

# Schema documentation for kmConfig.xsd

september 18, 2013

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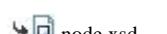
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## Resource hierarchy:

Legend: Import, Include, Redefine, Cycle detected

kmConfig.xsd



↳ node.xsd

↳ sensor.xsd

↳ variable.xsd

↳ common.xsd

↳ topic.xsd

↳ channel.xsd



**Namespace: "http://www.example.org/km"**

## Schema(s)

### Main schema kmConfig.xsd

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

### Included schema node.xsd

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

### Included schema sensor.xsd

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

### Included schema variable.xsd

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

### Included schema common.xsd

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

### Included schema topic.xsd

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

### Included schema channel.xsd

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

### Included schema actuator.xsd

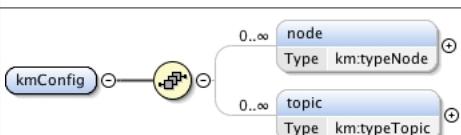
Namespace	http://www.example.org/km

Properties	attribute form default: unqualified element form default: qualified
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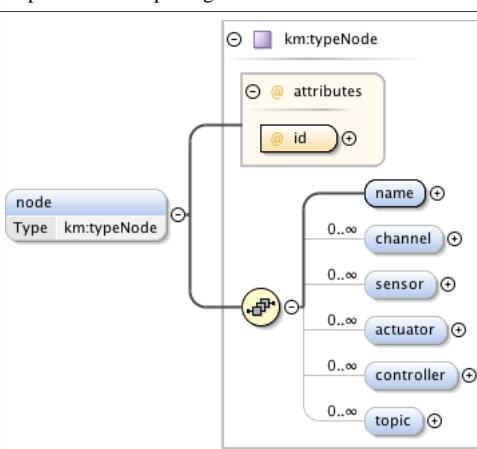
**Included schema controller.xsd**

Namespace	http://www.example.org/km
Properties	attribute form default: unqualified element form default: qualified

**Element(s)****Element km:kmConfig**

Namespace	http://www.example.org/km
Diagram	
Properties	content: complex
Model	km:node* , km:topic*
Children	km:node, km:topic
Instance	<km:kmConfig xmlns:km="http://www.example.org/km"> <km:node id="">{0,unbounded}</km:node> <km:topic id="">{0,unbounded}</km:topic> </km:kmConfig>
Source	<pre>&lt;element name="kmConfig"&gt;   &lt;complexType&gt;     &lt;sequence&gt;       &lt;element name="node" type="km:typeNode" maxOccurs="unbounded" minOccurs="0" /&gt;       &lt;element name="topic" type="km:typeTopic" maxOccurs="unbounded" minOccurs="0" /&gt;     &lt;/sequence&gt;   &lt;/complexType&gt; &lt;/element&gt;</pre>

**Element km:kmConfig / km:node**

Namespace	http://www.example.org/km
Diagram	
Type	node:typeNode
Properties	content: complex minOccurs: 0 maxOccurs: unbounded
Model	node:name , node:channel* , node:sensor* , node:actuator* , node:controller* , node:topic*
Children	node:actuator, node:channel, node:controller, node:name, node:sensor, node:topic
Instance	<km:node id="" xmlns:km="http://www.example.org/km"> <km:name>{1,1}</km:name>

```

<km:channel id="" {0,unbounded}></km:channel>
<km:sensor id="" {0,unbounded}></km:sensor>
<km:actuator id="" {0,unbounded}></km:actuator>
<km:controller id="" {0,unbounded}></km:controller>
<km:topic id="" {0,unbounded}></km:topic>
</km:node>

```

Attributes	QName	Type	Fixed	Default	Use
	<b>id</b>	node:nodeID			required
Source	<element name="node" type="km:typeNode" maxOccurs="unbounded" minOccurs="0" />				

### Element node:typeNode / node:name

Namespace	http://www.example.org/km
Diagram	<pre> graph TD     nodeTypeNode --&gt; @id     @id --&gt; typeIO   </pre>
Type	common:kmStringName
Properties	content: simple
Source	<element name="name" type="node:kmStringName" />

### Element node:typeNode / node:channel

Namespace	http://www.example.org/km										
Diagram	<pre> graph TD     nodeTypeChannel --&gt; @id     @id --&gt; typeIO   </pre>										
Type	channel:typeChannel										
Properties	content: complex minOccurs: 0 maxOccurs: unbounded										
Model	channel:typeIO										
Children	channel:typeIO										
Instance	<node:channel id="" xmlns:node="http://www.example.org/km">     <node:typeIO>{1,1}</node:typeIO>   </node:channel>										
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>channel:channelID</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	<b>id</b>	channel:channelID			required
QName	Type	Fixed	Default	Use							
<b>id</b>	channel:channelID			required							
Source	<element name="channel" type="node:typeChannel" maxOccurs="unbounded" minOccurs="0" />										

### Element channel:typeChannel / channel:typeIO

Namespace	http://www.example.org/km
Diagram	<pre> graph TD     channelTypeIO --- ND     channelTypeIO --- IN     channelTypeIO --- OUT   </pre>
Type	channel:typeIO
Properties	content: complex
Model	channel:ND   channel:IN   channel:OUT
Children	channel:IN, channel:ND, channel:OUT
Instance	<channel:typeIO xmlns:channel="http://www.example.org/km">

	<pre>&lt;channel:ND&gt;{1,1}&lt;/channel:ND&gt; &lt;channel:IN&gt;{1,1}&lt;/channel:IN&gt; &lt;channel:OUT&gt;{1,1}&lt;/channel:OUT&gt; &lt;/channel:typeIO&gt;</pre>
Source	<code>&lt;element name="typeIO" type="channel:typeIO" /&gt;</code>

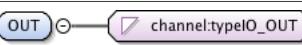
**Element channel:typeIO / channel:ND**

Namespace	http://www.example.org/km
Diagram	
Type	common:label_ND
Properties	content: simple
Facets	maxLength 0
Source	<code>&lt;element name="ND" type="channel:typeIO" /&gt;</code>

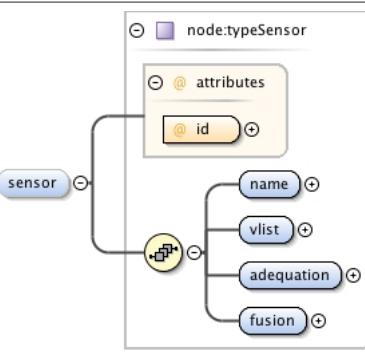
**Element channel:typeIO / channel:IN**

Namespace	http://www.example.org/km
Diagram	
Type	channel:typeIO_IN
Properties	content: simple
Source	<code>&lt;element name="IN" type="channel:typeIO_IN" /&gt;</code>

**Element channel:typeIO / channel:OUT**

Namespace	http://www.example.org/km
Diagram	
Type	channel:typeIO_OUT
Properties	content: simple
Source	<code>&lt;element name="OUT" type="channel:typeIO_OUT" /&gt;</code>

**Element node:typeNode / node:sensor**

Namespace	http://www.example.org/km
Diagram	
Type	sensor:typeSensor
Properties	content: complex minOccurs: 0 maxOccurs: unbounded
Model	sensor:name , sensor:vlist , sensor:adequation , sensor:fusion
Children	sensor:adequation, sensor:fusion, sensor:name, sensor:vlist
Instance	<code>&lt;node:sensor id="" xmlns:node="http://www.example.org/km"&gt; &lt;node:name&gt;{1,1}&lt;/node:name&gt; &lt;node:vlist&gt;{1,1}&lt;/node:vlist&gt; &lt;node:adequation&gt;{1,1}&lt;/node:adequation&gt;</code>

