

Schema documentation for serializable_schema.xsd

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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

Namespace	No namespace			
Diagram	<p>The diagram illustrates the structure of a <code>serializable</code> element. It is a container element with three attributes: <code>name</code> (Name of the serializable object), <code>namespace</code> (Namespace of the serializable object), and <code>typeid</code> (ID for the object. If not declared, isfgen autogenerates one. Must be unique across all serializable files). The <code>serializable</code> element contains a <code>members</code> element (A collection of member items to define the serializable object) and an <code>import_serializable_type</code> element (Type: <code>xs:anyURI</code>). The <code>serializable</code> element is shown with a <code>serializable</code> attribute and a <code>members</code> attribute. The <code>import_serializable_type</code> element is shown with a <code>import_serializable_type</code> attribute.</p>			
Properties	content:	complex		
Model	members import_serializable_type include_header comment			
Children	comment, import_serializable_type, include_header, members			
Instance	<pre><serializable name="" namespace="" typeid=""> <members>{1,1}</members> <import_serializable_type>{1,1}</import_serializable_type> <include_header>{1,1}</include_header> <comment>{1,1}</comment> </serializable></pre>			
Attributes	QName	Type	Use	
	name		required	

	QName	Type	Use
		Name of the serializable object.	
	namespace		optional
		Namespace of the serializable object.	
	typeid	id_define	optional
		ID for the object. If not declared, isfgen autogenerates one. Must be unique across all serializable files.	
Source	<pre><xs:element name="serializable"> <xs:complexType> <xs:choice minOccurs="0" maxOccurs="unbounded"> <xs:element ref="members"/> <xs:element ref="import_serializable_type"/> <xs:element ref="include_header"/> <xs:element ref="comment"/> </xs:choice> <xs:attribute name="name" use="required"> <xs:annotation> <xs:documentation>Name of the serializable object.</xs:documentation> </xs:annotation> </xs:attribute> <xs:attribute name="namespace"> <xs:annotation> <xs:documentation>Namespace of the serializable object.</xs:documentation> </xs:annotation> </xs:attribute> <xs:attribute name="typeid" type="id_define"> <xs:annotation> <xs:documentation>ID for the object. If not declared, isfgen autogenerates one. Must be unique across all serializable files.</xs:documentation> </xs:annotation> </xs:attribute> </xs:complexType> </xs:element></pre>		

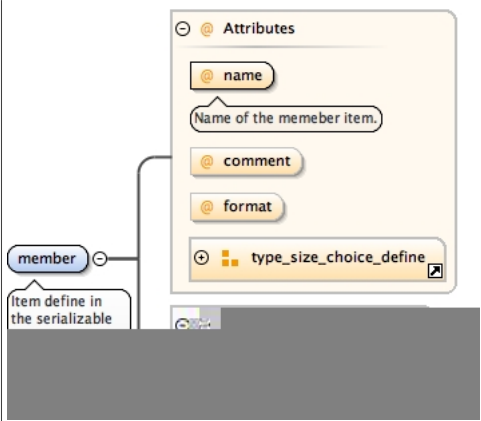
Element members

Namespace	No namespace	
Annotations	A collection of memeber items to define the serializable object.	
Diagram		
Properties	content:	complex
Used by	Element	serializable
Model	member+	
Children	member	
Instance	<pre> <members> <member comment="" data_type="" format="" name="" size="" type="">{1,unbounded}</member> </members> </pre>	
Source	<pre> <xs:element name="members"> <xs:annotation> <xs:documentation>A collection of memeber items to define the serializable object.</ </xs:annotation> <xs:complexType> <xs:sequence> <xs:element maxOccurs="unbounded" ref="member"/> </xs:sequence> </xs:complexType> </xs:element> </pre>	

Element member

Namespace	No namespace
Annotations	Item define in the serializable object.

