Schema documentation for serializable_schema.xsd

august 31, 2016

Table of Contents

	"
Schem	a(s)
	Main schema serializable_schema.xsd
	Included schema common_elements.xsd
Elemei	nt(s)
	Element serializable
	Element members
	Element member
	Element enum
	Element item
	Element import_serializable_type
	Element include_header
	Element comment
	Element arg_define / arg
	Element return
a	Element external_arg_define / arg
Simple	e Type(s)
	Simple Type id_define
	Simple Type full_items_define
	Simple Type pass_by_define
	Simple Type component_role_define
	Simple Type channel_update_define
	Simple Type severity define
	Simple Type command_kind_define
	Simple Type component_types_define
	Simple Type component_types_define
	Simple Type id_or_system_var_define
	Simple Type base_code_define
A 44 3	Simple Type system_var_define
Attribu	ite(s)
	Attribute item / @name
	Attribute item / @value
	Attribute item / @comment
	Attribute enum / @name
	Attribute type_size_choice_define / @name
	Attribute type_size_choice_define / @comment
	Attribute type_size_choice_define / @format
	Attribute type_size_choice_define / @data_type
	Attribute type_size_choice_define / @type
	Attribute type_size_choice_define / @size
	Attribute member / @comment
	Attribute member / @format
	Attribute member / @name
	Attribute serializable / @name
	Attribute serializable / @namespace
	Attribute serializable / @typeid
	Attribute arg_define / arg / @name
	Attribute arg_define / arg / @pass_by
	Attribute arg_define / arg / @comment
	Attribute return / @name
	Attribute return / @pass_by
	Attribute return / @comment
	Attribute external_arg_define / arg / @name
	Attribute external_arg_define / arg / @comment
Fleme	nt Group(s)
Licine	Element Group type_size_choice_define
	Element Group arg_define
	Element Group external_arg_define
Attribu	ite Group(s)
	Attribute Group type_size_choice_define

Namespace: ""

Schema(s)

Main schema serializable_schema.xsd

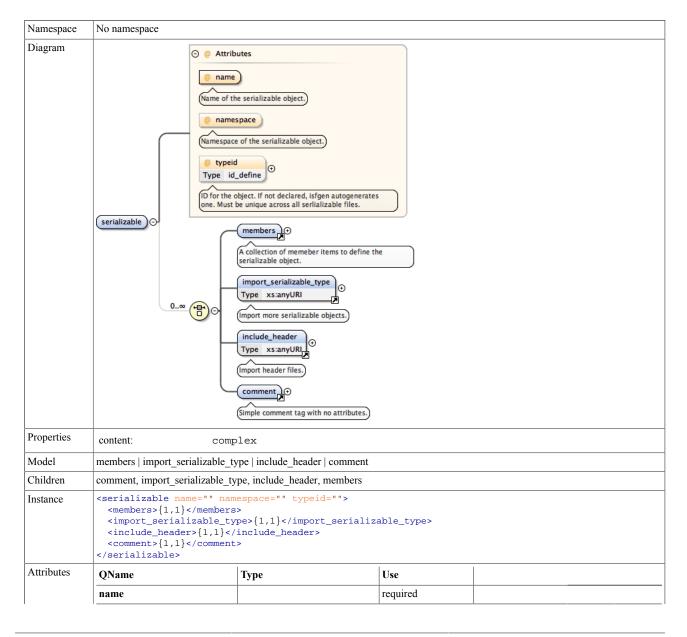
Namespace	No namespace	
Properties	attribute form default:	unqualified
	element form default:	qualified

Included schema common_elements.xsd

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

Element(s)