	<node:fusion>{1,1}</node:fusion> </node:sensor>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Default</b>	<b>Use</b>
	<b>id</b>	sensor:sensorID			required
Source	<element name="sensor" type="node:typeSensor" maxOccurs="unbounded" minOccurs="0" />				

**Element sensor:typeSensor / sensor:name**

Namespace	http://www.example.org/km
Diagram	
Type	common:kmStringName
Properties	content: simple
Source	<element name="name" type="sensor:kmStringName" />

**Element sensor:typeSensor / sensor:vlist**

Namespace	http://www.example.org/km
Diagram	
Properties	content: complex
Model	sensor:variable*
Children	sensor:variable
Instance	<sensor:vlist xmlns:sensor="http://www.example.org/km"> <sensor:variable name="">{0,unbounded}</sensor:variable> </sensor:vlist>
Source	<element name="vlist"> <complexType> <sequence> <element name="variable" type="sensor:typeVariable" maxOccurs="unbounded" minOccurs="0" /> </sequence> <br  &lt; complextype&gt;<br=""></br  &lt;> </element>

**Element sensor:typeSensor / sensor:vlist / sensor:variable**

Namespace	http://www.example.org/km				
Diagram					
Type	var:typeVariable				
Properties	content: complex minOccurs: 0 maxOccurs: unbounded				
Model	var:configuration , var:connections				
Children	var:configuration, var:connections				
Instance	<sensor:variable name="" xmlns:sensor="http://www.example.org/km"> <sensor:configuration>{1,1}</sensor:configuration> <sensor:connections>{1,1}</sensor:connections> </sensor:variable>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Default</b>	<b>Use</b>
	<b>name</b>	string			required
Source	<element name="variable" type="sensor:typeVariable" maxOccurs="unbounded" minOccurs="0" />				

**Element var:typeVariable / var:configuration**

Namespace	http://www.example.org/km
Diagram	<p>Built-in primitive type. The string datatype represents character strings in XML.</p>
Type	string
Properties	content: simple
Source	<element name="configuration" type="string" />

**Element var:typeVariable / var:connections**

Namespace	http://www.example.org/km
Diagram	
Type	var:variableConnections
Properties	content: complex
Model	var:idChannel{0,1} , var:idTopic*
Children	var:idChannel, var:idTopic
Instance	<var:connections xmlns:var="http://www.example.org/km">   <var:idChannel id="">{0,1}</var:idChannel>   <var:idTopic id="" location="" mode="">{0,unbounded}</var:idTopic> </var:connections>
Source	<element name="connections" type="var:variableConnections" />

**Element var:variableConnections / var:idChannel**

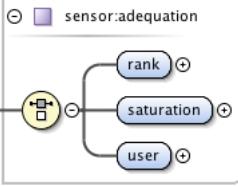
Namespace	http://www.example.org/km										
Diagram											
Type	var:typeConnectionChannel										
Properties	content: complex minOccurs: 0 maxOccurs: 1										
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>int</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	id	int			required
QName	Type	Fixed	Default	Use							
id	int			required							
Source	<element name="idChannel" type="var:typeConnectionChannel" minOccurs="0" maxOccurs="1" />										

**Element var:variableConnections / var:idTopic**

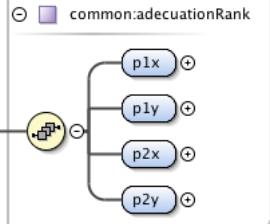
Namespace	http://www.example.org/km
Diagram	

Type	var:typeConnectionTopic				
Properties	content: complex minOccurs: 0 maxOccurs: unbounded				
Attributes	QName	Type	Fixed	Default	Use
	<b>id</b>	int			required
	<b>location</b>	string			required
	<b>mode</b>	string			required
Source	<element name="idTopic" type="var:typeConnectionTopic" minOccurs="0" maxOccurs="unbounded" />				

**Element sensor:typeSensor / sensor:adequation**

Namespace	http://www.example.org/km
Diagram	
Type	common:adequation
Properties	content: complex
Model	common:rank   common:saturation   common:user
Children	common:rank, common:saturation, common:user
Instance	<sensor:adequation xmlns:sensor="http://www.example.org/km"> <sensor:rank>{1,1}</sensor:rank> <sensor:saturation>{1,1}</sensor:saturation> <sensor:user>{1,1}</sensor:user> </sensor:adequation>
Source	<element name="adequation" type="sensor:adequation"/>

**Element common:adequation / common:rank**

Namespace	http://www.example.org/km
Diagram	
Type	common:adequationRank
Properties	content: complex
Model	common:p1x , common:p1y , common:p2x , common:p2y
Children	common:p1x, common:p1y, common:p2x, common:p2y
Instance	<common:rank xmlns:common="http://www.example.org/km"> <common:p1x>{1,1}</common:p1x> <common:p1y>{1,1}</common:p1y> <common:p2x>{1,1}</common:p2x> <common:p2y>{1,1}</common:p2y> </common:rank>
Source	<element name="rank" type="common:adequationRank"/>

**Element common:adequationRank / common:p1x**

Namespace	http://www.example.org/km
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Diagram	
Type	float
Properties	content: simple
Source	<code>&lt;element name="p1x" type="float"/&gt;</code>

**Element common:adecuationRank / common:p1y**

Namespace	http://www.example.org/km
Diagram	
Type	float
Properties	content: simple
Source	<code>&lt;element name="p1y" type="float"/&gt;</code>

**Element common:adecuationRank / common:p2x**

Namespace	http://www.example.org/km
Diagram	
Type	float
Properties	content: simple
Source	<code>&lt;element name="p2x" type="float"/&gt;</code>

**Element common:adecuationRank / common:p2y**

Namespace	http://www.example.org/km
Diagram	
Type	float
Properties	content: simple
Source	<code>&lt;element name="p2y" type="float"/&gt;</code>

**Element common:adecuation / common:saturation**

Namespace	http://www.example.org/km
Diagram	
Type	common:adecuationSaturation
Properties	content: complex
Model	common:p1x , common:p1y , common:p2x , common:p2y

Children	common:p1x, common:p1y, common:p2x, common:p2y
Instance	<common:saturation xmlns:common="http://www.example.org/km"> <common:p1x>{1,1}</common:p1x> <common:p1y>{1,1}</common:p1y> <common:p2x>{1,1}</common:p2x> <common:p2y>{1,1}</common:p2y> </common:saturation>
Source	<element name="saturation" type="common:adecuationSaturation"/>

### Element common:adecuationSaturation / common:p1x

Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. Corresponds to the IEEE single-precision 32-bit floating point type [IEEE 754-1985].
Type	float
Properties	content: simple
Source	<element name="p1x" type="float"/>

### Element common:adecuationSaturation / common:p1y

Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. Corresponds to the IEEE single-precision 32-bit floating point type [IEEE 754-1985].
Type	float
Properties	content: simple
Source	<element name="p1y" type="float"/>

