

Schema documentation for xbel.xsd

3 june 2011

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Namespace: "http://www.belscript.org/schema/xbel"

Schemas

Main schema xbel.xsd


Namespace	http://www.belscript.org/schema/xbel
Properties	attribute form default: qualified
	element form default: qualified

Included schema xbel-annotations.xsd

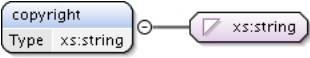
Namespace	http://www.belscript.org/schema/xbel
Properties	attribute form default: qualified
	element form default: qualified

Elements

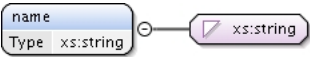
Element bel:comment

Namespace	http://www.belscript.org/schema/xbel
Annotations	A comment optionally used with statements.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Elements bel:statement, bel:statementGroup


Element bel:copyright

Namespace	http://www.belscript.org/schema/xbel
Annotations	Document copyright information.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Element bel:header


Element bel:name

Namespace	http://www.belscript.org/schema/xbel
Annotations	Document name.
Diagram	
Type	xs:string
Properties	content: simple
Used by	Elements bel:header, bel:statementGroup


Element bel:version

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Document version information.	
Diagram		
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:header


Element bel:contactInfo

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Document contact information.	
Diagram		
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:header


Element bel:author

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Document author.	
Diagram		
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:authorGroup

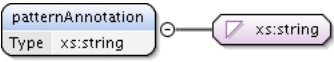
Element bel:license

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Document license.	
Diagram		
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:licenseGroup

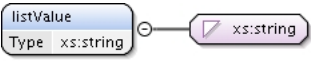
Element bel:disclaimer

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Document disclaimer.	
Diagram		
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:header

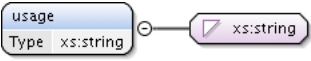
Element `bel:patternAnnotation`

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Contains a pattern-based value.	
Diagram	 The diagram shows a blue box labeled 'patternAnnotation' with 'Type xs:string' below it. A line with a circle at the end connects this box to a purple box labeled 'xs:string'.	
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:internalAnnotationDefinition


Element `bel:listValue`

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Contains a list-based value.	
Diagram	 The diagram shows a blue box labeled 'listValue' with 'Type xs:string' below it. A line with a circle at the end connects this box to a purple box labeled 'xs:string'.	
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:listAnnotation

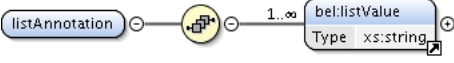
Element `bel:usage`

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Annotation usage explaining how to filter on annotation values.	
Diagram	 The diagram shows a blue box labeled 'usage' with 'Type xs:string' below it. A line with a circle at the end connects this box to a purple box labeled 'xs:string'.	
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:internalAnnotationDefinition

Element `bel:description`

Namespace	http://www.belscript.org/schema/xbel	
Annotations	General element description.	
Diagram	 The diagram shows a blue box labeled 'description' with 'Type xs:string' below it. A line with a circle at the end connects this box to a purple box labeled 'xs:string'.	
Type	xs:string	
Properties	content:	simple
Used by	Elements	bel:header, bel:internalAnnotationDefinition

Element `bel:listAnnotation`

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Contains a list of values.	
Diagram	 The diagram shows a blue box labeled 'listAnnotation' with a circle at its end. A line connects this box to a yellow circle containing a list icon. Another line connects the yellow circle to a blue box labeled 'bel:listValue' with 'Type xs:string' below it. A '1..∞' cardinality is shown between the yellow circle and the 'bel:listValue' box.	
Properties	content:	complex
Used by	Element	bel:internalAnnotationDefinition
Model	bel:listValue+	

Children	bel:listValue
Instance	<pre><bel:listAnnotation> <bel:listValue>{1,unbounded}</bel:listValue> </bel:listAnnotation></pre>

