# Schema documentation for data.xsd

september 19, 2012

# **Table of Contents**

	2
Namespace: "http://www.ime.iiasa.ac.at/model/instance"	2
Schema(s)	2
Main schema data.xsd	2
Element(s)	2
Element i:dataSet	2
Complex Type(s)	
Complex Type i:modelData	
Complex Type i:modelInstance	
Complex Type i:memberDic	
Complex Type i:tupleValue	
Complex Type i:setMembers	
Complex Type i:tupleMembers	
Complex Type i:entityValues	
1 11 -	
Complex Type i:tupleValues	
Complex Type i:groupEntityValues	
Namespace: "http://www.ime.iiasa.ac.at/model/spec"	/
Schema(s)	
Imported schema sms.xsd	
Simple Type(s)	
Simple Type m:description	
Simple Type m:shortName	
Simple Type m:name	
Simple Type m:status	
Simple Type m:setSpecType	
Simple Type m:entityRole	
Simple Type m:mathType	9
Complex Type(s)	9
Complex Type m:modelSpec	9
Complex Type m:setSpec	10
Complex Type m:iteratorContainer	
Complex Type m:entitySpec	11
Namespace: ""	10
	12
Element(s)	12
Element(s)  Element i:modelData / id	12 12
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec	12 12 12
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent	12 12 12
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description	12 12 12 13
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked	12 12 12 13 13
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id	12 12 12 12 13 13
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec	12 12 12 12 13 13 13
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData	12 12 12 13 13 13 14
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / shortName	12 12 13 13 13 13 14 14
Element(s)  Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / idModelData  Element i:modelInstance / shortName  Element i:modelInstance / name	12 12 13 13 13 14 14
Element i: modelData / id  Element i: modelData / idModelSpec  Element i: modelData / idParent  Element i: modelData / description  Element i: modelData / locked  Element i: modelInstance / id  Element i: modelInstance / idModelSpec  Element i: modelInstance / idModelData  Element i: modelInstance / idModelData  Element i: modelInstance / shortName  Element i: modelInstance / name  Element i: modelInstance / description	
Element i: modelData / id  Element i: modelData / idModelSpec  Element i: modelData / idParent  Element i: modelData / description  Element i: modelData / locked  Element i: modelInstance / id  Element i: modelInstance / idModelSpec  Element i: modelInstance / idModelData  Element i: modelInstance / idModelData  Element i: modelInstance / shortName  Element i: modelInstance / name  Element i: modelInstance / description  Element i: modelInstance / status	
Element i:modelData / id Element i:modelData / idModelSpec Element i:modelData / idParent Element i:modelData / idParent Element i:modelData / description Element i:modelData / locked Element i:modelInstance / id Element i:modelInstance / idModelSpec Element i:modelInstance / idModelData Element i:modelInstance / idModelData Element i:modelInstance / shortName Element i:modelInstance / name Element i:modelInstance / description Element i:modelInstance / status	
Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / idModelData  Element i:modelInstance / shortName  Element i:modelInstance / name  Element i:modelInstance / description  Element i:modelInstance / status  Element i:modelInstance / status  Element i:memberDic / id  Element i:memberDic / code	
Element i:modelData / id Element i:modelData / idModelSpec. Element i:modelData / idParent. Element i:modelData / description Element i:modelData / locked. Element i:modelInstance / id Element i:modelInstance / idModelSpec Element i:modelInstance / idModelData Element i:modelInstance / idModelData Element i:modelInstance / idModelData Element i:modelInstance / shortName. Element i:modelInstance / name Element i:modelInstance / description Element i:modelInstance / status Element i:modelInstance / status Element i:memberDic / id. Element i:memberDic / code Element i:memberDic / code	
Element i:modelData / id	
Element i:modelData / id Element i:modelData / idModelSpec. Element i:modelData / idParent. Element i:modelData / description Element i:modelData / locked. Element i:modelInstance / id Element i:modelInstance / idModelSpec Element i:modelInstance / idModelData Element i:modelInstance / idModelData Element i:modelInstance / idModelData Element i:modelInstance / shortName. Element i:modelInstance / name Element i:modelInstance / description Element i:modelInstance / status Element i:modelInstance / status Element i:memberDic / id. Element i:memberDic / code Element i:memberDic / code	
Element i:modelData / id	
Element i:modelData / id	
Element i:modelData / id Element i:modelData / idModelSpec Element i:modelData / idParent Element i:modelData / description Element i:modelData / locked Element i:modelInstance / id Element i:modelInstance / idModelSpec Element i:modelInstance / idModelSpec Element i:modelInstance / idModelData Element i:modelInstance / shortName Element i:modelInstance / shortName Element i:modelInstance / status Element i:modelInstance / description Element i:modelInstance / status Element i:memberDic / id Element i:memberDic / code Element i:memberDic / code / stringValue Element i:memberDic / code / intValue Element i:memberDic / code / doubleValue Element i:memberDic / code / doubleValue Element i:memberDic / code / doubleValue Element i:memberDic / description	
Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / shortName  Element i:modelInstance / name  Element i:modelInstance / description  Element i:modelInstance / status  Element i:memberDic / code  Element i:memberDic / code  Element i:memberDic / code / stringValue  Element i:memberDic / code / doubleValue  Element i:memberDic / code / doubleValue  Element i:memberDic / description  Element i:memberDic / description  Element i:memberDic / code / doubleValue  Element i:memberDic / description  Element i:memberDic / description  Element i:memberDic / description	
Element i:modelData / id Element i:modelData / idModelSpec Element i:modelData / idParent Element i:modelData / idParent Element i:modelData / description Element i:modelData / locked Element i:modelInstance / id Element i:modelInstance / idModelSpec Element i:modelInstance / idModelData Element i:modelInstance / idModelData Element i:modelInstance / shortName Element i:modelInstance / name Element i:modelInstance / description Element i:modelInstance / status Element i:memberDic / id Element i:memberDic / code Element i:memberDic / code / stringValue Element i:memberDic / code / intValue Element i:memberDic / code / doubleValue Element i:memberDic / description Element i:memberDic / description Element i:memberDic / description Element i:memberDic / description Element i:tupleValue / tupleMember Element i:tupleValue / value	
Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelData / description  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / idModelData  Element i:modelInstance / shortName  Element i:modelInstance / name  Element i:modelInstance / status  Element i:modelInstance / status  Element i:modelInstance / status  Element i:memberDic / id  Element i:memberDic / code  Element i:memberDic / code / stringValue  Element i:memberDic / code / intValue  Element i:memberDic / dode / doubleValue  Element i:memberDic / dode / doubleValue  Element i:memberDic / topleMember  Element i:tupleValue / tupleMember  Element i:tupleValue / value  Element i:tupleValue / value	
Element i:modelData / id Element i:modelData / idModelSpec Element i:modelData / idParent Element i:modelData / idParent Element i:modelData / description Element i:modelData / locked Element i:modelInstance / id Element i:modelInstance / idModelSpec Element i:modelInstance / idModelData Element i:modelInstance / idModelData Element i:modelInstance / shortName Element i:modelInstance / shortName Element i:modelInstance / status Element i:modelInstance / status Element i:memberDic / id Element i:memberDic / code Element i:memberDic / code / stringValue Element i:memberDic / code / intValue Element i:memberDic / code / doubleValue Element i:memberDic / description Element i:memberDic / code / intValue Element i:memberDic / code / intValue Element i:tupleValue / tupleMember Element i:tupleValue / value Element i:tupleValue / value / intValue Element i:tupleValue / value / intValue Element i:tupleValue / value / doubleValue	
Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idModelSpec  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / shortName  Element i:modelInstance / shortName  Element i:modelInstance / description  Element i:modelInstance / status  Element i:memberDic / id  Element i:memberDic / code  Element i:memberDic / code / stringValue  Element i:memberDic / code / intValue  Element i:memberDic / description  Element i:memberDic / description  Element i:memberDic / code / doubleValue  Element i:tupleValue / tupleMember  Element i:tupleValue / value  Element i:tupleValue / value / intValue  Element i:tupleValue / value / doubleValue  Element i:setMembers / setShortName  Element i:setMembers / setShortName	
Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idModelSpec  Element i:modelData / idParent  Element i:modelData / description  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / shortName  Element i:modelInstance / name  Element i:modelInstance / description  Element i:modelInstance / status  Element i:memberDic / id  Element i:memberDic / code  Element i:memberDic / code / stringValue  Element i:memberDic / code / stringValue  Element i:memberDic / code / doubleValue  Element i:memberDic / description  Element i:memberDic / description  Element i:tupleValue / tupleMember  Element i:tupleValue / value  Element i:tupleValue / value / intValue  Element i:tupleValue / value / intValue  Element i:tupleValue / value / doubleValue  Element i:tupleValue / value / intValue  Element i:setMembers / setShortName  Element i:setMembers / setShortName  Element i:setMembers / tupleMembers  Element i:tupleMembers / tupleMembers	
Element i:modelData / id  Element i:modelData / idModelSpec  Element i:modelData / idModelSpec  Element i:modelData / description  Element i:modelData / locked  Element i:modelInstance / id  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelSpec  Element i:modelInstance / idModelData  Element i:modelInstance / shortName  Element i:modelInstance / shortName  Element i:modelInstance / description  Element i:modelInstance / status  Element i:memberDic / id  Element i:memberDic / code  Element i:memberDic / code / stringValue  Element i:memberDic / code / intValue  Element i:memberDic / description  Element i:memberDic / description  Element i:memberDic / code / doubleValue  Element i:tupleValue / tupleMember  Element i:tupleValue / value  Element i:tupleValue / value / intValue  Element i:tupleValue / value / doubleValue  Element i:setMembers / setShortName  Element i:setMembers / setShortName	

