Schema documentation for interface_schema.xsd

august 31, 2016

Table of Contents

Namespace: ""

Schema(s)

Main schema `interface_schema.xsd`

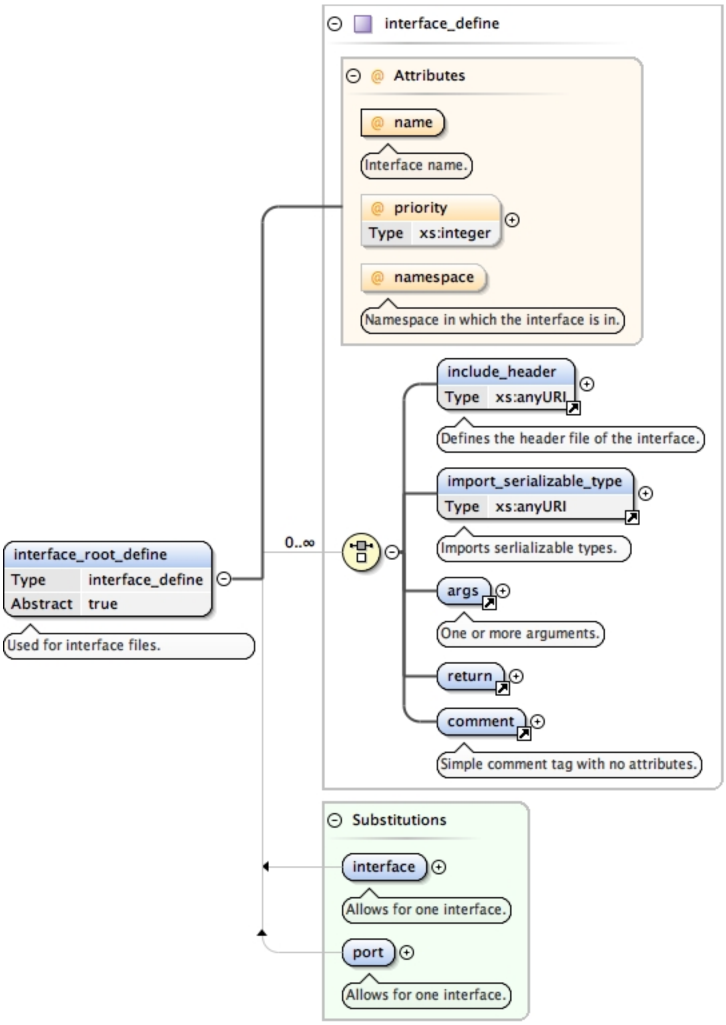
Namespace	No namespace	
Properties	attribute form default:	`unqualified`
	element form default:	`qualified`

Included schema `common_elements.xsd`

Namespace	No namespace	
Properties	attribute form default:	`unqualified`
	element form default:	`qualified`

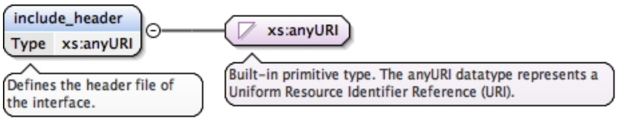
Element(s)

Element `interface_root_define`

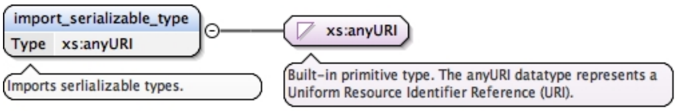
Namespace	No namespace
Annotations	`Used for interface files.`
Diagram	 interface_define Attributes name Interface name. priority Type xs:integer namespace Namespace in which the interface is in. include_header Type xs:anyURI Defines the header file of the interface. import_serializable_type Type xs:anyURI Imports serlializable types. args One or more arguments. return comment Simple comment tag with no attributes. 0..∞ interface_root_define Type interface_define Abstract true Used for interface files. Substitutions interface Allows for one interface. port Allows for one interface.
Type	interface_define

<table>
<tr><td>Properties</td><td><table><tr><td>content:</td><td>complex</td></tr><tr><td>abstract:</td><td>true</td></tr></table></td></tr>
<tr><td>Substitution Group</td><td>- interface
- port</td></tr>
<tr><td>Model</td><td>include_header | import_serializable_type | args | return | comment</td></tr>
<tr><td>Children</td><td>args, comment, import_serializable_type, include_header, return</td></tr>
<tr><td>Instance</td><td><interface_root_define name="" namespace="" priority="">
  <include_header>{1,1}</include_header>
  <import_serializable_type>{1,1}</import_serializable_type>
  <args>{1,1}</args>
  <return comment="" data_type="" name="" pass_by="" size="" type="">{1,1}</return>
  <comment>{1,1}</comment>
</interface_root_define></td></tr>
<tr><td>Attributes</td><td><table><tr><th>QName</th><th>Type</th><th>Use</th><th></th></tr><tr><td><b>name</b></td><td></td><td>required</td><td></td></tr><tr><td></td><td colspan="3">Interface name.</td></tr><tr><td><b>namespace</b></td><td></td><td>optional</td><td></td></tr><tr><td></td><td colspan="3">Namespace in which the interface is in.</td></tr><tr><td><b>priority</b></td><td>xs:integer</td><td>optional</td><td></td></tr></table></td></tr>
<tr><td>Source</td><td><xs:element name="interface_root_define" abstract="true" type="interface_define">
  <xs:annotation>
    <xs:documentation>Used for interface files.</xs:documentation>
  </xs:annotation>
</xs:element></td></tr>
</table>

Element include_header

Namespace	No namespace
Annotations	Defines the header file of the interface.
Diagram	 include_header Type xs:anyURI xs:anyURI Defines the header file of the interface. Built-in primitive type. The anyURI datatype represents a Uniform Resource Identifier Reference (URI).
Type	xs:anyURI
Properties	content: simple
Used by	Complex Type interface_define
Source	<xs:element name="include_header" type="xs:anyURI"> <xs:annotation> <xs:documentation>Defines the header file of the interface.</xs:documentation> </xs:annotation> </xs:element>