Element bel:header

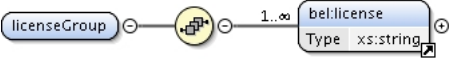
Namespace	http://www.belscript.org/schema/xbel
Annotations	Provides ownership and legal context for the document.
Diagram	
Properties	content: complex
Used by	Element bel:document
Model	ALL(bel:name bel:description bel:version bel:copyright{0,1} bel:disclaimer{0,1} bel:contactInfo{0,1} bel:authorGroup{0,1} bel:licenseGroup{0,1})
Children	bel:authorGroup, bel:contactInfo, bel:copyright, bel:description, bel:disclaimer, bel:licenseGroup, bel:name, bel:version
Instance	<pre><bel:header> <bel:name>{1,1}</bel:name> <bel:description>{1,1}</bel:description> <bel:version>{1,1}</bel:version> <bel:copyright>{0,1}</bel:copyright> <bel:disclaimer>{0,1}</bel:disclaimer> <bel:contactInfo>{0,1}</bel:contactInfo> <bel:authorGroup>{0,1}</bel:authorGroup> <bel:licenseGroup>{0,1}</bel:licenseGroup> </bel:header></pre>

Element bel:authorGroup

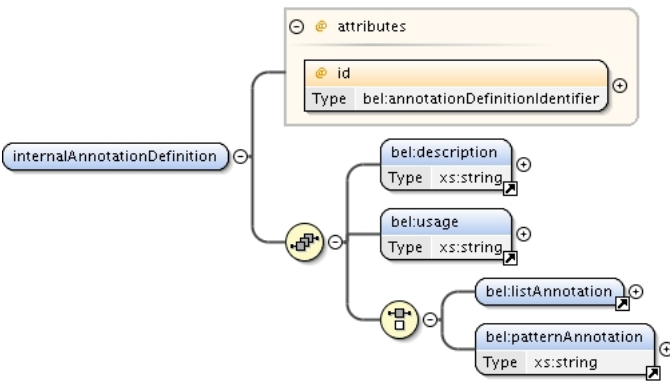
Namespace	http://www.belscript.org/schema/xbel
Annotations	Contains one or more document authors.
Diagram	
Properties	content: complex
Used by	Element bel:header
Model	bel:author+
Children	bel:author
Instance	<pre><bel:authorGroup> <bel:author>{1,unbounded}</bel:author> </bel:authorGroup></pre>

Element bel:licenseGroup

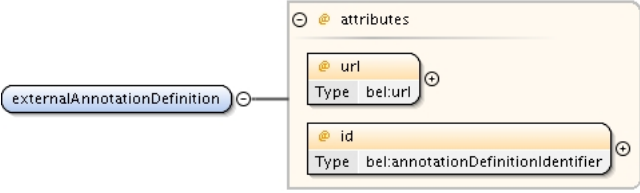
Namespace	http://www.belscript.org/schema/xbel
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Annotations	Contains one or more document licenses.
Diagram	 A diagram showing the 'licenseGroup' element containing a 'bel:license' element. The 'bel:license' element has a type of 'xs:string' and a cardinality of '1..∞'.
Properties	content: complex
Used by	Element bel:header
Model	bel:license+
Children	bel:license
Instance	<pre><bel:licenseGroup> <bel:license>{1,unbounded}</bel:license> </bel:licenseGroup></pre>

Element bel:internalAnnotationDefinition

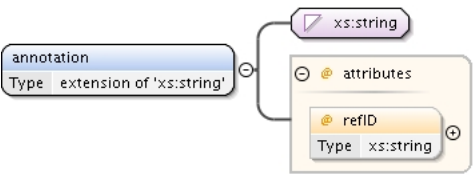
Namespace	http://www.belscript.org/schema/xbel				
Annotations	Internally defined annotations express knowledge about a statement. The annotation values are defined in the document.				
Diagram					
Properties	content:	complex			
Used by	Element	bel:annotationDefinitionGroup			
Model	bel:description , bel:usage , (bel:listAnnotation bel:patternAnnotation)				
Children	bel:description, bel:listAnnotation, bel:patternAnnotation, bel:usage				
Instance	<pre><bel:internalAnnotationDefinition bel:id=""> <bel:description>{1,1}</bel:description> <bel:usage>{1,1}</bel:usage> </bel:internalAnnotationDefinition></pre>				
Attributes	QName	Type	Fixed	Default	Use
	bel:id	bel:annotationDefinitionIdentifier			required