### Element common:adecuationSaturation / common:p2x

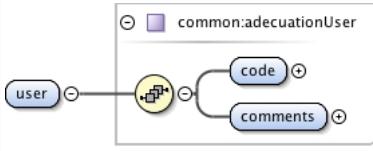
Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. Corresponds to the IEEE single-precision 32-bit floating point type [IEEE 754-1985].
Type	float
Properties	content: simple
Source	<element name="p2x" type="float"/>

### Element common:adecuationSaturation / common:p2y

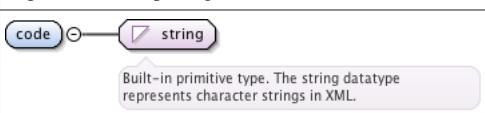
Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. Corresponds to the IEEE single-precision 32-bit floating point type [IEEE 754-1985].
Type	float
Properties	content: simple
Source	<element name="p2y" type="float"/>

### Element common:adecuation / common:user

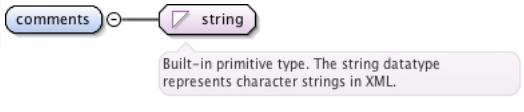
Namespace	http://www.example.org/km
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Diagram	
Type	common:adecuationUser
Properties	content: complex
Model	common:code , common:comments
Children	common:code, common:comments
Instance	<common:user xmlns:common="http://www.example.org/km"> <common:code>{1,1}</common:code> <common:comments>{1,1}</common:comments> </common:user>
Source	<element name="user" type="common:adecuationUser"/>

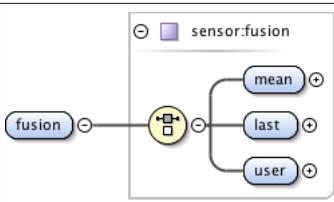
### Element common:adecuationUser / common:code

Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. The string datatype represents character strings in XML.
Type	string
Properties	content: simple
Source	<element name="code" type="string"/>

### Element common:adecuationUser / common:comments

Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. The string datatype represents character strings in XML.
Type	string
Properties	content: simple
Source	<element name="comments" type="string"/>

### Element sensor:typeSensor / sensor:fusion

Namespace	http://www.example.org/km
Diagram	
Type	common:fusion
Properties	content: complex
Model	common:mean   common:last   common:user
Children	common:last, common:mean, common:user
Instance	<sensor:fusion xmlns:sensor="http://www.example.org/km"> <sensor:mean>{1,1}</sensor:mean> <sensor:last>{1,1}</sensor:last> <sensor:user>{1,1}</sensor:user> </sensor:fusion>
Source	<element name="fusion" type="sensor:fusion"/>

**Element common:fusion / common:mean**

Namespace	http://www.example.org/km
Diagram	
Type	common:fusionMean
Properties	content: complex
Model	common:mean
Children	common:mean
Instance	<common:mean xmlns:common="http://www.example.org/km"> <common:mean>{1,1}</common:mean> </common:mean>
Source	<element name="mean" type="common:fusionMean" />

**Element common:fusionMean / common:mean**

Namespace	http://www.example.org/km
Diagram	<p>Built-in primitive type. The string datatype represents character strings in XML.</p>
Type	string
Properties	content: simple
Source	<element name="mean" type="string" />

**Element common:fusion / common:last**

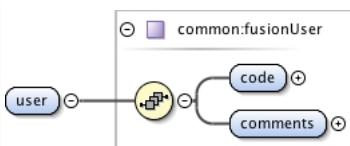
Namespace	http://www.example.org/km
Diagram	
Type	common:fusionLast
Properties	content: complex
Model	common:last
Children	common:last
Instance	<common:last xmlns:common="http://www.example.org/km"> <common:last>{1,1}</common:last> </common:last>
Source	<element name="last" type="common:fusionLast" />

**Element common:fusionLast / common:last**

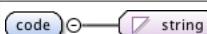
Namespace	http://www.example.org/km
Diagram	<p>Built-in primitive type. The string datatype represents character strings in XML.</p>
Type	string
Properties	content: simple
Source	<element name="last" type="string" />

**Element common:fusion / common:user**

Namespace	http://www.example.org/km
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Diagram	
Type	common:fusionUser
Properties	content: complex
Model	common:code , common:comments
Children	common:code, common:comments
Instance	<pre>&lt;common:user xmlns:common="http://www.example.org/km"&gt;   &lt;common:code&gt;{1,1}&lt;/common:code&gt;   &lt;common:comments&gt;{1,1}&lt;/common:comments&gt; &lt;/common:user&gt;</pre>
Source	<code>&lt;element name="user" type="common:fusionUser" /&gt;</code>

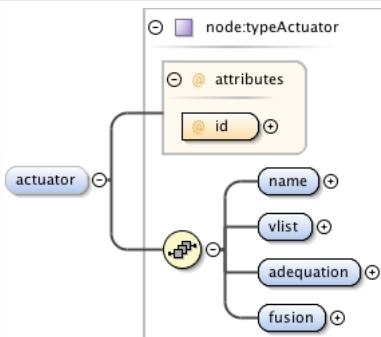
### Element common:fusionUser / common:code

Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. The string datatype represents character strings in XML.
Type	string
Properties	content: simple
Source	<code>&lt;element name="code" type="string" /&gt;</code>

### Element common:fusionUser / common:comments

Namespace	http://www.example.org/km
Diagram	 Built-in primitive type. The string datatype represents character strings in XML.
Type	string
Properties	content: simple
Source	<code>&lt;element name="comments" type="string" /&gt;</code>

### Element node:typeNode / node:actuator

Namespace	http://www.example.org/km
Diagram	
Type	actuator:typeActuator
Properties	content: complex minOccurs: 0 maxOccurs: unbounded
Model	actuator:name , actuator:vlist , actuator:adequation , actuator:fusion

Children	actuator:adequation, actuator:fusion, actuator:name, actuator:vlist										
Instance	<pre>&lt;node:actuator id="" xmlns:node="http://www.example.org/km"&gt;   &lt;node:name&gt;{1,1}&lt;/node:name&gt;   &lt;node:vlist&gt;{1,1}&lt;/node:vlist&gt;   &lt;node:adequation&gt;{1,1}&lt;/node:adequation&gt;   &lt;node:fusion&gt;{1,1}&lt;/node:fusion&gt; &lt;/node:actuator&gt;</pre>										
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>actuator:actuatorID</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	<b>id</b>	actuator:actuatorID			required
QName	Type	Fixed	Default	Use							
<b>id</b>	actuator:actuatorID			required							
Source	<code>&lt;element name="actuator" type="node:typeActuator" maxOccurs="unbounded" minOccurs="0" /&gt;</code>										

### Element actuator:typeActuator / actuator:name

Namespace	http://www.example.org/km
Diagram	
Type	common:kmStringName
Properties	content: simple
Source	<code>&lt;element name="name" type="actuator:kmStringName" /&gt;</code>

### Element actuator:typeActuator / actuator:vlist

Namespace	http://www.example.org/km
Diagram	
Properties	content: complex
Model	actuator:variable*
Children	actuator:variable
Instance	<pre>&lt;actuator:vlist xmlns:actuator="http://www.example.org/km"&gt;   &lt;actuator:variable name=""&gt;{0,unbounded}&lt;/actuator:variable&gt; &lt;/actuator:vlist&gt;</pre>
Source	<pre>&lt;element name="vlist"&gt;   &lt;complexType&gt;     &lt;sequence&gt;       &lt;element name="variable" type="actuator:typeVariable" maxOccurs="unbounded" minOccurs="0" /&gt;     &lt;/sequence&gt;   &lt;/complexType&gt; &lt;/element&gt;</pre>

