

G2 CR00213 make attribute cardinality explicit in XML schema

IPTC G2-Standards: Change Request document

Title: Make attribute cardinality explicit in XML Schema

Change Request number: G2 CR00213

Standard to be changed: NewsML-G2

Standard's version to be changed: 2.29 (change effected in 2.30)

Change Request History			
Version	Date	Author(s)	Notes
1	2021-08-06	Brendan Quinn, ...	
2	2021-08-13	Dave Compton	Added example
3	2021-08-27	Dave Compton	Identified possible corrections
4	2021-09-03	Brendan Quinn	Fixed corrections pointed out by Dave and some incorrect attribute references in the table

Typographic note

Changes to existing documents/specifications are highlighted in yellow.

Editing notes for the spec documents are highlighted in cyan.

In drafts only: Text highlighted in magenta needs further discussion

Description of the change: (free-text)

Change XML Schema so all attribute definitions explicitly state either use="required" or use="optional".

In effect, this involves adding use="optional" where there is currently no "use" attribute.

Rationale for the change:

It can be confusing or misleading to see an attribute definition in the XML Schema where the cardinality is not explicitly defined. XML Schema is defined such that the default "use" is "optional", so a missing "use" attribute is the same as use="optional". In some attribute definitions, we included an explicit use="optional" attribute, other times we let the definition fall back to the default.

We want our schema to be easy to read and understand, so to explicitly include the "use" attribute makes it clearer that we are deliberately making the attribute's existence optional.

Reference to related IPTC discussion(s) (on groups.io etc):

<https://github.com/iptc/news-architecture-dev/issues/40>

<https://groups.io/g/iptc-news-architecture-dev/message/11535>

Formalised change request: (spec table etc.)

Header	Value
(XML) Data Model	
Namespace (prefix)	nar
Name	
Title	
Definition	

User Note(s)		
Implementation Note(s)		
XML Schema Spec	At: PCL (no changes to CCL since v 2.25)	
Datatype		
Internally Ctrl Values		
Externally Ctrl Values		
Attributes	optional attribute group name Framework: scheme/@authority catalog/@additionalInfo catalog/@url catalog/@authority catalog/@guid catalog/@version generator/@role generator/@roleuri altRep/@representation altRep/@representationuri altRep/@size hash/@hashtype hash/@hashtypeuri hash/@scope hash/@scopeuri origRep/@accesstype origRep/@accesstypeuri origRep/@reposrole origRep/@reposroleuri incomingFeedId/@role incomingFeedId/@roleuri icon/@rendition icon/@renditionuri altId/@idformat altId/@idformaturi altId/@role altId/@roleuri altId/@version rating/@scaleunit rating/@scaleunituri rating/@ratingtype rating/@ratingtypeuri userInteraction/@interactiontype userInteraction/@interactiontypeuri timeDelim/@timeunit timeDelim/@timeunituri timeDelim/@renditionref timeDelim/@renditionrefuri regionDelim/@x regionDelim/@y regionDelim/@width regionDelim/@height derivedFrom/@idrefs bag/bit/@type bag/bit/@typeuri	Name Cardinality; Datatype; Definition Add: use="optional"

bag/bit/@significance
ConceptIdType/@qcode
RelatedConceptType/related/@rank
hasInstrument/@symbolsrc
hasInstrument/@symbolsrcuri
hasInstrument/@market
hasInstrument/@marketuri
hasInstrument/@marketlabel
hasInstrument/@marketlabelsrc
hasInstrument/@marketlabelsrcuri
hasInstrument/@type
hasInstrument/@typeuri
hasInstrument/@rank
circle/@radunit
circle/@radunituri
participationRequirement/@role
participationRequirement/@roleuri
location/@role
location/@roleuri
newsCoverage/@role
newsCoverage/@roleuri
ContactInfoType/web/@role
ContactInfoType/web/@roleuri
AddressType/line/@role
AddressType/line/@roleuri
AddressType/@role
AddressType/@roleuri
assignedTo/@coversfrom
assignedTo/@coversto
planning/@coversfrom
planning/@coversto
hop/action/@target
hop/action/@targeturi
hop/action/@timestamp
hop/@seq
hop/@timestamp
pubHistory/published/@qcode
pubHistory/published/@literal
BlockType/@roleuri
QCodePropType/@qcode
Flex2ExtPropType/@rel
Flex2ExtPropType/@reluri
Flex1PartyPropType/@rel
Flex1PartyPropType/@reluri
Knowledge Item:
schemeMeta/@preferredalias
schemeMeta/@authority
schemeMeta/@concepttype
News Item:
inlineData/@encoding
inlineData/@encodinguri
contentSet/@original
RemoteContentPropType/channel/@chnlid
RemoteContentPropType/channel/@type
RemoteContentPropType/channel/@typeuri
RemoteContentPropType/channel/@role
RemoteContentPropType/channel/@roleuri
RemoteContentPropType/channel/@language

	RemoteContentPropType/@language																						
	PackageItem: groupSet/group/@role groupSet/group/@roleuri																						
Child elements	<table> <tr> <th>optional element group name</th><th>Name</th><th>Cardinality</th></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>	optional element group name	Name	Cardinality																			
optional element group name	Name	Cardinality																					
XML Schema Note(s)																							
Example(s)	<p>scheme /@authority</p> <p>Currently: @use is implicit: optional <code><xs:attribute name="authority" type="IRIType"></code> <code><xs:annotation></code> <code><xs:documentation>Defines the authority controlling this</code> <code>scheme</xs:documentation></code> <code></xs:annotation></code> <code></xs:attribute></code></p> <p>Proposed: explicit @use <code><xs:attribute name="authority" type="IRIType" use="optional"></code> <code><xs:annotation></code> <code><xs:documentation>Defines the authority controlling this</code> <code>scheme</xs:documentation></code> <code></xs:annotation></code> <code></xs:attribute></code></p>																						