Schema documentation for tridas-1.2.1.xsd

17 september 2010

Table of Contents

Namespace: "http://www.tridas.org/1.2.1"

Schemas

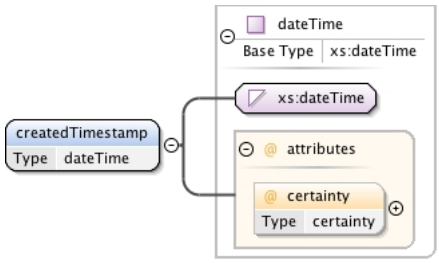
Main schema `tridas-1.2.1.xsd`

Namespace	http://www.tridas.org/1.2.1
Properties	attribute form default: `unqualified` element form default: `qualified`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Elements

Element `createdTimestamp`

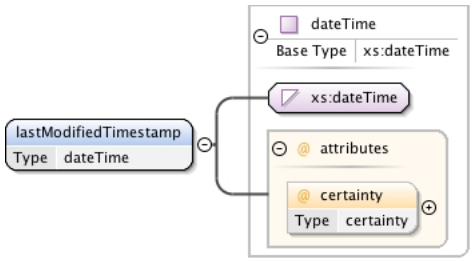
Namespace	http://www.tridas.org/1.2.1
Annotations	`Field containing date and time when this record was created.`

Diagram	
Type	dateTime
Properties	content: complex
Used by	Complex Types: baseSeries, tridasEntity Elements: derivedSeries, element, measurementSeries, object, project, radius, sample
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **certainty** | certainty | | | optional

Source	`<xs:element name="createdTimestamp" type="dateTime">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Field containing date and time when this record was created.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

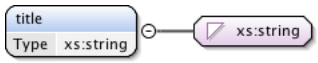
Element `lastModifiedTimestamp`

Namespace	http://www.tridas.org/1.2.1
Annotations	Field containing date and time when this records was last updated.
Diagram	
Type	dateTime
Properties	content: complex
Used by	Complex Types: baseSeries, tridasEntity Elements: derivedSeries, element, measurementSeries, object, project, radius, sample
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **certainty** | certainty | | | optional

Source	`<xs:element name="lastModifiedTimestamp" type="dateTime">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Field containing date and time when this records was last updated.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

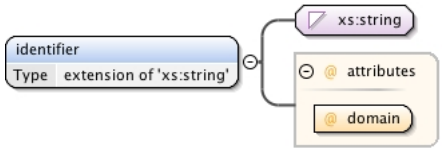
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `title`

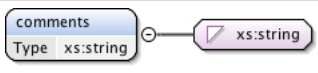
Namespace	http://www.tridas.org/1.2.1
Annotations	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.
Diagram	
Type	xs:string

Properties	content:	simple
Used by	Complex Types	baseSeries, tridasEntity
	Elements	derivedSeries, element, measurementSeries, object, project, radius, sample
Source	<xs:element name="title" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Title or name of this entity. This should be a 'human readable' name by which the entity is referred.</xs:documentation> </xs:annotation> </xs:element>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Element identifier

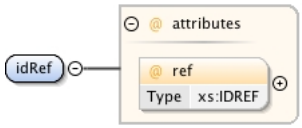
Namespace	http://www.tridas.org/1.2.1				
Annotations	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.				
Diagram					
Type	extension of xs:string				
Properties	content:	complex			
Used by	Complex Types	baseSeries, seriesLink, tridasEntity			
	Elements	derivedSeries, element, laboratory, measurementSeries, object, project, radius, research, sample			
Attributes	**QName**	**Type**	**Fixed**	**Default**	**Use**
	domain				required
	The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.				
Source	<xs:element name="identifier"> <xs:annotation> <xs:documentation xml:lang="EN">Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.</xs:documentation> </xs:annotation> <xs:complexType> <xs:simpleContent> <xs:extension base="xs:string"> <xs:attribute name="domain" use="required"> <xs:annotation> <xs:documentation xml:lang="EN">The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.</xs:documentation> </xs:annotation> </xs:attribute> </xs:extension> </xs:simpleContent> </xs:complexType> </xs:element>				
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd				

Element comments

Namespace	http://www.tridas.org/1.2.1	
Annotations	More information about this entity.	
Diagram		
Type	xs:string	
Properties	content:	simple
Used by	Complex Types	baseSeries, tridasEntity

	Elements	derivedSeries, element, measurementSeries, object, project, radius, sample
Source	<xs:element name="comments" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">More information about this entity.</xs:documentation> </xs:annotation> </xs:element>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Element seriesLink / idRef

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex

Attributes

QName	Type	Fixed	Default	Use
ref	xs:IDREF			optional

Source

```
<xs:element name="idRef">
  <xs:complexType>
    <xs:attribute name="ref" type="xs:IDREF"/>
  </xs:complexType>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element seriesLink / xLink

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex

Attributes

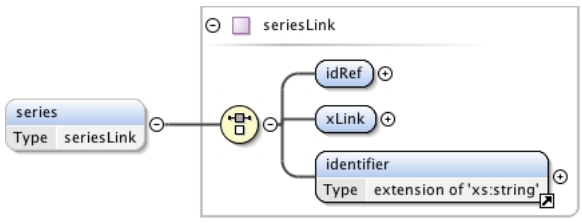
QName	Type	Fixed	Default	Use
xlink:href	anyURI			optional

Source

```
<xs:element name="xLink">
  <xs:complexType>
    <xs:attribute ref="xlink:href"/>
  </xs:complexType>
</xs:element>
```

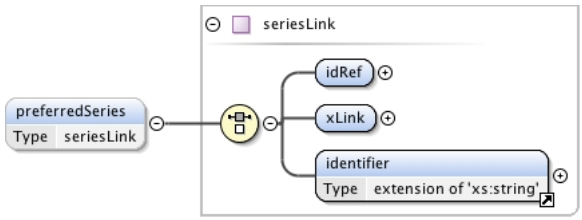
Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element seriesLinks / series

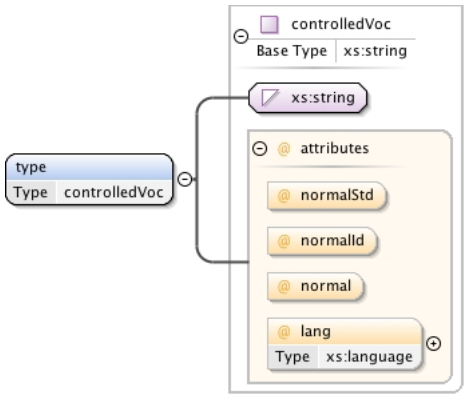
Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	seriesLink
Properties	content: complex minOccurs: 0 maxOccurs: unbounded
Model	idRef | xLink | identifier
Children	idRef, identifier, xLink

Instance	<series> <idRef ref="">{1,1}</idRef> <xLink xlink:href="">{1,1}</xLink> <identifier domain="">{1,1}</identifier> </series>
Source	<xs:element name="series" type="seriesLink" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element seriesLinksWithPreferred / preferredSeries

Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	seriesLink
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	idRef | xLink | identifier
Children	idRef, identifier, xLink
Instance	<preferredSeries> <idRef ref="">{1,1}</idRef> <xLink xlink:href="">{1,1}</xLink> <identifier domain="">{1,1}</identifier> </preferredSeries>
Source	<xs:element name="preferredSeries" type="seriesLink" minOccurs="0" maxOccurs="1"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element type

Namespace	http://www.tridas.org/1.2.1
Annotations	The type of entity this is. Preferrably derived from a controlled vocabulary.
Diagram	
Type	controlledVoc
Properties	content: complex
Used by	Elements: derivedSeries, element, object, project, sample, statFoundation, vocabulary/derivedSeries.type, vocabulary/element.type, vocabulary/object.type, vocabulary/project.type, vocabulary/sample.type Complex Type: baseSeries

Attributes

QName	Type	Fixed	Default	Use
lang	xs:language			optional
	The language this term is in. Default is EN if not specified.			

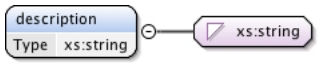
	QName	Type	Fixed	Default	Use
	normal				optional
		The normalised name for this entry			
	normalId				optional
		The ID value in the standard dictionary corresponding to this entry			
	normalStd				optional
		The name of the standard used to control this vocabulary			

Source

```
<xs:element name="type" type="controlledVoc">
  <xs:annotation>
    <xs:documentation xml:lang="EN">The type of entity this is. Preferrably derived from a
 controlled vocabulary.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element description

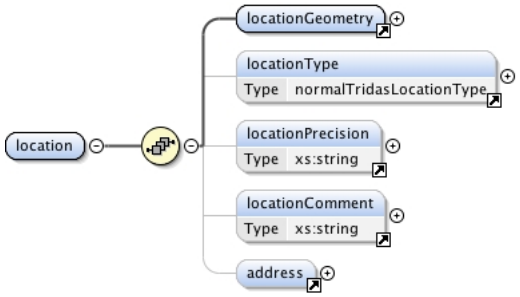
Namespace	http://www.tridas.org/1.2.1
Annotations	General description of this entity.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Elements: element, object, project, research, sample

Source

```
<xs:element name="description" type="xs:string">
  <xs:annotation>
    <xs:documentation xml:lang="EN">General description of this entity.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element location

Namespace	http://www.tridas.org/1.2.1
Annotations	Details about the geographical location of this entity.
Diagram	
Properties	content: complex
Used by	Elements: derivedSeries, element, object Complex Type: baseSeries
Model	locationGeometry , locationType{0,1} , locationPrecision{0,1} , locationComment{0,1} , address{0,1}
Children	address, locationComment, locationGeometry, locationPrecision, locationType

Instance

```
<location>
  <locationGeometry>{1,1}</locationGeometry>
  <locationType>{0,1}</locationType>
  <locationPrecision>{0,1}</locationPrecision>
  <locationComment>{0,1}</locationComment>
  <address>{0,1}</address>
</location>
```

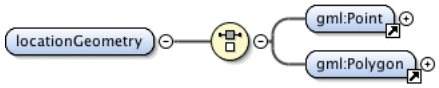
Source

```
<xs:element name="location">
  <xs:annotation>
```

```
    <xs:documentation xml:lang="EN">Details about the geographical location of this
 entity.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="locationGeometry"/>
      <xs:element ref="locationType" minOccurs="0"/>
      <xs:element ref="locationPrecision" minOccurs="0"/>
      <xs:element ref="locationComment" minOccurs="0"/>
      <xs:element ref="address" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `locationGeometry`

Namespace	http://www.tridas.org/1.2.1
Annotations	GML representation of a location. Can be either a point to represent a particular location or a polygon to represent an area or a geographical extent / bounding box.
Diagram	
Properties	content: complex
Used by	Element location
Model	gml:Point | gml:Polygon
Children	gml:Point, gml:Polygon
Instance	

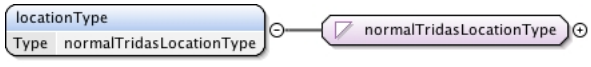
```
<locationGeometry>
  <gml:Point gml:id="" srsName="">{1,1}</gml:Point>
  <gml:Polygon gml:id="" srsName="">{1,1}</gml:Polygon>
</locationGeometry>
```

Source

```
<xs:element name="locationGeometry">
  <xs:annotation>
    <xs:documentation xml:lang="EN">GML representation of a location. Can be either
 a point to represent a particular location or a polygon to represent an area or a
 geographical extent / bounding box.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:choice>
      <xs:element ref="gml:Point"/>
      <xs:element ref="gml:Polygon"/>
    </xs:choice>
  </xs:complexType>
</xs:element>
```

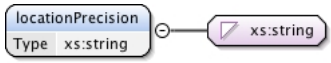
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `locationType`

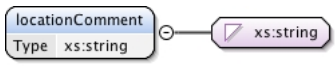
Namespace	http://www.tridas.org/1.2.1
Annotations	The type of location that the geometry field represents taken from the TRiDaS controlled vocabulary.
Diagram	
Type	normalTridasLocationType
Properties	content: simple
Facets	enumeration: Growth location enumeration: Location of use (static) enumeration: Location of use (mobile) enumeration: Current location enumeration: Manufacture location
Used by	Elements location, vocabulary/location.type

Source	<xs:element name="locationType" type="normalTridasLocationType"> <xs:annotation> <xs:documentation xml:lang="EN">The type of location that the geometry field represents taken from the TRiDaS controlled vocabulary.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

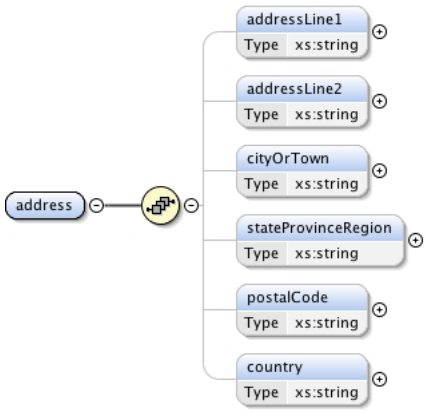
Element locationPrecision

Namespace	http://www.tridas.org/1.2.1
Annotations	Stores potential difference; number of meters difference, so 0 is exact.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element location
Source	<xs:element name="locationPrecision" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Stores potential difference; number of meters difference, so 0 is exact.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element locationComment

Namespace	http://www.tridas.org/1.2.1
Annotations	Additional information about the location, for example, point taken from center or corner of area, which corner
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element location
Source	<xs:element name="locationComment" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Additional information about the location, for example, point taken from center or corner of area, which corner</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element address

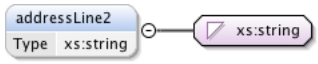
Namespace	http://www.tridas.org/1.2.1
Annotations	Address information about this location
Diagram	

Properties	content: complex
Used by	Elements: laboratory, location
Model	addressLine1{0,1} , addressLine2{0,1} , cityOrTown{0,1} , stateProvinceRegion{0,1} , postalCode{0,1} , country{0,1}
Children	addressLine1, addressLine2, cityOrTown, country, postalCode, stateProvinceRegion
Instance	<address> <addressLine1>{0,1}</addressLine1> <addressLine2>{0,1}</addressLine2> <cityOrTown>{0,1}</cityOrTown> <stateProvinceRegion>{0,1}</stateProvinceRegion> <postalCode>{0,1}</postalCode> <country>{0,1}</country> </address>
Source	<xs:element name="address"> <xs:annotation> <xs:documentation xml:lang="EN">Address information about this location</ xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="addressLine1" type="xs:string" minOccurs="0"/> <xs:element name="addressLine2" type="xs:string" minOccurs="0"/> <xs:element name="cityOrTown" type="xs:string" minOccurs="0"/> <xs:element name="stateProvinceRegion" type="xs:string" minOccurs="0"/> <xs:element name="postalCode" type="xs:string" minOccurs="0"/> <xs:element name="country" type="xs:string" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

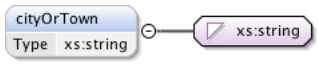
Element address / addressLine1

Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0
Source	<xs:element name="addressLine1" type="xs:string" minOccurs="0"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element address / addressLine2

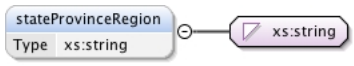
Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0
Source	<xs:element name="addressLine2" type="xs:string" minOccurs="0"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element address / cityOrTown

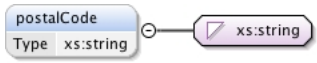
Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	xs:string
Properties	content: simple

	minOccurs: 0
Source	`<xs:element name="cityOrTown" type="xs:string" minOccurs="0"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

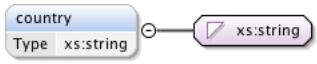
Element address / stateProvinceRegion

Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0
Source	`<xs:element name="stateProvinceRegion" type="xs:string" minOccurs="0"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element address / postalCode

Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0
Source	`<xs:element name="postalCode" type="xs:string" minOccurs="0"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element address / country

Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0
Source	`<xs:element name="country" type="xs:string" minOccurs="0"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

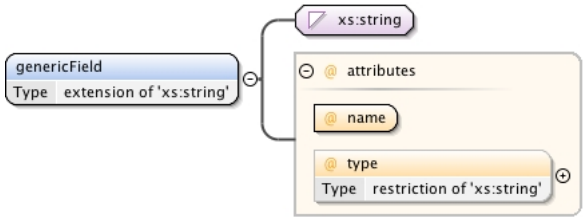
Element file

Namespace	http://www.tridas.org/1.2.1
Annotations	Filename of a file associated with this entity.
Diagram	
Properties	content: complex
Used by	Elements: element, object, project, sample
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **xlink:href** | anyURI | | | required
Source	`<xs:element name="file">` `  <xs:annotation>`

```
    <xs:documentation xml:lang="EN">Filename of a file associated with this entity.</
xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:attribute ref="xlink:href" use="required"/>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `genericField`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard`
Diagram	

Type	extension of xs:string

Properties

content:	`complex`

Used by

Elements	derivedSeries, element, measurementSeries, object, project, radius, sample
Complex Type	baseSeries

Attributes

QName	Type	Fixed	Default	Use
name				required
	`Name of the field.`			
type	restriction of xs:string			optional
	`The data type that this field contains.`			

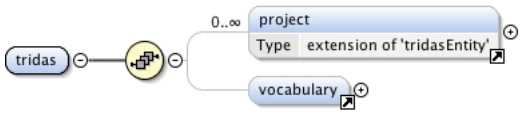
Source

```
<xs:element name="genericField">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Generic field for storing key/value pairs for data not
 currently supported in the TRiDaS standard</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:simpleContent>
      <xs:extension base="xs:string">
        <xs:attribute name="name" use="required">
          <xs:annotation>
            <xs:documentation>Name of the field.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
        <xs:attribute name="type" use="optional">
          <xs:annotation>
            <xs:documentation>The data type that this field contains.</xs:documentation>
          </xs:annotation>
          <xs:simpleType>
            <xs:restriction base="xs:string">
              <xs:enumeration value="xs:string"/>
              <xs:enumeration value="xs:boolean"/>
              <xs:enumeration value="xs:int"/>
              <xs:enumeration value="xs:float"/>
              <xs:enumeration value="xs:date"/>
              <xs:enumeration value="xs:dateTime"/>
              <xs:enumeration value="xs:duration"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:attribute>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

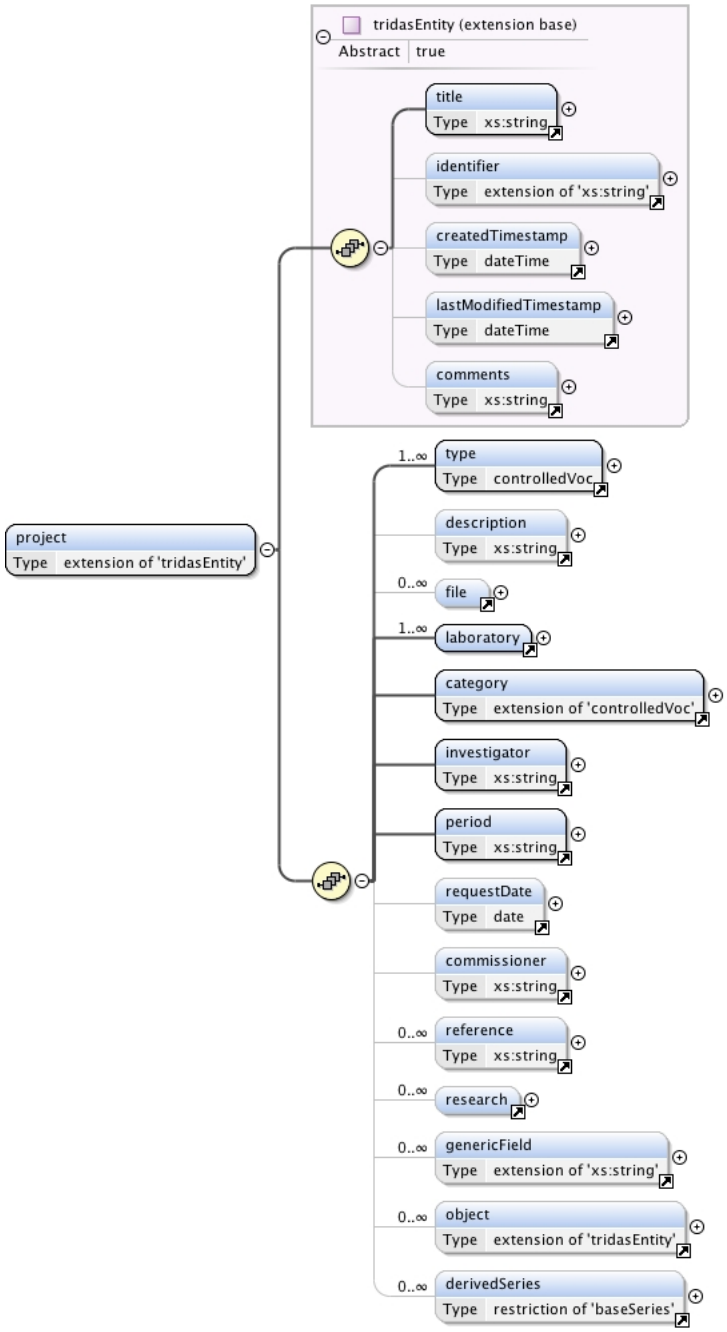
Element `tridas`

Namespace	http://www.tridas.org/1.2.1

Diagram	
Properties	content: complex
Model	project* , vocabulary{0,1}
Children	project, vocabulary
Instance	<tridas> <project>{0,unbounded}</project> <vocabulary>{0,1}</vocabulary> </tridas>
Source	<xs:element name="tridas"> <xs:complexType> <xs:sequence> <xs:element ref="project" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="vocabulary" minOccurs="0" maxOccurs="1"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

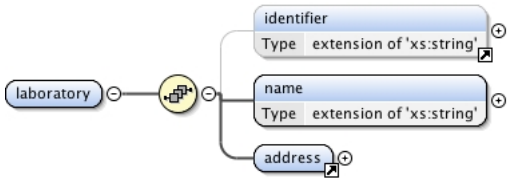
Element project

Namespace	http://www.tridas.org/1.2.1
Annotations	A project is defined by a laboratory and encompasses dendrochronological research of a particular object or group of objects. Examples include: the dating of a building; the research of forest dynamics in a stand of living trees; the dating of all Rembrandt paintings in a museum. What is considered a 'project' is up to the laboratory performing the research. It could be the dating of a group of objects, but the laboratory can also decide to define a separate project for each object. Therefore, a project can have one or more objects associated with it.

Diagram	
Type	extension of tridasEntity
Type hierarchy	• tridasEntity
Properties	content: complex
Used by	Element tridas
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , type+ , description{0,1} , file* , laboratory+ , category , investigator , period , requestDate{0,1} , commissioner{0,1} , reference* , research* , genericField* , object* , derivedSeries*
Children	category, comments, commissioner, createdTimestamp, derivedSeries, description, file, genericField, identifier, investigator, laboratory, lastModifiedTimestamp, object, period, reference, requestDate, research, title, type
Instance	<project> <title>{1,1}</title> <identifier domain="">{0,1}</identifier> <createdTimestamp certainty="">{0,1}</createdTimestamp> <lastModifiedTimestamp certainty="">{0,1}</lastModifiedTimestamp> <comments>{0,1}</comments> </project>

Source	<xs:element name="project"> <xs:annotation> <xs:documentation xml:lang="EN">A project is defined by a laboratory and encompasses dendrochronological research of a particular object or group of objects. Examples include: the dating of a building; the research of forest dynamics in a stand of living trees; the dating of all Rembrandt paintings in a museum. What is considered a 'project' is up to the laboratory performing the research. It could be the dating of a group of objects, but the laboratory can also decide to define a separate project for each object. Therefore, a project can have one or more objects associated with it.</xs:documentation> </xs:annotation> <xs:complexType> <xs:complexContent> <xs:extension base="tridasEntity"> <xs:sequence> <xs:element ref="type" maxOccurs="unbounded"/> <xs:element ref="description" minOccurs="0"/> <xs:element ref="file" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="laboratory" maxOccurs="unbounded"/> <xs:element ref="category"/> <xs:element ref="investigator"/> <xs:element ref="period"/> <xs:element ref="requestDate" minOccurs="0"/> <xs:element ref="commissioner" minOccurs="0"/> <xs:element ref="reference" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="research" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="object" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="derivedSeries" minOccurs="0" maxOccurs="unbounded"/> </xs:sequence> </xs:extension> </xs:complexContent> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

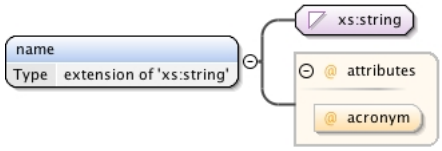
Element laboratory

Namespace	http://www.tridas.org/1.2.1
Annotations	The dendrochronological research laboratory where this work was done.
Diagram	
Properties	content: complex
Used by	Element project
Model	identifier{0,1} , name , address
Children	address, identifier, name
Instance	<laboratory> <identifier domain="">{0,1}</identifier> <name acronym="">{1,1}</name> <address>{1,1}</address> </laboratory>
Source	<xs:element name="laboratory"> <xs:annotation> <xs:documentation xml:lang="EN">The dendrochronological research laboratory where this work was done.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element ref="identifier" minOccurs="0"> <xs:annotation> <xs:documentation xml:lang="EN">Identifier for the laboratory.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="name"> <xs:complexType> <xs:annotation> <xs:documentation xml:lang="EN">Name of the laboratory.</xs:documentation> </xs:annotation>

```
          <xs:simpleContent>
            <xs:extension base="xs:string">
              <xs:attribute name="acronym" use="optional">
                <xs:annotation>
                  <xs:documentation>Acronym of the laboratory.</xs:documentation>
                </xs:annotation>
              </xs:attribute>
            </xs:extension>
          </xs:simpleContent>
        </xs:complexType>
      </xs:element>
      <xs:element ref="address"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `laboratory / name`

Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	extension of xs:string
Properties	content: complex

Attributes

QName	Type	Fixed	Default	Use
acronym				optional
	Acronym of the laboratory.			

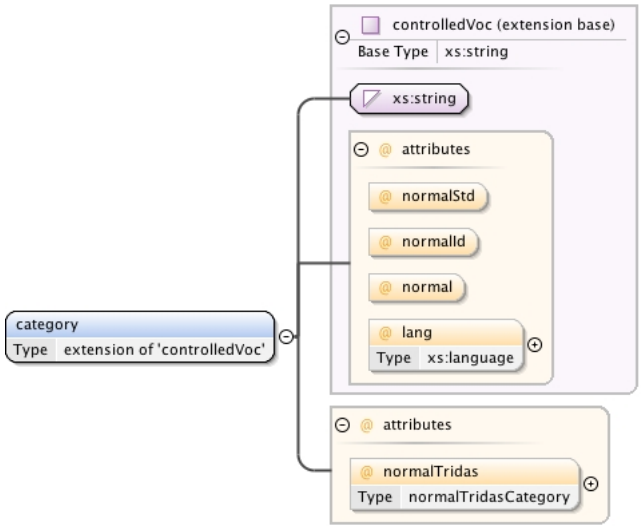
Source

```
<xs:element name="name">
  <xs:complexType>
    <xs:annotation>
      <xs:documentation xml:lang="EN">Name of the laboratory.</xs:documentation>
    </xs:annotation>
    <xs:simpleContent>
      <xs:extension base="xs:string">
        <xs:attribute name="acronym" use="optional">
          <xs:annotation>
            <xs:documentation>Acronym of the laboratory.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `category`

Namespace	http://www.tridas.org/1.2.1
Annotations	Category of research this project falls into. Preferably from a controlled vocabulary.

Diagram	
Type	extension of controlledVoc
Type hierarchy	• xs:string • controlledVoc
Properties	content: complex
Used by	Elements project, vocabulary/project.category

Attributes

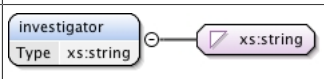
QName	Type	Fixed	Default	Use
lang	xs:language			optional
	The language this term is in. Default is EN if not specified.			
normal				optional
	The normalised name for this entry			
normalId				optional
	The ID value in the standard dictionary corresponding to this entry			
normalStd				optional
	The name of the standard used to control this vocabulary			
normalTridas	normalTridasCategory			optional
	TRiDaS controlled vocabulary of research categories.			

Source

```
<xs:element name="category">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Category of research this project falls into.
 Preferably from a controlled vocabulary.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="controlledVoc">
        <xs:attribute name="normalTridas" type="normalTridasCategory">
          <xs:annotation>
            <xs:documentation>TRiDaS controlled vocabulary of research categories.</
xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

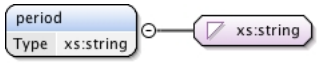
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element investigator

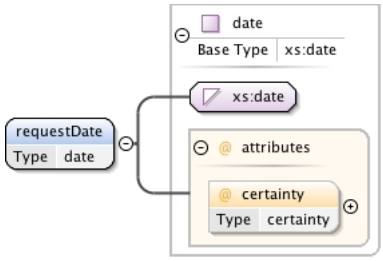
Namespace	http://www.tridas.org/1.2.1
Annotations	Principal investigator of this project.
Diagram	

Type	xs:string
Properties	content: simple
Used by	Element project
Source	<xs:element name="investigator" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Principal investigator of this project.</ xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element period

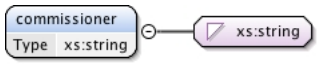
Namespace	http://www.tridas.org/1.2.1
Annotations	When the dendrochronological project took place. Could consist of a start- and end-date. If unknown it should be estimated.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element project
Source	<xs:element name="period" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">When the dendrochronological project took place. Could consist of a start- and end-date. If unknown it should be estimated.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element requestDate

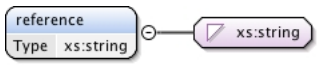
Namespace	http://www.tridas.org/1.2.1
Annotations	Date of the request for dendrochronology. If unknown it should be estimated.
Diagram	
Type	date
Properties	content: complex
Used by	Element project
Attributes	QName: certainty; Type: certainty; Fixed: ; Default: ; Use: optional
Source	<xs:element name="requestDate" type="date"> <xs:annotation> <xs:documentation xml:lang="EN">Date of the request for dendrochronology. If unknown it should be estimated.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element commissioner

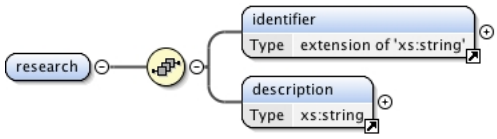
Namespace	http://www.tridas.org/1.2.1

Annotations	The person/organisation who commissioned the project.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element project
Source	<xs:element name="commissioner" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">The person/organisation who commissioned the project.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element reference

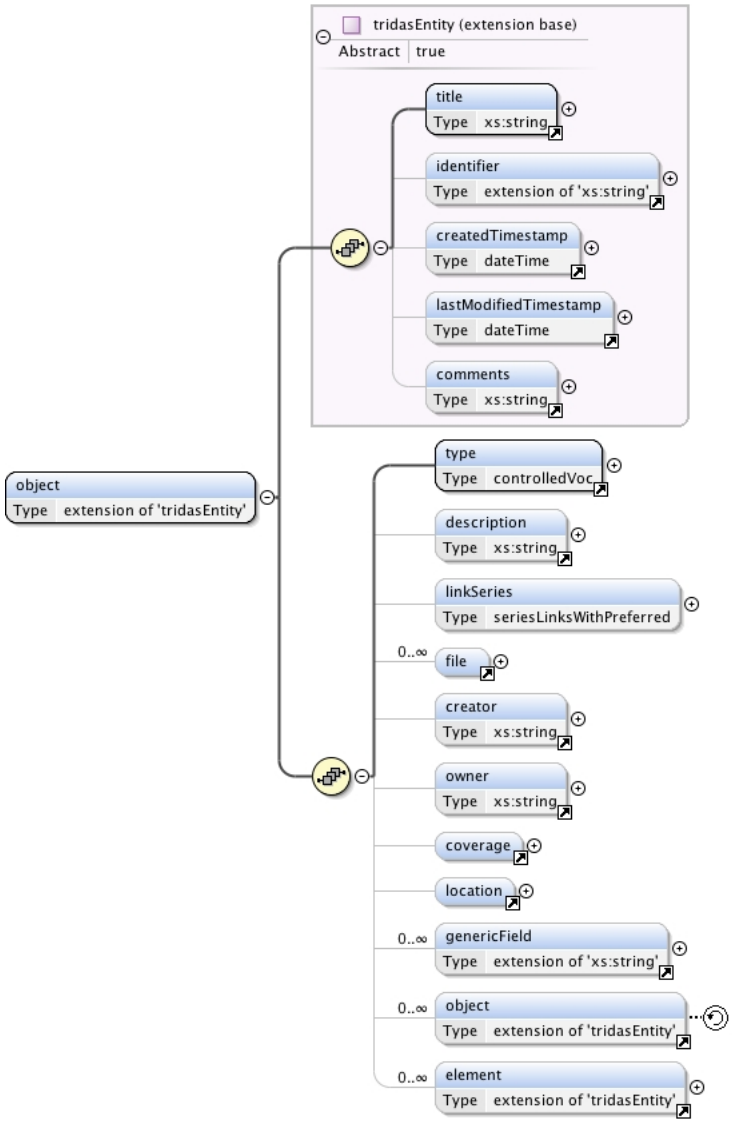
Namespace	http://www.tridas.org/1.2.1
Annotations	Citations of publications relating to this project.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element project
Source	<xs:element name="reference" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Citations of publications relating to this project.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element research

Namespace	http://www.tridas.org/1.2.1
Annotations	National/International system in which the research project is registered.
Diagram	
Properties	content: complex
Used by	Element project
Model	identifier , description
Children	description, identifier
Instance	<research> <identifier domain="">{1,1}</identifier> <description>{1,1}</description> </research>
Source	<xs:element name="research"> <xs:annotation> <xs:documentation xml:lang="EN">National/International system in which the research project is registered.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element ref="identifier"/> <xs:element ref="description"/> </xs:sequence> </xs:complexType>

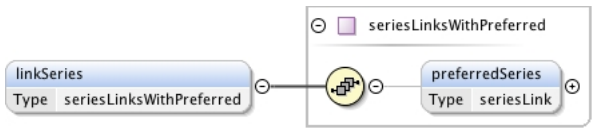
	`</xs:element>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `object`

Namespace	http://www.tridas.org/1.2.1
Annotations	An object is the item to be investigated. Examples include: violin; excavation site; painting on a wooden panel; water well; church; carving; ship; forest. An object could also be more specific, for example: mast of a ship; roof of a church. Depending on the object type various descriptions are made possible. An object can have one or more elements and can also refer to another (sub) object. For instance a single file may contain three objects: an archaeological site object, within which there is a building object, within which there is a beam object. The list of possible object types is extensible and is thus flexible enough to incorporate the diversity of data required by the dendro community. Only information that is essential for dendrochronological research is recorded here. Other related data may be provided in the form of a link to an external database such as a museum catalogue.
Diagram	
Type	extension of tridasEntity
Type hierarchy	• tridasEntity
Properties	content: `complex`
Used by	Elements object, project
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , type , description{0,1} , linkSeries{0,1} , file* , creator{0,1} , owner{0,1} , coverage{0,1} , location{0,1} , genericField* , object* , element*

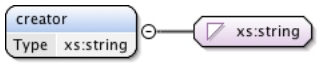
Children	comments, coverage, createdTimestamp, creator, description, element, file, genericField, identifier, lastModifiedTimestamp, linkSeries, location, object, owner, title, type
Instance	<object> <title>{1,1}</title> <identifier domain="">{0,1}</identifier> <createdTimestamp certainty="">{0,1}</createdTimestamp> <lastModifiedTimestamp certainty="">{0,1}</lastModifiedTimestamp> <comments>{0,1}</comments> </object>
Source	<xs:element name="object"> <xs:annotation> <xs:documentation xml:lang="EN">An object is the item to be investigated. Examples include: violin; excavation site; painting on a wooden panel; water well; church; carving; ship; forest. An object could also be more specific, for example: mast of a ship; roof of a church. Depending on the object type various descriptions are made possible. An object can have one or more elements and can also refer to another (sub) object. For instance a single file may contain three objects: an archaeological site object, within which there is a building object, within which there is a beam object. The list of possible object types is extensible and is thus flexible enough to incorporate the diversity of data required by the dendro community. Only information that is essential for dendrochronological research is recorded here. Other related data may be provided in the form of a link to an external database such as a museum catalogue.</xs:documentation> </xs:annotation> <xs:complexType> <xs:complexContent> <xs:extension base="tridasEntity"> <xs:sequence> <xs:element ref="type"/> <xs:element ref="description" minOccurs="0"/> <xs:element name="linkSeries" type="seriesLinksWithPreferred" minOccurs="0" maxOccurs="1"/> <xs:element ref="file" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="creator" minOccurs="0"/> <xs:element ref="owner" minOccurs="0"/> <xs:element ref="coverage" minOccurs="0"/> <xs:element ref="location" minOccurs="0"/> <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="object" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="element" minOccurs="0" maxOccurs="unbounded"/> </xs:sequence> </xs:extension> </xs:complexContent> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `object / linkSeries`

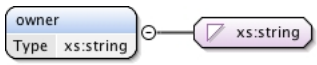
Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	seriesLinksWithPreferred
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	preferredSeries{0,1}
Children	preferredSeries
Instance	<linkSeries> <preferredSeries>{0,1}</preferredSeries> </linkSeries>
Source	<xs:element name="linkSeries" type="seriesLinksWithPreferred" minOccurs="0" maxOccurs="1"/> >
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `creator`

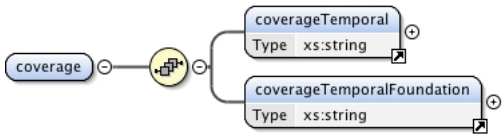
Namespace	http://www.tridas.org/1.2.1

Annotations	Name of creator, place of the workshop/wharf etc.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element object
Source	<xs:element name="creator" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Name of creator, place of the workshop/wharf etc.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element owner

Namespace	http://www.tridas.org/1.2.1
Annotations	Name of the owner of the physical object.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element object
Source	<xs:element name="owner" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Name of the owner of the physical object.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element coverage

Namespace	http://www.tridas.org/1.2.1
Annotations	Details on the time period this object covers.
Diagram	
Properties	content: complex
Used by	Element object
Model	coverageTemporal , coverageTemporalFoundation
Children	coverageTemporal, coverageTemporalFoundation
Instance	<coverage> <coverageTemporal>{1,1}</coverageTemporal> <coverageTemporalFoundation>{1,1}</coverageTemporalFoundation> </coverage>
Source	<xs:element name="coverage"> <xs:annotation> <xs:documentation xml:lang="EN">Details on the time period this object covers.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element ref="coverageTemporal"/> <xs:element ref="coverageTemporalFoundation"/> </xs:sequence> </xs:complexType>

	`</xs:element>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `coverageTemporal`

Namespace	http://www.tridas.org/1.2.1
Annotations	`If the date is already known in more or less detail: historical period (broad). Equivalent to Dublin Core term 'temporal'.`
Diagram	
Type	xs:string
Properties	content: `simple`
Used by	Element coverage

Source	`<xs:element name="coverageTemporal" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">If the date is already known in more or less detail: historical period (broad). Equivalent to Dublin Core term 'temporal'.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `coverageTemporalFoundation`

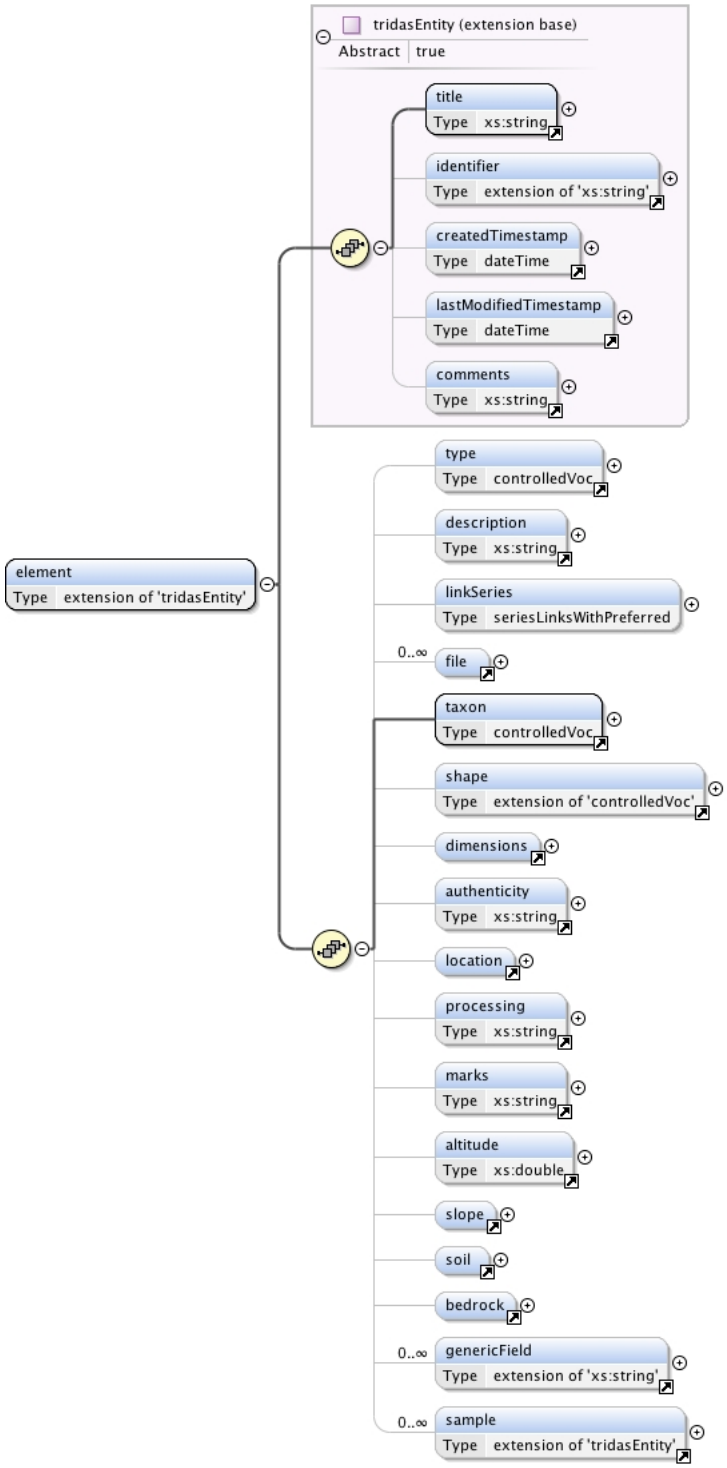
Namespace	http://www.tridas.org/1.2.1
Annotations	`Method of dating support (e.g. archive sources, inscriptions, stratigraphic context, associated finds, typology, stylistic aspects, carpenter marks, radiocarbon, OSL, other methods).`
Diagram	
Type	xs:string
Properties	content: `simple`
Used by	Element coverage

Source	`<xs:element name="coverageTemporalFoundation" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Method of dating support (e.g. archive sources, inscriptions, stratigraphic context, associated finds, typology, stylistic aspects, carpenter marks, radiocarbon, OSL, other methods).</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `element`

Namespace	http://www.tridas.org/1.2.1
Annotations	`An element is a piece of wood originating from a single tree. Examples include: one plank of a water well; a single wooden panel in a painting; the left-hand back plate of a violin; one beam in a roof; a tree trunk preserved in the soil; a living tree. The element is a specific part of exactly one object or sub object. An object will often consist of more than one element, e.g., when dealing with the staves (elements) of a barrel (object). One or more samples can be taken from an element and an element may be dated using one or more derivedSeries.`

Diagram	
Type	extension of tridasEntity
Type hierarchy	• tridasEntity
Properties	content: complex
Used by	Element object
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , type{0,1} , description{0,1} , linkSeries{0,1} , file* , taxon , shape{0,1} , dimensions{0,1} , authenticity{0,1} , location{0,1} , processing{0,1} , marks{0,1} , altitude{0,1} , slope{0,1} , soil{0,1} , bedrock{0,1} , genericField* , sample*
Children	altitude, authenticity, bedrock, comments, createdTimestamp, description, dimensions, file, genericField, identifier, lastModifiedTimestamp, linkSeries, location, marks, processing, sample, shape, slope, soil, taxon, title, type
Instance	<element> <title>{1,1}</title>