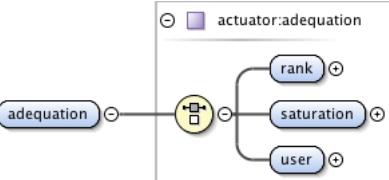
### Element actuator:typeActuator / actuator:vlist / actuator:variable

Namespace	http://www.example.org/km
Diagram	
Type	var:typeVariable
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	var:configuration , var:connections
Children	var:configuration, var:connections
Instance	<pre>&lt;actuator:variable name="" xmlns:actuator="http://www.example.org/km"&gt;   &lt;actuator:configuration&gt;{1,1}&lt;/actuator:configuration&gt;   &lt;actuator:connections&gt;{1,1}&lt;/actuator:connections&gt;</pre>

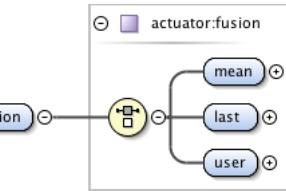
	</actuator:variable>				
Attributes	QName	Type	Fixed	Default	Use
	name	string			required

Source <element name="variable" type="actuator:typeVariable" maxOccurs="unbounded" minOccurs="0" />

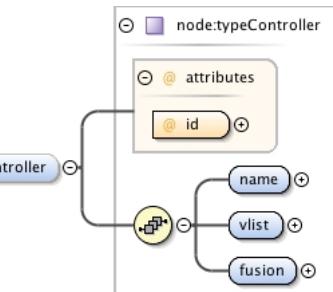
**Element actuator:typeActuator / actuator:adequation**

Namespace	http://www.example.org/km
Diagram	
Type	common:adequation
Properties	content: complex
Model	common:rank   common:saturation   common:user
Children	common:rank, common:saturation, common:user
Instance	<actuator:adequation xmlns:actuator="http://www.example.org/km"> <actuator:rank>{1,1}</actuator:rank> <actuator:saturation>{1,1}</actuator:saturation> <actuator:user>{1,1}</actuator:user> </actuator:adequation>
Source	<element name="adequation" type="actuator:adequation"/>

**Element actuator:typeActuator / actuator:fusion**

Namespace	http://www.example.org/km
Diagram	
Type	common:fusion
Properties	content: complex
Model	common:mean   common:last   common:user
Children	common:last, common:mean, common:user
Instance	<actuator:fusion xmlns:actuator="http://www.example.org/km"> <actuator:mean>{1,1}</actuator:mean> <actuator:last>{1,1}</actuator:last> <actuator:user>{1,1}</actuator:user> </actuator:fusion>
Source	<element name="fusion" type="actuator:fusion"/>

**Element node:typeNode / node:controller**

Namespace	http://www.example.org/km
Diagram	

Type	controller:typeController														
Properties	content: complex minOccurs: 0 maxOccurs: unbounded														
Model	controller:name , controller:vlist , controller:fusion														
Children	controller:fusion, controller:name, controller:vlist														
Instance	<pre>&lt;node:controller id="" xmlns:node="http://www.example.org/km"&gt;   &lt;node:name&gt;{1,1}&lt;/node:name&gt;   &lt;node:vlist&gt;{1,1}&lt;/node:vlist&gt;   &lt;node:fusion&gt;{1,1}&lt;/node:fusion&gt; &lt;/node:controller&gt;</pre>														
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>controller:controllerID</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	<b>id</b>	controller:controllerID			required				
QName	Type	Fixed	Default	Use											
<b>id</b>	controller:controllerID			required											
Source	<pre>&lt;element name="controller" type="node:typeController" maxOccurs="unbounded" minOccurs="0" /&gt;</pre>														

### Element controller:typeController / controller:name

Namespace	http://www.example.org/km
Diagram	
Type	common:kmStringName
Properties	content: simple
Source	<pre>&lt;element name="name" type="controller:kmStringName" /&gt;</pre>

### Element controller:typeController / controller:vlist

Namespace	http://www.example.org/km
Diagram	
Properties	content: complex
Model	controller:variable*
Children	controller:variable
Instance	<pre>&lt;controller:vlist xmlns:controller="http://www.example.org/km"&gt;   &lt;controller:variable name=""&gt;{0,unbounded}&lt;/controller:variable&gt; &lt;/controller:vlist&gt;</pre>
Source	<pre>&lt;element name="vlist"&gt;   &lt;complexType&gt;     &lt;sequence&gt;       &lt;element name="variable" type="controller:typeVariable" maxOccurs="unbounded" minOccurs="0" /&gt;     &lt;/sequence&gt;   &lt;/complexType&gt; &lt;/element&gt;</pre>

### Element controller:typeController / controller:vlist / controller:variable

Namespace	http://www.example.org/km
Diagram	
Type	var:typeVariable
Properties	content: complex minOccurs: 0 maxOccurs: unbounded

Model	var:configuration , var:connections				
Children	var:configuration, var:connections				
Instance	<pre>&lt;controller:variable name="" xmlns:controller="http://www.example.org/km"&gt;   &lt;controller:configuration&gt;{1,1}&lt;/controller:configuration&gt;   &lt;controller:connections&gt;{1,1}&lt;/controller:connections&gt; &lt;/controller:variable&gt;</pre>				
Attributes	<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Default</b>	<b>Use</b>
	<b>name</b>	string			required
Source	<pre>&lt;element name="variable" type="controller:typeVariable" maxOccurs="unbounded" minOccurs="0" /&gt;</pre>				

### Element controller:typeController / controller:fusion

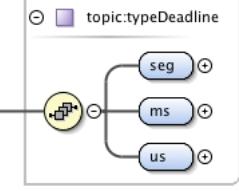
Namespace	http://www.example.org/km
Diagram	
Type	common:fusion
Properties	content: complex
Model	common:mean   common:last   common:user
Children	common:last, common:mean, common:user
Instance	<pre>&lt;controller:fusion xmlns:controller="http://www.example.org/km"&gt;   &lt;controller:mean&gt;{1,1}&lt;/controller:mean&gt;   &lt;controller:last&gt;{1,1}&lt;/controller:last&gt;   &lt;controller:user&gt;{1,1}&lt;/controller:user&gt; &lt;/controller:fusion&gt;</pre>
Source	<pre>&lt;element name="fusion" type="controller:fusion" /&gt;</pre>

### Element node:typeNode / node:topic

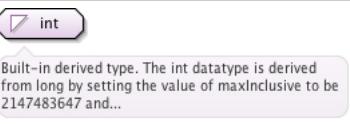
Namespace	http://www.example.org/km										
Diagram											
Type	topic:typeTopic										
Properties	content: complex minOccurs: 0 maxOccurs: unbounded										
Model	topic:deadline										
Children	topic:deadline										
Instance	<pre>&lt;node:topic id="" xmlns:node="http://www.example.org/km"&gt;   &lt;node:deadline&gt;{1,1}&lt;/node:deadline&gt; &lt;/node:topic&gt;</pre>										
Attributes	<table border="1"> <tr> <td><b>QName</b></td><td><b>Type</b></td><td><b>Fixed</b></td><td><b>Default</b></td><td><b>Use</b></td></tr> <tr> <td><b>id</b></td><td>topic:topicID</td><td></td><td></td><td>required</td></tr> </table>	<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Default</b>	<b>Use</b>	<b>id</b>	topic:topicID			required
<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Default</b>	<b>Use</b>							
<b>id</b>	topic:topicID			required							
Source	<pre>&lt;element name="topic" type="node:typeTopic" maxOccurs="unbounded" minOccurs="0" /&gt;</pre>										

