

# 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	new	comment	12/12/2021 17:23:24	

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: <a href="https://github.com/oasis-tcs/dita/blob/DITA-2.0/specification/archSpec/base/determining-effective-attribute-values.dita">https://github.com/oasis-tcs/dita/blob/DITA-2.0/specification/archSpec/base/determining-effective-attribute-values.dita</a>	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 <b>COMPLETED</b> .					

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.					
Marked as <b>COMPLETED</b> .	keberlein	updated	comment	13/12/2021 22:49:50	

- 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	new	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): <a href="https://github.com/oasis-tcs/dita/blob/DITA-2.0/specification/archSpec/base/determining-effective-attribute-values.dita">https://github.com/oasis-tcs/dita/blob/DITA-2.0/specification/archSpec/base/determining-effective-attribute-values.dita</a>	randerson	new	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	new	comment	13/12/2021 23:01:29	
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 <b>COMPLETED</b> .					
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 &lt;subjectdef keys="windows">	fwegmann	updated	comment	10/12/2021 20:49:13	
Corrected.					
Marking this comment <b>COMPLETED</b> .	keberlein	updated	comment	13/12/2021 23:06:14	

Excluded, because all redhat content is excluded.

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

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.					
Marking this comment as <b>COMPLETED</b> .	keberlein	updated	comment	8/12/2021 21:23:53	

## 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 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?	fwegmann	updated	comment	10/12/2021 21:22:22	

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.

Added a draf comment.

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

Marking this comment as **ACCEPTED**.

### 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 <b>CLOSED</b> . (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.					
Why would you use the link-relationship attributes on a default value?					
Why is @processing-role here, but not on attributedef?	zlawson	updated	comment	12/12/2021 17:16:26	
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 <b>CLOSED</b> .					

## 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 <b>CLOSED</b> .	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 <b>CLOSED</b> .	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
I'm still struggling with understanding the differences between hadRelated and related Subjects. Here's is what the original DITA 1.2 proposal said: <ul style="list-style-type: none"><li>• <b>&lt;hasRelated&gt;</b>:A specialized &lt;topicref&gt; 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.</li><li>• <b>&lt;relatedSubjects&gt;</b>A specialized &lt;topicref&gt; 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).</li></ul>	keberlein	new	comment	9/12/2021 16:46:59	
This does not help ...					

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

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

- 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.

@Robert, do I have this correct?

## 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"><li>• What does specifying a key on the &lt;hasRelated&gt; element get one?</li><li>• 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 &lt;hasKind&gt; (or &lt;hasType&gt;) element around the subject definitions for linux and windows?</li></ul>	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 <b>COMPLETED</b> .					

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 <b>COMPLETED</b> .					

```
<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 <b>COMPLETED</b> .					

## 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.?	zlawson	new	comment	12/12/2021 18:19:34	

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	new	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	new	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).					
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.	randerson	new	comment	13/12/2021 21:15:29	

## 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	new	comment	12/12/2021 18:13:13	

### 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.	zlawson	updated	comment	12/12/2021 18:22:42	

Why did we specialize subjectHeadMeta, but just use topicmeta for <subjectdef>?

Do we need this specialization?

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...

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

keberlein updated comment 14/12/2021 01:08:26

## 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	

## 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.	keberlein	updated	comment	9/12/2021 13:53:39	
-----					
Done.					



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.					
Marking this comment <b>COMPLETED</b> .	keberlein	updated	comment	13/12/2021 20:02:04	

## 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"><li>Referenced subject-scheme map</li><li>Referencing subject-scheme map</li></ul>	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 <b>CLOSED</b> .					

## 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?	keberlein	updated	comment	10/12/2021 13:11:45	
Was this intentional, or an error in the original content model released with DITA 1.2?					
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 <b>CLOSED</b> .					

### 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	
@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?	keberlein	updated	comment	9/12/2021 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 <b>CLOSED</b> .	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 <b>COMPLETE</b> .	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 thinkig 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.					
<ul style="list-style-type: none"><li>• 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 &lt;subjectRole&gt; elements contained in the corresponding column.</li><li>• 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?</li></ul>	dstevens	updated comment		8/12/2021 20:43:06	
Also, looking at the example rendered table confuses me more because it <i>looks</i> 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 <b>COMPLETED</b> .	keberlein	updated comment		14/12/2021 00:17:39	

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	new 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 new comment 9/12/2021 13:12:22

## 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 &lt;hasNarrower> and element.	dstevens	updated	comment	8/12/2021 16:52:18	
Done.					
Marking this comment as <b>COMPLETED</b> .	keberlein	updated	comment	8/12/2021 21:15:00	

## 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 ( <a href="https://www.oasis-open.org/apps/org/workgroup/dita/download.php/26359/IssueControlledValues12031.html">https://www.oasis-open.org/apps/org/workgroup/dita/download.php/26359/IssueControlledValues12031.html</a> ) the &lt;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 &lt;hasNarrower> ...					
----					
No changes required. Marking this comment <b>CLOSED</b> .					

## 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 <b>CLOSED</b> .					

## Topic: subjectRole (DA00508656)

### Paragraph-level comments

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	new	comment	8/12/2021 20:53:31	

## 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, might have kind -- sedan, miniman, suv, but also part -- tire, hood, engine, and also related -- mechanic, insurance, etc.	dstevens	updated	comment	8/12/2021 16:51:43	

### 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 <b>attribute -binding</b> 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.					
Marking this comment <b>COMPLETED</b> .	keberlein	updated	comment	10/12/2021 11:48:29	