Element i:entityValues / entityShortName	
Element i:entityValues / tupleValues	
Element i:tupleValues / tuple	
Element i:tupleValues / value	
Element i:tupleValues / value / intValue	21
Element i:tupleValues / value / doubleValue	
Element i:groupEntityValues / tupleMember	21
Element i:groupEntityValues / value	
Element i:groupEntityValues / value / intValue	
Element i:groupEntityValues / value / doubleValue	
Element m:modelSpec / id	
Element m:modelSpec / shortName	
Element m:modelSpec / name	23
Element m:modelSpec / description	
Element m:modelSpec / status	
Element m:modelSpec / setSpec	
Element m:setSpec / id	
Element m:setSpec / idParent	
Element m:setSpec / shortName	
Element m:setSpec / name	25
Element m:setSpec / description	25
Element m:setSpec / type	
Element m:setSpec / idx	. 26
Element m:setSpec / iteratorContainer	26
Element m:iteratorContainer / idSetSpec	
Element m:modelSpec / entitySpec	27
Element m:entitySpec / id	
Element m:entitySpec / shortName	28
Element m:entitySpec / name	28
Element m:entitySpec / description	28
Element m:entitySpec / idLowerBound	. 28
Element m:entitySpec / idUpperBound	
Element m:entitySpec / constantValue	29
Element m:entitySpec / iteratorContainer	29
Element m:entitySpec / role	
Element m:entitySpec / mathType	30
Element m:entitySpec / unit	
Element m:entitySpec / formula	
Element m:entitySpec / source	
Element m:entitySpec / group	
Element m:entitySpec / modelSpec	31

# Resource hierarchy:

# Namespace: "http://www.ime.iiasa.ac.at/model/instance"

# Schema(s)

#### Main schema data.xsd

Namespace	http://www.ime.iiasa.ac.at/model/instance			
Properties	attribute form default: unqualified			
	element form default:	unqualified		

# Element(s)

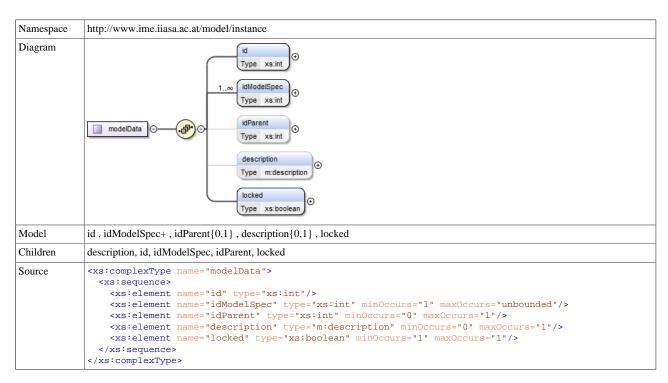
## Element i:dataSet

Namespace	http://www.ime.iiasa.ac.at/model/instance	
Annotations	only for mockup	

Diagram	ataSet ○  type i.setMembers  Type i.setMembers  1∞  entityValues  Type i.entityValues  Type i.entityValues		
Properties	content: complex		
Model	setMembers+, entityValues+		
Children	entityValues, setMembers		
Instance	<pre><i:dataset xmlns:i="http://www.ime.iiasa.ac.at/model/instance">     <setmembers>{1,unbounded}</setmembers>     <entityvalues>{1,unbounded}</entityvalues>     </i:dataset></pre>		
Source	<pre><xs:element name="dataSet"></xs:element></pre>		

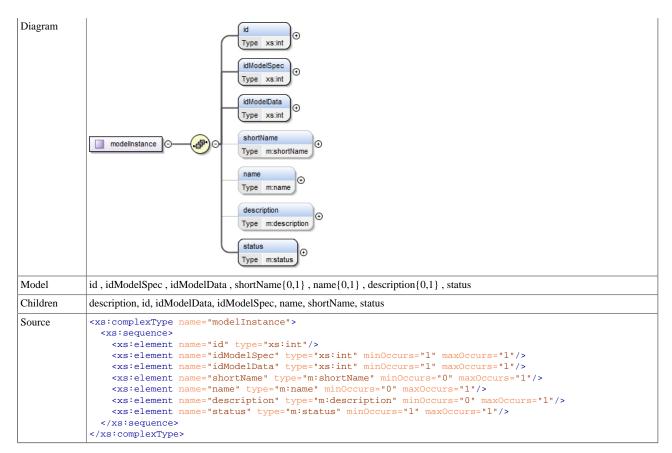
# Complex Type(s)

## Complex Type i:modelData

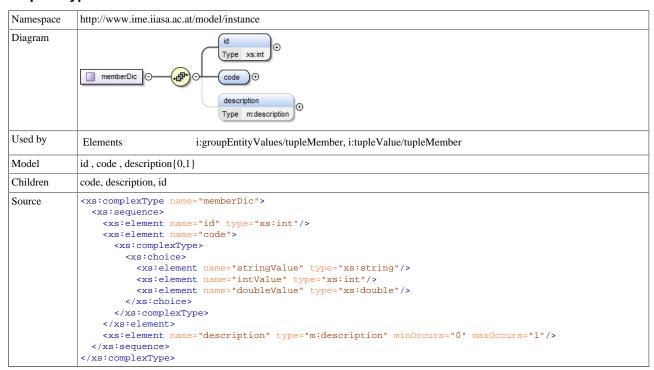


## Complex Type i:modelInstance

Namespace	http://www.ime.iiasa.ac.at/model/instance
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#### Complex Type i:memberDic

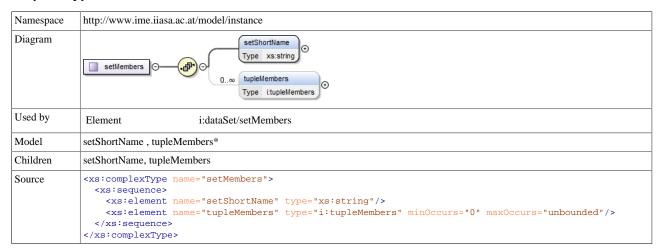


#### Complex Type i:tupleValue

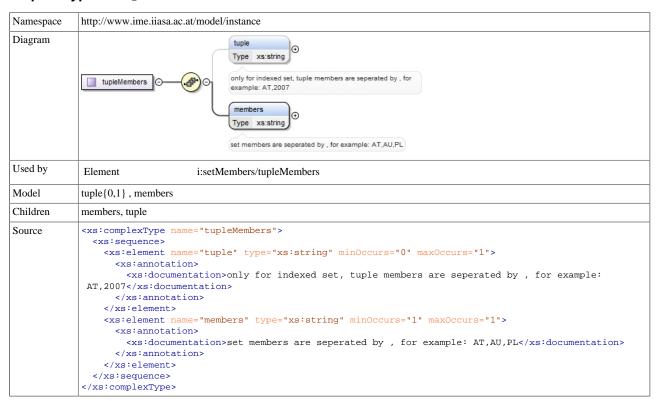


```
Model
             tupleMember*, value
Children
             tupleMember, value
Source
             <xs:complexType name="tupleValue">
               <xs:sequence>
                  <xs:element name="tupleMember" type="i:memberDic" minOccurs="0" maxOccurs="unbounded"/>
<xs:element name="value">
                    <xs:complexType>
                      <xs:choice>
                        <xs:element name="intValue" type="xs:int"/>
                        <xs:element name="doubleValue" type="xs:double"/>
                      </xs:choice>
                    </xs:complexType>
                  </xs:element>
               </xs:sequence>
             </xs:complexType>
```