```
  <identifier domain="">{0,1}</identifier>
  <createdTimestamp certainty="">{0,1}</createdTimestamp>
  <lastModifiedTimestamp certainty="">{0,1}</lastModifiedTimestamp>
  <comments>{0,1}</comments>
</element>
```

Source

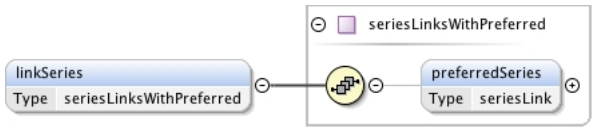
```
<xs:element name="element">
  <xs:annotation>
    <xs:documentation xml:lang="EN">An element is a piece of wood originating from a
 single tree. Examples include: one plank of a water well; a single wooden panel in
 a painting; the left-hand back plate of a violin; one beam in a roof; a tree trunk
 preserved in the soil; a living tree. The element is a specific part of exactly one
 object or sub object. An object will often consist of more than one element, e.g., when
 dealing with the staves (elements) of a barrel (object). One or more samples can be
 taken from an element and an element may be dated using one or more derivedSeries.</
xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="tridasEntity">
        <xs:sequence>
          <xs:element ref="type" minOccurs="0"/>
          <xs:element ref="description" minOccurs="0"/>
          <xs:element name="linkSeries" type="seriesLinksWithPreferred" minOccurs="0"
 maxOccurs="1"/>
          <xs:element ref="file" minOccurs="0" maxOccurs="unbounded"/>
          <xs:element ref="taxon"/>
          <xs:element ref="shape" minOccurs="0"/>
          <xs:element ref="dimensions" minOccurs="0"/>
          <xs:element ref="authenticity" minOccurs="0"/>
          <xs:element ref="location" minOccurs="0"/>
          <xs:element ref="processing" minOccurs="0"/>
          <xs:element ref="marks" minOccurs="0"/>
          <xs:element ref="altitude" minOccurs="0"/>
          <xs:element ref="slope" minOccurs="0"/>
          <xs:element ref="soil" minOccurs="0"/>
          <xs:element ref="bedrock" minOccurs="0"/>
          <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/>
          <xs:element ref="sample" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element element / linkSeries

Namespace: http://www.tridas.org/1.2.1

Diagram



Type: seriesLinksWithPreferred

Properties

content:	complex
minOccurs:	0
maxOccurs:	1

Model: preferredSeries{0,1}

Children: preferredSeries

Instance

```
<linkSeries>
  <preferredSeries>{0,1}</preferredSeries>
</linkSeries>
```

Source

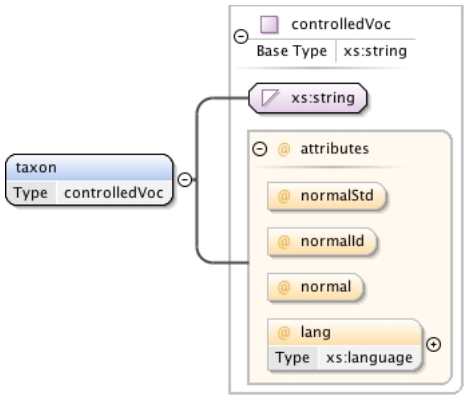
```
<xs:element name="linkSeries" type="seriesLinksWithPreferred" minOccurs="0" maxOccurs="1"/
>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element taxon

Namespace: http://www.tridas.org/1.2.1

Annotations: The most detailed taxonomic name known for this element (species, genus, family etc).

	Preferably from the Catalogue of Life (www.catalogueoflife.org) controlled vocabulary.
Diagram	
Type	controlledVoc
Properties	content: complex
Used by	Elements: element, vocabulary/element.taxon

Attributes

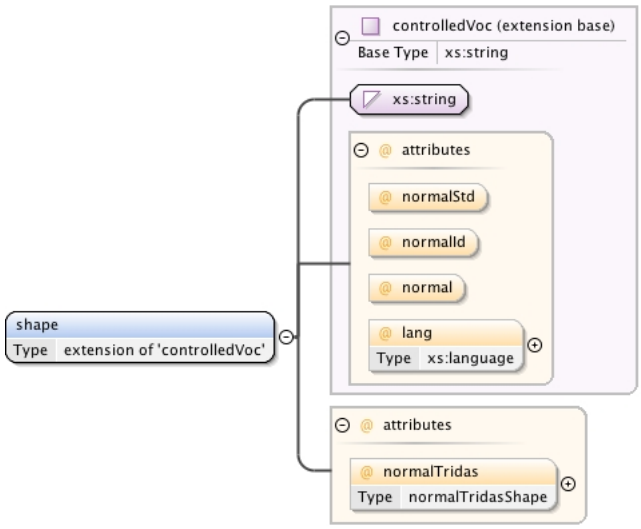
QName	Type	Fixed	Default	Use
lang	xs:language			optional
	The language this term is in. Default is EN if not specified.			
normal				optional
	The normalised name for this entry			
normalId				optional
	The ID value in the standard dictionary corresponding to this entry			
normalStd				optional
	The name of the standard used to control this vocabulary			

Source

```
<xs:element name="taxon" type="controlledVoc">
  <xs:annotation>
    <xs:documentation xml:lang="EN">The most detailed taxonomic name known for
 this element (species, genus, family etc). Preferably from the Catalogue of Life
 (www.catalogueoflife.org) controlled vocabulary.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element shape

Namespace	http://www.tridas.org/1.2.1
Annotations	The shape of this element, as a free text description, an entry from a specificed controlled vocabulary, or perferably from the TRiDaS controlled vocabulary.
Diagram	
Type	extension of controlledVoc

Type hierarchy	• xs:string • controlledVoc
Properties	content: complex
Used by	Elements: element, vocabulary/element.shape

Attributes

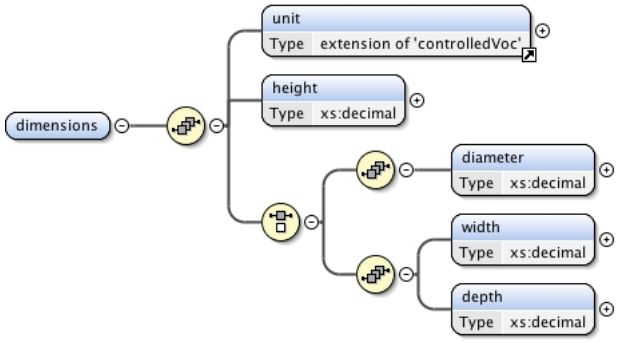
QName	Type	Fixed	Default	Use
lang	xs:language			optional
	The language this term is in. Default is EN if not specified.			
normal				optional
	The normalised name for this entry			
normalId				optional
	The ID value in the standard dictionary corresponding to this entry			
normalStd				optional
	The name of the standard used to control this vocabulary			
normalTridas	normalTridasShape			optional

Source

```
<xs:element name="shape">
  <xs:annotation>
    <xs:documentation>The shape of this element, as a free text description, an entry
 from a specificed controlled vocabulary, or perferably from the TRiDaS controlled
 vocabulary.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="controlledVoc">
        <xs:attribute name="normalTridas" type="normalTridasShape"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element dimensions

Namespace	http://www.tridas.org/1.2.1
Annotations	Physical dimensions of this element, either height and diameter, or height, width and depth. The units of these measurements must also be specified.
Diagram	
Properties	content: complex
Used by	Element: element
Model	unit , height , ((diameter) | (width , depth))
Children	depth, diameter, height, unit, width

Instance

```
<dimensions>
  <unit lang="" normal="" normalId="" normalStd="" normalTridas="">{1,1}</unit>
  <height>{1,1}</height>
</dimensions>
```

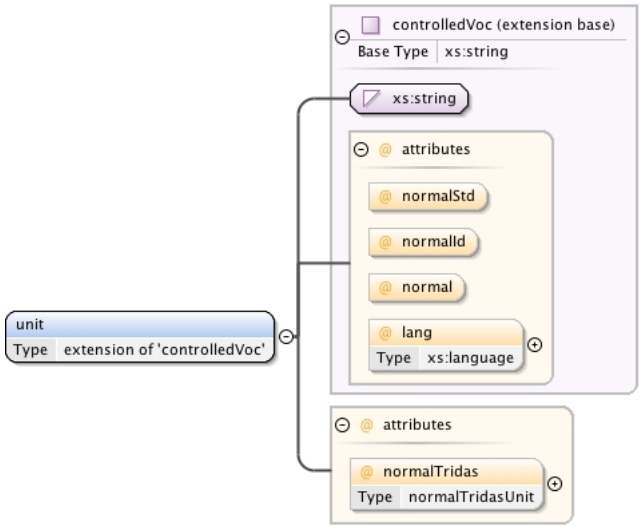
Source

```
<xs:element name="dimensions">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Physical dimensions of this element, either height
 and diameter, or height, width and depth. The units of these measurements must also be
 specified.</xs:documentation>
  </xs:annotation>
```

```
  <xs:complexType>
    <xs:sequence>
      <xs:element ref="unit"/>
      <xs:element name="height" type="xs:decimal">
        <xs:annotation>
          <xs:documentation>Height of this element. Should be used in combination with
 either diameter, or width and depth.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:choice>
        <xs:sequence>
          <xs:element name="diameter" type="xs:decimal">
            <xs:annotation>
              <xs:documentation>Diameter of this element. Used in combination with height
 when the element is a tree.</xs:documentation>
            </xs:annotation>
          </xs:element>
        </xs:sequence>
        <xs:sequence>
          <xs:element name="width" type="xs:decimal">
            <xs:annotation>
              <xs:documentation>Width of the element.</xs:documentation>
            </xs:annotation>
          </xs:element>
          <xs:element name="depth" type="xs:decimal">
            <xs:annotation>
              <xs:documentation>Depth of the element.</xs:documentation>
            </xs:annotation>
          </xs:element>
        </xs:sequence>
      </xs:choice>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `unit`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Measurement units used for these value, preferrably taken from the TRiDaS controlled vocabulary`
Diagram	
Type	extension of controlledVoc
Type hierarchy	• xs:string • controlledVoc
Properties	content: `complex`
Used by	Elements: dimensions, values, vocabulary/global.unit

Attributes

QName	Type	Fixed	Default	Use
lang	xs:language			optional
	`The language this term is in. Default is EN if not specified.`			

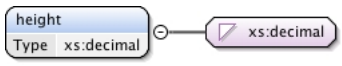
	QName	Type	Fixed	Default	Use
	normal				optional
		The normalised name for this entry			
	normalId				optional
		The ID value in the standard dictionary corresponding to this entry			
	normalStd				optional
		The name of the standard used to control this vocabulary			
	normalTridas	normalTridasUnit			optional

Source

```
<xs:element name="unit">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Measurement units used for these value, preferrably
 taken from the TRiDaS controlled vocabulary</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="controlledVoc">
        <xs:attribute name="normalTridas" type="normalTridasUnit"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element dimensions / height

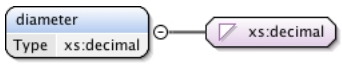
Namespace	http://www.tridas.org/1.2.1
Annotations	Height of this element. Should be used in combination with either diameter, or width and depth.
Diagram	
Type	xs:decimal
Properties	content: simple

Source

```
<xs:element name="height" type="xs:decimal">
  <xs:annotation>
    <xs:documentation>Height of this element. Should be used in combination with either
 diameter, or width and depth.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element dimensions / diameter

Namespace	http://www.tridas.org/1.2.1
Annotations	Diameter of this element. Used in combination with height when the element is a tree.
Diagram	
Type	xs:decimal
Properties	content: simple

Source

```
<xs:element name="diameter" type="xs:decimal">
  <xs:annotation>
    <xs:documentation>Diameter of this element. Used in combination with height when the
 element is a tree.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element dimensions / width

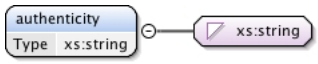
Namespace	http://www.tridas.org/1.2.1
Annotations	Width of the element.

Diagram	
Type	xs:decimal
Properties	content: simple
Source	<xs:element name="width" type="xs:decimal"> <xs:annotation> <xs:documentation>Width of the element.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

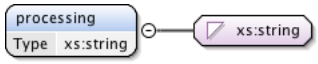
Element dimensions / depth

Namespace	http://www.tridas.org/1.2.1
Annotations	Depth of the element.
Diagram	
Type	xs:decimal
Properties	content: simple
Source	<xs:element name="depth" type="xs:decimal"> <xs:annotation> <xs:documentation>Depth of the element.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element authenticity

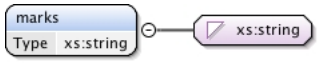
Namespace	http://www.tridas.org/1.2.1
Annotations	Whether this element is original, a repair or later addition etc.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element element
Source	<xs:element name="authenticity" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Whether this element is original, a repair or later addition etc.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element processing

Namespace	http://www.tridas.org/1.2.1
Annotations	Processing (carved, sawn etc.) rafting marks etc.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element element
Source	<xs:element name="processing" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Processing (carved, sawn etc.) rafting marks etc.</xs:documentation> </xs:annotation>

	`</xs:element>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `marks`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Carpenter marks, inscriptions etc`
Diagram	
Type	xs:string
Properties	content: `simple`
Used by	Element element

`Source`	`<xs:element name="marks" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Carpenter marks, inscriptions etc</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

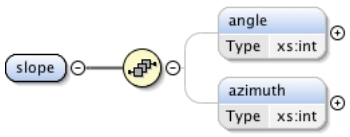
Element `altitude`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Altitude in metres if this element is a standing tree in situ.`
Diagram	
Type	xs:double
Properties	content: `simple`
Used by	Element element

`Source`	`<xs:element name="altitude" type="xs:double">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Altitude in metres if this element is a standing tree in situ.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `slope`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Only relevant if this element is a standing tree. Contains details about the slope this tree was growing on.`
Diagram	
Properties	content: `complex`
Used by	Element element
Model	angle{0,1} , azimuth{0,1}
Children	angle, azimuth

`Instance`	`<slope>`
	`  <angle>{0,1}</angle>`
	`  <azimuth>{0,1}</azimuth>`
	`</slope>`

`Source`	`<xs:element name="slope">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Only relevant if this element is a standing tree. Contains details about the slope this tree was growing on.</xs:documentation>`

```
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="angle" type="xs:int" minOccurs="0">
        <xs:annotation>
          <xs:documentation xml:lang="EN">Angle of slope from horizontal in degrees</
xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="azimuth" type="xs:int" minOccurs="0">
        <xs:annotation>
          <xs:documentation xml:lang="EN">Angle in degrees from north along which the
 slope lies</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `slope / angle`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Angle of slope from horizontal in degrees`
Diagram	
Type	xs:int
Properties	content: `simple` minOccurs: `0`

Source	`<xs:element name="angle" type="xs:int" minOccurs="0">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Angle of slope from horizontal in degrees</`
	`xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

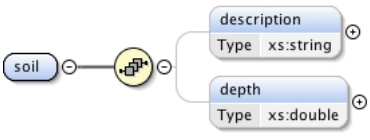
Element `slope / azimuth`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Angle in degrees from north along which the slope lies`
Diagram	
Type	xs:int
Properties	content: `simple` minOccurs: `0`

Source	`<xs:element name="azimuth" type="xs:int" minOccurs="0">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Angle in degrees from north along which the slope`
	` lies</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

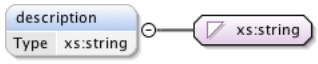
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `soil`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Only relevant if this element is a standing tree. Contains details of the soil the tree was growing in.`
Diagram	

Properties	content: complex
Used by	Element element
Model	description{0,1} , depth{0,1}
Children	depth, description
Instance	<soil> <description>{0,1}</description> <depth>{0,1}</depth> </soil>
Source	<xs:element name="soil"> <xs:annotation> <xs:documentation xml:lang="EN">Only relevant if this element is a standing tree. Contains details of the soil the tree was growing in.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="description" type="xs:string" minOccurs="0"> <xs:annotation> <xs:documentation xml:lang="EN">General description of the soil type</xs:documentation> </xs:annotation> </xs:element> <xs:element name="depth" type="xs:double" minOccurs="0"> <xs:annotation> <xs:documentation xml:lang="EN">Depth of soil in centimetres</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element soil / description

Namespace	http://www.tridas.org/1.2.1
Annotations	General description of the soil type
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0
Source	<xs:element name="description" type="xs:string" minOccurs="0"> <xs:annotation> <xs:documentation xml:lang="EN">General description of the soil type</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element soil / depth

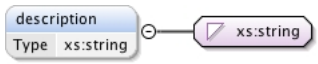
Namespace	http://www.tridas.org/1.2.1
Annotations	Depth of soil in centimetres
Diagram	
Type	xs:double
Properties	content: simple minOccurs: 0
Source	<xs:element name="depth" type="xs:double" minOccurs="0"> <xs:annotation> <xs:documentation xml:lang="EN">Depth of soil in centimetres</xs:documentation> </xs:annotation> </xs:element>

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element bedrock

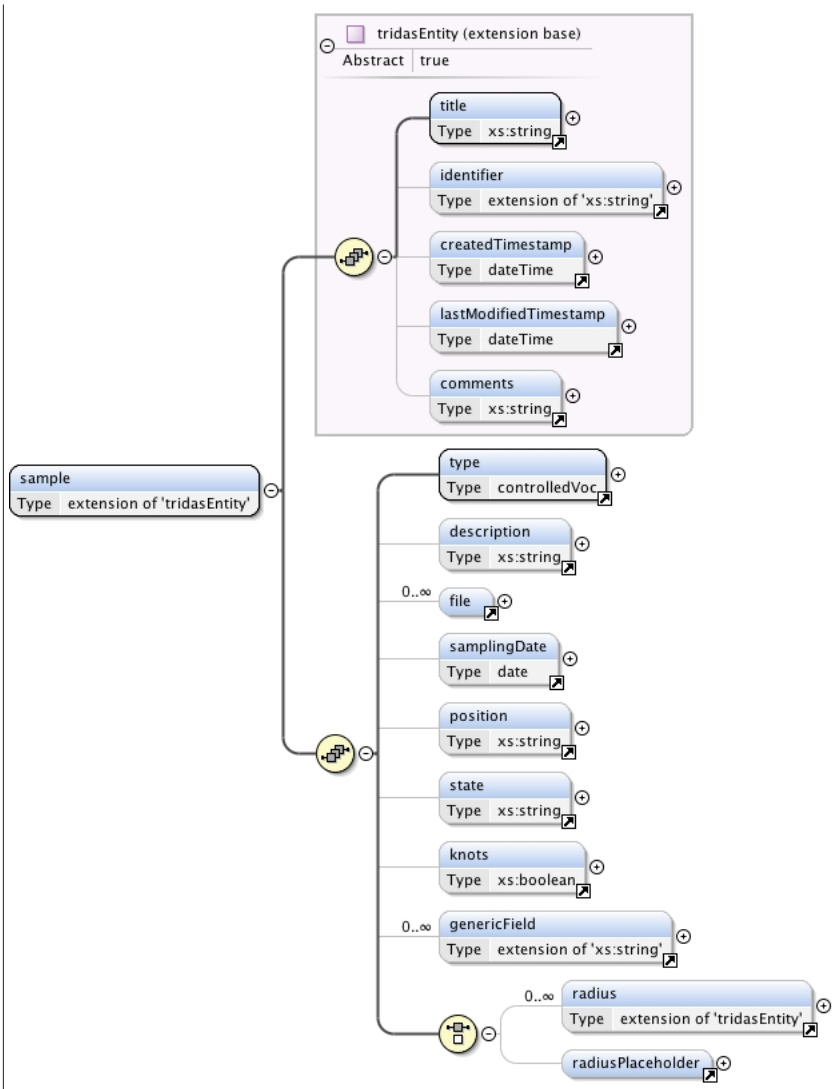
Namespace	http://www.tridas.org/1.2.1
Annotations	Only relevant if this element is a standing tree. Contains details of the bedrock below where the tree was growing.
Diagram	
Properties	content: complex
Used by	Element element
Model	description{0,1}
Children	description
Instance	<bedrock> <description>{0,1}</description> </bedrock>
Source	<xs:element name="bedrock"> <xs:annotation> <xs:documentation xml:lang="EN">Only relevant if this element is a standing tree. Contains details of the bedrock below where the tree was growing.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="description" type="xs:string" minOccurs="0"> <xs:annotation> <xs:documentation xml:lang="EN">General description of the underlying bedrock</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element bedrock / description

Namespace	http://www.tridas.org/1.2.1
Annotations	General description of the underlying bedrock
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 0
Source	<xs:element name="description" type="xs:string" minOccurs="0"> <xs:annotation> <xs:documentation xml:lang="EN">General description of the underlying bedrock</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element sample

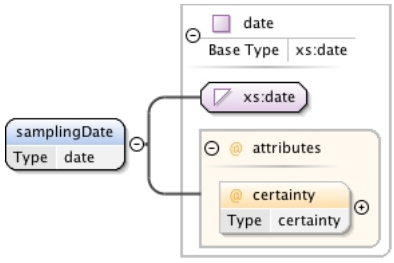
Namespace	http://www.tridas.org/1.2.1
Annotations	A sample is a physical specimen or non-physical representation of an element. Examples include: core from a living tree; core from a rafter in a church roof; piece of charcoal from an archaeological trench; slice from a pile used in a pile foundation; wax imprint of the outer end of a plank; photo of a back plate of a string instrument. Note that a sample always exists and that it can either be physical (e.g. a core) or representative (e.g. a picture). A sample is taken from exactly one element and can be represented by one or more radii.

Diagram	
Type	extension of tridasEntity
Type hierarchy	• tridasEntity
Properties	content: complex
Used by	Element element
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , type , description{0,1} , file* , samplingDate{0,1} , position{0,1} , state{0,1} , knots{0,1} , genericField* , (radius* | radiusPlaceholder{0,1})
Children	comments, createdTimestamp, description, file, genericField, identifier, knots, lastModifiedTimestamp, position, radius, radiusPlaceholder, samplingDate, state, title, type
Instance	<sample> <title>{1,1}</title> <identifier domain="">{0,1}</identifier> <createdTimestamp certainty="">{0,1}</createdTimestamp> <lastModifiedTimestamp certainty="">{0,1}</lastModifiedTimestamp> <comments>{0,1}</comments> </sample>
Source	<xs:element name="sample"> <xs:annotation> <xs:documentation xml:lang="EN">A sample is a physical specimen or non-physical representation of an element. Examples include: core from a living tree; core from a rafter in a church roof; piece of charcoal from an archaeological trench; slice from a pile used in a pile foundation; wax imprint of the outer end of a plank; photo of a back plate of a string instrument. Note that a sample always exists and that it can either be physical (e.g. a core) or representative (e.g. a picture). A sample is taken from exactly one element and can be represented by one or more radii.</xs:documentation> </xs:annotation> <xs:complexType> <xs:complexContent>

```
      <xs:extension base="tridasEntity">
        <xs:sequence>
          <xs:element ref="type"/>
          <xs:element ref="description" minOccurs="0"/>
          <xs:element ref="file" minOccurs="0" maxOccurs="unbounded"/>
          <xs:element ref="samplingDate" minOccurs="0"/>
          <xs:element ref="position" minOccurs="0"/>
          <xs:element ref="state" minOccurs="0"/>
          <xs:element ref="knots" minOccurs="0"/>
          <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/>
          <xs:choice>
            <xs:element ref="radius" minOccurs="0" maxOccurs="unbounded"/>
            <xs:element ref="radiusPlaceholder" minOccurs="0"/>
          </xs:choice>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `samplingDate`

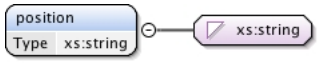
Namespace	http://www.tridas.org/1.2.1
Annotations	`Date the sample was taken`
Diagram	
Type	date
Properties	content: `complex`
Used by	Element sample

Attributes	QName	Type	Fixed	Default	Use
	certainty	certainty			optional

Source	`<xs:element name="samplingDate" type="date">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Date the sample was taken</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

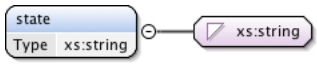
Element `position`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Description of the position in the element where this sample was taken from`
Diagram	
Type	xs:string
Properties	content: `simple`
Used by	Element sample

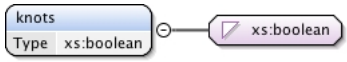
Source	`<xs:element name="position" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Description of the position in the element where this sample was taken from</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `state`

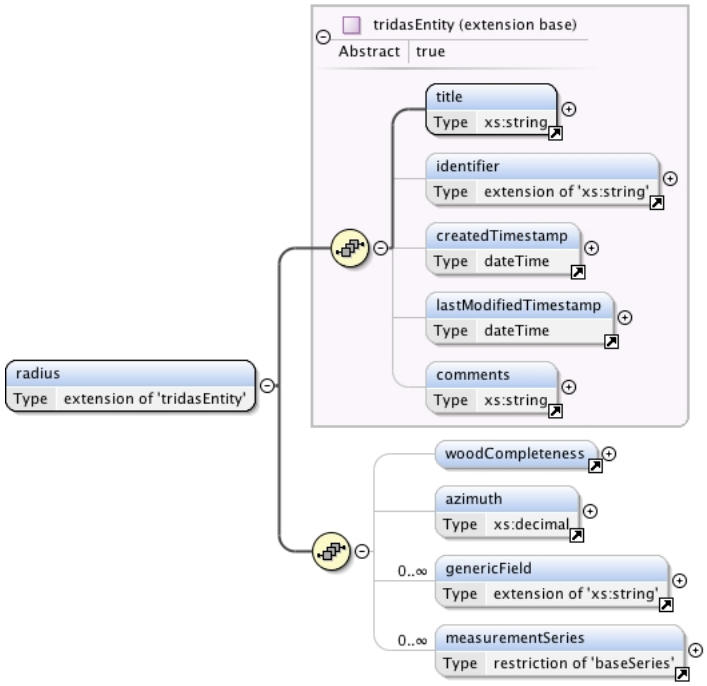
Namespace	http://www.tridas.org/1.2.1
Annotations	State of the material (dry/wet/conserved/burned, woodworm, rot, cracks) things that indicate the quality of the measurements.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element sample
Source	<xs:element name="state" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">State of the material (dry/wet/conserved/burned, woodworm, rot, cracks) things that indicate the quality of the measurements.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `knots`

Namespace	http://www.tridas.org/1.2.1
Annotations	Are knots present in the sample?
Diagram	
Type	xs:boolean
Properties	content: simple
Used by	Element sample
Source	<xs:element name="knots" type="xs:boolean"> <xs:annotation> <xs:documentation xml:lang="EN">Are knots present in the sample?</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

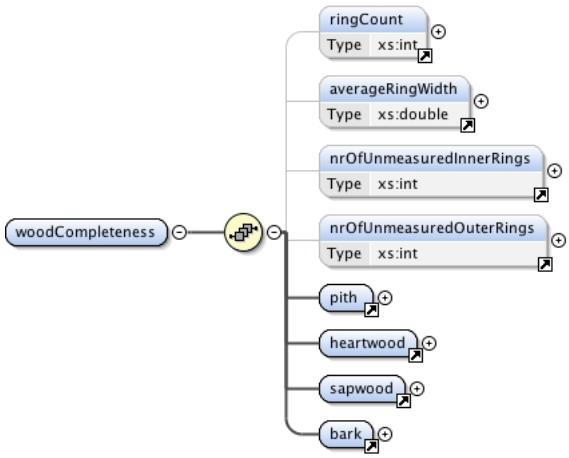
Element `radius`

Namespace	http://www.tridas.org/1.2.1
Annotations	A radius is a line from pith to bark along which the measurements are taken. A radius is derived from exactly one sample. It can be measured more than once resulting in multiple measurementSeries.

Diagram	
Type	extension of tridasEntity
Type hierarchy	• tridasEntity
Properties	content: complex
Used by	Element sample
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , woodCompleteness{0,1} , azimuth{0,1} , genericField* , measurementSeries*
Children	azimuth, comments, createdTimestamp, genericField, identifier, lastModifiedTimestamp, measurementSeries, title, woodCompleteness
Instance	<radius> <title>{1,1}</title> <identifier domain="">{0,1}</identifier> <createdTimestamp certainty="">{0,1}</createdTimestamp> <lastModifiedTimestamp certainty="">{0,1}</lastModifiedTimestamp> <comments>{0,1}</comments> </radius>
Source	<xs:element name="radius"> <xs:annotation> <xs:documentation xml:lang="EN">A radius is a line from pith to bark along which the measurements are taken. A radius is derived from exactly one sample. It can be measured more than once resulting in multiple measurementSeries.</xs:documentation> </xs:annotation> <xs:complexType> <xs:complexContent> <xs:extension base="tridasEntity"> <xs:sequence> <xs:element ref="woodCompleteness" minOccurs="0" maxOccurs="1"/> <xs:element ref="azimuth" minOccurs="0"/> <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="measurementSeries" minOccurs="0" maxOccurs="unbounded"/> </xs:sequence> </xs:extension> </xs:complexContent> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element woodCompleteness

Namespace	http://www.tridas.org/1.2.1
Annotations	Details of the pith, heartwood, sapwood and last ring under the bark. This is included under the radius or measurementSeries entities. If present in both, the measurementSeries details supercede those of the radius.

Diagram	
Properties	content: `complex`
Used by	Elements: measurementSeries, radius Complex Type: baseSeries
Model	ringCount{0,1} , averageRingWidth{0,1} , nrOfUnmeasuredInnerRings{0,1} , nrOfUnmeasuredOuterRings{0,1} , pith , heartwood , sapwood , bark
Children	averageRingWidth, bark, heartwood, nrOfUnmeasuredInnerRings, nrOfUnmeasuredOuterRings, pith, ringCount, sapwood

`Instance`	`<woodCompleteness>`
	`  <ringCount>{0,1}</ringCount>`
	`  <averageRingWidth>{0,1}</averageRingWidth>`
	`  <nrOfUnmeasuredInnerRings>{0,1}</nrOfUnmeasuredInnerRings>`
	`  <nrOfUnmeasuredOuterRings>{0,1}</nrOfUnmeasuredOuterRings>`
	`  <pith presence="">{1,1}</pith>`
	`  <heartwood presence="">{1,1}</heartwood>`
	`  <sapwood presence="">{1,1}</sapwood>`
	`  <bark presence="">{1,1}</bark>`
	`</woodCompleteness>`

`Source`	`<xs:element name="woodCompleteness">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Details of the pith, heartwood, sapwood and last ring under the bark. This is included under the radius or measurementSeries entities. If present in both, the measurementSeries details supercede those of the radius.</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="ringCount" minOccurs="0"/>`
	`  <xs:element ref="averageRingWidth" minOccurs="0"/>`
	`  <xs:element ref="nrOfUnmeasuredInnerRings" minOccurs="0"/>`
	`  <xs:element ref="nrOfUnmeasuredOuterRings" minOccurs="0"/>`
	`  <xs:element ref="pith"/>`
	`  <xs:element ref="heartwood"/>`
	`  <xs:element ref="sapwood"/>`
	`  <xs:element ref="bark"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

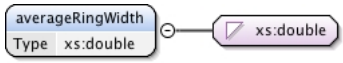
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `ringCount`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Convenience field for recording the total number of rings measured. If there is a disparity between this field and the actual number of 'values' tags, then the number of 'values' tags should be taken as definitive.`
Diagram	
Type	xs:int
Properties	content: `simple`

Used by	Element woodCompleteness
Source	<xs:element name="ringCount" type="xs:int"> <xs:annotation> <xs:documentation>Convenience field for recording the total number of rings measured. If there is a disparity between this field and the actual number of 'values' tags, then the number of 'values' tags should be taken as definitive.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element averageRingWidth

Namespace	http://www.tridas.org/1.2.1
Annotations	Convenience field for recording the average ring width of rings measured. If there is a disparity between this field and the actual 'values' tags, then the average of the 'values' tags should be taken as definitive.
Diagram	
Type	xs:double
Properties	content: simple
Used by	Element woodCompleteness
Source	<xs:element name="averageRingWidth" type="xs:double"> <xs:annotation> <xs:documentation>Convenience field for recording the average ring width of rings measured. If there is a disparity between this field and the actual 'values' tags, then the average of the 'values' tags should be taken as definitive.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element nrOfUnmeasuredInnerRings

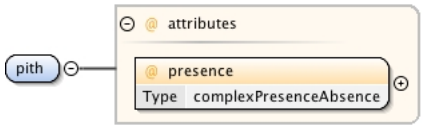
Namespace	http://www.tridas.org/1.2.1
Annotations	Field for recording whether there are any rings at the inner (i.e. towards pith) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.
Diagram	
Type	xs:int
Properties	content: simple
Used by	Element woodCompleteness
Source	<xs:element name="nrOfUnmeasuredInnerRings" type="xs:int"> <xs:annotation> <xs:documentation>Field for recording whether there are any rings at the inner (i.e. towards pith) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element nrOfUnmeasuredOuterRings

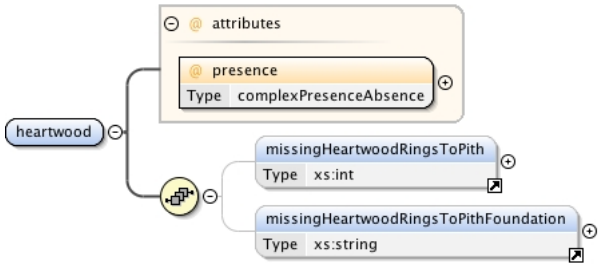
Namespace	http://www.tridas.org/1.2.1
Annotations	Field for recording whether there are any rings at the outer (i.e. towards bark) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.
Diagram	
Type	xs:int
Properties	content: simple

Used by	Element woodCompleteness
Source	<xs:element name="nrOfUnmeasuredOuterRings" type="xs:int"> <xs:annotation> <xs:documentation>Field for recording whether there are any rings at the outer (i.e. towards bark) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element pith

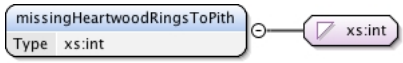
Namespace	http://www.tridas.org/1.2.1
Annotations	Whether the pith is present or absent
Diagram	
Properties	content: complex
Used by	Element woodCompleteness
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **presence** | complexPresenceAbsence | | | required
Source	<xs:element name="pith"> <xs:annotation> <xs:documentation xml:lang="EN">Whether the pith is present or absent</xs:documentation> </xs:annotation> <xs:complexType> <xs:attribute name="presence" use="required" type="complexPresenceAbsence"/> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element heartwood

Namespace	http://www.tridas.org/1.2.1
Annotations	This field records whether the outer (youngest) heartwood is present and if so whether it is complete. If the sample includes the last heartwood ring before the sapwood then it is 'complete' otherwise it is 'incomplete' or 'absent'.
Diagram	
Properties	content: complex
Used by	Element woodCompleteness
Model	missingHeartwoodRingsToPith{0,1} , missingHeartwoodRingsToPithFoundation{0,1}
Children	missingHeartwoodRingsToPith, missingHeartwoodRingsToPithFoundation
Instance	<heartwood presence=""> <missingHeartwoodRingsToPith>{0,1}</missingHeartwoodRingsToPith> <missingHeartwoodRingsToPithFoundation>{0,1}</missingHeartwoodRingsToPithFoundation> </heartwood>
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **presence** | complexPresenceAbsence | | | required

Source	<xs:element name="heartwood"> <xs:annotation> <xs:documentation xml:lang="EN">This field records whether the outer (youngest) heartwood is present and if so whether it is complete. If the sample includes the last heartwood ring before the sapwood then it is 'complete' otherwise it is 'incomplete' or 'absent'.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element ref="missingHeartwoodRingsToPith" minOccurs="0"/> <xs:element ref="missingHeartwoodRingsToPithFoundation" minOccurs="0"/> </xs:sequence> <xs:attribute name="presence" use="required" type="complexPresenceAbsence"/> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element missingHeartwoodRingsToPith

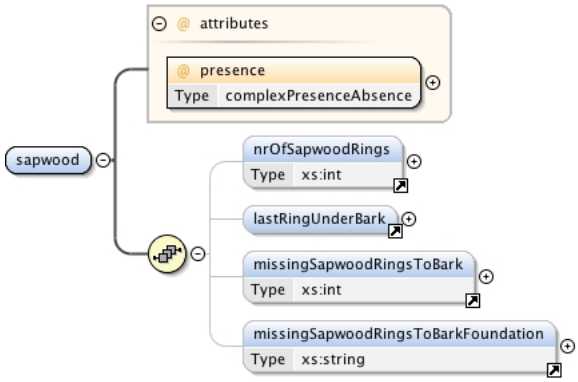
Namespace	http://www.tridas.org/1.2.1
Annotations	Estimated number of missing heartwood rings to the pith
Diagram	
Type	xs:int
Properties	content: simple
Used by	Element heartwood
Source	<xs:element name="missingHeartwoodRingsToPith" type="xs:int"> <xs:annotation> <xs:documentation xml:lang="EN">Estimated number of missing heartwood rings to the pith</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element missingHeartwoodRingsToPithFoundation

Namespace	http://www.tridas.org/1.2.1
Annotations	Description of the way the estimation of how many heartwood rings are missing was made and what the certainty is.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element heartwood
Source	<xs:element name="missingHeartwoodRingsToPithFoundation" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Description of the way the estimation of how many heartwood rings are missing was made and what the certainty is.</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element sapwood

Namespace	http://www.tridas.org/1.2.1
Annotations	Details about the sapwood

Diagram	
Properties	content: `complex`
Used by	Element woodCompleteness
Model	nrOfSapwoodRings{0,1} , lastRingUnderBark{0,1} , missingSapwoodRingsToBark{0,1} , missingSapwoodRingsToBarkFoundation{0,1}
Children	lastRingUnderBark, missingSapwoodRingsToBark, missingSapwoodRingsToBarkFoundation, nrOfSapwoodRings

Instance	<pre><sapwood presence="">
	  <nrOfSapwoodRings>{0,1}</nrOfSapwoodRings>
	  <lastRingUnderBark presence="">{0,1}</lastRingUnderBark>
	  <missingSapwoodRingsToBark>{0,1}</missingSapwoodRingsToBark>
	  <missingSapwoodRingsToBarkFoundation>{0,1}</missingSapwoodRingsToBarkFoundation>
	</sapwood></pre>

Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **presence** / complexPresenceAbsence / / / required Whether the sapwood is present or not

Source	<pre><xs:element name="sapwood">
	  <xs:annotation>
	  <xs:documentation xml:lang="EN">Details about the sapwood</xs:documentation>
	  </xs:annotation>
	  <xs:complexType>
	  <xs:sequence>
	  <xs:element ref="nrOfSapwoodRings" minOccurs="0"/>
	  <xs:element ref="lastRingUnderBark" minOccurs="0"/>
	  <xs:element ref="missingSapwoodRingsToBark" minOccurs="0"/>
	  <xs:element ref="missingSapwoodRingsToBarkFoundation" minOccurs="0"/>
	  </xs:sequence>
	  <xs:attribute name="presence" use="required" type="complexPresenceAbsence">
	  <xs:annotation>
	  <xs:documentation xml:lang="EN">Whether the sapwood is present or not</
	xs:documentation>
	  </xs:annotation>
	  </xs:attribute>
	  </xs:complexType>
	</xs:element></pre>

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

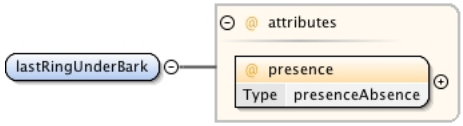
Element `nrOfSapwoodRings`

Namespace	http://www.tridas.org/1.2.1
Annotations	Number of sapwood rings measured
Diagram	
Type	xs:int
Properties	content: `simple`
Used by	Element sapwood

Source	<pre><xs:element name="nrOfSapwoodRings" type="xs:int">
	  <xs:annotation>
	  <xs:documentation xml:lang="EN">Number of sapwood rings measured</xs:documentation>
	  </xs:annotation>
	</xs:element></pre>

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `lastRingUnderBark`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Information about the last rings under the bark. If the last ring is under the bark is present, include information about the completeness of this ring and/or season of felling.`
Diagram	
Properties	content: `complex` mixed: `true`
Used by	Element sapwood
Model	

Attributes

QName	Type	Fixed	Default	Use
presence	presenceAbsence			required

Source