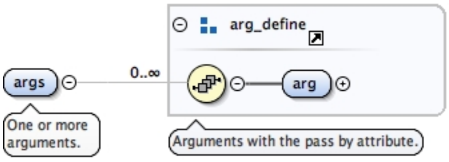
Element import_serializable_type

Namespace	No namespace
Annotations	Imports serlializable types.
Diagram	 import_serializable_type Type xs:anyURI xs:anyURI Imports serlializable types. Built-in primitive type. The anyURI datatype represents a Uniform Resource Identifier Reference (URI).
Type	xs:anyURI
Properties	content: simple
Used by	Complex Type interface_define

Source	<xs:element name="import_serializable_type" type="xs:anyURI">
	  <xs:annotation>
	    <xs:documentation>Imports serlializable types.</xs:documentation>
	  </xs:annotation>

	`</xs:element>`

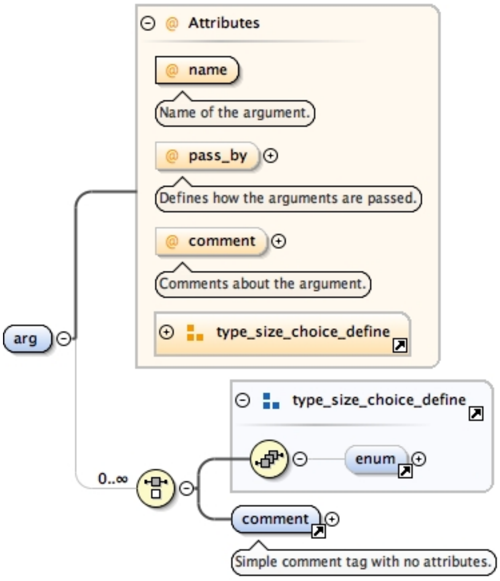
Element args

Namespace	No namespace
Annotations	One or more arguments.
Diagram	 args 0..∞ arg_define arg One or more arguments. Arguments with the pass by attribute.
Properties	content: complex
Used by	Complex Type interface_define
Model	arg
Children	arg

Instance	`<args>`
	`  <arg comment="" data_type="" name="" pass_by="" size="" type="">{1,1}</arg>`
	`</args>`

Source	`<xs:element name="args">`
	`  <xs:annotation>`
	`    <xs:documentation>One or more arguments.</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:complexType>`
	`    <xs:group minOccurs="0" maxOccurs="unbounded" ref="arg_define"/>`
	`  </xs:complexType>`
	`</xs:element>`

Element arg_define / arg

Namespace	No namespace
Diagram	 Attributes name Name of the argument. pass_by Defines how the arguments are passed. comment Comments about the argument. type_size_choice_define arg type_size_choice_define enum 0..∞ comment Simple comment tag with no attributes.
Properties	content: complex
Model	(enum{0,1}) | comment
Children	comment, enum

Instance	`<arg comment="" data_type="" name="" pass_by="" size="" type="">`
	`  <enum name="">{0,1}</enum>`
	`  <comment>{1,1}</comment>`
	`</arg>`

Attributes	

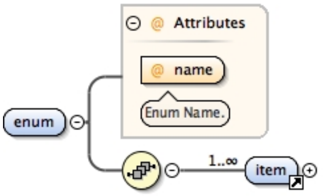
QName	Type	Use	
comment	xs:string	optional	

QName	Type	Use	
	Comments about the argument.		
data_type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	
name		required	
	Name of the argument.		
pass_by	pass_by_define	optional	
	Defines how the arguments are passed.		
size	xs:nonNegativeInteger	optional	
	The size of the argument.		
type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	

Source

```
<xs:element name="arg">
  <xs:complexType>
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:group ref="type_size_choice_define"/>
      <xs:element ref="comment"/>
    </xs:choice>
    <xs:attribute name="name" use="required">
      <xs:annotation>
        <xs:documentation>Name of the argument.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="pass_by" type="pass_by_define">
      <xs:annotation>
        <xs:documentation>Defines how the arguments are passed.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="comment" type="xs:string">
      <xs:annotation>
        <xs:documentation>Comments about the argument.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attributeGroup ref="type_size_choice_define"/>
  </xs:complexType>
</xs:element>
```

Element enum

Namespace	No namespace
Diagram	
Properties	content: complex
Used by	Element Group type_size_choice_define
Model	item+
Children	item

Instance

```
<enum name="">
  <item comment="" name="" value="">{1,unbounded}</item>
</enum>
```

Attributes

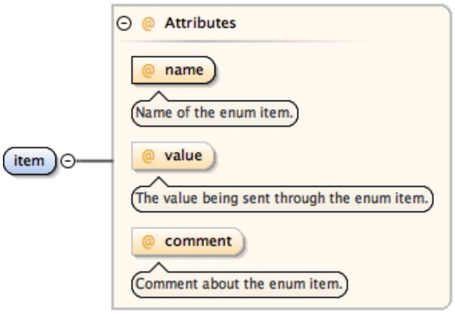
QName	Type	Use	
name		required	
	Enum Name.		

Source

```
<xs:element name="enum">
  <xs:complexType>
    <xs:sequence>
      <xs:element maxOccurs="unbounded" ref="item"/>
    </xs:sequence>
    <xs:attribute name="name" use="required">
```

```
      <xs:annotation>
        <xs:documentation>Enum Name.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
  </xs:complexType>
</xs:element>
```

Element item

Namespace	No namespace
Diagram	
Properties	content: complex
Used by	Element enum
Attributes	

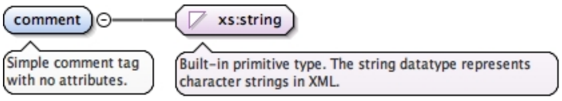
Attributes
name
Name of the enum item.
item
value
The value being sent through the enum item.
comment
Comment about the enum item.