Element serializable



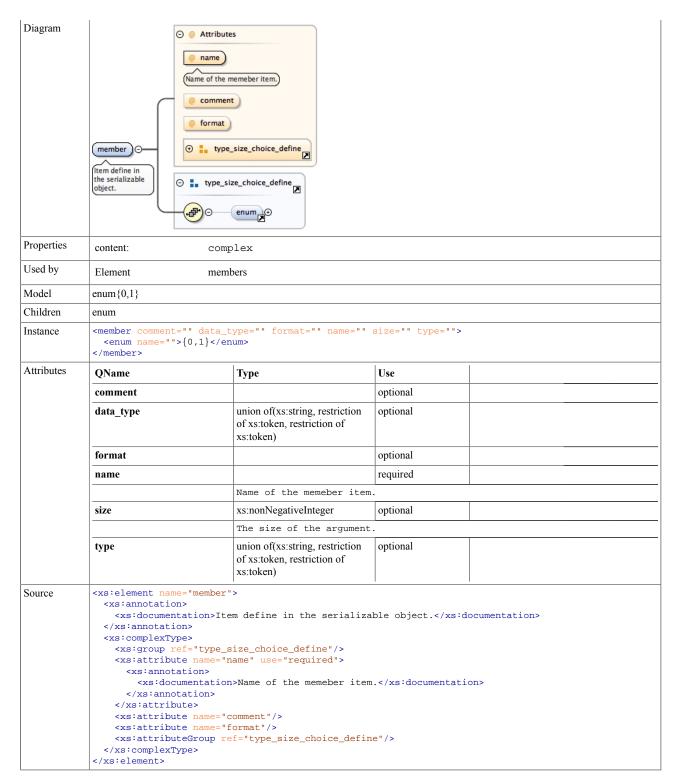
	QName	Type	Use		
		Name of the serializable object.			
	namespace		optional		
		Namespace of the seriali	zable object.		
	typeid	id_define	optional		
		ID for the object. If no unique across all serli		n autogenerates one. Must be	
Source	<pre><xs:element 0"="" embers"="" maxoccurs="unbounded" ref="m</td><td>="></xs:element> mport_serializable_type"/> nclude_header"/> omment"/> name" use="required"> n>Name of the serializable namespace"> n>Namespace of the seriali typeid" type="id_define"></pre>	object.zable object.t declared, isfge			

Element members

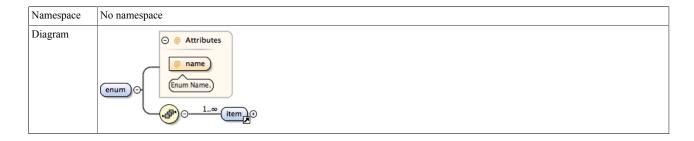
Namespace	No namespace			
Annotations	A collection of memeber items to define the serializable object.			
Diagram	A collection of member items to define the serializable object. (Item define in the serializable object.)			
Properties	content: complex			
Used by	Element serializable			
Model	member+			
Children	member			
Instance	<pre><members></members></pre>			
Source	<pre><xs:element name="members"> <xs:annotation> <xs:documentation>A collection of memeber items to define the serializable object.<!-- xs:documentation--> </xs:documentation></xs:annotation> <xs:complextype></xs:complextype></xs:element></pre>			

Element member

Namespace	No namespace
Annotations	Item define in the serializable object.