### Element topic:typeTopic / topic:deadline

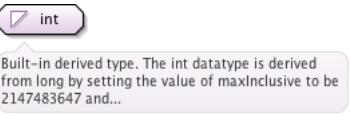
Namespace	http://www.example.org/km
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Diagram	
Type	topic:typeDeadline
Properties	<p>content: complex</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Model	topic:seg , topic:ms , topic:us
Children	topic:ms, topic:seg, topic:us
Instance	<pre>&lt;topic:deadline xmlns:topic="http://www.example.org/km"&gt;   &lt;topic:seg&gt;{1,1}&lt;/topic:seg&gt;   &lt;topic:ms&gt;{1,1}&lt;/topic:ms&gt;   &lt;topic:us&gt;{1,1}&lt;/topic:us&gt; &lt;/topic:deadline&gt;</pre>
Source	<code>&lt;element name="deadline" type="topic:typeDeadline" minOccurs="1" maxOccurs="1" /&gt;</code>

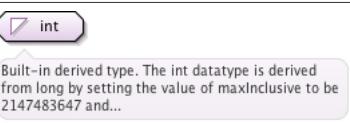
### Element topic:typeDeadline / topic:seg

Namespace	http://www.example.org/km
Diagram	 Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483647 and...
Type	int
Properties	content: simple
Source	<code>&lt;element name="seg" type="int" /&gt;</code>

### Element topic:typeDeadline / topic:ms

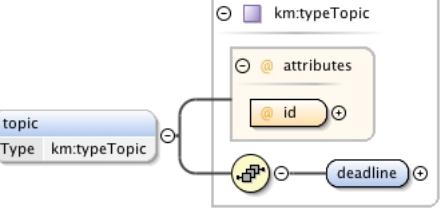
Namespace	http://www.example.org/km
Diagram	 Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483647 and...
Type	int
Properties	content: simple
Source	<code>&lt;element name="ms" type="int" /&gt;</code>

### Element topic:typeDeadline / topic:us

Namespace	http://www.example.org/km
Diagram	 Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483647 and...
Type	int
Properties	content: simple
Source	<code>&lt;element name="us" type="int" /&gt;</code>

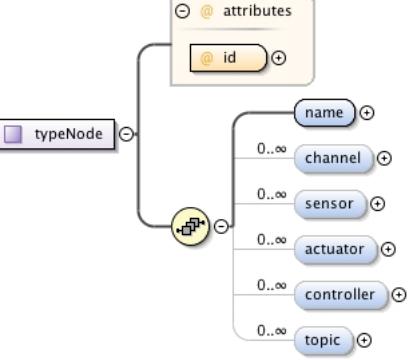
### Element km:kmConfig / km:topic

Namespace	http://www.example.org/km
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Diagram											
Type	topic:typeTopic										
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>										
Model	topic:deadline										
Children	topic:deadline										
Instance	<km:topic id="" xmlns:km="http://www.example.org/km"> <km:deadline>{1,1}</km:deadline> </km:topic>										
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>topic:topicID</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	id	topic:topicID			required
QName	Type	Fixed	Default	Use							
id	topic:topicID			required							
Source	<code>&lt;element name="topic" type="km:typeTopic" maxOccurs="unbounded" minOccurs="0" /&gt;</code>										

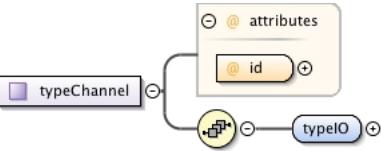
## Complex Type(s)

### Complex Type node:typeNode

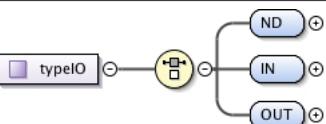
Namespace	http://www.example.org/km										
Diagram											
Used by	Element km:kmConfig/km:node										
Model	node:name , node:channel* , node:sensor* , node:actuator* , node:controller* , node:topic*										
Children	node:actuator, node:channel, node:controller, node:name, node:sensor, node:topic										
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>node:nodeID</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	id	node:nodeID			required
QName	Type	Fixed	Default	Use							
id	node:nodeID			required							
Source	<pre>&lt;complexType name="typeNode"&gt;   &lt;sequence&gt;     &lt;element name="name" type="node:kmStringName"/&gt;     &lt;element name="channel" type="node:typeChannel" maxOccurs="unbounded" minOccurs="0"/&gt;     &lt;element name="sensor" type="node:typeSensor" maxOccurs="unbounded" minOccurs="0"/&gt;     &lt;element name="actuator" type="node:typeActuator" maxOccurs="unbounded" minOccurs="0"/&gt;     &lt;element name="controller" type="node:typeController" maxOccurs="unbounded" minOccurs="0"/&gt;     &lt;element name="topic" type="node:typeTopic" maxOccurs="unbounded" minOccurs="0"/&gt;   &lt;/sequence&gt;   &lt;!-- Attributes --&gt;   &lt;attribute name="id" use="required" type="node:nodeID"/&gt; &lt;/complexType&gt;</pre>										

### Complex Type channel:typeChannel

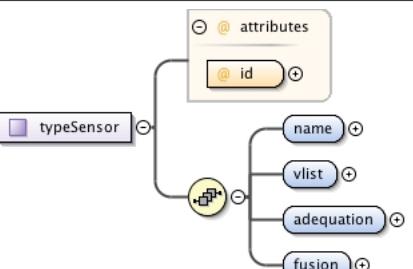
Namespace	http://www.example.org/km
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Diagram											
Used by	Element node:typeNode/node:channel										
Model	channel:typeIO										
Children	channel:typeIO										
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td>channel:channelID</td><td></td><td></td><td>required</td></tr> </tbody> </table>	QName	Type	Fixed	Default	Use	<b>id</b>	channel:channelID			required
QName	Type	Fixed	Default	Use							
<b>id</b>	channel:channelID			required							
Source	<pre>&lt;complexType name="typeChannel"&gt;   &lt;sequence&gt;     &lt;element name="typeIO" type="channel:typeIO"/&gt;   &lt;/sequence&gt;   &lt;!-- Attributes --&gt;   &lt;attribute name="id" use="required" type="channel:channelID"/&gt; &lt;/complexType&gt;</pre>										

## Complex Type channel:typeIO

Namespace	http://www.example.org/km
Diagram	
Used by	Element channel:typeChannel/channel:typeIO
Model	channel:ND   channel:IN   channel:OUT
Children	channel:IN, channel:ND, channel:OUT
Source	<pre>&lt;complexType name="typeIO"&gt;   &lt;choice&gt;     &lt;element name="ND" type="channel:label_ND"/&gt;     &lt;element name="IN" type="channel:typeIO_IN"/&gt;     &lt;element name="OUT" type="channel:typeIO_OUT"/&gt;   &lt;/choice&gt; &lt;/complexType&gt;</pre>