QName	Type	Use	
comment		optional	
	Comment about the enum item.		
name		required	
	Name of the enum item.		
value		optional	
	The value being sent through the enum item.		

Source

```
<xs:element name="item">
  <xs:complexType>
    <xs:attribute name="name" use="required">
      <xs:annotation>
        <xs:documentation>Name of the enum item.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="value">
      <xs:annotation>
        <xs:documentation>The value being sent through the enum item.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="comment">
      <xs:annotation>
        <xs:documentation>Comment about the enum item.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
  </xs:complexType>
</xs:element>
```

Element comment

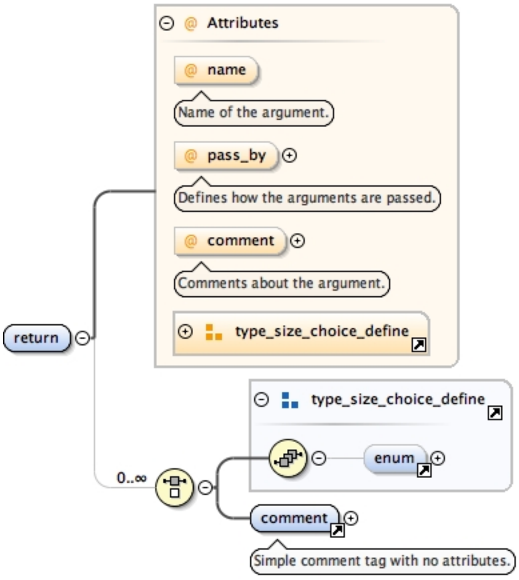
Namespace	No namespace
Annotations	Simple comment tag with no attributes.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Elements arg_define/arg, external_arg_define/arg, return
	Complex Type interface_define

comment
xs:string
Simple comment tag with no attributes.
Built-in primitive type. The string datatype represents character strings in XML.

Source

```
<xs:element name="comment" type="xs:string">
  <xs:annotation>
    <xs:documentation>Simple comment tag with no attributes.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Element `return`

Namespace	No namespace	
Diagram		
Properties	content:	`complex`
Used by	Complex Type	interface_define
Model	(enum{0,1}) | comment	
Children	comment, enum	

Instance

```
<return comment="" data_type="" name="" pass_by="" size="" type="">
  <enum name="">{0,1}</enum>
  <comment>{1,1}</comment>
</return>
```

Attributes

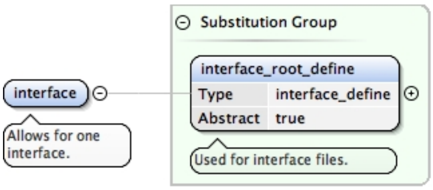
QName	**Type**	**Use**	
comment	xs:string	optional	
	`Comments about the argument.`		
data_type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	
name		optional	
	`Name of the argument.`		
pass_by	pass_by_define	optional	
	`Defines how the arguments are passed.`		
size	xs:nonNegativeInteger	optional	
	`The size of the argument.`		
type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	

Source

```
<xs:element name="return">
  <xs:complexType>
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:group ref="type_size_choice_define"/>
      <xs:element ref="comment"/>
    </xs:choice>
    <xs:attribute name="name">
      <xs:annotation>
        <xs:documentation>Name of the argument.</xs:documentation>
      </xs:annotation>
```

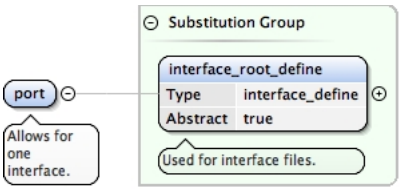
	`    </xs:attribute>`
	`    <xs:attribute name="pass_by" type="pass_by_define">`
	`      <xs:annotation>`
	`        <xs:documentation>Defines how the arguments are passed.</xs:documentation>`
	`      </xs:annotation>`
	`    </xs:attribute>`
	`    <xs:attribute name="comment" type="xs:string">`
	`      <xs:annotation>`
	`        <xs:documentation>Comments about the argument.</xs:documentation>`
	`      </xs:annotation>`
	`    </xs:attribute>`
	`    <xs:attributeGroup ref="type_size_choice_define"/>`
	`  </xs:complexType>`
	`</xs:element>`

Element interface

Namespace	No namespace
Annotations	Allows for one interface.
Diagram	 Substitution Group interface_root_define Type interface_define Abstract true Used for interface files. interface Allows for one interface.
Substitution Group Affiliation	• interface_root_define

Source	`<xs:element name="interface" substitutionGroup="interface_root_define">`
	`  <xs:annotation>`
	`    <xs:documentation>Allows for one interface.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

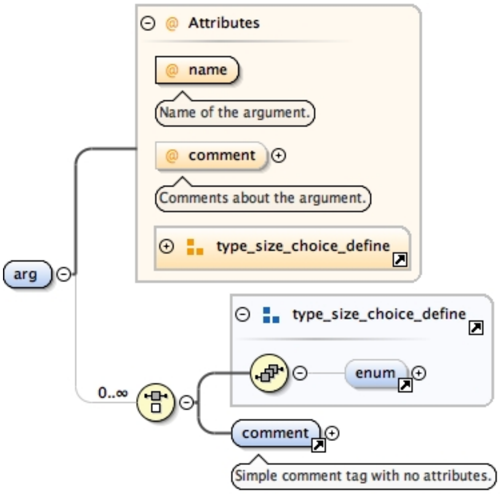
Element port

Namespace	No namespace
Annotations	Allows for one interface.
Diagram	 Substitution Group interface_root_define Type interface_define Abstract true Used for interface files. port Allows for one interface.
Substitution Group Affiliation	• interface_root_define

Source	`<xs:element name="port" substitutionGroup="interface_root_define">`
	`  <xs:annotation>`
	`    <xs:documentation>Allows for one interface.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Element external_arg_define / arg

Namespace	No namespace

Diagram	 Attributes name Name of the argument. comment Comments about the argument. type_size_choice_define arg 0..∞ type_size_choice_define enum comment Simple comment tag with no attributes.
Properties	content: complex
Model	(enum{0,1}) | comment
Children	comment, enum

Instance	`<arg comment="" data_type="" name="" size="" type="">`
	  `<enum name="">{0,1}</enum>`
	  `<comment>{1,1}</comment>`
	`</arg>`

Attributes

QName	Type	Use	
comment	xs:string	optional	
	Comments about the argument.		
data_type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	
name		required	
	Name of the argument.		
size	xs:nonNegativeInteger	optional	
	The size of the argument.		
type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	

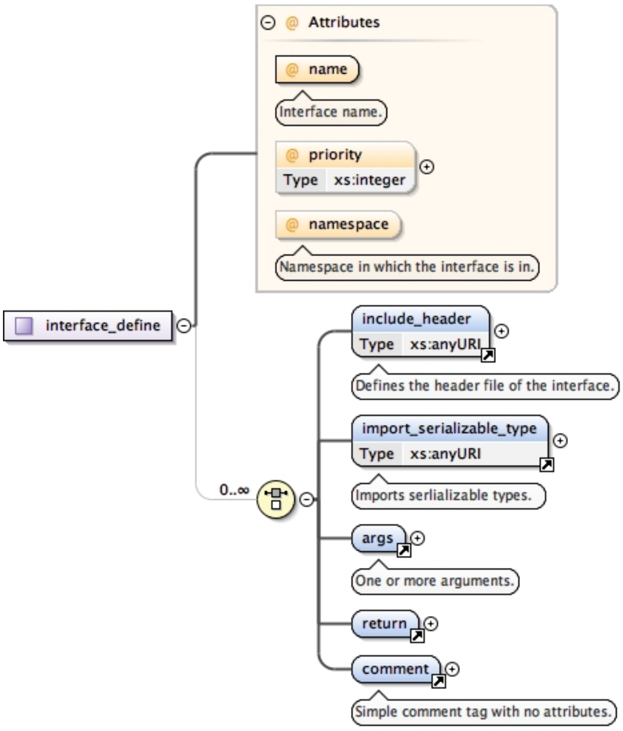
Source