```
<xs:element name="lastRingUnderBark">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Information about the last rings under the bark. If
 the last ring is under the bark is present, include information about the completeness of
 this ring and/or season of felling.</xs:documentation>
  </xs:annotation>
  <xs:complexType mixed="true">
    <xs:attribute name="presence" type="presenceAbsence" use="required"/>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `missingSapwoodRingsToBark`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Estimated number of missing sapwood rings to the bark`
Diagram	
Type	xs:int
Properties	content: `simple`
Used by	Element sapwood

Source

```
<xs:element name="missingSapwoodRingsToBark" type="xs:int">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Estimated number of missing sapwood rings to the
 bark</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `missingSapwoodRingsToBarkFoundation`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Description of the way the estimation of how many sapwood rings are missing was made and what the certainty is.`
Diagram	
Type	xs:string
Properties	content: `simple`
Used by	Element sapwood

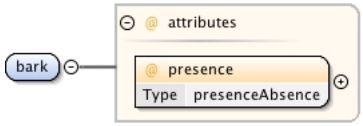
Source

```
<xs:element name="missingSapwoodRingsToBarkFoundation" type="xs:string">
```

```
  <xs:annotation>
    <xs:documentation xml:lang="EN">Description of the way the estimation of how many
 sapwood rings are missing was made and what the certainty is.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element bark

Namespace	http://www.tridas.org/1.2.1
Annotations	Bark is present or absent
Diagram	
Properties	content: complex
Used by	Element: woodCompleteness

Attributes

QName	Type	Fixed	Default	Use
presence	presenceAbsence			required

Source

```
<xs:element name="bark">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Bark is present or absent</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:attribute name="presence" use="required" type="presenceAbsence"/>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element azimuth

Namespace	http://www.tridas.org/1.2.1
Annotations	Angle in degrees from north along which this radius lies.
Diagram	
Type	xs:decimal
Properties	content: simple
Used by	Element: radius

Source

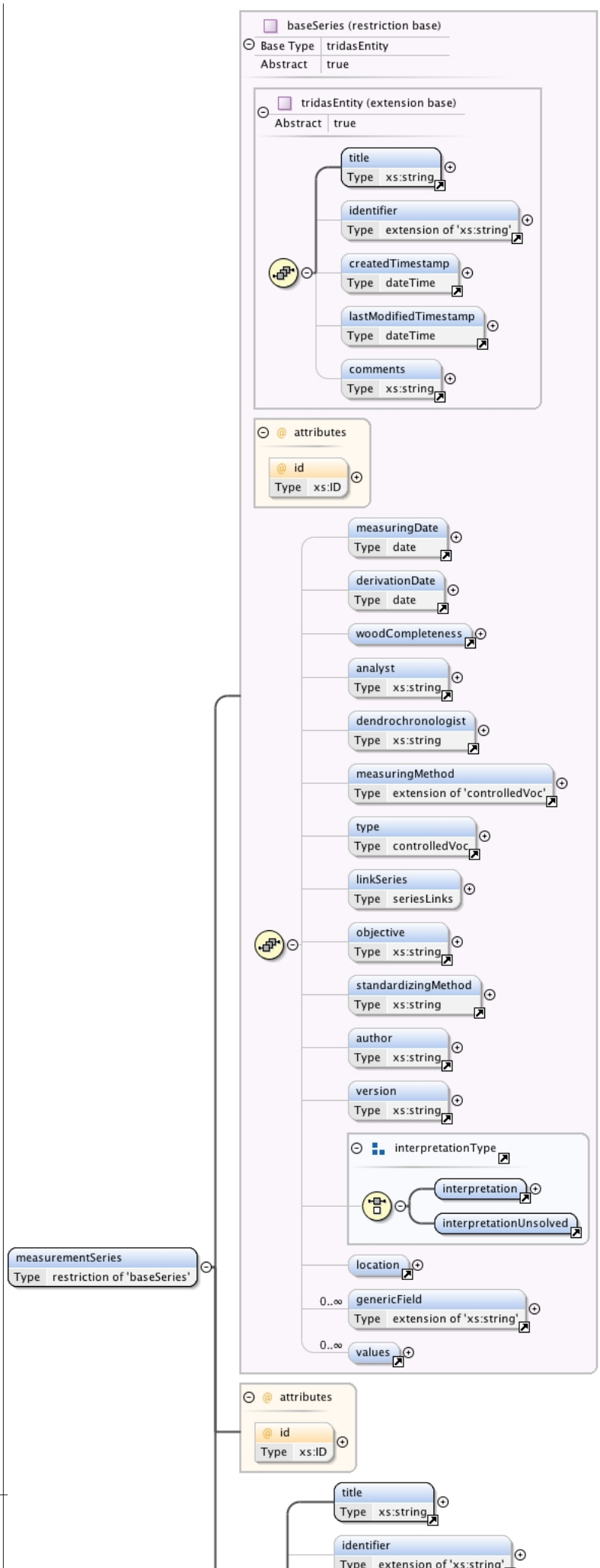
```
<xs:element name="azimuth" type="xs:decimal">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Angle in degrees from north along which this radius
 lies.</xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element measurementSeries

Namespace	http://www.tridas.org/1.2.1
Annotations	A measurementSeries is a series of direct, raw measurements along a radius. A single measurementSeries can be standardised or a collection of measurementSeries can be combined into a derivedSeries. The measurements themselves are stored separately as values.

Diagram


baseSeries (restriction base)
Base Type tridasEntity
Abstract true
tridasEntity (extension base)
Abstract true
title
Type xs:string
identifier
Type extension of 'xs:string'
createdTimestamp
Type dateTime
lastModifiedTimestamp
Type dateTime
comments
Type xs:string
attributes
id
Type xs:ID
measuringDate
Type date
derivationDate
Type date
woodCompleteness
analyst
Type xs:string
dendrochronologist
Type xs:string
measuringMethod
Type extension of 'controlledVoc'
type
Type controlledVoc
linkSeries
Type seriesLinks
objective
Type xs:string
standardizingMethod
Type xs:string
author
Type xs:string
version
Type xs:string
interpretationType
interpretation
interpretationUnsolved
location
0..∞
genericField
Type extension of 'xs:string'
0..∞
values
measurementSeries
Type restriction of 'baseSeries'
attributes
id
Type xs:ID
title
Type xs:string
identifier
Type extension of 'xs:string'

Type	restriction of baseSeries
Type hierarchy	• tridasEntity • baseSeries
Properties	content: complex
Used by	Element radius
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , measuringDate{0,1} , woodCompleteness{0,1} , analyst{0,1} , dendrochronologist{0,1} , measuringMethod , (interpretation | interpretationUnsolved) , genericField* , values*
Children	analyst, comments, createdTimestamp, dendrochronologist, genericField, identifier, interpretation, interpretationUnsolved, lastModifiedTimestamp, measuringDate, measuringMethod, title, values, woodCompleteness

Instance

```
<measurementSeries id="">
  <title>{1,1}</title>
  <identifier domain="">{0,1}</identifier>
  <createdTimestamp certainty="">{0,1}</createdTimestamp>
  <lastModifiedTimestamp certainty="">{0,1}</lastModifiedTimestamp>
  <comments>{0,1}</comments>
  <measuringDate certainty="">{0,1}</measuringDate>
  <woodCompleteness>{0,1}</woodCompleteness>
  <analyst>{0,1}</analyst>
  <dendrochronologist>{0,1}</dendrochronologist>
  <measuringMethod lang="" normal="" normalId="" normalStd="" normalTridas="">{1,1}</
measuringMethod>
  <genericField name="" type="">{0,unbounded}</genericField>
  <values>{0,unbounded}</values>
</measurementSeries>
```

Attributes

QName	Type	Fixed	Default	Use
id	xs:ID			optional

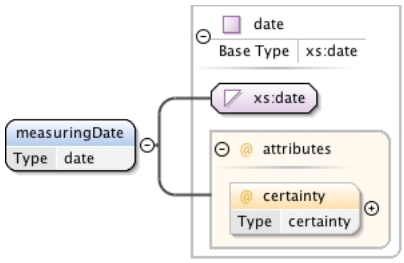
Source

```
<xs:element name="measurementSeries">
  <xs:annotation>
    <xs:documentation xml:lang="EN">A measurementSeries is a series of direct, raw
 measurements along a radius. A single measurementSeries can be standardised or a
 collection of measurementSeries can be combined into a derivedSeries. The measurements
 themselves are stored separately as values.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:restriction base="baseSeries">
        <xs:sequence>
          <xs:element ref="title"/>
          <xs:element ref="identifier" minOccurs="0"/>
          <xs:element ref="createdTimestamp" minOccurs="0"/>
          <xs:element ref="lastModifiedTimestamp" minOccurs="0"/>
          <xs:element ref="comments" minOccurs="0"/>
          <xs:element ref="measuringDate" minOccurs="0" maxOccurs="1"/>
          <xs:element ref="woodCompleteness" minOccurs="0" maxOccurs="1"/>
          <xs:element ref="analyst" minOccurs="0"/>
          <xs:element ref="dendrochronologist" minOccurs="0"/>
          <xs:element ref="measuringMethod" minOccurs="1"/>
          <xs:group ref="interpretationType" minOccurs="0"/>
          <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/>
          <xs:element ref="values" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:attribute name="id" type="xs:ID"/>
      </xs:restriction>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element measuringDate

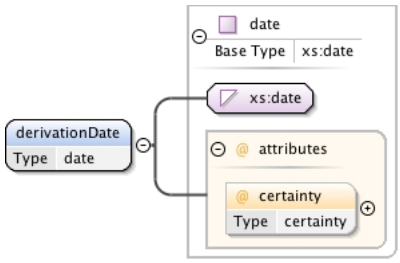
Namespace	http://www.tridas.org/1.2.1
Annotations	Date that the measurements where made.

Diagram	
Type	date
Properties	content: complex
Used by	Complex Type baseSeries Element measurementSeries
Attributes	**QName** **Type** **Fixed** **Default** **Use** **certainty** certainty optional

Source	`<xs:element name="measuringDate" type="date">`
	`  <xs:annotation>`
	`  <xs:documentation>Date that the measurements where made.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

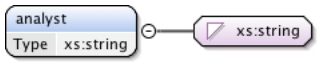
Element derivationDate

Namespace	http://www.tridas.org/1.2.1
Annotations	The date that this derivedSeries was created.
Diagram	
Type	date
Properties	content: complex
Used by	Complex Type baseSeries Element derivedSeries
Attributes	**QName** **Type** **Fixed** **Default** **Use** **certainty** certainty optional

Source	`<xs:element name="derivationDate" type="date">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">The date that this derivedSeries was created.</`
	`xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element analyst

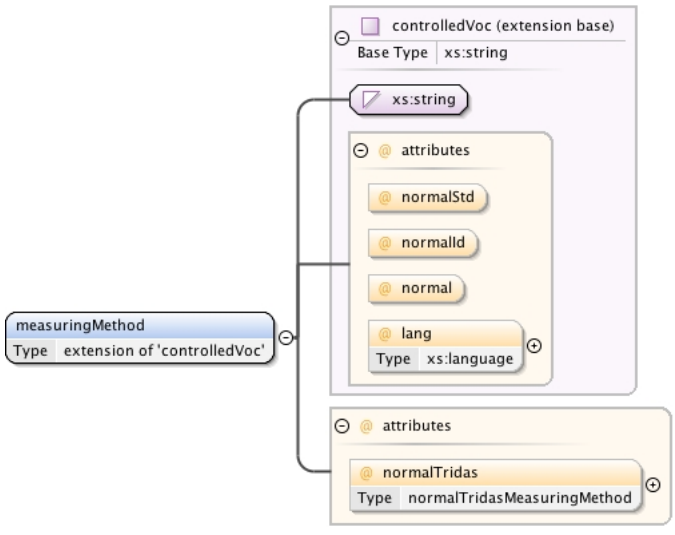
Namespace	http://www.tridas.org/1.2.1
Annotations	Name of the analyst that made the series
Diagram	
Type	xs:string

Properties	content:	simple
Used by	Complex Type	baseSeries
	Element	measurementSeries
Source	<xs:element name="analyst" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Name of the analyst that made the series</ xs:documentation> </xs:annotation> </xs:element>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Element dendrochronologist

Namespace	http://www.tridas.org/1.2.1
Annotations	Name of the dendrochronologist that oversaw the analyst
Diagram	
Type	xs:string
Properties	content: simple
Used by	Complex Type: baseSeries Element: measurementSeries
Source	<xs:element name="dendrochronologist" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Name of the dendrochronologist that oversaw the analyst</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element measuringMethod

Namespace	http://www.tridas.org/1.2.1
Annotations	Method that was used to measure this measurementSeries, preferably from the TRiDaS controlled vocabulary.
Diagram	
Type	extension of controlledVoc
Type hierarchy	• xs:string • controlledVoc
Properties	content: complex
Used by	Complex Type: baseSeries

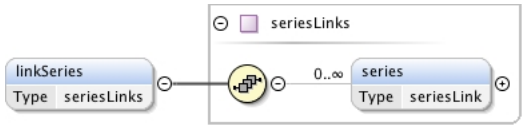
	Elements	measurementSeries, vocabulary/measurementSeries.measuringMethod			
Attributes	**QName**	**Type**	**Fixed**	**Default**	**Use**
	lang	xs:language			optional
		The language this term is in. Default is EN if not specified.			
	normal				optional
		The normalised name for this entry			
	normalId				optional
		The ID value in the standard dictionary corresponding to this entry			
	normalStd				optional
		The name of the standard used to control this vocabulary			
	normalTridas	normalTridasMeasuringMethod			optional
		TRiDaS controlled vocabulary for the method of measuring.			

Source

```
<xs:element name="measuringMethod">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Method that was used to measure this
 measurementSeries, preferably from the TRiDaS controlled vocabulary.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="controlledVoc">
        <xs:attribute name="normalTridas" type="normalTridasMeasuringMethod">
          <xs:annotation>
            <xs:documentation>TRiDaS controlled vocabulary for the method of measuring.</
xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

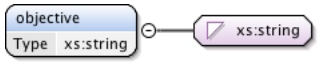
Element `baseSeries / linkSeries`

Namespace	http://www.tridas.org/1.2.1
Diagram	
Type	seriesLinks
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	series*
Children	series

Instance	`<linkSeries>`
	`  <series>{0,unbounded}</series>`
	`</linkSeries>`

Source	`<xs:element name="linkSeries" type="seriesLinks" minOccurs="0" maxOccurs="1"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `objective`

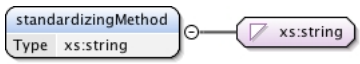
Namespace	http://www.tridas.org/1.2.1
Annotations	The reason/rationale why this series was made
Diagram	
Type	xs:string
Properties	content: simple

Used by	Complex Type: baseSeries Element: derivedSeries

Source	`<xs:element name="objective" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">The reason/rationale why this series was made</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

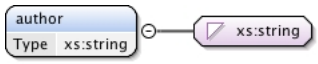
Element `standardizingMethod`

Namespace	http://www.tridas.org/1.2.1
Annotations	Numerical method used to standardise the series
Diagram	
Type	xs:string
Properties	content: simple
Used by	Complex Type: baseSeries Element: derivedSeries

Source	`<xs:element name="standardizingMethod" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Numerical method used to standardise the series</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

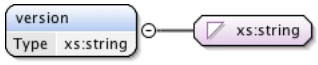
Element `author`

Namespace	http://www.tridas.org/1.2.1
Annotations	Name of the person that created this derivedSeries
Diagram	
Type	xs:string
Properties	content: simple
Used by	Complex Type: baseSeries Element: derivedSeries

Source	`<xs:element name="author" type="xs:string">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Name of the person that created this derivedSeries</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

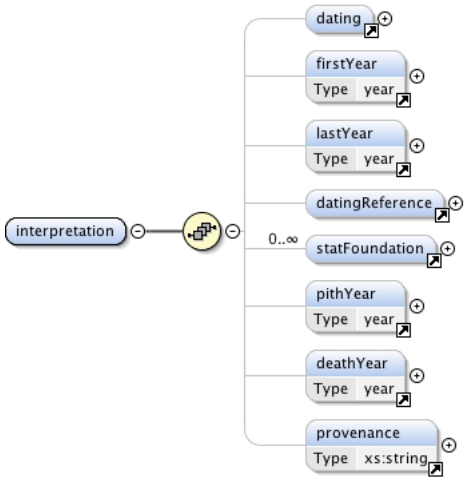
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `version`

Namespace	http://www.tridas.org/1.2.1
Annotations	Version number of this derivedSeries
Diagram	
Type	xs:string
Properties	content: simple
Used by	Complex Type: baseSeries Element: derivedSeries

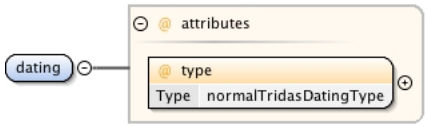
Source	<xs:element name="version" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Version number of this derivedSeries</ xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element interpretation

Namespace	http://www.tridas.org/1.2.1
Annotations	Information interpreted from the series
Diagram	
Properties	content: complex
Used by	Element Group interpretationType
Model	dating{0,1} , firstYear{0,1} , lastYear{0,1} , datingReference{0,1} , statFoundation* , pithYear{0,1} , deathYear{0,1} , provenance{0,1}
Children	dating, datingReference, deathYear, firstYear, lastYear, pithYear, provenance, statFoundation
Instance	<interpretation> <dating type="">{0,1}</dating> <firstYear certainty="" suffix="">{0,1}</firstYear> <lastYear certainty="" suffix="">{0,1}</lastYear> <datingReference>{0,1}</datingReference> <statFoundation>{0,unbounded}</statFoundation> <pithYear certainty="" suffix="">{0,1}</pithYear> <deathYear certainty="" suffix="">{0,1}</deathYear> <provenance>{0,1}</provenance> </interpretation>
Source	<xs:element name="interpretation"> <xs:annotation> <xs:documentation xml:lang="EN">Information interpreted from the series</ xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element ref="dating" minOccurs="0"/> <xs:element ref="firstYear" minOccurs="0"/> <xs:element ref="lastYear" minOccurs="0"/> <xs:element ref="datingReference" minOccurs="0"/> <xs:element ref="statFoundation" minOccurs="0" maxOccurs="unbounded"/> <xs:element ref="pithYear" minOccurs="0"/> <xs:element ref="deathYear" minOccurs="0"/> <xs:element ref="provenance" minOccurs="0"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element dating

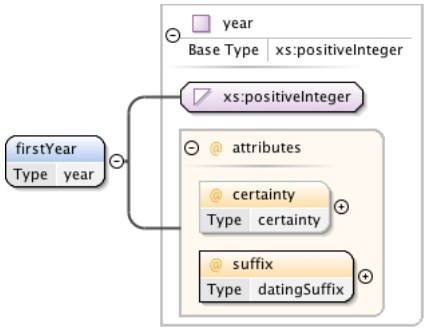
Namespace	http://www.tridas.org/1.2.1

Annotations	Information about dating
Diagram	
Properties	content: complex
Used by	Element interpretation
Attributes	**QName** **Type** **Fixed** **Default** **Use** **type** normalTridasDatingType required Field to denote dating type

Source	`<xs:element name="dating">`
	`<xs:annotation>`
	`<xs:documentation xml:lang="EN">Information about dating</xs:documentation>`
	`</xs:annotation>`
	`<xs:complexType>`
	`<xs:attribute name="type" type="normalTridasDatingType" use="required">`
	`<xs:annotation>`
	`<xs:documentation xml:lang="EN">Field to denote dating type</xs:documentation>`
	`</xs:annotation>`
	`</xs:attribute>`
	`</xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `firstYear`

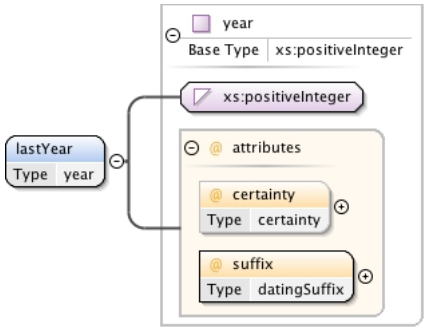
Namespace	http://www.tridas.org/1.2.1
Annotations	Year of the first measured ring. This is derived from the chronology that was used to date this series. It is not to be confused with sproutYear.
Diagram	
Type	year
Properties	content: complex
Used by	Element interpretation
Attributes	**QName** **Type** **Fixed** **Default** **Use** **certainty** certainty optional **suffix** datingSuffix required

Source	`<xs:element name="firstYear" type="year">`
	`<xs:annotation>`
	`<xs:documentation xml:lang="EN">Year of the first measured ring. This is derived from the chronology that was used to date this series. It is not to be confused with sproutYear.</xs:documentation>`
	`</xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `lastYear`

Namespace	http://www.tridas.org/1.2.1

Annotations	Year of the last measured ring. It is not to be confused with deathYear which might also include unmeasured or hypothetical rings
Diagram	
Type	year
Properties	content: complex
Used by	Element interpretation

Attributes

QName	Type	Fixed	Default	Use
certainty	certainty			optional
suffix	datingSuffix			required

Source

```
<xs:element name="lastYear" type="year">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Year of the last measured ring. It is not to be
 confused with deathYear which might also include unmeasured or hypothetical rings</
xs:documentation>
  </xs:annotation>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element datingReference

Namespace	http://www.tridas.org/1.2.1
Annotations	Chronology used to interpret the series
Diagram	
Properties	content: complex
Used by	Element interpretation
Model	linkSeries
Children	linkSeries

Instance

```
<datingReference>
  <linkSeries>{1,1}</linkSeries>
</datingReference>
```

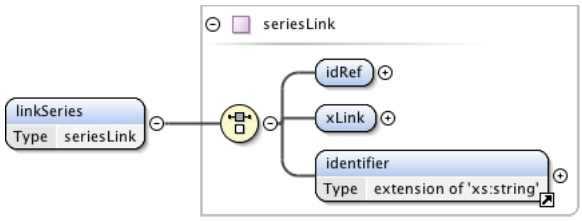
Source

```
<xs:element name="datingReference">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Chronology used to interpret the series</
xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="linkSeries" type="seriesLink"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element datingReference / linkSeries

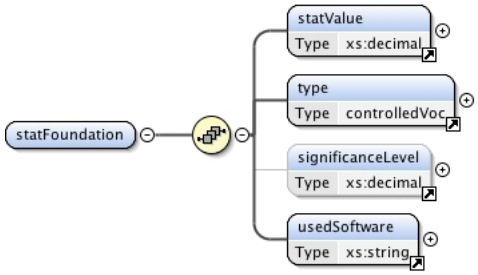
Namespace	http://www.tridas.org/1.2.1

Diagram	
Type	seriesLink
Properties	content: complex
Model	idRef | xLink | identifier
Children	idRef, identifier, xLink

Instance	<pre><linkSeries>
	  <idRef ref="">{1,1}</idRef>
	  <xLink xlink:href="">{1,1}</xLink>
	  <identifier domain="">{1,1}</identifier>
	</linkSeries></pre>

Source	<pre><xs:element name="linkSeries" type="seriesLink"/></pre>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element statFoundation

Namespace	http://www.tridas.org/1.2.1
Annotations	Container for fields that describe the statistical method used for crossdating
Diagram	
Properties	content: complex
Used by	Element interpretation
Model	statValue , type , significanceLevel{0,1} , usedSoftware
Children	significanceLevel, statValue, type, usedSoftware

Instance	<pre><statFoundation>
	  <statValue>{1,1}</statValue>
	  <type lang="" normal="" normalId="" normalStd="">{1,1}</type>
	  <significanceLevel>{0,1}</significanceLevel>
	  <usedSoftware>{1,1}</usedSoftware>
	</statFoundation></pre>

Source	<pre><xs:element name="statFoundation">
	  <xs:annotation>
	  <xs:documentation xml:lang="EN">Container for fields that describe the statistical
	 method used for crossdating</xs:documentation>
	  </xs:annotation>
	  <xs:complexType>
	  <xs:sequence>
	  <xs:element ref="statValue"/>
	  <xs:element ref="type"/>
	  <xs:element ref="significanceLevel" minOccurs="0"/>
	  <xs:element ref="usedSoftware"/>
	  </xs:sequence>
	  </xs:complexType>
	</xs:element></pre>

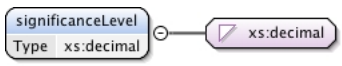
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element statValue

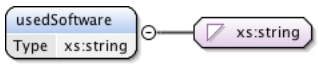
Namespace	http://www.tridas.org/1.2.1

Annotations	Statistical value used to support match with chronology
Diagram	
Type	xs:decimal
Properties	content: simple
Used by	Element statFoundation
Source	<xs:element name="statValue" type="xs:decimal"> <xs:annotation> <xs:documentation xml:lang="EN">Statistical value used to support match with chronology</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element significanceLevel

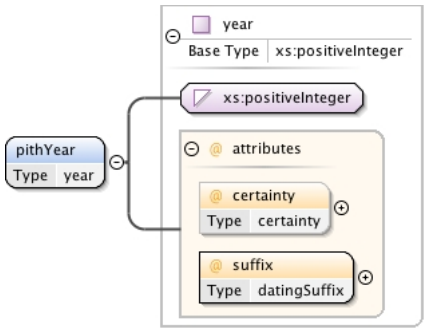
Namespace	http://www.tridas.org/1.2.1
Annotations	Significance of the statistical match with the chronology
Diagram	
Type	xs:decimal
Properties	content: simple
Used by	Element statFoundation
Source	<xs:element name="significanceLevel" type="xs:decimal"> <xs:annotation> <xs:documentation xml:lang="EN">Significance of the statistical match with the chronology</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element usedSoftware

Namespace	http://www.tridas.org/1.2.1
Annotations	Software used to perform the statistical match with the chronology
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element statFoundation
Source	<xs:element name="usedSoftware" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Software used to perform the statistical match with the chronology</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element pithYear

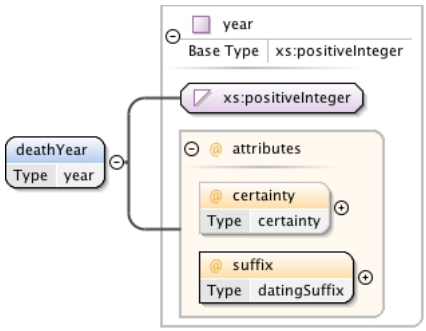
Namespace	http://www.tridas.org/1.2.1
Annotations	Estimated year that the tree sprouted

Diagram	
Type	year
Properties	content: complex
Used by	Element interpretation
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **certainty** | certainty | | | optional **suffix** | datingSuffix | | | required

Source	`<xs:element name="pithYear" type="year">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Estimated year that the tree sprouted</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element deathYear

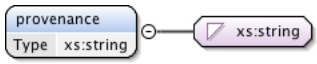
Namespace	http://www.tridas.org/1.2.1
Annotations	Estimated year of death of the tree
Diagram	
Type	year
Properties	content: complex
Used by	Element interpretation
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **certainty** | certainty | | | optional **suffix** | datingSuffix | | | required

Source	`<xs:element name="deathYear" type="year">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Estimated year of death of the tree</xs:documentation>`
	`  </xs:annotation>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element provenance

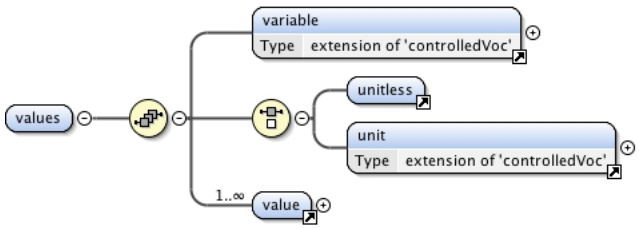
Namespace	http://www.tridas.org/1.2.1

Annotations	Estimated provenance derived from the matching chronology
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element interpretation
Source	<xs:element name="provenance" type="xs:string"> <xs:annotation> <xs:documentation xml:lang="EN">Estimated provenance derived from the matching chronology</xs:documentation> </xs:annotation> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element interpretationUnsolved

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex
Used by	Element Group interpretationType
Source	<xs:element name="interpretationUnsolved"> <xs:complexType/> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

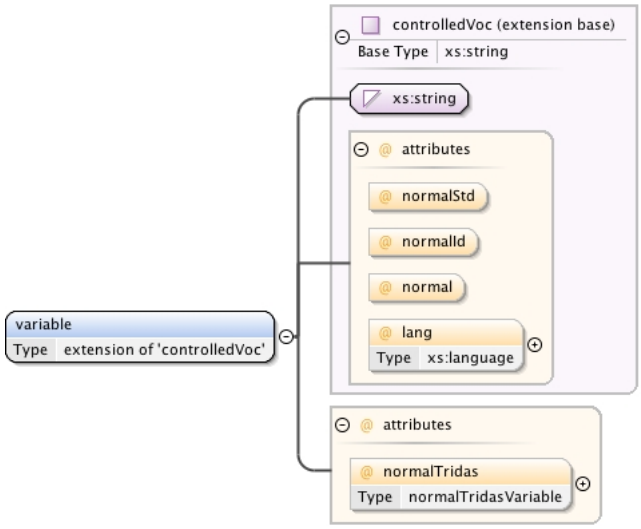
Element values

Namespace	http://www.tridas.org/1.2.1
Annotations	This is a container for a group of actual measurement values. When appropriate this container includes details on the variable being represented as well as the units used. If the values are unitless, then the special <unitless> field is used.
Diagram	
Properties	content: complex
Used by	Complex Type baseSeries Elements derivedSeries, measurementSeries
Model	variable , (unitless | unit) , value+
Children	unit, unitless, value, variable
Instance	<values> <variable lang="" normal="" normalId="" normalStd="" normalTridas="">{1,1}</variable> <value count="" value="">{1,unbounded}</value> </values>
Source	<xs:element name="values"> <xs:annotation> <xs:documentation xml:lang="EN">This is a container for a group of actual measurement values. When appropriate this container includes details on the variable being represented as well as the units used. If the values are unitless, then the special <unitless> field is used.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence>

```
      <xs:element ref="variable" minOccurs="1" maxOccurs="1"/>
      <xs:choice>
        <xs:element ref="unitless"/>
        <xs:element ref="unit"/>
      </xs:choice>
      <xs:element ref="value" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `variable`

Namespace	http://www.tridas.org/1.2.1
Annotations	Measured variable (ring width, earlywood, latewood etc) preferrably taken from the TRiDaS controlled vocabulary
Diagram	
Type	extension of controlledVoc
Type hierarchy	• xs:string • controlledVoc
Properties	content: complex
Used by	Elements: values, vocabulary/values.variable

Attributes

QName	Type	Fixed	Default	Use
lang	xs:language			optional
	The language this term is in. Default is EN if not specified.			
normal				optional
	The normalised name for this entry			
normalId				optional
	The ID value in the standard dictionary corresponding to this entry			
normalStd				optional
	The name of the standard used to control this vocabulary			
normalTridas	normalTridasVariable			optional

Source

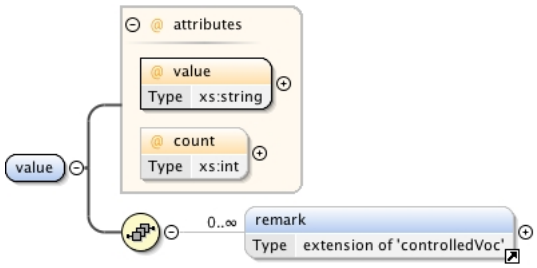
```
<xs:element name="variable">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Measured variable (ring width, earlywood, latewood
 etc) preferrably taken from the TRiDaS controlled vocabulary</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="controlledVoc">
        <xs:attribute name="normalTridas" type="normalTridasVariable"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `unitless`

Namespace	http://www.tridas.org/1.2.1
Annotations	Presence of this field denotes that hte associated values have no units. Not to be used to denote *unknown* units.
Diagram	
Properties	content: complex
Used by	Element values
Source	<xs:element name="unitless"> <xs:annotation> <xs:documentation xml:lang="EN">Presence of this field denotes that hte associated values have no units. Not to be used to denote *unknown* units.</xs:documentation> </xs:annotation> <xs:complexType/> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

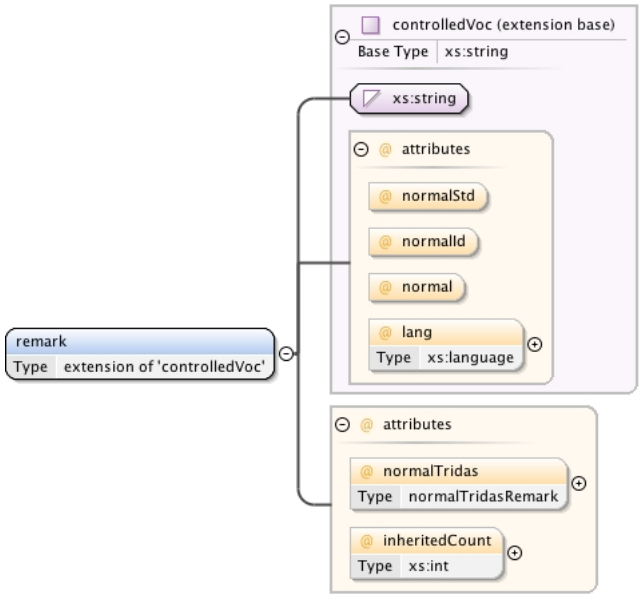
Element `value`

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex
Used by	Element values
Model	remark*
Children	remark
Instance	<value count="" value=""> <remark inheritedCount="" lang="" normal="" normalId="" normalStd="" normalTridas="">{0,unbounded}</remark> </value>
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **count** | xs:int | | | optional Optional field to denote how many underlying values went to create this value in a derivedSeries **value** | xs:string | | | required A value is the result of a single ring measurement. The type of measurement this is along with the units used are recorded in the 'values' container in the associated measurement- or derviedSeries.
Source	<xs:element name="value"> <xs:complexType> <xs:sequence> <xs:element ref="remark" minOccurs="0" maxOccurs="unbounded"/> </xs:sequence> <xs:attribute name="value" type="xs:string" use="required"> <xs:annotation> <xs:documentation xml:lang="EN">A value is the result of a single ring measurement. The type of measurement this is along with the units used are recorded in the 'values' container in the associated measurement- or derviedSeries.</xs:documentation> </xs:annotation> </xs:attribute> <xs:attribute name="count" type="xs:int" use="optional">

```
      <xs:annotation>
        <xs:documentation xml:lang="EN">Optional field to denote how many underlying
 values went to create this value in a derivedSeries</xs:documentation>
      </xs:annotation>
    </xs:attribute>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `remark`

Namespace	http://www.tridas.org/1.2.1
Annotations	Remark about this value. Remarks can be standardised to consistantly record important features like 'frost damage' - preferrably using the TRiDaS controlled vocabulary.
Diagram	
Type	extension of controlledVoc
Type hierarchy	• xs:string • controlledVoc
Properties	content: complex
Used by	Elements: value, vocabulary/values.remark

Attributes

QName	Type	Fixed	Default	Use
inheritedCount	xs:int			optional
	In derivedSeries this shows the number of constituent measurementSeries that this remark is found in.			
lang	xs:language			optional
	The language this term is in. Default is EN if not specified.			
normal				optional
	The normalised name for this entry			
normalId				optional
	The ID value in the standard dictionary corresponding to this entry			
normalStd				optional
	The name of the standard used to control this vocabulary			
normalTridas	normalTridasRemark			optional
	TRiDaS controlled vocabulary for specific remarks.			

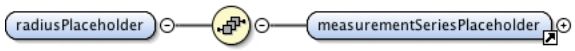
Source

```
<xs:element name="remark">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Remark about this value. Remarks can be standardised
 to consistantly record important features like 'frost damage' - preferrably using the
 TRiDaS controlled vocabulary.</xs:documentation>
```

```
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:extension base="controlledVoc">
        <xs:attribute name="normalTridas" type="normalTridasRemark">
          <xs:annotation>
            <xs:documentation xml:lang="EN">TRiDaS controlled vocabulary for specific
 remarks.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
        <xs:attribute name="inheritedCount" type="xs:int">
          <xs:annotation>
            <xs:documentation xml:lang="EN">In derivedSeries this shows the number of
 constituent measurementSeries that this remark is found in.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `radiusPlaceholder`

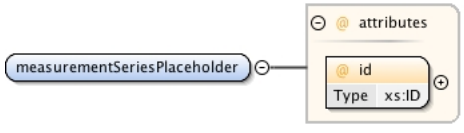
Namespace	http://www.tridas.org/1.2.1
Annotations	`This entity is used instead of a standard 'radius' when radius details are not known.`
Diagram	
Properties	content: `complex`
Used by	Element sample
Model	measurementSeriesPlaceholder
Children	measurementSeriesPlaceholder

`Instance`	`<radiusPlaceholder>`
	`  <measurementSeriesPlaceholder id="">{1,1}</measurementSeriesPlaceholder>`
	`</radiusPlaceholder>`

`Source`	`<xs:element name="radiusPlaceholder">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">This entity is used instead of a standard 'radius'`
	` when radius details are not known.</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="measurementSeriesPlaceholder"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element `measurementSeriesPlaceholder`

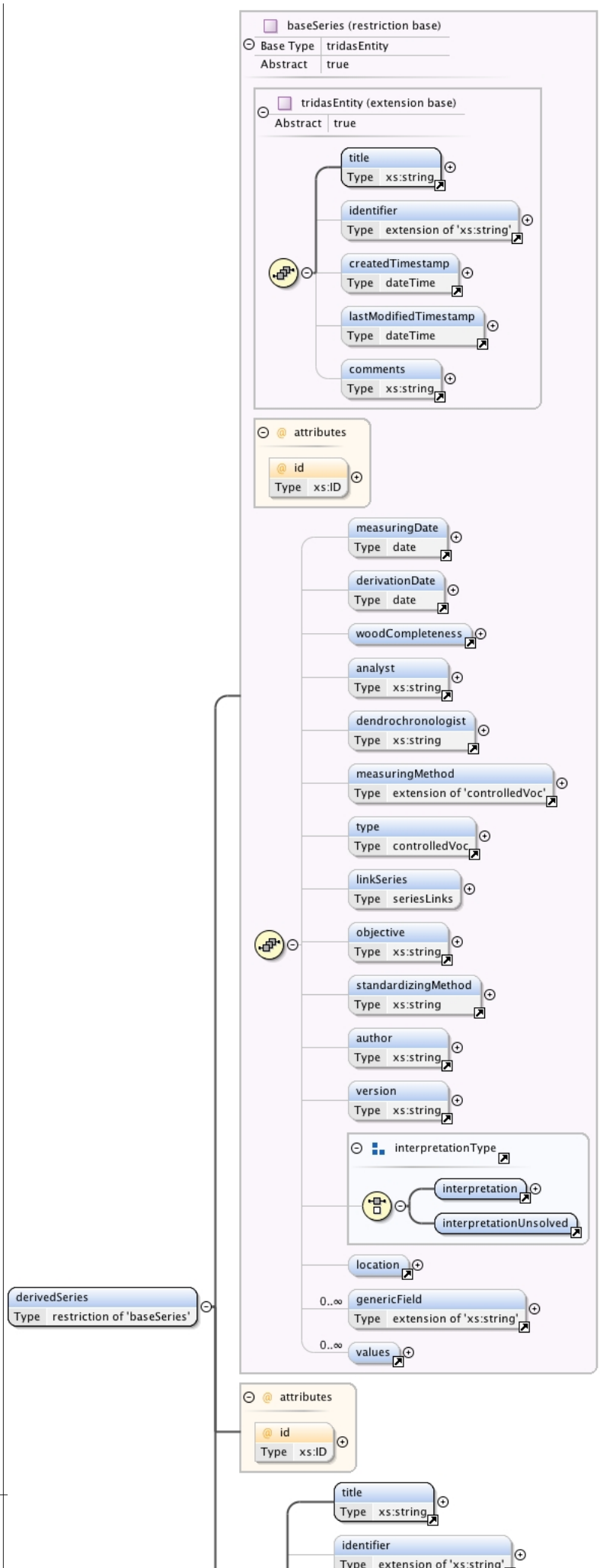
Namespace	http://www.tridas.org/1.2.1
Annotations	`If no measurementSeries information is known (e.g. if describing a derivedSeries where no measurementSeries data is available) this placeholder is used instead of a standard measurementSeries entity.`
Diagram	
Properties	content: `complex`
Used by	Element radiusPlaceholder
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **id** | xs:ID | | | required
`Source`	`<xs:element name="measurementSeriesPlaceholder">`

	<xs:annotation> <xs:documentation xml:lang="EN">If no measurementSeries information is known (e.g. if describing a derivedSeries where no measurementSeries data is available) this placeholder is used instead of a standard measurementSeries entity.</xs:documentation> </xs:annotation> <xs:complexType> <xs:attribute name="id" type="xs:ID" use="required"/> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element derivedSeries

Namespace	http://www.tridas.org/1.2.1
Annotations	A derivedSeries is a calculated series of values and is a minor modification of the 'v-series' concept proposed by Brewer et al (2009). Examples include: index; average of a collection of measurementSeries such as a chronology. A derivedSeries is derived from one or more measurementSeries and has multiple values associated with it.