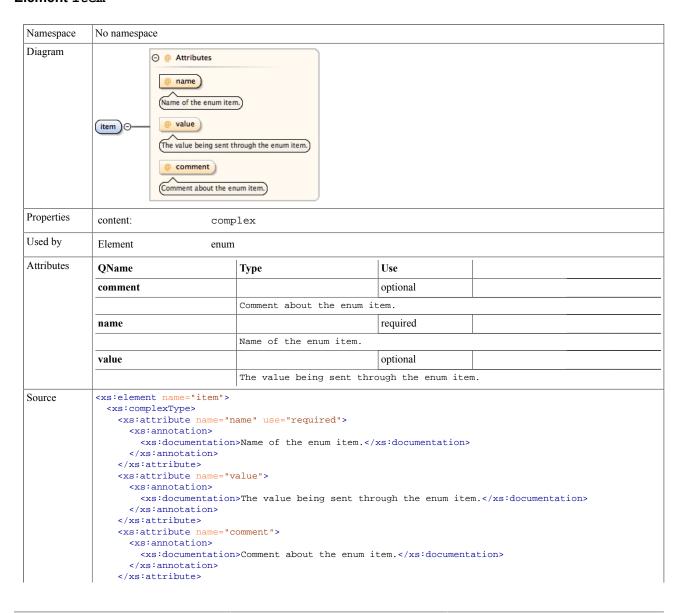


Element enum



Properties	content: con	mplex			
Used by	Element Group type_size_choice_define				
Model	item+				
Children	item				
Instance	<pre><enum name=""> <item comment="" name="" value="">{1,unbounded}</item> </enum></pre>				
Attributes	QName	Туре	Use		
	name		required		
		Enum Name.			
Source	<pre><xs:element name="enum"> <xs:complextype> <xs:sequence></xs:sequence></xs:complextype></xs:element></pre>				

Element item



```
</xs:complexType>
</xs:element>
```

${\bf Element} \ {\tt import_serializable_type}$

Namespace	No namespace	
Annotations	Import more serializable objects.	
Diagram	import_serializable_type Type xs:anyURI (Import more serializable objects.) (Suilt-in primitive type. The anyURI datatype represents a Uniform Resource Identifier Reference (URI).	
Туре	xs:anyURI	
Properties	content: simple	
Used by	Element serializable	
Source	<pre><xs:element name="import_serializable_type" type="xs:anyURI"></xs:element></pre>	

Element include_header

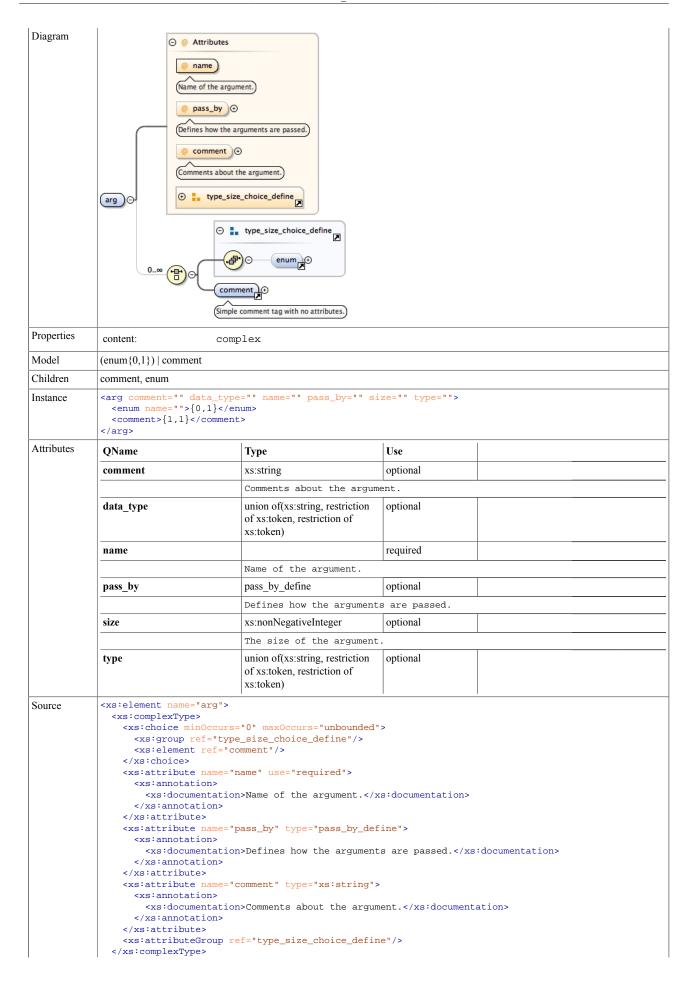
Namespace	No namespace			
Annotations	Import header files.			
Diagram	include_header Type xs:anyURI (import header files.	Built-in primitive type. The anyURI datatype represents a Uniform Resource Identifier Reference (URI).		
Type	xs:anyURI			
Properties	content:	simple		
Used by	Element	serializable		
Source	<pre><xs:element name="include_header" type="xs:anyURI"></xs:element></pre>			

