `taxonomy:category` elements defining the categories in a taxonomy. It can be empty, but until possible categories are added, no artifacts can be created that use the taxonomy for a property type.

The `taxonomy:categories` element appears as the first child of `taxonomy:validation` because it is through validation constraints that the property type is defined. In SOA Systinet all taxonomies are defined in terms of a set of *category* values.

The categories can be arranged in a hierarchy as shown in this expansion of the above diagram.



## category



**Table 281. Attributes**

Name	Required	Description
keyName	Yes	Descriptive name used as a label.
keyValue	Yes	A unique identifier, typically mnemonic or numeric.
disabled	No	If yes then this value is now invalid. Either it is deprecated or it only exists to contain subcategories.

## Taxonomy Schema

```

<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema id="taxonomy"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://systinet.com/uddi/taxonomy/v3/5.0"
  xmlns:taxonomy="http://systinet.com/uddi/taxonomy/v3/5.0"
  xmlns:uddi="urn:uddi-org:api_v3"
  elementFormDefault="qualified"
  attributeFormDefault="unqualified"
  version="1.00">
  <!--
    Copyright 2001-2005 Systinet Corp. All rights reserved.
    Use is subject to license terms.
  -->
  <xsd:import namespace="http://www.w3.org/XML/1998/namespace"
    schemaLocation="http://www.w3.org/2001/xml.xsd"/>
  <xsd:import namespace="urn:uddi-org:api_v3" schemaLocation="uddi_v3.xsd"/>

  <xsd:element name="compatibility" type="taxonomy:compatibility" final="restriction"/>
  
```

```

<xsd:simpleType name="compatibility">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="businessEntity"/>
    <xsd:enumeration value="businessService"/>
    <xsd:enumeration value="bindingTemplate"/>
    <xsd:enumeration value="tModel"/>
  </xsd:restriction>
</xsd:simpleType>
<xsd:element name="categorization" type="taxonomy:categorization" final="restriction"/>
<xsd:simpleType name="categorization">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="categorization"/>
    <xsd:enumeration value="categorizationGroup"/>
    <xsd:enumeration value="identifier"/>
    <xsd:enumeration value="relationship"/>
  </xsd:restriction>
</xsd:simpleType>
<xsd:element name="taxonomy" type="taxonomy:taxonomy" final="restriction"/>
<xsd:complexType name="taxonomy" final="restriction">
  <xsd:sequence>
    <xsd:element ref="uddi:tModel"/>
    <xsd:element ref="taxonomy:compatibilityBag" minOccurs="0"/>
    <xsd:element ref="taxonomy:categorizationBag" minOccurs="0"/>
    <xsd:element ref="taxonomy:validation" minOccurs="0"/>
  </xsd:sequence>
  <xsd:attribute name="check" type="xsd:boolean" use="optional"/>
  <xsd:attribute name="unvalidatable" type="xsd:boolean" use="optional"/>
  <xsd:attribute name="brief" type="xsd:boolean" use="optional"/>
</xsd:complexType>
<xsd:element name="taxonomyDetail" type="taxonomy:taxonomyDetail" final="restriction"/>
<xsd:complexType name="taxonomyDetail" final="restriction">
  <xsd:sequence>
    <xsd:element ref="taxonomy:taxonomy" minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
  <xsd:attribute name="truncated" type="uddi:truncated" use="optional"/>
</xsd:complexType>
<xsd:element name="validation" type="taxonomy:validation" final="restriction"/>
<xsd:complexType name="validation" final="restriction">
  <xsd:choice>
    <xsd:sequence>
      <xsd:element ref="taxonomy:categories"/>
      <xsd:element ref="uddi:bindingTemplate" minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:element ref="uddi:bindingTemplate" maxOccurs="unbounded"/>
  </xsd:choice>
</xsd:complexType>
<xsd:element name="categories" type="taxonomy:categories" final="restriction"/>