#### Complex Type i:setMembers

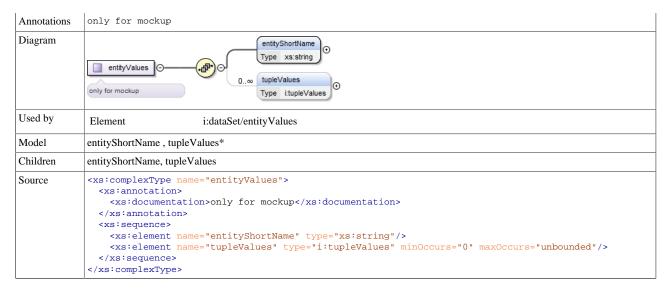


#### Complex Type i:tupleMembers

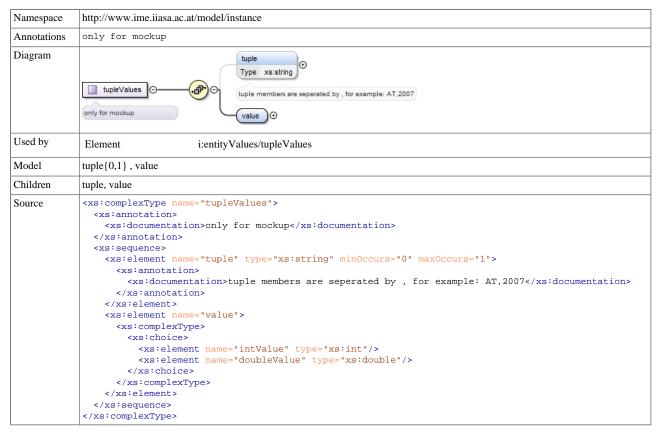


# Complex Type i:entityValues

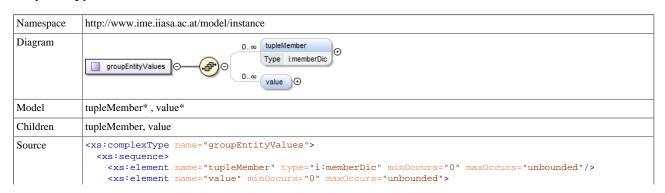
Namespace	http://www.ime.iiasa.ac.at/model/instance



#### Complex Type i:tupleValues



#### Complex Type i:groupEntityValues



# Namespace: "http://www.ime.iiasa.ac.at/model/spec"

# Schema(s)

#### Imported schema sms.xsd

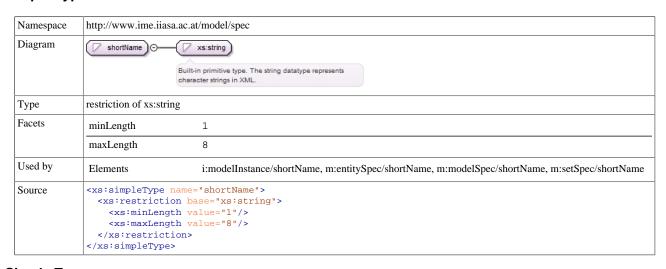
Namespace	http://www.ime.iiasa.ac.at/model/spec			
Properties	attribute form default: unqualified			
	element form default: unqualified			

# Simple Type(s)

#### Simple Type m:description

Namespace	http://www.ime.iiasa.ac.at/model/spec	
Diagram		xs:string  huilt-in primitive type. The string datatype represents haracter strings in XML.
Туре	restriction of xs:string	
Facets	minLength	1
	maxLength	512
Used by	Elements	i:memberDic/description, i:modelData/description, i:modelInstance/description, m:entitySpec/description, m:modelSpec/description, m:setSpec/description
Source	<pre><xs:simpletype name="description">   <xs:restriction base="xs:string"></xs:restriction></xs:simpletype></pre>	

#### Simple Type m: shortName



## Simple Type m:name

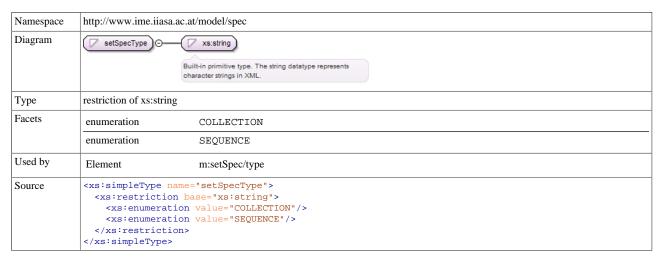
Namespace	http://www.ime.iiasa.ac.at/model/spec
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Diagram	name O	Built-in primitive type. The string datatype represents character strings in XML.
Туре	restriction of xs:st	ring
Facets	minLength	1
	maxLength	32
Used by	Elements	i:modelInstance/name, m:entitySpec/name, m:modelSpec/name, m:setSpec/name
Source	<pre><xs:simpletype name="name">     <xs:restriction base="xs:string">         <xs:minlength value="1"></xs:minlength>         <xs:maxlength value="32"></xs:maxlength>         </xs:restriction>         </xs:simpletype></pre>	

## Simple Type m: status

Namespace	http://www.ime.iiasa.ac.at/model/spec	
Diagram	Built-in	primitive type. The string datatype represents ter strings in XML.
Туре	restriction of xs:string	
Facets	enumeration	EDIT
	enumeration	TEST
	enumeration	COMMITTED
Used by	Elements	i:modelInstance/status, m:modelSpec/status
Source	<pre><xs:simpletype name="status">     <xs:restriction base="xs:string">         <xs:enumeration value="EDIT"></xs:enumeration>         <xs:enumeration value="TEST"></xs:enumeration>         <xs:enumeration value="COMMITTED"></xs:enumeration>         </xs:restriction>     </xs:simpletype></pre>	

## Simple Type m:setSpecType

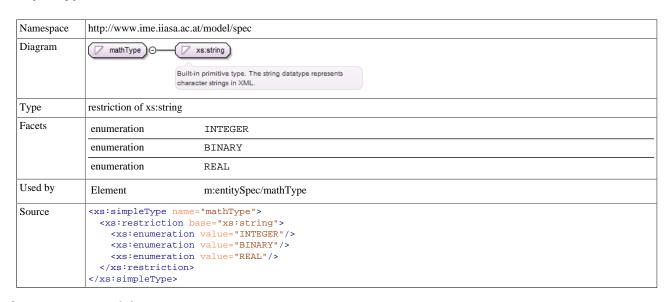


# Simple Type m:entityRole



Type	restriction of xs:strir	ng					
Facets	enumeration	CONSTANT					
	enumeration	PARAMETER					
	enumeration DECISION_VAR						
	enumeration	enumeration EXTERNAL_DECISION_VAR					
	enumeration	OUTCOME_VAR	OUTCOME_VAR				
	enumeration	n AUXILIARY_VAR					
	enumeration	ASSIGNMENT					
	enumeration	CONSTRAINT					
	enumeration	A_VARIABLE	<pre>any type of variable: DECISION_VAR,     EXTERNAL_DECISION_VAR,OUTCOME_VAR,or     AUXILIARY_VAR</pre>				
	enumeration	A_FORMULA	any type of formula: ASSIGNMENT or CONSTRAINT				
Used by	Element	m:entitySpec/role					
Source	<pre><xs:restrictio <xs:annote="" <xs:doct="" <xs:enumerat="" auxiliary_var<,<="" td=""><td><pre>immentation&gt;any type of variation&gt; cation&gt; ation&gt; cion value="A_FORMULA"&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt;</pre></td><td></td></xs:restrictio></pre>	<pre>immentation&gt;any type of variation&gt; cation&gt; ation&gt; cion value="A_FORMULA"&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt; ation&gt;</pre>					