Element comment

Namespace	No namespace			
Annotations	Simple comment tag with no attributes.			
Diagram	Simple comment tag with no attributes. Built-in primitive type. The string datatype represents character strings in XML.			
Туре	xs:string			
Properties	content: simple			
Used by	Elements arg_define/arg, external_arg_define/arg, return, serializable			
Source	<pre><xs:element name="comment" type="xs:string"> <xs:annotation> <xs:documentation>Simple comment tag with no attributes.</xs:documentation> </xs:annotation> </xs:element></pre>			

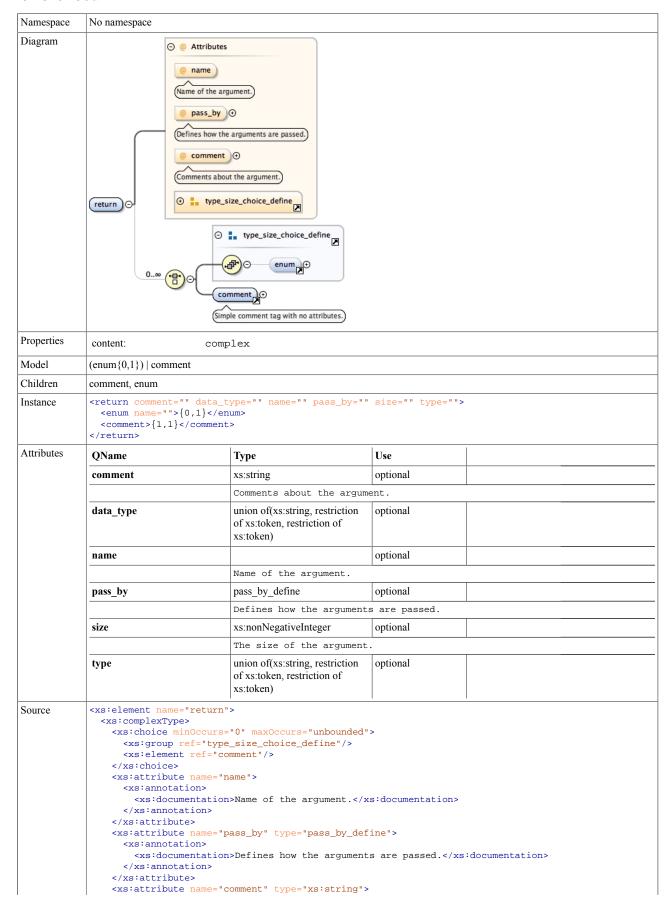
Element arg_define / arg

Namespace	No namespace
-----------	--------------



</rs:element>

Element return



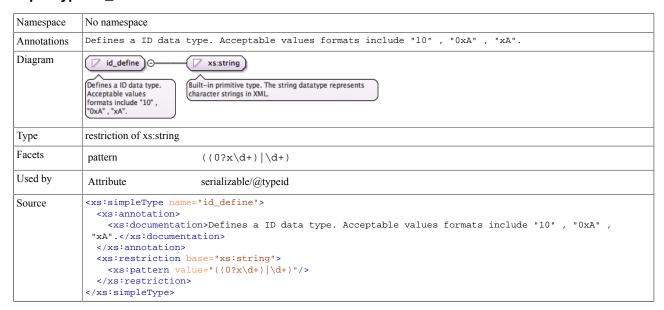
Element external_arg_define / arg

Namespace	No namespace			
Diagram	0	type_size_choice_define		
Properties	content: comp	olex		
Model	(enum{0,1}) comment			
Children	comment, enum			
Instance	<pre><arg comment="" data_type="" name="" size="" type=""> <enum name="">{0,1}</enum> <comment>{1,1}</comment> </arg></pre>			
