

Schema documentation for CDE_schema.xsd

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Schema(s)

Main schema CDE_schema.xsd

Element(s)

Element data_element_set

Diagram	
Model	id , name , description , version , references{0,1} , index_codes{0,1} , images{0,1} , modality* , biological_sex{0,1} , age_range{0,1} , authors{0,1} , event* , specialty+ , elements
Instance	<pre> <data_element_set> <id>{1,1}</id> <name>{1,1}</name> <description>{1,1}</description> <version>{1,1}</version> <references>{0,1}</references> <index_codes>{0,1}</index_codes> <images>{0,1}</images> <modality>{0,unbounded}</modality> <biological_sex>{0,1}</biological_sex> </pre>

```

<age_range>{0,1}</age_range>
<authors>{0,1}</authors>
<event>{0,unbounded}</event>
<specialty>{1,unbounded}</specialty>
<elements>{1,1}</elements>
</data_element_set>

```

Element data_element_set / id

Annotations	Each set has a unique identifier of the format "RDES[0-9]+" (e.g., "RDES42") and a textual name.
Diagram	
Type	restriction of xs:string
Facets	pattern RDES\d+

Element data_element_set / name

Diagram	
Type	xs:string

Element description

Diagram	
Type	xs:string
Used by	Element data_element_set

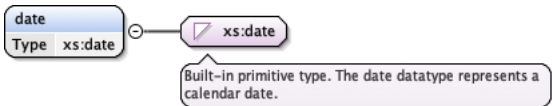
Element version

Diagram	
Used by	Elements data_element_set, element
Model	name , date , status
Instance	<pre> <version> <name>{1,1}</name> <date>{1,1}</date> <status>{1,1}</status> </version> </pre>

Element version / name

Diagram	
Type	xs:string


Element date

Diagram		
Type	xs:date	
Used by	Element Group	status_attrs

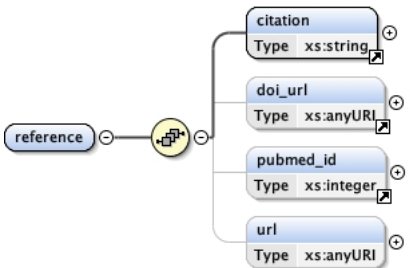
Element status

Diagram		
Type	restriction of xs:token	
Facets	enumeration	proposed
	enumeration	published
	enumeration	retired
Used by	Element Group	status_attrs

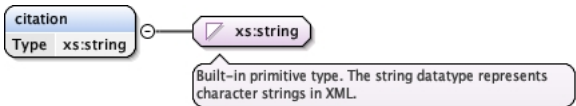
Element references

Diagram		
Used by	Elements	data_element_set, element, image, value_set/value
Model	reference+	
Instance	<pre><references> <reference>{1,unbounded}</reference> </references></pre>	

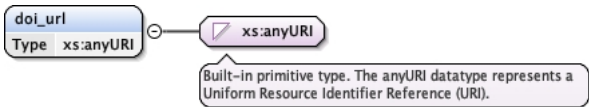
Element reference

Diagram		
Used by	Element	references
Model	citation , doi_url{0,1} , pubmed_id{0,1} , url{0,1}	
Instance	<pre><reference> <citation>{1,1}</citation> <doi_url>{0,1}</doi_url> <pubmed_id>{0,1}</pubmed_id> <url>{0,1}</url> </reference></pre>	