Element bel:externalAnnotationDefinition

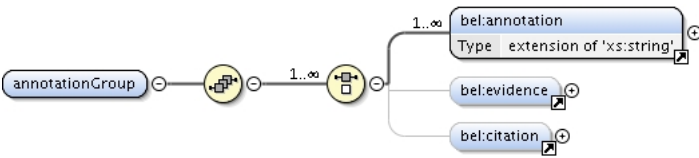
Namespace	http://www.belscript.org/schema/xbel				
Annotations	Externally defined annotations express knowledge about a statement. The annotation values are defined by a URL.				
Diagram	 A diagram showing the 'externalAnnotationDefinition' element. It has an 'attributes' block containing a 'url' attribute of type 'bel:url' and an 'id' attribute of type 'bel:annotationDefinitionIdentifier'.				
Properties	content: complex				
Used by	Element bel:annotationDefinitionGroup				
Attributes	QName	Type	Fixed	Default	Use
	bel:id	bel:annotationDefinitionIdentifier			required

	QName	Type	Fixed	Default	Use
	bel:url	bel:url			required


Element `bel:annotation`

Namespace	http://www.belscript.org/schema/xbel				
Annotations	An annotation applied to a BEL statement, referencing an annotation definition.				
Diagram					
Type	extension of xs:string				
Properties	content:	complex			
Used by	Element	bel:annotationGroup			
Attributes	QName	Type	Fixed	Default	Use
	bel:refID	xs:string			optional

Element `bel:annotationGroup`

Namespace	http://www.belscript.org/schema/xbel		
Annotations	A grouping of annotations, evidences, and citations.		
Diagram			
Properties	content:	complex	
Used by	Elements	bel:statement, bel:statementGroup	
Model	(bel:annotation+ bel:evidence{0,1} bel:citation{0,1})		
Children	bel:annotation, bel:citation, bel:evidence		
Instance	<pre><bel:annotationGroup> <bel:annotation bel:refID="">{1,unbounded}</bel:annotation> <bel:evidence>{0,1}</bel:evidence> <bel:citation bel:type="">{0,1}</bel:citation> </bel:annotationGroup></pre>		

Element `bel:evidence`

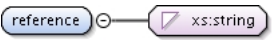
Namespace	http://www.belscript.org/schema/xbel				
Diagram					
Type	restriction of xs:string				
Properties	content:	simple			
Facets	maxLength	4000			
Used by	Element	bel:annotationGroup			

Element `bel:citation`


Namespace	http://www.belscript.org/schema/xbel				
Annotations	Specifies information about the knowledge source on which a				

	statement is based.				
Diagram					
Properties	content:	complex			
Used by	Element	bel:annotationGroup			
Model	bel:reference , bel:name , bel:comment{0,1} , bel:date{0,1} , bel:authorGroup{0,1}				
Children	bel:authorGroup, bel:comment, bel:date, bel:name, bel:reference				
Instance	<pre><bel:citation bel:type=""> <bel:reference>{1,1}</bel:reference> <bel:name>{1,1}</bel:name> <bel:comment>{0,1}</bel:comment> <bel:date>{0,1}</bel:date> <bel:authorGroup>{0,1}</bel:authorGroup> </bel:citation></pre>				
Attributes	QName	Type	Fixed	Default	Use
	bel:type	bel:citationType			required

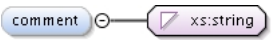
Element **bel:citation** / **bel:reference**

Namespace	http://www.belscript.org/schema/xbel				
Diagram					
Type	xs:string				
Properties	content:	simple			
	minOccurs:	1			
	maxOccurs:	1			


Element **bel:citation** / **bel:name**

Namespace	http://www.belscript.org/schema/xbel				
Diagram					
Type	xs:string				
Properties	content:	simple			
	minOccurs:	1			
	maxOccurs:	1			


Element **bel:citation** / **bel:comment**

Namespace	http://www.belscript.org/schema/xbel				
Diagram					
Type	xs:string				
Properties	content:	simple			
	minOccurs:	0			
	maxOccurs:	1			


Element `bel:citation` / `bel:date`

Namespace	http://www.belscript.org/schema/xbel						
Diagram							
Type	xs:date						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						

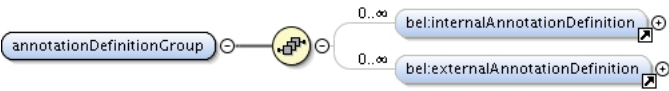
Element `bel:citation` / `bel:authorGroup`

Namespace	http://www.belscript.org/schema/xbel						
Annotations	Contains one or more citation authors.						
Diagram							
Properties	<table> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	bel:author+						
Children	bel:author						
Instance	<pre><bel:authorGroup> <bel:author>{1,unbounded}</bel:author> </bel:authorGroup></pre>						