```

```

<xsd:complexType name="categories" final="restriction">
  <xsd:sequence>
    <xsd:element ref="taxonomy:category" minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
<xsd:element name="category" type="taxonomy:category" final="restriction"/>
<xsd:complexType name="category" final="restriction">
  <xsd:sequence>
    <xsd:element ref="taxonomy:category" minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
  <xsd:attribute name="keyName" type="uddi:keyName" use="required"/>
  <xsd:attribute name="keyValue" type="uddi:keyValue" use="required"/>
  <xsd:attribute name="disabled" type="xsd:boolean" use="optional"/>
</xsd:complexType>
<xsd:element name="compatibilityBag" type="taxonomy:compatibilityBag" final="restriction"/>
<xsd:complexType name="compatibilityBag" final="restriction">
  <xsd:sequence>
    <xsd:element ref="taxonomy:compatibility" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
<xsd:element name="categorizationBag" type="taxonomy:categorizationBag" final="restriction"/>
<xsd:complexType name="categorizationBag" final="restriction">
  <xsd:sequence>
    <xsd:element ref="taxonomy:categorization" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
<xsd:element name="find_taxonomy" type="taxonomy:find_taxonomy" final="restriction"/>
<xsd:complexType name="find_taxonomy" final="restriction">
  <xsd:complexContent>
    <xsd:extension base="uddi:find_tModel">
      <xsd:sequence>
        <xsd:element ref="taxonomy:compatibilityBag" minOccurs="0"/>
        <xsd:element ref="taxonomy:categorizationBag" minOccurs="0"/>
      </xsd:sequence>
      <xsd:attribute name="check" type="xsd:boolean" use="optional"/>
      <xsd:attribute name="unvalidatable" type="xsd:boolean" use="optional"/>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
<xsd:element name="taxonomyInfo" type="taxonomy:taxonomyInfo" final="restriction"/>
<xsd:complexType name="taxonomyInfo" final="restriction">
  <xsd:complexContent>
    <xsd:extension base="uddi:tModelInfo">
      <xsd:sequence>
        <xsd:element ref="taxonomy:categorizationBag"/>
        <xsd:element ref="taxonomy:compatibilityBag"/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>

```

```

        <xsd:attribute name="check" type="xsd:boolean" use="required"/>
        <xsd:attribute name="unvalidatable" type="xsd:boolean" use="optional"/>
    </xsd:extension>
</xsd:complexContent>
</xsd:complexType>
<xsd:element name="taxonomyInfos" type="taxonomy:taxonomyInfos" final="restriction"/>
<xsd:complexType name="taxonomyInfos" final="restriction">
    <xsd:sequence>
        <xsd:element ref="taxonomy:taxonomyInfo" minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
<xsd:element name="taxonomyList" type="taxonomy:taxonomyList" final="restriction"/>
<xsd:complexType name="taxonomyList" final="restriction">
    <xsd:sequence>
        <xsd:element ref="uddi:listDescription" minOccurs="0"/>
        <xsd:element ref="taxonomy:taxonomyInfos" minOccurs="0"/>
    </xsd:sequence>
    <xsd:attribute name="truncated" type="xsd:boolean" use="optional"/>
</xsd:complexType>
<xsd:element name="get_taxonomy" type="taxonomy:get_taxonomy" final="restriction"/>
<xsd:complexType name="get_taxonomy" final="restriction">
    <xsd:complexContent>
        <xsd:extension base="uddi:get_tModelDetail">
            <xsd:attribute name="brief" type="xsd:boolean" use="optional"/>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
<xsd:element name="delete_taxonomy" type="taxonomy:delete_taxonomy" final="restriction"/>
<xsd:complexType name="delete_taxonomy" final="restriction">
    <xsd:complexContent>
        <xsd:extension base="uddi:delete_tModel"/>
    </xsd:complexContent>
</xsd:complexType>
<xsd:element name="save_taxonomy" type="taxonomy:save_taxonomy" final="restriction"/>
<xsd:complexType name="save_taxonomy" final="restriction">
    <xsd:sequence>
        <xsd:element ref="taxonomy:authInfo" minOccurs="0"/>
        <xsd:element ref="taxonomy:taxonomy" minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>
<xsd:element name="authInfo" type="taxonomy:authInfo" final="restriction"/>
<xsd:simpleType name="authInfo">
    <xsd:restriction base="xsd:string"/>
</xsd:simpleType>
<xsd:element name="tModel" type="taxonomy:tModel" substitutionGroup="uddi:tModel"/>
<xsd:complexType name="tModel">
    <xsd:complexContent>

```

```

        <xsd:extension base="uddi:tModel">
            <xsd:attribute name="tModelKeyV2" type="uddi:tModelKey" use="optional"/>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>
<xsd:element name="download_taxonomy" type="taxonomy:download_taxonomy" final="restriction"/>
<xsd:complexType name="download_taxonomy" final="restriction">
    <xsd:sequence>
        <xsd:element ref="taxonomy:authInfo" minOccurs="0"/>
        <xsd:element ref="uddi:tModelKey"/>
    </xsd:sequence>
</xsd:complexType>
<xsd:element name="upload_taxonomy" type="taxonomy:upload_taxonomy" final="restriction"/>
<xsd:complexType name="upload_taxonomy" final="restriction">
    <xsd:sequence>
        <xsd:element ref="taxonomy:authInfo" minOccurs="0"/>
    </xsd:sequence>
</xsd:complexType>
</xsd:schema>

```

## 7 Policy Schema

The policy schema structure defines technical policies. HP uses the [WS-Policy specification](http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnglobspec/html/ws-policy.asp) [http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnglobspec/html/ws-policy.asp] as a modeling framework for technical policies. Technical policies are prepared by Architects and Policy Developers who codify them as requested by the line-of-business managers, architectural councils, operational managers, etc.