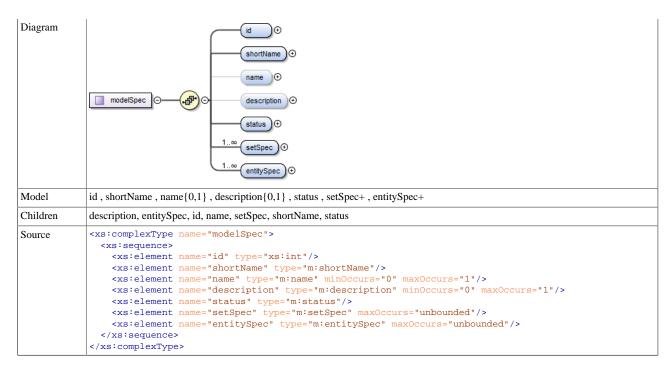
# Simple Type m:mathType



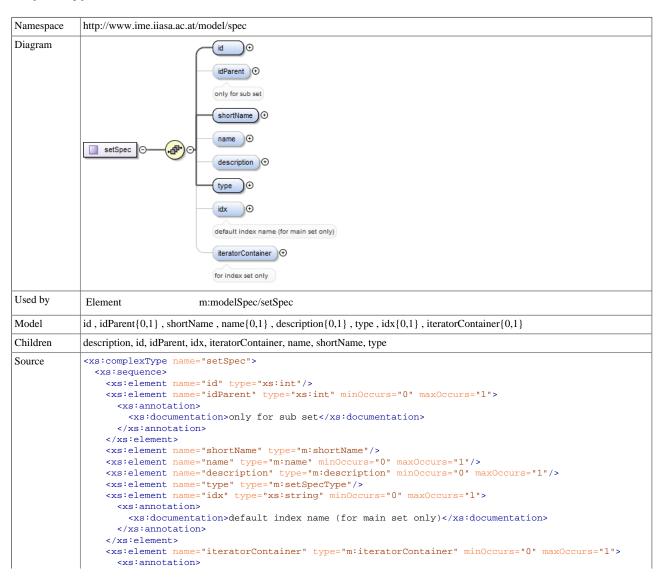
# **Complex Type(s)**

## Complex Type m:modelSpec

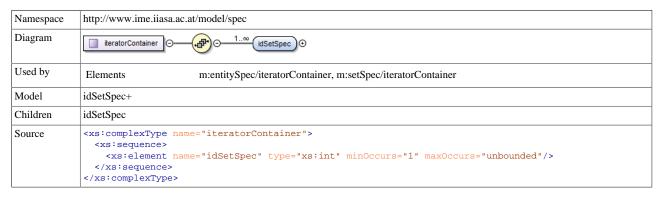
Namespace	http://www.ime.iiasa.ac.at/model/spec



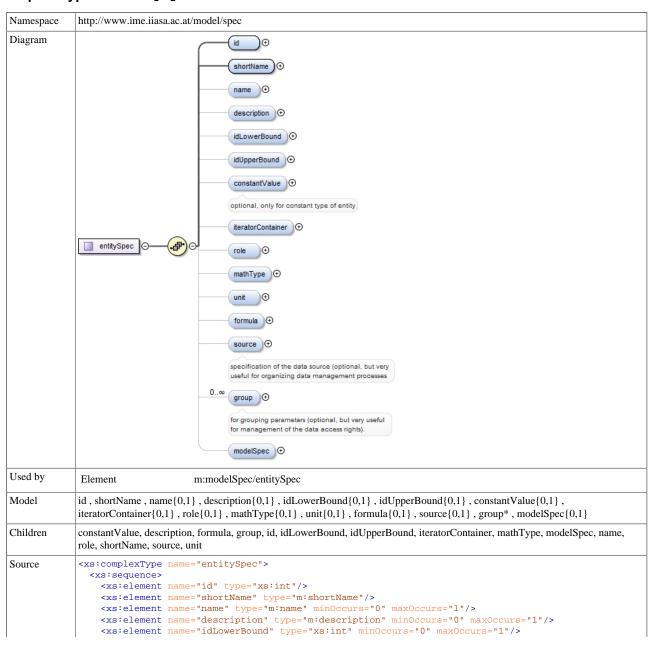
#### Complex Type m: setSpec



#### Complex Type m: iteratorContainer



#### Complex Type m:entitySpec

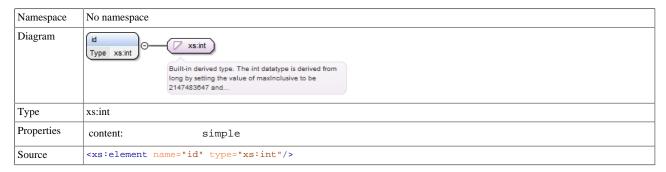


```
<xs:element name="idUpperBound" type="xs:int" minOccurs="0" maxOccurs="1"/>
   <xs:element name="constantValue" type="xs:double" minOccurs="0" maxOccurs="1">
     <xs:annotation>
       <xs:documentation>optional, only for constant type of entity</xs:documentation>
     </xs:annotation>
   <xs:element name="iteratorContainer" type="m:iteratorContainer" minOccurs="0" maxOccurs="1"/>
   <xs:element name="role" type="m:entityRole" minOccurs="0" maxOccurs="1"/>
   <xs:element name="mathType" type="m:mathType" minOccurs="0" maxOccurs="1"/>
   <xs:element name="unit" type="xs:string" minOccurs="0" maxOccurs="1"/>
   <xs:element name="formula" type="xs:string" minOccurs="0" maxOccurs="1"/>
   <xs:element name="source" type="xs:string" minOccurs="0" maxOccurs="1">
     <xs:annotation>
       <xs:documentation>specification of the data source (optional, but very useful for organizing
data management processes</xs:documentation>
   </xs:element>
   <xs:element name="group" type="xs:string" minOccurs="0" maxOccurs="unbounded">
     <xs:annotation>
      data access rights).</xs:documentation>
     </xs:annotation>
   </xs:element>
   <xs:element name="modelSpec" type="xs:string" minOccurs="0" maxOccurs="1"/>
 </xs:sequence>
</xs:complexType>
```

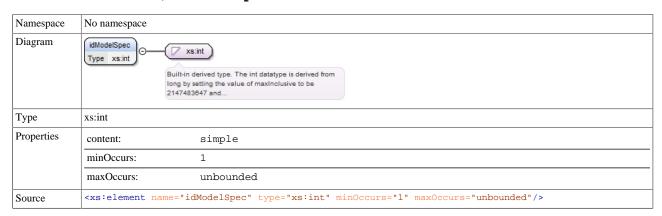
# Namespace: ""

## Element(s)

#### Element i:modelData / id



#### Element i:modelData / idModelSpec



#### Element i:modelData / idParent



Properties	content:	simple
	minOccurs:	0
	maxOccurs:	1
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="i&lt;/pre&gt;&lt;/th&gt;&lt;th&gt;dParent" type="xs:int"></xs:element></pre>	

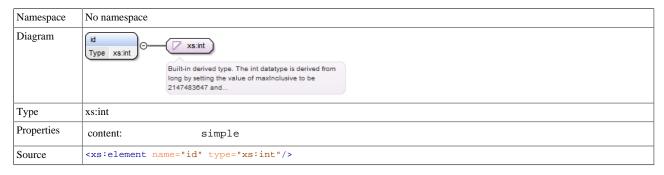
## Element i:modelData / description

Namespace	No namespace		
Diagram	m description		
Туре	m:description		
Properties	content: simple		
	minOccurs: 0		
	maxOccurs: 1		
Facets	minLength 1		
	maxLength 512		
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="description" type="m:description"></xs:element></pre>		

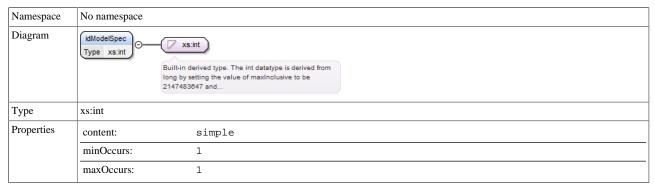
#### Element i:modelData / locked

Namespace	No namespace	
Diagram	Type xs:boolean  Built-in primitive type. It defines the boolean values true and false.	
Type	xs:boolean	
Properties	content: simple	
	minOccurs: 1	
	maxOccurs: 1	
Source	<pre><xs:element maxoccurs="1" minoccurs="1" name="locked" type="xs:boolean"></xs:element></pre>	