Diagram


baseSeries (restriction base)
Base Type tridasEntity
Abstract true
tridasEntity (extension base)
Abstract true
title
Type xs:string
identifier
Type extension of 'xs:string'
createdTimestamp
Type dateTime
lastModifiedTimestamp
Type dateTime
comments
Type xs:string
attributes
id
Type xs:ID
measuringDate
Type date
derivationDate
Type date
woodCompleteness
analyst
Type xs:string
dendrochronologist
Type xs:string
measuringMethod
Type extension of 'controlledVoc'
type
Type controlledVoc
linkSeries
Type seriesLinks
objective
Type xs:string
standardizingMethod
Type xs:string
author
Type xs:string
version
Type xs:string
interpretationType
interpretation
interpretationUnsolved
location
derivedSeries
Type restriction of 'baseSeries'
0..∞
genericField
Type extension of 'xs:string'
0..∞
values
attributes
id
Type xs:ID
title
Type xs:string
identifier

Type	restriction of baseSeries
Type hierarchy	• tridasEntity • baseSeries
Properties	content: complex
Used by	Element project
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , derivationDate{0,1} , type , linkSeries , objective{0,1} , standardizingMethod{0,1} , author{0,1} , version{0,1} , (interpretation | interpretationUnsolved) , location{0,1} , genericField* , values*
Children	author, comments, createdTimestamp, derivationDate, genericField, identifier, interpretation, interpretationUnsolved, lastModifiedTimestamp, linkSeries, location, objective, standardizingMethod, title, type, values, version

Instance

```
<derivedSeries id="">
  <title>{1,1}</title>
  <identifier domain="">{0,1}</identifier>
  <createdTimestamp certainty="">{0,1}</createdTimestamp>
  <lastModifiedTimestamp certainty="">{0,1}</lastModifiedTimestamp>
  <comments>{0,1}</comments>
  <derivationDate certainty="">{0,1}</derivationDate>
  <type lang="" normal="" normalId="" normalStd="">{1,1}</type>
  <linkSeries>{1,1}</linkSeries>
  <objective>{0,1}</objective>
  <standardizingMethod>{0,1}</standardizingMethod>
  <author>{0,1}</author>
  <version>{0,1}</version>
  <location>{0,1}</location>
  <genericField name="" type="">{0,unbounded}</genericField>
  <values>{0,unbounded}</values>
</derivedSeries>
```

Attributes

QName	Type	Fixed	Default	Use
id	xs:ID			optional

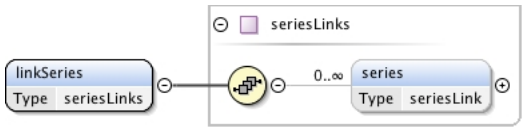
Source

```
<xs:element name="derivedSeries">
  <xs:annotation>
    <xs:documentation xml:lang="EN">A derivedSeries is a calculated series of values
 and is a minor modification of the 'v-series' concept proposed by Brewer et al (2009).
 Examples include: index; average of a collection of measurementSeries such as a
 chronology. A derivedSeries is derived from one or more measurementSeries and has
 multiple values associated with it.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:complexContent>
      <xs:restriction base="baseSeries">
        <xs:sequence>
          <xs:element ref="title"/>
          <xs:element ref="identifier" minOccurs="0"/>
          <xs:element ref="createdTimestamp" minOccurs="0"/>
          <xs:element ref="lastModifiedTimestamp" minOccurs="0"/>
          <xs:element ref="comments" minOccurs="0"/>
          <xs:element ref="derivationDate" minOccurs="0" maxOccurs="1"/>
          <xs:element ref="type" minOccurs="1"/>
          <xs:element name="linkSeries" type="seriesLinks" minOccurs="1" maxOccurs="1"/>
          <xs:element ref="objective" minOccurs="0"/>
          <xs:element ref="standardizingMethod" minOccurs="0"/>
          <xs:element ref="author" minOccurs="0"/>
          <xs:element ref="version" minOccurs="0"/>
          <xs:group ref="interpretationType" minOccurs="0"/>
          <xs:element ref="location" minOccurs="0"/>
          <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/>
          <xs:element ref="values" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:attribute name="id" type="xs:ID"/>
      </xs:restriction>
    </xs:complexContent>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element derivedSeries / linkSeries

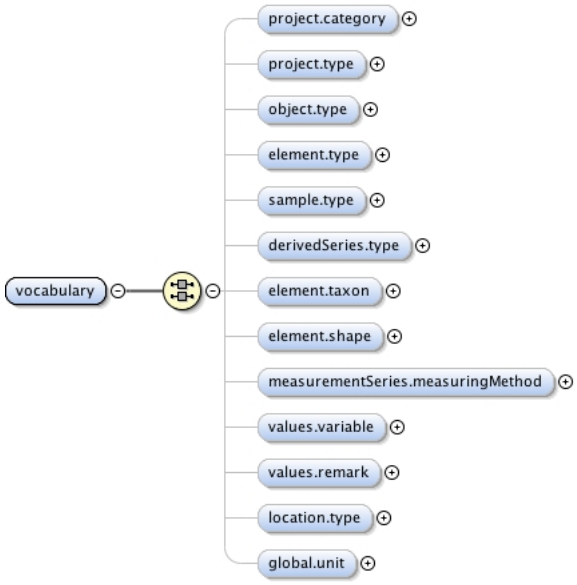
Namespace	http://www.tridas.org/1.2.1

Diagram	
Type	seriesLinks
Properties	content: complex minOccurs: 1 maxOccurs: 1
Model	series*
Children	series

Instance	`<linkSeries>`
	`  <series>{0,unbounded}</series>`
	`</linkSeries>`

Source	`<xs:element name="linkSeries" type="seriesLinks" minOccurs="1" maxOccurs="1"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary

Namespace	http://www.tridas.org/1.2.1
Annotations	Collection of one or more vocabulary dictionaries
Diagram	
Properties	content: complex
Used by	Element tridas
Model	ALL(project.category{0,1} project.type{0,1} object.type{0,1} element.type{0,1} sample.type{0,1} derivedSeries.type{0,1} element.taxon{0,1} element.shape{0,1} measurementSeries.measuringMethod{0,1} values.variable{0,1} values.remark{0,1} location.type{0,1} global.unit{0,1})
Children	derivedSeries.type, element.shape, element.taxon, element.type, global.unit, location.type, measurementSeries.measuringMethod, object.type, project.category, project.type, sample.type, values.remark, values.variable

Instance	`<vocabulary>`
	`  <project.category>{0,1}</project.category>`
	`  <project.type>{0,1}</project.type>`
	`  <object.type>{0,1}</object.type>`
	`  <element.type>{0,1}</element.type>`
	`  <sample.type>{0,1}</sample.type>`
	`  <derivedSeries.type>{0,1}</derivedSeries.type>`
	`  <element.taxon>{0,1}</element.taxon>`
	`  <element.shape>{0,1}</element.shape>`
	`  <measurementSeries.measuringMethod>{0,1}</measurementSeries.measuringMethod>`
	`  <values.variable>{0,1}</values.variable>`
	`  <values.remark>{0,1}</values.remark>`
	`  <location.type>{0,1}</location.type>`

```
  <global.unit>{0,1}</global.unit>
</vocabulary>
```

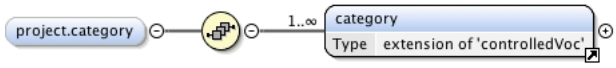
Source

```
<xs:element name="vocabulary">
  <xs:annotation>
    <xs:documentation>Collection of one or more vocabulary dictionaries</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:all>
      <xs:element name="project.category" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="category" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="project.type" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="object.type" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="element.type" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="sample.type" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="derivedSeries.type" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="element.taxon" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="taxon" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="element.shape" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="shape" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="measurementSeries.measuringMethod" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="measuringMethod" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="values.variable" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="variable" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="values.remark" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="remark" minOccurs="1" maxOccurs="unbounded"/>
```

```
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="location.type" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="locationType" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="global.unit" minOccurs="0" maxOccurs="1">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="unit" minOccurs="1" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:all>
  </xs:complexType>
</xs:element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / project.category

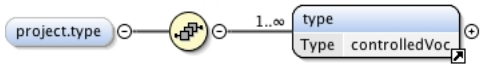
Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	category+
Children	category

Instance	`<project.category>`
	`  <category lang="" normal="" normalId="" normalStd="" normalTridas="">{1,unbounded}</category>`
	`</project.category>`

Source	`<xs:element name="project.category" minOccurs="0" maxOccurs="1">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="category" minOccurs="1" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / project.type

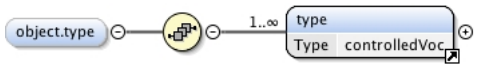
Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	type+
Children	type

Instance	`<project.type>`
	`  <type lang="" normal="" normalId="" normalStd="">{1,unbounded}</type>`
	`</project.type>`

Source	`<xs:element name="project.type" minOccurs="0" maxOccurs="1">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / object.type

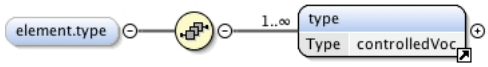
Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	type+
Children	type

Instance	`<object.type>`
	`  <type lang="" normal="" normalId="" normalStd="">{1,unbounded}</type>`
	`</object.type>`

Source	`<xs:element name="object.type" minOccurs="0" maxOccurs="1">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / element.type

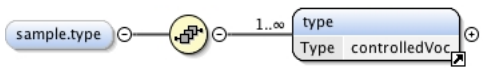
Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	type+
Children	type

Instance	`<element.type>`
	`  <type lang="" normal="" normalId="" normalStd="">{1,unbounded}</type>`
	`</element.type>`

Source	`<xs:element name="element.type" minOccurs="0" maxOccurs="1">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / sample.type

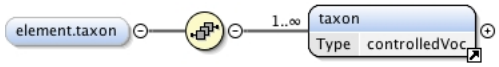
Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	type+
Children	type
Instance	`<sample.type>`

	<type lang="" normal="" normalId="" normalStd="">{1,unbounded}</type> </sample.type>
Source	<xs:element name="sample.type" minOccurs="0" maxOccurs="1"> <xs:complexType> <xs:sequence> <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

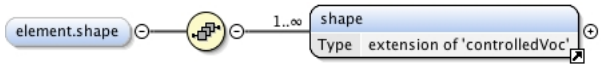
Element vocabulary / derivedSeries.type

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	type+
Children	type
Instance	<derivedSeries.type> <type lang="" normal="" normalId="" normalStd="">{1,unbounded}</type> </derivedSeries.type>
Source	<xs:element name="derivedSeries.type" minOccurs="0" maxOccurs="1"> <xs:complexType> <xs:sequence> <xs:element ref="type" minOccurs="1" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / element.taxon

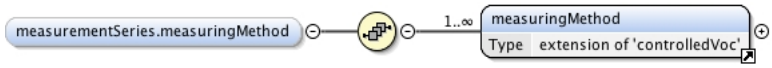
Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	taxon+
Children	taxon
Instance	<element.taxon> <taxon lang="" normal="" normalId="" normalStd="">{1,unbounded}</taxon> </element.taxon>
Source	<xs:element name="element.taxon" minOccurs="0" maxOccurs="1"> <xs:complexType> <xs:sequence> <xs:element ref="taxon" minOccurs="1" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / element.shape

Namespace	http://www.tridas.org/1.2.1
Diagram	

Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	shape+
Children	shape
Instance	<element.shape> <shape lang="" normal="" normalId="" normalStd="" normalTridas="">{1,unbounded}</shape> </element.shape>
Source	<xs:element name="element.shape" minOccurs="0" maxOccurs="1"> <xs:complexType> <xs:sequence> <xs:element ref="shape" minOccurs="1" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / measurementSeries.measuringMethod

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	measuringMethod+
Children	measuringMethod
Instance	<measurementSeries.measuringMethod> <measuringMethod lang="" normal="" normalId="" normalStd="" normalTridas="">{1,unbounded}</measuringMethod> </measurementSeries.measuringMethod>
Source	<xs:element name="measurementSeries.measuringMethod" minOccurs="0" maxOccurs="1"> <xs:complexType> <xs:sequence> <xs:element ref="measuringMethod" minOccurs="1" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / values.variable

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	variable+
Children	variable
Instance	<values.variable> <variable lang="" normal="" normalId="" normalStd="" normalTridas="">{1,unbounded}</variable> </values.variable>
Source	<xs:element name="values.variable" minOccurs="0" maxOccurs="1"> <xs:complexType> <xs:sequence> <xs:element ref="variable" minOccurs="1" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType>

	`</xs:element>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / values.remark

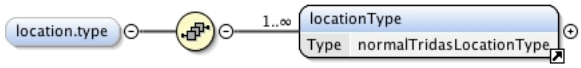
Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	remark+
Children	remark

Instance	`<values.remark>`
	`  <remark inheritedCount="" lang="" normal="" normalId="" normalStd="" normalTridas="">{1,unbounded}</remark>`
	`</values.remark>`

Source	`<xs:element name="values.remark" minOccurs="0" maxOccurs="1">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="remark" minOccurs="1" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / location.type

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	locationType+
Children	locationType

Instance	`<location.type>`
	`  <locationType>{1,unbounded}</locationType>`
	`</location.type>`

Source	`<xs:element name="location.type" minOccurs="0" maxOccurs="1">`
	`  <xs:complexType>`
	`  <xs:sequence>`
	`  <xs:element ref="locationType" minOccurs="1" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`  </xs:complexType>`
	`</xs:element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element vocabulary / global.unit

Namespace	http://www.tridas.org/1.2.1
Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	unit+

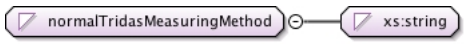
Children	unit
Instance	<global.unit> <unit lang="" normal="" normalId="" normalStd="" normalTridas="">{1,unbounded}</unit> </global.unit>
Source	<xs:element name="global.unit" minOccurs="0" maxOccurs="1"> <xs:complexType> <xs:sequence> <xs:element ref="unit" minOccurs="1" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Types

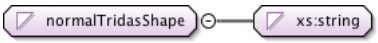
Simple Type normalTridasDatingType

Namespace	http://www.tridas.org/1.2.1
Annotations	TriDaS specified controlled vocabulary for the type of dating
Diagram	
Type	restriction of xs:string
Facets	enumeration Absolute enumeration Dated with uncertainty enumeration Relative enumeration Radiocarbon
Used by	Attribute dating/@type
Source	<xs:simpleType name="normalTridasDatingType"> <xs:annotation> <xs:documentation xml:lang="EN">TriDaS specified controlled vocabulary for the type of dating</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:enumeration value="Absolute"/> <xs:enumeration value="Dated with uncertainty"/> <xs:enumeration value="Relative"/> <xs:enumeration value="Radiocarbon"/> </xs:restriction> </xs:simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type normalTridasMeasuringMethod

Namespace	http://www.tridas.org/1.2.1
Annotations	TriDaS specified controlled vocabulary for the method of measurement
Diagram	
Type	restriction of xs:string
Facets	enumeration Measuring platform enumeration Hand lens and graticule
Used by	Attribute measuringMethod/@normalTridas
Source	<xs:simpleType name="normalTridasMeasuringMethod"> <xs:annotation> <xs:documentation xml:lang="EN">TriDaS specified controlled vocabulary for the method of measurement</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:enumeration value="Measuring platform"/> <xs:enumeration value="Hand lens and graticule"/> </xs:restriction> </xs:simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `normalTridasShape`

Namespace	http://www.tridas.org/1.2.1
Annotations	TriDaS specified controlled vocabulary element shape adapted from dictionary created by BIAX Consult, Zaandam (NL).
Diagram	
Type	restriction of xs:string
Facets	enumeration: Whole section enumeration: Half section enumeration: Third section enumeration: Quarter section enumeration: Wedge where radius is smaller than circumference enumeration: Wedge where radius equals the circumference enumeration: Wedge where radius is bigger than the circumference enumeration: Beam straightened on one side enumeration: Squared beam from whole section enumeration: Squared beam from half section enumeration: Squared beam from quarter section enumeration: Plank cut on one side enumeration: Radial plank through pith enumeration: Radial plank up to pith enumeration: Tangential plank not including pith with breadth larger than a quarter section enumeration: Plank not including pith with breadth smaller than a quarter section enumeration: Small part of section enumeration: Part of undetermined section enumeration: Unknown
Used by	Attribute: shape/@normalTridas

Source

```
<xs:simpleType name="normalTridasShape">
  <xs:annotation>
    <xs:documentation xml:lang="EN">TriDaS specified controlled vocabulary element shape
 adapted from dictionary created by BIAX Consult, Zaandam (NL).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="Whole section"/>
    <xs:enumeration value="Half section"/>
    <xs:enumeration value="Third section"/>
    <xs:enumeration value="Quarter section"/>
    <xs:enumeration value="Wedge where radius is smaller than circumference"/>
    <xs:enumeration value="Wedge where radius equals the circumference"/>
    <xs:enumeration value="Wedge where radius is bigger than the circumference"/>
    <xs:enumeration value="Beam straightened on one side"/>
    <xs:enumeration value="Squared beam from whole section"/>
```

```
    <xs:enumeration value="Squared beam from half section"/>
    <xs:enumeration value="Squared beam from quarter section"/>
    <xs:enumeration value="Plank cut on one side"/>
    <xs:enumeration value="Radial plank through pith"/>
    <xs:enumeration value="Radial plank up to pith"/>
    <xs:enumeration value="Tangential plank not including pith with breadth larger than a
 quarter section"/>
    <xs:enumeration value="Plank not including pith with breadth smaller than a quarter
 section"/>
    <xs:enumeration value="Small part of section"/>
    <xs:enumeration value="Part of undetermined section"/>
    <xs:enumeration value="Unknown"/>
  </xs:restriction>
</xs:simpleType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `normalTridasLocationType`

Namespace	http://www.tridas.org/1.2.1
Annotations	TriDaS specified controlled vocabulary for the type of location
Diagram	
Type	restriction of xs:string
Facets	enumeration: Growth location enumeration: Location of use (static) enumeration: Location of use (mobile) enumeration: Current location enumeration: Manufacture location
Used by	Element: locationType
Source	

```
<xs:simpleType name="normalTridasLocationType">
  <xs:annotation>
    <xs:documentation xml:lang="EN">TriDaS specified controlled vocabulary for the type of
 location</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="Growth location"/>
    <xs:enumeration value="Location of use (static)"/>
    <xs:enumeration value="Location of use (mobile)"/>
    <xs:enumeration value="Current location"/>
    <xs:enumeration value="Manufacture location"/>
  </xs:restriction>
</xs:simpleType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `normalTridasVariable`

Namespace	http://www.tridas.org/1.2.1
Annotations	TRiDaS specified controlled vocabulary for the measurementSeries variable
Diagram	
Type	restriction of xs:string
Facets	enumeration: Ring width enumeration: Earlywood width enumeration: Latewood width enumeration: Ring density enumeration: Earlywood density enumeration: Latewood density enumeration: Maximum density enumeration: Latewood percent
Used by	Attribute: variable/@normalTridas

Source	<xs:simpleType name="normalTridasVariable"> <xs:annotation> <xs:documentation xml:lang="EN">TRiDaS specified controlled vocabulary for the measurementSeries variable</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:enumeration value="Ring width"/> <xs:enumeration value="Earlywood width"/> <xs:enumeration value="Latewood width"/> <xs:enumeration value="Ring density"/> <xs:enumeration value="Earlywood density"/> <xs:enumeration value="Latewood density"/> <xs:enumeration value="Maximum density"/> <xs:enumeration value="Latewood percent"/> </xs:restriction> </xs:simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `normalTridasUnit`

Namespace	http://www.tridas.org/1.2.1
Annotations	TRiDaS specified controlled vocabulary for the units in which data are stored
Diagram	
Type	restriction of xs:string
Facets	enumeration micrometres enumeration 1/100th millimetres enumeration 1/10th millimetres enumeration millimetres enumeration centimetres enumeration metres
Used by	Attribute unit/@normalTridas
Source	<xs:simpleType name="normalTridasUnit"> <xs:annotation> <xs:documentation xml:lang="EN">TRiDaS specified controlled vocabulary for the units in which data are stored</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:enumeration value="micrometres"/> <xs:enumeration value="1/100th millimetres"/> <xs:enumeration value="1/10th millimetres"/> <xs:enumeration value="millimetres"/> <xs:enumeration value="centimetres"/> <xs:enumeration value="metres"/> </xs:restriction> </xs:simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `normalTridasRemark`

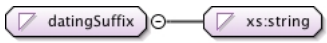
Namespace	http://www.tridas.org/1.2.1
Annotations	TRiDaS specified controlled vocabulary for remarks attached to rings
Diagram	
Type	restriction of xs:string
Facets	enumeration Fire damage enumeration Frost damage enumeration Crack enumeration False ring(s) enumeration Compression wood enumeration Tension wood enumeration Traumatic ducts enumeration Unspecified injury

Used by	Attribute remark/@normalTridas
Source	<xs:simpleType name="normalTridasRemark"> <xs:annotation> <xs:documentation xml:lang="EN">TRiDaS specified controlled vocabulary for remarks attached to rings</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:enumeration value="Fire damage"/> <xs:enumeration value="Frost damage"/> <xs:enumeration value="Crack"/> <xs:enumeration value="False ring(s)"/> <xs:enumeration value="Compression wood"/> <xs:enumeration value="Tension wood"/> <xs:enumeration value="Traumatic ducts"/> <xs:enumeration value="Unspecified injury"/> </xs:restriction> </xs:simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `normalTridasCategory`

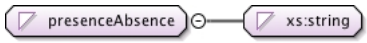
Namespace	http://www.tridas.org/1.2.1
Annotations	Enumeration of TRiDaS recognised project categories
Diagram	
Type	restriction of xs:string
Facets	enumeration
Used by	Attribute category/@normalTridas
Source	<xs:simpleType name="normalTridasCategory"> <xs:annotation> <xs:documentation xml:lang="EN">Enumeration of TRiDaS recognised project categories</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:enumeration value=""/> </xs:restriction> </xs:simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `datingSuffix`

Namespace	http://www.tridas.org/1.2.1
Annotations	Suffix to add to a year number
Diagram	
Type	restriction of xs:string
Facets	enumeration AD enumeration BC enumeration BP
Used by	Attribute year/@suffix
Source	<xs:simpleType name="datingSuffix"> <xs:annotation> <xs:documentation xml:lang="EN">Suffix to add to a year number</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:enumeration value="AD"/> <xs:enumeration value="BC"/> <xs:enumeration value="BP"/> </xs:restriction> </xs:simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `presenceAbsence`

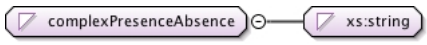
Namespace	http://www.tridas.org/1.2.1
Annotations	Simple presence/absence data type

Diagram	
Type	restriction of xs:string
Facets	enumeration `present` enumeration `absent`
Used by	Attributes bark/@presence, lastRingUnderBark/@presence

Source	`<xs:simpleType name="presenceAbsence">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Simple presence/absence data type</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:restriction base="xs:string">`
	`  <xs:enumeration value="present"/>`
	`  <xs:enumeration value="absent"/>`
	`  </xs:restriction>`
	`</xs:simpleType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

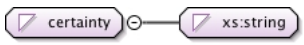
Simple Type `complexPresenceAbsence`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Complex presence/absence data type with additional possibilities`
Diagram	
Type	restriction of xs:string
Facets	enumeration `unknown` enumeration `not applicable` enumeration `absent` enumeration `complete` enumeration `incomplete`
Used by	Attributes heartwood/@presence, pith/@presence, sapwood/@presence

Source	`<xs:simpleType name="complexPresenceAbsence">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Complex presence/absence data type with additional`
	`possibilities</xs:documentation>`
	`  </xs:annotation>`
	`  <xs:restriction base="xs:string">`
	`  <xs:enumeration value="unknown"/>`
	`  <xs:enumeration value="not applicable"/>`
	`  <xs:enumeration value="absent"/>`
	`  <xs:enumeration value="complete"/>`
	`  <xs:enumeration value="incomplete"/>`
	`  </xs:restriction>`
	`</xs:simpleType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Simple Type `certainty`

Namespace	http://www.tridas.org/1.2.1
Annotations	`Simple certainty data type`
Diagram	
Type	restriction of xs:string
Facets	enumeration `unknown` enumeration `exact` enumeration `approximately` enumeration `after` enumeration `before`
Used by	Attributes date/@certainty, dateTime/@certainty, year/@certainty

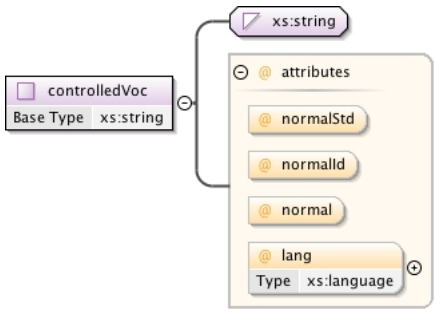
Source	`<xs:simpleType name="certainty">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">Simple certainty data type</xs:documentation>`

```
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="unknown"/>
    <xs:enumeration value="exact"/>
    <xs:enumeration value="approximately"/>
    <xs:enumeration value="after"/>
    <xs:enumeration value="before"/>
  </xs:restriction>
</xs:simpleType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Complex Types

Complex Type `controlledVoc`

Namespace	http://www.tridas.org/1.2.1
Annotations	`A controlled vocabulary is used to limit users to a pick list of values`
Diagram	
Type	extension of xs:string
Used by	Elements category, measuringMethod, remark, shape, taxon, type, unit, variable

Attributes

QName	Type	Fixed	Default	Use
lang	xs:language			optional
	`The language this term is in. Default is EN if not specified.`			
normal				optional
	`The normalised name for this entry`			
normalId				optional
	`The ID value in the standard dictionary corresponding to this entry`			
normalStd				optional
	`The name of the standard used to control this vocabulary`			

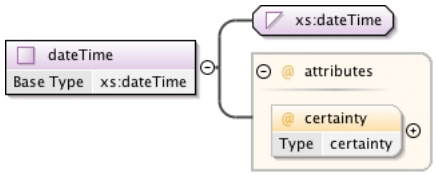
Source

```
<xs:complexType name="controlledVoc">
  <xs:annotation>
    <xs:documentation xml:lang="EN">A controlled vocabulary is used to limit users to a
 pick list of values</xs:documentation>
  </xs:annotation>
  <xs:simpleContent>
    <xs:extension base="xs:string">
      <xs:attribute name="normalStd">
        <xs:annotation>
          <xs:documentation xml:lang="EN">The name of the standard used to control this
 vocabulary</xs:documentation>
        </xs:annotation>
      </xs:attribute>
      <xs:attribute name="normalId">
        <xs:annotation>
          <xs:documentation xml:lang="EN">The ID value in the standard dictionary
 corresponding to this entry</xs:documentation>
        </xs:annotation>
      </xs:attribute>
      <xs:attribute name="normal">
        <xs:annotation>
          <xs:documentation xml:lang="EN">The normalised name for this entry</
xs:documentation>
        </xs:annotation>
      </xs:attribute>
      <xs:attribute name="lang" type="xs:language">
        <xs:annotation>
          <xs:documentation xml:lang="EN">The language this term is in. Default is EN if
 not specified.</xs:documentation>
```

```
        </xs:annotation>
      </xs:attribute>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Complex Type `dateTime`

Namespace	http://www.tridas.org/1.2.1
Annotations	An extension to the basic dateTime type which includes an optional 'certainty' attribute.
Diagram	
Type	extension of xs:dateTime
Used by	Elements createdTimestamp, lastModifiedTimestamp

Attributes

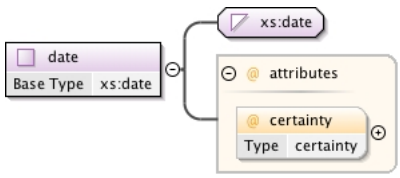
QName	Type	Fixed	Default	Use
certainty	certainty			optional

Source

```
<xs:complexType name="dateTime">
  <xs:annotation>
    <xs:documentation xml:lang="EN">An extension to the basic dateTime type which includes
 an optional 'certainty' attribute.</xs:documentation>
  </xs:annotation>
  <xs:simpleContent>
    <xs:extension base="xs:dateTime">
      <xs:attribute name="certainty" type="certainty" use="optional"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Complex Type `date`

Namespace	http://www.tridas.org/1.2.1
Annotations	An extension to the basic date type which includes an optional 'certainty' attribute.
Diagram	
Type	extension of xs:date
Used by	Elements derivationDate, measuringDate, requestDate, samplingDate

Attributes

QName	Type	Fixed	Default	Use
certainty	certainty			optional

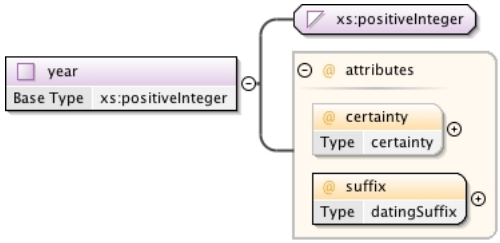
Source

```
<xs:complexType name="date">
  <xs:annotation>
    <xs:documentation xml:lang="EN">An extension to the basic date type which includes an
 optional 'certainty' attribute.</xs:documentation>
  </xs:annotation>
  <xs:simpleContent>
    <xs:extension base="xs:date">
      <xs:attribute name="certainty" type="certainty" use="optional"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Complex Type `year`

Namespace	http://www.tridas.org/1.2.1

Annotations	Data type for storing year. Includes a separate suffix attribute and optional certainty value
Diagram	
Type	extension of xs:positiveInteger
Used by	Elements: deathYear, firstYear, lastYear, pithYear

Attributes

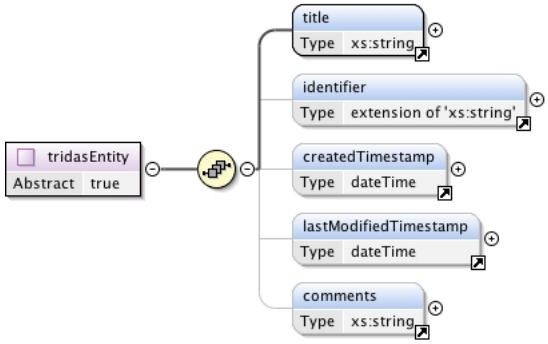
QName	Type	Fixed	Default	Use
certainty	certainty			optional
suffix	datingSuffix			required

Source

```
<xs:complexType name="year">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Data type for storing year. Includes a separate suffix
 attribute and optional certainty value</xs:documentation>
  </xs:annotation>
  <xs:simpleContent>
    <xs:extension base="xs:positiveInteger">
      <xs:attribute name="certainty" type="certainty" use="optional"/>
      <xs:attribute name="suffix" use="required" type="datingSuffix"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Complex Type `tridasEntity`

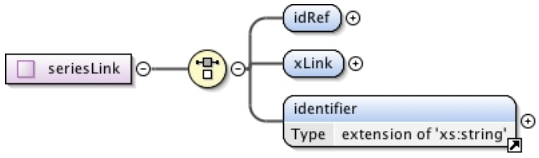
Namespace	http://www.tridas.org/1.2.1
Annotations	Base data type inherited by all TRiDaS entities. Contains the fields common to all TRiDaS data entities.
Diagram	
Properties	abstract: true
Used by	Elements: element, object, project, radius, sample Complex Type: baseSeries
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1}
Children	comments, createdTimestamp, identifier, lastModifiedTimestamp, title

Source

```
<xs:complexType name="tridasEntity" abstract="true">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Base data type inherited by all TRiDaS entities.
 Contains the fields common to all TRiDaS data entities.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element ref="title"/>
    <xs:element ref="identifier" minOccurs="0"/>
    <xs:element ref="createdTimestamp" minOccurs="0"/>
    <xs:element ref="lastModifiedTimestamp" minOccurs="0"/>
    <xs:element ref="comments" minOccurs="0" maxOccurs="1"/>
  </xs:sequence>
```

	`</xs:complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

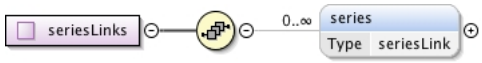
Complex Type `seriesLink`

Namespace	http://www.tridas.org/1.2.1
Diagram	
Used by	Elements datingReference/linkSeries, seriesLinks/series, seriesLinksWithPreferred/preferredSeries
Model	idRef | xLink | identifier
Children	idRef, identifier, xLink

Source	`<xs:complexType name="seriesLink">`
	`  <xs:choice>`
	`  <xs:element name="idRef">`
	`  <xs:complexType>`
	`  <xs:attribute name="ref" type="xs:IDREF"/>`
	`  </xs:complexType>`
	`  </xs:element>`
	`  <xs:element name="xLink">`
	`  <xs:complexType>`
	`  <xs:attribute ref="xlink:href"/>`
	`  </xs:complexType>`
	`  </xs:element>`
	`  <xs:element ref="identifier"/>`
	`  </xs:choice>`
	`</xs:complexType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

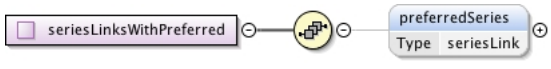
Complex Type `seriesLinks`

Namespace	http://www.tridas.org/1.2.1
Diagram	
Used by	Elements baseSeries/linkSeries, derivedSeries/linkSeries
Model	series*
Children	series

Source	`<xs:complexType name="seriesLinks">`
	`  <xs:sequence>`
	`  <xs:element name="series" type="seriesLink" minOccurs="0" maxOccurs="unbounded"/>`
	`  </xs:sequence>`
	`</xs:complexType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

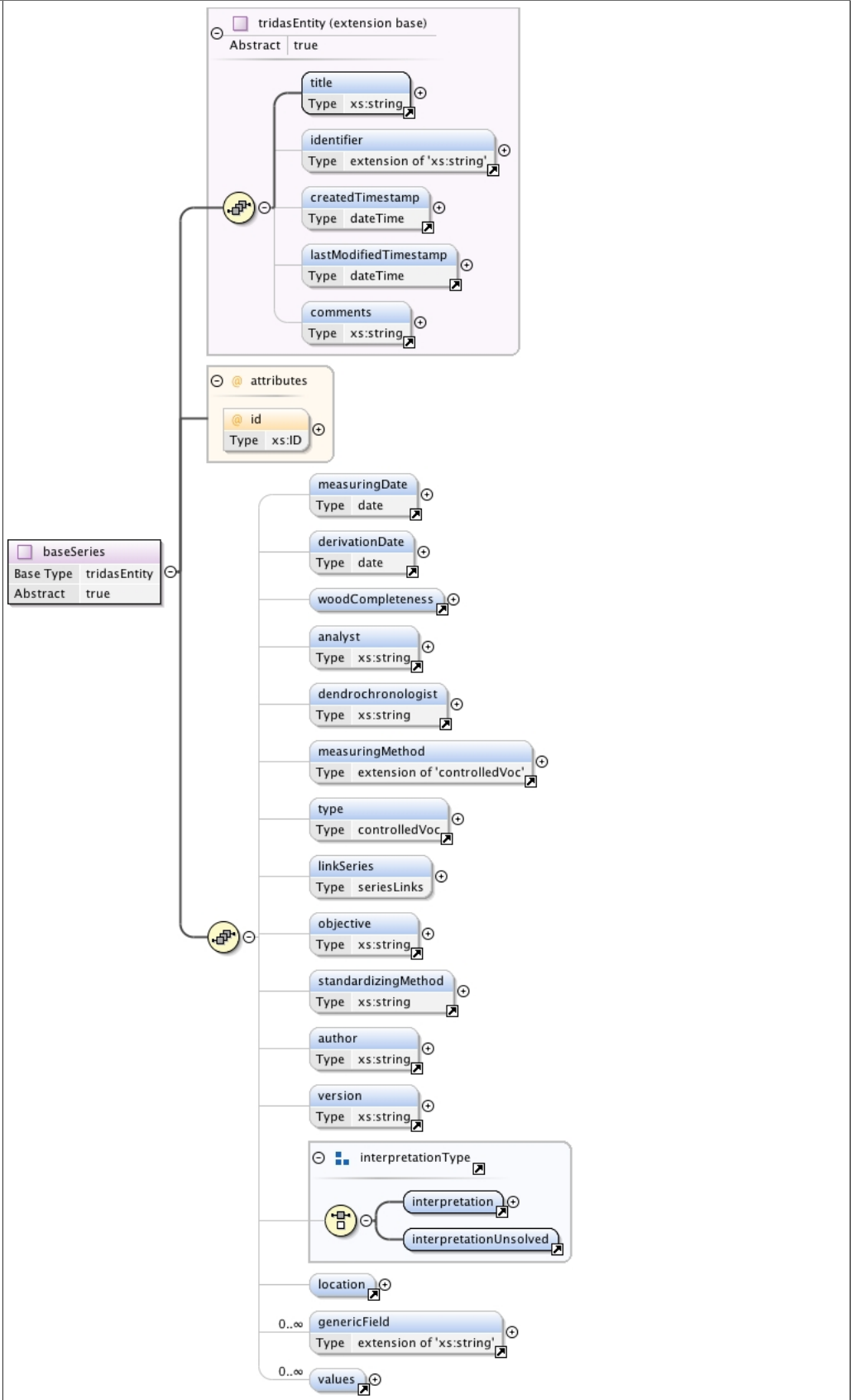
Complex Type `seriesLinksWithPreferred`

Namespace	http://www.tridas.org/1.2.1
Diagram	
Used by	Elements element/linkSeries, object/linkSeries
Model	preferredSeries{0,1}
Children	preferredSeries

Source	`<xs:complexType name="seriesLinksWithPreferred">`
	`  <xs:sequence>`
	`  <xs:element name="preferredSeries" type="seriesLink" minOccurs="0" maxOccurs="1"/>`
	`  </xs:sequence>`
	`</xs:complexType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Complex Type `baseSeries`

Namespace	http://www.tridas.org/1.2.1
Annotations	`A base type inherited by measurementSeries and derivedSeries.`
Diagram	
Type	extension of tridasEntity

Type hierarchy	• tridasEntity • baseSeries
Properties	abstract: `true`
Used by	Elements derivedSeries, measurementSeries
Model	title , identifier{0,1} , createdTimestamp{0,1} , lastModifiedTimestamp{0,1} , comments{0,1} , measuringDate{0,1} , derivationDate{0,1} , woodCompleteness{0,1} , analyst{0,1} , dendrochronologist{0,1} , measuringMethod{0,1} , type{0,1} , linkSeries{0,1} , objective{0,1} , standardizingMethod{0,1} , author{0,1} , version{0,1} , (interpretation | interpretationUnsolved) , location{0,1} , genericField* , values*
Children	analyst, author, comments, createdTimestamp, dendrochronologist, derivationDate, genericField, identifier, interpretation, interpretationUnsolved, lastModifiedTimestamp, linkSeries, location, measuringDate, measuringMethod, objective, standardizingMethod, title, type, values, version, woodCompleteness

Attributes

QName	Type	Fixed	Default	Use
id	xs:ID			optional

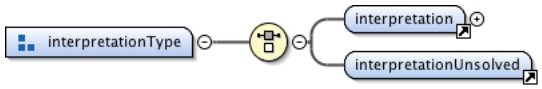
Source

