

Publication: Review D: Subject scheme (00812655-DC_1)

Topic: enumerationdef (DA00509232)

Paragraph-level comments

The <enumerationdef> element contains an enumeration definition. An enumeration definition specifies an attribute, an optional set of controlled values, and the optional element to which the attribute and controlled values pair are bound.

Annotation	Reviewer	Status	Type	Date	Topic version
With natural language shortdesc, do you need the first sentence?	zlawson	updated	comment	12/12/2021 17:23:24	
I had held of implementing natural-language short descriptions because it was impossible to use natural language for so many of these elements, and I was unsure whether we wanted to have a mix of natural language and non-natural language short descriptions.					
Why impossible? Other than the "has" elements, consider attributedef. It is NOT an attribute definition ...	keberlein	updated	comment	14/12/2021 19:02:45	
In any case, I changed the shortdesc to read: "An enumeration definition is a binding of an attribute to a set of controlled values. The set of controlled values can be limited to a specific element or it can be empty."					
Marking this comment COMPLETE .					

An enumeration definition can accomplish the following goals:

Annotation	Reviewer	Status	Type	Date	Topic version
Do we need to add a statement about how these interact with the grammar files? I believe these override the grammar files, and while I think it's stated elsewhere, might be nice to have here as well, since this is the "container" element that describes all the things it does.	zlawson	updated	comment	12/12/2021 17:26:54	
They do not override the grammar files - that interaction is laid out in a topic outside of this review, which still needs a fair bit of cleanup: https://github.com/oasis-tcs/dita/blob/DITA-2.0/specification/archSpec/base/determining-effective-attribute-values.dita	randerson	updated	comment	13/12/2021 20:42:45	
I think we need to add a draft-comment here noting that this needs to be clarified here too (possibly just a cross reference).					
I think this is handled with the addition of a "Processing expectations" section.	keberlein	updated	comment	14/12/2021 01:00:53	
Marking this comment COMPLETED .					

When the <enumerationdef> element contains only an <attributedef> and a <subjectdef> element, the set of controlled values that are bound to the attribute apply to all elements.

For example, when <enumerationdef> contains only <attributedef name="value"/>, the @value attribute is limited to the specified enumeration for all elements.

Annotation	Reviewer	Status	Type	Date	Topic version
for all elements that include the @value attribute.	dstevens	updated	comment	8/12/2021	

16:36:31

I've gotten hesitant about saying "include an attribute" but I think we should probably update this to something similar, like "for all elements that can specify the @value attribute"

randerson updated comment 13/12/2021 20:44:16

Done.

keberlein updated comment 13/12/2021 22:49:50

Marked as **COMPLETED**.

When the <enumerationdef> element contains a <defaultSubject> element, the value specified by the <defaultSubject> element is assumed when no attribute value is explicitly set in the DITA source.

For example, given the following <enumerationdef> element, any draft comment in the DITA source that does not explicitly set the @audience attribute is assumed to have a value of spec-editors:

```
<enumerationdef>
  <elementdef name="draft-comment"/>
  <attributedef name="audience"/>
  <subjectdef keyref="values-audience-draft-comment"/>
  <defaultSubject keyref="spec-editors"/>
</enumerationdef>
```

Annotation	Reviewer	Status	Type	Date	Topic version
When the element contains a element, the value specified by the element is assumed when no attribute value is explicitly set in the DITA source and the XML grammar does not set a default attribute value . For example, given the following element, any draft comment in the DITA source that does not explicitly set the @audience attribute is assumed to have a value of spec-editors:	gjoseph	updated	change	15/12/2021 19:03:38	
Made this change. Also added a draft comment that we need to double-check that what we have in the "Usage information " section does not conflict with the final topic about "Determining effective attribute values".	keberlein	updated	comment	11/1/2022 18:08:00	
Marking this comment COMPLETED .					

When the <enumerationdef> element is empty, no value is valid for the attribute.

Annotation	Reviewer	Status	Type	Date	Topic version
When the element is empty, no value is valid for the attribute. The result is the same as removing the attribute from the XML grammar.	gjoseph	updated	change	15/12/2021 19:06:53	
I don't think we can say that. All of this stuff with subject scheme only happens in the context of an application that supports it. It's not the equivalent of validating against the grammar file. @Robert?	keberlein	updated	comment	11/1/2022 18:11:10	
No, we cannot make a statement that equates this to removing the attribute from the grammar. The grammar is enforced by parsers that read documents without any knowledge of DITA, so no processing rules we create can truly be the same as removing something from the grammar (unless you're dealing with an XML parser that is DITA specific, parsing files with knowledge of the subject scheme - which isn't going to happen).	randerson	updated	comment	11/1/2022 23:25:31	
That said, looking at this now, I do not know what it means to have an empty enumerationdef. "empty" to me means <enumerationdef/> but in that case we					

have not specified an element or an attribute name, so how can we say no value is valid for "the" attribute?

Made the following change:

When the enumerationdef element contains only an @attributedef element that does not reference a subject, no value is valid for the attribute.

For example, the following code sample specifies that no tokens are valid for the @props attribute:

```
<enumerationdef>  
<attributedef name="props"/>  
</enumerationdef>
```

keberlein updated comment 12/1/2022 04:32:40

Marking this comment **COMPLETED**.

- The permissible values for the @audience attribute on the <draft-comment> element are restricted to the subject values-audience-draft-comment. This means that the only allowed values are spec-editors and tc-reviewers. If no value for @audience is specified for a <draft-comment> element in the DITA source, it is assumed to be set to spec-editors.

Annotation	Reviewer	Status	Type	Date	Topic version
"it is assumed to be set" is that a evasive way of putting it as "an implementation SHOULD set it to spec-editors"? By now I got it that wording should allow for enough wiggle room. But do you think this is justified here?	fwegmann	updated	comment	12/12/2021 16:41:53	
I have no idea yet what the wording should be - I agree that "it is assumed to be set" is not great. We do not want a SHOULD rule here just because this is an example, and we do not define normative rules in examples; the normative rule is actually specified in this topic, which still needs cleanup (it's in the ordered list at the end of the topic right now): https://github.com/oasis-tcs/dita/blob/DITA-2.0/specification/archSpec/base/determining-effective-attribute-values.dita	randerson	updated	comment	13/12/2021 20:49:15	
I think it makes sense to clarify in this example that because of the rules around determining effective attribute values (maybe with a link to that topic), processors treat this as if ...					
@Robert, now that we have a "Processing expectations" section with a cross reference to the topic about "Determining effective attribute values," do you still want to add verbiage and a cross reference into this example in the "Usage information" section?	keberlein	updated	comment	13/12/2021 23:01:29	
Marking this comment as COMPLETED .					
For a quick suggested wording change: "If no value ..., processors operate as if the @audience attribute is explicitly set to 'spec-editoris'."					
-----	keberlein	updated	comment	13/12/2021 20:49:18	
Implemented. Marking this comment as COMPLETED .					
Add a "Processing expectations" section, and include a cross reference to the topic that Robert has called out.	keberlein	updated	comment	13/12/2021 20:50:51	

Topic: Example: How hierarchies defined in a subject scheme map affect filtering (DA00508590)

Paragraph-level comments

```
<subjectScheme>
  <subjectdef keys="os">
    <topicmeta>
      <navtitle>Operating systems</navtitle>
    </topicmeta>
    <subjectdef keys="linux">
      <topicmeta>
        <navtitle>Linux</navtitle>
      </topicmeta>
      <subjectdef keys="redhat">
        <topicmeta>
          <navtitle>RedHat Linux</navtitle>
        </topicmeta>
      </subjectdef>
      <subjectdef keys="suse">
        <topicmeta>
          <navtitle>SuSE Linux</navtitle>
        </topicmeta>
      </subjectdef>
      </subjectdef>
      <subjectdef keys="windows">
        <topicmeta>
          <navtitle>Windows</navtitle>
        </topicmeta>
      </subjectdef>
      <subjectdef keys="zos">
        <topicmeta>
          <navtitle>z/OS</navtitle>
        </topicmeta>
      </subjectdef>
      </subjectdef>
      <enumerationdef>
        <attributedef name="platform"/>
        <subjectdef keyref="os"/>
      </enumerationdef>
    </subjectScheme>
```

Annotation	Reviewer	Status	Type	Date	Topic version
indentation not aligned properly, beginning at the contents of <subjectdef keys="windows">	fwegmann	updated	comment	10/12/2021 20:49:13	
Corrected. Marking this comment COMPLETED .	keberlein	updated	comment	13/12/2021 23:06:14	

```
<subjectScheme>
  <subjectdef keys="os">
    <topicmeta>
      <navtitle>Operating systems</navtitle>
    </topicmeta>
    <subjectdef keys="linux">
      <topicmeta>
        <navtitle>Linux</navtitle>
      </topicmeta>
      <subjectdef keys="redhat">
        <topicmeta>
          <navtitle>RedHat Linux</navtitle>
        </topicmeta>
      </subjectdef>
      <subjectdef keys="suse">
        <topicmeta>
          <navtitle>SuSE Linux</navtitle>
        </topicmeta>
      </subjectdef>
```

```

</subjectdef>
<subjectdef keys="windows">
<topicmeta>
<navtitle>Windows</navtitle>
</topicmeta>
</subjectdef>
<subjectdef keys="zos">
<topicmeta>
<navtitle>z/OS</navtitle>
</topicmeta>
</subjectdef>
</subjectdef>
<enumerationdef>
<attributedef name="platform"/>
<subjectdef keyref="os"/>
</enumerationdef>
</subjectScheme>

```

Annotation	Reviewer	Status	Type	Date	Topic version
There are duplicate /subjectdef elements towards the end. Delete the one 6 lines from the bottom of the code block.	gjoseph	updated	comment	15/12/2021 14:53:30	
No; what is in the source file is correct. Marking this comment CLOSED .	keberlein	updated	comment	11/1/2022 17:55:29	

Excluded, because all redhat content is excluded.