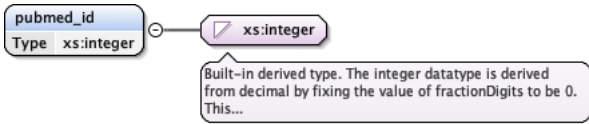
Element citation

Diagram		
Type	xs:string	
Used by	Element	reference

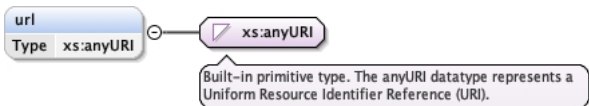
Element doi_url

Diagram		
Type	xs:anyURI	
Used by	Element	reference

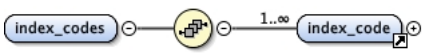
Element pubmed_id

Diagram		
Type	xs:integer	
Used by	Element	reference

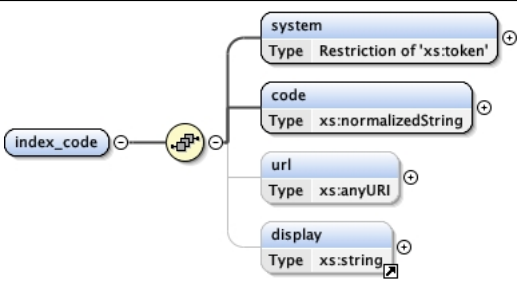
Element reference / url

Diagram		
Type	xs:anyURI	


Element index_codes

Diagram		
Used by	Elements	data_element_set, element, value_set/value
Model	index_code+	
Instance	<pre><index_codes> <index_code>{1,unbounded}</index_code> </index_codes></pre>	

Element index_code

Diagram		
Used by	Element	index_codes
Model	system , code , url{0,1} , display{0,1}	
Instance	<pre><index_code> <system>{1,1}</system> <code>{1,1}</code> <url>{0,1}</url> <display>{0,1}</display> </index_code></pre>	

Element index_code / system

Diagram		
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Type	restriction of xs:token	
Facets	enumeration	RADLEX
	enumeration	SNOMEDCT
	enumeration	LOINC

Element `index_code` / `code`

Diagram	
Type	xs:normalizedString

Element `index_code` / `url`

Diagram	
Type	xs:anyURI

Element `display`

Diagram	
Type	xs:string
Used by	Element <code>index_code</code>

Element `images`

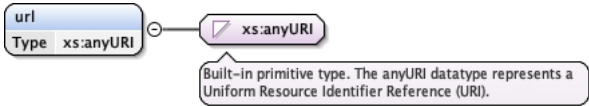
Diagram	
Used by	Elements <code>data_element_set</code> , <code>element</code> , <code>value_set/value</code>
Model	image+
Instance	<pre><images> <image>{1,unbounded}</image> </images></pre>

Element `image`

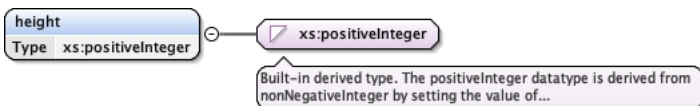
Diagram	
Used by	Element <code>images</code>
Model	url height width caption rights authors references

Instance	<pre> <image> <url>{1,1}</url> <height>{1,1}</height> <width>{1,1}</width> <caption>{1,1}</caption> <rights>{1,1}</rights> <authors>{1,1}</authors> <references>{1,1}</references> </image> </pre>
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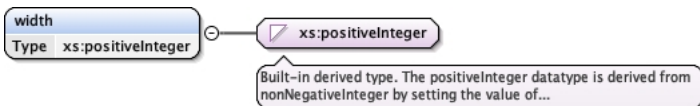
Element image / url

Diagram	
Type	xs:anyURI

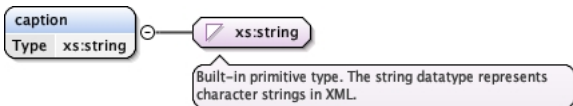
Element height

Diagram	
Type	xs:positiveInteger
Used by	Element image

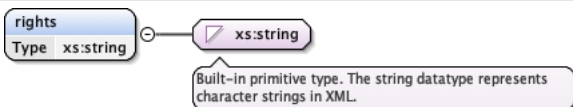
Element width

Diagram	
Type	xs:positiveInteger
Used by	Element image

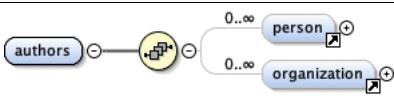
Element caption

Diagram	
Type	xs:string
Used by	Element image

Element rights

Diagram	
Type	xs:string
Used by	Element image

Element authors

Diagram	
Used by	Elements data_element_set, element, image

Model	person*, organization*
Instance	<pre> <authors> <person>{0,unbounded}</person> <organization>{0,unbounded}</organization> </authors> </pre>