Element `bel:citation` / `bel:authorGroup` / `bel:author`

Namespace	http://www.belscript.org/schema/xbel				
Diagram					
Type	xs:string				
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	simple	maxOccurs:	unbounded
content:	simple				
maxOccurs:	unbounded				

Element `bel:annotationDefinitionGroup`

Namespace	http://www.belscript.org/schema/xbel		
Annotations	Contains one or more annotation definitions.		
Diagram			
Properties	<table> <tr> <td>content:</td><td>complex</td></tr> </table>	content:	complex
content:	complex		
Used by	Element <code>bel:document</code>		
Model	bel:internalAnnotationDefinition*, bel:externalAnnotationDefinition*		
Children	bel:externalAnnotationDefinition, bel:internalAnnotationDefinition		
Instance	<pre><bel:annotationDefinitionGroup> <bel:internalAnnotationDefinition bel:id="">{0,unbounded}</ bel:internalAnnotationDefinition> <bel:externalAnnotationDefinition bel:id="" bel:url="">{0,unbounded}</ bel:externalAnnotationDefinition> </bel:annotationDefinitionGroup></pre>		

Element `bel:namespace`

Namespace	http://www.belscript.org/schema/xbel
Annotations	Specifies a namespace whose values may be used in statements.

Diagram					
Properties	content:	complex			
Used by	Element	bel:namespaceGroup			
Attributes	QName	Type	Fixed	Default	Use
	bel:prefix	bel:prefix			required
	bel:resourceLocation	bel:resourceLocation			required

Element bel:namespaceGroup

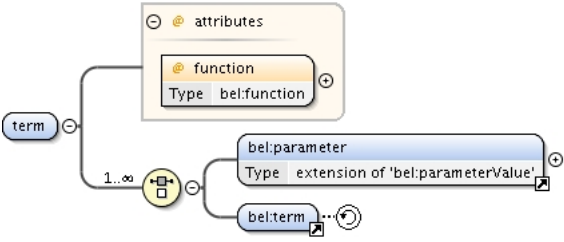
Namespace	http://www.belscript.org/schema/xbel				
Annotations	Contains any number of namespaces.				
Diagram	<pre>classDiagram class namespaceGroup { +attributes +defaultResourceLocation : Type bel:resourceLocation } class bel_namespace["bel:namespace"] namespaceGroup "1" *-- "0..∞" bel_namespace</pre>				
Properties	content:	complex			
Used by	Element	bel:document			
Model	bel:namespace*				
Children	bel:namespace				
Instance	<pre><bel:namespaceGroup bel:defaultResourceLocation=""> <bel:namespace bel:prefix="" bel:resourceLocation="">{0,unbounded}</bel:namespace> </bel:namespaceGroup></pre>				
Attributes	QName	Type	Fixed	Default	Use
	bel:defaultResourceLocation	bel:resourceLocation			optional

Element bel:parameter

Namespace	http://www.belscript.org/schema/xbel				
Annotations	BEL term and function parameter.				
Diagram					
Type	extension of bel:parameterValue				
Type hierarchy	<ul style="list-style-type: none"> xs:string bel:parameterValue 				
Properties	content:	complex			
Used by	Element	bel:term			
Attributes	QName	Type	Fixed	Default	Use
	bel:ns	xs:string			optional

Element bel:term

Namespace	http://www.belscript.org/schema/xbel				
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Annotations	BEL terms represent biological entities.				
Diagram					
Properties	content:	complex			
Used by	Elements	bel:object, bel:subject, bel:term			
Model	bel:parameter bel:term				
Children	bel:parameter, bel:term				
Instance	<pre><bel:term bel:function=""> <bel:parameter bel:ns="">{1,1}</bel:parameter> <bel:term bel:function="">{1,1}</bel:term> </bel:term></pre>				
Attributes	QName	Type	Fixed	Default	Use
	bel:function	bel:function			required

Element bel:subject

Namespace	http://www.belscript.org/schema/xbel
Annotations	Defines the subject of a statement.
Diagram	
Properties	content: complex
Used by	Element bel:statement
Model	bel:term
Children	bel:term
Instance	<pre><bel:subject> <bel:term bel:function="">{1,1}</bel:term> </bel:subject></pre>