Diagram




Properties	content: complex			
Used by	Element members			
Model	enum{0,1}			
Children	enum			
Instance	<pre><member comment="" data_type="" format="" name="" size="" type=""> <enum name="">{0,1}</enum> </member></pre>			
Attributes	QName	Type	Use	
	comment		optional	
	data_type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	
	format		optional	
	name		required	
		Name of the memeber item.		
	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="member"> <xs:annotation> <xs:documentation>Item define in the serializable object.</xs:documentation> </xs:annotation> <xs:complexType> <xs:group ref="type_size_choice_define"/> <xs:attribute name="name" use="required"> <xs:annotation> <xs:documentation>Name of the memeber item.</xs:documentation> </xs:annotation> </xs:attribute> <xs:attribute name="comment"/> <xs:attribute name="format"/> <xs:attributeGroup ref="type_size_choice_define"/> </xs:complexType> </xs:element></pre>			

Element enum

Namespace	No namespace
Diagram	<p>The diagram shows an 'enum' element (blue box) connected to an 'Attributes' panel (yellow box) containing a 'name' attribute (documentation: 'Enum Name.'). Below the attributes panel, there is a choice group (yellow box) containing an 'item' element (blue box) with a cardinality of '1..∞'.</p>

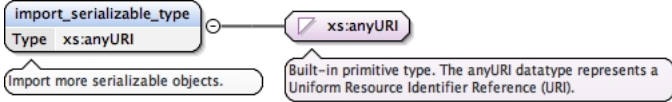
Properties	content: complex		
Used by	Element Group	type_size_choice_define	
Model	item+		
Children	item		
Instance	<pre><enum name=""> <item comment="" name="" value="">{1,unbounded}</item> </enum></pre>		
Attributes	QName	Type	Use
	name		required
	Enum Name.		
Source	<pre><xs:element name="enum"> 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

Element item

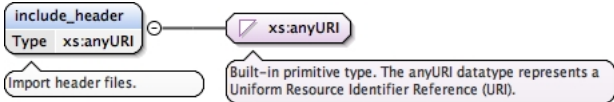
Namespace	No namespace			
Diagram				
Properties	content:	complex		
Used by	Element	enum		
Attributes	QName	Type	Use	
	comment		optional	
	Comment about the enum item.			
	name		required	
	Name of the enum item.			
	value		optional	
	The value being sent through the enum item.			
Source	<pre><xs:element 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></pre>			

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

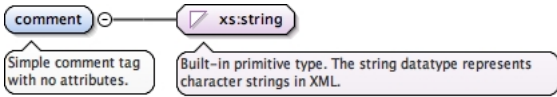
Element `import_serializable_type`

Namespace	No namespace
Annotations	Import more serializable objects.
Diagram	
Type	xs:anyURI
Properties	content: simple
Used by	Element serializable
Source	<pre><xs:element name="import_serializable_type" type="xs:anyURI"> <xs:annotation> <xs:documentation>Import more serializable objects.</xs:documentation> </xs:annotation> </xs:element></pre>

Element `include_header`

Namespace	No namespace
Annotations	Import header files.
Diagram	
Type	xs:anyURI
Properties	content: simple
Used by	Element serializable
Source	<pre><xs:element name="include_header" type="xs:anyURI"> <xs:annotation> <xs:documentation>Import header files.</xs:documentation> </xs:annotation> </xs:element></pre>

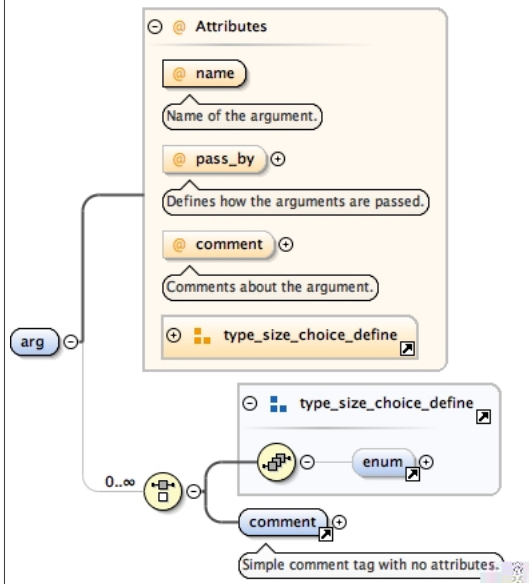
Element `comment`

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, 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
-----------	--------------