```
<xs:complexType name="baseSeries" abstract="true">
  <xs:annotation>
    <xs:documentation xml:lang="EN">A base type inherited by measurementSeries and
 derivedSeries.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="tridasEntity">
      <xs:sequence>
        <xs:element ref="measuringDate" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="derivationDate" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="woodCompleteness" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="analyst" minOccurs="0"/>
        <xs:element ref="dendrochronologist" minOccurs="0"/>
        <xs:element ref="measuringMethod" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="type" minOccurs="0" maxOccurs="1"/>
        <xs:element name="linkSeries" type="seriesLinks" minOccurs="0" maxOccurs="1"/>
        <xs:element ref="objective" minOccurs="0"/>
        <xs:element ref="standardizingMethod" minOccurs="0"/>
        <xs:element ref="author" minOccurs="0"/>
        <xs:element ref="version" minOccurs="0"/>
        <xs:group ref="interpretationType" minOccurs="0"/>
        <xs:element ref="location" minOccurs="0"/>
        <xs:element ref="genericField" minOccurs="0" maxOccurs="unbounded"/>
        <xs:element ref="values" minOccurs="0" maxOccurs="unbounded"/>
      </xs:sequence>
      <xs:attribute name="id" type="xs:ID"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Element Groups

Element Group `interpretationType`

Namespace	http://www.tridas.org/1.2.1
Annotations	Contains either the 'interpretation' of the series or an 'interpretationUnsolved' placeholder
Diagram	

Used by

Complex Type	baseSeries
Elements	derivedSeries, measurementSeries

Model	interpretation | interpretationUnsolved
Children	interpretation, interpretationUnsolved

Source

```
<xs:group name="interpretationType">
  <xs:annotation>
    <xs:documentation xml:lang="EN">Contains either the 'interpretation' of the series or
 an 'interpretationUnsolved' placeholder</xs:documentation>
  </xs:annotation>
  <xs:choice>
    <xs:element ref="interpretation"/>
    <xs:element ref="interpretationUnsolved"/>
```

	</xs:choice> </xs:group>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Namespace: "http://www.w3.org/1999/xlink"

Schemas

Imported schema `xlinks.xsd`

Namespace	http://www.w3.org/1999/xlink
Annotations	GML 3.0 candidate xlinks schema. Copyright (c) 2001 OGC, All Rights Reserved.
Properties	attribute form default: unqualified element form default: unqualified version: 2.0
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attributes

Attribute `@xlink:href`

Namespace	http://www.w3.org/1999/xlink
Type	anyURI
Properties	content: simple
Used by	Elements: file, seriesLink/xLink Attribute Groups: xlink:locatorLink, xlink:simpleLink
Source	<attribute name="href" type="anyURI"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `@xlink:role`

Namespace	http://www.w3.org/1999/xlink
Type	anyURI
Properties	content: simple
Used by	Attribute Groups: xlink:extendedLink, xlink:locatorLink, xlink:resourceLink, xlink:simpleLink
Source	<attribute name="role" type="anyURI"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `@xlink:arcrole`

Namespace	http://www.w3.org/1999/xlink
Type	anyURI
Properties	content: simple
Used by	Attribute Groups: xlink:arcLink, xlink:simpleLink
Source	<attribute name="arcrole" type="anyURI"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `@xlink:title`

Namespace	http://www.w3.org/1999/xlink
Type	string
Properties	content: simple
Used by	Attribute Groups: xlink:arcLink, xlink:extendedLink, xlink:locatorLink, xlink:resourceLink, xlink:simpleLink

Source	`<attribute name="title" type="string"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute @xlink:show

Namespace	http://www.w3.org/1999/xlink
Annotations	The 'show' attribute is used to communicate the desired presentation of the ending resource on traversal from the starting resource; it's value should be treated as follows: new - load ending resource in a new window, frame, pane, or other presentation context replace - load the resource in the same window, frame, pane, or other presentation context embed - load ending resource in place of the presentation of the starting resource other - behavior is unconstrained; examine other markup in the link for hints none - behavior is unconstrained
Type	restriction of string
Properties	content: simple
Facets	enumeration: new enumeration: replace enumeration: embed enumeration: other enumeration: none
Used by	Attribute Groups: xlink:arcLink, xlink:simpleLink
Source	`<attribute name="show"> <annotation> <documentation>The 'show' attribute is used to communicate the desired presentation of the ending resource on traversal from the starting resource; it's value should be treated as follows: new - load ending resource in a new window, frame, pane, or other presentation context replace - load the resource in the same window, frame, pane, or other presentation context embed - load ending resource in place of the presentation of the starting resource other - behavior is unconstrained; examine other markup in the link for hints none - behavior is unconstrained</documentation> </annotation> <simpleType> <restriction base="string"> <enumeration value="new"/> <enumeration value="replace"/> <enumeration value="embed"/> <enumeration value="other"/> <enumeration value="none"/> </restriction> </simpleType> </attribute>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute @xlink:actuate

Namespace	http://www.w3.org/1999/xlink
Annotations	The 'actuate' attribute is used to communicate the desired timing of traversal from the starting resource to the ending resource; it's value should be treated as follows: onLoad - traverse to the ending resource immediately on loading the starting resource onRequest - traverse from the starting resource to the ending resource only on a post-loading event triggered for this purpose other - behavior is unconstrained; examine other markup in link for hints none - behavior is unconstrained
Type	restriction of string
Properties	content: simple
Facets	enumeration: onLoad enumeration: onRequest

	enumeration	other
	enumeration	none
Used by	Attribute Groups	xlink:arcLink, xlink:simpleLink
Source		

```
<attribute name="actuate">
  <annotation>
    <documentation>The 'actuate' attribute is used to communicate the desired timing of
 traversal from the starting resource to the ending resource; it's value should be treated
 as follows: onLoad - traverse to the ending resource immediately on loading the starting
 resource onRequest - traverse from the starting resource to the ending resource only on a
 post-loading event triggered for this purpose other - behavior is unconstrained; examine
 other markup in link for hints none - behavior is unconstrained</documentation>
  </annotation>
  <simpleType>
    <restriction base="string">
      <enumeration value="onLoad"/>
      <enumeration value="onRequest"/>
      <enumeration value="other"/>
      <enumeration value="none"/>
    </restriction>
  </simpleType>
</attribute>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `@xlink:label`

Namespace	http://www.w3.org/1999/xlink	
Type	string	
Properties	content:	simple
Used by	Attribute Groups	xlink:locatorLink, xlink:resourceLink
Source	`<attribute name="label" type="string"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd	

Attribute `@xlink:from`

Namespace	http://www.w3.org/1999/xlink	
Type	string	
Properties	content:	simple
Used by	Attribute Group	xlink:arcLink
Source	`<attribute name="from" type="string"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd	

Attribute `@xlink:to`

Namespace	http://www.w3.org/1999/xlink	
Type	string	
Properties	content:	simple
Used by	Attribute Group	xlink:arcLink
Source	`<attribute name="to" type="string"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd	

Attribute `xlink:simpleLink / @xlink:type`

Namespace	http://www.w3.org/1999/xlink	
Type	string	
Properties	fixed:	simple
Used by	Attribute Group	xlink:simpleLink
Source	`<attribute name="type" type="string" fixed="simple" form="qualified"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd	

Attribute `xlink:extendedLink / @xlink:type`

Namespace	http://www.w3.org/1999/xlink
Type	string
Properties	fixed: `extended`
Used by	Attribute Group xlink:extendedLink
Source	`<attribute name="type" type="string" fixed="extended" form="qualified"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `xlink:locatorLink / @xlink:type`

Namespace	http://www.w3.org/1999/xlink
Type	string
Properties	fixed: `locator`
Used by	Attribute Group xlink:locatorLink
Source	`<attribute name="type" type="string" fixed="locator" form="qualified"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `xlink:arcLink / @xlink:type`

Namespace	http://www.w3.org/1999/xlink
Type	string
Properties	fixed: `arc`
Used by	Attribute Group xlink:arcLink
Source	`<attribute name="type" type="string" fixed="arc" form="qualified"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `xlink:resourceLink / @xlink:type`

Namespace	http://www.w3.org/1999/xlink
Type	string
Properties	fixed: `resource`
Used by	Attribute Group xlink:resourceLink
Source	`<attribute name="type" type="string" fixed="resource" form="qualified"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute `xlink:titleLink / @xlink:type`

Namespace	http://www.w3.org/1999/xlink
Type	string
Properties	fixed: `title`
Used by	Attribute Group xlink:titleLink
Source	`<attribute name="type" type="string" fixed="title" form="qualified"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

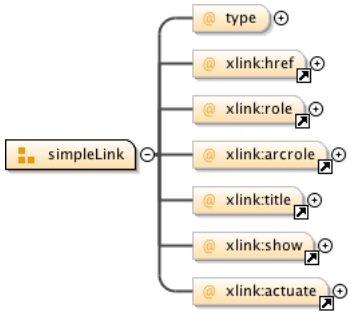
Attribute `xlink:emptyLink / @xlink:type`

Namespace	http://www.w3.org/1999/xlink
Type	string
Properties	fixed: `none`
Used by	Attribute Group xlink:emptyLink

Source	`<attribute name="type" type="string" fixed="none" form="qualified"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute Groups

Attribute Group `xlink:simpleLink`

Namespace	http://www.w3.org/1999/xlink
Diagram	
Used by	Attribute Group gml:AssociationAttributeGroup

Attributes

QName	Type	Fixed	Default	Use
xlink:actuate	restriction of string			optional
	The 'actuate' attribute is used to communicate the desired timing of traversal from the starting resource to the ending resource; it's value should be treated as follows: onLoad - traverse to the ending resource immediately on loading the starting resource onRequest - traverse from the starting resource to the ending resource only on a post-loading event triggered for this purpose other - behavior is unconstrained; examine other markup in link for hints none - behavior is unconstrained			
xlink:arcrole	anyURI			optional
xlink:href	anyURI			optional
xlink:role	anyURI			optional
xlink:show	restriction of string			optional
	The 'show' attribute is used to communicate the desired presentation of the ending resource on traversal from the starting resource; it's value should be treated as follows: new - load ending resource in a new window, frame, pane, or other presentation context replace - load the resource in the same window, frame, pane, or other presentation context embed - load ending resource in place of the presentation of the starting resource other - behavior is unconstrained; examine other markup in the link for hints none - behavior is unconstrained			
xlink:title	string			optional
xlink:type	string	simple		optional

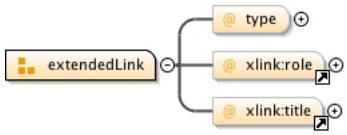
Source

```
<attributeGroup name="simpleLink">
  <attribute name="type" type="string" fixed="simple" form="qualified"/>
  <attribute ref="xlink:href" use="optional"/>
  <attribute ref="xlink:role" use="optional"/>
  <attribute ref="xlink:arcrole" use="optional"/>
  <attribute ref="xlink:title" use="optional"/>
  <attribute ref="xlink:show" use="optional"/>
  <attribute ref="xlink:actuate" use="optional"/>
</attributeGroup>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute Group `xlink:extendedLink`

Namespace	http://www.w3.org/1999/xlink

Diagram	

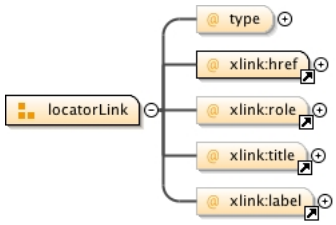
Attributes	QName	Type	Fixed	Default	Use
	xlink:role	anyURI			optional
	xlink:title	string			optional
	xlink:type	string	extended		optional

Source

```
<attributeGroup name="extendedLink">
  <attribute name="type" type="string" fixed="extended" form="qualified"/>
  <attribute ref="xlink:role" use="optional"/>
  <attribute ref="xlink:title" use="optional"/>
</attributeGroup>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute Group `xlink:locatorLink`

Namespace	http://www.w3.org/1999/xlink
Diagram	

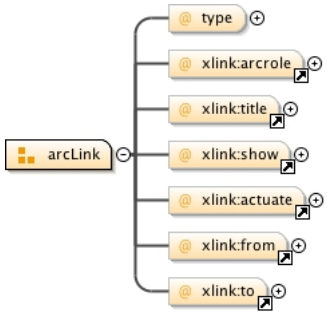
Attributes	QName	Type	Fixed	Default	Use
	xlink:href	anyURI			required
	xlink:label	string			optional
	xlink:role	anyURI			optional
	xlink:title	string			optional
	xlink:type	string	locator		optional

Source

```
<attributeGroup name="locatorLink">
  <attribute name="type" type="string" fixed="locator" form="qualified"/>
  <attribute ref="xlink:href" use="required"/>
  <attribute ref="xlink:role" use="optional"/>
  <attribute ref="xlink:title" use="optional"/>
  <attribute ref="xlink:label" use="optional"/>
</attributeGroup>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute Group `xlink:arcLink`

Namespace	http://www.w3.org/1999/xlink
Diagram	

Attributes	QName	Type	Fixed	Default	Use
	xlink:actuate	restriction of string			optional
		The 'actuate' attribute is used to communicate the desired timing of traversal from the starting resource to the ending resource; it's value should be treated as follows:			

	QName	Type	Fixed	Default	Use
		onLoad - traverse to the ending resource immediately on loading the starting resource onRequest - traverse from the starting resource to the ending resource only on a post-loading event triggered for this purpose other - behavior is unconstrained; examine other markup in link for hints none - behavior is unconstrained			
	xlink:arcrole	anyURI			optional
	xlink:from	string			optional
	xlink:show	restriction of string			optional
		The 'show' attribute is used to communicate the desired presentation of the ending resource on traversal from the starting resource; it's value should be treated as follows: new - load ending resource in a new window, frame, pane, or other presentation context replace - load the resource in the same window, frame, pane, or other presentation context embed - load ending resource in place of the presentation of the starting resource other - behavior is unconstrained; examine other markup in the link for hints none - behavior is unconstrained			
	xlink:title	string			optional
	xlink:to	string			optional
	xlink:type	string	arc		optional

Source

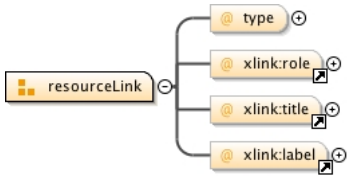
```
<attributeGroup name="arcLink">
  <attribute name="type" type="string" fixed="arc" form="qualified"/>
  <attribute ref="xlink:arcrole" use="optional"/>
  <attribute ref="xlink:title" use="optional"/>
  <attribute ref="xlink:show" use="optional"/>
  <attribute ref="xlink:actuate" use="optional"/>
  <attribute ref="xlink:from" use="optional"/>
  <attribute ref="xlink:to" use="optional"/>
</attributeGroup>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute Group `xlink:resourceLink`

Namespace: http://www.w3.org/1999/xlink

Diagram



Attributes

QName	Type	Fixed	Default	Use
xlink:label	string			optional
xlink:role	anyURI			optional
xlink:title	string			optional
xlink:type	string	resource		optional

Source

```
<attributeGroup name="resourceLink">
  <attribute name="type" type="string" fixed="resource" form="qualified"/>
  <attribute ref="xlink:role" use="optional"/>
  <attribute ref="xlink:title" use="optional"/>
  <attribute ref="xlink:label" use="optional"/>
</attributeGroup>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd

Attribute Group `xlink:titleLink`

Namespace: http://www.w3.org/1999/xlink

Diagram

Attributes	**QName**	**Type**	**Fixed**	**Default**	**Use**
	xlink:type	string	title		optional
Source	<attributeGroup name="titleLink"> <attribute name="type" type="string" fixed="title" form="qualified"/> </attributeGroup>				
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd				

Attribute Group `xlink:emptyLink`

Namespace	http://www.w3.org/1999/xlink				
Diagram					
Attributes	**QName**	**Type**	**Fixed**	**Default**	**Use**
	xlink:type	string	none		optional
Source	<attributeGroup name="emptyLink"> <attribute name="type" type="string" fixed="none" form="qualified"/> </attributeGroup>				
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/xlinks.xsd				

Namespace: "http://www.opengis.net/gml"

Schemas

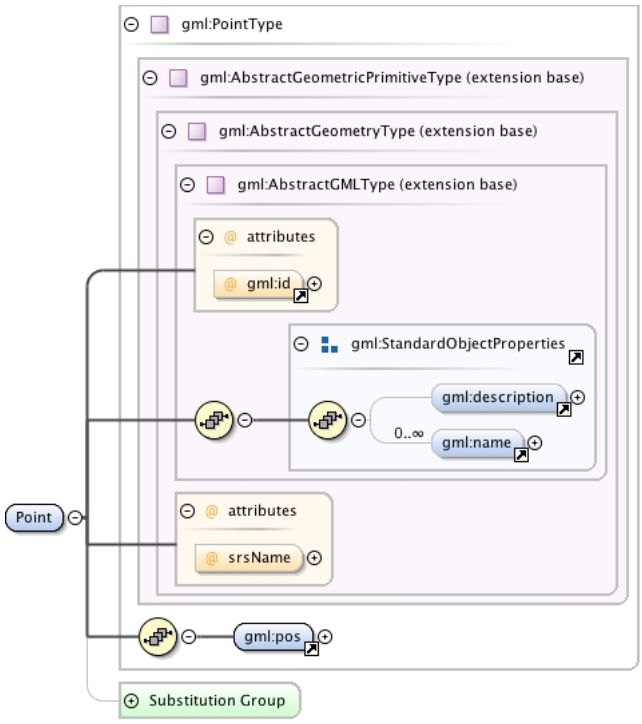
Imported schema `gmlsf.xsd`

Namespace	http://www.opengis.net/gml
Annotations	GML 3.1.1 Simplified Features profile Levels 0 and 1. Copyright (c) 2006 Open Geospatial Consortium, Inc. All Rights Reserved.
Properties	attribute form default: unqualified element form default: qualified version: 1.0.0
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Elements

Element `gml:Point`

Namespace	http://www.opengis.net/gml

Diagram	
Type	gml:PointType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:PointType
Properties	content: complex
Used by	Element: locationGeometry Complex Type: gml:PointPropertyType
Model	gml:description{0,1} , gml:name* , gml:pos
Children	gml:description, gml:name, gml:pos

Instance	`<gml:Point gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:Point>`

Attributes

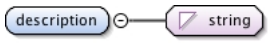
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source

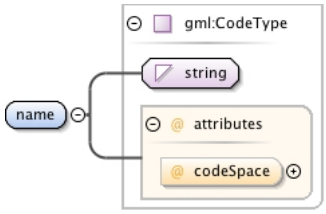
```
<element name="Point" type="gml:PointType" substitutionGroup="gml:_GeometricPrimitive"/>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

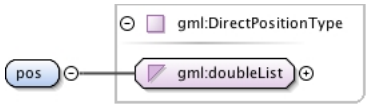
Element gml:description

Namespace	http://www.opengis.net/gml
Annotations	Contains a simple text description of the object. Restricted to only allow a text string, as done in GML 3.2.
Diagram	
Type	string
Properties	content: simple
Used by	Element Group gml:StandardObjectProperties
Source	<element name="description" type="string"> <annotation> <documentation>Contains a simple text description of the object.</documentation> <documentation>Restricted to only allow a text string, as done in GML 3.2.</documentation> </annotation> </element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:name

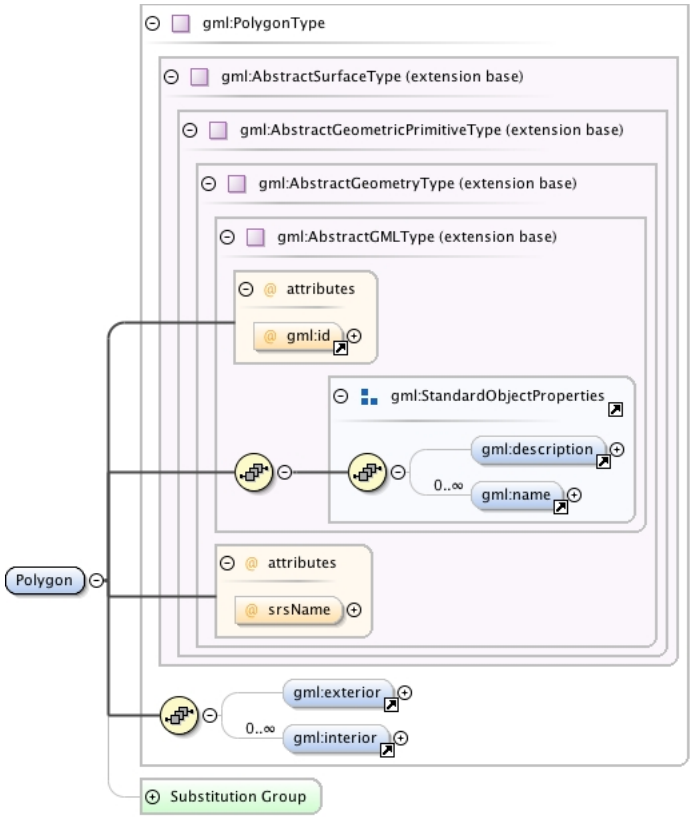
Namespace	http://www.opengis.net/gml
Annotations	Label for the object, normally a descriptive name. An object may have several names, typically assigned by different authorities. The authority for a name is indicated by the value of its (optional) codeSpace attribute. The name may or may not be unique, as determined by the rules of the organization responsible for the codeSpace.
Diagram	
Type	gml:CodeType
Properties	content: complex
Used by	Element Group gml:StandardObjectProperties
Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **codeSpace** / anyURI / / / optional
Source	<element name="name" type="gml:CodeType"> <annotation> <documentation>Label for the object, normally a descriptive name. An object may have several names, typically assigned by different authorities. The authority for a name is indicated by the value of its (optional) codeSpace attribute. The name may or may not be unique, as determined by the rules of the organization responsible for the codeSpace.</documentation> </annotation> </element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:pos

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:DirectPositionType

Type hierarchy	• anySimpleType • gml:doubleList • gml:DirectPositionType
Properties	content: complex
Used by	Complex Type gml:PointType
Source	`<element name="pos" type="gml:DirectPositionType"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:Polygon

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:PolygonType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractSurfaceType • gml:PolygonType
Properties	content: complex
Used by	Element locationGeometry
Model	gml:description{0,1} , gml:name* , gml:exterior{0,1} , gml:interior*
Children	gml:description, gml:exterior, gml:interior, gml:name

Instance	`<gml:Polygon gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:Polygon>`

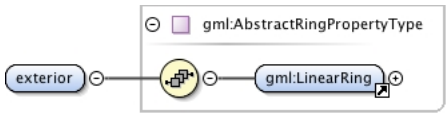
Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional

	QName	Type	Fixed	Default	Use
		Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
	srsName	anyURI			optional
		In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source	`<element name="Polygon" type="gml:PolygonType" substitutionGroup="gml:_Surface"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:exterior`

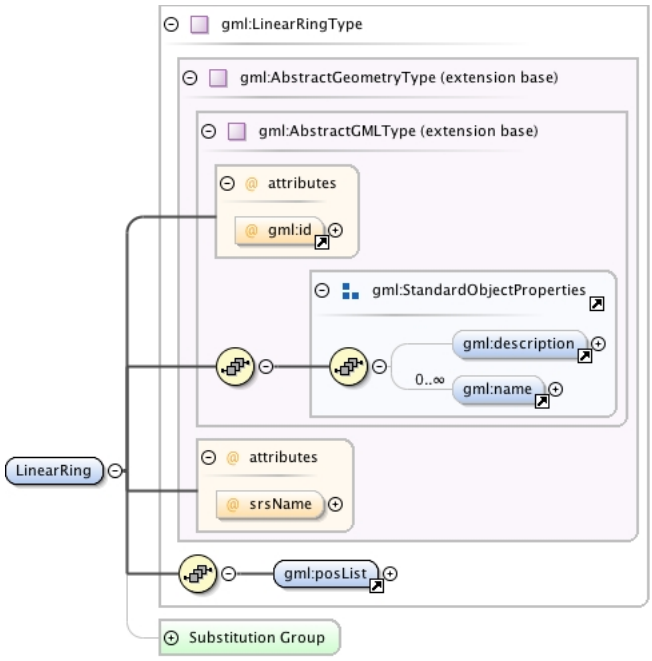
Namespace	http://www.opengis.net/gml
Annotations	A boundary of a surface consists of a number of rings. In the normal 2D case, one of these rings is distinguished as being the exterior boundary. In a general manifold this is not always possible, in which case all boundaries shall be listed as interior boundaries, and the exterior will be empty.
Diagram	
Type	gml:AbstractRingPropertyType
Properties	content: complex
Used by	Complex Types: gml:PolygonPatchType, gml:PolygonType
Model	gml:LinearRing
Children	gml:LinearRing

Instance	`<gml:exterior>`
	`  <gml:LinearRing gml:id="" srsName="">{1,1}</gml:LinearRing>`
	`</gml:exterior>`

Source	`<element name="exterior" type="gml:AbstractRingPropertyType">` `  <annotation>` ` <documentation>A boundary of a surface consists of a number of rings. In the normal 2D case, one of these rings is distinguished as being the exterior boundary. In a general manifold this is not always possible, in which case all boundaries shall be listed as interior boundaries, and the exterior will be empty.</documentation>` ` </annotation>` `</element>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:LinearRing`

Namespace	http://www.opengis.net/gml

Diagram	
Type	gml:LinearRingType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:LinearRingType
Properties	content: complex
Used by	Complex Type gml:AbstractRingPropertyType
Model	gml:description{0,1} , gml:name* , gml:posList
Children	gml:description, gml:name, gml:posList

Instance	`<gml:LinearRing gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:LinearRing>`

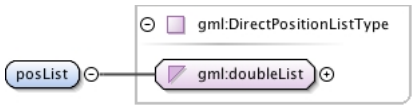
Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

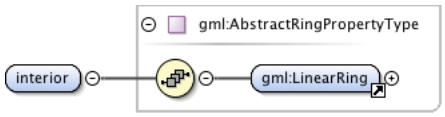
Source	`<element name="LinearRing" type="gml:LinearRingType" substitutionGroup="gml:_Geometry"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:posList

Namespace	http://www.opengis.net/gml

Diagram	
Type	gml:DirectPositionListType
Type hierarchy	• anySimpleType • gml:doubleList • gml:DirectPositionListType
Properties	content: complex
Used by	Complex Types gml:LineStringSegmentType, gml:LineStringType, gml:LinearRingType
Source	`<element name="posList" type="gml:DirectPositionListType"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:interior

Namespace	http://www.opengis.net/gml
Annotations	A boundary of a surface consists of a number of rings. The "interior" rings seperate the surface / surface patch from the area enclosed by the rings.
Diagram	
Type	gml:AbstractRingPropertyType
Properties	content: complex
Used by	Complex Types gml:PolygonPatchType, gml:PolygonType
Model	gml:LinearRing
Children	gml:LinearRing

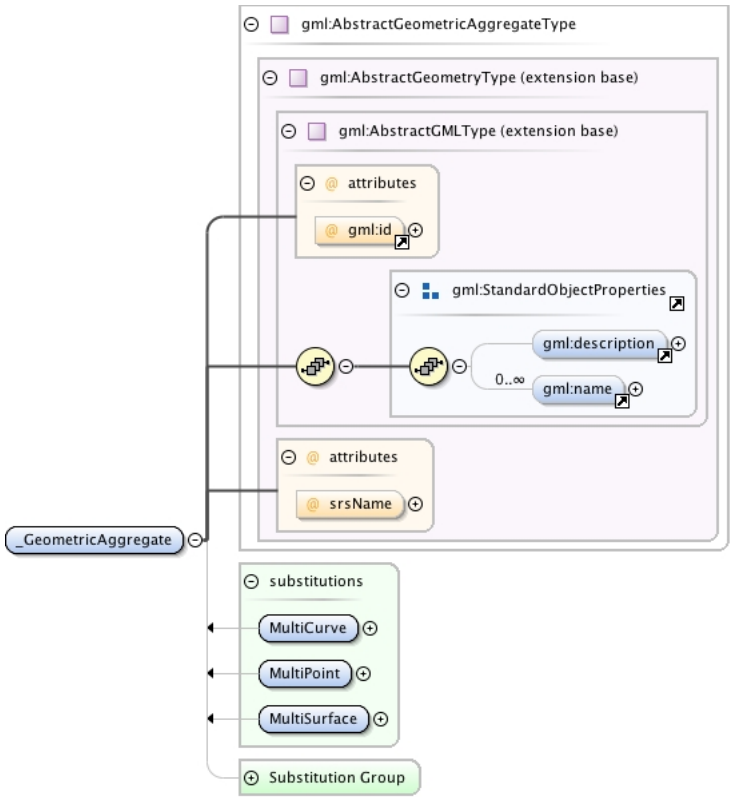
Instance	`<gml:interior>`
	`  <gml:LinearRing gml:id="" srsName="">{1,1}</gml:LinearRing>`
	`</gml:interior>`

Source	`<element name="interior" type="gml:AbstractRingPropertyType">`
	`  <annotation>`
	`  <documentation>A boundary of a surface consists of a number of rings. The "interior" rings seperate the surface / surface patch from the area enclosed by the rings.</documentation>`
	`  </annotation>`
	`</element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:_GeometricAggregate

Namespace	http://www.opengis.net/gml
Annotations	The "_GeometricAggregate" element is the abstract head of the substitution group for all geometric aggregates.

Diagram	
Type	gml:AbstractGeometricAggregateType

Type hierarchy	• gml:AbstractGMLType
	  • gml:AbstractGeometryType
	  • gml:AbstractGeometricAggregateType

Properties	content: `complex` abstract: `true`
Used by	Complex Type gml:MultiGeometryPropertyType
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

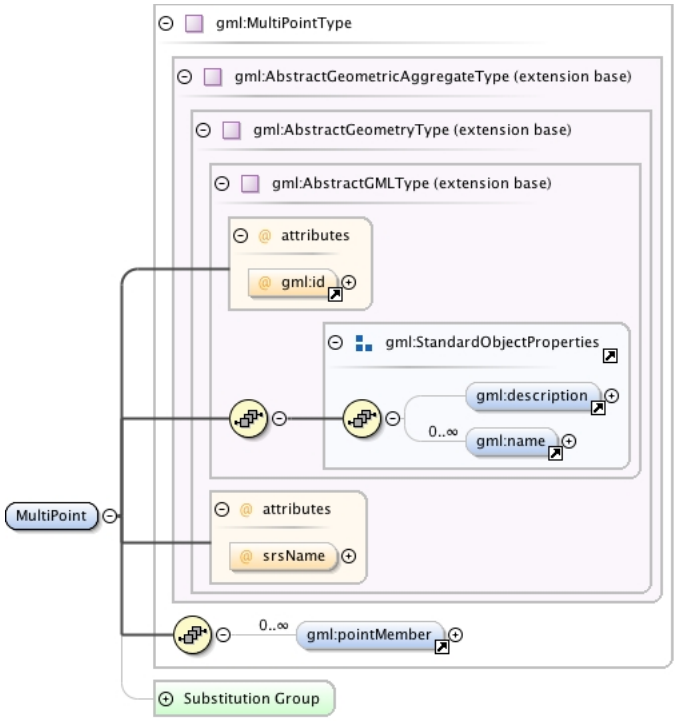
`Instance`	`<gml:_GeometricAggregate gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:_GeometricAggregate>`

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source	<element name="_GeometricAggregate" type="gml:AbstractGeometricAggregateType" substitutionGroup="gml:_Geometry" abstract="true"> <annotation> <documentation>The "_GeometricAggregate" element is the abstract head of the substitution group for all geometric aggregates.</documentation> </annotation> </element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:MultiPoint

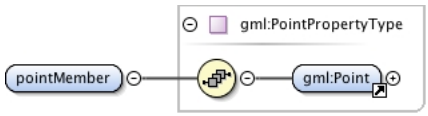
Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:MultiPointType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricAggregateType • gml:MultiPointType
Properties	content: complex
Used by	Complex Type gml:MultiPointPropertyType
Model	gml:description{0,1} , gml:name* , gml:pointMember*
Children	gml:description, gml:name, gml:pointMember
Instance	<gml:MultiPoint gml:id="" srsName=""> <gml:description>{0,1}</gml:description> <gml:name codeSpace="">{0,unbounded}</gml:name> </gml:MultiPoint>

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of			

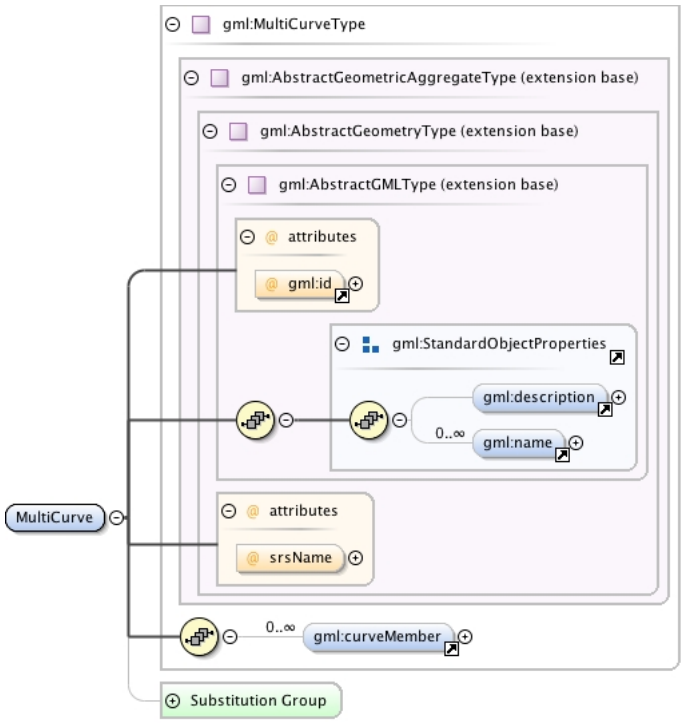
	QName	Type	Fixed	Default	Use
		gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			
Source	<element name="MultiPoint" type="gml:MultiPointType" substitutionGroup="gml:_GeometricAggregate"/>				
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd				

Element gml:pointMember

Namespace	http://www.opengis.net/gml
Annotations	This property element contains the Point element.
Diagram	
Type	gml:PointPropertyType
Properties	content: complex
Used by	Complex Type gml:MultiPointType
Model	gml:Point
Children	gml:Point
Instance	<gml:pointMember> <gml:Point gml:id="" srsName="">{1,1}</gml:Point> </gml:pointMember>
Source	<element name="pointMember" type="gml:PointPropertyType"> <annotation> <documentation>This property element contains the Point element.</documentation> </annotation> </element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:MultiCurve

Namespace	http://www.opengis.net/gml

Diagram	
Type	gml:MultiCurveType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricAggregateType • gml:MultiCurveType
Properties	content: complex
Used by	Complex Type gml:MultiCurvePropertyType
Model	gml:description{0,1} , gml:name* , gml:curveMember*
Children	gml:curveMember, gml:description, gml:name

Instance	`<gml:MultiCurve gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:MultiCurve>`

Attributes

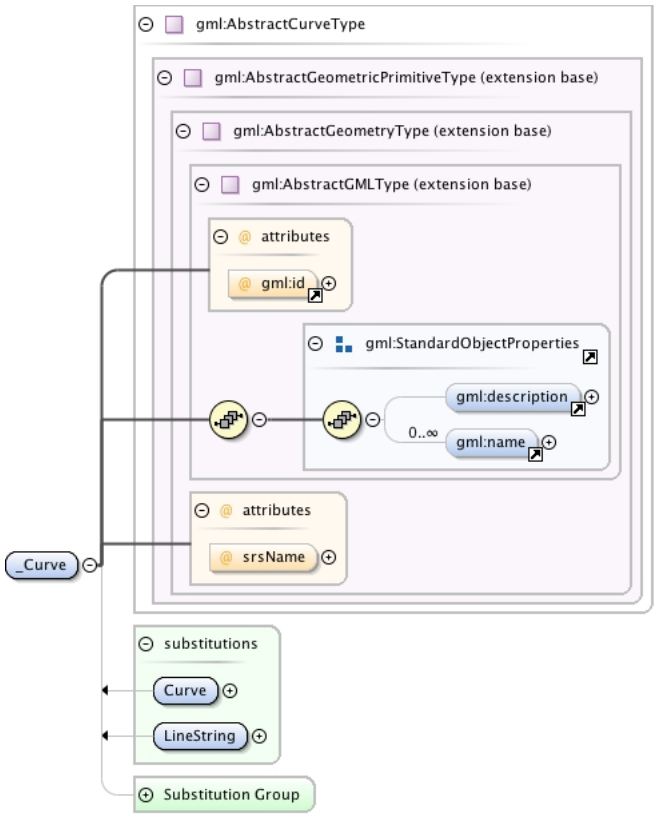
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source	`<element name="MultiCurve" type="gml:MultiCurveType"` `  substitutionGroup="gml:_GeometricAggregate"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:curveMember`

Namespace	http://www.opengis.net/gml
Annotations	This property element contains the curve element. A curve element is any element which is substitutable for "_Curve".
Diagram	
Type	gml:CurvePropertyType
Properties	content: complex
Used by	Complex Type gml:MultiCurveType
Model	gml:_Curve
Children	gml:_Curve
Instance	<gml:curveMember> <gml:_Curve gml:id="" srsName="">{1,1}</gml:_Curve> </gml:curveMember>
Source	<element name="curveMember" type="gml:CurvePropertyType"> <annotation> <documentation>This property element contains the curve element. A curve element is any element which is substitutable for "_Curve".</documentation> </annotation> </element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:_Curve`

Namespace	http://www.opengis.net/gml
Annotations	The "_Curve" element is the abstract head of the substituition group for all (continuous) curve elements.
Diagram	
Type	gml:AbstractCurveType
Type hierarchy	• gml:AbstractGMLType

	• gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractCurveType
Properties	content: complex abstract: true
Used by	Complex Type: gml:CurvePropertyType
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Instance	`<gml:_Curve gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:_Curve>`

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

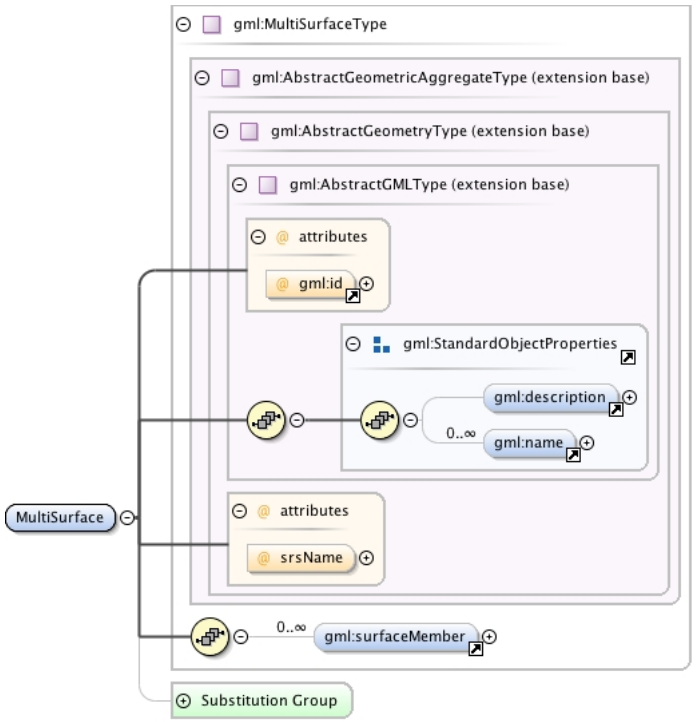
Source