In WS-Policy terms, a SOA Systinet technical policy = WS-Policy + name + documentation. SOA Systinet business policies are covered by the [WS-PolicyAttachment specification](http://msdn.microsoft.com/webservices/default.aspx?pull=/library/en-us/dnglobspec/html/ws-policyattachment.asp) [http://msdn.microsoft.com/webservices/default.aspx?pull=/library/en-us/dnglobspec/html/ws-policyattachment.asp].

Policy structure consists of a `wsp:Policy` element wrapping any number of assertion elements, as shown in [Example 1 on page 247](#). SOA Systinet does not support `wsp:All` or `wsp:ExactlyOne`.

---

### Example 1. Policy Definition Structure

```
<wsp:Policy xmlns:wsp="http://schemas.xmlsoap.org/ws/2004/09/policy"
            xmlns:ex="http://www.example.com/assertions">

    <ex:Assertion1/>
    <ex:Assertion2/>
    <ex:Assertion3/>
    <ex:Assertion4/>

</wsp:Policy>
```





## 8 Assertion Schema

Assertions are SOA Systinet artifacts. They are stored in the SOA Systinet Platform repository and are accessed by the REST interface. The REST interface defines two different types of assertion endpoints, assertion collections and assertion definitions. Performing an HTTP GET operation on an assertion collection returns a list of assertion definitions. Performing an HTTP GET operation on an assertion definition returns SOA Systinet metadata and assertion details, specifically the reference template, implementations, and any parameters.

The following sections cover each type and component of the assertion schema:

- [Assertion Collection Format on page 249](#)

The XML collection listing multiple assertions.

- [Assertion Definition on page 251](#)

The assertion definition, wrapping metadata and details.

- [Assertion Document Details on page 256](#)

Details, or components, of the assertion definition.

### Assertion Collection Format

The XML schema of a collection of assertions is the same as the XML schema of any other SOA Systinet listing of a collection. An assertion collection is shown in [Example 2 on page 250](#)

---

## Example 2. Assertion Collection

```
<?xml version="1.0" encoding="UTF-8"?>
<rest:resource xlink:href="http://localhost:8080/soa/systinet/platform/rest/repository/assertions/" ... >
  <rest:metadata>
    <rest:path>assertions</rest:path>
    <rest:collection></rest:collection>
    <rest:binary>0</rest:binary>
    <rest:type>collection</rest:type>
    <rest:deleted>0</rest:deleted>

    <rest:owner>systinet:admin</rest:owner>
    <rest:revision>
      <rest:number>1</rest:number>
      <rest:timestamp>1970-01-01T00:00:00.000Z</rest:timestamp>
      <rest:creator>systinet:admin</rest:creator>
      <rest:label xsi:nil="true"/>
      <rest:last>1</rest:last>
    </rest:revision>
    <rest:relationships/>
    <rest:cached>0</rest:cached>
    <rest:checksum>0</rest:checksum>
  </rest:metadata>
  <rest:descriptor/>
  <rest:data representation="list">
    <rest:resource
      xlink:href="http://localhost:8080/soa/systinet/platform/rest/repository/assertions/BP1013" ...>

      <rest:metadata>
        <rest:path>assertions/BP1013</rest:path>
        <rest:collection>assertions</rest:collection>
        <rest:binary>0</rest:binary>
        <rest:contentType>text/xml</rest:contentType>
        <rest:type>document</rest:type>

        <rest:deleted>0</rest:deleted>
        <rest:owner>systinet:admin</rest:owner>
        <rest:revision>
          <rest:number>1</rest:number>
          <rest:timestamp>2007-02-14T10:18:52.498Z</rest:timestamp>
          <rest:creator>admin</rest:creator>

          <rest:label xsi:nil="true"/>
          <rest:last>1</rest:last>
        </rest:revision>
      </rest:metadata>
    </rest:resource>
  </rest:data>
</rest:resource>
```

```

        </rest:revision>
        <rest:relationships/>
        <rest:cached>0</rest:cached>
        <rest:checksum>0</rest:checksum>
        <rest:extensions/>

    </rest:metadata>
    <rest:descriptor>
        <p0:assertionArtifact deleted="0" ...>

            <p1:nameGroup>
                <p2:name>BP1013</p2:name>
            </p1:nameGroup>
            <p1:descriptionGroup>

                <p2:description>
                    The content of the envelope matches the
                    definition in the WSDL document. ...</p2:description>
                </p1:descriptionGroup>

                <g:artifactTypeGroup>
                    ...
                    <n3:artifactType name="Assertion"
taxonomyUri="uddi:systinet.com:soa:model:taxonomies:artifactTypes"
                    value="urn:com:systinet:soa:model:artifacts:soa:policy:assertion"/>
                </g:artifactTypeGroup>
                <n4:lastRevision>1</n4:lastRevision>
                <n5:revision>1</n5:revision>
            </p0:assertionArtifact>
        </rest:descriptor>
    </rest:resource>
    ...
</rest:data>
</rest:resource>

```

## Assertion Definition

An assertion definition includes its description and definition of parameters and validation mechanisms.