Element bel:object

Namespace	http://www.belscript.org/schema/xbel		
Annotations	Defines the object of a statement.		
Diagram	<pre>graph LR object([object]) --- choice(()) choice --- belterm([bel:term]) choice --- belstatement([bel:statement]) style object fill:#add8e6,stroke:#000,stroke-width:1px style choice fill:#ffff00,stroke:#000,stroke-width:1px style belterm fill:#add8e6,stroke:#000,stroke-width:1px style belstatement fill:#add8e6,stroke:#000,stroke-width:1px</pre>		
Properties	content:	complex	
Used by	Element	bel:statement	
Model	bel:term bel:statement		
Children	bel:statement, bel:term		
Instance	<pre><bel:object> <bel:term bel:function="">{1,1}</bel:term> <bel:statement bel:relationship="">{1,1}</bel:statement> </bel:object></pre>		

Element bel:statement

Namespace	http://www.belscript.org/schema/xbel				
Annotations	A statement is a specific assertion of a fact in some context: it is implicitly based on some source of knowledge, implicitly true in at least one specific situation.				

Diagram					
Properties	content:	complex			
Used by	Elements	bel:object, bel:statementGroup			
Model	bel:comment{0,1} , bel:annotationGroup{0,1} , bel:subject , bel:object{0,1}				
Children	bel:annotationGroup, bel:comment, bel:object, bel:subject				
Instance	<pre><bel:statement bel:relationship=" "> <bel:comment>{0,1}</bel:comment> <bel:annotationGroup>{0,1}</bel:annotationGroup> <bel:subject>{1,1}</bel:subject> <bel:object>{0,1}</bel:object> </bel:statement></pre>				
Attributes	QName	Type	Fixed	Default	Use
	bel:relationship	bel:relationship			optional

Element **bel:statementGroup**

Namespace	http://www.belscript.org/schema/xbel
Annotations	A group of BEL statements.
Diagram	
Properties	content: complex
Used by	Elements bel:document, bel:statementGroup
Model	bel:name{0,1} , bel:comment{0,1} , bel:annotationGroup{0,1} , bel:statement* , bel:statementGroup*
Children	bel:annotationGroup, bel:comment, bel:name, bel:statement, bel:statementGroup
Instance	<pre><bel:statementGroup> <bel:name>{0,1}</bel:name> <bel:comment>{0,1}</bel:comment> <bel:annotationGroup>{0,1}</bel:annotationGroup> <bel:statement bel:relationship=" ">{0,unbounded}</bel:statement> <bel:statementGroup>{0,unbounded}</bel:statementGroup> </bel:statementGroup></pre>

Element **bel:document**

Namespace	http://www.belscript.org/schema/xbel
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Diagram	
Properties	content: complex
Model	bel:header , bel:namespaceGroup{0,1} , bel:annotationDefinitionGroup{0,1} , bel:statementGroup+
Children	bel:annotationDefinitionGroup, bel:header, bel:namespaceGroup, bel:statementGroup
Instance	<pre> <bel:document> <bel:header>{1,1}</bel:header> <bel:namespaceGroup bel:defaultResourceLocation=" ">{0,1}</bel:namespaceGroup> <bel:annotationDefinitionGroup>{0,1}</bel:annotationDefinitionGroup> <bel:statementGroup>{1,unbounded}</bel:statementGroup> </bel:document> </pre>