Annotation	Reviewer	Status	Type	Date	Topic version
Excluded, because all redhat content is excluded.	fwegmann	updated	change	9/12/2021 21:39:58	
Added the missing space.	keberlein	updated	comment	10/12/2021 11:52:15	
Marking this comment as COMPLETED .					

If the default for @platform values is "include", this is included. If the default for @platform values is "exclude", this is excluded.

Annotation	Reviewer	Status	Type	Date	Topic version
Compare this description with the one in the next column; they are saying the same thing, but using completely different language to do so. Why not say things the same way?	dstevens	updated	comment	8/12/2021 16:18:38	
Good catch -- thank you! I've corrected this.	keberlein	updated	comment	8/12/2021 21:23:53	
Marking this comment as COMPLETED .					

Topic: defaultSubject (DA00508963)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
Let's assume, in the DTD or a specialization there is an attribute defined with an enumeration data type and some default value. Now a subject scheme imposes maybe different controlled values for that attribute with a different default value? How is an implementation supposed to validate a document instance? My naive understanding would be that the DTD/schema definitions have precedence. This would mean that if the	fwegmann	updated	comment	10/12/2021 21:22:22	

subject scheme defines a set of controlled values none of which are in the attribute definition of the schema, then the default value of the DTD would be taken. But what is a tool like Oxygen supposed to be doing then?

Maybe I ask this, because I have (apparently) no idea what's going on behind the scenes, but then I wonder if this is worth discussing in the spec? Not necessarily here, but earlier in the usage chapter.

I think we should add this as a draft comment in this page, and then make sure it is covered in the section about how to determine values: <https://github.com/oasis-tcs/dita/blob/DITA-2.0/specification/archSpec/base/determining-effective-attribute-values.dita>

I think the answer is implied by the language today, but it's not directly addressed. The spec says that if your scheme tells you "a" and "b" are the only valid values in an attribute, then specifying "x" and "y" are both in error, and processors / applications can treat that as an error. If you set up that scheme but your grammar files only allow "x" and "y", then you've set up a scheme that means every usage of that element is automatically an error condition.

randerson updated comment 13/12/2021 20:57:49

Added a draft comment.

Marking this comment as **COMPLETED**

keberlein updated comment 13/12/2021 23:11:26

If the schema specifies a default value, the schema's default value is used and the subject scheme's default value is ignored. This is what's stated in the arch spec:

The default attribute values that are specified in a subject scheme map apply only if a value is not otherwise specified in the DITA source or as a default value by the XML grammar.

gjoseph updated comment 15/12/2021 18:54:02

Paragraph-level comments

Do we want to make a normative statement about how processors should handle default values for attributes when they are specified by <defaultSubject>?

Annotation	Reviewer	Status	Type	Date	Topic version
Yes, I think it will help.	zlawson	updated	comment	12/12/2021 17:10:21	
Marking this comment CLOSED . (The work involved gets covered by other comments.)	keberlein	updated	comment	13/12/2021 23:12:35	

The following attributes are available on this element: universal attributes , link-relationship attributes , @keys , @keyref , @processing-role , and @toc .

Annotation	Reviewer	Status	Type	Date	Topic version
I don't play with subject scheme maps much at all, so I am highly ignorant, but my brain hurts thinking through this list of attributes.	zlawson	updated	comment	12/12/2021 17:16:26	
Why would you use the link-relationship attributes on a default value?					
Why is @processing-role here, but not on attributedef?					
Why would this ever appear in a TOC, so why is @toc here?					
If you have all the universal attributes, does that mean you can apply conditional processing on a subject scheme map? (Probably, but that really makes my brain hurt.)					

Remember that the defaultSubject element is specialized from topicref, so by default, all the attributes come along. We could have -- and probably should have -- not included these attributes on defaultSubject. So, slightly bad design on the part of the TC.

keberlein updated comment 13/12/2021 21:00:36

But yes, one certainly can use conditional processing on elements in a subjectScheme map.

Marking this comment **CLOSED**.

Topic: subjectRelTable (DA00508738)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
Unless someone provides a really good reason for keeping subjectRelTable, I like the idea of moving the topics to the a repo. I really don't understand what's going on, or why you would want to do this.	zlawson	updated	comment	12/12/2021 18:12:16	
No action required, so making this comment CLOSED .	keberlein	updated	comment	13/12/2021 23:16:54	

Paragraph-level comments

The following code sample shows a subject relationship table that establishes relationships between operating systems and applications. Subjects in the first column are the operating systems, and subjects in the second column are applications.

Annotation	Reviewer	Status	Type	Date	Topic version
This is more of a preference comment, but in relationship tables, I recommend to my clients to avoid multiple topics in the first cell of a rel table because it is very hard to qc what all has been associated with a single item. In this example, you can't tell as a glance what is associated with WindowsOS and that's really what you need to see. I would set this up with row 1 being linux and row2 3 being Windows, and repeat the two items that both are related to. I realize this may not be the most efficient in terms of DITA functionality, but it is the most efficient in terms of understanding what you've done.	dstevens	updated	comment	8/12/2021 20:37:51	
@Dawn, do you have clients using subject relationship tables, or does your comment pertain to relationship tables in general?	keberlein	updated	comment	8/12/2021 21:10:21	
Relationship tables in general. I think it would apply here as well, but no, I don't have clients using subject relationship tables.	dstevens	updated	comment	9/12/2021 13:57:58	
No action required, so marking this comment CLOSED .	keberlein	updated	comment	13/12/2021 23:17:31	

Topic: hasRelated (DA00508710)

Paragraph-level comments

The <hasRelated> element specifies that the contained subjects have an associative relationship with the container subject.

Annotation	Reviewer	Status	Type	Date	Topic version
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I'm still struggling with understanding the differences between hadRelated and related Subjects. Here's is what the original DITA 1.2 proposal said: keberlein updated comment 9/12/2021 16:46:59

- **<hasRelated>**:A specialized <topicref> element that identifies an associative relationship between the container subject and each of the contained subjects. As in any DITA map, relationships applies to all parent-child pairs of descendants.
- **<relatedSubjects>**:A specialized <topicref> element that establishes associative relationships between each child subject and every other child subject (unless the association is restricted by the linking attribute of the subjects).

This does not help ...

OK, after talking this over with Robert on our spec editors' call today here is the distinction, that we made:

- hasRelated can be used **within** the hierarchy of a subject definition to indicate that the children subjects are related to each other.
- related Subjects can be used **outside** of the hierarchy of the subject definitions to indicate that specific subjects are related. This is useful if the subjects that you want to indicate as related are not part of the same nodes in the hierarchical tree.

keberlein updated comment 13/12/2021 23:23:48

@Robert, do I have this correct?

Marking this comment as **CLOSED**, as we decide to remove this element (and the "has" elements) from DITA 2.0

Example

Annotation	Reviewer	Status	Type	Date	Topic version
The code sample is kind of twisted, and I don't understand the implications of the particular markup. For example: <ul style="list-style-type: none">• What does specifying a key on the <hasRelated> element get one?• Also, the markup implies that linux and windows are "kinds (or maybe "types") of platforms, due to the hierarchy of the map, but why not wrap a <hasKind> (or <hasType>) element around the subject definitions for linux and windows?	keberlein	updated	comment	10/12/2021 13:05:12	
If the explanatory text cannot cover these points, then I think we should swap in another example. Updated the introductory text to the example.	keberlein	updated	comment	13/12/2021 23:36:07	
Marking this comment COMPLETED .					

This example needs to be replaced, but I honestly do not understand the intent of the element enough to do that currently.

Annotation	Reviewer	Status	Type	Date	Topic version
See my possible example, earlier -- auto may have hasrelated to mechanic and insurance. If I'm understanding the use properly.	dstevens	updated	comment	8/12/2021 16:56:50	
I reworked the introduction to the example to more clearly indicate what is happening.	keberlein	updated	comment	13/12/2021 23:35:05	
Marking this comment COMPLETED .					


```

<subjectScheme>
  <subjectdef keys="myProgram">
    <hasRelated keys="platforms">
      <subjectdef keys="linux">
        <subjectdef keys="windows"/>
      </hasRelated>
    </subjectdef>
  </subjectScheme>

```

Annotation	Reviewer	Status	Type	Date	Topic version
The subjectdef element for linux is not closed. -----	keberlein	updated	comment	10/12/2021 12:42:55	
Fixed, and marked as COMPLETED .					