You can view the XML serialization of an assertion in the UI. Open the assertion's detail page, accessible from either the **Catalog Browser** in the **Tools** tab or the **Views** menu in the assertion's page in the **Policies** tab. Click **XML View** in the detail page **Views** menu.

Alternatively, you can open a browser window with the XML View's URL, which is of the following form:

```
http://hostname:port/soa/systinet/platform/rest/repository/assertions/AssertionName
```

For example, in the standard installation of Policy Manager, you can find the WS-I Basic Profile 1.1 assertion BP1001 at

```
http://localhost:8080/soa/systinet/platform/rest/repository/assertions/BP1001.
```

The assertion definition has the following structure:

---

### Example 3. Assertion Definition Structure

```
<?xml version="1.0" encoding="UTF-8"?>
<rest:resource
  xlink:href="http://b217:8080/soa/systinet/platform/rest/repository/assertions/BP1001" ...>
<rest:metadata>
  <rest:path>assertions/BP1001</rest:path>
  <rest:collection>assertions/</rest:collection>
  <rest:binary>0</rest:binary>
  <rest:contentType>text/xml</rest:contentType>
  <rest:type>document</rest:type>

  <rest:deleted>0</rest:deleted>
  <rest:owner>systinet:admin</rest:owner>
  <rest:revision>
    <rest:number>1</rest:number>
    <rest:timestamp>2007-02-14T10:17:41.045Z</rest:timestamp>
    <rest:creator>admin</rest:creator>

    <rest:label xsi:nil="true"/>
    <rest:last>1</rest:last>
  </rest:revision>
  <rest:relationships/>
  <rest:cached>0</rest:cached>
  <rest:checksum>0</rest:checksum>
  <rest:extensions/>
</rest:metadata>
<rest:descriptor>
  <a:assertionArtifact deleted="0" xlink:href="assertions/BP1001" ...>

    <g:nameGroup>
      <p:name>BP1001</p:name>
    </g:nameGroup>
    <g:descriptionGroup>

      <p:description>...</p:description>
    </g:descriptionGroup>
    ...
    <g:artifactTypeGroup>
      ...
      <p:artifactType name="Assertion" taxonomyUri="uddi:systinet.com:soa:model:taxonomies:artifactTypes"

        value="urn:com:systinet:soa:model:artifacts:soa:policy:assertion"/>
    </g:artifactTypeGroup>
  </a:assertionArtifact>
</rest:descriptor>
</rest:resource>
```

```

        </g:artifactTypeGroup>
        <p:lastRevision>1</p:lastRevision>
        <p:revision>1</p:revision>
    </a:assertionArtifact>
</rest:descriptor>
<rest:data representation="xml" data=">
    <rest:xmlData contentType="text/xml">
        <pm:Assertion xmlns:pm="http://systinet.com/2005/10/soa/policy">

            <pm:Template xmlns:wsim="http://www.ws-i.org/testing/2004/07/assertions/">
                <wsim:BP1001/>
            </pm:Template>
            <pm:Validation SourceType="xml" xmlns:(ns=http://systinet.com/2005/10/soa/policy/report) qname:(ns:Message)">

                <wsim:Message AssertionID="BP1001"
xmlns:wsim="http://systinet.com/2005/10/soa/policy/validation/wsi-message"/>
            </pm:Validation>
        </pm:Assertion>
    </rest:xmlData>
</rest:data>

</rest:resource>

```

The elements of this structure are defined as follows:

- **/rest:resource** . An element containing the resource.
- **/rest:resource/@xlink:href** . Reference to the item. The same as the requestURI attribute on this element.
- **/rest:resource/rest:metadata** . The generic metadata of the resource. See SOA Systinet Platform documentation for details.
- **/rest:resource/rest:descriptor/a:assertionArtifact** . An assertion descriptor, containing assertion specific metadata.
- **/rest:resource/rest:descriptor/a:assertionArtifact/p:\*** . A property. A generic format of property looks like: <prefix:local taxonomyURI='uri' name='name' value='value' />.



It takes approximately 10 minutes for changes in the SDM configuration to propagate to Policy Manager.