Attributes	QName	Туре	Use	
	comment	xs:string	optional	
	data_type	Comments about the argum union of(xs:string, restriction of xs:token, restriction of xs:token)	ent . optional	
	name		required	
		Name of the argument.		1
	size	xs:nonNegativeInteger	optional	
		The size of the argument		
	type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	
Source	<pre><xs:element name="arg"></xs:element></pre>			

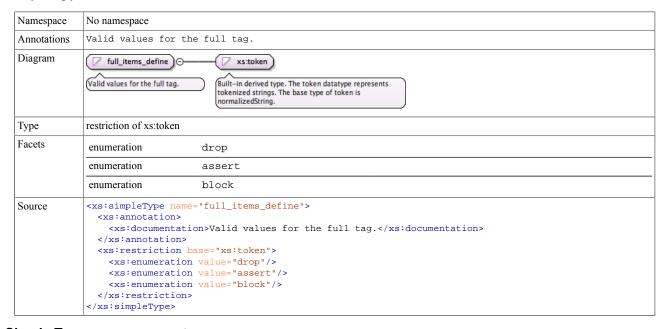
</xs:element>

Simple Type(s)

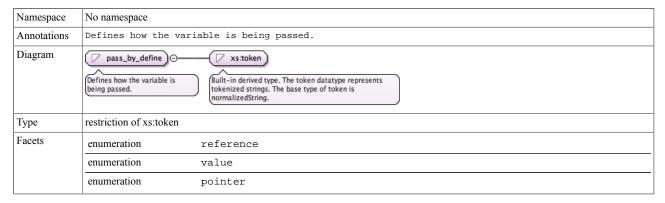
Simple Type id_define



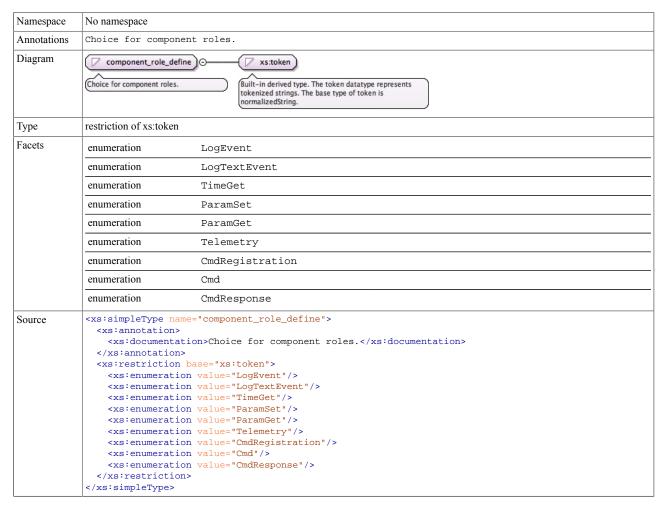
Simple Type full_items_define



Simple Type pass_by_define



Simple Type component_role_define



Simple Type channel_update_define

Namespace	No namespace		
Annotations	Choice between always and on_change. This is used in the channel 'update' tag.		
Diagram	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	<pre><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:simpletype></pre>		