Element person

Diagram	
Used by	Element authors
Model	name, (orcid_id twitter_handle url role)
Instance	<pre> <person> <name>{1,1}</name> <orcid_id>{1,1}</orcid_id> <twitter_handle>{1,1}</twitter_handle> <url>{1,1}</url> <role>{1,1}</role> </person> </pre>

Element person / name

Diagram	
Type	xs:string

Element orcid_id

Diagram	
Type	xs:string
Used by	Element person

Element twitter_handle


Diagram	
Type	xs:string
Used by	Element person

Element person / url

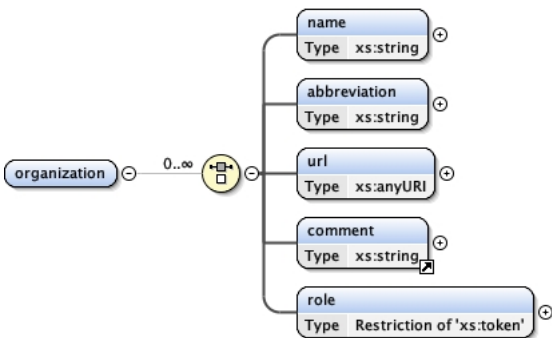
Diagram	
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Type	xs:string
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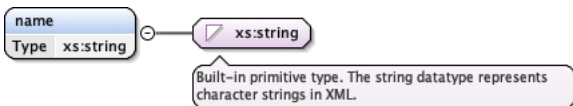
Element person / role

Diagram		
Type	restriction of xs:token	
Facets	enumeration	author
	enumeration	editor
	enumeration	translator
	enumeration	reviewer
	enumeration	contributor

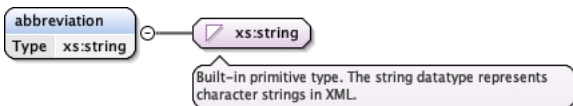
Element organization

Diagram		
Used by	Element	authors
Model	name abbreviation url comment role	
Instance	<pre> <organization> <name>{1,1}</name> <abbreviation>{1,1}</abbreviation> <url>{1,1}</url> <comment>{1,1}</comment> <role>{1,1}</role> </organization> </pre>	

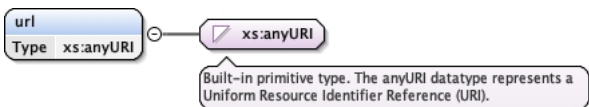
Element organization / name

Diagram		
Type	xs:string	

Element organization / abbreviation

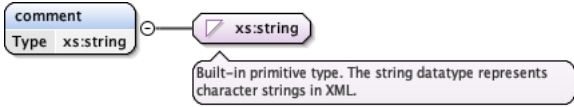
Diagram		
Type	xs:string	

Element organization / url

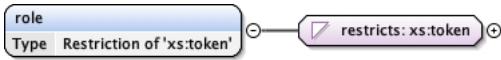
Diagram		
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Type	xs:anyURI
------	-----------

Element comment

Diagram		
Type	xs:string	
Used by	Element	organization

Element organization / role

Diagram		
Type	restriction of xs:token	
Facets	enumeration	contributor
	enumeration	sponsor
	enumeration	translator
	enumeration	reviewer
	enumeration	author