- `/rest:resource/rest:descriptor/a:assertionArtifact/g:*` . A property group. If more properties with the same namespace URI and local part are present, they should be included in a property group. Although this group should be named as a plural of the local part of the assertion, this is not checked by Policy Manager.
- `/rest:resource/rest:data/rest:xmlData` . A wrapper for the "executive" part of the assertion.
- `/rest:resource/rest:data/rest:xmlData/pm:Assertion` . Root element containing the definition of the "executive" part of an assertion.
- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Template` . This required element must contain exactly one child element, which is a reference template of how this assertion looks as a WS-Policy document. If there are namespace definitions here, they are included in the reference template. If the assertion has any parameters, you can define default values for them in the reference template. If there are no namespaces or parameters, the reference template can be in the form `<name/>`.
- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Parameter` . An assertion in a WS-Policy document may contain parameters including timeouts (in WS-ReliableMessaging), type of authentication, required SOAP header elements, etc. This element gives a definition of such parameters, including the type of the parameter and where the parameter can be found in an instance of the assertion. This information is used both by the UI console and by policy validators.
- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Parameter/@Name` . The name of the parameter. This name will be shown in the UI.
- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Parameter/@Type` . Schema type of the parameter's value.



In this release, the schema type is not used in either the UI or in the validation process. This behavior is likely to be changed.

- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Parameter/@XPointer`. In the absence of a `ValueXPointer` attribute, this attribute identifies the place of the parameter in the assertion's template (that is, how the attribute can be obtained from an instance of the assertion). Only a simplified form of the `XPointer` can be used.

The evaluation context for the `XPointer` is the root of the actual assertion. So, for example, `b[1]` is the first "b" child of the assertion's element.

In this release, an `XPath` starting with "/" is interpreted to point to the root of the policy document. This behavior will be changed, so do not use absolute `XPaths`.

- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Parameter/@ValueXPointer`. `ValueXPointer` identifies the place of the parameter *relative to* the place identified by the `XPointer` attribute. When the parameter is not set, the element referenced by the `XPointer` attribute is removed from the instance. When the parameter is defined, its value is set to a place identified by the concatenation of the `XPointer` and `ValueXPointer` values. The rationale for this attribute is that there are assertions whose schema requires that either an attribute is set or the attribute's parent element is missing.
- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Parameter/@Optional`. This attribute tells whether the parameter is optional, that is, if it can be omitted from the assertion instance.
- `/rest:resource/rest:data/rest:xmlData/pm:Assertion/pm:Validation`. The implementation, as described in [Implementations on page 261](#).

## Assertion Document Details

[Example 4 on page 257](#) is the raw XML document of the UDDI BE 01 assertion.



---

## Example 4. UDDI BE 01 Assertion XML Document

```
<?xml version="1.0" encoding="UTF-8"?>
  <pm:Assertion xmlns:pm="http://systinet.com/2005/10/soa/policy"
    xmlns:up="http://systinet.com/2005/10/soa/policy/uddi"
    xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <pm:Parameter Name="lang" Type="xs:string" XPointer="xpointer(@RequiredLang)"/>
  <!-- template of the instance of the assertion -->
    <pm:Template>
      <up:UDDI_BE_01 RequiredLang="en"/>
    </pm:Template>
    <pm:Validation SourceType="xmlns(ns=urn:uddi-org:api_v2)qname(ns:businessEntity)"
      xmlns:uddi="urn:uddi-org:api_v2"
      xmlns:val="http://systinet.com/2005/10/soa/policy/validation">
  <!-- the validation is implemented via xpath expression -->
      <val:XPath>
        count(/uddi:businessEntity/uddi:name[@xml:lang=$lang])>0
      </val:XPath>
    </pm:Validation>
  </pm:Assertion>
```

The key components of the assertion, visible in both the UI and the XML document, are:

- Reference Template
- Parameter
- Implementation, which includes the validation handler.

## Reference Templates

The reference template defines what the assertion looks like instantiated as a WS-Policy document (See the generic `<pm:Template>` element shown in [Example 4 on page 257](#)). If there is a namespace to be defined it is included in the reference template. If there are parameters, you can define the default values they point to. If there is no namespace or parameter, the template can be a simple empty tag, like `<assertionName/>`.

The UDDI BE 01 assertion reference template defines the `up` namespace. The assertion has one parameter, `lang`, which points to the `RequiredLang` attribute. The reference template sets the default value of this parameter, `en`. The actual XML of the reference template is:

```
<p:Template>
  <up:UDDI_BE_01 RequiredLang="en" xmlns:up="http://systinet.com/2005/10/soa/policy/uddi"/>
</p:Template>
```

Reference templates must obey the following rules:

- The template name must be unique.
- The template must be a complete and valid XML element, not a fragment.
- The template can carry a namespace. This is the case with the WS-I BasicProfile assertion reference templates, such as `<wsi:BP1004 xmlns:wsi="http://www.ws-i.org/testing/2004/07/assertions/" />`

## Parameters

Parameters represent requirements whose specific values may vary. They include such things as timeouts, type of authentication, required SOAP header elements, and so on. The value referenced by a parameter can differ between technical policies containing the parameter's parent assertion because each technical policy contains its own instance of the assertion.