```
<xs:element name="arg">
  <xs:complexType>
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:group ref="type_size_choice_define"/>
      <xs:element ref="comment"/>
    </xs:choice>
    <xs:attribute name="name" use="required">
      <xs:annotation>
        <xs:documentation>Name of the argument.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="comment" type="xs:string">
      <xs:annotation>
        <xs:documentation>Comments about the argument.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attributeGroup ref="type_size_choice_define"/>
  </xs:complexType>
</xs:element>
```

Complex Type(s)

Complex Type `interface_define`

Namespace	No namespace

Diagram	
Used by	Element interface_root_define
Model	include_header | import_serializable_type | args | return | comment
Children	args, comment, import_serializable_type, include_header, return
Attributes	

QName	**Type**	**Use**	
name		required	
	Interface name.		
namespace		optional	
	Namespace in which the interface is in.		
priority	xs:integer	optional	

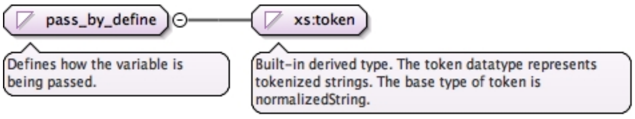
Source

```
<xs:complexType name="interface_define">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element ref="include_header"/>
    <xs:element ref="import_serializable_type"/>
    <xs:element ref="args"/>
    <xs:element ref="return"/>
    <xs:element ref="comment"/>
  </xs:choice>
  <xs:attribute name="name" use="required">
    <xs:annotation>
      <xs:documentation>Interface name.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="priority" type="xs:integer"/>
  <xs:attribute name="namespace">
    <xs:annotation>
      <xs:documentation>Namespace in which the interface is in.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
```

Simple Type(s)

Simple Type pass_by_define

Namespace	No namespace
Annotations	Defines how the variable is being passed.

<table>
<tr><td>Diagram</td><td>

pass_by_define
xs:token
Defines how the variable is being passed.
Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.

</td></tr>
<tr><td>Type</td><td>restriction of xs:token</td></tr>
<tr><td>Facets</td><td><table><tr><td>enumeration</td><td><code>reference</code></td></tr><tr><td>enumeration</td><td><code>value</code></td></tr><tr><td>enumeration</td><td><code>pointer</code></td></tr></table></td></tr>
<tr><td>Used by</td><td><table><tr><td>Attributes</td><td>arg_define/arg/@pass_by, return/@pass_by</td></tr></table></td></tr>
<tr><td>Source</td><td><pre>
<xs:simpleType name="pass_by_define">
  <xs:annotation>
    <xs:documentation>Defines how the variable is being passed.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:token">
    <xs:enumeration value="reference"/>
    <xs:enumeration value="value"/>
    <xs:enumeration value="pointer"/>
  </xs:restriction>
</xs:simpleType>
</pre></td></tr>
</table>

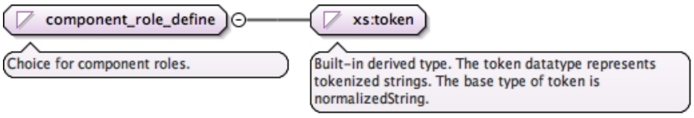
Simple Type `full_items_define`

<table>
<tr><td>Namespace</td><td>No namespace</td></tr>
<tr><td>Annotations</td><td><code>Valid values for the full tag.</code></td></tr>
<tr><td>Diagram</td><td>

full_items_define
xs:token
Valid values for the full tag.
Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.

</td></tr>
<tr><td>Type</td><td>restriction of xs:token</td></tr>
<tr><td>Facets</td><td><table><tr><td>enumeration</td><td><code>drop</code></td></tr><tr><td>enumeration</td><td><code>assert</code></td></tr><tr><td>enumeration</td><td><code>block</code></td></tr></table></td></tr>
<tr><td>Source</td><td><pre>
<xs:simpleType name="full_items_define">
  <xs:annotation>
    <xs:documentation>Valid values for the full tag.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:token">
    <xs:enumeration value="drop"/>
    <xs:enumeration value="assert"/>
    <xs:enumeration value="block"/>
  </xs:restriction>
</xs:simpleType>
</pre></td></tr>
</table>

Simple Type `component_role_define`

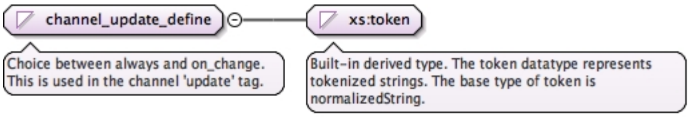
<table>
<tr><td>Namespace</td><td>No namespace</td></tr>
<tr><td>Annotations</td><td><code>Choice for component roles.</code></td></tr>
<tr><td>Diagram</td><td>

component_role_define
xs:token
Choice for component roles.
Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.

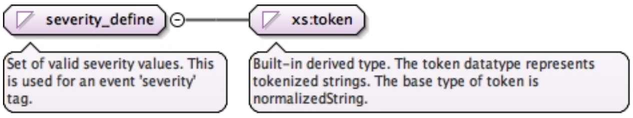
</td></tr>
<tr><td>Type</td><td>restriction of xs:token</td></tr>
<tr><td>Facets</td><td><table><tr><td>enumeration</td><td><code>LogEvent</code></td></tr><tr><td>enumeration</td><td><code>LogTextEvent</code></td></tr><tr><td>enumeration</td><td><code>TimeGet</code></td></tr><tr><td>enumeration</td><td><code>ParamSet</code></td></tr><tr><td>enumeration</td><td><code>ParamGet</code></td></tr><tr><td>enumeration</td><td><code>Telemetry</code></td></tr><tr><td>enumeration</td><td><code>CmdRegistration</code></td></tr></table></td></tr>
</table>

	enumeration Cmd enumeration CmdResponse
Source	<xs:simpleType name="component_role_define"> <xs:annotation> <xs:documentation>Choice for component roles.</xs:documentation> </xs:annotation> <xs:restriction base="xs:token"> <xs:enumeration value="LogEvent"/> <xs:enumeration value="LogTextEvent"/> <xs:enumeration value="TimeGet"/> <xs:enumeration value="ParamSet"/> <xs:enumeration value="ParamGet"/> <xs:enumeration value="Telemetry"/> <xs:enumeration value="CmdRegistration"/> <xs:enumeration value="Cmd"/> <xs:enumeration value="CmdResponse"/> </xs:restriction> </xs:simpleType>