## Complex Type sensor:typeSensor

Namespace	http://www.example.org/km										
Diagram											
Used by	Element node:typeNode/node:sensor										
Model	sensor:name , sensor:vlist , sensor:adequation , sensor:fusion										
Children	sensor:adequation, sensor:fusion, sensor:name, sensor:vlist										
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td>sensor:sensorID</td><td></td><td></td><td>required</td></tr> </tbody> </table>	QName	Type	Fixed	Default	Use	<b>id</b>	sensor:sensorID			required
QName	Type	Fixed	Default	Use							
<b>id</b>	sensor:sensorID			required							
Source	<pre>&lt;complexType name="typeSensor"&gt;   &lt;sequence&gt;     &lt;element name="name" type="sensor:kmStringName"/&gt;     &lt;element name="vlist"&gt;       &lt;complexType&gt;</pre>										

```

<sequence>
  <element name="variable" type="sensor:typeVariable" maxOccurs="unbounded" minOccurs="0" />
</sequence>
</complexType>
</element>
<element name="adequation" type="sensor:adequation" />
<element name="fusion" type="sensor:fusion" />
</sequence>
<!-- Attributes -->
<attribute name="id" use="required" type="sensor:sensorID" />
</complexType>

```

## Complex Type var:typeVariable

Namespace	http://www.example.org/km														
Diagram	<pre> classDiagram     class typeVariable {         @name         configuration     }     configuration {         connections     } </pre>														
Used by	Elements actuator:typeActuator/actuator:vlist/actuator:variable, controller:typeController/controller:vlist/controller:variable, sensor:typeSensor/sensor:vlist/sensor:variable														
Model	var:configuration , var:connections														
Children	var:configuration, var:connections														
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>name</b></td> <td>string</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>					QName	Type	Fixed	Default	Use	<b>name</b>	string			required
QName	Type	Fixed	Default	Use											
<b>name</b>	string			required											
Source	<pre> &lt;complexType name="typeVariable"&gt;   &lt;sequence&gt;     &lt;element name="configuration" type="string" /&gt;     &lt;element name="connections" type="var:variableConnections" /&gt;   &lt;/sequence&gt;   &lt;!-- Attributes --&gt;   &lt;attribute name="name" type="string" use="required" /&gt; &lt;/complexType&gt; </pre>														

## Complex Type var:variableConnections

Namespace	http://www.example.org/km				
Diagram	<pre> classDiagram     class variableConnections {         idChannel     }     idTopic {         *--&gt; variableConnections     } </pre>				
Used by	Element var:typeVariable/var:connections				
Model	var:idChannel{0,1} , var:idTopic*				
Children	var:idChannel, var:idTopic				
Source	<pre> &lt;complexType name="variableConnections"&gt;   &lt;sequence&gt;     &lt;element name="idChannel" type="var:typeConnectionChannel" minOccurs="0" maxOccurs="1" /&gt;     &lt;element name="idTopic" type="var:typeConnectionTopic" minOccurs="0" maxOccurs="unbounded" /&gt;   &lt;/sequence&gt; &lt;/complexType&gt; </pre>				

## Complex Type var:typeConnectionChannel

Namespace	http://www.example.org/km														
Diagram	<pre> classDiagram     class typeConnectionChannel {         @id     } </pre>														
Used by	Element var:variableConnections/var:idChannel														
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>int</td> <td></td> <td></td> <td>required</td> </tr> </tbody> </table>					QName	Type	Fixed	Default	Use	<b>id</b>	int			required
QName	Type	Fixed	Default	Use											
<b>id</b>	int			required											

Source	<pre>&lt;complexType name="typeConnectionChannel"&gt;   &lt;!-- Attributes --&gt;   &lt;attribute name="id" type="int" use="required"/&gt; &lt;/complexType&gt;</pre>
--------	---

## Complex Type var:typeConnectionTopic

Namespace	http://www.example.org/km				
Diagram					
Used by	Element var:variableConnections/var:idTopic				
Attributes	QName	Type	Fixed	Default	Use
	<b>id</b>	int			required
	<b>location</b>	string			required
	<b>mode</b>	string			required
Source	<pre>&lt;complexType name="typeConnectionTopic"&gt;   &lt;!-- Attributes --&gt;   &lt;!-- internal   external --&gt;   &lt;attribute name="id" type="int" use="required"/&gt;   &lt;attribute name="location" type="string" use="required"/&gt;   &lt;!-- read   write --&gt;   &lt;attribute name="mode" type="string" use="required"/&gt; &lt;/complexType&gt;</pre>				

## Complex Type common:adequation

Namespace	http://www.example.org/km				
Diagram					
Used by	Elements actuator:typeActuator/actuator:adequation, sensor:typeSensor/sensor:adequation				
Model	common:rank   common:saturation   common:user				
Children	common:rank, common:saturation, common:user				
Source	<pre>&lt;complexType name="adequation"&gt;   &lt;choice&gt;     &lt;element name="rank" type="common:adecuationRank"/&gt;     &lt;element name="saturation" type="common:adecuationSaturation"/&gt;     &lt;element name="user" type="common:adecuationUser"/&gt;   &lt;/choice&gt; &lt;/complexType&gt;</pre>				

## Complex Type common:adecuationRank

Namespace	http://www.example.org/km				
Diagram					
Used by	Element common:adequation/common:rank				
Model	common:p1x , common:p1y , common:p2x , common:p2y				
Children	common:p1x, common:p1y, common:p2x, common:p2y				
Source	<pre>&lt;complexType name="adecuationRank"&gt;</pre>				

```

<sequence>
  <element name="plx" type="float"/>
  <element name="ply" type="float"/>
  <element name="p2x" type="float"/>
  <element name="p2y" type="float"/>
</sequence>
</complexType>

```

### Complex Type common:adecuationSaturation

Namespace	http://www.example.org/km
Diagram	<pre> classDiagram     class adecuationSaturation {         &lt;&gt; p1x         &lt;&gt; p1y         &lt;&gt; p2x         &lt;&gt; p2y     } </pre>
Used by	Element common:adecuation/common:saturation
Model	common:p1x , common:p1y , common:p2x , common:p2y
Children	common:p1x, common:p1y, common:p2x, common:p2y
Source	<pre> &lt;complexType name="adecuationSaturation"&gt;   &lt;sequence&gt;     &lt;element name="plx" type="float"/&gt;     &lt;element name="ply" type="float"/&gt;     &lt;element name="p2x" type="float"/&gt;     &lt;element name="p2y" type="float"/&gt;   &lt;/sequence&gt; &lt;/complexType&gt; </pre>

### Complex Type common:adecuationUser

Namespace	http://www.example.org/km
Diagram	<pre> classDiagram     class adecuationUser {         &lt;&gt; code         &lt;&gt; comments     } </pre>
Used by	Element common:adecuation/common:user
Model	common:code , common:comments
Children	common:code, common:comments
Source	<pre> &lt;complexType name="adecuationUser"&gt;   &lt;sequence&gt;     &lt;element name="code" type="string"/&gt;     &lt;element name="comments" type="string"/&gt;   &lt;/sequence&gt; &lt;/complexType&gt; </pre>