Diagram



Properties	content: complex			
Model	(enum{0,1}) comment			
Children	comment, enum			
Instance	<pre><arg comment="" data_type="" name="" pass_by="" size="" type=""> <enum name="">{0,1}</enum> <comment>{1,1}</comment> </arg></pre>			
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.		
	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 return

Namespace	No namespace																																														
Diagram																																															
Properties	content:	complex																																													
Model	(enum{0,1}) comment																																														
Children	comment, enum																																														
Instance	<pre><return comment="" data_type="" name="" pass_by="" size="" type=""> <enum name="">{0,1}</enum> <comment>{1,1}</comment> </return></pre>																																														
Attributes	<table><tr><th>QName</th><th>Type</th><th>Use</th><th></th></tr><tr><td>comment</td><td>xs:string</td><td>optional</td><td></td></tr><tr><td></td><td colspan="3">Comments about the argument.</td></tr><tr><td>data_type</td><td>union of(xs:string, restriction of xs:token, restriction of xs:token)</td><td>optional</td><td></td></tr><tr><td>name</td><td></td><td>optional</td><td></td></tr><tr><td></td><td colspan="3">Name of the argument.</td></tr><tr><td>pass_by</td><td>pass_by_define</td><td>optional</td><td></td></tr><tr><td></td><td colspan="3">Defines how the arguments are passed.</td></tr><tr><td>size</td><td>xs:nonNegativeInteger</td><td>optional</td><td></td></tr><tr><td></td><td colspan="3">The size of the argument.</td></tr><tr><td>type</td><td>union of(xs:string, restriction of xs:token, restriction of xs:token)</td><td>optional</td><td></td></tr></table>	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			
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	<pre><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"></pre>																																														


```

<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 external_arg_define / arg

Namespace	No namespace			
Diagram				
Properties	content:	complex		
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	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.		
Attributes	type	union of(xs:string, restriction of xs:token, restriction of xs:token)	optional	
Source	<pre><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:complexType></pre>			

</xs:element>

Simple Type(s)

Simple Type id_define

Namespace	No namespace
Annotations	Defines a ID data type. Acceptable values formats include "10" , "0xA" , "xA".
Diagram	
Type	restriction of xs:string
Facets	pattern <code>((0?x\d+) \d+)</code>
Used by	Attribute serializable/@typeid
Source	<pre><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></pre>

Simple Type full_items_define

Namespace	No namespace						
Annotations	Valid values for the full tag.						
Diagram							
Type	restriction of xs:token						
Facets	<table border="1"> <tr> <td>enumeration</td> <td>drop</td> </tr> <tr> <td>enumeration</td> <td>assert</td> </tr> <tr> <td>enumeration</td> <td>block</td> </tr> </table>	enumeration	drop	enumeration	assert	enumeration	block
enumeration	drop						
enumeration	assert						
enumeration	block						
Source	<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>						

Simple Type pass_by_define

Namespace	No namespace						
Annotations	Defines how the variable is being passed.						
Diagram							
Type	restriction of xs:token						
Facets	<table border="1"> <tr> <td>enumeration</td> <td>reference</td> </tr> <tr> <td>enumeration</td> <td>value</td> </tr> <tr> <td>enumeration</td> <td>pointer</td> </tr> </table>	enumeration	reference	enumeration	value	enumeration	pointer
enumeration	reference						
enumeration	value						
enumeration	pointer						

Used by	Attributes arg_define/arg/@pass_by, return/@pass_by
Source	<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>

Simple Type component_role_define

Namespace	No namespace																		
Annotations	Choice for component roles.																		
Diagram																			
Type	restriction of xs:token																		
Facets	<table> <tr><td>enumeration</td><td>LogEvent</td></tr> <tr><td>enumeration</td><td>LogTextEvent</td></tr> <tr><td>enumeration</td><td>TimeGet</td></tr> <tr><td>enumeration</td><td>ParamSet</td></tr> <tr><td>enumeration</td><td>ParamGet</td></tr> <tr><td>enumeration</td><td>Telemetry</td></tr> <tr><td>enumeration</td><td>CmdRegistration</td></tr> <tr><td>enumeration</td><td>Cmd</td></tr> <tr><td>enumeration</td><td>CmdResponse</td></tr> </table>	enumeration	LogEvent	enumeration	LogTextEvent	enumeration	TimeGet	enumeration	ParamSet	enumeration	ParamGet	enumeration	Telemetry	enumeration	CmdRegistration	enumeration	Cmd	enumeration	CmdResponse
enumeration	LogEvent																		
enumeration	LogTextEvent																		
enumeration	TimeGet																		
enumeration	ParamSet																		
enumeration	ParamGet																		
enumeration	Telemetry																		
enumeration	CmdRegistration																		
enumeration	Cmd																		
enumeration	CmdResponse																		
Source	<pre> <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> </pre>																		

Simple Type channel_update_define

Namespace	No namespace				
Annotations	Choice between always and on_change. This is used in the channel 'update' tag.				
Diagram					
Type	restriction of xs:token				
Facets	<table> <tr><td>enumeration</td><td>always</td></tr> <tr><td>enumeration</td><td>on_change</td></tr> </table>	enumeration	always	enumeration	on_change
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> </pre>				

