

# Schema documentation for labslink.xsd

july 13, 2016

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## Schema(s)

### Main schema labslink.xsd

Annotations	<p>This schema specifies the structure for the two separate XML documents required for participation in Europe PMC's External Links Service: one that contains basic information about the provider of links (with a &lt;providers&gt; root element) and another that contains the links (with a &lt;links&gt; root element.)</p> <p>Changelog:                  v1.0 (2013-07-09): First release                  v1.1 (2013-11-04): Fixes to allow leading and trailing whitespace in string values                  v1.2 (2014-03-18): Added the ability to identify Europe PMC records by DOI                  v1.3 (2015-06-08): Made the doi regex less restrictive                  v1.4 (2016-04-22): Added image provision                  All versions are backwards compatible.</p>						
Properties	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">attribute form default:</td> <td style="padding: 2px;">unqualified</td> </tr> <tr> <td style="padding: 2px;">element form default:</td> <td style="padding: 2px;">unqualified</td> </tr> <tr> <td style="padding: 2px;">version:</td> <td style="padding: 2px;">1.2</td> </tr> </table>	attribute form default:	unqualified	element form default:	unqualified	version:	1.2
attribute form default:	unqualified						
element form default:	unqualified						
version:	1.2						

## Element(s)

### Element links

Annotations	One of two permitted root elements. It should contain a list of multiple child <link> elements.
Diagram	<pre> graph LR     links[links] --- link[link]     link --- link_text[1..∞]             </pre>
Properties	content: complex
Children	link

### Element links / link

Annotations	Required, only permitted, multiply-occurring child element of the <links> root element. Each <link> must have a @providerId attribute and two child elements: <resource> and either <record> or <doi>. Each link is a mapping of a single external resource to a single bibliographic record.
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Diagram			
Properties	content:	complex	
	minOccurs:	1	
	maxOccurs:	unbounded	
Children	doi, record, resource		
Attributes	<b>QName</b>	<b>Type</b>	<b>Use</b>
	providerId	xs:integer	required
	Required attribute of each <link> element. Contains the number assigned to the link provider upon approval of their participation in the External Links Service. If you do not have a provider ID, send an email to labslink@europemc.org to request one. This is used to associate each link with an organisation or individual, so that their links will be attributed to them on the Europe PMC web site.		

### Element links / link / resource

Annotations	Required first child of <link> elements. Contains details of a single external resource (e.g. a web page, a PDF document.)		
Diagram			
Properties	content:	complex	
	minOccurs:	1	
	maxOccurs:	1	
Children	image, title, url		

### Element links / link / resource / url

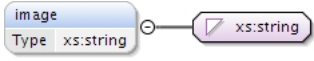
Annotations	Required child of <resource> elements. Contains the full URL of an external resource. Only URLs beginning with http://, https:// or ftp:// are currently allowed.		
Diagram			
Type	restriction of xs:string		
Properties	content:	simple	
	minOccurs:	1	
	maxOccurs:	1	
Facets	pattern	\s*(ht f)tps*://.*\s*	

### Element links / link / resource / title

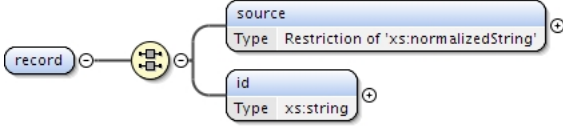
Annotations	Optional child of <resource> elements, containing the text to be displayed on the Europe PMC web site alongside the URL.		
Diagram			

Type	xs:string						
Properties	<table border="1"> <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						

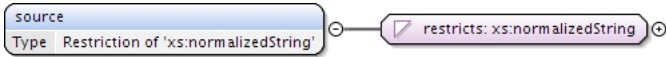
### Element links / link / resource / image

Annotations	Optional child of <resource> elements. Contains the location of an image to display with the external links.						
Diagram							
Type	xs:string						
Properties	<table border="1"> <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 links / link / record

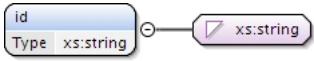
Annotations	Second child of <link> elements. Contains details of the Europe PMC record to be associated with the external resource specified in the sibling <resource> element. Alternatively, a <doi> element can be used, but not both.						
Diagram							
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Children	id, source						