Simple Type channel_update_define

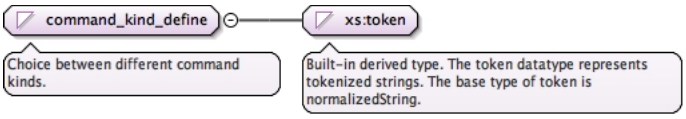
Namespace	No namespace
Annotations	Choice between always and on_change. This is used in the channel 'update' tag.
Diagram	 channel_update_define xs:token Choice between always and on_change. This is used in the channel 'update' tag. Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.
Type	restriction of xs:token
Facets	enumeration always enumeration on_change
Source	<xs:simpleType name="channel_update_define"> <xs:annotation> <xs:documentation>Choice between always and on_change. This is used in the channel 'update' tag.</xs:documentation> </xs:annotation> <xs:restriction base="xs:token"> <xs:enumeration value="always"/> <xs:enumeration value="on_change"/> </xs:restriction> </xs:simpleType>

Simple Type severity_define

Namespace	No namespace
Annotations	Set of valid severity values. This is used for an event 'severity' tag.
Diagram	 severity_define xs:token Set of valid severity values. This is used for an event 'severity' tag. Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.
Type	restriction of xs:token
Facets	enumeration COMMAND enumeration ACTIVITY_LO enumeration ACTIVITY_HI enumeration WARNING_LO enumeration WARNING_HI enumeration DIAGNOSTIC enumeration FATAL
Source	<xs:simpleType name="severity_define"> <xs:annotation> <xs:documentation>Set of valid severity values. This is used for an event 'severity' tag.</xs:documentation> </xs:annotation> <xs:restriction base="xs:token"> <xs:enumeration value="COMMAND"/>

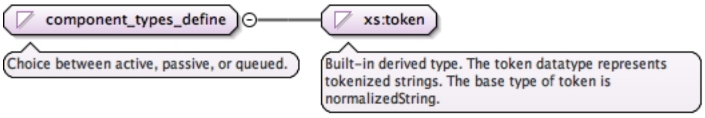
	<xs:enumeration value="ACTIVITY_LO"/>
	    <xs:enumeration value="ACTIVITY_HI"/>
	    <xs:enumeration value="WARNING_LO"/>
	    <xs:enumeration value="WARNING_HI"/>
	    <xs:enumeration value="DIAGNOSTIC"/>
	    <xs:enumeration value="FATAL"/>
	  </xs:restriction>
	</xs:simpleType>

Simple Type `command_kind_define`

Namespace	No namespace
Annotations	`Choice between different command kinds.`
Diagram	 command_kind_define xs:token Choice between different command kinds. Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.
Type	restriction of xs:token
Facets	enumeration async enumeration sync enumeration guarded

Source	<xs:simpleType name="command_kind_define">
	  <xs:annotation>
	    <xs:documentation>Choice between different command kinds.</xs:documentation>
	  </xs:annotation>
	  <xs:restriction base="xs:token">
	    <xs:enumeration value="async"/>
	    <xs:enumeration value="sync"/>
	    <xs:enumeration value="guarded"/>
	  </xs:restriction>
	</xs:simpleType>

Simple Type `component_types_define`

Namespace	No namespace
Annotations	`Choice between active, passive, or queued.`
Diagram	 component_types_define xs:token Choice between active, passive, or queued. Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.
Type	restriction of xs:token
Facets	enumeration active enumeration passive enumeration queued

Source	<xs:simpleType name="component_types_define">
	  <xs:annotation>
	    <xs:documentation>Choice between active, passive, or queued.</xs:documentation>
	  </xs:annotation>
	  <xs:restriction base="xs:token">
	    <xs:enumeration value="active"/>
	    <xs:enumeration value="passive"/>
	    <xs:enumeration value="queued"/>
	  </xs:restriction>
	</xs:simpleType>

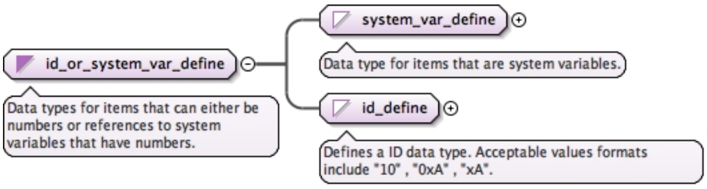
Simple Type `port_types_define`

Namespace	No namespace
Annotations	`Choice between different port types.`
Diagram	port_types_define xs:token Choice between different port types. Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.
Type	restriction of xs:token

Facets	enumeration `input` enumeration `sync_input` enumeration `guarded_input` enumeration `async_input` enumeration `model_input` enumeration `output`

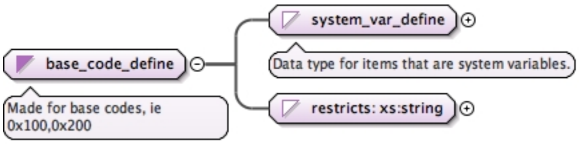
Source	`<xs:simpleType name="port_types_define">`
	`  <xs:annotation>`
	`    <xs:documentation>Choice between different port types.</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:restriction base="xs:token">`
	`    <xs:enumeration value="input"/>`
	`    <xs:enumeration value="sync_input"/>`
	`    <xs:enumeration value="guarded_input"/>`
	`    <xs:enumeration value="async_input"/>`
	`    <xs:enumeration value="model_input"/>`
	`    <xs:enumeration value="output"/>`
	`  </xs:restriction>`
	`</xs:simpleType>`

Simple Type id_or_system_var_define

Namespace	No namespace
Annotations	Data types for items that can either be numbers or references to system variables that have numbers.
Diagram	 system_var_define Data type for items that are system variables. id_or_system_var_define Data types for items that can either be numbers or references to system variables that have numbers. id_define Defines a ID data type. Acceptable values formats include "10" , "0xA" , "xA".
Type	union of(system_var_define, id_define)

Source	`<xs:simpleType name="id_or_system_var_define">`
	`  <xs:annotation>`
	`    <xs:documentation>Data types for items that can either be numbers or references to system variables that have numbers.</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:union memberTypes="system_var_define id_define"/>`