Topic: Subject scheme maps (DA00508533)

Paragraph-level comments

Controlled values are tokens that can be used as values for attributes. For example, the @audience attribute can take a value that identifies the users that are associated with a particular product. Typical values for a medical-equipment product line might include "therapist", "oncologist", "physicist", and "radiologist". In a subject scheme map, an information architect can define a list of these values for the @audience attribute. Controlled values can be used to classify content for filtering and flagging at build time.

Annotation	Reviewer	Status	Type	Date	Topic version
This may be my misinterpretation, but this definition doesn't explain that the intention of controlled values is to limit options. We're explaining what we're doing but not why we'd want to. maybe add something about Authoring tools might use this list to limit the values authors can use, avoiding misspellings and invalid values for your processing.? @Robert, I'll work this comment. ----	zlawson	updated	comment	12/12/2021 18:19:34	
I've added the following sentence: "An authoring tool can then provide a pick list for values for the attribute and generate a warning if an author attempts to specify a value that is not one of the controlled values." Marking this comment COMPLETED .	keberlein	updated	comment	12/1/2022 16:09:42	

Key references to controlled values are resolved to a key definition using the same precedence rules as apply to any other key. However, once a key is resolved to a controlled value, that key reference does not typically result in links or generated text.

Annotation	Reviewer	Status	Type	Date	Topic version
FWIW -- I do not understand what the second sentence means.	sdoherly	updated	comment	12/12/2021 13:35:48	
Quite simply, that key references resolved within a subjectScheme map do NOT generate variable text or produce links. Within the context of a subjectScheme map, the key references provide bindings or associations with subjects.	keberlein	updated	comment	13/12/2021 20:06:03	
I think the root of this problem / this misunderstanding is the poor design choice of using the same keys/keyref attribute for Subject Schemes as we do for normal linking / variable text. We had an item in the 2.0 queue to completely redesign that, but never had anyone with the time / energy to work on it (it would have been a big change).	randerson	updated	comment	13/12/2021 21:15:29	

The problem here is that we have to explain "These don't work like normal keys, and you shouldn't use them in links and expect them to resolve as text or links" -- in a way that is clear, accurate, and short enough that it actually gets read. So, I think we need some work on this paragraph.

Added a draft comment to the source.

keberlein updated comment 14/12/2021 17:31:30

Marking this comment **COMPLETED**.

My understanding is that keyref behavior to a subject scheme object is not resolved the usual way. Usually a keyref results in a standard topicref behavior or substitution of the key value defined by the keydef element. In this case, at processing time, the value of the attribute value defined by the subject scheme's subjectdef element takes effect, presumably to drive some rendering-time behavior similar to profiling or some other custom behavior that's traditionally driven from attribute values.

gjoseph updated comment 15/12/2021 10:53:12

Marking this comment **CLOSED**.

keberlein updated comment 12/1/2022 04:17:35

Topic: subjectHeadMeta (DA00509268)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
Somewhere in this topic need to reiterate that the content in the subjectHeadMeta is an optional display-only thing?	zlawson	updated	comment	12/12/2021 18:13:13	
Added the following to the short description: "for use if the subject scheme is displayed."	keberlein	updated	comment	14/12/2021 18:02:35	
Marking this comment COMPLETED .					

Paragraph-level comments

The <subjectHeadMeta> element enables a navigation title and short description to be associated with a subject heading.

Annotation	Reviewer	Status	Type	Date	Topic version
Dumb question that probably doesn't have an answer.					
Why did we specialize subjectHeadMeta, but just use topicmeta for <subjectdef>?					
Do we need this specialization?	zlawson	updated	comment	12/12/2021 18:22:42	
Would it make more sense to have a subjectMeta that could be used for subjectHeadMeta and in subjectdef?					
The content model of subjectHeadMeta was explicitly limited to navtitle/shortdesc -- thus the specialization. The subjectdef element can in theory reference real live content, and use all of the metadata associated with any content, while the subject heading is really just a heading.	randerson	updated	comment	13/12/2021 21:23:53	
That's the background anyway - I can't say for certain that it's better than just using topicmeta...					
	keberlein	updated	comment	14/12/2021	

Example

In the following code sample, the <subjectHeadMeta> element contains a @navtitle element that provides a label for the group of subjects:

```
<subjectScheme toc="yes" search="no">
  <!-- ... -->
  <subjectHead>
  <subjectHeadMeta>
  <navtitle>Server setup</navtitle>
  </subjectHeadMeta>
  <subjectdef href="planningTaskType.dita"/>
  <subjectdef href="installingTaskType.dita"/>
  <subjectdef href="webServerApp.dita"/>
  <subjectdef href="databaseApp.dita"/>
  </subjectHead>
  <!-- ... -->
</subjectScheme>
```

Annotation	Reviewer	Status	Type	Date	Topic version
I think the example should include a shortdesc as well for the subjectHead. Per my earlier comment, I think this example is supposed to be providing documentation for a subject scheme, so I would think there should be a description of the overall grouping as part of the documentation.	dstevens	new	comment	8/12/2021 20:31:39	
I don't understand this example at all, and think it should be entirely redone. Subject head is meant to basically provide a heading within a set of subjects, which is not itself a valid thing you can select -- but it could be used to optimize editing. A better example might be a heading of "Operating systems" that then defines keys for win/mac/linux -- so "operating systems" can't be selected, but it can improve navigation for the subjects that can.	randerson	new	comment	13/12/2021 21:22:39	
@Robert , I've updated the example, which now is in the subjectHead topic. Do the changes work for you?	keberlein	new	comment	14/12/2021 18:09:09	

Example

Annotation	Reviewer	Status	Type	Date	Topic version
This is the same code sample used in the subjectHead topic. I suggest removing it from this topic, and just cross-referencing to the example in the subjectHead topic.					
----- Done. Marking this comment COMPLETED .	keberlein	updated	comment	9/12/2021 13:53:39	

Topic: Binding controlled values to an attribute (DA00509076)

Paragraph-level comments

The <enumerationdef> element binds the set of controlled values to an attribute. Valid attribute values are those that are defined in the set of controlled values. Invalid attribute values are those that are not defined in the set of controlled values. An enumeration can specify an empty

<subjectdef> element, in which case, no value is valid for the attribute. An enumeration can also specify an optional default value by using the <defaultSubject> element.

Annotation	Reviewer	Status	Type	Date	Topic version
The element binds the set of controlled values to an attribute. Valid attribute values are those that are defined in the set of controlled values. Invalid attribute values are those that are not defined in the set of controlled values. If an enumeration can specify an empty element, no attribute value can be assigned to the attribute in which case, no value is valid for the attribute. An enumeration can also specify an optional default value by using the element.	gjoseph	updated	change	15/12/2021 12:06:07	
Changed to read "If an enumeration specifies an empty element, no value is valid for the attribute."	keberlein	updated	comment	11/1/2022 18:20:31	
Marking this comment COMPLETED .					

When the above subject scheme map is used, the only valid values for the @audience attribute are "therapist", "oncologist", "physicist", and "radiologist". Note that "users" is not a valid value for the @audience attribute; it merely identifies the parent or container subject.

Annotation	Reviewer	Status	Type	Date	Topic version
When the above subject scheme map is used, the only valid values for the @audience attribute are "therapist", "oncologist", "physicist", and "radiologist". Note that "users" is not a valid value for the @audience attribute; it merely identifies the parent or container subject.	gjoseph	updated	change	15/12/2021 12:09:12	
Done, more or less as you suggested. Marking this comment COMPLETED .	keberlein	updated	comment	11/1/2022 18:24:32	

The following code sample declares that there are no valid values for the @outputclass attribute.

Annotation	Reviewer	Status	Type	Date	Topic version
I suggest we either add to this sentence that this is done by defining an empty subjectdef element, or by making the empty subjectdef element in the code sample bold so it stands out. My preference is the latter. Although we say this explicitly in the main body of this topic above, the reader may forget this sentence by the time they read this example.	gjoseph	updated	comment	15/12/2021 12:15:41	
I wonder if we should make it clearer that the result of doing this means that users cannot set any value for the attribute. I'm not sure all readers will deduce this fact from the current text.					
Added bold highlighting, also added the following sentence: "Authors will not be able to specify the @outputclass attribute on an element."	keberlein	updated	comment	11/1/2022 18:28:36	
Marking this comment COMPLETED .					

Topic: Example: Extending a subject scheme upwards (DC00810971)

Paragraph-level comments

The following subject scheme map creates a "Software" category that includes operating systems as well as applications. The subject scheme map that defines the operation system subjects is pulled in by reference, while the application subjects are defined directly in the subject scheme map below:

Annotation	Reviewer	Status	Type	Date	Topic version
------------	----------	--------	------	------	---------------

second line should be 'subject scheme map that defines the operating system subjects'

nharrison updated comment 11/12/2021 23:13:02

Fixed.

keberlein updated comment 13/12/2021 20:02:04

Marking this comment **COMPLETED**.

Topic: Extending subject schemes (DA00509323)

Paragraph-level comments

The <schemeref> element provides a reference to another subject scheme map. Typically, the referenced subject-scheme map defines a base set of controlled values that are extended by the current subject-scheme map. The values in the referenced subject-scheme map are merged with the values in the current subject-scheme map; the result is equivalent to specifying all of the values in a single subject scheme map.