```
<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															
Type	restriction of xs:token														
Facets	<table> <tr><td>enumeration</td><td>COMMAND</td></tr> <tr><td>enumeration</td><td>ACTIVITY_LO</td></tr> <tr><td>enumeration</td><td>ACTIVITY_HI</td></tr> <tr><td>enumeration</td><td>WARNING_LO</td></tr> <tr><td>enumeration</td><td>WARNING_HI</td></tr> <tr><td>enumeration</td><td>DIAGNOSTIC</td></tr> <tr><td>enumeration</td><td>FATAL</td></tr> </table>	enumeration	COMMAND	enumeration	ACTIVITY_LO	enumeration	ACTIVITY_HI	enumeration	WARNING_LO	enumeration	WARNING_HI	enumeration	DIAGNOSTIC	enumeration	FATAL
enumeration	COMMAND														
enumeration	ACTIVITY_LO														
enumeration	ACTIVITY_HI														
enumeration	WARNING_LO														
enumeration	WARNING_HI														
enumeration	DIAGNOSTIC														
enumeration	FATAL														
Source	<pre><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></pre>														

Simple Type command_kind_define


Namespace	No namespace						
Annotations	Choice between different command kinds.						
Diagram							
Type	restriction of xs:token						
Facets	<table> <tr><td>enumeration</td><td>async</td></tr> <tr><td>enumeration</td><td>sync</td></tr> <tr><td>enumeration</td><td>guarded</td></tr> </table>	enumeration	async	enumeration	sync	enumeration	guarded
enumeration	async						
enumeration	sync						
enumeration	guarded						
Source	<pre><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></pre>						

Simple Type component_types_define

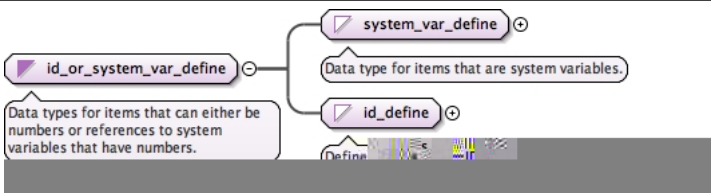
Namespace	No namespace
-----------	--------------