Simple Type severity_define

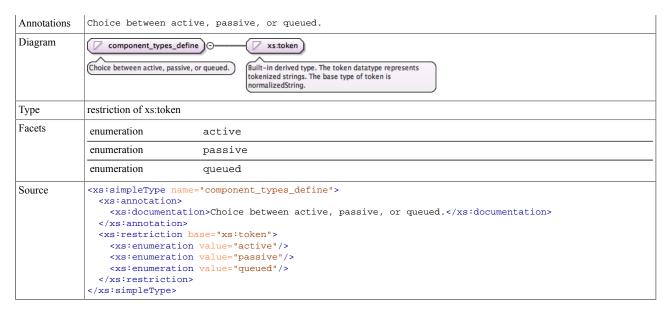


Simple Type command_kind_define

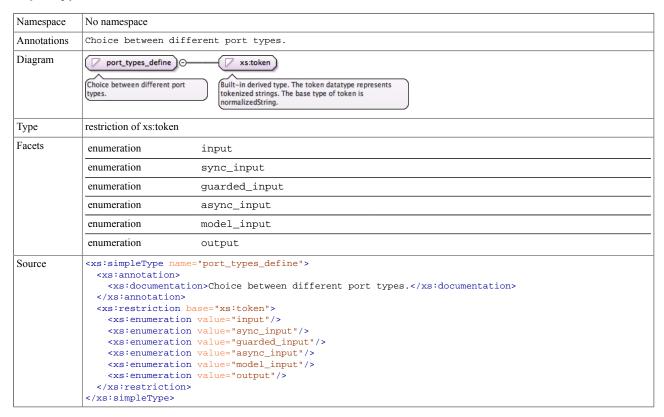
Namespace	No namespace		
Annotations	Choice between different command kinds.		
Diagram	Choice between different command kinds. Built-in derived type. The token datatype represents tokenized strings. The base type of token is normalizedString.		
Туре	restriction of xs:token		
Facets	enumeration async		
	enumeration sync		
	enumeration guarded		
Source	<pre><xs:simpletype name="command_kind_define"></xs:simpletype></pre>		

Simple Type component_types_define

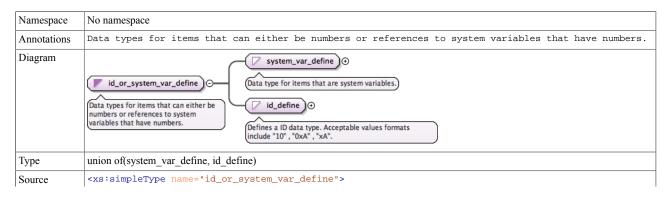
Namespace	No namespace
-----------	--------------



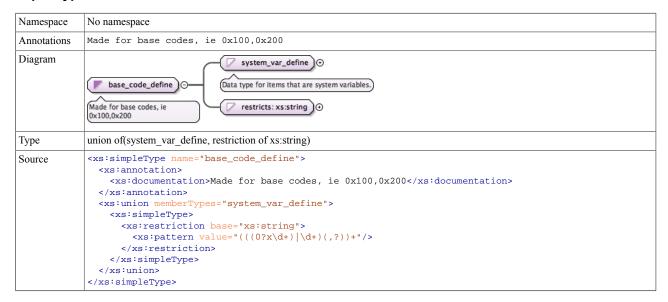
Simple Type port_types_define



Simple Type id_or_system_var_define



${\bf Simple\ Type\ base_code_define}$



Simple Type system_var_define

Namespace	No namespace		
Annotations	Data type for items that are system variables.		
Diagram	Data type for items that are system variables. Built-in primitive type. The string datatype represents character strings in XML.		
Туре	restriction of xs:string		
Facets	pattern \$[\w _ \-]+		
Source	<pre><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:pattern> </xs:restriction> </xs:simpletype></pre>		

Attribute(s)

Attribute item / @name

Namespace	No namespace		
Annotations	Name of the enum item.		
Properties	use: required		
Used by	Element item		
Source	<pre><xs:attribute name="name" use="required"></xs:attribute></pre>		

Attribute item / @value

Namespace	No namespace
-----------	--------------

Annotations	he value being sent through the enum item.	
Used by	Element item	
Source	<pre><xs:attribute name="value"> <xs:annotation></xs:annotation></xs:attribute></pre>	

Attribute item / @comment

Namespace	No namespace		
Annotations	Comment about the enum item.		
Used by	Element item		
Source	<pre><xs:attribute name="comment"> <xs:annotation></xs:annotation></xs:attribute></pre>		

Attribute enum / @name

Namespace	No namespace			
Annotations	Enum Name.	Enum Name.		
Properties	use:	required		
Used by	Element	enum		
Source	<pre><xs:annotation></xs:annotation></pre>	"name" use="required"> on>Enum Name.		