### Complex Type common:fusion

Namespace	http://www.example.org/km
Diagram	<pre> classDiagram     class fusion {         &lt;&gt; mean         &lt;&gt; last         &lt;&gt; user     } </pre>
Used by	Elements actuator:typeActuator/actuator:fusion, controller:typeController/controller:fusion, sensor:typeSensor/sensor:fusion
Model	common:mean   common:last   common:user
Children	common:last, common:mean, common:user
Source	<pre> &lt;complexType name="fusion"&gt;   &lt;choice&gt;     &lt;element name="mean" type="common:fusionMean"/&gt;     &lt;element name="last" type="common:fusionLast"/&gt;     &lt;element name="user" type="common:fusionUser"/&gt;   &lt;/choice&gt; &lt;/complexType&gt; </pre>

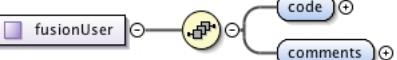
## Complex Type common:fusionMean

Namespace	http://www.example.org/km
Diagram	
Used by	Element common:fusion/common:mean
Model	common:mean
Children	common:mean
Source	<pre>&lt;complexType name="fusionMean"&gt;   &lt;sequence&gt;     &lt;element name="mean" type="string"/&gt;   &lt;/sequence&gt; &lt;/complexType&gt;</pre>

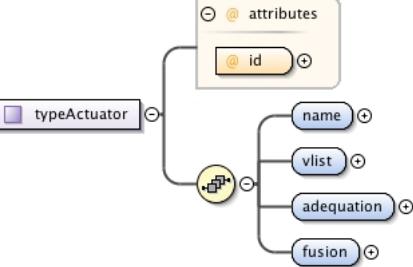
## Complex Type common:fusionLast

Namespace	http://www.example.org/km
Diagram	
Used by	Element common:fusion/common:last
Model	common:last
Children	common:last
Source	<pre>&lt;complexType name="fusionLast"&gt;   &lt;sequence&gt;     &lt;element name="last" type="string"/&gt;   &lt;/sequence&gt; &lt;/complexType&gt;</pre>

## Complex Type common:fusionUser

Namespace	http://www.example.org/km
Diagram	
Used by	Element common:fusion/common:user
Model	common:code , common:comments
Children	common:code, common:comments
Source	<pre>&lt;complexType name="fusionUser"&gt;   &lt;sequence&gt;     &lt;element name="code" type="string"/&gt;     &lt;element name="comments" type="string"/&gt;   &lt;/sequence&gt; &lt;/complexType&gt;</pre>

## Complex Type actuator:typeActuator

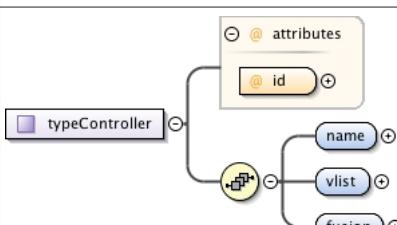
Namespace	http://www.example.org/km
Diagram	
Used by	Element node:typeNode/node:actuator
Model	actuator:name , actuator:vlist , actuator:adequation , actuator:fusion

Children	actuator:adequation, actuator:fusion, actuator:name, actuator:vlist				
Attributes	<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Default</b>	<b>Use</b>
	<b>id</b>	actuator:actuatorID			required

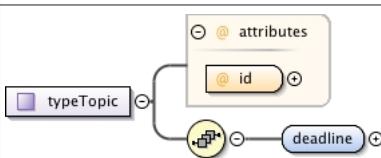
  

Source	<complexType name="typeActuator"> <sequence> <element name="name" type="actuator:kmStringName"/> <element name="vlist"> <complexType> <sequence> <element name="variable" type="actuator:typeVariable" maxOccurs="unbounded" minOccurs="0"/> </sequence> </complexType> </element> <element name="adequation" type="actuator:adequation"/> <element name="fusion" type="actuator:fusion"/> </sequence> <!-- Attributes --> <attribute name="id" use="required" type="actuator:actuatorID"/> </complexType>
--------	---

## Complex Type controller:typeController

Namespace	http://www.example.org/km				
Diagram					
Used by	Element node:typeNode/node:controller				
Model	controller:name , controller:vlist , controller:fusion				
Children	controller:fusion, controller:name, controller:vlist				
Attributes	<b>QName</b>	<b>Type</b>	<b>Fixed</b>	<b>Default</b>	<b>Use</b>
	<b>id</b>	controller:controllerID			required
Source	<complexType name="typeController"> <sequence> <element name="name" type="controller:kmStringName"/> <element name="vlist"> <complexType> <sequence> <element name="variable" type="controller:typeVariable" maxOccurs="unbounded" minOccurs="0"/> </sequence> </complexType> </element> <element name="fusion" type="controller:fusion"/> </sequence> <!-- Attributes --> <attribute name="id" use="required" type="controller:controllerID"/> </complexType>				

## Complex Type topic:typeTopic

Namespace	http://www.example.org/km				
Diagram					
Used by	Elements km:kmConfig/km:topic, node:typeNode/node:topic				
Model	topic:deadline				
Children	topic:deadline				

Attributes	QName	Type	Fixed	Default	Use
	<b>id</b>	topic:topicID			required
Source	<pre>&lt;complexType name="typeTopic"&gt;   &lt;sequence&gt;     &lt;element name="deadline" type="topic:typeDeadline" minOccurs="1" maxOccurs="1"/&gt;   &lt;/sequence&gt;   &lt;!-- Attributes --&gt;   &lt;attribute name="id" type="topic:topicID" use="required"/&gt; &lt;/complexType&gt;</pre>				

## Complex Type **topic:typeDeadline**

Namespace	http://www.example.org/km				
Diagram	<pre> classDiagram     class typeDeadline     class seg     class ms     class us      typeDeadline "0..1" --&gt; "1..1" seg     typeDeadline "0..1" --&gt; "1..1" ms     typeDeadline "0..1" --&gt; "1..1" us   </pre>				
Used by	Element topic:typeTopic/topic:deadline				
Model	topic:seg , topic:ms , topic:us				
Children	topic:ms, topic:seg, topic:us				
Source	<pre>&lt;complexType name="typeDeadline"&gt;   &lt;sequence&gt;     &lt;element name="seg" type="int" /&gt;     &lt;element name="ms" type="int" /&gt;     &lt;element name="us" type="int" /&gt;   &lt;/sequence&gt; &lt;/complexType&gt;</pre>				

## Simple Type(s)

### Simple Type **common:kmStringName**

Namespace	http://www.example.org/km				
Diagram	<p>Built-in primitive type. The string datatype represents character strings in XML.</p>				
Type	string				
Used by	Elements actuator:typeActuator/actuator:name, controller:typeController/controller:name, node:typeNode/node:name, sensor:typeSensor/sensor:name				
Source	<pre>&lt;simpleType name="kmStringName"&gt;   &lt;restriction base="string" /&gt; &lt;/simpleType&gt;</pre>				

### Simple Type **common:label\_ND**

Namespace	http://www.example.org/km				
Diagram	<p>Built-in primitive type. The string datatype represents character strings in XML.</p>				
Type	restriction of string				
Facets	maxLength 0				
Used by	Element channel:typeIO/channel:ND				
Source	<pre>&lt;simpleType name="label_ND"&gt;   &lt;restriction base="string" /&gt;     &lt;maxLength value="0" /&gt;   &lt;/restriction&gt; &lt;/simpleType&gt;</pre>				