Annotation	Reviewer	Status	Type	Date	Topic version
Editorial -- need to be consistent about hyphenation for "subject scheme". Sometimes it is hyphenated when used as a modifier, sometimes it is not.	sdoherly	updated	comment	12/12/2021 13:36:57	
Good point. From my recently refreshed knowledge regarding the use of hyphens in compound words, I would argue here that it should always be written without hyphen: it is not a compound adjective such as "implementation-specific rule" that usually takes a hyphen if used as modifier. Here we have two nouns forming a compound that, IMHO, falls into the same category as "user guide" or "living room". Intuitively I'd talk of a "subject scheme map", being a map containing a subject scheme. Native speakers, step forward;)	fwegmann	updated	comment	12/12/2021 16:05:16	
The phrase "subject-scheme" is hyphenated in this paragraph because it is used in long noun strings: <ul style="list-style-type: none"> Referenced subject-scheme map Referencing subject-scheme map 	keberlein	updated	comment	14/12/2021 00:12:34	
Without the hyphen, it is less clear exactly what the adjectives "referenced" and "referencing" modify.					
Marking this comment CLOSED .					

The <schemeref> element provides a reference to another subject scheme map. Typically, the referenced subject-scheme map defines a base set of controlled values that are extended by the current subject-scheme map. The values in the referenced subject-scheme map are merged with the values in the current subject-scheme map; the result is equivalent to specifying all of the values in a single subject scheme map.

Annotation	Reviewer	Status	Type	Date	Topic version
The element provides a reference to another subject scheme map. Typically, the referenced subject-scheme map defines a base set of controlled values that are extended by the current subject-scheme map. The values in the referenced subject-scheme map are merged with the values in the current subject-scheme map; the result is equivalent to specifying all of the values in a single subject scheme map.	gjoseph	updated	change	15/12/2021 14:23:12	
Dome. Marking this comment as COMPLETED .	keberlein	updated	comment	11/1/2022 18:30:10	

I think we need to make a normative statement about this for DITA 2.0. I realize that doing so would require developing detailed content about processing subject scheme maps, since they have different processing expectations than DITA maps in general. Also, see the following draft comment (from the 1.3 time frame), which had been commented out of this topic.

Annotation	Reviewer	Status	Type	Date	Topic version
I wonder if anyone is actually extending the subject scheme this way to create an uber ontology or taxonomy. I doubt it's used much, if at all, which may make it worthwhile considering removal of the schemeref element from our content model... I'd expect this type of activity to be done using ontology tools.	gjoseph	updated	comment	15/12/2021 14:27:43	
@Gershon, I doubt anyone is doing this. I am not aware of any processors that support schemeref. @Robert, should we consider removing this behavior (the transclusion and merging) rather than defining the expected processing?	keberlein	updated	comment	11/1/2022 18:32:36	
I'm not aware of processors that do this. I think we should keep the element, it's logical / intuitive that you might want to pull in controlled values from several schemes, but I'd be OK removing that language about "equivalent to specifying all values in a single subject scheme map"	randerson	updated	comment	11/1/2022 23:11:20	
I think we should run that by the TC before removing though - it's a defined behavior, and we should check if others know of its use.					
Marking this as REFERRED . We'll have it on the agenda for the TC meeting on 18 January 2022.	keberlein	updated	comment	12/1/2022 04:23:28	

Topic: relatedSubjects (DA00509552)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
The <relatedSubjects> element seems to have a different content model than the other "has" elements. It does not permit <subjectHead>, why? Was this intentional, or an error in the original content model released with DITA 1.2?	keberlein	updated	comment	10/12/2021 13:11:45	
Intentional, based on a reading of the original DITA 1.2 proposal.					
If the purpose of the relatedSubjects element is strictly to be an element that can contain subjects -- and specifies that all contained subjects have (essentially) a family relationship, then there is NO need for a subjectHead element (which was intended to provide a label that would be displayed for faceted browsing).	keberlein	updated	comment	13/12/2021 21:25:12	
Marking this comment as CLOSED .					

Paragraph-level comments

How is this element different from <hasRelated>?

Annotation	Reviewer	Status	Type	Date	Topic version
in my understanding <hasRelated> establishes a relationship within a classification, while relatedsubjects establishes a relationship between classifications or categories.	dstevens	updated	comment	8/12/2021 18:58:52	
	keberlein	updated	comment	9/12/2021	

@Dawn, is your understanding based on these elements, or RDF? And what do you mean by a classification? Is it a subject scheme or a subject?

12:53:26

I mean subjects. So using my hasrelated example, autos has hasRelated to Mechanics and Insurance, within its subject of auto. But related subjects to autos might be Henry Ford or Assembly Line or Motorcycles. These later items don't have a direct relationship. Autos don't "have" motorcycles, they are related to them. But autos do "have" mechanics or insurance.

dstevens updated comment 9/12/2021 13:54:59

No changes required. Marking this comment **CLOSED**.

keberlein updated comment 14/12/2021 00:14:47

Example

Annotation	Reviewer	Status	Type	Date	Topic version
The subjectdef element for linux needs to be closed. Fixed. Marking as COMPLETE .	keberlein	updated	comment	10/12/2021 14:06:54	

The following code sample specifies that the Linux, the Apache Web Server, and the MySQL Database subjects are related:

Annotation	Reviewer	Status	Type	Date	Topic version
If my understanding is correct, the better example from other examples we are using in other elements would be to say that the subject Cities is related to the subject Places.	dstevens	updated	comment	8/12/2021 19:00:56	
@Dawn, why would that be a better example? This example shows that a hasRelated element can contain subjectdef elements, and that the contained subjects are related in some unspecified way.	keberlein	updated	comment	9/12/2021 12:59:17	
I don't really see the utility of this, except as a minimal framework for some sort of faceted browsing.					
I think you can close this. I think I didn't pay enough attention to this example and was thinking that all the listed subjectdefs were things that had been part of the same subject in the past -- linux, redhat, etc. -- which they obviously aren't. Sorry.	dstevens	updated	comment	9/12/2021 13:42:42	
Marking this comment CLOSED .	keberlein	updated	comment	9/12/2021 13:46:07	

Topic: subjectRelHeader (DA00509505)

Paragraph-level comments

Each cell in the header row identifies a subject topic that defines a role. When specializing the <subjectRelTable> element, you can accomplish the same purpose by specializing the cells within the rows to enforce the roles.

Annotation	Reviewer	Status	Type	Date	Topic version
I think this whole explanation is confusing.	dstevens	updated	comment	8/12/2021 20:43:06	
<ul style="list-style-type: none">Can we eliminate the word "topic" -- Each cell in the header row identifies a subject (or category or classification) that applies to all of the <subjectRole> elements contained in the corresponding column.					

- For the second sentence, I have no idea what we are talking about. is is saying that you might specialize subjectRole to specifically correspond to a particular classification of values -- so that subjectRole in the first column, for example, could only include keyrefs that were part of the column's referenced content -- kind of like an enumeration that specifies which values are allowed in a specific column? Whether that is indeed what is being said, or something else entirely, could we be a little less obuse?

Also, looking at the example rendered table confuses me more because it *looks* like we are saying the entire scheme associated with operating system is related to the entire scheme associated with application. So should this somewhere indicate that although you are using a keyref, no association is established in the subjectrelheader? That may be obvious, but it doesn't really look that way.

I find this content confusing, also. The design of subjectRelTable, which does not strictly mirror that of relatable, is largely to blame, I think.

keberlein updated comment 9/12/2021 13:10:14

For the first sentence - yes, I think we should change or remove the word "topic".

I think we should delete the second sentence entirely. The idea behind it was that people would be specializing <subjectRelTable> to create even more specialized types of subject relationships. We're struggling to determine if people even use the base element, so I do not think we should talk about specializing it in the usage information.

randerson updated comment 13/12/2021 21:30:05

Implemented the changes that Robert suggested.

Marking this comment **COMPLETED**.

keberlein updated comment 14/12/2021 00:17:39

I suggest deleting the second sentence. It's irrelevant here. Perhaps it could be moved to the arch spec, but even there I don't see much value in explaining how a user would specialize subjectRelTable futher.

gjoseph updated comment 16/12/2021 10:41:26

Marking this comment **CLOSED**, as the TC decide to remove subject rel table.

keberlein updated comment 11/1/2022 19:02:44

Do we need such an example?

Annotation	Reviewer	Status	Type	Date	Topic version
What would be a more complex example? What is the use case for such complexity? I wouldn't think we would need it, unless an easy use case comes to mind.	dstevens	updated	comment	8/12/2021 20:51:42	
A reason for a more complex example is that the subjectRelHeader shown in the subjectRelTable topic does not clearly show what can be done with this element.	keberlein	updated	comment	9/12/2021 13:12:22	

Topic: schemeref (DA00508610)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
You could refer to the existing example discussed in the general examples section using schemeref. I would add an example here only if you can demonstrate a capability of schemeref not shown previously.	fwegmann	updated	comment	12/12/2021 16:54:52	
Removed the draft comment. Marking this comment CLOSED .	keberlein	updated	comment	11/1/2022 18:38:37	

Paragraph-level comments

The values specified in the subject scheme maps are merged; the result is equivalent to specifying all of the values in a single map.