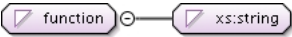
Simple Types

Simple Type bel:relationship

Namespace	http://www.belscript.org/schema/xbel																																
Annotations	The intrinsic set of relationship types allowed in statements.																																
Diagram																																	
Type	restriction of xs:string																																
Facets	<table> <tr><td>enumeration</td><td>increases</td></tr> <tr><td>enumeration</td><td>decreases</td></tr> <tr><td>enumeration</td><td>directlyIncreases</td></tr> <tr><td>enumeration</td><td>directlyDecreases</td></tr> <tr><td>enumeration</td><td>causesNoChange</td></tr> <tr><td>enumeration</td><td>positiveCorrelation</td></tr> <tr><td>enumeration</td><td>negativeCorrelation</td></tr> <tr><td>enumeration</td><td>translatedTo</td></tr> <tr><td>enumeration</td><td>transcribedTo</td></tr> <tr><td>enumeration</td><td>isA</td></tr> <tr><td>enumeration</td><td>subProcessOf</td></tr> <tr><td>enumeration</td><td>rateLimitingStepOf</td></tr> <tr><td>enumeration</td><td>biomarkerFor</td></tr> <tr><td>enumeration</td><td>prognosticBiomarkerFor</td></tr> <tr><td>enumeration</td><td>orthologous</td></tr> <tr><td>enumeration</td><td>analogous</td></tr> </table>	enumeration	increases	enumeration	decreases	enumeration	directlyIncreases	enumeration	directlyDecreases	enumeration	causesNoChange	enumeration	positiveCorrelation	enumeration	negativeCorrelation	enumeration	translatedTo	enumeration	transcribedTo	enumeration	isA	enumeration	subProcessOf	enumeration	rateLimitingStepOf	enumeration	biomarkerFor	enumeration	prognosticBiomarkerFor	enumeration	orthologous	enumeration	analogous
enumeration	increases																																
enumeration	decreases																																
enumeration	directlyIncreases																																
enumeration	directlyDecreases																																
enumeration	causesNoChange																																
enumeration	positiveCorrelation																																
enumeration	negativeCorrelation																																
enumeration	translatedTo																																
enumeration	transcribedTo																																
enumeration	isA																																
enumeration	subProcessOf																																
enumeration	rateLimitingStepOf																																
enumeration	biomarkerFor																																
enumeration	prognosticBiomarkerFor																																
enumeration	orthologous																																
enumeration	analogous																																


	enumeration	association
	enumeration	hasMembers
	enumeration	hasComponents
	enumeration	hasMember
	enumeration	hasComponent
Used by	Attribute	bel:statement/@bel:relationship

Simple Type bel:function


Namespace	http://www.belscript.org/schema/xbel		
Annotations	The intrinsic set of functions allowed in BEL term expressions.		
Diagram			
Type	restriction of xs:string		
Facets	enumeration	proteinAbundance	The protein abundance BEL function.
	enumeration	proteinModification	The protein modification BEL function for a protein abundance.
	enumeration	substitution	The substitution BEL function for a protein abundance.
	enumeration	truncation	The truncation BEL function for a protein abundance.
	enumeration	rnaAbundance	The rna abundance BEL function.
	enumeration	abundance	The abundance BEL function.
	enumeration	microRNAAbundance	The micro rna abundance BEL function.
	enumeration	geneAbundance	The gene abundance BEL function.
	enumeration	biologicalProcess	The biological process BEL function.
	enumeration	pathology	The pathology BEL function.
	enumeration	complexAbundance	The complex abundance BEL function.
	enumeration	translocation	The translocation BEL function.
	enumeration	cellSecretion	The cell secretion BEL function.
	enumeration	cellSurfaceExpression	The cell surface expression BEL function.
	enumeration	reaction	The reaction BEL function.
	enumeration	compositeAbundance	The composite abundance BEL function.
	enumeration	fusion	The fusion BEL function.
	enumeration	reactants	The reactants BEL function.
	enumeration	products	The products BEL function.
	enumeration	degradation	The degradation BEL function.
	enumeration	molecularActivity	The molecular activity BEL function.
	enumeration	catalyticActivity	The catalytic activity BEL function.
	enumeration	kinaseActivity	The kinase activity BEL function.
	enumeration	phosphataseActivity	The phosphatase activity BEL function.
	enumeration	peptidaseActivity	The peptidase activity BEL function.
	enumeration	ribosylationActivity	The ribosylation activity BEL function.
	enumeration	transcriptionalActivity	The transcriptional activity BEL function.
	enumeration	transportActivity	The transport activity BEL function.
	enumeration	gtpBoundActivity	The gtp-bound activity BEL function.
	enumeration	chaperoneActivity	The chaperone activity BEL function.
	enumeration	list	The list BEL function.
Used by	Attributes	@bel:function, bel:term/@bel:function	

Simple Type bel:annotationDefinitionIdentifier


Namespace	http://www.belscript.org/schema/xbel
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Annotations	A unique identifier referencing an annotation definition.	
Diagram		
Type	xs:NCName	
Used by	Attributes	bel:externalAnnotationDefinition/@bel:id, bel:internalAnnotationDefinition/@bel:id


Simple Type bel:resourceLocation

Namespace	http://www.belscript.org/schema/xbel	
Annotations	the URI of the resource defining a namespace.	
Diagram		
Type	xs:anyURI	
Used by	Attributes	@bel:namespace, bel:namespace/@bel:resourceLocation, bel:namespaceGroup/@bel:defaultResourceLocation