### Element links / link / record / source

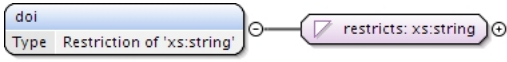
Annotations	Required child of <record> elements, containing a three-letter code indicating the source of the Europe PMC record. Europe PMC is an aggregator of content which has mostly been acquired from other sources. Therefore, to uniquely identify a record, the source must be specified in addition to the individual record's ID. The allowed values are listed below, and are the same as the values returned in the <source> element of the Europe PMC web service responses, but not necessarily the same as the prefixes to identifiers displayed on the Europe PMC web site.																		
Diagram																			
Type	restriction of xs:normalizedString																		
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> </table>	content:	simple																
content:	simple																		
Facets	<table border="1"> <tr> <td>enumeration</td> <td>AGR</td> </tr> <tr> <td>enumeration</td> <td>CIT</td> </tr> <tr> <td>enumeration</td> <td>CBA</td> </tr> <tr> <td>enumeration</td> <td>CTX</td> </tr> <tr> <td>enumeration</td> <td>ETH</td> </tr> <tr> <td>enumeration</td> <td>HIR</td> </tr> <tr> <td>enumeration</td> <td>MED</td> </tr> <tr> <td>enumeration</td> <td>PAT</td> </tr> <tr> <td>enumeration</td> <td>PMC</td> </tr> </table>	enumeration	AGR	enumeration	CIT	enumeration	CBA	enumeration	CTX	enumeration	ETH	enumeration	HIR	enumeration	MED	enumeration	PAT	enumeration	PMC
enumeration	AGR																		
enumeration	CIT																		
enumeration	CBA																		
enumeration	CTX																		
enumeration	ETH																		
enumeration	HIR																		
enumeration	MED																		
enumeration	PAT																		
enumeration	PMC																		

### Element links / link / record / id


Annotations	Required child of <record> elements, containing the identifier of the record to be linked. It is the same value as returned in the <id> element of the Europe PMC web web service responses.
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Diagram	
Type	xs:string
Properties	content: simple

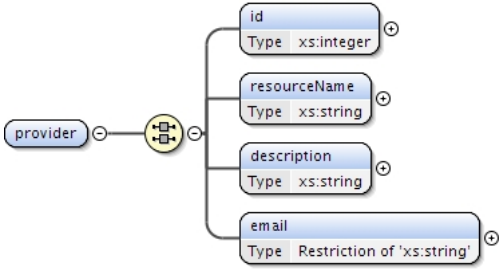
### Element links / link / doi

Annotations	Alternative second child of <link> elements. If used, it must contain a string value which is a full valid DOI as per the specification at <a href="http://www.doi.org/doi_handbook/2_Numbering.html#2.2">http://www.doi.org/doi_handbook/2_Numbering.html#2.2</a> (i.e. must start with "10.", do not prefix with "doi:" or the URL of a DOI resolver, and shortDOIs are not supported.) When DOIs are used, instead of the identifiers of Europe PMC records, an attempt will be made to match against our internal database of DOIs. If no match can be found, the link will not appear on Europe PMC.
Diagram	
Type	restriction of xs:string
Properties	content: simple
	minOccurs: 1
	maxOccurs: 1
Facets	pattern \s*10\.[\da-zA-Z]+\s*


### Element providers

Annotations	One of two permitted root elements. Contains at least one child <provider> element, each of which describes the links provided in a separate file.
Diagram	
Properties	content: complex
Children	provider

### Element providers / provider

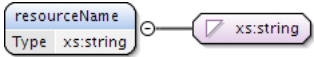
Annotations	Required, only permitted, multiply-occurring child element of the <providers> root element. Most users will require only one <provider> but multiple are permitted.
Diagram	
Properties	content: complex
	minOccurs: 1
	maxOccurs: unbounded
Children	description, email, id, resourceName

### Element providers / provider / id


Annotations	Required child element of <provider> elements. Contains the number assigned to the link provider upon approval of their participation in the External Links Service. If you do not have a provider ID, or wish to maintain multiple profiles, send an email to <a href="mailto:labslink@europemc.org">labslink@europemc.org</a> to request one.
Diagram	
Type	xs:integer

Properties	content: simple
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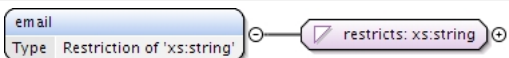
### Element providers / provider / resourceName

Annotations	Required child element of <provider> elements. Contains the text of the heading under which links will be displayed on the Europe PMC web site.
Diagram	
Type	xs:string
Properties	content: simple

### Element providers / provider / description

Annotations	Required child element of <provider> elements. Contains a short description of the resource and/or the methodology used to link Europe PMC records to the resource.
Diagram	
Type	xs:string
Properties	content: simple

### Element providers / provider / email

Annotations	Required child element of <provider> elements. Contains a single email address of a person who can respond to, or redirect, both technical issues (e.g. invalid XML files, broken links) and any enquiries we might have about the quality or legality of the linked resources. An automated report will be sent to this address each time new or updated links are processed.
Diagram	
Type	restriction of xs:string
Properties	content: simple
Facets	pattern <code>\s*[\s;@]+@[^\s;@]+\.[^\s;@]+\s*</code>