	`</xs:simpleType>`

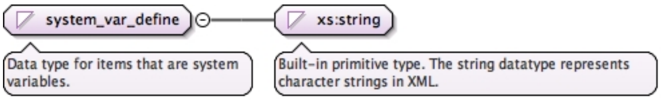
Simple Type base_code_define

Namespace	No namespace
Annotations	Made for base codes, ie 0x100,0x200
Diagram	 system_var_define Data type for items that are system variables. base_code_define Made for base codes, ie 0x100,0x200 restricts: xs:string
Type	union of(system_var_define, restriction of xs:string)

Source	`<xs:simpleType name="base_code_define">`
	`  <xs:annotation>`
	`    <xs:documentation>Made for base codes, ie 0x100,0x200</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:union memberTypes="system_var_define">`
	`    <xs:simpleType>`
	`      <xs:restriction base="xs:string">`
	`        <xs:pattern value="(((0?x\d+)|\d+)(,?))+"/>`
	`      </xs:restriction>`
	`    </xs:simpleType>`
	`  </xs:union>`
	`</xs:simpleType>`

Simple Type system_var_define

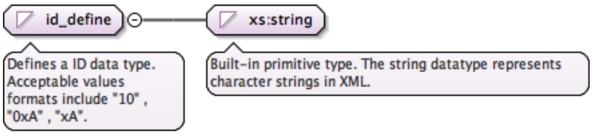
Namespace	No namespace
Annotations	Data type for items that are system variables.

<table>
<tr><td>Diagram</td><td>

system_var_define
xs:string
Data type for items that are system variables.
Built-in primitive type. The string datatype represents character strings in XML.

</td></tr>
<tr><td>Type</td><td>restriction of xs:string</td></tr>
<tr><td>Facets</td><td>pattern $[\w|_|\-]+</td></tr>
<tr><td>Source</td><td>&lt;xs:simpleType name="system_var_define">
  <xs:annotation>
    <xs:documentation>Data type for items that are system variables.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="$[\w|_|\-]+"/>
  </xs:restriction>
</xs:simpleType&gt;</td></tr>
</table>

Simple Type `id_define`

<table>
<tr><td>Namespace</td><td>No namespace</td></tr>
<tr><td>Annotations</td><td>Defines a ID data type. Acceptable values formats include "10" , "0xA" , "xA".</td></tr>
<tr><td>Diagram</td><td>

id_define
xs:string
Defines a ID data type. Acceptable values formats include "10" , "0xA" , "xA".
Built-in primitive type. The string datatype represents character strings in XML.

</td></tr>
<tr><td>Type</td><td>restriction of xs:string</td></tr>
<tr><td>Facets</td><td>pattern ((0?x\d+)|\d+)</td></tr>
<tr><td>Source</td><td>&lt;xs:simpleType name="id_define">
  <xs:annotation>
    <xs:documentation>Defines a ID data type. Acceptable values formats include "10" , "0xA" , "xA".</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="((0?x\d+)|\d+)"/>
  </xs:restriction>
</xs:simpleType&gt;</td></tr>
</table>

Attribute(s)

Attribute `item / @name`

<table>
<tr><td>Namespace</td><td>No namespace</td></tr>
<tr><td>Annotations</td><td>Name of the enum item.</td></tr>
<tr><td>Properties</td><td>use: required</td></tr>
<tr><td>Used by</td><td>Element item</td></tr>
<tr><td>Source</td><td>&lt;xs:attribute name="name" use="required">
  <xs:annotation>
    <xs:documentation>Name of the enum item.</xs:documentation>
  </xs:annotation>
</xs:attribute&gt;</td></tr>
</table>

Attribute `item / @value`

<table>
<tr><td>Namespace</td><td>No namespace</td></tr>
<tr><td>Annotations</td><td>The value being sent through the enum item.</td></tr>
<tr><td>Used by</td><td>Element item</td></tr>
<tr><td>Source</td><td>&lt;xs:attribute name="value">
  <xs:annotation>
    <xs:documentation>The value being sent through the enum item.</xs:documentation>
  </xs:annotation>
</xs:attribute&gt;</td></tr>
</table>

Attribute `item / @comment`

<table>
<tr><td>Namespace</td><td>No namespace</td></tr>
</table>

Annotations	Comment about the enum item.
Used by	Element item
Source	<xs:attribute name="comment"> <xs:annotation> <xs:documentation>Comment about the enum item.</xs:documentation> </xs:annotation> </xs:attribute>

Attribute enum / @name

Namespace	No namespace
Annotations	Enum Name.
Properties	use: required
Used by	Element enum

Source	<xs:attribute name="name" use="required">
	  <xs:annotation>
	    <xs:documentation>Enum Name.</xs:documentation>
	  </xs:annotation>
	</xs:attribute>

Attribute arg_define / arg / @name

Namespace	No namespace
Annotations	Name of the argument.
Properties	use: required
Used by	Element arg_define/arg
Source	<xs:attribute name="name" use="required"> <xs:annotation> <xs:documentation>Name of the argument.</xs:documentation> </xs:annotation> </xs:attribute>

Attribute arg_define / arg / @pass_by

Namespace	No namespace
Annotations	Defines how the arguments are passed.
Type	pass_by_define
Properties	content: simple
Facets	enumeration reference enumeration value enumeration pointer
Used by	Element arg_define/arg
Source	<xs:attribute name="pass_by" type="pass_by_define"> <xs:annotation> <xs:documentation>Defines how the arguments are passed.</xs:documentation> </xs:annotation> </xs:attribute>

Attribute arg_define / arg / @comment

Namespace	No namespace
Annotations	Comments about the argument.
Type	xs:string
Properties	content: simple
Used by	Element arg_define/arg

Source	<xs:attribute name="comment" type="xs:string">
	  <xs:annotation>
	    <xs:documentation>Comments about the argument.</xs:documentation>
	  </xs:annotation>

	`</xs:attribute>`

Attribute `type_size_choice_define / @data_type`

Namespace	No namespace
Type	union of(xs:string, restriction of xs:token, restriction of xs:token)
Properties	content: `simple`
Used by	Attribute Group type_size_choice_define