Simple Type bel:prefix

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Prefix uniquely identifying a namespace within the document.	
Diagram		
Type	xs:NCName	
Used by	Attribute	bel:namespace/@bel:prefix

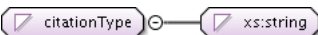
Simple Type bel:parameterValue

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Namespace values.	
Diagram		
Type	restriction of xs:string	
Facets	minLength	1
Used by	Element	bel:parameter

Simple Type bel:url

Namespace	http://www.belscript.org/schema/xbel	
Annotations	URL values.	
Diagram		
Type	restriction of xs:anyURI	
Facets	minLength	1
Used by	Attribute	bel:externalAnnotationDefinition/@bel:url

Simple Type bel:citationType

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Citation type (e.g., book, journal, online resource, other, pubmed)	
Diagram		
Type	restriction of xs:string	
Facets	enumeration	Book

	enumeration	Journal
	enumeration	Online Resource
	enumeration	Other
	enumeration	PubMed
Used by	Attribute	bel:citation/@bel:type

Attributes

Attribute @bel:function

Namespace	http://www.belscript.org/schema/xbel		
Annotations	Defines a function used within a BEL term expression.		
Type	bel:function		
Properties	content:	simple	
Facets	enumeration	proteinAbundance	The protein abundance BEL function.
	enumeration	proteinModification	The protein modification BEL function for a protein abundance.
	enumeration	substitution	The substitution BEL function for a protein abundance.
	enumeration	truncation	The truncation BEL function for a protein abundance.
	enumeration	rnaAbundance	The rna abundance BEL function.
	enumeration	abundance	The abundance BEL function.
	enumeration	microRNAAbundance	The micro rna abundance BEL function.
	enumeration	geneAbundance	The gene abundance BEL function.
	enumeration	biologicalProcess	The biological process BEL function.
	enumeration	pathology	The pathology BEL function.
	enumeration	complexAbundance	The complex abundance BEL function.
	enumeration	translocation	The translocation BEL function.
	enumeration	cellSecretion	The cell secretion BEL function.
	enumeration	cellSurfaceExpression	The cell surface expression BEL function.
	enumeration	reaction	The reaction BEL function.
	enumeration	compositeAbundance	The composite abundance BEL function.
	enumeration	fusion	The fusion BEL function.
	enumeration	reactants	The reactants BEL function.
	enumeration	products	The products BEL function.
	enumeration	degradation	The degradation BEL function.
	enumeration	molecularActivity	The molecular activity BEL function.
	enumeration	catalyticActivity	The catalytic activity BEL function.
	enumeration	kinaseActivity	The kinase activity BEL function.
	enumeration	phosphataseActivity	The phosphatase activity BEL function.
	enumeration	peptidaseActivity	The peptidase activity BEL function.
	enumeration	ribosylationActivity	The ribosylation activity BEL function.
	enumeration	transcriptionalActivity	The transcriptional activity BEL function.
	enumeration	transportActivity	The transport activity BEL function.
	enumeration	gtpBoundActivity	The gtp-bound activity BEL function.
	enumeration	chaperoneActivity	The chaperone activity BEL function.
	enumeration	list	The list BEL function.

Attribute @bel:defaultResourceLocation

Namespace	http://www.belscript.org/schema/xbel
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Annotations	Resource location of the default namespace used by the document.	
Type	xs:anyURI	
Properties	content:	simple

Attribute @bel:namespace

Namespace	http://www.belscript.org/schema/xbel	
Annotations	Associated namespace.	
Type	bel:resourceLocation	
Properties	content:	simple

Attribute bel:internalAnnotationDefinition / @bel:id

Namespace	http://www.belscript.org/schema/xbel	
Type	bel:annotationDefinitionIdentifier	
Properties	use:	required
Used by	Element	bel:internalAnnotationDefinition

Attribute bel:externalAnnotationDefinition / @bel:url

Namespace	http://www.belscript.org/schema/xbel	
Type	bel:url	
Properties	use:	required
Facets	minLength	1
Used by	Element	bel:externalAnnotationDefinition

Attribute bel:externalAnnotationDefinition / @bel:id

Namespace	http://www.belscript.org/schema/xbel	
Type	bel:annotationDefinitionIdentifier	
Properties	use:	required
Used by	Element	bel:externalAnnotationDefinition