Element modality

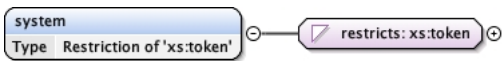
Diagram	
Used by	Elements data_element_set, element
Model	system , code , name , url , code , name , url , code , name , url , code , name , url , code , name , url , code , name , url , code , name , url , , url
Instance	<modality> <system>{1,1}</system> <code>{1,1}</code> <name>{1,1}</name> <:url>{1,1}</url> <code>{1..1}</code>

```

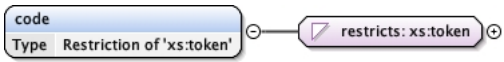
<name>{1,1}</name>
<url>{1,1}</url>
<code>{1,1}</code>
<name>{1,1}</name>
<url>{1,1}</url>
<code>{1,1}</code>
<name>{1,1}</name>
<url>{1,1}</url>
<code>{1,1}</code>
<name>{1,1}</name>
<url>{1,1}</url>
<code>{1,1}</code>
<name>{1,1}</name>
<url>{1,1}</url>
<code>{1,1}</code>
<name>{1,1}</name>
<url>{1,1}</url>
</modality>

```

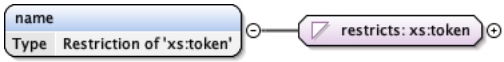
Element modality / system

Diagram	
Type	restriction of xs:token
Facets	enumeration RadLex

Element modality / code

Diagram	
Type	restriction of xs:token
Facets	enumeration CT

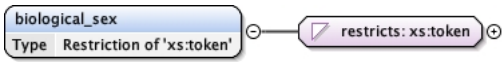
Element modality / name

Diagram	
Type	restriction of xs:token
Facets	enumeration Computed Tomography

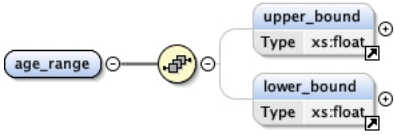
Element modality / url

Diagram	
Type	restriction of xs:token
Facets	enumeration http://radlex.org/RID/RID10321

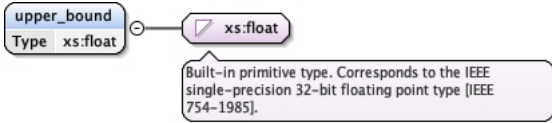
Element biological_sex

Diagram	
Type	restriction of xs:token
Facets	enumeration M enumeration F
Used by	Elements data_element_set, element

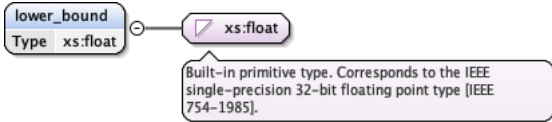
Element age_range

Diagram	 The diagram shows the 'age_range' element connected to a choice container. This container has two branches: 'upper_bound' with type 'xs:float' and 'lower_bound' with type 'xs:float'. Both branches have a cardinality of 1..1.
Used by	Elements data_element_set, element
Model	upper_bound{0,1} , lower_bound{0,1}
Instance	<pre><age_range> <upper_bound>{0,1}</upper_bound> <lower_bound>{0,1}</lower_bound> </age_range></pre>

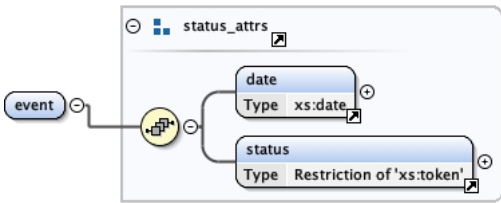
Element upper_bound

Diagram	 The diagram shows the 'upper_bound' element with type 'xs:float'. A callout box explains that 'xs:float' is a built-in primitive type corresponding to the IEEE single-precision 32-bit floating point type [IEEE 754-1985].
Type	xs:float
Used by	Element age_range

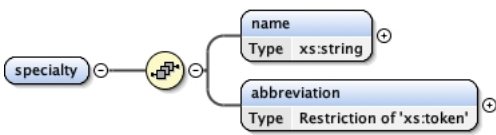
Element lower_bound

Diagram	 The diagram shows the 'lower_bound' element with type 'xs:float'. A callout box explains that 'xs:float' is a built-in primitive type corresponding to the IEEE single-precision 32-bit floating point type [IEEE 754-1985].
Type	xs:float
Used by	Element age_range