Annotations	Choice between active, passive, or queued.						
Diagram							
Type	restriction of xs:token						
Facets	<table> <tr> <td>enumeration</td><td>active</td></tr> <tr> <td>enumeration</td><td>passive</td></tr> <tr> <td>enumeration</td><td>queued</td></tr> </table>	enumeration	active	enumeration	passive	enumeration	queued
enumeration	active						
enumeration	passive						
enumeration	queued						
Source	<pre> <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> </pre>						

Simple Type port_types_define

Namespace	No namespace												
Annotations	Choice between different port types.												
Diagram													
Type	restriction of xs:token												
Facets	<table> <tr> <td>enumeration</td><td>input</td></tr> <tr> <td>enumeration</td><td>sync_input</td></tr> <tr> <td>enumeration</td><td>guarded_input</td></tr> <tr> <td>enumeration</td><td>async_input</td></tr> <tr> <td>enumeration</td><td>model_input</td></tr> <tr> <td>enumeration</td><td>output</td></tr> </table>	enumeration	input	enumeration	sync_input	enumeration	guarded_input	enumeration	async_input	enumeration	model_input	enumeration	output
enumeration	input												
enumeration	sync_input												
enumeration	guarded_input												
enumeration	async_input												
enumeration	model_input												
enumeration	output												
Source	<pre> <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> </pre>												

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	
Type	union of(system_var_define, id_define)
Source	<pre> <xs:simpleType name="id_or_system_var_define"> </pre>

```
<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	
Type	union of(system_var_define, restriction of xs:string)
Source	<pre><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></pre>

Simple Type system_var_define

Namespace	No namespace
Annotations	Data type for items that are system variables.
Diagram	
Type	restriction of xs:string
Facets	pattern <code>\$(\w _ \\-)+</code>
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: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:annotation> <xs:documentation>Name of the enum item.</xs:documentation> </xs:annotation> </xs:attribute></pre>

Attribute item / @value

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

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

Attribute enum / @name

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

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

Attribute type_size_choice_define / @comment

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

Attribute type_size_choice_define / @format

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

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	<pre> <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> </pre>

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	<pre> <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> </pre>

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

Attribute member / @comment

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

Attribute member / @format

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

Attribute member / @name

Namespace	No namespace
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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:documentation>Name of the serializable object.</xs:documentation> </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 object. If not declared, isfgen autogenerates one. Must be unique across all serializable files.
Type	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:documentation>ID for the object. If not declared, isfgen autogenerates one. Must be unique across all serializable files.</xs:documentation> </xs:annotation> </xs:attribute></pre>

Attribute arg_define / arg / @name

Namespace	No namespace
Annotations	Name of the argument.
Properties	use: required
Used by	Element 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 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	<pre><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></pre>	

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

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	<pre><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></pre>	

Attribute return / @comment

Namespace	No namespace	
Annotations	Comments about the argument.	
Type	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 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 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

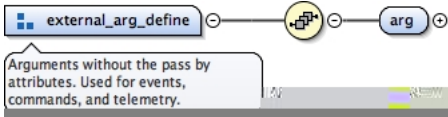
Namespace	No namespace
Diagram	
Used by	Elements arg_define/arg, external_arg_define/arg, member, return
Model	enum{0,1}
Children	enum
Source	<pre><xs:group name="type_size_choice_define"> <xs:sequence> <xs:element minOccurs="0" ref="enum" /> </xs:sequence> </xs:group></pre>

Element Group arg_define

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

Source	<pre> <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> </pre>
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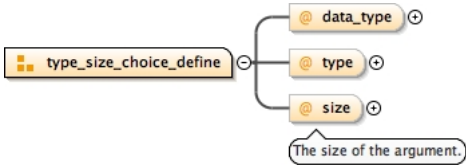
Element Group external_arg_define

Namespace	No namespace
Annotations	Arguments without the pass by attributes. Used for events, commands, and telemetry.
Diagram	
Model	arg
Children	arg
Source	<pre> <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> </pre>

Attribute Group(s)

Attribute Group type_size_choice_define

Namespace	No namespace
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Diagram				
Used by	Elements	arg_define/arg, external_arg_define/arg, member, 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	<pre> <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> </pre>			