Attribute type_size_choice_define / @name

Namespace	No namespace		
Annotations	Name of the memeber item.		
Properties	use:	required	
Used by	Element	member	
Source	<pre><xs:annotation></xs:annotation></pre>	"name" use="required"> ion>Name of the memeber item.	

Attribute type_size_choice_define / @comment

Namespace	No namespace		
Used by	Element	member	
Source	<pre><xs:attribute name="comment"></xs:attribute></pre>		

Attribute type_size_choice_define / @format

Namespace	No namespace		
Used by	Element m	nember	
Source	xs:attribute name="format"/>		

Attribute type_size_choice_define / @data_type

Namespace	No namespace	
Type	union of(xs:string, restric	ction of xs:token, restriction of xs:token)
Properties	content:	simple

```
Used by
             Attribute Group
                                type_size_choice_define
            <xs:attribute name="data_type">
Source
              <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	No namespace	
Туре	union of(xs:string, restriction of xs:token, restriction of xs:token)		
Properties	content:	simple	
Used by	Attribute Group	type_size_choice_define	
Source	<pre><xs:simple< td=""><td><pre>> mberTypes="xs:string"> Type> riction base="xs:token"> umeration value="string"/> triction> eType> Type> riction base="xs:token"> umeration value="ENUM"/> triction base="xs:token"> umeration value="ENUM"/> triction> eType></pre></td></xs:simple<></pre>	<pre>> mberTypes="xs:string"> Type> riction base="xs:token"> umeration value="string"/> triction> eType> Type> riction base="xs:token"> umeration value="ENUM"/> triction base="xs:token"> umeration value="ENUM"/> triction> eType></pre>	

Attribute type_size_choice_define / @size

Namespace	No namespace		
Annotations	The size of the argu	The size of the argument.	
Туре	xs:nonNegativeInteger		
Properties	content:	simple	
Used by	Attribute Group	type_size_choice_define	
Source	<xs:annotation></xs:annotation>	size" type="xs:nonNegativeInteger"> on>The size of the argument.	

Attribute member / @comment

Namespace	No namespace	
Source	<pre><xs:attribute name="comment"></xs:attribute></pre>	

Attribute member / @format

Namespace	No namespace	
Source	<pre><xs:attribute name="format"></xs:attribute></pre>	

Attribute member / @name

Namespace	No namespace
-----------	--------------

Annotations	Name of the memeber item.	
Properties	use: required	
Source	<pre><xs:attribute name="name" use="required"> <xs:annotation> <xs:documentation>Name of the memeber item.</xs:documentation> </xs:annotation> </xs:attribute></pre>	

Attribute serializable / @name

Namespace	No namespace
Annotations	Name of the serializable object.
Properties	use: required
Used by	Element serializable
Source	<pre><xs:attribute name="name" use="required"> <xs:annotation></xs:annotation></xs:attribute></pre>

Attribute serializable / @namespace

Namespace	No namespace		
Annotations	Namespace of the serializable object.		
Used by	Element serializable		
Source	<pre><xs:attribute name="namespace"> <xs:annotation> <xs:documentation>Namespace of the serializable object.</xs:documentation> </xs:annotation> </xs:attribute></pre>		