Element event

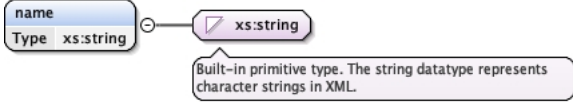
Diagram	 The diagram shows the 'event' element connected to a choice container. This container is part of a group named 'status_attrs' and has two branches: 'date' with type 'xs:date' and 'status' with type 'Restriction of 'xs:token''. Both branches have a cardinality of 1..1.
Used by	Element Group history
Model	date , status
Instance	<pre><event> <date>{1,1}</date> <status>{1,1}</status> </event></pre>

Element specialty


Diagram	 The diagram shows the 'specialty' element connected to a choice container. This container has two branches: 'name' with type 'xs:string' and 'abbreviation' with type 'Restriction of 'xs:token''. Both branches have a cardinality of 1..1.
Used by	Elements data_element_set, element

Model	name , abbreviation
Instance	<pre><specialty> <name>{1,1}</name> <abbreviation>{1,1}</abbreviation> </specialty></pre>

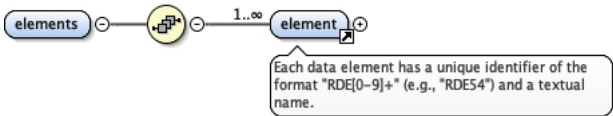
Element specialty / name

Diagram	
Type	xs:string

Element specialty / abbreviation

Diagram																																							
Type	restriction of xs:token																																						
Facets	<table border="1"> <tbody> <tr><td>enumeration</td><td>AB</td></tr> <tr><td>enumeration</td><td>BR</td></tr> <tr><td>enumeration</td><td>CA</td></tr> <tr><td>enumeration</td><td>CH</td></tr> <tr><td>enumeration</td><td>ER</td></tr> <tr><td>enumeration</td><td>GI</td></tr> <tr><td>enumeration</td><td>GU</td></tr> <tr><td>enumeration</td><td>HN</td></tr> <tr><td>enumeration</td><td>IR</td></tr> <tr><td>enumeration</td><td>MI</td></tr> <tr><td>enumeration</td><td>MK</td></tr> <tr><td>enumeration</td><td>NR</td></tr> <tr><td>enumeration</td><td>OB</td></tr> <tr><td>enumeration</td><td>OI</td></tr> <tr><td>enumeration</td><td>OT</td></tr> <tr><td>enumeration</td><td>PD</td></tr> <tr><td>enumeration</td><td>QI</td></tr> <tr><td>enumeration</td><td>RS</td></tr> <tr><td>enumeration</td><td>VI</td></tr> </tbody> </table>	enumeration	AB	enumeration	BR	enumeration	CA	enumeration	CH	enumeration	ER	enumeration	GI	enumeration	GU	enumeration	HN	enumeration	IR	enumeration	MI	enumeration	MK	enumeration	NR	enumeration	OB	enumeration	OI	enumeration	OT	enumeration	PD	enumeration	QI	enumeration	RS	enumeration	VI
enumeration	AB																																						
enumeration	BR																																						
enumeration	CA																																						
enumeration	CH																																						
enumeration	ER																																						
enumeration	GI																																						
enumeration	GU																																						
enumeration	HN																																						
enumeration	IR																																						
enumeration	MI																																						
enumeration	MK																																						
enumeration	NR																																						
enumeration	OB																																						
enumeration	OI																																						
enumeration	OT																																						
enumeration	PD																																						
enumeration	QI																																						
enumeration	RS																																						
enumeration	VI																																						

Element elements

Diagram	
Used by	Element data_element_set
Model	element+
Instance	<pre><elements> <element>{1,unbounded}</element> </elements></pre>