Attribute bel:annotation / @bel:refID

Namespace	http://www.belscript.org/schema/xbel	
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:annotation

Attribute bel:citation / @bel:type

Namespace	http://www.belscript.org/schema/xbel	
Type	bel:citationType	
Properties	use:	required
Facets	enumeration	Book
	enumeration	Journal
	enumeration	Online Resource
	enumeration	Other
	enumeration	PubMed
Used by	Element	bel:citation

Attribute `bel:namespace` / `@bel:prefix`

Namespace	http://www.belscript.org/schema/xbel	
Type	bel:prefix	
Properties	use:	required
Used by	Element	bel:namespace

Attribute `bel:namespace` / `@bel:resourceLocation`

Namespace	http://www.belscript.org/schema/xbel	
Type	bel:resourceLocation	
Properties	use:	required
Used by	Element	bel:namespace

Attribute `bel:namespaceGroup` / `@bel:defaultResourceLocation`

Namespace	http://www.belscript.org/schema/xbel	
Type	bel:resourceLocation	
Properties	content:	simple
Used by	Element	bel:namespaceGroup

Attribute `bel:parameter` / `@bel:ns`

Namespace	http://www.belscript.org/schema/xbel	
Type	xs:string	
Properties	content:	simple
Used by	Element	bel:parameter

Attribute `bel:term` / `@bel:function`

Namespace	http://www.belscript.org/schema/xbel		
Type	bel:function		
Properties	use:	required	
Facets	enumeration	proteinAbundance	The protein abundance BEL function.
	enumeration	proteinModification	The protein modification BEL function for a protein abundance.
	enumeration	substitution	The substitution BEL function for a protein abundance.
	enumeration	truncation	The truncation BEL function for a protein abundance.
	enumeration	rnaAbundance	The rna abundance BEL function.
	enumeration	abundance	The abundance BEL function.
	enumeration	microRNAAbundance	The micro rna abundance BEL function.
	enumeration	geneAbundance	The gene abundance BEL function.
	enumeration	biologicalProcess	The biological process BEL function.
	enumeration	pathology	The pathology BEL function.
	enumeration	complexAbundance	The complex abundance BEL function.
	enumeration	translocation	The translocation BEL function.
	enumeration	cellSecretion	The cell secretion BEL function.
	enumeration	cellSurfaceExpression	The cell surface expression BEL function.
	enumeration	reaction	The reaction BEL function.
	enumeration	compositeAbundance	The composite abundance BEL function.
	enumeration	fusion	The fusion BEL function.

	enumeration	reactants	The reactants BEL function.
	enumeration	products	The products BEL function.
	enumeration	degradation	The degradation BEL function.
	enumeration	molecularActivity	The molecular activity BEL function.
	enumeration	catalyticActivity	The catalytic activity BEL function.
	enumeration	kinaseActivity	The kinase activity BEL function.
	enumeration	phosphataseActivity	The phosphatase activity BEL function.
	enumeration	peptidaseActivity	The peptidase activity BEL function.
	enumeration	ribosylationActivity	The ribosylation activity BEL function.
	enumeration	transcriptionalActivity	The transcriptional activity BEL function.
	enumeration	transportActivity	The transport activity BEL function.
	enumeration	gtpBoundActivity	The gtp-bound activity BEL function.
	enumeration	chaperoneActivity	The chaperone activity BEL function.
	enumeration	list	The list BEL function.
Used by	Element	bel:term	

Attribute `bel:statement` / `@bel:relationship`

Namespace	http://www.belscript.org/schema/xbel		
Type	bel:relationship		
Properties	content:	simple	
Facets	enumeration	increases	
	enumeration	decreases	
	enumeration	directlyIncreases	
	enumeration	directlyDecreases	
	enumeration	causesNoChange	
	enumeration	positiveCorrelation	
	enumeration	negativeCorrelation	
	enumeration	translatedTo	
	enumeration	transcribedTo	
	enumeration	isA	
	enumeration	subProcessOf	
	enumeration	rateLimitingStepOf	
	enumeration	biomarkerFor	
	enumeration	prognosticBiomarkerFor	
	enumeration	orthologous	
	enumeration	analogous	
	enumeration	association	
	enumeration	hasMembers	
	enumeration	hasComponents	
	enumeration	hasMember	
	enumeration	hasComponent	
Used by	Element	bel:statement	