Attribute serializable / @typeid

Namespace	No namespace	
Annotations	ID for the obj	ject. If not declared, isfgen autogenerates one. Must be unique across all e files.
Туре	id_define	
Properties	content:	simple
Facets	pattern	((0?x\d+) \d+)
Used by	Element	serializable
Source	<pre><xs:attribute name="typeid" type="id_define"> <xs:annotation></xs:annotation></xs:attribute></pre>	

Attribute arg_define / arg / @name

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

Attribute arg_define / arg / @pass_by

Namespace	No namespace
-----------	--------------

Annotations	Defines how the	arguments are passed.
Туре	pass_by_define	
Properties	content:	simple
Facets	enumeration	reference
	enumeration	value
	enumeration	pointer
Used by	Element	arg_define/arg
Source	<pre><xs:attribute name="pass_by" type="pass_by_define"></xs:attribute></pre>	

Attribute arg_define / arg / @comment

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

Attribute return / @name

Namespace	No namespace	
Annotations	Name of the argument.	
Used by	Element return	
Source	<pre><xs:attribute name="name"> <xs:annotation></xs:annotation></xs:attribute></pre>	

Attribute return / @pass_by

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

Attribute return / @comment

Namespace	No namespace
Annotations	Comments about the argument.
Туре	xs:string

Properties	content:	simple
Used by	Element	return
Source	<pre><xs:attribute name="comment" type="xs:string"> <xs:annotation> <xs:documentation>Comments about the argument.</xs:documentation> </xs:annotation> </xs:attribute></pre>	

Attribute external_arg_define / arg / @name

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

Attribute external_arg_define / arg / @comment

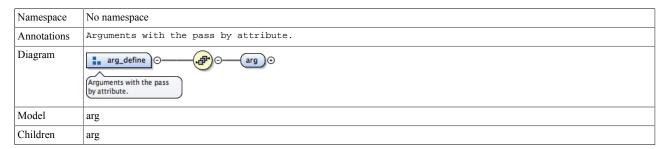
Namespace	No namespace	
Annotations	Comments about the	e argument.
Type	xs:string	
Properties	content:	simple
Used by	Element	external_arg_define/arg
Source	<pre><xs:attribute name="comment" type="xs:string"> <xs:annotation> <xs:documentation>Comments about the argument.</xs:documentation> </xs:annotation>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

Element Group(s)

Element Group type_size_choice_define

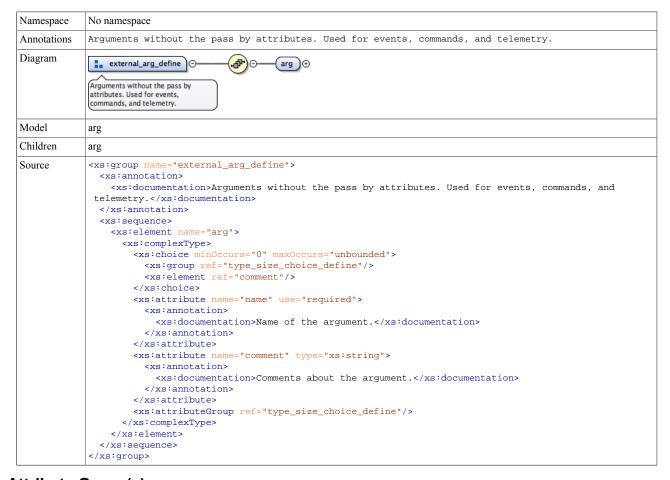
Namespace	No namespace	
Diagram	type_size_choice_define	
Used by	Elements arg_define/arg, external_arg_define/arg, member, return	
Model	enum{0,1}	
Children	enum	
Source	<pre><xs:group name="type_size_choice_define"></xs:group></pre>	

Element Group arg_define



```
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: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:annotation>
                    </xs:attribute>
                    <xs:attributeGroup ref="type_size_choice_define"/>
                 </xs:complexType>
               </xs:element>
              </xs:sequence>
            </xs:group>
```

Element Group external_arg_define



Attribute Group(s)

Attribute Group type_size_choice_define

Namespace	No namespace
-----------	--------------