Element element

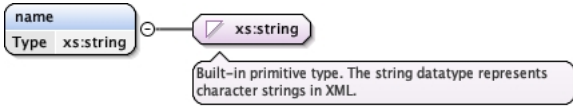
Annotations	Each data element has a unique identifier of the format "RDE[0-9]+'" (e.g., "RDE54") and a textual name.
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Diagram	
Used by	Element elements
Model	id , name , definition , version , references{0,1} , index_codes{0,1} , images{0,1} , modality* , biological_sex{0,1} , age_range{0,1} , authors{0,1} , event* , specialty* , (integer_values float_values boolean_values value_set)
Instance	<pre> <element> <id>{1,1}</id> <name>{1,1}</name> <definition>{1,1}</definition> <version>{1,1}</version> <references>{0,1}</references> <index_codes>{0,1}</index_codes> <images>{0,1}</images> <modality>{0,unbounded}</modality> <biological_sex>{0,1}</biological_sex> <age_range>{0,1}</age_range> <authors>{0,1}</authors> <event>{0,unbounded}</event> <specialty>{0,unbounded}</specialty> <integer_values>{1,1}</integer_values> <float_values>{1,1}</float_values> <boolean_values>{1,1}</boolean_values> <value_set>{1,1}</value_set> </element> </pre>

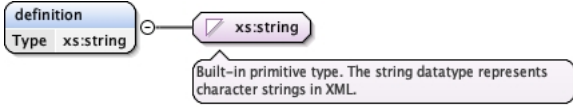
Element element / id

Diagram	
Type	restriction of xs:string
Facets	pattern RDE\d+

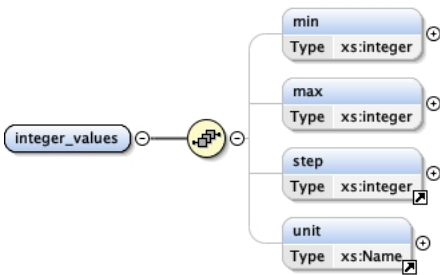
Element `element` / `name`

Diagram	
Type	xs:string

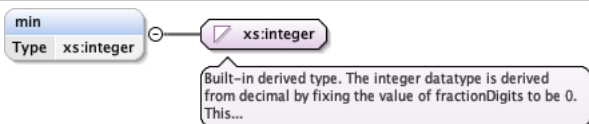
Element definition

Diagram	
Type	xs:string
Used by	Elements <code>element</code> , <code>value_set/value</code>

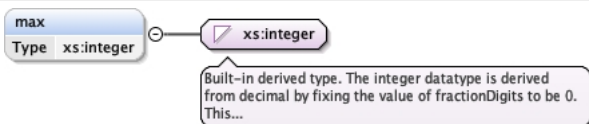
Element `integer_values`

Diagram	
Used by	Element <code>element</code>
Model	<code>min{0,1} , max{0,1} , step{0,1} , unit{0,1}</code>
Instance	<pre> <integer_values> <min>{0,1}</min> <max>{0,1}</max> <step>{0,1}</step> <unit>{0,1}</unit> </integer_values> </pre>

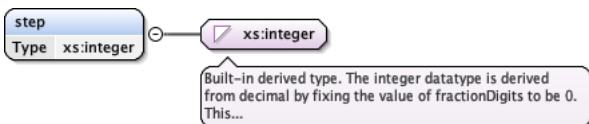
Element `integer_values` / `min`

Diagram	
Type	xs:integer

Element `integer_values` / `max`

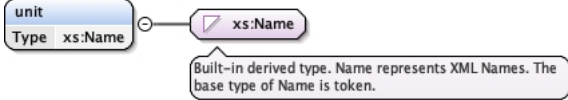
Diagram	
Type	xs:integer

Element `step`

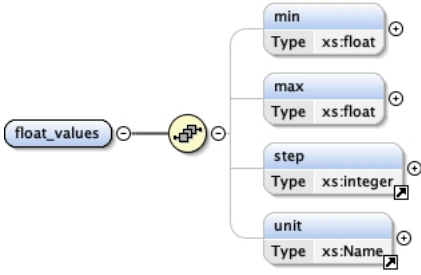
Diagram	
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Type	xs:integer
Used by	Elements float_values, integer_values