### Simple Type **channel:typeIO\_IN**

Namespace	http://www.example.org/km				
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Diagram	A diagram showing a rounded rectangle labeled "typeIO_IN" connected by a line with a hollow circle to another rounded rectangle labeled "string". A callout bubble below the line says "Built-in primitive type. The string datatype represents character strings in XML."/>
Type	string
Used by	Element channel:typeIO/channel:IN
Source	<pre>&lt;simpleType name="typeIO_IN"&gt;   &lt;restriction base="string"&gt;   &lt;/restriction&gt; &lt;/simpleType&gt;</pre>

### Simple Type channel:typeIO\_OUT

Namespace	http://www.example.org/km
Diagram	A diagram showing a rounded rectangle labeled "typeIO_OUT" connected by a line with a hollow circle to another rounded rectangle labeled "string". A callout bubble below the line says "Built-in primitive type. The string datatype represents character strings in XML."/>
Type	string
Used by	Element channel:typeIO/channel:OUT

```
<simpleType name="typeIO_OUT">
  <restriction base="string">
  </restriction>
</simpleType>
```

### Simple Type channel:channelID

Namespace	http://www.example.org/km
Diagram	A diagram showing a rounded rectangle labeled "channelID" connected by a line with a hollow circle to another rounded rectangle labeled "int". A callout bubble below the line says "Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483647 and...".
Type	restriction of int
Facets	minInclusive 0
Used by	Attribute channel:typeChannel/@id

```
<simpleType name="channelID">
  <restriction base="int">
    <minInclusive value="0" />
  </restriction>
</simpleType>
```

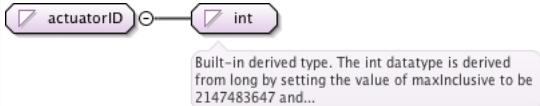
### Simple Type sensor:sensorID

Namespace	http://www.example.org/km
Diagram	A diagram showing a rounded rectangle labeled "sensorID" connected by a line with a hollow circle to another rounded rectangle labeled "int". A callout bubble below the line says "Built-in derived type. The int datatype is derived from long by setting the value of maxInclusive to be 2147483647 and...".
Type	restriction of int
Facets	minInclusive 0
Used by	Attribute sensor:typeSensor/@id

```
<simpleType name="sensorID">
  <restriction base="int">
    <minInclusive value="0" />
  </restriction>
</simpleType>
```

### Simple Type actuator:actuatorID

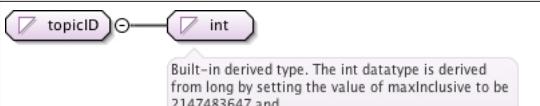
Namespace	http://www.example.org/km
-----------	---------------------------

Diagram	
Type	restriction of int
Facets	minInclusive 0
Used by	Attribute actuator:typeActuator/@id
Source	<pre>&lt;simpleType name="actuatorID"&gt;   &lt;restriction base="int"&gt;     &lt;minInclusive value="0" /&gt;   &lt;/restriction&gt; &lt;/simpleType&gt;</pre>

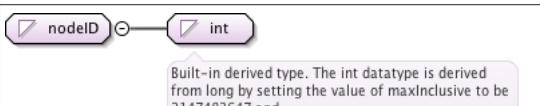
### Simple Type controller:controllerID

Namespace	http://www.example.org/km
Diagram	
Type	restriction of int
Facets	minInclusive 0
Used by	Attribute controller:typeController/@id
Source	<pre>&lt;simpleType name="controllerID"&gt;   &lt;restriction base="int"&gt;     &lt;minInclusive value="0" /&gt;   &lt;/restriction&gt; &lt;/simpleType&gt;</pre>

### Simple Type topic:topicID

Namespace	http://www.example.org/km
Diagram	
Type	restriction of int
Facets	minInclusive 0
Used by	Attribute topic:typeTopic/@id
Source	<pre>&lt;simpleType name="topicID"&gt;   &lt;restriction base="int"&gt;     &lt;minInclusive value="0" /&gt;   &lt;/restriction&gt; &lt;/simpleType&gt;</pre>

### Simple Type node:nodeID

Namespace	http://www.example.org/km
Diagram	
Type	restriction of int
Facets	minInclusive 0
Used by	Attribute node:typeNode/@id
Source	<pre>&lt;simpleType name="nodeID"&gt;   &lt;restriction base="int"&gt;     &lt;minInclusive value="0" /&gt;   &lt;/restriction&gt; &lt;/simpleType&gt;</pre>

<pre>&lt;/restriction&gt; &lt;/simpleType&gt;</pre>
---

### Simple Type channel:label\_ND

Namespace	http://www.example.org/km
Diagram	
Type	string
Source	<pre>&lt;simpleType name="label_ND"&gt;   &lt;restriction base="string"&gt;     &lt;/restriction&gt; &lt;/simpleType&gt;</pre>

### Namespace: ""

#### Attribute(s)

##### Attribute channel:typeChannel / @id

Namespace	No namespace
Type	channel:channelID
Properties	use: required
Facets	minInclusive 0
Used by	Complex Type channel:typeChannel
Source	<pre>&lt;attribute name="id" use="required" type="channel:channelID"/&gt;</pre>

##### Attribute var:typeConnectionChannel / @id

Namespace	No namespace
Type	int
Properties	use: required
Used by	Complex Type var:typeConnectionChannel
Source	<pre>&lt;attribute name="id" type="int" use="required"/&gt;</pre>

##### Attribute var:typeConnectionTopic / @id

Namespace	No namespace
Type	int
Properties	use: required
Used by	Complex Type var:typeConnectionTopic
Source	<pre>&lt;attribute name="id" type="int" use="required"/&gt;</pre>

##### Attribute var:typeConnectionTopic / @location

Namespace	No namespace
Type	string
Properties	use: required
Used by	Complex Type var:typeConnectionTopic
Source	<pre>&lt;attribute name="location" type="string" use="required"/&gt;</pre>

##### Attribute var:typeConnectionTopic / @mode

Namespace	No namespace
Type	string

Properties	use:	required
Used by	Complex Type	var:typeConnectionTopic
Source	<attribute name="mode" type="string" use="required"/>	

**Attribute var:typeVariable / @name**

Namespace	No namespace
Type	string
Properties	use: required
Used by	Complex Type var:typeVariable
Source	<attribute name="name" type="string" use="required"/>

**Attribute sensor:typeSensor / @id**

Namespace	No namespace
Type	sensor:sensorID
Properties	use: required
Facets	minInclusive 0
Used by	Complex Type sensor:typeSensor
Source	<attribute name="id" use="required" type="sensor:sensorID"/>

**Attribute actuator:typeActuator / @id**

Namespace	No namespace
Type	actuator:actuatorID
Properties	use: required
Facets	minInclusive 0
Used by	Complex Type actuator:typeActuator
Source	<attribute name="id" use="required" type="actuator:actuatorID"/>

**Attribute controller:typeController / @id**

Namespace	No namespace
Type	controller:controllerID
Properties	use: required
Facets	minInclusive 0
Used by	Complex Type controller:typeController
Source	<attribute name="id" use="required" type="controller:controllerID"/>

**Attribute topic:typeTopic / @id**

Namespace	No namespace
Type	topic:topicID
Properties	use: required
Facets	minInclusive 0
Used by	Complex Type topic:typeTopic
Source	<attribute name="id" type="topic:topicID" use="required"/>

**Attribute node:typeNode / @id**

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

Type	node:nodeID	
Properties	use: required	
Facets	minInclusive	0
Used by	Complex Type	node:typeNode
Source	<attribute name="id" use="required" type="node:nodeID"/>	