#### Element i:modelInstance / id



# Element i:modelInstance / idModelSpec



Source | <xs:element name="idModelSpec" type="xs:int" minOccurs="1" maxOccurs="1"/>

#### Element i:modelInstance / idModelData

Namespace	No namespace
Diagram	IdModelData Type xs:int  Built-in derived type. The int datatype is derived from long by setting the value of maxinclusive to be 2147483647 and
Type	xs:int
Properties	content: simple
	minOccurs: 1
	maxOccurs: 1
Source	<pre><xs:element maxoccurs="1" minoccurs="1" name="idModelData" type="xs:int"></xs:element></pre>

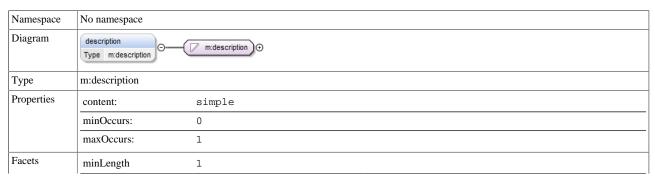
#### Element i:modelInstance / shortName

Namespace	No namespace		
Diagram	ShortName Type m:shortName		
Туре	m:shortName		
Properties	content: simple		
	minOccurs: 0		
	maxOccurs: 1		
Facets	minLength 1		
	maxLength 8		
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="shortName" type="m:shortName"></xs:element></pre>		

## Element i:modelInstance / name

Namespace	No namespace		
Diagram	name Type m:name		
Туре	m:name		
Properties	content: simple		
	minOccurs: 0		
	maxOccurs: 1		
Facets	minLength 1		
	maxLength 32		
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="name" type="m:name"></xs:element></pre>		

## Element i:modelInstance / description

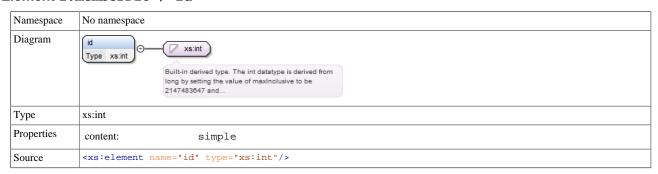


		maxLength	512				
S	ource	<pre><xs:element< pre=""></xs:element<></pre>	name="description"	<pre>type="m:description"</pre>	minOccurs="0"	maxOccurs="1"/>	

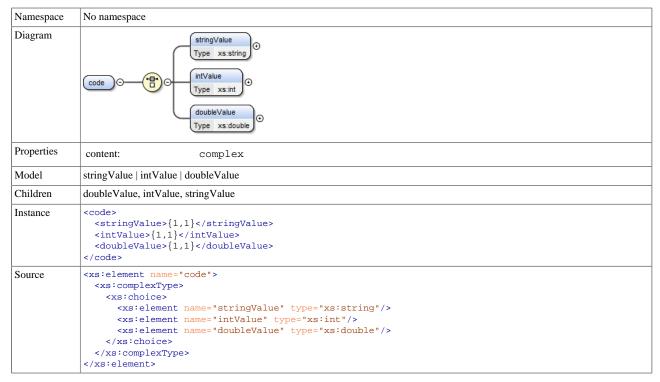
#### Element i:modelInstance / status

Namespace	No namespace		
Diagram	Status Type m:status ⊙ m:status ⊙		
Туре	m:status		
Properties	content:	simple	
	minOccurs:	1	
	maxOccurs:	1	
Facets	enumeration	EDIT	
	enumeration	TEST	
	enumeration	COMMITTED	
Source	<pre><xs:element max0ccurs="1" min0ccurs="1" name="status" type="m:status"></xs:element></pre>		

#### Element i:memberDic / id



#### Element i:memberDic / code

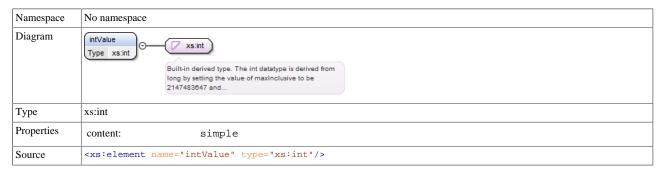


#### Element i:memberDic / code / stringValue

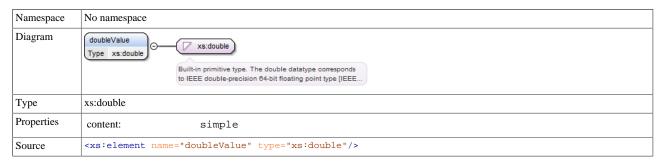
Namespace	No namespace
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## Element i:memberDic / code / intValue



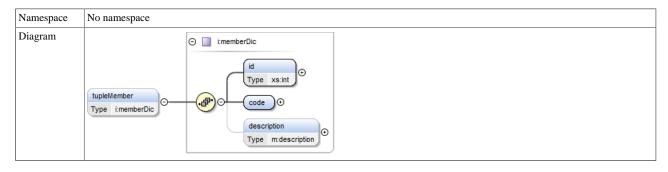
#### Element i:memberDic / code / doubleValue



#### Element i:memberDic / description

Namespace	No namespace		
Diagram	description   ⊙		
Туре	m:description		
Properties	content:	simple	
	minOccurs:	0	
	maxOccurs:	1	
Facets	minLength	1	
	maxLength	512	
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="description" type="m:description"></xs:element></pre>		

#### Element i:tupleValue / tupleMember

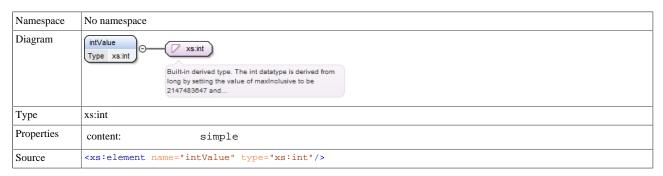


Type	i:memberDic	
Properties	content:	complex
	minOccurs:	0
	maxOccurs:	unbounded
Model	el id, code, description{0,1}	
Children	code, description, id	
Instance	<tuplemember> <id>{id}{1,1}{1,1} </id></tuplemember>	
Source	<pre><xs:element name<="" pre=""></xs:element></pre>	e="tupleMember" type="i:memberDic" minOccurs="0" maxOccurs="unbounded"/>

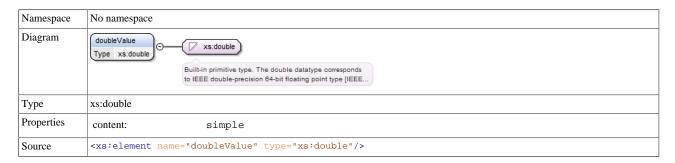
## Element i:tupleValue / value

Namespace	No namespace
Diagram	value O to the control of the contro
Properties	content: complex
Model	intValue   doubleValue
Children	doubleValue, intValue
Instance	<pre><value>   <intvalue>{1,1}</intvalue>   <doublevalue>{1,1}</doublevalue> </value></pre>
Source	<pre><xs:element name="value"></xs:element></pre>

## Element i:tupleValue / value / intValue



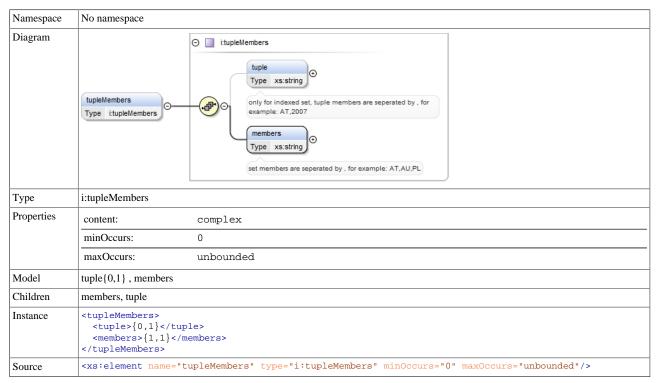
#### Element i:tupleValue / value / doubleValue