Annotation	Reviewer	Status	Type	Date	Topic version
The values specified in the subject scheme maps are merged . † The result is equivalent to specifying all of the values in a single map.	gjoseph	updated	change	16/12/2021 09:54:43	
Done. marking this comment COMPLETED .	keberlein	updated	comment	11/1/2022 18:36:32	

The following attributes are available on this element: universal attributes , link-relationship attributes , @keys , and @keyref .

Annotation	Reviewer	Status	Type	Date	Topic version
Should this also get @processing-role? Possibly with a default value? Also @toc = no as default?	zlawson	updated	comment	12/12/2021 17:31:10	
@Robert? I don't want to hog all the "fun" here ...	keberlein	updated	comment	11/1/2022 18:39:21	
At this point I don't think so. It is only available inside of subject schemes, and only meant to reference other subject schemes; I think whatever role you've assigned to the root subject scheme (almost certainly "resource-only") should carry through. Similarly, I think it's safe to use the root TOC setting here.	randerson	updated	comment	11/1/2022 23:28:15	
Marking CLOSED - it wouldn't hurt to add them but I don't think there is a compelling reason to do so, absent a push at the TC.					

Would it be good to have a separate example for this element?

Annotation	Reviewer	Status	Type	Date	Topic version
I think an example here would be helpful to the reader, but only if it's complete. Since we have the example in the arch spec (if I remember correctly), perhaps a link to the arch spec topic with the example will suffice.	gjoseph	updated	comment	16/12/2021 10:00:13	
Marking this comment CLOSED , as I have removed the draft comment.	keberlein	updated	comment	11/1/2022 18:40:02	

Topic: hasNarrower (DA00508596)

Paragraph-level comments

The container subject is more general than the subjects contained within the <hasNarrower>element. The way in which the contained subjects represent a narrower relationship is not specified.

Annotation	Reviewer	Status	Type	Date	Topic version
add space between <hasNarrower> and element.	dstevens	updated	comment	8/12/2021 16:52:18	
Done.	keberlein	updated	comment	8/12/2021 21:15:00	

Marking this comment as **COMPLETED**.

Example

Annotation	Reviewer	Status	Type	Date	Topic version
Isn't the "planting-rose" subject narrower than "horticulture," simply by virtue of the fact that "planting-roses" is a child of "horticulture"?					

According to the DITA 1.2 proposal for this stuff (https://www.oasis-open.org/apps/org/workgroup/dita/download.php/26359/IssueControlledValues12031.html) the <hasNarrower> element " makes the default hierarchical relationship explicit."	keberlein	updated	comment	10/12/2021 12:19:07	
I wonder if Erik Hennum anticipated that some viewing applications would not understand the hierarchy of the map, and so would need markup like <hasNarrower> ...					

No changes required. Marking this comment CLOSED .					

Topic: subjectRel (DA00508992)

Paragraph-level comments

The associations between different cells in the same row are evaluated in the same way as those in a <relrow>.

Annotation	Reviewer	Status	Type	Date	Topic version
should there be a crossref here?	dstevens	updated	comment	8/12/2021 20:32:20	
No. Anyone needing to look at the relrow topic can access it through using the "DITA elements, A to Z" topic.	keberlein	updated	comment	8/12/2021 21:17:30	
Marking this comment as CLOSED .					

Topic: Processing controlled attribute values (DA00508848)

Paragraph-level comments

- Processors *SHOULD* validate that the values of attributes that are bound to controlled values contain only valid values from those sets. (The list of controlled values is not validated by basic XML parsers.) If the controlled values are part of a named key scope, the scope name is ignored for the purpose of validating the controlled values.

Annotation	Reviewer	Status	Type	Date	Topic version
Processors SHOULD validate that the values of attributes that are bound to controlled values contain only valid values from those sets. (This requirement is needed because basic XML parsers do not validate the list of controlled values is not validated by basic XML parsers.) If the controlled values are part of a named key scope, the scope name is ignored for the purpose of validating the controlled values.	gjoseph	updated	change	15/12/2021 14:19:17	
Done. Marking this comment COMPLETED .	keberlein	updated	comment	11/1/2022 18:42:54	

Topic: subjectdef (DA00508958)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
I think I'm not seeing the distinction between the code samples. The example is the same; but the introduction is slightly different. I would suggest a more robust example with multiple first level subject defs and nested ones.	dstevens	updated	comment	8/12/2021 19:04:26	
Mistake in the DITA source! Apologies. Marking this comment CLOSED .	keberlein	updated	comment	9/12/2021 14:14:52	

Paragraph-level comments

The <subjectdef> element can use a <navtitle> element to supply a label for the subject. The @href attribute on <subjectdef> can be used to reference a topic that captures the consensus definition for the subject.

Annotation	Reviewer	Status	Type	Date	Topic version
What is "consensus definition"? I *thnk* I figured it out, but will our average reader know what this means?	gjoseph	updated	comment	16/12/2021 10:02:15	
Changed to read "provides more information about a subject and how authors use it when classifying content." Yeah, the wording was very Erik Hennem! Marking this comment COMPLETED .	keberlein	updated	comment	11/1/2022 18:48:28	

The following attributes are available on this element: universal attributes , link-relationship attributes , @keys , @keyref , @processing-role , @toc , @collection-type , and @linking .

Annotation	Reviewer	Status	Type	Date	Topic version
What the heck would @collection-type or @linking do? Ditto the link-relationship attributes.	zlawson	updated	comment	12/12/2021 17:35:17	
@Robert? Sharing the fun here ...	keberlein	updated	comment	11/1/2022 18:44:47	
They would just inherit the common processing used elsewhere - provided you're trying to publish the scheme, which is possible but not the most common case. Early on, I saw examples of subject schemes where each "subject" was a DITA topic, so publishing the scheme could be used to publish your taxonomy, in which case you'd want all of the normal processing associated with those attributes. Marking CLOSED - there is no driving reason to remove these, and if used, they'd pick up normal processing behaviors.	randerson	updated	comment	11/1/2022 23:30:22	

Example

Annotation	Reviewer	Status	Type	Date	Topic version
Obviously a mistake in the DITA source; the example is duplicated. I've	keberlein	updated	comment	9/12/2021 14:07:33	

corrected this.

Marked as **COMPLETED**.

Do we need a 2nd example that focuses on subjects for a simple taxonomy?

Annotation	Reviewer	Status	Type	Date	Topic version
Yes, or at least a related link to the architecture example. (Taxonomies are a blind spot for me. I keep trying to understand how/why to use one and I've never had an implementation that needed one, so I never entirely grok them.)					
I'm also a bit meh on the description that the example shows values for @product...because we don't have the enumerationdef that does the actual connecting. I would explicitly state that because if I randomly came to this topic and it doesn't point to enumerationdef, I wouldn't realize that I needed it. I'd think I could just use a key name that included "values-<attributeName>" and magic would happen.	zlawson	updated	comment	12/12/2021 17:39:36	
The enumerationdef element has some *extended* examples of how to do this - that might be a good link target.					
I do think this example needs updating - it shows 3 key definitions, but does not actually associate them with product. Options I see are:					
<ol style="list-style-type: none">1. We refer to enumerationdef for all examples of this - it what this one is showing2. We state that this example is showing how to define hierarchical subjects, but then refer to enumerationdef for how it's used for that case3. We add an example of enumerationdef here -- "here is how you define the subjects, here is how you use them"4. We just state that this is defining hierarchical subjects and don't mention the product attribute	randerson	updated	comment	11/1/2022 23:51:06	
I think I favor 2, but any of those would resolve this example -- @Kris?					
@Robert, I'll take this one on; I'll work on it today.					

<ol style="list-style-type: none">1. I revised the intro to the "Example of defining a set of onrolled values". Because the example is about <i>defining</i> controlled values, I did not add any information about binding the enumeration to an attribute. We simply cannot make every example contain all the information that a end user would need in order to use an element ...2. I added another example: "Example of defining a simple taxonomy". The taxomony is for "hobbies", and it contains "fibre-arts" and "wood-working" subjects.	keberlein	updated	comment	12/1/2022 16:13:32	
Marking this comment COMPLETED .					

Topic: subjectRole (DA00508656)

Paragraph-level comments

A subject-relationship table cell does not imply a relationship between topics or resources that are referenced in the same cell, unless the @collection-type attribute set on the cell indicates that they are related.

Annotation	Reviewer	Status	Type	Date	Topic version
	gjoseph	updated	comment	16/12/2021	

I find this sentence odd. Instead of saying how to use this, we say how it's not used. OK, so how is it used???

10:49:48

Like Dawn, I also don't follow the content model of subjectRelHeader.

I think we could further simplify the subject scheme content model based on the fact taxonomy and ontology management systems are now mature, and DITA does not need to perform their functions. All DITA needs to do is provide a way to inject taxonomy to be applied to content, and to apply that taxonomy to DITA content. Erik designed this as a full house taxonomy and ontology development and management system, because there was nothing reasonable out there at the time. Should we be reevaluating the entire subjectscheme thing?

We wanted to redesign subjectScheme for DITA 2.0, but no one had the bandwidth to do it. And I am probably the person on the TC with the deepest knowledge of subjectScheme. Anyhow, marking this comment **CLOSED**, since the TC decide today to remove subject rel table from DITA 2.0.

keberlein updated comment 11/1/2022 18:51:56

When used within the <subjectRelHeader>, the <subjectRole> element defines the type of subject or the relationship provided by the column.