Using parameters lets the policy developer reuse assertions. The developer can set a different required value for an assertion in each policy in which the assertion is used. Without parameters, the developer would need a separate assertion for each required value.

[Example 5 on page 258](#) is an assertion taken from a policy file (namespaces omitted for brevity). Note the attribute `RequiredLang` with the value of "en". This attribute represents the `RequiredLang` parameter. Its default value is "en" for English. This default value is specified in the reference template (see [Reference Templates on page 257](#)) but the policy developer can change this value in individual policy files. If the assertion developer does not specify the parameter's default value in the reference template and does not set the parameter as optional, the policy developer must set the parameter value when creating a technical policy with the parameter's parent assertion.

---

### Example 5. Assertion With Parameter

```
<wsp:Policy xmlns:wsp="..." />
  <up:UDDI_BE_01 RequiredLang="en" xmlns:up="..." />
</wsp:Policy>
```

A parameter definition has the following structure:

- `pm:Parameter/@Name`

Name of the parameter.

- `pm:Parameter/pm:Description`

Description of the parameter.

- `pm:Parameter/@XPointer`

Location of the modified attribute (expressed as an XPointer).

- `pm:Parameter/@ValueXPointer`

Location of the modified attribute (expressed as an XPointer). See below for details.

- `pm:Parameter/@Optional`

Optionality of the parameter (if it is optional, it might be left unfilled).

Another example:

```
<wsp:Policy xmlns:wsp="..." />
  <up:Communication xmlns:up="...">
    <up:ConnectionTimeout value="10000" />
    ...
  </up:Communication>
</wsp:Policy>
```

This assertion checks whether communication settings contain a connection timeout set to at least 10 seconds. Additionally, the XML Schema of this assertion specifies that either the "value" must be present, or, to use the default value, the whole `up:ConnectionTimeout` element must be missing.

In this case, a single XPointer referencing the `up:ConnectionTimeout/@value` attribute is not enough, because Policy Manager would not know that the whole element should be removed when the value is not entered. Therefore the parameter is now described in two XPaths:

- Location of the element that should be removed when the value of the parameter is not set
- Location of the value within the element defined above

The location of the element is set in the XPointer and the location of the value within the element is set in a ValueXPointer. For example, [Example 6 on page 260](#) is a parameter with the ValueXPointer set at 5000. This results in the policy document in [Example 7 on page 260](#). By contrast, if the developer leaves the ValueXPointer blank, the resulting policy document is [Example 8 on page 260](#).

---

### Example 6. Parameter with ValueXPointer Set at 5000

```
<p:Parameter Name="ConnectionTimeout" Optional="false" Type="xsd:integer"
  XPointer="xmlns(up=...)xpointer(up:ConnectionTimeout)"
  ValueXPointer="xpointer(@value)"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <p:Description>Connection timeout in milliseconds.</p:Description>
</p:Parameter>
```

---

### Example 7. Policy Document with ValueXPointer in Parameter Set to 5000

```
<wsp:Policy xmlns:wsp="..." />
  <up:Communication xmlns:up="...">
    <up:ConnectionTimeout value="5000" />
  </up:Communication>
</wsp:Policy>
```

---

### Example 8. Policy Document with Empty ValueXPointer in Parameter

```
<wsp:Policy xmlns:wsp="..." />
  <up:Communication xmlns:up="...">
    <up:Communication>
  </wsp:Policy>
```

[Table 282, "XPointer Combinations and Results"](#) shows the XML representations of various XPointer and ValueXPointer combinations, for optional and required attributes, and whether the value is defined or not. [Example 9 on page 261](#) is a correctly defined XPointer.



Only a simplified form of XPointer is recognized in the parameter definition. The rationale is that in this context XPointer is used not only for retrieving data, but also for creating

parameters via the UI. This is not possible with general XPointers. The recognized XPointer must have the following structure:

```
xmlns(prefix1=ns1)*xpointer({/{<prefix>:}?<localname>[<index>]}*)
```

**Table 282. XPointer Combinations and Results**

Optional	Value	XPointer	ValueXPointer	Result in Policy Schema
Yes/No	'ABC'	@P	—	<a P="ABC"/>
Yes	—	@P	—	<a/>
No	—	Prohibited		
Yes	'ABC'	b[1]	@P	<a><b P='ABC'/></a>
Yes	—	b[1]	@P	<a/> (XPointer is removed.)
Yes	'ABC'	b[1]	—	<a><b>ABC</b></a>
Yes	'ABC'	b[1]	c[1]	<a><b><c>ABC</c></b></a>
Yes	—	b[1]	c[1]	<a/> (XPointer is removed.)