#### Element i:setMembers / setShortName



## Element i:setMembers / tupleMembers



#### Element i:tupleMembers / tuple

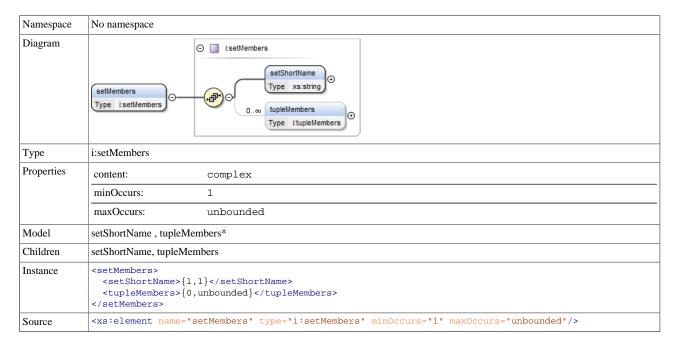
Namespace	No namespace		
Annotations	only for indexed set, tuple members are seperated by , for example: AT,2007		
Diagram	tuple Type xs:string  only for indexed set, tuple members are seperated by , for example: AT,2007  Type xs:string  Built-in primitive type. The string datatype represents character strings in XML.		
Туре	xs:string		
Properties	content: simple		
	minOccurs: 0		
	maxOccurs: 1		
Source <pre> <pre> <pre> </pre> <pre> <pre< td=""></pre<></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>			

## Element i:tupleMembers / members

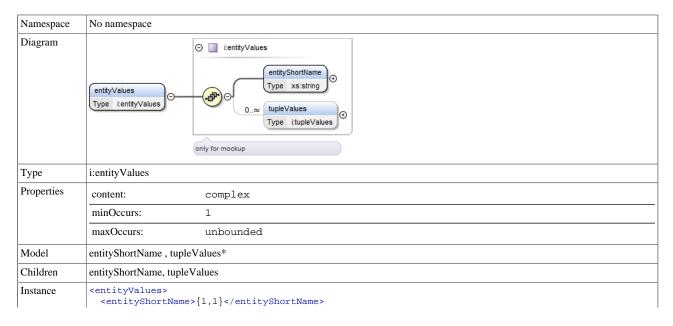
Namespace	No namespace	
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Annotations	set members are seperated by , for example: AT,AU,PL		
Diagram	members Type xs:string  set members are seperated by , for example: AT,AU,PL  Built-in primitive type. The string datatype represents character strings in XML.		
Туре	xs:string		
Properties	content: simple		
	minOccurs: 1		
	maxOccurs: 1		
Source	<pre><xs:element maxoccurs="1" minoccurs="1" name="members" type="xs:string">     <xs:annotation></xs:annotation></xs:element></pre>		

#### Element i:dataSet / setMembers



# Element i:dataSet / entityValues

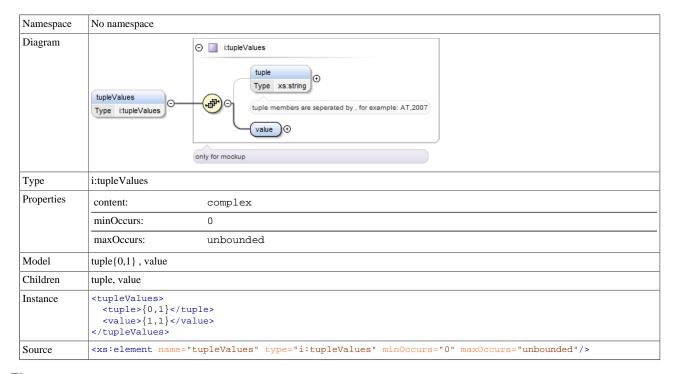


<pre><tuplevalues>{0,unbounded}</tuplevalues> </pre>			
	Source	<pre><xs:element maxoccurs="unbounded" minoccurs="1" name="entityValues" type="i:entityValues"></xs:element></pre>	1

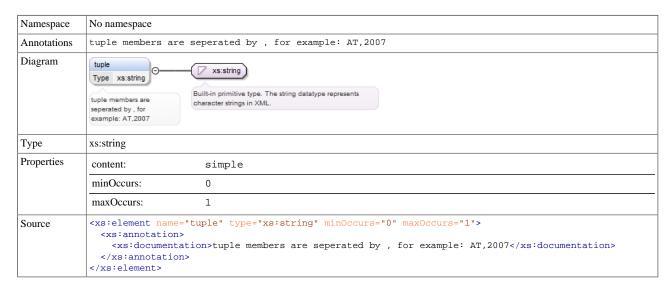
#### Element i:entityValues / entityShortName

Namespace	No namespace
Diagram	entityShortName Type xs:string  Built-in primitive type. The string datatype represents character strings in XML.
Туре	xs:string
Properties	content: simple
Source	<pre><xs:element name="entityShortName" type="xs:string"></xs:element></pre>

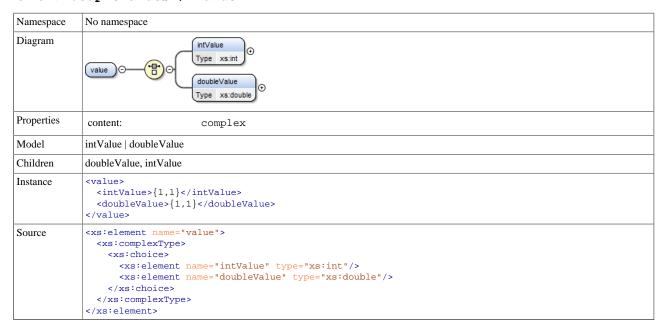
#### Element i:entityValues / tupleValues



#### Element i:tupleValues / tuple



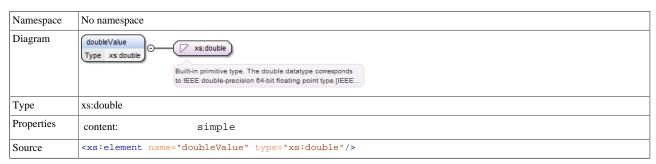
#### Element i:tupleValues / value



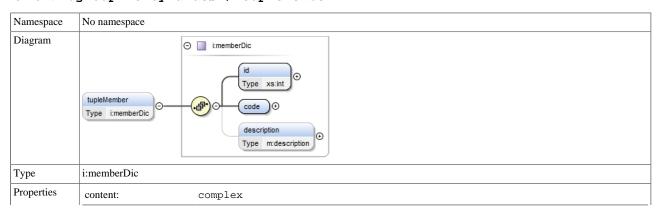
#### Element i:tupleValues / value / intValue

Namespace	No namespace
Diagram	intValue Type xs.int  Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483647 and
Туре	xs:int
Properties	content: simple
Source	<pre><xs:element name="intValue" type="xs:int"></xs:element></pre>

## Element i:tupleValues / value / doubleValue



## Element i:groupEntityValues / tupleMember

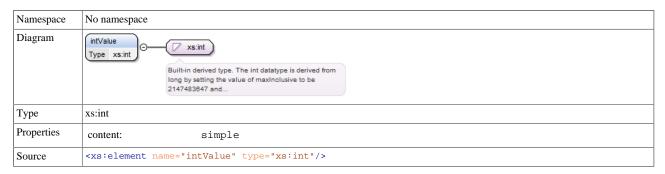


	minOccurs:	0
	maxOccurs:	unbounded
Model	id, code, description	{0,1}
Children	code, description, id	
Instance	<tuplemember> <id>{1,1}</id> <code>{1,1}</code> <description>{ </description></tuplemember>	ode> 0,1}
Source	<pre><xs:element name<="" pre=""></xs:element></pre>	="tupleMember" type="i:memberDic" minOccurs="0" maxOccurs="unbounded"/>

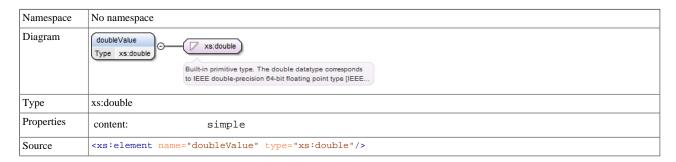
#### Element i:groupEntityValues / value