Source	`<xs:attribute name="data_type">`
	`  <xs:simpleType>`
	`    <xs:union memberTypes="xs:string">`
	`      <xs:simpleType>`
	`        <xs:restriction base="xs:token">`
	`          <xs:enumeration value="string"/>`
	`        </xs:restriction>`
	`      </xs:simpleType>`
	`      <xs:simpleType>`
	`        <xs:restriction base="xs:token">`
	`          <xs:enumeration value="ENUM"/>`
	`        </xs:restriction>`
	`      </xs:simpleType>`
	`    </xs:union>`
	`  </xs:simpleType>`
	`</xs:attribute>`

Attribute `type_size_choice_define / @type`

Namespace	No namespace
Type	union of(xs:string, restriction of xs:token, restriction of xs:token)
Properties	content: `simple`
Used by	Attribute Group type_size_choice_define

Source	`<xs:attribute name="type">`
	`  <xs:simpleType>`
	`    <xs:union memberTypes="xs:string">`
	`      <xs:simpleType>`
	`        <xs:restriction base="xs:token">`
	`          <xs:enumeration value="string"/>`
	`        </xs:restriction>`
	`      </xs:simpleType>`
	`      <xs:simpleType>`
	`        <xs:restriction base="xs:token">`
	`          <xs:enumeration value="ENUM"/>`
	`        </xs:restriction>`
	`      </xs:simpleType>`
	`    </xs:union>`
	`  </xs:simpleType>`
	`</xs:attribute>`

Attribute `type_size_choice_define / @size`

Namespace	No namespace
Annotations	`The size of the argument.`
Type	xs:nonNegativeInteger
Properties	content: `simple`
Used by	Attribute Group type_size_choice_define

Source	`<xs:attribute name="size" type="xs:nonNegativeInteger">`
	`  <xs:annotation>`
	`    <xs:documentation>The size of the argument.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Attribute `return / @name`

Namespace	No namespace
Annotations	`Name of the argument.`
Used by	Element return

Source	`<xs:attribute name="name">`
	`  <xs:annotation>`
	`    <xs:documentation>Name of the argument.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Attribute return / @pass_by

Namespace	No namespace
Annotations	Defines how the arguments are passed.
Type	pass_by_define
Properties	content: simple
Facets	enumeration reference enumeration value enumeration pointer
Used by	Element return

Source	`<xs:attribute name="pass_by" type="pass_by_define">`
	`  <xs:annotation>`
	`    <xs:documentation>Defines how the arguments are passed.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Attribute return / @comment

Namespace	No namespace
Annotations	Comments about the argument.
Type	xs:string
Properties	content: simple
Used by	Element return

Source	`<xs:attribute name="comment" type="xs:string">`
	`  <xs:annotation>`
	`    <xs:documentation>Comments about the argument.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Attribute interface_define / @name

Namespace	No namespace
Annotations	Interface name.
Properties	use: required
Used by	Complex Type interface_define

Source	`<xs:attribute name="name" use="required">`
	`  <xs:annotation>`
	`    <xs:documentation>Interface name.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Attribute interface_define / @priority

Namespace	No namespace
Type	xs:integer
Properties	content: simple
Used by	Complex Type interface_define
Source	`<xs:attribute name="priority" type="xs:integer"/>`

Attribute interface_define / @namespace

Namespace	No namespace
Annotations	Namespace in which the interface is in.

Used by	Complex Type	interface_define
Source	<xs:attribute name="namespace"> <xs:annotation> <xs:documentation>Namespace in which the interface is in.</xs:documentation> </xs:annotation> </xs:attribute>	

Attribute external_arg_define / arg / @name

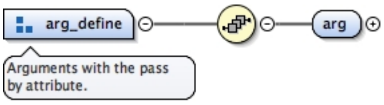
Namespace	No namespace	
Annotations	Name of the argument.	
Properties	use:	required
Used by	Element	external_arg_define/arg
Source	<xs:attribute name="name" use="required"> <xs:annotation> <xs:documentation>Name of the argument.</xs:documentation> </xs:annotation> </xs:attribute>	

Attribute external_arg_define / arg / @comment

Namespace	No namespace	
Annotations	Comments about the argument.	
Type	xs:string	
Properties	content:	simple
Used by	Element	external_arg_define/arg
Source	<xs:attribute name="comment" type="xs:string"> <xs:annotation> <xs:documentation>Comments about the argument.</xs:documentation> </xs:annotation> </xs:attribute>	

Element Group(s)

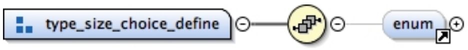
Element Group arg_define

Namespace	No namespace	
Annotations	Arguments with the pass by attribute.	
Diagram		
Used by	Element	args
Model	arg	
Children	arg	

Source	<xs:group name="arg_define">
	  <xs:annotation>
	    <xs:documentation>Arguments with the pass by attribute.</xs:documentation>
	  </xs:annotation>
	  <xs:sequence>
	    <xs:element name="arg">
	      <xs:complexType>
	        <xs:choice minOccurs="0" maxOccurs="unbounded">
	          <xs:group ref="type_size_choice_define"/>
	          <xs:element ref="comment"/>
	        </xs:choice>
	        <xs:attribute name="name" use="required">
	          <xs:annotation>
	            <xs:documentation>Name of the argument.</xs:documentation>
	          </xs:annotation>
	        </xs:attribute>
	        <xs:attribute name="pass_by" type="pass_by_define">
	          <xs:annotation>
	            <xs:documentation>Defines how the arguments are passed.</xs:documentation>	