**Example 9. XPointer**

```
xmlns(soap=http://schemas.xmlsoap.org/soap/envelope/)
xmlns(myns=http://systinet.com/examples/foo)xpointer(soap:Envelope[1]/soap:Body[1]/myns:Foo)
```

**Implementations**

An assertion has one implementation for each source type to which the assertion applies. Each implementation is propagated into its own `pm:Validation` element. An implementation contains the definition of the validation handler, in `p:Validation/##other[1]`, and the type of artifact which the assertion can be used to validate, in `p:Validation/@SourceType`.

Implementations use validation handlers if they do not specify manual validation. Validation handlers are pluggable pieces of code that show Policy Manager how to validate a source document. Validation handlers are usually XPath or XQuery expressions, in which case the source code is included inside the

implementation, but they can be custom made. Custom made validation handlers are written in Java and the implementation references the Java class.

Validation handlers and source types are described in the following sections:

[Source Type on page 262](#). A description of all source types to which an implementation may apply.

[XPath Assertions on page 264](#). XPath validation handlers.

[XQuery Assertions on page 265](#). XQuery validation handlers.

## Source Type

The `pm:Validation@SourceType` attribute defines the type of artifact validated by the assertion. `SourceType` must be a simplified XPointer identifying the root element of the resource which the assertion validates. If this parameter is omitted, the implementation would apply to sources of any type. However, for performance reasons it is better to map validation to a concrete source type, as narrowly as possible.

`SourceType` can be set as one of the following:

- A general artifact type with the namespace usually defined in the `pm:Validation` element. Please see [Table 283, "Source Types Applying to General Resources"](#) for a list of these `SourceType` values and their associated artifacts and namespaces.
- A SOA Systinet artifact type. These share the namespace `xmlns:a="http://systinet.com/2005/05/soa/model/artifact"`. They are described in "SOA Definition Model" in the HP SOA Systinet Reference Guide. A list of these `SourceType` values and their matching SOA Systinet artifact types is given in [Table 284, "SourceTypes Applying to SOA Systinet Artifacts"](#).

**Table 283. Source Types Applying to General Resources**

Resource	SourceType value
Any SOA Systinet resource	<code>xmlns(rest=http://systinet.com/2005/05/soa/resource)rest:resource</code>
SOAP message	<code>xmlns(soap=http://schemas.xmlsoap.org/soap/envelope/)soap:Envelope</code>
UDDI v2 Business Entity	<code>xmlns(uddi=urn:uddi-org:api_v2)uddi:businessEntity</code>

Resource	SourceType value
UDDI v3 Business Entity	xmlns(uddi=urn:uddi-org:api_v3)uddi:businessEntity
WSDL Definition	xmlns(wSDL=http://schemas.xmlsoap.org/wSDL)wSDL:definitions
XML Schema	xmlns(xsd=http://www.w3.org/2001/XMLSchema)xsd:schema

**Table 284. SourceTypes Applying to SOA Systinet Artifacts**

SOA Systinet artifact	SourceType Value
Agreement	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)agreementArtifact
Application	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)hpsoaApplicationArtifact
Business Policy	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)businessPolicyArtifact
Business Service	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)businessServiceArtifact
Consumption Request	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)contractRequestArtifact
Contact	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)contactArtifact
Contract	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)contractArtifact
Conversation Document	xmlns(a=http://systinet.com/2005/10/soa/policy/report)Conversation
Documentation	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)documentationArtifact
HTTP Message Document	xmlns(a=http://systinet.com/2005/10/soa/policy/report)Message
Person	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)personArtifact
Policy	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)policyArtifact
Registry	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)registryArtifact
Report	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)reportArtifact
SOAP Service	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)webServiceArtifact
SLO	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)sloArtifact
Schema	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)schemaArtifact
Taxonomy	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)taxonomyArtifact

SOA Systinet artifact	SourceType Value
UDDI Channel	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)uddiChannelArtifact
UDDI Entity	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)uddiEntityArtifact
UDDI Registry	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)uddiRegistryArtifact
WS-Policy	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)wsPolicyArtifact
WSDL	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)wsdlArtifact
Web Application	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)webArtifact
XML Schema	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)xmlSchemaArtifact
XML Service	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)xmlServiceArtifact
XSLT	xmlns(a=http://systinet.com/2005/05/soa/model/artifact)xsltArtifact

## XPath Assertions

[Example 10 on page 264](#) is an XPath that applies to UDDI business entities and returns every `name` element whose `lang` attribute is set to the same value as the value of the `lang` parameter. If the XPath returns a non-empty list, the source document is considered to be valid against the assertion. If the returned node list is empty, validation has failed..

---

### Example 10. XPath Expression

```
<val:XPath>
  count(/uddi:businessEntity/uddi:name[@xml:lang=$lang])>0
</val:XPath>
```

You must take the following points into account when writing XPath assertions:

- **Namespace**

The element `val:XPath` is the namespace context for the XPath expression. If you need to define a prefix-namespace mapping, do it on this element or its ancestors.