Namespace	No namespace
Diagram	value O Type xs:int O doubleValue Type xs:double  Type xs:double
Properties	content: complex
	minOccurs: 0
	maxOccurs: unbounded
Model	intValue   doubleValue
Children	doubleValue, intValue
Instance	<pre><value>   <intvalue>{1,1}</intvalue>   <doublevalue>{1,1}</doublevalue> </value></pre>
Source	<pre><xs:element maxoccurs="unbounded" minoccurs="0" name="value"></xs:element></pre>

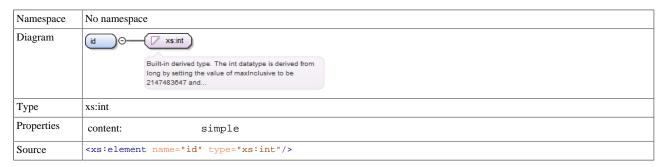
## Element i:groupEntityValues / value / intValue



## Element i:groupEntityValues / value / doubleValue



## Element m:modelSpec / id



#### Element m:modelSpec / shortName

Namespace	No namespace		
Diagram	shortName 🗇 📈 m:	shortName )⊕	
Туре	m:shortName		
Properties	content:	simple	
Facets	minLength	1	
	maxLength	8	
Source	<pre><xs:element name="shortName" type="m:shortName"></xs:element></pre>		

#### Element m:modelSpec / name

Namespace	No namespace		
Diagram	name Θ-	<sup>™</sup> m:name ) ⊕	
Туре	m:name		
Properties	content:	simple	
	minOccurs:	0	
	maxOccurs:	1	
Facets	minLength	1	
	maxLength	32	
Source	<xs:element< td=""><td>ame="name" type="m:name" minOccurs="0" maxOccurs="1"/&gt;</td><td></td></xs:element<>	ame="name" type="m:name" minOccurs="0" maxOccurs="1"/>	

## Element m:modelSpec / description

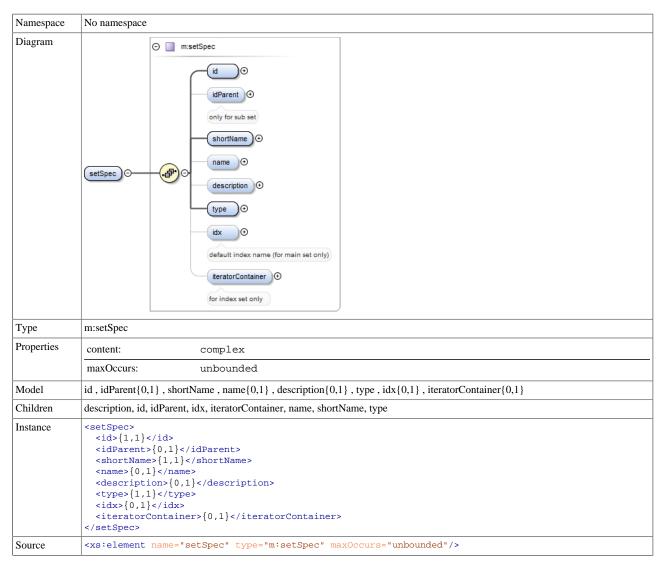
Namespace	No namespace		
Diagram	description ⊙		
Туре	m:description		
Properties	content:	simple	
	minOccurs:	0	
	maxOccurs:	1	
Facets	minLength	1	
	maxLength	512	
Source	<pre><xs:element< pre=""></xs:element<></pre>	name="description" type="m:description" minOccurs="0" maxOccurs="1"/>	

#### Element m:modelSpec / status

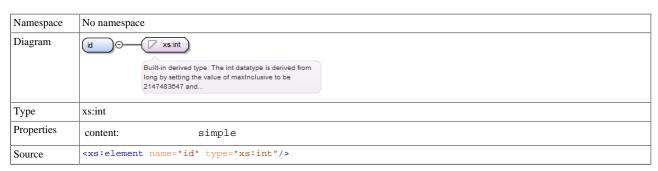
Namespace	No namespace
Diagram	Status ) ⊙
Type	m:status

Properties	content:	simple
Facets	enumeration	EDIT
	enumeration	TEST
	enumeration	COMMITTED
Source	<pre><xs:element name="status" type="m:status"></xs:element></pre>	

#### Element m:modelSpec / setSpec

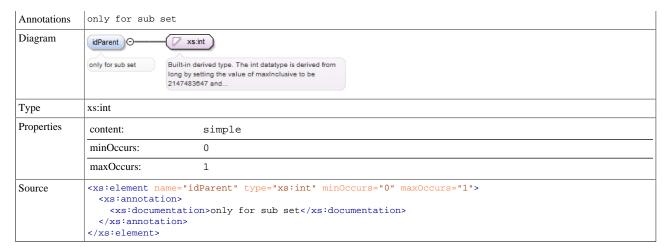


#### Element m:setSpec / id



#### Element m:setSpec / idParent

Namespace	No namespace
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# Element m:setSpec / shortName

Namespace	No namespace	
Diagram	ShortName ⊙	
Type	m:shortName	
Properties	content:	simple
Facets	minLength	1
	maxLength	8
Source	<xs:element< td=""><td>ame="shortName" type="m:shortName"/&gt;</td></xs:element<>	ame="shortName" type="m:shortName"/>

# Element m:setSpec / name

Namespace	No namespace		
Diagram	name 🛇 — 📝 m:name 💿		
Туре	m:name		
Properties	content:	simple	
	minOccurs:	0	
	maxOccurs:	1	
Facets	minLength	1	
	maxLength	32	
Source	<xs:element< td=""><td>name="name" type="m:name" minOccurs="0" maxOccurs="1"/&gt;</td></xs:element<>	name="name" type="m:name" minOccurs="0" maxOccurs="1"/>	

## Element m:setSpec / description

Namespace	No namespace	
Diagram	description ⊙ m:description ⊕	
Type	m:description	
Properties	content:	simple
	minOccurs:	0
	maxOccurs:	1
Facets	minLength	1
	maxLength	512
Source	<pre><xs:element nam<="" pre=""></xs:element></pre>	e="description" type="m:description" minOccurs="0" maxOccurs="1"/>

# Element m:setSpec / type

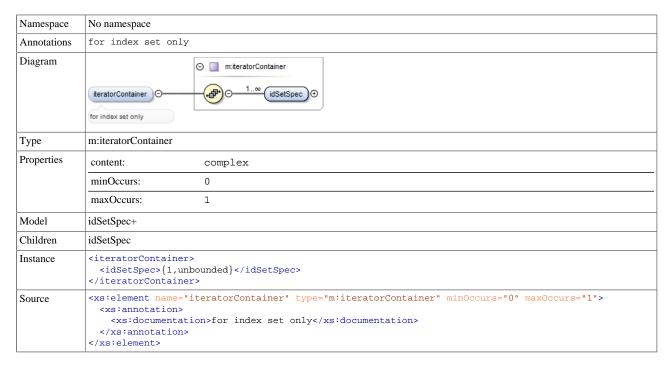
Namespace	No namespace	
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Diagram	type ⊙ m:setSpecType •	
Type	m:setSpecType	
Properties	content:	simple
Facets	enumeration	COLLECTION
	enumeration	SEQUENCE
Source	<pre><xs:element name="type" type="m:setSpecType"></xs:element></pre>	

#### Element m:setSpec / idx

Namespace	No namespace		
Annotations	default index name (for main set only)		
Diagram	idx  O  xs:string  default index name (for main set only)  Built-in primitive type. The string datatype represents character strings in XML.		
Type	xs:string		
Properties	content: simple		
	minOccurs: 0		
	maxOccurs: 1		
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="idx" type="xs:string"></xs:element></pre>		