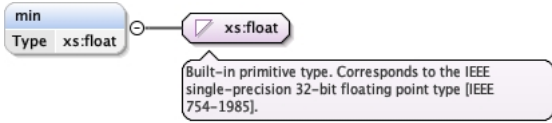
Element unit

Diagram	
Type	xs:Name
Used by	Elements float_values, integer_values

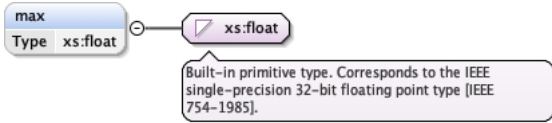
Element float_values

Diagram	
Used by	Element element
Model	min{0,1} , max{0,1} , step{0,1} , unit{0,1}
Instance	<pre> <float_values> <min>{0,1}</min> <max>{0,1}</max> <step>{0,1}</step> <unit>{0,1}</unit> </float_values> </pre>

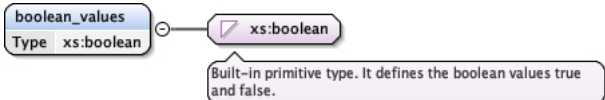
Element float_values / min

Diagram	
Type	xs:float

Element float_values / max

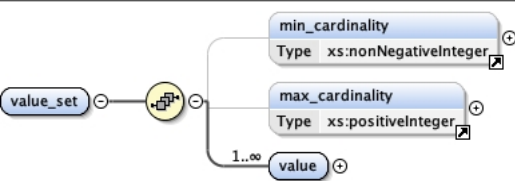
Diagram	
Type	xs:float

Element boolean_values

Diagram	
Type	xs:boolean

Used by	Element	element
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Element value_set

Diagram	
Used by	Element element
Model	min_cardinality{0,1} , max_cardinality{0,1} , value+
Instance	<pre><value_set> <min_cardinality>{0,1}</min_cardinality> <max_cardinality>{0,1}</max_cardinality> <value>{1,unbounded}</value> </value_set></pre>

Element min_cardinality

Diagram	<div><div><div>min_cardinality</div><div>Type xs:nonNegativeInteger</div></div><div><div>xs:nonNegativeInteger</div><div>Built-in derived type. The nonNegativeInteger datatype is derived from integer by setting the value of minInclusive to...</div></div></div>
Type	xs:nonNegativeInteger
Used by	Element value_set

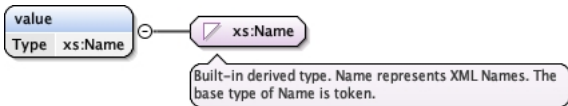
Element max_cardinality

Diagram	<div><div><div>max_cardinality</div><div>Type xs:positiveInteger</div></div><div><div>xs:positiveInteger</div><div>Built-in derived type. The positiveInteger datatype is derived from nonNegativeInteger by setting the value of...</div></div></div>
Type	xs:positiveInteger
Used by	Element value_set

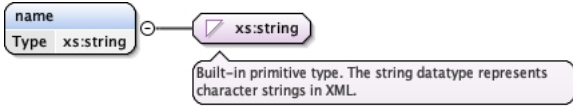
Element value_set / value

Diagram	
Model	value , name , definition{0,1} , references{0,1} , images{0,1} , index_codes{0,1}
Instance	<pre><value> <value>{1,1}</value> <name>{1,1}</name> <definition>{0,1}</definition> <references>{0,1}</references> <images>{0,1}</images> <index_codes>{0,1}</index_codes> </value></pre>

Element `value_set` / `value` / `value`

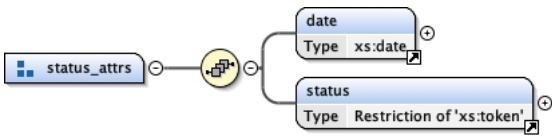
Diagram	
Type	xs:Name

Element `value_set` / `value` / `name`

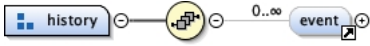
Diagram	
Type	xs:string

Element Group(s)

Element Group `status_attrs`

Diagram	
Used by	Elements event, version
Model	date , status

Element Group `history`

Diagram	
Used by	Elements data_element_set, element
Model	event*