- **Type system**



The XPath engine used in this enforcer is the free version of the [Saxon-B 8.5.1](http://www.saxonica.com) [http://www.saxonica.com] XSLT/XPath/XQuery engine. Although this version does not contain XML Schema parsing, it still checks for type conformance. For example, if you need to check that the value of attribute "xyz" is greater than 5, include in your XPath expression:

```
xs:integer(@xyz) > 5
```

If you fail to retype to integer, the XPath expression will never be fulfilled and no warning will be returned.

- **Parameter type**

In this release, assertion parameters are always passed as strings, regardless of the schema type written in the parameter definition. For this reason you have to explicitly cast the parameter in numerical comparisons. For example, the following XPath expression would be used in an assertion which checks that the message's body has at most a given number of elements (defined as a parameter named `MaxElements`):

```
count(soap:Body//*) <=xs:integer($MaxElements)
```

## XQuery Assertions

XQuery expression can be represented as shown in [Example 11 on page 266](#):

---

## Example 11. XQuery Expression

```
<val:XQuery>

  declare namespace rest="http://systinet.com/2005/05/soa/resource";
  declare namespace a="http://systinet.com/2005/05/soa/model/artifact";
  declare namespace p="http://systinet.com/2005/05/soa/model/property";
  declare namespace val="http://systinet.com/2005/10/soa/policy/validation";

  declare variable $metadata.source.url external;

  if (exists(rest:resource/rest:descriptor/a:businessServiceArtifact/p:productionStage)) then
    val:assertionOK()
  else
    val:assertionFailed(concat('This service is not assigned a category from a lifecycle taxonomy.
',
    'To fix this problem, go to <a href="', $metadata.source.url, '&view">the service</a>, ',
    'click on "Edit" and assign the category.'))

</val:XQuery>
```

The XQuery in [Example 11 on page 266](#) comes from the Service Supports Lifecycle assertion. The XQuery applies to business services and checks that each service has a lifecycle stage assigned to it. In the SOA Systinet use of XQueries, the `assertionOK` function is called only one time per tested artifact if the artifact passes validation, whereas if the artifact fails, the `assertionFailed` function is called for each individual violation. For the XQuery in [Example 11 on page 266](#) there is no logical need to call `assertionFailed` more than once, since the artifact either has one lifecycle stage or none at all. In [Example 12 on page 267](#), the XQuery checks each `include` and `import` element and makes sure they use relative references. The `assertionFailed` function is called for each element that does not use relative references.

---

## Example 12. XQuery Reporting Multiple Failures

```
declare namespace xs = "http://www.w3.org/2001/XMLSchema";
declare namespace val="http://systinet.com/2005/10/soa/policy/validation";

let $errors :=
  for $el in //xs:*[local-name() = 'include' or local-name() = 'import'] where ($el/@schemaLocation
and contains($el/@schemaLocation, ':'))
  return
    val:assertionFailed(concat('This xs:', local-name($el), ' uses absolute reference to another
schema.'), $el)
  return
    if (empty($errors)) then
      val:assertionOK()
    else
      ()
```



Namespaces are not propagated from parent elements but defined via standard XQuery declarations.

Together with the source document, XQuery assertions can be called with additional parameters. For example, these parameters can be used by the assertion to perform additional checks or output the location of the problem back to the user. The parameters are added to the XQuery expression of the assertion. A metadata parameter is shown in [Example 11 on page 266](#).

Parameter name	Description
metadata.source.url	The URL of the source of validation. In the case of HTTP request/response, this points to the request/response message. For one-way messages, WSDL documents etc. it points to the resource being validated.
metadata.description.url	The URL of the associated description document (for example, WSDL associated to a log of messages).
metadata.source.is.subdocument	Detects subdocuments. Returns "false" if document is standalone, "true" if document is part of a larger document.

If you want to write a new XQuery assertion or modify an existing one, follow these guidelines:

- The XQuery engine used in this enforcer is the free version of the [Saxon-B 8.5.1](http://www.saxonica.com) [http://www.saxonica.com] XSLT/XPath/XQuery engine. Although this version does not contain XML Schema parsing, it still checks for type conformance. For example, if you need to check that the value of attribute "xyz" is greater than 5, write:

```
xs:integer(@xyz) > 5
```

Failing to do so, the XQuery expression might never be fulfilled. If this happens, no warning will be returned.

- In this release, assertion parameters are always passed as strings, regardless of the schema type written in the parameter definition. Because of this you must explicitly cast the parameter in numerical comparisons. For example, the following expression would be used in an assertion which checks that the message's body has at most a given number of elements (defined as a parameter named *MaxElements*):

```
count(soap:Body//*) <= xs:integer($MaxElements)
```