#### Element m:setSpec / iteratorContainer

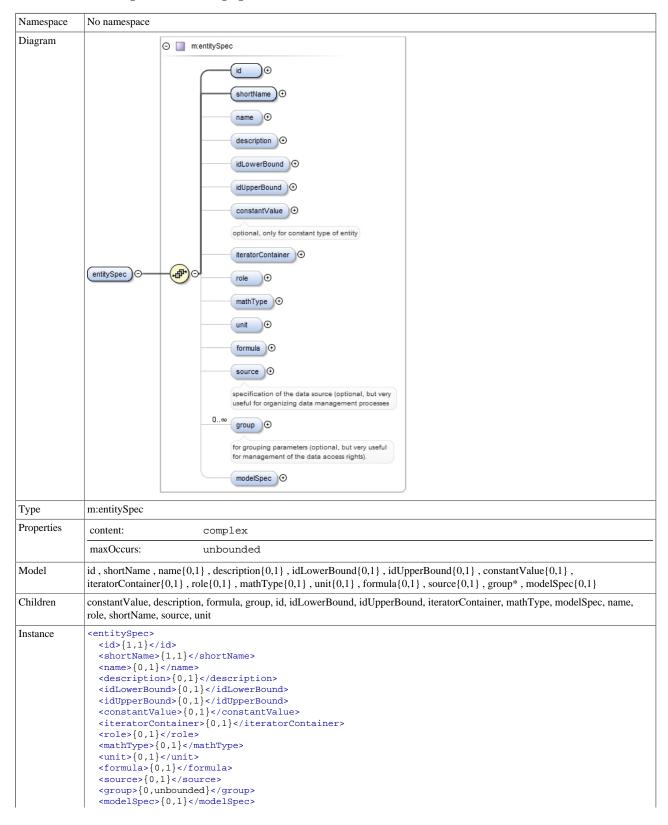


#### Element m:iteratorContainer / idSetSpec



Type	xs:int	
Properties	content:	simple
	minOccurs:	1
	maxOccurs:	unbounded
Source	<pre><xs:element maxoccurs="unbounded" minoccurs="1" name="idSetSpec" type="xs:int"></xs:element></pre>	

#### Element m:modelSpec / entitySpec



Source	<pre><xs:element maxoccurs="unbounded" name="entitySpec" type="m:entitySpec"></xs:element></pre>		

## Element m:entitySpec / id

Namespace	No namespace
Diagram	Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483847 and
Type	xs:int
Properties	content: simple
Source	<pre><xs:element name="id" type="xs:int"></xs:element></pre>

# Element m:entitySpec / shortName

Namespace	No namespace	No namespace	
Diagram	shortName ) -	— ( m:shortName ) ⊕	
Туре	m:shortName		
Properties	content:	simple	
Facets	minLength	1	
	maxLength	8	
Source	<pre><xs:element< pre=""></xs:element<></pre>	name="shortName" type="m:shortName"/>	

# Element m:entitySpec / name

Namespace	No namespace	
Diagram	name $\Theta$	✓ m:name ) ⊙
Туре	m:name	
Properties	content:	simple
	minOccurs:	0
	maxOccurs:	1
Facets	minLength	1
	maxLength	32
Source	<pre><xs:element< pre=""></xs:element<></pre>	name="name" type="m:name" minOccurs="0" maxOccurs="1"/>

# Element m:entitySpec / description

Namespace	No namespace	
Diagram	description $\bigcirc$ —	— (
Туре	m:description	
Properties	content:	simple
	minOccurs:	0
	maxOccurs:	1
Facets	minLength	1
	maxLength	512
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="description" type="m:description"></xs:element></pre>	

# Element m:entitySpec / idLowerBound

Namespace	No namespace
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Diagram	idLowerBound O	Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483647 and
Type	xs:int	
Properties	content:	simple
	minOccurs:	0
	maxOccurs:	1
Source	<xs:element na<="" td=""><td>me="idLowerBound" type="xs:int" minOccurs="0" maxOccurs="1"/&gt;</td></xs:element>	me="idLowerBound" type="xs:int" minOccurs="0" maxOccurs="1"/>

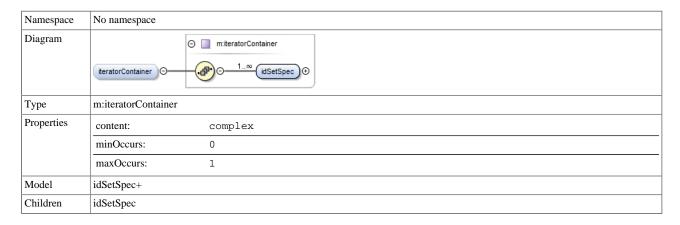
## Element m:entitySpec / idUpperBound

Namespace	No namespace	
Diagram	idUpperBound O xs:int  Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483047 and	
Туре	xs:int	
Properties	content: simple	
	minOccurs: 0	
	maxOccurs: 1	
Source	<pre><xs:element maxoccu<="" maxoccurs="0" minoccurs="0" name="idUpperBound" td="" type="xs:int"><td>ccurs="1"/&gt;</td></xs:element></pre>	ccurs="1"/>

## Element m:entitySpec / constantValue

Namespace	No namespace	
Annotations	optional, only for constant type of entity	
Diagram	optional, only for constant type of entity  Built-in primitive type. The double datatype corresponds to IEEE double-precision 64-bit floating point type [IEEE	
Туре	xs:double	
Properties	content: simple	
	minOccurs: 0	
	maxOccurs: 1	
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="constantValue" type="xs:double">     <xs:annotation></xs:annotation></xs:element></pre>	

## Element m:entitySpec / iteratorContainer



Instance	<pre><iteratorcontainer>   <idsetspec>{1,unbounded}</idsetspec> </iteratorcontainer></pre>
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="iteratorContainer" type="m:iteratorContainer"></xs:element></pre>

# Element m:entitySpec / role

Namespace	No namespace		
Diagram	role ⊙		
Туре	m:entityRole		
Properties	content:	simple	
	minOccurs:	0	
	maxOccurs:	1	
Facets	enumeration	CONSTANT	
	enumeration	PARAMETER	
	enumeration	DECISION_VAR	
	enumeration	EXTERNAL_DECISION_VAR	
	enumeration	OUTCOME_VAR	
	enumeration	AUXILIARY_VAR	
	enumeration	ASSIGNMENT	
	enumeration	CONSTRAINT	
	enumeration	A_VARIABLE	any type of variable: DECISION_VAR, EXTERNAL_DECISION_VAR,OUTCOME_VAR,or AUXILIARY_VAR
	enumeration	A_FORMULA	any type of formula: ASSIGNMENT or CONSTRAINT
Source	<pre><xs:element nam<="" pre=""></xs:element></pre>	e="role" type="m:entityRole" mi	inOccurs="0" maxOccurs="1"/>

# Element m:entitySpec / mathType

Namespace	No namespace				
Diagram	mathType ⊙				
Туре	m:mathType				
Properties	content:	content: simple			
	minOccurs:	0			
	maxOccurs:	1			
Facets	enumeration	INTEGER			
	enumeration	BINARY			
	enumeration	REAL			
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="mathType" type="m:mathType"></xs:element></pre>				

# Element m:entitySpec / unit

Namespace	No namespace	
Diagram	Built-in primitive type. The string datatype represents character strings in XML.	
Туре	xs:string	
Properties	content:	simple
	minOccurs:	0
	maxOccurs:	1
Source	<xs:element< td=""><td>me="unit" type="xs:string" minOccurs="0" maxOccurs="1"/&gt;</td></xs:element<>	me="unit" type="xs:string" minOccurs="0" maxOccurs="1"/>

#### Element m:entitySpec / formula

Namespace	No namespace			
Diagram	formula			
Туре	xs:string			
Properties	content: simple			
	minOccurs: 0			
	maxOccurs: 1			
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="formula" type="xs:string"></xs:element></pre>			

#### Element m:entitySpec / source

Namespace	No namespace				
Annotations	specification of the data source (optional, but very useful for organizing data management processes				
Diagram	specification of the data source (optional, but very useful for organizing data management processes				
Type	xs:string				
Properties	content: simple				
	minOccurs: 0				
	maxOccurs: 1				
Source	<pre><xs:element maxoccurs="1" minoccurs="0" name="source" type="xs:string">     <xs:annotation>         <xs:documentation>specification of the data source (optional, but very useful for organizing data management processes</xs:documentation>         </xs:annotation>         </xs:element></pre>				

## Element m:entitySpec / group



# Element m:entitySpec / modelSpec

Namespace	No namespace
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Diagram	modelSpec ) $\Theta$ —	Built-in primitive type. The string datatype represents character strings in XML.
Type	xs:string	
Properties	content:	simple
	minOccurs:	0
	maxOccurs:	1
Source	<pre><xs:element< pre=""></xs:element<></pre>	name="modelSpec" type="xs:string" minOccurs="0" maxOccurs="1"/>