Annotation	Reviewer	Status	Type	Date	Topic version
Maybe this addresses my earlier comment on subjectrelheader. maybe add an explicit sentence here tht says no relationship is defined in the subjectRelheader?	dstevens	updated	comment	8/12/2021 20:53:31	
I'm just not sure that's true, given the wacky design of subjectRelHeader! It does not mirror reltable. ----	keberlein	updated	comment	14/12/2021 17:57:34	
Marking this comment CLOSED , since the TC decide today to remove subject rel table from DITA 2.0.					

Topic: Example: Extending a subject scheme (DA00509241)

Paragraph-level comments

```
<subjectScheme>
  <subjectdef keys="os">
    <topicmeta>
      <navtitle>Operating systems</navtitle>
    </topicmeta>
    <subjectdef keys="linux">
      <topicmeta>
        <navtitle>Linux</navtitle>
      </topicmeta>
      <subjectdef keys="redhat">
        <topicmeta>
          <navtitle>RedHat Linux</navtitle>
        </topicmeta>
      </subjectdef>
    </subjectdef>
    <subjectdef keys="suse">
      <topicmeta>
        <navtitle>SuSE Linux</navtitle>
      </topicmeta>
    </subjectdef>
  </subjectdef>
  <subjectdef keys="windows">
    <topicmeta>
      <navtitle>Windows</navtitle>
    </topicmeta>
  </subjectdef>
  <subjectdef keys="zos">
    <topicmeta>
      <navtitle>z/OS</navtitle>
    </topicmeta>
  </subjectdef>
</subjectScheme>
```

```

</subjectdef>
</subjectdef>
<enumerationdef>
<attributedef name="platform"/>
<subjectdef keyref="os"/>
</enumerationdef>
</subjectScheme>

```

Annotation	Reviewer	Status	Type	Date	Topic version
Delete the <code><subjectdef></code> 6 lines from the bottom of the code block. It's a duplicate that lacks a start tag.	gjoseph	updated	comment	15/12/2021 15:02:11	
No, the code sample is correct as it stand. I double-checked it.	keberlein	updated	comment	11/1/2022 18:56:54	
Marking this comment CLOSED .					

The following subject scheme map extends the enumeration defined in baseOS.ditamap. It adds macos as a child of the existing os subject; it also adds special versions of Windows as children of the existing windows subject:

Annotation	Reviewer	Status	Type	Date	Topic version
The following subject scheme map extends the enumeration defined in baseOS.ditamap. It adds macos as a child of the existing os subject ; and it also adds special versions of Windows as children of the existing windows subject:	gjoseph	updated	change	15/12/2021 15:03:39	
Done. Marking this comment COMPLETED .	keberlein	updated	comment	11/1/2022 18:55:09	

```

<subjectScheme>
  <schemeref href="baseOS.ditamap"/>
  <subjectdef keyref="os">
    <subjectdef keys="macos"/>
    <subjectdef keyref="windows">
      <subjectdef keys="win10"/>
      <subjectdef keys="win11"/>
    </subjectdef>
  </subjectdef>
</subjectScheme>

```

Annotation	Reviewer	Status	Type	Date	Topic version
Speaking of indentation. While the conkeyreffed "basic-subjectScheme" basically uses an indentation of 4 space characters, the two examples in this topic use two. A consistent indentation would be nice. And if I were asked, I'd always pledge for 2 space characters.	fwegmann	updated	comment	10/12/2021 20:54:24	
Corrected the indentation in these examples.					
Since a majority of existing code blocks use an indentation of four space, we need to stick with that. Handling the indentation is manual, finicky work. Changing it just is not a priority.	keberlein	updated	comment	14/12/2021 00:03:34	
Marking this comment COMPLETED .					

```

<subjectScheme>
  <subjectdef keys="os">
    <subjectdef keys="linux">
      <subjectdef keys="redhat"/>
      <subjectdef keys="suse"/>
    </subjectdef>
  </subjectdef>
</subjectScheme>

```

```

</subjectdef>
<subjectdef keys="macos">
<subjectdef keys="windows">
<subjectdef keys="win10"/>
<subjectdef keys="win11"/>
</subjectdef>
<subjectdef keys="zos"/>
</subjectdef>
<enumerationdef>
<attributedef name="platform"/>
<subjectdef keyref="os"/>
</enumerationdef>
</subjectScheme>

```

Annotation	Reviewer	Status	Type	Date	Topic version
<subjectdef keys="macos"/>	fwegmann	updated	change	10/12/2021 20:55:11	
Fixed.					
Marking this comment COMPLETED .	keberlein	updated	comment	14/12/2021 00:09:25	

```

<subjectScheme>
<subjectdef keys="os">
<subjectdef keys="linux">
<subjectdef keys="redhat"/>
<subjectdef keys="suse"/>
</subjectdef>
<subjectdef keys="macos">
<subjectdef keys="windows">
<subjectdef keys="win10"/>
<subjectdef keys="win11"/>
</subjectdef>
<subjectdef keys="zos"/>
</subjectdef>
<enumerationdef>
<attributedef name="platform"/>
<subjectdef keyref="os"/>
</enumerationdef>
</subjectScheme>

```

Annotation	Reviewer	Status	Type	Date	Topic version
Clarifying Frank's comment: The subjectdef element that defines macos is missing an end tag. It should be: <subjectdef keys="macos" />	gjoseph	updated	comment	15/12/2021 15:06:39	
Already handled. Marking this comment CLOSED .	keberlein	updated	comment	11/1/2022 18:55:48	

Topic: Scaling a list of controlled values to define a taxonomy (DA00513584)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
In every example related to "has" elements, except hasRelated (which has a note to replace the example), the "has" element is shown as a child of subjectScheme -- applying therefore to all of the subjects nested within it. But is also valid to be a child of <subjectdef>. If we keep these elements, I think we need to have some examples that show the has elements as part of the subjectdef. Showing that within the same overall subjectdef heirarchy the has relationship could vary or in fact, the values within a single subject def could have different relationships. For example, a subjectdef of automobile,	dstevens	updated	comment	8/12/2021 16:51:43	

might have kind -- sedan, minivan, suv, but also part -- tire, hood, engine, and also related -- mechanic, insurance, etc.

That's a good point. I think the examples were developed back in the DITA 1.2 time frame to just be very stripped down.

keberlein updated comment 14/12/2021 17:49:30

Since it seems very clear that we are heading to removing these elements from DITA 2.0, I'm marking this comment **CLOSED**.

Paragraph-level comments

Beyond the core elements and the attribute binding elements, sophisticated taxonomies can take advantage of some optional elements. These optional elements make it possible to specify more precise relationships among subjects. The <hasNarrower>, <hasPart>, <hasKind>, <hasInstance>, and <hasRelated> elements specify the kind of relationship in a hierarchy between a container subject and its contained subjects.

Annotation	Reviewer	Status	Type	Date	Topic version
Beyond the core elements and the attribute-binding elements, sophisticated taxonomies can take advantage of some optional elements. These optional elements make it possible to specify more precise relationships among subjects. The , , , and elements specify the kind of relationship in a hierarchy between a container subject and its contained subjects.	fwegmann	updated	change	9/12/2021 21:03:08	
Made the change.	keberlein	updated	comment	10/12/2021 11:48:29	
Marking this comment COMPLETED .					

```
<subjectScheme>
  <hasInstance>
    <subjectdef keys="city">
    <subjectdef keys="la"/>
    <subjectdef keys="nyc"/>
    <subjectdef keys="san-francisco"/>
  </subjectdef>
  <subjectdef keys="state">
    <subjectdef keys="ca"/>
    <subjectdef keys="ny"/>
  </subjectdef>
</hasInstance>
<hasPart>
  <subjectdef keys="place">
    <subjectdef keyref="ca">
    <subjectdef keyref="la"/>
    <subjectdef keyref="sf"/>
  </subjectdef>
  <subjectdef keyref="ny">
  <subjectdef keyref="nyc"/>
</subjectdef>
</hasPart>
</subjectScheme>
```

Annotation	Reviewer	Status	Type	Date	Topic version
This is a keyref to "sf" but the key defined is "san-francisco" earlier in the file. I don't think this will work.	dstevens	updated	comment	8/12/2021 19:35:16	
Good catch - need to update this one.	randerson	updated	comment	8/12/2021 19:59:52	
Corrected.	keberlein	updated	comment	9/12/2021 13:21:17	

Marking this comment as **COMPLETED**.

```
<subjectScheme>
  <hasInstance>
    <subjectdef keys="city">
      <subjectdef keys="la"/>
      <subjectdef keys="nyc"/>
      <subjectdef keys="san-francisco"/>
    </subjectdef>
    <subjectdef keys="state">
      <subjectdef keys="ca"/>
      <subjectdef keys="ny"/>
    </subjectdef>
  </hasInstance>
  <hasPart>
    <subjectdef keys="place">
      <subjectdef keyref="ca">
      <subjectdef keyref="la"/>
      <subjectdef keyref="sf"/>
    </subjectdef>
    <subjectdef keyref="ny">
    <subjectdef keyref="nyc"/>
  </subjectdef>
  </subjectdef>
</hasPart>
</subjectScheme>
```

Annotation	Reviewer	Status	Type	Date	Topic version
To make this more international friendly, if you're keeping the la, nyc, and sf, can you add navtitle descriptions that spell out the city (and maybe state) names?	zlawson	updated	comment	12/12/2021 16:16:57	
I realize it clutters up the example, but may help with clarity for folks not as familiar with US geography.					
I spelled things out more in the values for @keys, for example, "los-angeles" rather than "la."	keberlein	updated	comment	14/12/2021 00:22:15	
Marking this comment COMPLETED .					