```
<element name="_Curve" type="gml:AbstractCurveType"
 substitutionGroup="gml:_GeometricPrimitive" abstract="true">
  <annotation>
    <documentation>The "_Curve" element is the abstract head of the substituition group
 for all (continuous) curve elements.</documentation>
  </annotation>
</element>
```

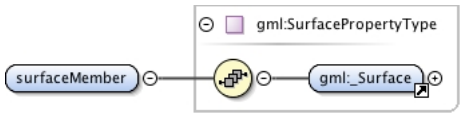
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:MultiSurface

Namespace	http://www.opengis.net/gml

<table>
<tr><td>Diagram</td><td> 
</td></tr>
<tr><td>Type</td><td>gml:MultiSurfaceType</td></tr>
<tr><td>Type hierarchy</td><td>• gml:AbstractGMLType
• gml:AbstractGeometryType
• gml:AbstractGeometricAggregateType
• gml:MultiSurfaceType</td></tr>
<tr><td>Properties</td><td>content: complex</td></tr>
<tr><td>Used by</td><td>Complex Type gml:MultiSurfacePropertyType</td></tr>
<tr><td>Model</td><td>gml:description{0,1} , gml:name* , gml:surfaceMember*</td></tr>
<tr><td>Children</td><td>gml:description, gml:name, gml:surfaceMember</td></tr>
<tr><td>Instance</td><td><pre><gml:MultiSurface gml:id="" srsName="">
  <gml:description>{0,1}</gml:description>
  <gml:name codeSpace="">{0,unbounded}</gml:name>
</gml:MultiSurface></pre></td></tr>
<tr><td>Attributes</td><td>
<table>
<tr><th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr>
<tr><td>gml:id</td><td>ID</td><td></td><td></td><td>optional</td></tr>
<tr><td></td><td colspan="4">Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.</td></tr>
<tr><td>srsName</td><td>anyURI</td><td></td><td></td><td>optional</td></tr>
<tr><td></td><td colspan="4">In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.</td></tr>
</table>
</td></tr>
<tr><td>Source</td><td><pre><element name="MultiSurface" type="gml:MultiSurfaceType"
 substitutionGroup="gml:_GeometricAggregate"/></pre></td></tr>
<tr><td>Schema location</td><td>file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd</td></tr>
</table>

Element `gml:surfaceMember`

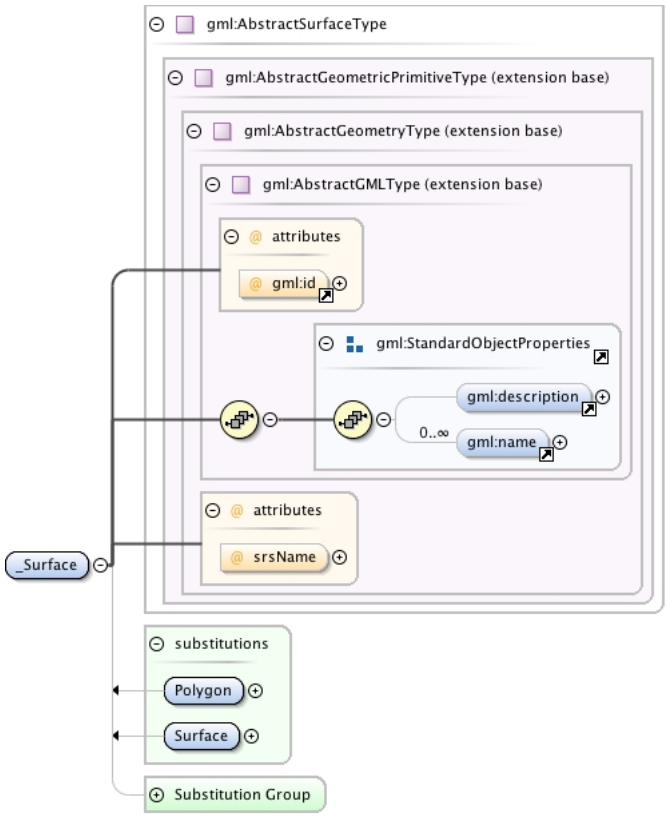
Namespace	http://www.opengis.net/gml
Annotations	`This property element contains the surface element. A surface element is any element which is substitutable for "_Surface".`
Diagram	
Type	gml:SurfacePropertyType
Properties	content: `complex`
Used by	Complex Type gml:MultiSurfaceType
Model	gml:_Surface
Children	gml:_Surface

`Instance`	`<gml:surfaceMember>`
	`  <gml:_Surface gml:id="" srsName="">{1,1}</gml:_Surface>`
	`</gml:surfaceMember>`

`Source`	`<element name="surfaceMember" type="gml:SurfacePropertyType">`
	`  <annotation>`
	`  <documentation>This property element contains the surface element. A surface element is any element which is substitutable for "_Surface".</documentation>`
	`  </annotation>`
	`</element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:_Surface`

Namespace	http://www.opengis.net/gml
Annotations	`The "_Surface" element is the abstract head of the substituition group for all (continuous) surface elements.`
Diagram	
Type	gml:AbstractSurfaceType
Type hierarchy	• gml:AbstractGMLType

<table>
<tr><td></td><td>

gml:AbstractGeometryType

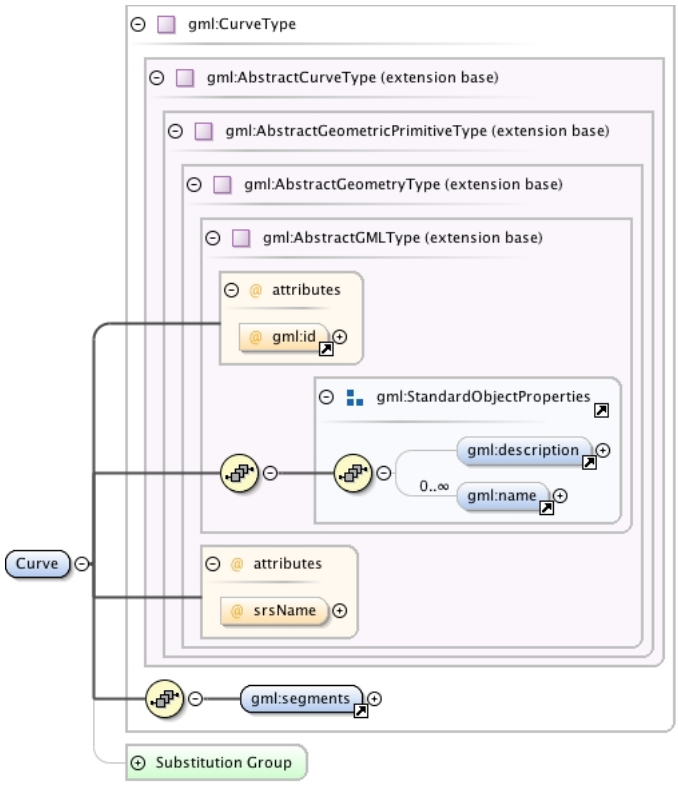
gml:AbstractGeometricPrimitiveType

gml:AbstractSurfaceType

</td></tr>
<tr><td>Properties</td><td>
<table>
<tr><td>content:</td><td><code>complex</code></td></tr>
<tr><td>abstract:</td><td><code>true</code></td></tr>
</table>
</td></tr>
<tr><td>Used by</td><td>
<table>
<tr><td>Complex Type</td><td>gml:SurfacePropertyType</td></tr>
</table>
</td></tr>
<tr><td>Model</td><td>gml:description{0,1} , gml:name*</td></tr>
<tr><td>Children</td><td>gml:description, gml:name</td></tr>
<tr><td><code>Instance</code></td><td>
<pre><gml:_Surface gml:id="" srsName="">
  <gml:description>{0,1}</gml:description>
  <gml:name codeSpace="">{0,unbounded}</gml:name>
</gml:_Surface></pre>
</td></tr>
<tr><td>Attributes</td><td>
<table>
<tr><th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr>
<tr><td>gml:id</td><td>ID</td><td></td><td></td><td>optional</td></tr>
<tr><td></td><td colspan="4">Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.</td></tr>
<tr><td>srsName</td><td>anyURI</td><td></td><td></td><td>optional</td></tr>
<tr><td></td><td colspan="4">In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.</td></tr>
</table>
</td></tr>
<tr><td><code>Source</code></td><td>
<pre><element name="_Surface" type="gml:AbstractSurfaceType"
 substitutionGroup="gml:_GeometricPrimitive" abstract="true">
  <annotation>
    <documentation>The "_Surface" element is the abstract head of the substituition group
 for all (continuous) surface elements.</documentation>
  </annotation>
</element></pre>
</td></tr>
<tr><td>Schema location</td><td>file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd</td></tr>
</table>

Element `gml:Curve`

Namespace	http://www.opengis.net/gml

Diagram	
Type	gml:CurveType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractCurveType • gml:CurveType
Properties	content: complex
Model	gml:description{0,1} , gml:name* , gml:segments
Children	gml:description, gml:name, gml:segments

Instance	`<gml:Curve gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:Curve>`

Attributes

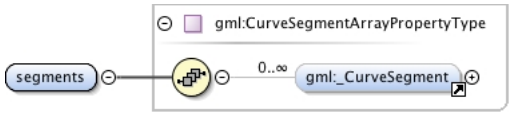
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source

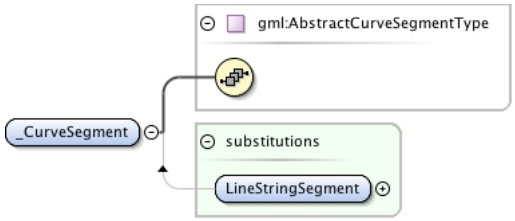
```
<element name="Curve" type="gml:CurveType" substitutionGroup="gml:_Curve"/>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:segments

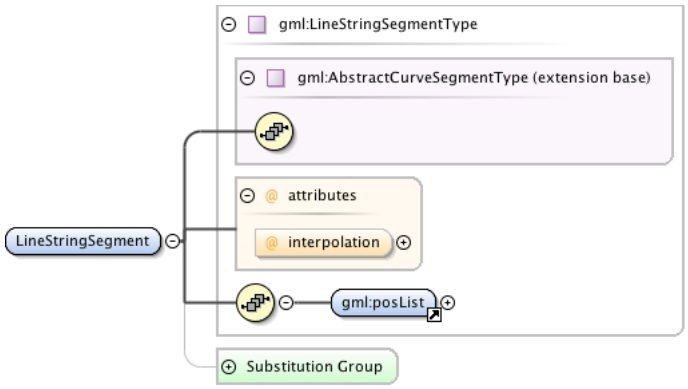
Namespace	http://www.opengis.net/gml
Annotations	This property element contains a list of curve segments. The order of the elements is significant and shall be preserved when processing the array.
Diagram	
Type	gml:CurveSegmentArrayPropertyType
Properties	content: complex
Used by	Complex Type gml:CurveType
Model	gml:_CurveSegment*
Children	gml:_CurveSegment
Instance	<gml:segments> <gml:_CurveSegment>{0,unbounded}</gml:_CurveSegment> </gml:segments>
Source	<element name="segments" type="gml:CurveSegmentArrayPropertyType"> <annotation> <documentation>This property element contains a list of curve segments. The order of the elements is significant and shall be preserved when processing the array.</ documentation> </annotation> </element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:_CurveSegment

Namespace	http://www.opengis.net/gml
Annotations	The "_CurveSegment" element is the abstract head of the substituition group for all curve segment elements, i.e. continuous segments of the same interpolation mechanism.
Diagram	
Type	gml:AbstractCurveSegmentType
Properties	content: complex abstract: true
Used by	Complex Type gml:CurveSegmentArrayPropertyType
Model	
Source	<element name="_CurveSegment" type="gml:AbstractCurveSegmentType" abstract="true"> <annotation> <documentation>The "_CurveSegment" element is the abstract head of the substituition group for all curve segment elements, i.e. continuous segments of the same interpolation mechanism.</documentation> </annotation> </element>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element gml:LineStringSegment

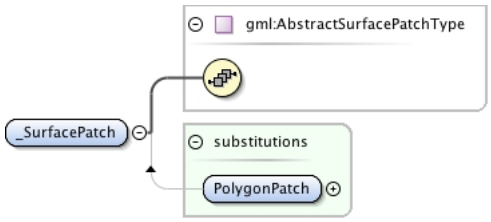
Namespace	http://www.opengis.net/gml

Diagram	
Type	gml:LineStringSegmentType
Type hierarchy	• gml:AbstractCurveSegmentType • gml:LineStringSegmentType
Properties	content: complex
Model	gml:posList
Children	gml:posList

Instance	`<gml:LineStringSegment interpolation="linear">`
	`  <gml:posList>{1,1}</gml:posList>`
	`</gml:LineStringSegment>`

Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **interpolation** / gml:CurveInterpolationType / / / optional The attribute "interpolation" specifies the curve interpolation mechanism used for this segment. This mechanism uses the control points and control parameters to determine the position of this curve segment. For a LineStringSegment the interpolation is fixed as "linear".
Source	`<element name="LineStringSegment" type="gml:LineStringSegmentType" substitutionGroup="gml:_CurveSegment"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

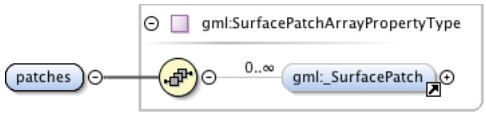
Element gml:_SurfacePatch

Namespace	http://www.opengis.net/gml
Annotations	The "_SurfacePatch" element is the abstract head of the substituition group for all surface pach elements describing a continuous portion of a surface.
Diagram	
Type	gml:AbstractSurfacePatchType
Properties	content: complex abstract: true
Used by	Complex Type: gml:SurfacePatchArrayPropertyType
Model	

Source	`<element name="_SurfacePatch" type="gml:AbstractSurfacePatchType" abstract="true">`
	`  <annotation>`
	`  <documentation>The "_SurfacePatch" element is the abstract head of the substituition group for all surface pach elements describing a continuous portion of a surface.</documentation>`
	`  </annotation>`

	`</element>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:patches`

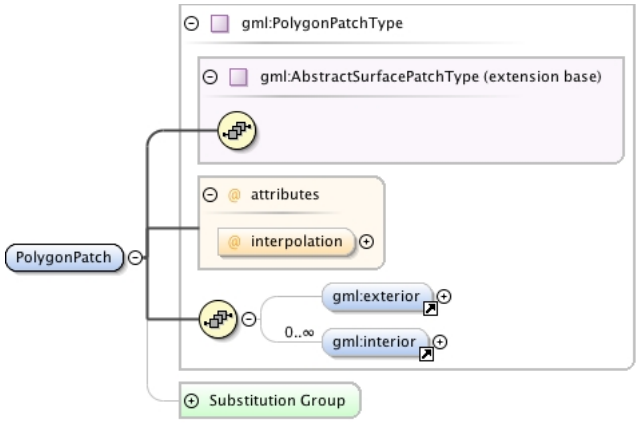
Namespace	http://www.opengis.net/gml
Annotations	This property element contains a list of surface patches. The order of the elements is significant and shall be preserved when processing the array.
Diagram	
Type	gml:SurfacePatchArrayPropertyType
Properties	content: complex
Used by	Complex Type gml:SurfaceType
Model	gml:_SurfacePatch*
Children	gml:_SurfacePatch

Instance	`<gml:patches>`
	`  <gml:_SurfacePatch>{0,unbounded}</gml:_SurfacePatch>`
	`</gml:patches>`

Source	`<element name="patches" type="gml:SurfacePatchArrayPropertyType">`
	`  <annotation>`
	`  <documentation>This property element contains a list of surface patches. The order of the elements is significant and shall be preserved when processing the array.</documentation>`
	`  </annotation>`
	`</element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:PolygonPatch`

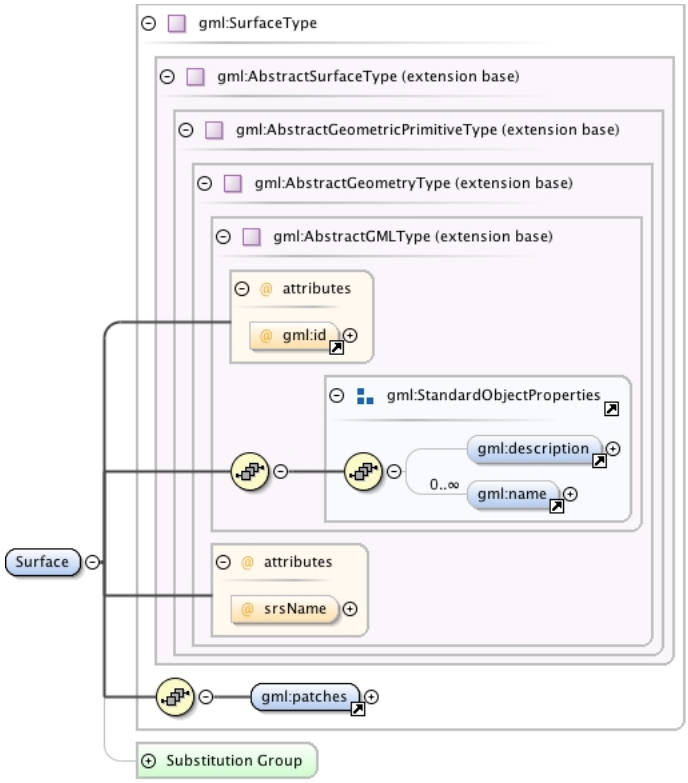
Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:PolygonPatchType
Type hierarchy	• gml:AbstractSurfacePatchType • gml:PolygonPatchType
Properties	content: complex
Model	gml:exterior{0,1} , gml:interior*
Children	gml:exterior, gml:interior

Instance	`<gml:PolygonPatch interpolation="planar">`
	`  <gml:exterior>{0,1}</gml:exterior>`
	`  <gml:interior>{0,unbounded}</gml:interior>`
	`</gml:PolygonPatch>`

Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **interpolation** | gml:SurfaceInterpolationType | | | optional

	QName	Type	Fixed	Default	Use
		The attribute "interpolation" specifies the interpolation mechanism used for this surface patch. Currently only planar surface patches are defined in GML 3, the attribute is fixed to "planar", i.e. the interpolation method shall return points on a single plane. The boundary of the patch shall be contained within that plane.			
Source	<element name="PolygonPatch" type="gml:PolygonPatchType" substitutionGroup="gml:_SurfacePatch"/>				
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd				

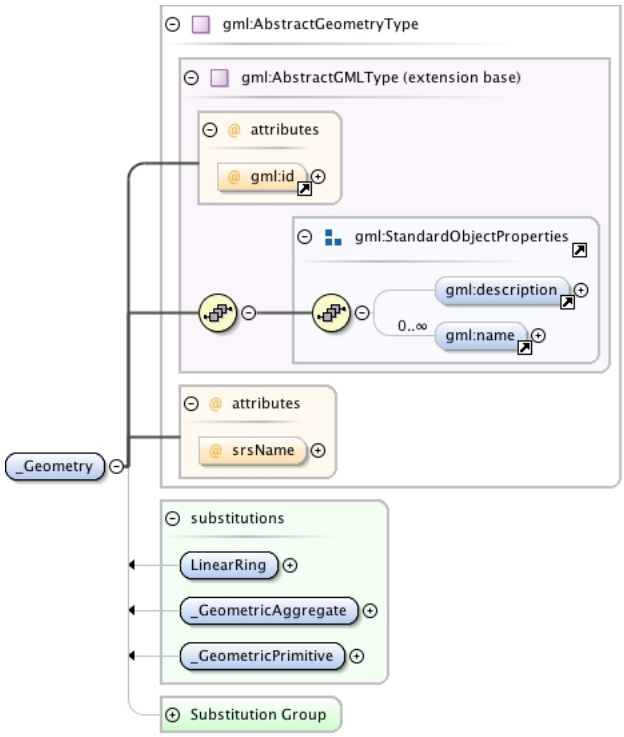
Element gml:Surface

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:SurfaceType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractSurfaceType • gml:SurfaceType
Properties	content: complex
Model	gml:description{0,1} , gml:name* , gml:patches
Children	gml:description, gml:name, gml:patches
Instance	<gml:Surface gml:id="" srsName=""> <gml:description>{0,1}</gml:description> <gml:name codeSpace="">{0,unbounded}</gml:name> </gml:Surface>

Attributes	QName	Type	Fixed	Default	Use
	gml:id	ID			optional
		Database handle for the object. It is of XML type ID,			

	QName	Type	Fixed	Default	Use
		so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
	srsName	anyURI			optional
		In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			
Source	<element name="Surface" type="gml:SurfaceType" substitutionGroup="gml:_Surface"/>				
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd				

Element gml:_Geometry

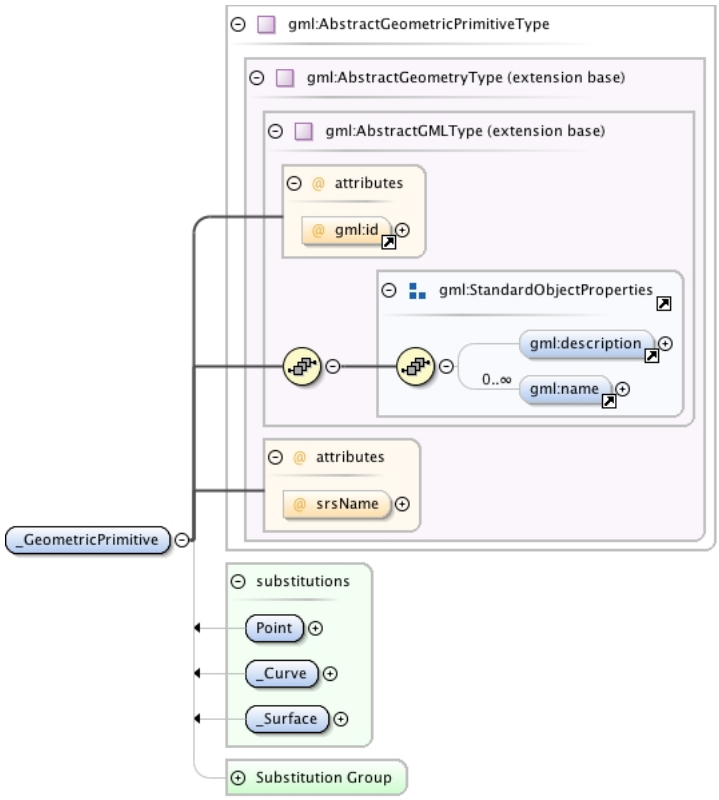
Namespace	http://www.opengis.net/gml
Annotations	The "_Geometry" element is the abstract head of the substituition group for all geometry elements of GML 3. This includes pre-defined and user-defined geometry elements. Any geometry element must be a direct or indirect extension/restriction of AbstractGeometryType and must be directly or indirectly in the substitution group of "_Geometry".
Diagram	
Type	gml:AbstractGeometryType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType
Properties	content: complex abstract: true
Used by	Complex Type gml:GeometryPropertyType
Model	gml:description{0,1} , gml:name*

<table>
<tr><td>Children</td><td>gml:description, gml:name</td></tr>
<tr><td>Instance</td><td><pre>
<gml:_Geometry gml:id="" srsName="">
  <gml:description>{0,1}</gml:description>
  <gml:name codeSpace="">{0,unbounded}</gml:name>
</gml:_Geometry>
</pre></td></tr>
<tr><td>Attributes</td><td>
<table>
<tr><th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr>
<tr><td>gml:id</td><td>ID</td><td></td><td></td><td>optional</td></tr>
<tr><td></td><td colspan="4">Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.</td></tr>
<tr><td>srsName</td><td>anyURI</td><td></td><td></td><td>optional</td></tr>
<tr><td></td><td colspan="4">In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.</td></tr>
</table>
</td></tr>
<tr><td>Source</td><td><pre>
<element name="_Geometry" type="gml:AbstractGeometryType" substitutionGroup="gml:_GML"
 abstract="true">
  <annotation>
    <documentation>The "_Geometry" element is the abstract head of the substituition group
 for all geometry elements of GML 3. This includes pre-defined and user-defined geometry
 elements. Any geometry element must be a direct or indirect extension/restriction of
 AbstractGeometryType and must be directly or indirectly in the substitution group of
 "_Geometry".</documentation>
  </annotation>
</element>
</pre></td></tr>
<tr><td>Schema location</td><td>file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd</td></tr>
</table>

Element gml:_GeometricPrimitive

Namespace	http://www.opengis.net/gml
Annotations	The "_GeometricPrimitive" element is the abstract head of the substituition group for all (pre- and user-defined) geometric primitives.

Diagram



Type: gml:AbstractGeometricPrimitiveType

Type hierarchy:

- gml:AbstractGMLType
  - gml:AbstractGeometryType
    - gml:AbstractGeometricPrimitiveType

Properties

content:	complex
abstract:	true

Model: gml:description{0,1} , gml:name*

Children: gml:description, gml:name

Instance

```
<gml:_GeometricPrimitive gml:id="" srsName="">
  <gml:description>{0,1}</gml:description>
  <gml:name codeSpace="">{0,unbounded}</gml:name>
</gml:_GeometricPrimitive>
```

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

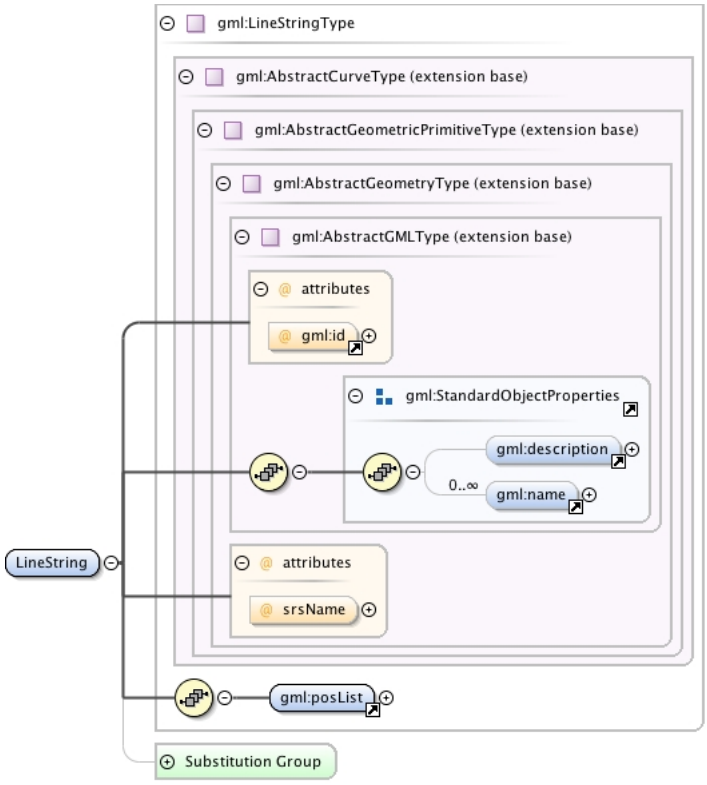
Source

```
<element name="_GeometricPrimitive" type="gml:AbstractGeometricPrimitiveType"
 abstract="true" substitutionGroup="gml:_Geometry">
  <annotation>
```

```
    <documentation>The "_GeometricPrimitive" element is the abstract head of the
 substituition group for all (pre- and user-defined) geometric primitives.</documentation>
  </annotation>
</element>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:LineString`

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:LineStringType

Type hierarchy	• gml:AbstractGMLType
	  • gml:AbstractGeometryType
	  • gml:AbstractGeometricPrimitiveType
	  • gml:AbstractCurveType
	  • gml:LineStringType

Properties	content: complex
Model	gml:description{0,1} , gml:name* , gml:posList
Children	gml:description, gml:name, gml:posList

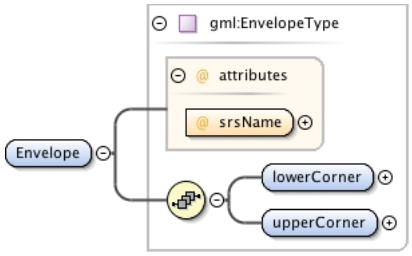
Instance	`<gml:LineString gml:id="" srsName="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:LineString>`

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of			

	QName	Type	Fixed	Default	Use
		gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			
Source	<element name="LineString" type="gml:LineStringType" substitutionGroup="gml:_Curve"/>				
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd				

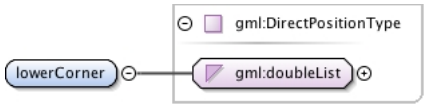
Element gml:Envelope

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:EnvelopeType
Properties	content: complex
Used by	Complex Type gml:BoundingShapeType
Model	gml:lowerCorner , gml:upperCorner
Children	gml:lowerCorner, gml:upperCorner
Instance	<gml:Envelope srsName=""> <gml:lowerCorner>{1,1}</gml:lowerCorner> <gml:upperCorner>{1,1}</gml:upperCorner> </gml:Envelope>

Attributes	QName	Type	Fixed	Default	Use
	srsName	anyURI			required
		In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to.			

Source	<element name="Envelope" type="gml:EnvelopeType"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

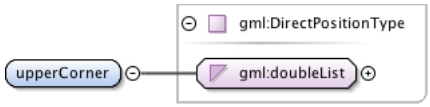
Element gml:EnvelopeType / gml:lowerCorner

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:DirectPositionType

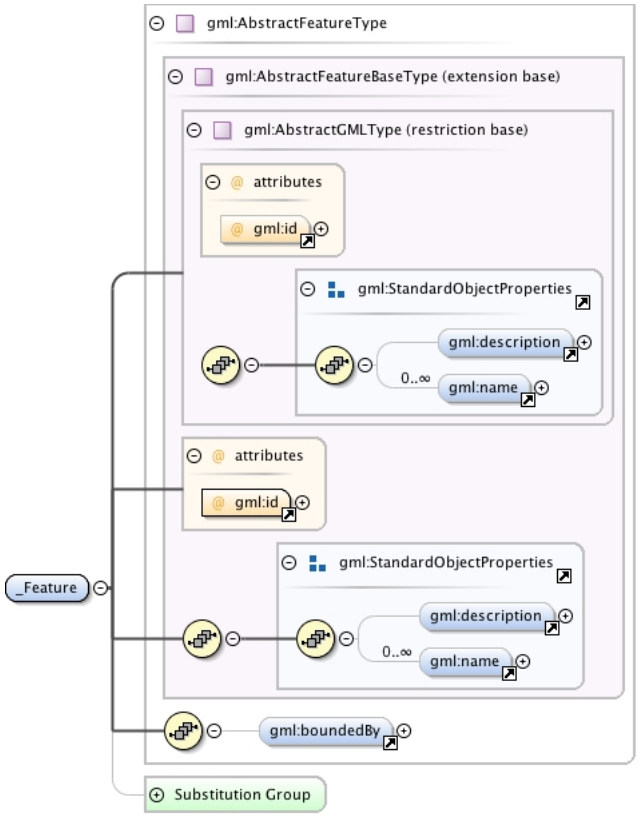
Type hierarchy	• anySimpleType
	  • gml:doubleList
	  • gml:DirectPositionType

Properties	content: complex
Source	<element name="lowerCorner" type="gml:DirectPositionType"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:EnvelopeType / gml:upperCorner`

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:DirectPositionType
Type hierarchy	• anySimpleType • gml:doubleList • gml:DirectPositionType
Properties	content: complex
Source	`<element name="upperCorner" type="gml:DirectPositionType"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element `gml:_Feature`

Namespace	http://www.opengis.net/gml
Diagram	
Type	gml:AbstractFeatureType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractFeatureBaseType • gml:AbstractFeatureType
Properties	content: complex abstract: true
Model	gml:description{0,1} , gml:name* , gml:boundedBy{0,1}
Children	gml:boundedBy, gml:description, gml:name
Instance	`<gml:_Feature gml:id="">`

<table>
<tr><td></td><td>

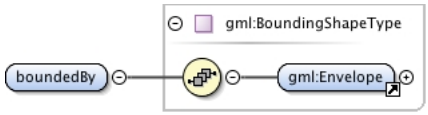
```
  <gml:description>{0,1}</gml:description>
  <gml:name codeSpace="">{0,unbounded}</gml:name>
</gml:_Feature>
```

</td></tr>
<tr><td>Attributes</td><td>
<table>
<tr><th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr>
<tr><td>gml:id</td><td>ID</td><td></td><td></td><td>required</td></tr>
<tr><td></td><td colspan="4">Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.</td></tr>
</table>
</td></tr>
<tr><td>Source</td><td>

```
<element name="_Feature" type="gml:AbstractFeatureType" abstract="true"
 substitutionGroup="gml:_GML"/>
```

</td></tr>
<tr><td>Schema location</td><td>file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd</td></tr>
</table>

Element gml:boundedBy

<table>
<tr><td>Namespace</td><td>http://www.opengis.net/gml</td></tr>
<tr><td>Diagram</td><td> 
</td></tr>
<tr><td>Type</td><td>gml:BoundingShapeType</td></tr>
<tr><td>Properties</td><td>content: complex</td></tr>
<tr><td>Used by</td><td>Complex Type gml:AbstractFeatureType</td></tr>
<tr><td>Model</td><td>gml:Envelope</td></tr>
<tr><td>Children</td><td>gml:Envelope</td></tr>
<tr><td>Instance</td><td>

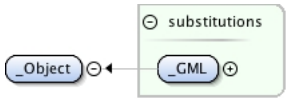
```
<gml:boundedBy>
  <gml:Envelope srsName="">{1,1}</gml:Envelope>
</gml:boundedBy>
```

</td></tr>
<tr><td>Source</td><td>

```
<element name="boundedBy" type="gml:BoundingShapeType"/>
```

</td></tr>
<tr><td>Schema location</td><td>file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd</td></tr>
</table>

Element gml:_Object

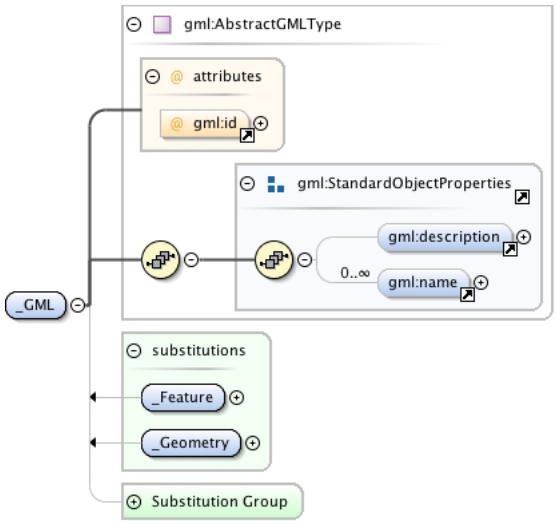
<table>
<tr><td>Namespace</td><td>http://www.opengis.net/gml</td></tr>
<tr><td>Annotations</td><td>This abstract element is the head of a substitutionGroup hierararchy which may contain either simpleContent or complexContent elements. It is used to assert the model position of "class" elements declared in other GML schemas.</td></tr>
<tr><td>Diagram</td><td> 
</td></tr>
<tr><td>Properties</td><td>abstract: true</td></tr>
<tr><td>Source</td><td>

```
<element name="_Object" abstract="true">
  <annotation>
    <documentation>This abstract element is the head of a substitutionGroup hierararchy
 which may contain either simpleContent or complexContent elements. It is used to assert
 the model position of "class" elements declared in other GML schemas.</documentation>
  </annotation>
</element>
```

</td></tr>
<tr><td>Schema location</td><td>file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd</td></tr>
</table>

Element gml:_GML

<table>
<tr><td>Namespace</td><td>http://www.opengis.net/gml</td></tr>
<tr><td>Annotations</td><td>Global element which acts as the head of a substitution group that may include any element which is a GML feature, object, geometry or complex value</td></tr>
</table>

Diagram	
Type	gml:AbstractGMLType
Properties	content: complex abstract: true
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Instance	`<gml:_GML gml:id="">`
	`  <gml:description>{0,1}</gml:description>`
	`  <gml:name codeSpace="">{0,unbounded}</gml:name>`
	`</gml:_GML>`

Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **gml:id** / ID / / / optional Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.

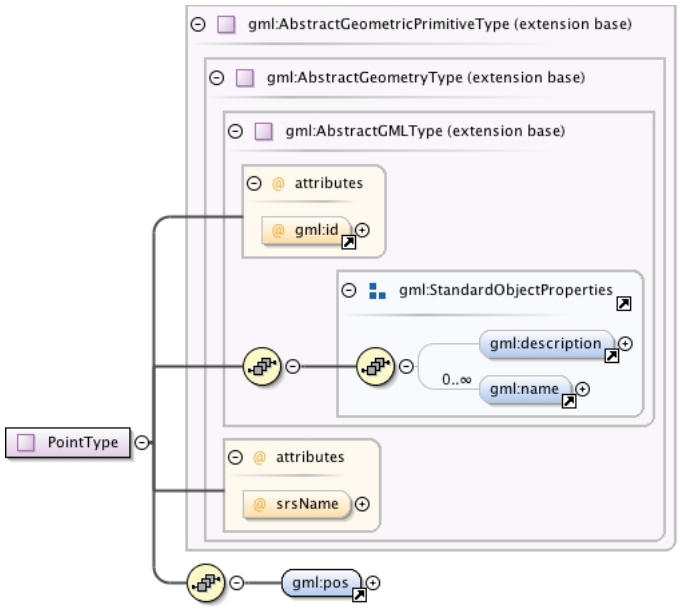
Source	`<element name="_GML" type="gml:AbstractGMLType" abstract="true"`
	` substitutionGroup="gml:_Object">`
	`  <annotation>`
	`  <documentation>Global element which acts as the head of a substitution group that may include any element which is a GML feature, object, geometry or complex value</documentation>`
	`  </annotation>`
	`</element>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Types

Complex Type `gml:PointType`

Namespace	http://www.opengis.net/gml
Annotations	A Point is defined by a single coordinate tuple.

Diagram	
Type	extension of gml:AbstractGeometricPrimitiveType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:PointType
Used by	Element gml:Point
Model	gml:description{0,1} , gml:name* , gml:pos
Children	gml:description, gml:name, gml:pos

Attributes

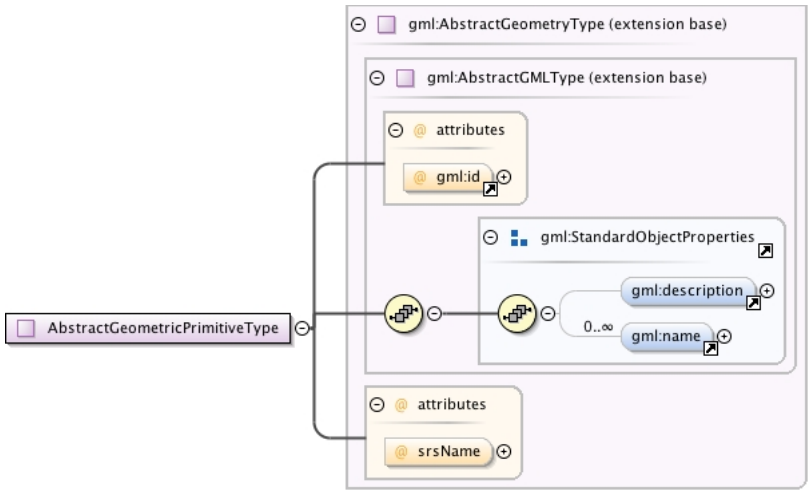
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source

```
<complexType name="PointType">
  <annotation>
    <documentation>A Point is defined by a single coordinate tuple.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGeometricPrimitiveType">
      <sequence>
        <element ref="gml:pos"/>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractGeometricPrimitiveType`