```
          </xs:annotation>
        </xs:attribute>
        <xs:attribute name="comment" type="xs:string">
          <xs:annotation>
            <xs:documentation>Comments about the argument.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
        <xs:attributeGroup ref="type_size_choice_define"/>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:group>
```

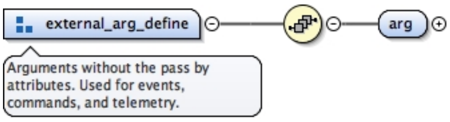
Element Group `type_size_choice_define`

Namespace	No namespace
Diagram	
Used by	Elements arg_define/arg, external_arg_define/arg, return
Model	enum{0,1}
Children	enum

Source

```
<xs:group name="type_size_choice_define">
  <xs:sequence>
    <xs:element minOccurs="0" ref="enum"/>
  </xs:sequence>
</xs:group>
```

Element Group `external_arg_define`

Namespace	No namespace
Annotations	Arguments without the pass by attributes. Used for events, commands, and telemetry.
Diagram	 external_arg_define arg Arguments without the pass by attributes. Used for events, commands, and telemetry.
Model	arg
Children	arg

Source

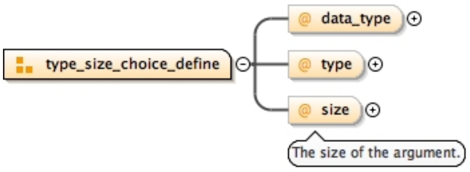
```
<xs:group name="external_arg_define">
  <xs:annotation>
    <xs:documentation>Arguments without the pass by attributes. Used for events, commands, and telemetry.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="arg">
      <xs:complexType>
        <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:group ref="type_size_choice_define"/>
          <xs:element ref="comment"/>
        </xs:choice>
        <xs:attribute name="name" use="required">
          <xs:annotation>
            <xs:documentation>Name of the argument.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
        <xs:attribute name="comment" type="xs:string">
          <xs:annotation>
            <xs:documentation>Comments about the argument.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
        <xs:attributeGroup ref="type_size_choice_define"/>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:group>
```

Attribute Group(s)

Attribute Group `type_size_choice_define`

Namespace	No namespace

Diagram



Used by		
	Elements	arg_define/arg, external_arg_define/arg, return

Attributes

QName	Type	Use	
data_type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	
size	xs:nonNegativeInteger	optional	
	The size of the argument.		
type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	

Source

```
<xs:attributeGroup name="type_size_choice_define">
  <xs:attribute name="data_type">
    <xs:simpleType>
      <xs:union memberTypes="xs:string">
        <xs:simpleType>
          <xs:restriction base="xs:token">
            <xs:enumeration value="string"/>
          </xs:restriction>
        </xs:simpleType>
        <xs:simpleType>
          <xs:restriction base="xs:token">
            <xs:enumeration value="ENUM"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:union>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="type">
    <xs:simpleType>
      <xs:union memberTypes="xs:string">
        <xs:simpleType>
          <xs:restriction base="xs:token">
            <xs:enumeration value="string"/>
          </xs:restriction>
        </xs:simpleType>
        <xs:simpleType>
          <xs:restriction base="xs:token">
            <xs:enumeration value="ENUM"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:union>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="size" type="xs:nonNegativeInteger">
    <xs:annotation>
      <xs:documentation>The size of the argument.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:attributeGroup>
```