The subject scheme map can also define relationships between subjects that are not hierarchical. For instance, cities sometimes have "sister city" relationships. An information architect could add a <subjectRelTable> element to define these associative relationships, with a row for each sister-city pair and the two cities in different columns in the row.

Annotation	Reviewer	Status	Type	Date	Topic version
Seems like there should be a reference to subject relationship tables here. Actually, I feel lie the idea of a subject relationship table needs its own topic to explain why and how. This appears to be the only mention of the concept, hidden in this topic.	dstevens	updated	comment	8/12/2021 16:31:59	
A new architectural topic that focuses on subject relationship tables ... It probably would be useful, assuming that we do not remove subject relationship table. But I think before we spending time developing such a topic, we'll need an architectural topic about relationship tables in general. Then the subject relationship table topic could focus on where the subjectRelTable deviates from the reltable design.	keberlein	updated	comment	9/12/2021 13:31:56	
Marking this comment as DEFERRED .					
Do we really need to keep subjectRelTable? Seems way too esoteric when we have such good taxonomy and ontology development and management tools out there. I don't think the CCMS should use DITA to manage complex ontologies.	gjoseph	updated	comment	15/12/2021 14:46:18	

Marking this comment as **CLOSED**, since we decided at the TC meeting today to remove subject rel tables from DITA 2.0.

keberlein updated comment 12/1/2022 04:37:21

Topic: attributedef (DA00509352)

Paragraph-level comments

The following attributes are available on this element: ID and conref attributes , @status , @base , @outputclass , and @class .

Annotation	Reviewer	Status	Type	Date	Topic version
Humble request - can we get a walk-through of how the attribute topics are organized? I'm not 100% sure I follow what's going on all the time. And maybe discuss formatting of these attribute sections?	zlawson	updated comment		12/12/2021 17:09:43	
I feel like this attributes section isn't quite right. I'm not sure if it's just a formatting thing (not using a dl here), or if something isn't correct. We're stating that @translate has a default value of no, but it's not listed as an included attribute.					
The attribute list here is wrong, it is missing translate / name (both should have been listed): https://github.com/oasis-tcs/dita/blob/DITA-2.0/doctypes/dtd/subjectScheme/subjectScheme.mod#L622-L626	randerson	updated comment		13/12/2021 21:37:30	
@Robert, assigning this to you to complete the work.	keberlein	updated comment		11/1/2022 18:58:36	
Fixed the attribute list; marking CLOSED	randerson	updated comment		14/1/2022 21:50:35	

Topic: elementdef (DA00508838)

Paragraph-level comments

The following attributes are available on this element: ID and conref attributes , @status , @base , @outputclass , @translate , @class , and @name .

Annotation	Reviewer	Status	Type	Date	Topic version
Similar comment to attributedef and defaultSubject attribute questions.					
Here's we list @name and @translate, we didn't in attributedef.	zlawson	updated comment		12/12/2021 17:21:56	
My brain is hurting with the idea of adding conrefs to these. Possibly needs an example up in the arch section?					
The attributedef list was incorrect, and was missing those two. As for using conrefs ... those are near-universal, basically allowed anywhere that id is allowed. In cases like that, removing them tends to make maintenance a bit harder (and result in random dissonance of "why isn't this here" when someone tries it) than just including them.	randerson	updated comment		13/12/2021 21:40:46	
@Robert, assigning this one to complte the work.	keberlein	updated comment		11/1/2022 18:59:42	
Closing this one:	randerson	updated comment		11/1/2022 23:17:24	
<ul style="list-style-type: none">The current list is correct (the referenced one on attributedef was the error)I don't want to remove conref - while it's unlikely to be used, removing select universal attributes from just a few elements makes them not universal, increases					

maintenance cost, and leads to things getting missed. We've had cases in the past where some "exception" elements missed new universal attributes because they had to be defined with duplicate definitions.

- I also don't want an example of using conref, here or in the arch spec - as you note, it hurts the brain to imagine doing it, and I can't see a reason to include examples for such extreme edge-cases.

Marking **CLOSED**

Topic: Defining controlled values for attributes (DA00508553)

Paragraph-level comments

- A <navtitle> (or a <titlealt> element with a @title-role of navigation) can provide a more readable name for the controlled value.

Annotation	Reviewer	Status	Type	Date	Topic version
Why don't we remove the alternative titlealt element here? I'm all for simplification. If the navtitle element works the same way, let's kill the titlealt with convoluted @title-role value to mean the same as a navtitle element...	gjoseph	updated	comment	15/12/2021 10:55:17	
The navtitle element is a specialized titlealt that defaults the title-role attribute to "navigation". It's a case where we've added the convenience element <navtitle> but it's in an optional domain, so might not be present; implementations need to be aware that this behavior is associated with that token on the base element, not specifically with the element.	randerson	updated	comment	11/1/2022 23:04:26	

Marking **Closed**

- Authoring tools *MAY* support accessing and displaying the content of the subject definition resource in order to provide users with a detailed explanation of the subject.

Annotation	Reviewer	Status	Type	Date	Topic version
In the corresponding DITA source file archSpec/base/controlled-values-for-attributes.dita the part after "MAY" is wrapped by a ph element for apparently no particular reason.	fwegmann	updated	comment	7/12/2021 20:39:09	
Yes -- This happens if we have removed @rev attributes. For DITA 2.0, we plan to run some scripting to remove such ph elements, but we have not done that with previous DITA releases.	keberlein	updated	comment	7/12/2021 20:51:43	

Marking this comment **CLOSED**.

- Authoring tools *MAY* support accessing and displaying the content of the subject definition resource in order to provide users with a detailed explanation of the subject.

Annotation	Reviewer	Status	Type	Date	Topic version
Need a space between MAY and support	dsteven	updated	comment	8/12/2021 16:00:25	
@Dawn, that's a DITAweb formatting glitch.	keberlein	updated	comment	8/12/2021 19:43:43	

Marking this comment **CLOSED**.

Topic: Classification maps (DA00509433)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
<p>People really don't get classification maps, and three sentences don't adequately describe why or how you would do this. For example, (I think), to associate some metadata that doesn't have a DITA metadata tag with certain topics in the map. using an example from some clients -- creating a subject scheme map that defines grade levels, and then associating topics in a map with the relevant grades. A curriculum map for junior high might include topics for 6, 7 or 8th grades, which would be specified in a classification map.</p> <p>At a minimum there should be examples.</p> <p>This topic was added for DITA 1.3. For DITA 1.2, there was no architectural information what so ever about classification maps. This sort of stuff is why we got rigorous with the proposal process for new versions of DITA.</p> <p>I have to wonder whether we should consider removing the classification domain (and this the classification map) from DITA 2.0. I don't know if anyone except Zoomin is using it (and they use it behind the scenes.). It's pretty impossible for authors to use ... Authors at IBM revolted whole scale at an early implementation that used this markup.</p> <p>My only concern about removing it is that it at least reflects an attempt to associate subjects defined in subject scheme with topics referenced by topicref.</p> <p>Marking this comment CLOSED, as we are moving forward with removing the classification map and domain.</p>	dstevens	updated	comment	8/12/2021 16:15:11	
	keberlein	updated	comment	8/12/2021 21:30:22	
	keberlein	updated	comment	11/1/2022 17:42:53	

Paragraph-level comments

Topic: Example: Defining values for deliveryTarget (DA00509063)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
<p>I wonder if it might also be useful to point out another use of this. If the two departments share no information (that is, content will never include online tags in the print based department), then this file could be set up without enumeration, and then each department would have its own subject scheme with an enumerationdef that points only to their type of output. Since the title is just about defining values for deliveryTarget, both uses apply and provide further examples on a difficult subject.</p>	dstevens	updated	comment	8/12/2021 16:28:02	
<p>@Dawn, I'm not completely clear whether the following is the use case that you are thinking of. Or maybe something completely different?</p> <ul style="list-style-type: none">• There is a subject scheme map (foo.ditamap) that defines controlled values that apply to both departments. However, it does not include any enumerations/bindings.• Each departments builds their own subject scheme that includes an enumeration/binding. (Does it contain only an enumeration/binding?)• The subjectScheme map for each departments references foo.ditamap using the schemeref element.• The deliverables for each department reference the department-level subjectScheme map. <p>My concern about the above scenario is that I don't know if it would work. Because the spec never specified any clear rules for how implementations should process</p>	keberlein	updated	comment	14/12/2021 18:23:02	

schemeref, I don't think that any processors ever implemented support for it. Last time I looked (post DITA 1.2, pre DITA 1.3), schemeref did not work with DITA-OT.