Namespace	http://www.opengis.net/gml
Annotations	This is the abstract root type of the geometric primitives. A geometric primitive is a geometric object that is not decomposed further into other primitives in the system. All primitives are oriented in the direction implied by the sequence of their coordinate tuples.
Diagram	
Type	extension of gml:AbstractGeometryType

Type hierarchy	• gml:AbstractGMLType
	  • gml:AbstractGeometryType
	  • gml:AbstractGeometricPrimitiveType

Properties	abstract: `true`
Used by	Complex Types: gml:AbstractCurveType, gml:AbstractSurfaceType, gml:PointType Element: gml:_GeometricPrimitive
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Attributes

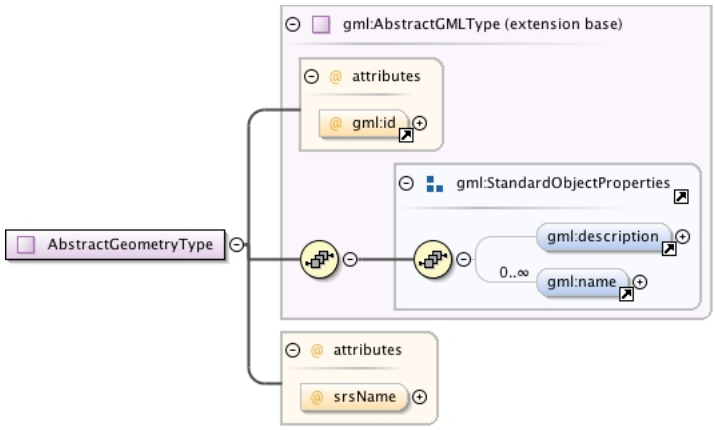
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source

```
<complexType name="AbstractGeometricPrimitiveType" abstract="true">
  <annotation>
    <documentation>This is the abstract root type of the geometric primitives. A geometric
 primitive is a geometric object that is not decomposed further into other primitives in
 the system. All primitives are oriented in the direction implied by the sequence of their
 coordinate tuples.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGeometryType"/>
  </complexContent>
```

	`</complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractGeometryType`

Namespace	http://www.opengis.net/gml
Annotations	All geometry elements are derived directly or indirectly from this abstract supertype. A geometry element may have an identifying attribute ("gml:id"), a name (attribute "name") and a description (attribute "description"). It may be associated with a spatial reference system (attribute "srsName"). The following rules shall be adhered: - Every geometry type shall derive from this abstract type. - Every geometry element (i.e. an element of a geometry type) shall be directly or indirectly in the substitution group of _Geometry.
Diagram	
Type	extension of gml:AbstractGMLType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType
Properties	abstract: `true`
Used by	Complex Types: gml:AbstractGeometricAggregateType, gml:AbstractGeometricPrimitiveType, gml:LinearRingType Element: gml:_Geometry
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

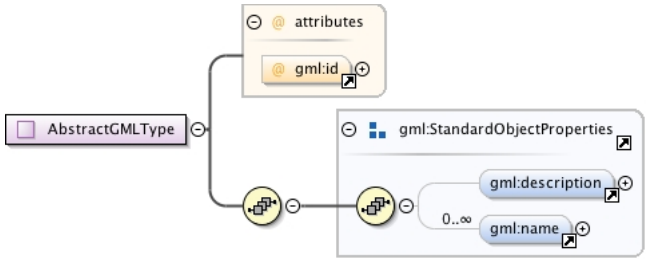
Source

```
<complexType name="AbstractGeometryType" abstract="true">
  <annotation>
    <documentation>All geometry elements are derived directly or indirectly from this
 abstract supertype. A geometry element may have an identifying attribute ("gml:id"), a
 name (attribute "name") and a description (attribute "description"). It may be associated
```

```
 with a spatial reference system (attribute "srsName"). The following rules shall be
 adhered: - Every geometry type shall derive from this abstract type. - Every geometry
 element (i.e. an element of a geometry type) shall be directly or indirectly in the
 substitution group of _Geometry.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGMLType">
      <attribute name="srsName" type="anyURI" use="optional">
        <annotation>
          <documentation>In general this reference points to a CRS instance of
 gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known
 references it is not required that the CRS description exists at the location the URI
 points to. If no srsName attribute is given, the CRS must be specified as part of the
 larger context this geometry element is part of, e.g. a geometric element like point,
 curve, etc. It is expected that this attribute will be specified at the direct position
 level only in rare cases.</documentation>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractGMLType`

Namespace	http://www.opengis.net/gml
Annotations	`All complexContent GML elements are directly or indirectly derived from this abstract supertype to establish a hierarchy of GML types that may be distinguished from other XML types by their ancestry. Elements in this hierarchy must have an ID and are thus referenceable.`
Diagram	
Properties	abstract: `true`
Used by	Complex Types: gml:AbstractFeatureBaseType, gml:AbstractGeometryType Element: gml:_GML
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Attributes

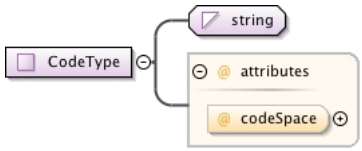
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	`Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.`			

Source

```
<complexType name="AbstractGMLType" abstract="true">
  <annotation>
    <documentation>All complexContent GML elements are directly or indirectly derived from
 this abstract supertype to establish a hierarchy of GML types that may be distinguished
 from other XML types by their ancestry. Elements in this hierarchy must have an ID and
 are thus referenceable.</documentation>
  </annotation>
  <sequence>
    <group ref="gml:StandardObjectProperties"/>
  </sequence>
  <attribute ref="gml:id" use="optional"/>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

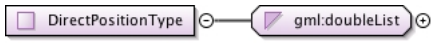
Complex Type gml:CodeType

Namespace	http://www.opengis.net/gml
Annotations	Name or code with an (optional) authority. Text token. If the codeSpace attribute is present, then its value should identify a dictionary, thesaurus or authority for the term, such as the organisation who assigned the value, or the dictionary from which it is taken. A text string with an optional codeSpace attribute.
Diagram	
Type	extension of string
Used by	Element gml:name
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **codeSpace** | anyURI | | | optional

Source	`<complexType name="CodeType">`
	`<annotation>`
	`<documentation>`Name or code with an (optional) authority. Text token. If the codeSpace attribute is present, then its value should identify a dictionary, thesaurus or authority for the term, such as the organisation who assigned the value, or the dictionary from which it is taken. A text string with an optional codeSpace attribute.`</documentation>`
	`</annotation>`
	`<simpleContent>`
	`<extension base="string">`
	`<attribute name="codeSpace" type="anyURI" use="optional"/>`
	`</extension>`
	`</simpleContent>`
	`</complexType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:DirectPositionType

Namespace	http://www.opengis.net/gml
Annotations	DirectPosition instances hold the coordinates for one position in the coordinate reference system (CRS) referenced in a larger element. In this case, the CRS shall be assumed to be the value referenced in the containing object's CRS.
Diagram	
Type	extension of gml:doubleList

Type hierarchy	• anySimpleType
	  • gml:doubleList
	  • gml:DirectPositionType

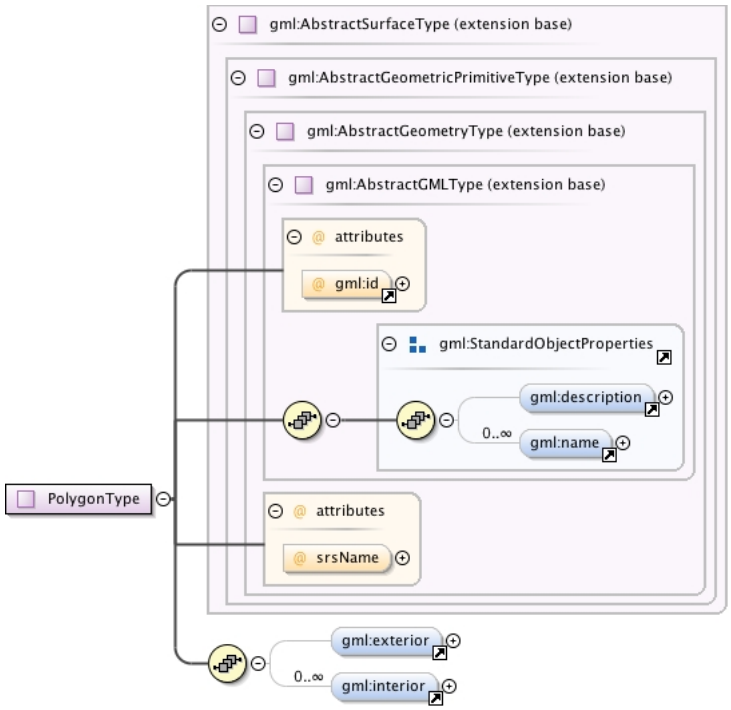
Used by	Elements gml:EnvelopeType/gml:lowerCorner, gml:EnvelopeType/gml:upperCorner, gml:pos

Source	`<complexType name="DirectPositionType">`
	`<annotation>`
	`<documentation>`DirectPosition instances hold the coordinates for one position in the coordinate reference system (CRS) referenced in a larger element. In this case, the CRS shall be assumed to be the value referenced in the containing object's CRS.`</documentation>`
	`</annotation>`
	`<simpleContent>`
	`<extension base="gml:doubleList"/>`
	`</simpleContent>`
	`</complexType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:PolygonType

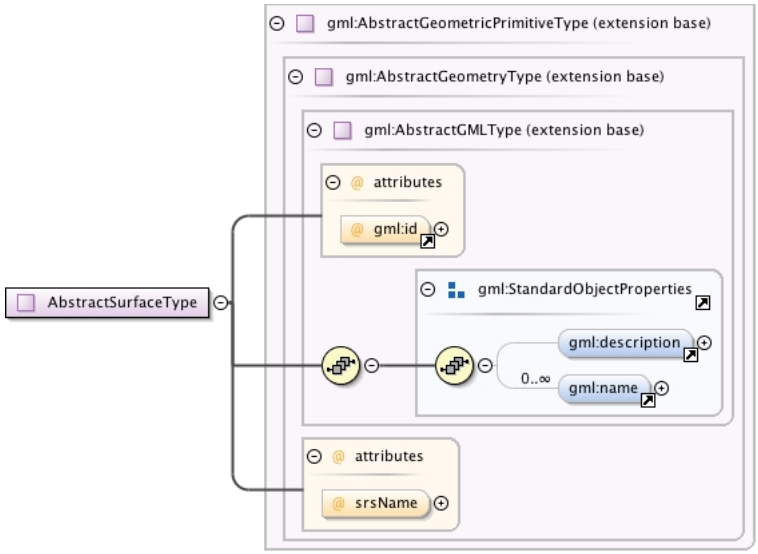
Namespace	http://www.opengis.net/gml
Annotations	A Polygon is a special surface that is defined by a single surface patch. The boundary of this patch is coplanar and the polygon uses planar interpolation in its interior. It

	is backwards compatible with the Polygon of GML 2.
Diagram	
Type	extension of gml:AbstractSurfaceType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractSurfaceType • gml:PolygonType
Used by	Element gml:Polygon
Model	gml:description{0,1} , gml:name* , gml:exterior{0,1} , gml:interior*
Children	gml:description, gml:exterior, gml:interior, gml:name
Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **gml:id** / ID / / / optional Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute. **srsName** / anyURI / / / optional In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.
Source	<complexType name="PolygonType"> <annotation> <documentation>A Polygon is a special surface that is defined by a single surface patch. The boundary of this patch is coplanar and the polygon uses planar interpolation in its interior. It is backwards compatible with the Polygon of GML 2.</documentation> </annotation> <complexContent> <extension base="gml:AbstractSurfaceType">

```
      <sequence>
        <element ref="gml:exterior" minOccurs="0"/>
        <element ref="gml:interior" minOccurs="0" maxOccurs="unbounded"/>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractSurfaceType`

Namespace	http://www.opengis.net/gml
Annotations	An abstraction of a surface to support the different levels of complexity. A surface is always a continuous region of a plane.
Diagram	

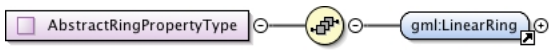
Type	extension of gml:AbstractGeometricPrimitiveType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractSurfaceType
Used by	Complex Types: gml:PolygonType, gml:SurfaceType Element: gml:_Surface
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Attributes

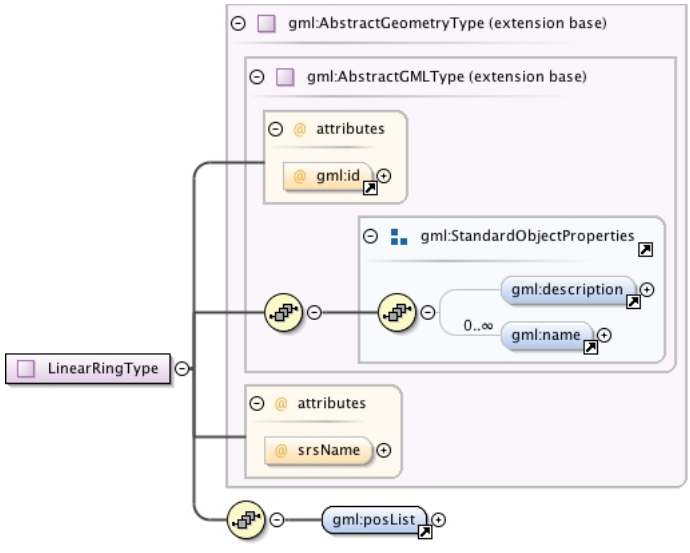
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source	<complexType name="AbstractSurfaceType"> <annotation> <documentation>An abstraction of a surface to support the different levels of complexity. A surface is always a continuous region of a plane.</documentation> </annotation> <complexContent> <extension base="gml:AbstractGeometricPrimitiveType"/> </complexContent> </complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:AbstractRingPropertyType

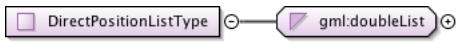
Namespace	http://www.opengis.net/gml
Annotations	Encapsulates a ring to represent the surface boundary property of a surface.
Diagram	
Used by	Elements gml:exterior, gml:interior
Model	gml:LinearRing
Children	gml:LinearRing
Source	<complexType name="AbstractRingPropertyType"> <annotation> <documentation>Encapsulates a ring to represent the surface boundary property of a surface.</documentation> </annotation> <sequence> <element ref="gml:LinearRing"/> </sequence> </complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:LinearRingType

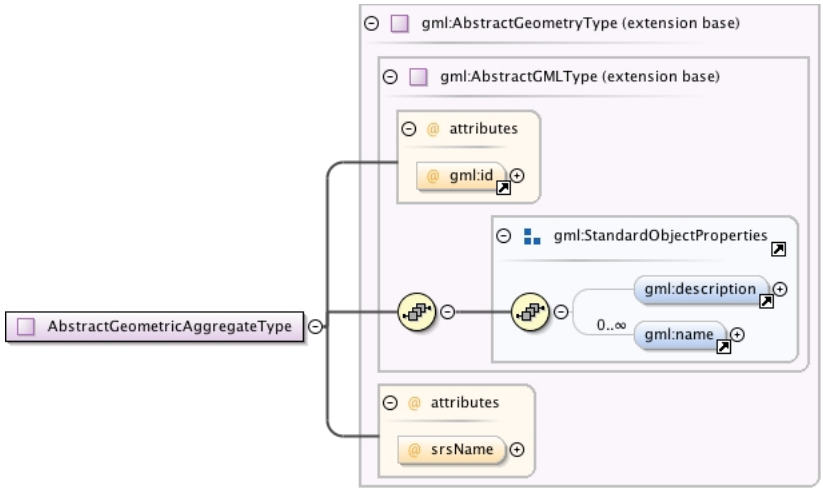
Namespace	http://www.opengis.net/gml
Annotations	A LinearRing is defined by four or more coordinate tuples, with linear interpolation between them; the first and last coordinates must be coincident.
Diagram	
Type	extension of gml:AbstractGeometryType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:LinearRingType
Used by	Element gml:LinearRing

Model	gml:description{0,1} , gml:name* , gml:posList
Children	gml:description, gml:name, gml:posList
Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **gml:id** / ID / / / optional Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute. **srsName** / anyURI / / / optional In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.
Source	 <complexType name="LinearRingType"> <annotation> <documentation>A LinearRing is defined by four or more coordinate tuples, with linear interpolation between them; the first and last coordinates must be coincident.</documentation> </annotation> <complexContent> <extension base="gml:AbstractGeometryType"> <sequence> <element ref="gml:posList"> <annotation> <documentation>The "posList" element provides a compact way to specifiy the coordinates of the control points, if all control points are in the same coordinate reference systems and belong to this ring only. The number of direct positions in the list must be at least four.</documentation> </annotation> </element> </sequence> </extension> </complexContent> </complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:DirectPositionListType`

Namespace	http://www.opengis.net/gml
Annotations	DirectPositionList instances hold the coordinates for a sequence of direct positions within the same coordinate reference system (CRS).
Diagram	
Type	extension of gml:doubleList
Type hierarchy	• anySimpleType • gml:doubleList • gml:DirectPositionListType
Used by	Element gml:posList
Source	 <complexType name="DirectPositionListType"> <annotation> <documentation>DirectPositionList instances hold the coordinates for a sequence of direct positions within the same coordinate reference system (CRS).</documentation> </annotation> <simpleContent> <extension base="gml:doubleList"/> </simpleContent> </complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractGeometricAggregateType`

Namespace	http://www.opengis.net/gml
Annotations	`This is the abstract root type of the geometric aggregates.`
Diagram	
Type	extension of gml:AbstractGeometryType

Type hierarchy	• gml:AbstractGMLType
	  • gml:AbstractGeometryType
	  • gml:AbstractGeometricAggregateType

Properties	abstract: `true`
Used by	Element: gml:_GeometricAggregate Complex Types: gml:MultiCurveType, gml:MultiPointType, gml:MultiSurfaceType
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Attributes

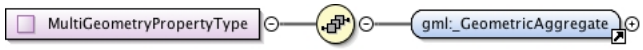
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	`Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.`			
srsName	anyURI			optional
	`In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.`			

Source

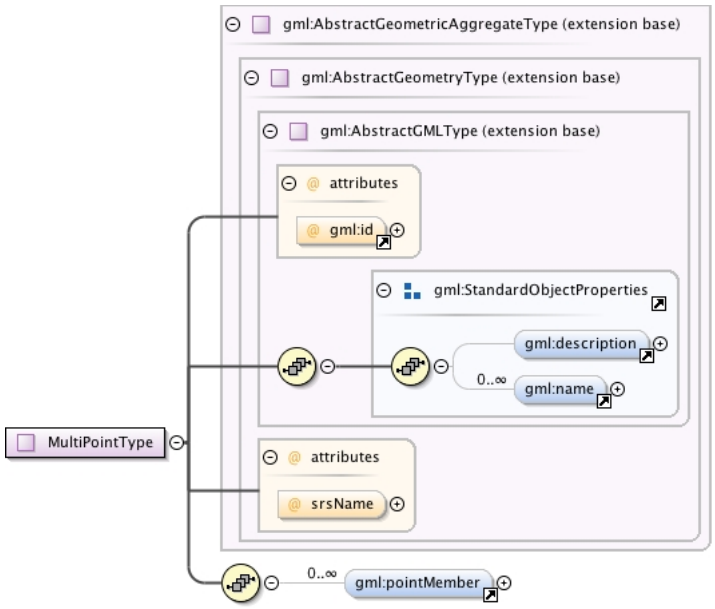
```
<complexType name="AbstractGeometricAggregateType" abstract="true">
  <annotation>
    <documentation>This is the abstract root type of the geometric aggregates.</
documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGeometryType"/>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:MultiGeometryPropertyType

Namespace	http://www.opengis.net/gml
Annotations	A property that has a geometric aggregate as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.
Diagram	
Model	gml:_GeometricAggregate
Children	gml:_GeometricAggregate
Source	`<complexType name="MultiGeometryPropertyType"> <annotation> <documentation>A property that has a geometric aggregate as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.</documentation> </annotation> <sequence> <element ref="gml:_GeometricAggregate"/> </sequence> </complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:MultiPointType

Namespace	http://www.opengis.net/gml
Annotations	A MultiPoint is defined by one or more Points, referenced through pointMember elements.
Diagram	
Type	extension of gml:AbstractGeometricAggregateType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricAggregateType • gml:MultiPointType
Used by	Element gml:MultiPoint
Model	gml:description{0,1} , gml:name* , gml:pointMember*
Children	gml:description, gml:name, gml:pointMember

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID,			

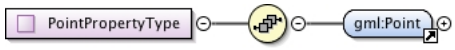
	QName	Type	Fixed	Default	Use
		so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
	srsName	anyURI			optional
		In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source

```
<complexType name="MultiPointType">
  <annotation>
    <documentation>A MultiPoint is defined by one or more Points, referenced through
 pointMember elements.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGeometricAggregateType">
      <sequence>
        <element ref="gml:pointMember" minOccurs="0" maxOccurs="unbounded"/>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:PointPropertyType`

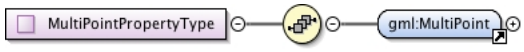
Namespace	http://www.opengis.net/gml
Annotations	A property that has a point as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.
Diagram	
Used by	Element gml:pointMember
Model	gml:Point
Children	gml:Point

Source

```
<complexType name="PointPropertyType">
  <annotation>
    <documentation>A property that has a point as its value domain shall contain an
 appropriate geometry element encapsulated in an element of this type.</documentation>
  </annotation>
  <sequence>
    <element ref="gml:Point"/>
  </sequence>
</complexType>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:MultiPointPropertyType`

Namespace	http://www.opengis.net/gml
Annotations	A property that has a collection of points as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.
Diagram	
Model	gml:MultiPoint
Children	gml:MultiPoint

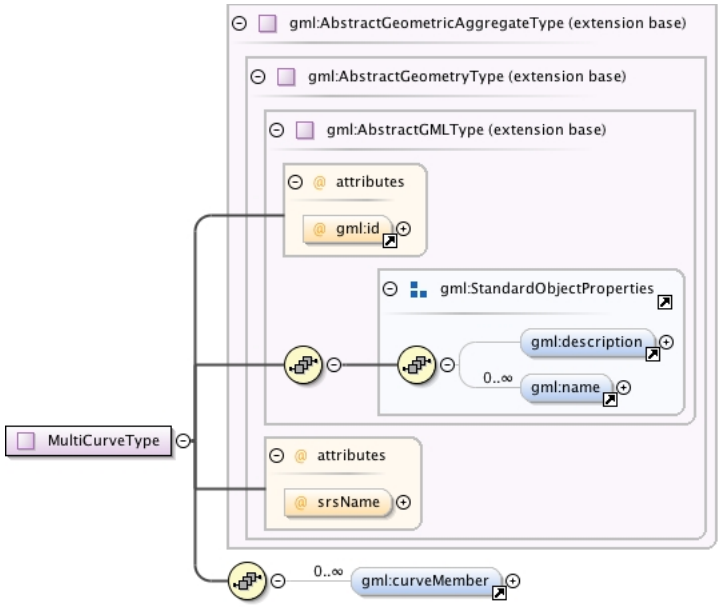
Source

```
<complexType name="MultiPointPropertyType">
  <annotation>
```

```
    <documentation>A property that has a collection of points as its value domain shall
 contain an appropriate geometry element encapsulated in an element of this type.</
documentation>
  </annotation>
  <sequence>
    <element ref="gml:MultiPoint"/>
  </sequence>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:MultiCurveType`

Namespace	http://www.opengis.net/gml
Annotations	A MultiCurve is defined by one or more Curves, referenced through curveMember elements.
Diagram	
Type	extension of gml:AbstractGeometricAggregateType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricAggregateType • gml:MultiCurveType
Used by	Element gml:MultiCurve
Model	gml:description{0,1} , gml:name* , gml:curveMember*
Children	gml:curveMember, gml:description, gml:name

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct			

	QName	Type	Fixed	Default	Use
		position level only in rare cases.			

Source

```
<complexType name="MultiCurveType">
  <annotation>
    <documentation>A MultiCurve is defined by one or more Curves, referenced through
 curveMember elements.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGeometricAggregateType">
      <sequence>
        <element ref="gml:curveMember" minOccurs="0" maxOccurs="unbounded"/>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:CurvePropertyType

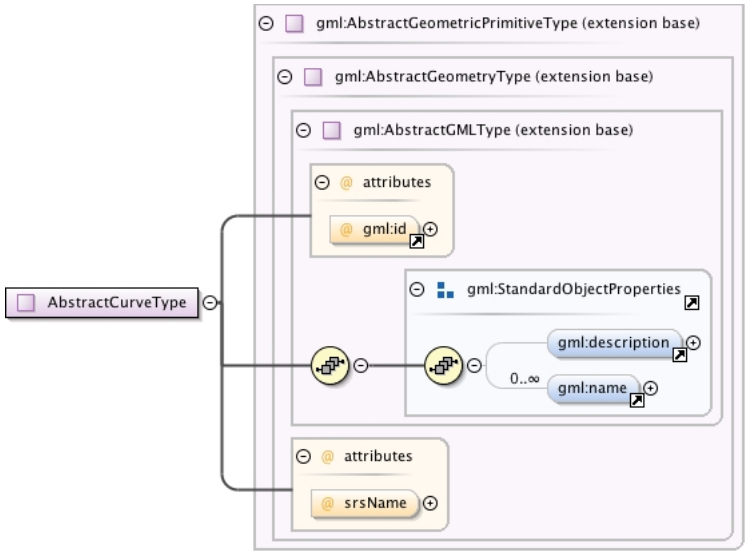
Namespace	http://www.opengis.net/gml
Annotations	A property that has a curve as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.
Diagram	
Used by	Element gml:curveMember
Model	gml:_Curve
Children	gml:_Curve

Source

```
<complexType name="CurvePropertyType">
  <annotation>
    <documentation>A property that has a curve as its value domain shall contain an
 appropriate geometry element encapsulated in an element of this type.</documentation>
  </annotation>
  <sequence>
    <element ref="gml:_Curve"/>
  </sequence>
</complexType>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:AbstractCurveType

Namespace	http://www.opengis.net/gml
Annotations	An abstraction of a curve to support the different levels of complexity. The curve can always be viewed as a geometric primitive, i.e. is continuous.
Diagram	

Type	extension of gml:AbstractGeometricPrimitiveType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractCurveType
Properties	abstract: `true`
Used by	Element: gml:_Curve Complex Types: gml:CurveType, gml:LineStringType
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Attributes

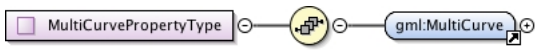
QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source

```
<complexType name="AbstractCurveType" abstract="true">
  <annotation>
    <documentation>An abstraction of a curve to support the different levels of
 complexity. The curve can always be viewed as a geometric primitive, i.e. is
 continuous.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGeometricPrimitiveType"/>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:MultiCurvePropertyType`

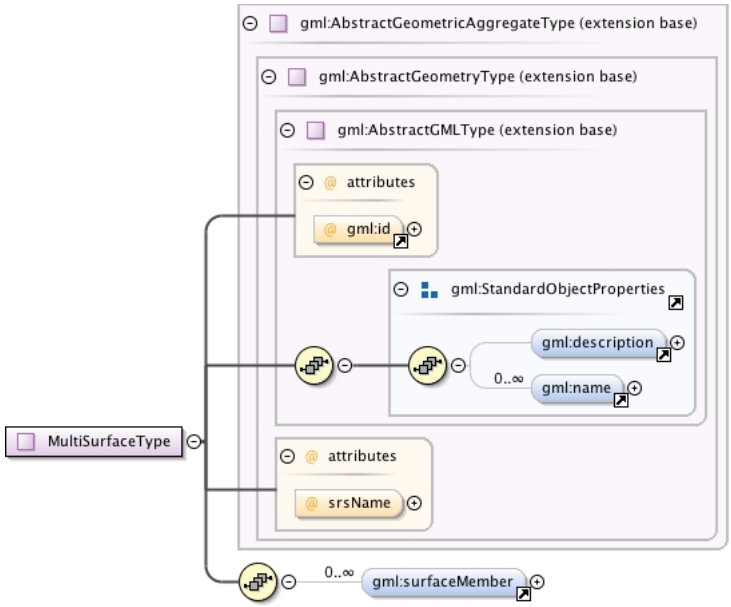
Namespace	http://www.opengis.net/gml
Annotations	A property that has a collection of curves as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.
Diagram	
Model	gml:MultiCurve
Children	gml:MultiCurve

Source

```
<complexType name="MultiCurvePropertyType">
  <annotation>
    <documentation>A property that has a collection of curves as its value domain shall
 contain an appropriate geometry element encapsulated in an element of this type.</
documentation>
  </annotation>
  <sequence>
    <element ref="gml:MultiCurve"/>
  </sequence>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:MultiSurfaceType`

Namespace	http://www.opengis.net/gml
Annotations	A MultiSurface is defined by one or more Surfaces, referenced through surfaceMember elements.
Diagram	
Type	extension of gml:AbstractGeometricAggregateType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricAggregateType • gml:MultiSurfaceType
Used by	Element gml:MultiSurface
Model	gml:description{0,1} , gml:name* , gml:surfaceMember*
Children	gml:description, gml:name, gml:surfaceMember

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

Source

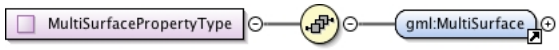
```
<complexType name="MultiSurfaceType">
  <annotation>
    <documentation>A MultiSurface is defined by one or more Surfaces, referenced through
 surfaceMember elements.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractGeometricAggregateType">
      <sequence>
        <element ref="gml:surfaceMember" minOccurs="0" maxOccurs="unbounded"/>
```

	</sequence> </extension> </complexContent> </complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:SurfacePropertyType

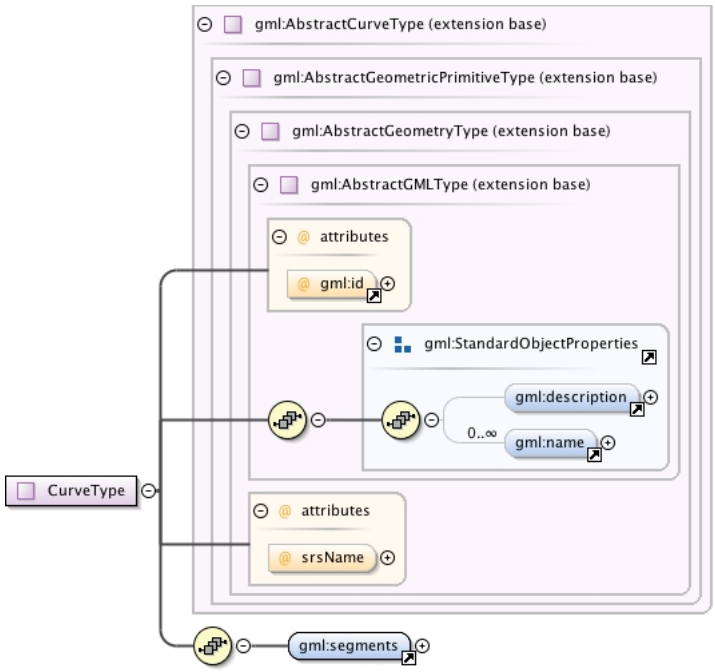
Namespace	http://www.opengis.net/gml
Annotations	A property that has a surface as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.
Diagram	
Used by	Element gml:surfaceMember
Model	gml:_Surface
Children	gml:_Surface
Source	<complexType name="SurfacePropertyType"> <annotation> <documentation>A property that has a surface as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.</documentation> </annotation> <sequence> <element ref="gml:_Surface"/> </sequence> </complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:MultiSurfacePropertyType

Namespace	http://www.opengis.net/gml
Annotations	A property that has a collection of surfaces as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.
Diagram	
Model	gml:MultiSurface
Children	gml:MultiSurface
Source	<complexType name="MultiSurfacePropertyType"> <annotation> <documentation>A property that has a collection of surfaces as its value domain shall contain an appropriate geometry element encapsulated in an element of this type.</documentation> </annotation> <sequence> <element ref="gml:MultiSurface"/> </sequence> </complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:CurveType

Namespace	http://www.opengis.net/gml
Annotations	Curve is a 1-dimensional primitive. Curves are continuous, connected, and have a measurable length in terms of the coordinate system. A curve is composed of one or more curve segments. The curve segments are connected to one another, with the end point of each segment except the last being the start point of the next segment in the segment list. The orientation of the curve is positive.

Diagram	
Type	extension of gml:AbstractCurveType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractCurveType • gml:CurveType
Used by	Element gml:Curve
Model	gml:description{0,1} , gml:name* , gml:segments
Children	gml:description, gml:name, gml:segments

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.			

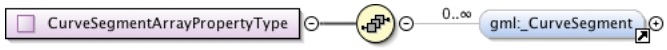
Source

```
<complexType name="CurveType">
  <annotation>
    <documentation>Curve is a 1-dimensional primitive. Curves are continuous, connected,
 and have a measurable length in terms of the coordinate system. A curve is composed of
 one or more curve segments. The curve segments are connected to one another, with the end
 point of each segment except the last being the start point of the next segment in the
 segment list. The orientation of the curve is positive.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractCurveType">
      <sequence>
```

```
        <element ref="gml:segments">
          <annotation>
            <documentation>This element encapsulates the segments of the curve.</
documentation>
          </annotation>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:CurveSegmentArrayPropertyType`

Namespace	http://www.opengis.net/gml
Annotations	A container for an array of curve segments.
Diagram	
Used by	Element gml:segments
Model	gml:_CurveSegment*
Children	gml:_CurveSegment
Source	

```
<complexType name="CurveSegmentArrayPropertyType">
  <annotation>
    <documentation>A container for an array of curve segments.</documentation>
  </annotation>
  <sequence>
    <element ref="gml:_CurveSegment" minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractCurveSegmentType`

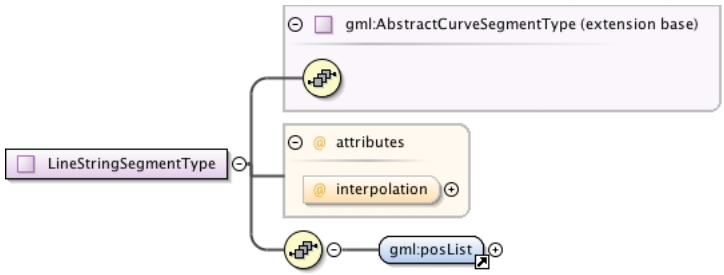
Namespace	http://www.opengis.net/gml
Annotations	Curve segment defines a homogeneous segment of a curve.
Diagram	
Properties	abstract: true
Used by	Element gml:_CurveSegment Complex Type gml:LineStringSegmentType
Model	
Source	

```
<complexType name="AbstractCurveSegmentType" abstract="true">
  <annotation>
    <documentation>Curve segment defines a homogeneous segment of a curve.</documentation>
  </annotation>
  <sequence/>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:LineStringSegmentType`

Namespace	http://www.opengis.net/gml
Annotations	A LineStringSegment is a curve segment that is defined by two or more coordinate tuples, with linear interpolation between them. Note: LineStringSegment implements GM_LineString of ISO 19107.