Obviously, this also relates to my statements that we need to explicitly cover processing expectations for schemeref and how @keyref is resolved in the context of a subject scheme map.

If I am misunderstanding what you were suggesting, please let me know!

Sent e-mail to Dawn on 12 January 2022. Also am marking this comment as **REFERRED**, since we need to have TC discussion about the schemeref element, the way that the spec in 1.2 and 1.3 discussed its usages and implicit expectations for processors, and what we want the DITA 2.0 spec to lay out.

Paragraph-level comments

Topic: Subject scheme elements (DA00509305)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
aren't we missing the classification map elements. The review includes the topic on classification maps --topicsubject, subjectref, etc, so I expected to see those elements. are they part of a later review? Is there more content on the use of classification maps associated with those?	dstevens	updated	comment	8/12/2021 20:18:21	
The classification elements are defined in the classification domain; they are not defined as part of a structural specialization (like subjectScheme). These elements will be included in a later review.					
Yes, subject definitions and classification maps are intrinsically related. No, the spec does not contain any additional content about classification.	keberlein	updated	comment	8/12/2021 21:32:21	
Marking this comment CLOSED .					

Paragraph-level comments

Topic: subjectScheme (DA00509562)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
It's a nice almost complete example. Should you go ahead and add the subjectRelTable as well to it?	dstevens	updated	comment	8/12/2021 20:55:58	
Holding off on doing that, since I suspect that we will be removing the subject relationship table from DITA 2.0.					
----	keberlein	updated	comment	14/12/2021 18:54:43	
Marking this comment CLOSED , as we have removed subject rel table from DITA 2.0.					

Paragraph-level comments

Specifies a location within another map document where this map will be anchored. Resolution of the map is deferred until the final step in the delivery of any rendered content. For example, `anchorref="map1.ditamap#a1"` allows the map with `@anchorref` to be pulled into the location of the anchor point "a1" inside `map1.ditamap` when `map1.ditamap` is rendered for delivery.

Annotation	Reviewer	Status	Type	Date	Topic version
I suppose this comment tacks on to the recent discussions of anchor. I don't understand the use case for <code>anchorref</code> within a subject scheme map.	dstevens	updated	comment	8/12/2021 20:55:02	
I don't see a use case, either -- but <code>@anchorref</code> is here because <code>subjectScheme</code> is specialized from <code>map</code> , which has <code>@anchorref</code> .	keberlein	updated	comment	9/12/2021 13:33:41	
Marking this comment CLOSED .					
I think it was a design flaw -- that attribute exists for <code>map</code> , so it needed an explicit decision to <i>not</i> have it on subject scheme when we specialized. The way things are heading now I kind of expect it will be removed from both going forward.	randerson	updated	comment	13/12/2021 21:46:21	

```
<subjectScheme>
  <!-- Pull in a scheme that defines unix OS values -->
  <schemeref href="unixOS.ditamap"/>
  <!-- Define new OS values that are merged with those in the unixOS scheme -->
  <subjectdef keys="operating-systems">
  <subjectdef keys="linux"/>
  <subjectdef keys="windows"/>
  <subjectdef keys="zOS"/>
  </subjectdef>
  <!-- Define application values -->
  <subjectdef keys="applications">
  <subjectdef keys="apache-server" href="subject/apache.dita"/>
  <subjectdef keys="my-sql" href="subject/sql.dita"/>
  </subjectdef>

  <!-- Define an enumeration of the platform attribute, equal to
  each value in the OS subject. This makes the following values
  valid for the platform attribute: linux, windows, zOS -->
  <enumerationdef>
  <attributedef name="platform"/>
  <subjectdef keyref="os"/>
  </enumerationdef>
  <!-- Define an enumeration of the otherprops attribute, equal to
  each value in the application subjects.
  This makes the following values valid for the otherprops attribute:
  apache-server, my-sql -->
  <enumerationdef>
  <attributedef name="otherprops"/>
  <subjectdef keyref="applications"/>
  </enumerationdef>
</subjectScheme>
```

Annotation	Reviewer	Status	Type	Date	Topic version
I see two errors in the example code.					
1. <code>&lt;subjectdef keyref=" os"/></code> should be <code>&lt;subjectdef keyref=" operating-systems"/></code>	gjoseph	updated	comment	16/12/2021 11:49:58	
2. The comment above this <code>enumerationdef</code> element should include "and the UNIX operating systems defined in the target of the <code>schemeref</code> element".					
Corrected the value of <code>@keyref</code> , and edited the comment.	keberlein	updated	comment	11/1/2022 19:13:47	

Marking this comment **COMPLETED**.

Topic: subjectHead (DA00509203)

Paragraph-level comments

For this element, the following considerations apply:

- The @collection-type attribute has an expected processing default value of unordered, although this value is not defaulted in the grammar files. This element limits the available values for @collection-type to unordered, sequence, and -dita-use-conref-target.
- The @linking attribute has a default value of normal, and no other values are valid.

Annotation	Reviewer	Status	Type	Date	Topic version
I guess I don't understand the use case for either of these attributes in a subject scheme map.	dstevens	updated	comment	8/12/2021 19:06:22	
I think it's to address the rare case of wanting to print out or otherwise render your scheme -- this tells you whether to render it as an ordered list of subject, vs unordered. I doubt that is common but I think it's the genesis of this. (Also note that what this really means, practically speaking, is -- we kept the collection-type attribute here but removed the value of "family" as an option.)	randerson	updated	comment	13/12/2021 21:50:12	
No change required.	keberlein	updated	comment	13/12/2021 23:55:02	
Marking this comment CLOSED .					

In the following code sample, the <subjectHead> element groups together several subjects and a label:

Annotation	Reviewer	Status	Type	Date	Topic version
I don't fully understand this example. I think the example is creating documentation for a subject scheme. The heading Server Setup has four "consensus" definitions nested underneath it, so authors presumably would understand when to use each term. But the key itself isn't part of this example, so is it assumed that the referenced document would include that information? Is there any reason you wouldn't do this all in one file -- that is, add the keys to the subjectdefs here so it not only defines the subject scheme, but documents it at the same time?	dstevens	updated	comment	8/12/2021 20:25:34	
Check out the shortdesc for subjectHead; it states that this element "provides a heading for a group of subjects, for use if the subject scheme is displayed. " (Emphasis added.)					
In the example, I think the intent was to define a few subjects (each with a DITA topic that explains the subject), and use subjectHead to provide a label ("Server setup") which rendered as some part of a facted browsing experience. So, the purpose of the subjectScheme is NOT to define subjects, but to generate some resources for the browsing experience. Note that toc is set to "yes" on the root element (to override the subjectScheme defaults).	keberlein	updated	comment	9/12/2021 13:42:23	
@Dawn, does this make sense? FYI, this is not an example I created; it's an Erik Henum original.					
This is what I really dislike about subjectScheme. It's overloaded and tries to do TOO MANY things. I think you were approaching the code sample is the "Example" section assuming that it a subjectScheme intended to create an enumeration?					
I agree with Dawn on the point that the only reason for subjectHead seems to be to	fwegmann	new	comment	12/12/2021 17:16:56	

provide a documentation for an existing (part of a) subject scheme. Remember the short description of subject scheme maps: "Subject scheme maps can be used to define controlled values and subject definitions. The controlled values can be bound to attributes, as well as element and attribute pairs. The subject definitions can contain metadata and provide links to more detailed information; they can be used to classify content and provide semantics that can be used in taxonomies and ontologies".

There's nothing about a meta usage of providing documentation about the subjects defined in a subject scheme map. Looks to me as if subjectHeads with that intention are violating the orthogonality principle (no side effects, each action changes just one thing without affecting others).

I could think of subjectHead as a container for textual (short) description of what is being defined in the subject scheme map, but I cannot understand why this is a specialization of topicref, with all the implications.

I just want to add my +1 to the general "huh?"

Is the idea that you might have a fancy Oxygen Plugin that helps you pick metadata values to be used in your Zoomin portal that might show the subjectHead in a popup or tree structure somewhere?

zlawson new comment 12/12/2021 18:04:11

> Is the idea that you might have a fancy Oxygen Plugin that helps you pick metadata values to be used in your Zoomin portal that might show the subjectHead in a popup or tree structure somewhere?

randerson new comment 13/12/2021 21:51:46

Yes, I think that sums it up, believe it or not...

I've updated the code sample, as well as the introductory paragraph. @Robert, do you think this adequately handles the issues that reviewers have raised?

keberlein updated comment 14/12/2021 00:00:38

Topic: Subject scheme maps and their usage (DA00509355)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
FYI -- The generated index retains the old one-word term (subjectScheme) versus the more recent two-word term (subject scheme).	sdoherly	updated	comment	12/12/2021 13:41:08	
Good catch; I've changed this.					
Marking this comment as COMPLETED .	keberlein	updated	comment	14/12/2021 17:23:11	

Paragraph-level comments

Topic: hasInstance (DA00508595)

Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
Since I am agreeing with the idea that we don't need all this hasSomething stuff, I'm not really reviewing those elements. I think they're doing something supercomplicated that no one really understands anymore.	zlawson	updated	comment	12/12/2021 18:06:21	

No work required. Marking this comment **CLOSED**.

keberlein updated comment 14/12/2021
00:25:34

Paragraph-level comments