Diagram	
Type	extension of gml:AbstractCurveSegmentType
Type hierarchy	• gml:AbstractCurveSegmentType • gml:LineStringSegmentType
Used by	Element gml:LineStringSegment
Model	gml:posList
Children	gml:posList
Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **interpolation** / gml:CurveInterpolationType / / / optional The attribute "interpolation" specifies the curve interpolation mechanism used for this segment. This mechanism uses the control points and control parameters to determine the position of this curve segment. For a LineStringSegment the interpolation is fixed as "linear".
Source	`<complexType name="LineStringSegmentType">` `<annotation>` `<documentation>A LineStringSegment is a curve segment that is defined by two or more coordinate tuples, with linear interpolation between them. Note: LineStringSegment implements GM_LineString of ISO 19107.</documentation>` `</annotation>` `<complexContent>` `<extension base="gml:AbstractCurveSegmentType">` `<sequence>` `<element ref="gml:posList"/>` `</sequence>` `<attribute name="interpolation" type="gml:CurveInterpolationType" fixed="linear">` `<annotation>` `<documentation>The attribute "interpolation" specifies the curve interpolation mechanism used for this segment. This mechanism uses the control points and control parameters to determine the position of this curve segment. For a LineStringSegment the interpolation is fixed as "linear".</documentation>` `</annotation>` `</attribute>` `</extension>` `</complexContent>` `</complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

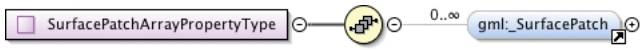
Complex Type `gml:AbstractSurfacePatchType`

Namespace	http://www.opengis.net/gml
Annotations	A surface patch defines a homogenuous portion of a surface.
Diagram	
Properties	abstract: true
Used by	Element gml:_SurfacePatch Complex Type gml:PolygonPatchType
Model	

Source	`<complexType name="AbstractSurfacePatchType" abstract="true">`
	`<annotation>`
	`<documentation>A surface patch defines a homogenuous portion of a surface.</documentation>`
	`</annotation>`
	`<sequence/>`

	`</complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

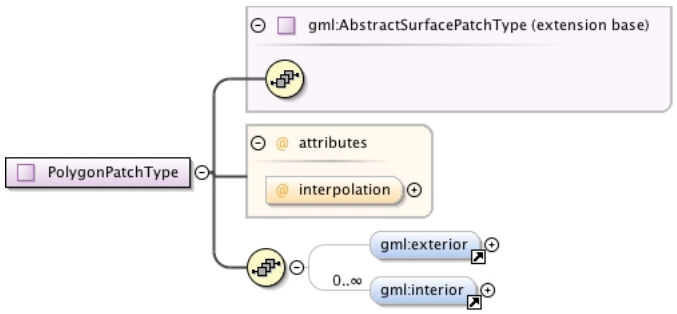
Complex Type `gml:SurfacePatchArrayPropertyType`

Namespace	http://www.opengis.net/gml
Annotations	`A container for an array of surface patches.`
Diagram	
Used by	Element gml:patches
Model	gml:_SurfacePatch*
Children	gml:_SurfacePatch

Source	`<complexType name="SurfacePatchArrayPropertyType">`
	`  <annotation>`
	`  <documentation>A container for an array of surface patches.</documentation>`
	`  </annotation>`
	`  <sequence>`
	`  <element ref="gml:_SurfacePatch" minOccurs="0" maxOccurs="unbounded"/>`
	`  </sequence>`
	`</complexType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:PolygonPatchType`

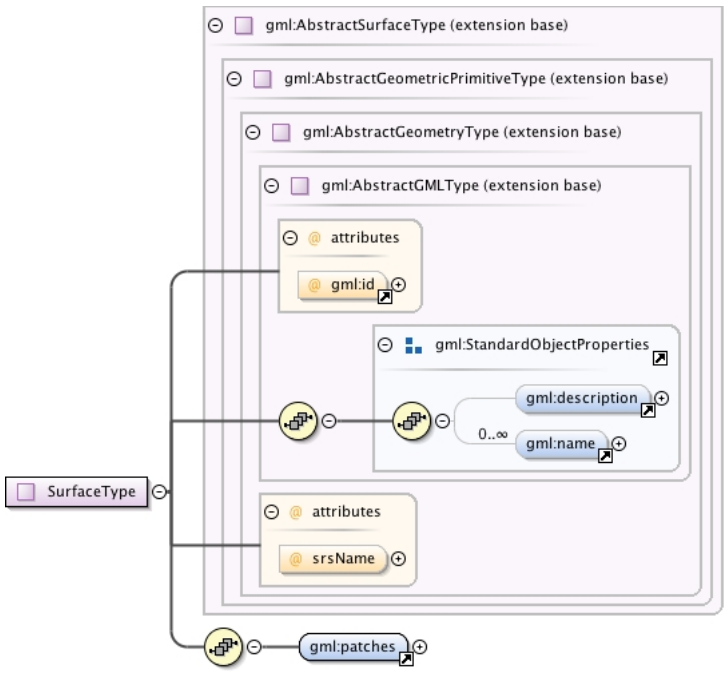
Namespace	http://www.opengis.net/gml
Annotations	`A PolygonPatch is a surface patch that is defined by a set of boundary curves and an underlying surface to which these curves adhere. The curves are coplanar and the polygon uses planar interpolation in its interior. Implements GM_Polygon of ISO 19107.`
Diagram	
Type	extension of gml:AbstractSurfacePatchType
Type hierarchy	• gml:AbstractSurfacePatchType • gml:PolygonPatchType
Used by	Element gml:PolygonPatch
Model	gml:exterior{0,1} , gml:interior*
Children	gml:exterior, gml:interior
Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use**: **interpolation** — gml:SurfaceInterpolationType — — — optional `The attribute "interpolation" specifies the interpolation mechanism used for this surface patch. Currently only planar surface patches are defined in GML 3, the attribute is fixed to "planar", i.e. the interpolation method shall return points on a single plane. The boundary of the patch shall be contained within that plane.`

Source	`<complexType name="PolygonPatchType">`
	`  <annotation>`
	`  <documentation>A PolygonPatch is a surface patch that is defined by a set of boundary curves and an underlying surface to which these curves adhere. The curves are coplanar and the polygon uses planar interpolation in its interior. Implements GM_Polygon of ISO 19107.</documentation>`

```
  </annotation>
  <complexContent>
    <extension base="gml:AbstractSurfacePatchType">
      <sequence>
        <element ref="gml:exterior" minOccurs="0"/>
        <element ref="gml:interior" minOccurs="0" maxOccurs="unbounded"/>
      </sequence>
      <attribute name="interpolation" type="gml:SurfaceInterpolationType" fixed="planar">
        <annotation>
          <documentation>The attribute "interpolation" specifies the interpolation
 mechanism used for this surface patch. Currently only planar surface patches are defined
 in GML 3, the attribute is fixed to "planar", i.e. the interpolation method shall return
 points on a single plane. The boundary of the patch shall be contained within that
 plane.</documentation>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

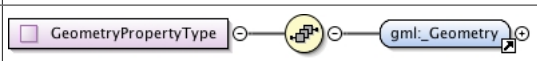
Complex Type `gml:SurfaceType`

Namespace	http://www.opengis.net/gml
Annotations	A Surface is a 2-dimensional primitive and is composed of one or more surface patches. The surface patches are connected to one another. The orientation of the surface is positive ("up"). The orientation of a surface chooses an "up" direction through the choice of the upward normal, which, if the surface is not a cycle, is the side of the surface from which the exterior boundary appears counterclockwise. Reversal of the surface orientation reverses the curve orientation of each boundary component, and interchanges the conceptual "up" and "down" direction of the surface. If the surface is the boundary of a solid, the "up" direction is usually outward. For closed surfaces, which have no boundary, the up direction is that of the surface patches, which must be consistent with one another. Its included surface patches describe the interior structure of the Surface.
Diagram	
Type	extension of gml:AbstractSurfaceType

Type hierarchy	• gml:AbstractGMLType
	  • gml:AbstractGeometryType
	  • gml:AbstractGeometricPrimitiveType
	  • gml:AbstractSurfaceType

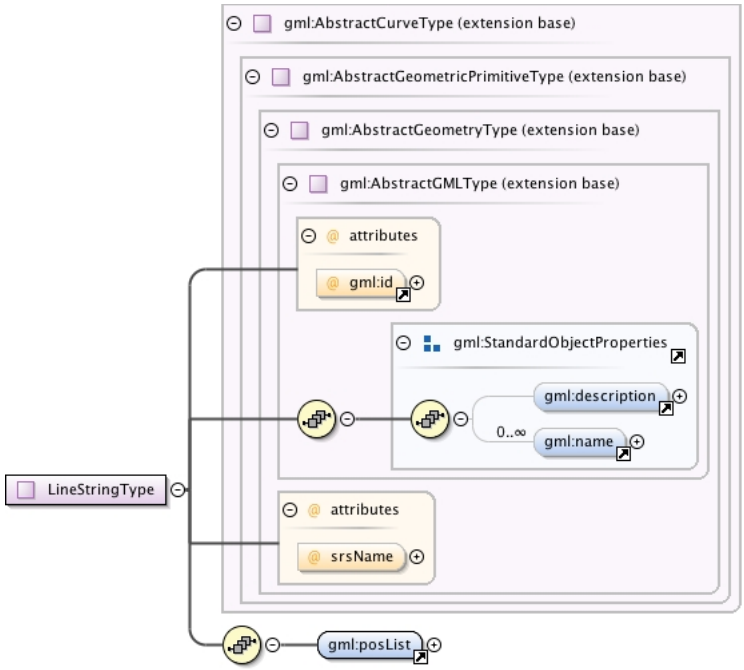
	• gml:SurfaceType
Used by	Element gml:Surface
Model	gml:description{0,1} , gml:name* , gml:patches
Children	gml:description, gml:name, gml:patches
Attributes	**QName** / **Type** / **Fixed** / **Default** / **Use** **gml:id** / ID / / / optional Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute. **srsName** / anyURI / / / optional In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.
Source	`<complexType name="SurfaceType"> <annotation> <documentation>A Surface is a 2-dimensional primitive and is composed of one or more surface patches. The surface patches are connected to one another. The orientation of the surface is positive ("up"). The orientation of a surface chooses an "up" direction through the choice of the upward normal, which, if the surface is not a cycle, is the side of the surface from which the exterior boundary appears counterclockwise. Reversal of the surface orientation reverses the curve orientation of each boundary component, and interchanges the conceptual "up" and "down" direction of the surface. If the surface is the boundary of a solid, the "up" direction is usually outward. For closed surfaces, which have no boundary, the up direction is that of the surface patches, which must be consistent with one another. Its included surface patches describe the interior structure of the Surface.</documentation> </annotation> <complexContent> <extension base="gml:AbstractSurfaceType"> <sequence> <element ref="gml:patches"> <annotation> <documentation>This element encapsulates the patches of the surface.</documentation> </annotation> </element> </sequence> </extension> </complexContent> </complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:GeometryPropertyType`

Namespace	http://www.opengis.net/gml
Annotations	A geometric property shall contain any geometry element encapsulated in an element of this type.
Diagram	
Model	gml:_Geometry
Children	gml:_Geometry
Source	`<complexType name="GeometryPropertyType"> <annotation> <documentation>A geometric property shall contain any geometry element encapsulated in an element of this type.</documentation> </annotation> <sequence> <element ref="gml:_Geometry"/> </sequence>`

	</complexType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:LineStringType

Namespace	http://www.opengis.net/gml
Annotations	A LineString is a special curve that consists of a single segment with linear interpolation. It is defined by two or more coordinate tuples, with linear interpolation between them. It is backwards compatible with the LineString of GML 2.
Diagram	
Type	extension of gml:AbstractCurveType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractGeometryType • gml:AbstractGeometricPrimitiveType • gml:AbstractCurveType • gml:LineStringType
Used by	Element gml:LineString
Model	gml:description{0,1} , gml:name* , gml:posList
Children	gml:description, gml:name, gml:posList

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			optional
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			
srsName	anyURI			optional
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected			

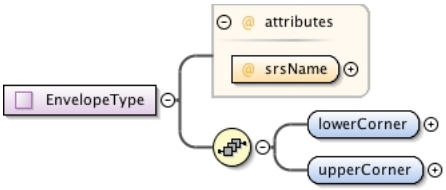
	QName	Type	Fixed	Default	Use
		that this attribute will be specified at the direct position level only in rare cases.			

Source

```
<complexType name="LineStringType">
  <annotation>
    <documentation>A LineString is a special curve that consists of a single segment
 with linear interpolation. It is defined by two or more coordinate tuples, with linear
 interpolation between them. It is backwards compatible with the LineString of GML 2.</
documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractCurveType">
      <sequence>
        <element ref="gml:posList"/>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:EnvelopeType`

Namespace	http://www.opengis.net/gml
Annotations	Envelope defines an extent using a pair of positions defining opposite corners in arbitrary dimensions. The first direct position is the "lower corner" (a coordinate position consisting of all the minimal ordinates for each dimension for all points within the envelope), the second one the "upper corner" (a coordinate position consisting of all the maximal ordinates for each dimension for all points within the envelope).
Diagram	
Used by	Element gml:Envelope
Model	gml:lowerCorner , gml:upperCorner
Children	gml:lowerCorner, gml:upperCorner

Attributes

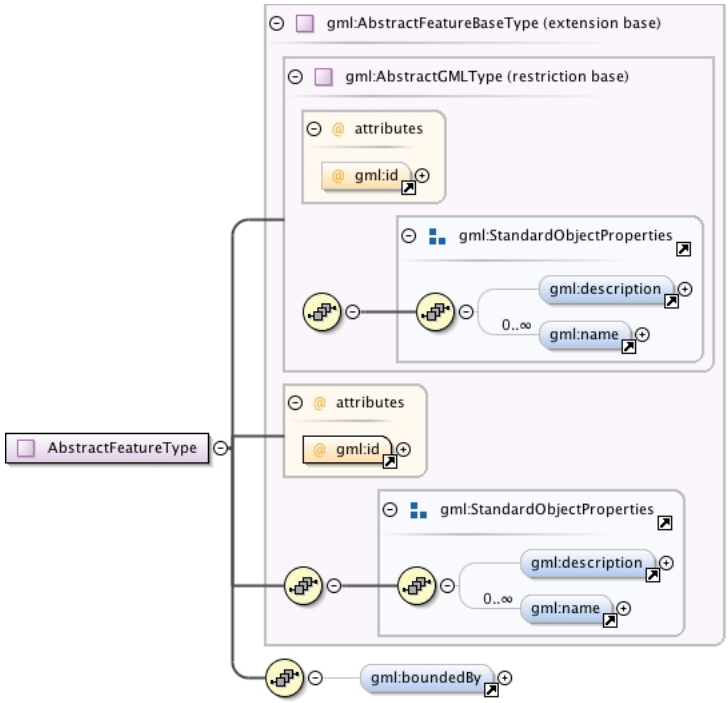
QName	Type	Fixed	Default	Use
srsName	anyURI			required
	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to.			

Source

```
<complexType name="EnvelopeType">
  <annotation>
    <documentation>Envelope defines an extent using a pair of positions defining opposite
 corners in arbitrary dimensions. The first direct position is the "lower corner" (a
 coordinate position consisting of all the minimal ordinates for each dimension for all
 points within the envelope), the second one the "upper corner" (a coordinate position
 consisting of all the maximal ordinates for each dimension for all points within the
 envelope).</documentation>
  </annotation>
  <sequence>
    <element name="lowerCorner" type="gml:DirectPositionType"/>
    <element name="upperCorner" type="gml:DirectPositionType"/>
  </sequence>
  <attribute name="srsName" type="anyURI" use="required">
    <annotation>
      <documentation>In general this reference points to a CRS instance of
 gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known
 references it is not required that the CRS description exists at the location the URI
 points to.</documentation>
    </annotation>
  </attribute>
</complexType>
```

Schema location: file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractFeatureType`

Namespace	http://www.opengis.net/gml
Annotations	An abstract feature provides a set of common properties, including id, name and description inherited from AbstractGMLType, plus boundedBy. A concrete feature type must derive from this type and specify additional properties in an application schema.
Diagram	
Type	extension of gml:AbstractFeatureBaseType

Type hierarchy	• gml:AbstractGMLType
	  • gml:AbstractFeatureBaseType
	  • gml:AbstractFeatureType

Properties	abstract: true
Used by	Element gml:_Feature
Model	gml:description{0,1} , gml:name* , gml:boundedBy{0,1}
Children	gml:boundedBy, gml:description, gml:name

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			required
	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.			

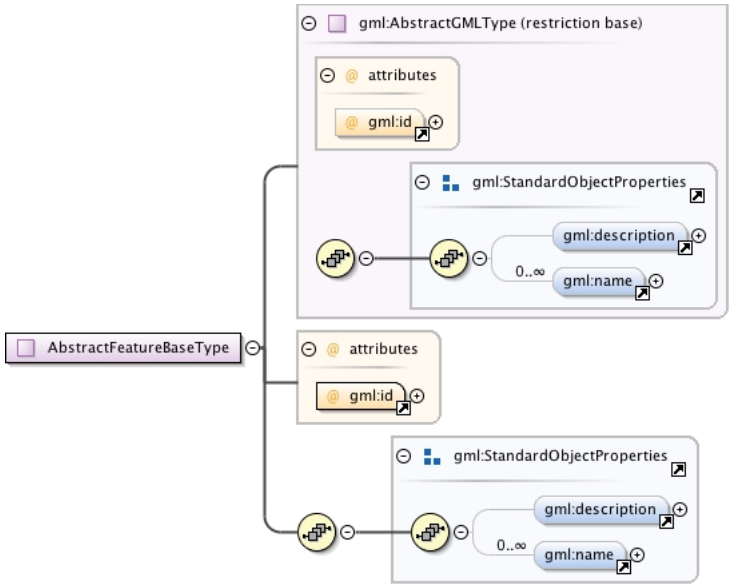
Source

```
<complexType name="AbstractFeatureType" abstract="true">
  <annotation>
    <documentation>An abstract feature provides a set of common properties, including id,
 name and description inherited from AbstractGMLType, plus boundedBy. A concrete feature
 type must derive from this type and specify additional properties in an application
 schema.</documentation>
  </annotation>
  <complexContent>
    <extension base="gml:AbstractFeatureBaseType">
      <sequence>
        <element ref="gml:boundedBy" minOccurs="0"/>
        <!-- additional properties must be specified in an
                    application schema -->
      </sequence>
```

```
    </extension>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:AbstractFeatureBaseType`

Namespace	http://www.opengis.net/gml
Annotations	A abstract feature base type, that shall include an identifying attribute ('id').
Diagram	
Type	restriction of gml:AbstractGMLType
Type hierarchy	• gml:AbstractGMLType • gml:AbstractFeatureBaseType
Used by	Complex Type gml:AbstractFeatureType
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

Attributes

QName	Type	Fixed	Default	Use
gml:id	ID			required

Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.

Source

```
<complexType name="AbstractFeatureBaseType">
  <annotation>
    <documentation>A abstract feature base type, that shall include an identifying
 attribute ('id').</documentation>
  </annotation>
  <complexContent>
    <restriction base="gml:AbstractGMLType">
      <sequence>
        <group ref="gml:StandardObjectProperties"/>
      </sequence>
      <attribute ref="gml:id" use="required"/>
    </restriction>
  </complexContent>
</complexType>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:BoundingShapeType`

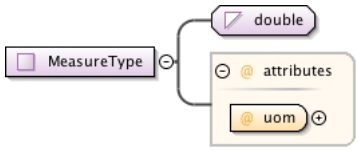
Namespace	http://www.opengis.net/gml

Annotations	Bounding shape.
Diagram	
Used by	Element gml:boundedBy
Model	gml:Envelope
Children	gml:Envelope
Source	`<complexType name="BoundingShapeType"> <annotation> <documentation>Bounding shape.</documentation> </annotation> <sequence> <element ref="gml:Envelope"/> </sequence> </complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type `gml:ReferenceType`

Namespace	http://www.opengis.net/gml
Annotations	A pattern or base for derived types used to specify complex types corresponding to a UML aggregation association. An instance of this type serves as a pointer to a remote Object.
Diagram	
Attributes	<table><tr><th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr><tr><td>xlink:actuate</td><td>restriction of string</td><td></td><td></td><td>optional</td></tr><tr><td></td><td colspan="4">The 'actuate' attribute is used to communicate the desired timing of traversal from the starting resource to the ending resource; it's value should be treated as follows: onLoad - traverse to the ending resource immediately on loading the starting resource onRequest - traverse from the starting resource to the ending resource only on a post-loading event triggered for this purpose other - behavior is unconstrained; examine other markup in link for hints none - behavior is unconstrained</td></tr><tr><td>xlink:arcrole</td><td>anyURI</td><td></td><td></td><td>optional</td></tr><tr><td>xlink:href</td><td>anyURI</td><td></td><td></td><td>optional</td></tr><tr><td>xlink:role</td><td>anyURI</td><td></td><td></td><td>optional</td></tr><tr><td>xlink:show</td><td>restriction of string</td><td></td><td></td><td>optional</td></tr><tr><td></td><td colspan="4">The 'show' attribute is used to communicate the desired presentation of the ending resource on traversal from the starting resource; it's value should be treated as follows: new - load ending resource in a new window, frame, pane, or other presentation context replace - load the resource in the same window, frame, pane, or other presentation context embed - load ending resource in place of the presentation of the starting resource other - behavior is unconstrained; examine other markup in the link for hints none - behavior is unconstrained</td></tr><tr><td>xlink:title</td><td>string</td><td></td><td></td><td>optional</td></tr><tr><td>xlink:type</td><td>string</td><td>simple</td><td></td><td>optional</td></tr></table>
Source	`<complexType name="ReferenceType"> <annotation> <documentation>A pattern or base for derived types used to specify complex types corresponding to a UML aggregation association. An instance of this type serves as a pointer to a remote Object.</documentation> </annotation> <attributeGroup ref="gml:AssociationAttributeGroup"/> </complexType>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Complex Type gml:MeasureType

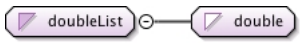
Namespace	http://www.opengis.net/gml
Annotations	Number with a scale. The value of uom (Units Of Measure) attribute is a reference to a Reference System for the amount, either a ratio or position scale.
Diagram	
Type	extension of double
Attributes	**QName** | **Type** | **Fixed** | **Default** | **Use** **uom** | anyURI | | | required

Source	`<complexType name="MeasureType">`
	`  <annotation>`
	`  <documentation>Number with a scale. The value of uom (Units Of Measure) attribute is a reference to a Reference System for the amount, either a ratio or position scale.</documentation>`
	`  </annotation>`
	`  <simpleContent>`
	`  <extension base="double">`
	`  <attribute name="uom" type="anyURI" use="required"/>`
	`  </extension>`
	`  </simpleContent>`
	`</complexType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Simple Types

Simple Type gml:doubleList

Namespace	http://www.opengis.net/gml
Annotations	XML List based on XML Schema double type. An element of this type contains a space-separated list of double values
Diagram	
Type	list of double
Used by	Complex Types gml:DirectPositionListType, gml:DirectPositionType

Source	`<simpleType name="doubleList">`
	`  <annotation>`
	`  <documentation>XML List based on XML Schema double type. An element of this type contains a space-separated list of double values</documentation>`
	`  </annotation>`
	`  <list itemType="double"/>`
	`</simpleType>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

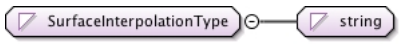
Simple Type gml:CurveInterpolationType

Namespace	http://www.opengis.net/gml
Annotations	CurveInterpolationType is a list of codes that may be used to identify the interpolation mechanisms specified by an schema.
Diagram	
Type	restriction of string
Facets	enumeration `linear`
Used by	Attribute gml:LineStringSegmentType/@interpolation

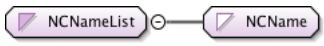
Source	`<simpleType name="CurveInterpolationType">`
	`  <annotation>`
	`  <documentation>CurveInterpolationType is a list of codes that may be used to identify the interpolation mechanisms specified by an schema.</documentation>`
	`  </annotation>`

	<restriction base="string"> <enumeration value="linear"/> </restriction> </simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Simple Type gml:SurfaceInterpolationType

Namespace	http://www.opengis.net/gml
Annotations	SurfaceInterpolationType is a list of codes that may be used to identify the interpolation mechanisms specified by an application schema.
Diagram	
Type	restriction of string
Facets	enumeration planar
Used by	Attribute gml:PolygonPatchType/@interpolation
Source	<simpleType name="SurfaceInterpolationType"> <annotation> <documentation>SurfaceInterpolationType is a list of codes that may be used to identify the interpolation mechanisms specified by an application schema.</documentation> </annotation> <restriction base="string"> <enumeration value="planar"/> </restriction> </simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Simple Type gml:NCNameList

Namespace	http://www.opengis.net/gml
Annotations	A set of values, representing a list of token with the lexical value space of NCName. The tokens are seperated by whitespace.
Diagram	
Type	list of NCName
Source	<simpleType name="NCNameList"> <annotation> <documentation>A set of values, representing a list of token with the lexical value space of NCName. The tokens are seperated by whitespace.</documentation> </annotation> <list itemType="NCName"/> </simpleType>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Attributes

Attribute @gml:id

Namespace	http://www.opengis.net/gml
Annotations	Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.
Type	ID
Properties	content: simple
Used by	Complex Types gml:AbstractFeatureBaseType, gml:AbstractGMLType
Source	<attribute name="id" type="ID"> <annotation> <documentation>Database handle for the object. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs. An external identifier for the object in the form of a URI may be constructed using standard XML and XPointer methods. This is done by concatenating the URI for the document, a fragment separator, and the value of the id attribute.</documentation>

```
  </annotation>
</attribute>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Element Groups

Element Group `gml:StandardObjectProperties`

Namespace	http://www.opengis.net/gml
Annotations	This content model group makes it easier to construct types that derive from AbstractGMLType and its descendents "by restriction". A reference to the group saves having to enumerate the standard object properties.
Diagram	
Used by	Complex Types: gml:AbstractCurveType, gml:AbstractFeatureBaseType, gml:AbstractFeatureType, gml:AbstractGMLType, gml:AbstractGeometricAggregateType, gml:AbstractGeometricPrimitiveType, gml:AbstractGeometryType, gml:AbstractSurfaceType, gml:CurveType, gml:LineStringType, gml:LinearRingType, gml:MultiCurveType, gml:MultiPointType, gml:MultiSurfaceType, gml:PointType, gml:PolygonType, gml:SurfaceType
Model	gml:description{0,1} , gml:name*
Children	gml:description, gml:name

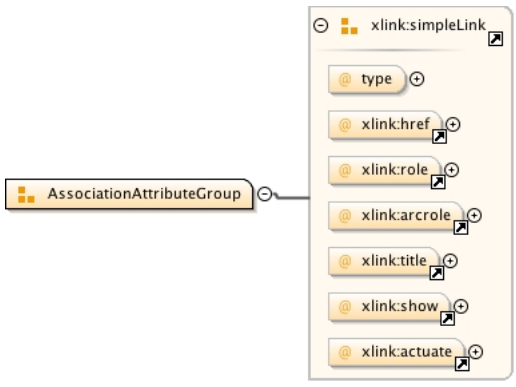
Source

```
<group name="StandardObjectProperties">
  <annotation>
    <documentation>This content model group makes it easier to construct types that derive
 from AbstractGMLType and its descendents "by restriction". A reference to the group saves
 having to enumerate the standard object properties.</documentation>
  </annotation>
  <sequence>
    <element ref="gml:description" minOccurs="0"/>
    <element ref="gml:name" minOccurs="0" maxOccurs="unbounded">
      <annotation>
        <documentation>Multiple names may be provided. These will often be distinguished
 by being assigned by different authorities, as indicated by the value of the codeSpace
 attribute. In an instance document there will usually only be one name per authority.</
documentation>
      </annotation>
    </element>
  </sequence>
</group>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Attribute Groups

Attribute Group `gml:AssociationAttributeGroup`

Namespace	http://www.opengis.net/gml
Annotations	Attribute group used to enable property elements to refer to their value remotely. It contains the simple link components from xlinks.xsd, with all members optional. These attributes can be attached to any element, thus allowing it to act as a pointer.
Diagram	

Used by	Complex Type gml:ReferenceType

Attributes	QName	Type	Fixed	Default	Use
	xlink:actuate	restriction of string			optional
		The 'actuate' attribute is used to communicate the desired timing of traversal from the starting resource to the ending resource; it's value should be treated as follows: onLoad - traverse to the ending resource immediately on loading the starting resource onRequest - traverse from the starting resource to the ending resource only on a post-loading event triggered for this purpose other - behavior is unconstrained; examine other markup in link for hints none - behavior is unconstrained			
	xlink:arcrole	anyURI			optional
	xlink:href	anyURI			optional
	xlink:role	anyURI			optional
	xlink:show	restriction of string			optional
		The 'show' attribute is used to communicate the desired presentation of the ending resource on traversal from the starting resource; it's value should be treated as follows: new - load ending resource in a new window, frame, pane, or other presentation context replace - load the resource in the same window, frame, pane, or other presentation context embed - load ending resource in place of the presentation of the starting resource other - behavior is unconstrained; examine other markup in the link for hints none - behavior is unconstrained			
	xlink:title	string			optional
	xlink:type	string	simple		optional

Source

```
<attributeGroup name="AssociationAttributeGroup">
  <annotation>
    <documentation>Attribute group used to enable property elements to refer to their
 value remotely. It contains the simple link components from xlinks.xsd, with all members
 optional. These attributes can be attached to any element, thus allowing it to act as a
 pointer.</documentation>
  </annotation>
  <attributeGroup ref="xlink:simpleLink"/>
</attributeGroup>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Namespace: ""

Attributes

Attribute `controlledVoc / @normalStd`

Namespace	No namespace
Annotations	The name of the standard used to control this vocabulary
Used by	Complex Type controlledVoc

Source

```
<xs:attribute name="normalStd">
  <xs:annotation>
    <xs:documentation xml:lang="EN">The name of the standard used to control this
 vocabulary</xs:documentation>
  </xs:annotation>
</xs:attribute>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `controlledVoc / @normalId`

Namespace	No namespace
Annotations	The ID value in the standard dictionary corresponding to this entry
Used by	Complex Type controlledVoc

Source	<xs:attribute name="normalId"> <xs:annotation> <xs:documentation xml:lang="EN">The ID value in the standard dictionary corresponding to this entry</xs:documentation> </xs:annotation> </xs:attribute>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute controlledVoc / @normal

Namespace	No namespace
Annotations	The normalised name for this entry
Used by	Complex Type controlledVoc
Source	<xs:attribute name="normal"> <xs:annotation> <xs:documentation xml:lang="EN">The normalised name for this entry</xs:documentation> </xs:annotation> </xs:attribute>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute controlledVoc / @lang

Namespace	No namespace
Annotations	The language this term is in. Default is EN if not specified.
Type	xs:language
Properties	content: simple
Used by	Complex Type controlledVoc
Source	<xs:attribute name="lang" type="xs:language"> <xs:annotation> <xs:documentation xml:lang="EN">The language this term is in. Default is EN if not specified.</xs:documentation> </xs:annotation> </xs:attribute>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute dateTime / @certainty

Namespace	No namespace
Type	certainty
Properties	use: optional
Facets	enumeration unknown enumeration exact enumeration approximately enumeration after enumeration before
Used by	Complex Type dateTime
Source	<xs:attribute name="certainty" type="certainty" use="optional"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute date / @certainty

Namespace	No namespace
Type	certainty
Properties	use: optional
Facets	enumeration unknown enumeration exact enumeration approximately

	enumeration	after
	enumeration	before
Used by	Complex Type	date
Source	<xs:attribute name="certainty" type="certainty" use="optional"/>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute year / @certainty

Namespace	No namespace	
Type	certainty	
Properties	use:	optional
Facets	enumeration	unknown
	enumeration	exact
	enumeration	approximately
	enumeration	after
	enumeration	before
Used by	Complex Type	year
Source	<xs:attribute name="certainty" type="certainty" use="optional"/>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute year / @suffix

Namespace	No namespace	
Type	datingSuffix	
Properties	use:	required
Facets	enumeration	AD
	enumeration	BC
	enumeration	BP
Used by	Complex Type	year
Source	<xs:attribute name="suffix" use="required" type="datingSuffix"/>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute identifier / @domain

Namespace	No namespace
Annotations	The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
Properties	use: required
Used by	Element identifier
Source	<xs:attribute name="domain" use="required"> <xs:annotation> <xs:documentation xml:lang="EN">The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.</xs:documentation> </xs:annotation> </xs:attribute>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute idRef / seriesLink / @ref

Namespace	No namespace	
Type	xs:IDREF	
Properties	content:	simple

Used by	Element seriesLink/idRef
Source	`<xs:attribute name="ref" type="xs:IDREF"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute gml:CodeType / @codeSpace

Namespace	No namespace
Type	anyURI
Properties	use: optional
Used by	Complex Type gml:CodeType
Source	`<attribute name="codeSpace" type="anyURI" use="optional"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Attribute gml:AbstractGeometryType / @srsName

Namespace	No namespace
Annotations	In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.
Type	anyURI
Properties	use: optional
Used by	Complex Type gml:AbstractGeometryType
Source	`<attribute name="srsName" type="anyURI" use="optional">` `  <annotation>` ` <documentation>In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to. If no srsName attribute is given, the CRS must be specified as part of the larger context this geometry element is part of, e.g. a geometric element like point, curve, etc. It is expected that this attribute will be specified at the direct position level only in rare cases.</documentation>` ` </annotation>` `</attribute>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Attribute genericField / @name

Namespace	No namespace
Annotations	Name of the field.
Properties	use: required
Used by	Element genericField

Source	`<xs:attribute name="name" use="required">`
	`  <xs:annotation>`
	`  <xs:documentation>Name of the field.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute genericField / @type

Namespace	No namespace
Annotations	The data type that this field contains.
Type	restriction of xs:string
Properties	use: optional

Facets	enumeration	xs:string
	enumeration	xs:boolean
	enumeration	xs:int
	enumeration	xs:float
	enumeration	xs:date
	enumeration	xs:dateTime
	enumeration	xs:duration
Used by	Element	genericField

Source

```
<xs:attribute name="type" use="optional">
  <xs:annotation>
    <xs:documentation>The data type that this field contains.</xs:documentation>
  </xs:annotation>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:enumeration value="xs:string"/>
      <xs:enumeration value="xs:boolean"/>
      <xs:enumeration value="xs:int"/>
      <xs:enumeration value="xs:float"/>
      <xs:enumeration value="xs:date"/>
      <xs:enumeration value="xs:dateTime"/>
      <xs:enumeration value="xs:duration"/>
    </xs:restriction>
  </xs:simpleType>
</xs:attribute>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute name / laboratory / @acronym

Namespace	No namespace	
Annotations	Acronym of the laboratory.	
Properties	use:	optional
Used by	Element	laboratory/name

Source

```
<xs:attribute name="acronym" use="optional">
  <xs:annotation>
    <xs:documentation>Acronym of the laboratory.</xs:documentation>
  </xs:annotation>
</xs:attribute>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute category / @normalTridas

Namespace	No namespace	
Annotations	TRiDaS controlled vocabulary of research categories.	
Type	normalTridasCategory	
Properties	content:	simple
Facets	enumeration	
Used by	Element	category

Source

```
<xs:attribute name="normalTridas" type="normalTridasCategory">
  <xs:annotation>
    <xs:documentation>TRiDaS controlled vocabulary of research categories.</
xs:documentation>
  </xs:annotation>
</xs:attribute>
```

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute shape / @normalTridas

Namespace	No namespace	
Type	normalTridasShape	
Properties	content:	simple

Facets	enumeration	Whole section
	enumeration	Half section
	enumeration	Third section
	enumeration	Quarter section
	enumeration	Wedge where radius is smaller than circumference
	enumeration	Wedge where radius equals the circumference
	enumeration	Wedge where radius is bigger than the circumference
	enumeration	Beam straightened on one side
	enumeration	Squared beam from whole section
	enumeration	Squared beam from half section
	enumeration	Squared beam from quarter section
	enumeration	Plank cut on one side
	enumeration	Radial plank through pith
	enumeration	Radial plank up to pith
	enumeration	Tangential plank not including pith with breadth larger than a quarter section
	enumeration	Plank not including pith with breadth smaller than a quarter section
	enumeration	Small part of section
	enumeration	Part of undetermined section
	enumeration	Unknown
Used by	Element	shape
Source	<xs:attribute name="normalTridas" type="normalTridasShape"/>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute unit / @normalTridas

Namespace	No namespace	
Type	normalTridasUnit	
Properties	content:	simple
Facets	enumeration	micrometres
	enumeration	1/100th millimetres
	enumeration	1/10th millimetres
	enumeration	millimetres
	enumeration	centimetres
	enumeration	metres
Used by	Element	unit
Source	<xs:attribute name="normalTridas" type="normalTridasUnit"/>	

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `pith / @presence`

Namespace	No namespace	
Type	complexPresenceAbsence	
Properties	use:	`required`
Facets	enumeration	`unknown`
	enumeration	`not applicable`
	enumeration	`absent`
	enumeration	`complete`
	enumeration	`incomplete`
Used by	Element	pith
`Source`	`<xs:attribute name="presence" use="required" type="complexPresenceAbsence"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute `heartwood / @presence`

Namespace	No namespace	
Type	complexPresenceAbsence	
Properties	use:	`required`
Facets	enumeration	`unknown`
	enumeration	`not applicable`
	enumeration	`absent`
	enumeration	`complete`
	enumeration	`incomplete`
Used by	Element	heartwood
`Source`	`<xs:attribute name="presence" use="required" type="complexPresenceAbsence"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute `lastRingUnderBark / @presence`

Namespace	No namespace	
Type	presenceAbsence	
Properties	use:	`required`
Facets	enumeration	`present`
	enumeration	`absent`
Used by	Element	lastRingUnderBark
`Source`	`<xs:attribute name="presence" type="presenceAbsence" use="required"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute `sapwood / @presence`

Namespace	No namespace	
Annotations	`Whether the sapwood is present or not`	
Type	complexPresenceAbsence	
Properties	use:	`required`
Facets	enumeration	`unknown`
	enumeration	`not applicable`
	enumeration	`absent`
	enumeration	`complete`

	enumeration	incomplete
Used by	Element	sapwood
Source	<xs:attribute name="presence" use="required" type="complexPresenceAbsence"> <xs:annotation> <xs:documentation xml:lang="EN">Whether the sapwood is present or not</xs:documentation> </xs:annotation> </xs:attribute>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute bark / @presence

Namespace	No namespace	
Type	presenceAbsence	
Properties	use:	required
Facets	enumeration	present
	enumeration	absent
Used by	Element	bark
Source	<xs:attribute name="presence" use="required" type="presenceAbsence"/>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute measuringMethod / @normalTridas

Namespace	No namespace	
Annotations	TRiDaS controlled vocabulary for the method of measuring.	
Type	normalTridasMeasuringMethod	
Properties	content:	simple
Facets	enumeration	Measuring platform
	enumeration	Hand lens and graticule
Used by	Element	measuringMethod
Source	<xs:attribute name="normalTridas" type="normalTridasMeasuringMethod"> <xs:annotation> <xs:documentation>TRiDaS controlled vocabulary for the method of measuring.</xs:documentation> </xs:annotation> </xs:attribute>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute dating / @type

Namespace	No namespace	
Annotations	Field to denote dating type	
Type	normalTridasDatingType	
Properties	use:	required
Facets	enumeration	Absolute
	enumeration	Dated with uncertainty
	enumeration	Relative
	enumeration	Radiocarbon
Used by	Element	dating
Source	<xs:attribute name="type" type="normalTridasDatingType" use="required"> <xs:annotation> <xs:documentation xml:lang="EN">Field to denote dating type</xs:documentation> </xs:annotation> </xs:attribute>	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute `variable / @normalTridas`

Namespace	No namespace
Type	normalTridasVariable
Properties	content: simple
Facets	enumeration: Ring width enumeration: Earlywood width enumeration: Latewood width enumeration: Ring density enumeration: Earlywood density enumeration: Latewood density enumeration: Maximum density enumeration: Latewood percent
Used by	Element: variable
Source	`<xs:attribute name="normalTridas" type="normalTridasVariable"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `remark / @normalTridas`

Namespace	No namespace
Annotations	TRiDaS controlled vocabulary for specific remarks.
Type	normalTridasRemark
Properties	content: simple
Facets	enumeration: Fire damage enumeration: Frost damage enumeration: Crack enumeration: False ring(s) enumeration: Compression wood enumeration: Tension wood enumeration: Traumatic ducts enumeration: Unspecified injury
Used by	Element: remark

Source	`<xs:attribute name="normalTridas" type="normalTridasRemark">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">TRiDaS controlled vocabulary for specific remarks.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `remark / @inheritedCount`

Namespace	No namespace
Annotations	In derivedSeries this shows the number of constituent measurementSeries that this remark is found in.
Type	xs:int
Properties	content: simple
Used by	Element: remark

Source	`<xs:attribute name="inheritedCount" type="xs:int">`
	`  <xs:annotation>`
	`  <xs:documentation xml:lang="EN">In derivedSeries this shows the number of constituent measurementSeries that this remark is found in.</xs:documentation>`
	`  </xs:annotation>`
	`</xs:attribute>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `value / @value`

Namespace	No namespace
Annotations	A value is the result of a single ring measurement. The type of measurement this is along with the units used are recorded in the 'values' container in the associated measurement- or derviedSeries.
Type	xs:string
Properties	use: required
Used by	Element value
Source	<xs:attribute name="value" type="xs:string" use="required"> <xs:annotation> <xs:documentation xml:lang="EN">A value is the result of a single ring measurement. The type of measurement this is along with the units used are recorded in the 'values' container in the associated measurement- or derviedSeries.</xs:documentation> </xs:annotation> </xs:attribute>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `value / @count`

Namespace	No namespace
Annotations	Optional field to denote how many underlying values went to create this value in a derivedSeries
Type	xs:int
Properties	use: optional
Used by	Element value
Source	<xs:attribute name="count" type="xs:int" use="optional"> <xs:annotation> <xs:documentation xml:lang="EN">Optional field to denote how many underlying values went to create this value in a derivedSeries</xs:documentation> </xs:annotation> </xs:attribute>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `baseSeries / @id`

Namespace	No namespace
Type	xs:ID
Properties	content: simple
Used by	Complex Type baseSeries
Source	<xs:attribute name="id" type="xs:ID"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `measurementSeries / @id`

Namespace	No namespace
Type	xs:ID
Properties	content: simple
Used by	Element measurementSeries
Source	<xs:attribute name="id" type="xs:ID"/>
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd

Attribute `measurementSeriesPlaceholder / @id`

Namespace	No namespace
Type	xs:ID

Properties	use:	`required`
Used by	Element	measurementSeriesPlaceholder
`Source`	`<xs:attribute name="id" type="xs:ID" use="required"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute `derivedSeries / @id`

Namespace	No namespace	
Type	xs:ID	
Properties	content:	`simple`
Used by	Element	derivedSeries
`Source`	`<xs:attribute name="id" type="xs:ID"/>`	
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/tridas-1.2.1.xsd	

Attribute `gml:LineStringSegmentType / @interpolation`

Namespace	No namespace	
Annotations	The attribute "interpolation" specifies the curve interpolation mechanism used for this segment. This mechanism uses the control points and control parameters to determine the position of this curve segment. For a LineStringSegment the interpolation is fixed as "linear".	
Type	gml:CurveInterpolationType	
Properties	fixed:	`linear`
Facets	enumeration	`linear`
Used by	Complex Type	gml:LineStringSegmentType

`Source`	`<attribute name="interpolation" type="gml:CurveInterpolationType" fixed="linear">`
	`  <annotation>`
	`  <documentation>`The attribute "interpolation" specifies the curve interpolation mechanism used for this segment. This mechanism uses the control points and control parameters to determine the position of this curve segment. For a LineStringSegment the interpolation is fixed as "linear".`</documentation>`
	`  </annotation>`
	`</attribute>`	

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd	

Attribute `gml:PolygonPatchType / @interpolation`

Namespace	No namespace	
Annotations	The attribute "interpolation" specifies the interpolation mechanism used for this surface patch. Currently only planar surface patches are defined in GML 3, the attribute is fixed to "planar", i.e. the interpolation method shall return points on a single plane. The boundary of the patch shall be contained within that plane.	
Type	gml:SurfaceInterpolationType	
Properties	fixed:	`planar`
Facets	enumeration	`planar`
Used by	Complex Type	gml:PolygonPatchType

`Source`	`<attribute name="interpolation" type="gml:SurfaceInterpolationType" fixed="planar">`
	`  <annotation>`
	`  <documentation>`The attribute "interpolation" specifies the interpolation mechanism used for this surface patch. Currently only planar surface patches are defined in GML 3, the attribute is fixed to "planar", i.e. the interpolation method shall return points on a single plane. The boundary of the patch shall be contained within that plane.`</documentation>`
	`  </annotation>`	

	`</attribute>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Attribute `gml:EnvelopeType / @srsName`

Namespace	No namespace
Annotations	`In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to.`
Type	anyURI
Properties	use: `required`
Used by	Complex Type gml:EnvelopeType

`Source`	`<attribute name="srsName" type="anyURI" use="required">`
	`  <annotation>`
	`  <documentation>In general this reference points to a CRS instance of gml:CoordinateReferenceSystemType (see coordinateReferenceSystems.xsd). For well known references it is not required that the CRS description exists at the location the URI points to.</documentation>`
	`  </annotation>`
	`</attribute>`

Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd

Attribute `gml:MeasureType / @uom`

Namespace	No namespace
Type	anyURI
Properties	use: `required`
Used by	Complex Type gml:MeasureType
`Source`	`<attribute name="uom" type="anyURI" use="required"/>`
Schema location	file:/Users/peterbrewer/dev/sourceforge/tridas/XMLSchema/1.2.1/gmlsf.xsd