```
<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
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. Marking this comment as <b>COMPLETED</b> .	keberlein	updated	comment	9/12/2021 13:21:17	

```

<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 <b>COMPLETED</b> .					

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 like 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	new	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	new	comment	9/12/2021 13:31:56	

## 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	new	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): <a href="https://github.com/oasis-tcs/dita/blob/DITA-2.0/doctypes/dtd/subjectScheme/subjectScheme.mod#L622-L626">https://github.com/oasis-tcs/dita/blob/DITA-2.0/doctypes/dtd/subjectScheme/subjectScheme.mod#L622-L626</a>	randerson	updated	comment	13/12/2021 21:37:30	

## 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	new	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	new	comment	13/12/2021 21:40:46	

## Topic: Example: Extending a subject scheme (DA00509241)

### Paragraph-level comments

```
<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 <b>COMPLETED</b> .					

```
<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
<code>&amp;lt;subjectdef keys="macos"/&gt;</code>	fwegmann	updated	change	10/12/2021 20:55:11	
Fixed.					
Marking this comment <b>COMPLETED</b> .	keberlein	updated	comment	14/12/2021 00:09:25	

## Topic: schemeref (DA00508610)

### Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic
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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

### Paragraph-level comments

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	new	comment	12/12/2021 17:31:10

## 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	new	comment	8/12/2021 19:04:26
Mistake in the DITA source! Apologies. Marking this comment <b>CLOSED</b> .	keberlein	new	comment	9/12/2021 14:14:52

### Paragraph-level comments

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	new	comment	12/12/2021 17:35:17

## Example

Annotation	Reviewer Status	Type	Date	Topic version
Obviously a mistake in the DITA source; the example is duplicated. I've corrected this. ---- Marked as <b>COMPLETED</b> .	keberlein	updated	comment	9/12/2021 14:07:33

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

Annotation	Reviewer Status	Type	Date	Topic
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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-&lt;attributeName>" and magic would happen.

zlawson new comment 12/12/2021 17:39:36

## Topic: Defining controlled values for attributes (DA00508553)

### Paragraph-level comments

- 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 <b>CLOSED</b> .					

- 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	dstevens	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 <b>CLOSED</b> .					

## Topic: Classification maps (DA00509433)

### Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
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.	dstevens	new	comment	8/12/2021 16:15:11	
At a minimum there should be examples.	keberlein	new	comment	8/12/2021	

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.

21:30:22

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.

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.

#### Paragraph-level comments

### Topic: Example: Defining values for deliveryTarget (DA00509063)

#### Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic version
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.	dstevens	new	comment	8/12/2021 16:28:02	

#### 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	new	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 <b>CLOSED</b> .					

#### Paragraph-level comments

### Topic: subjectScheme (DA00509562)

#### Topic-level comments

Annotation	Reviewer	Status	Type	Date	Topic
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It's a nice almost complete example. Should you go ahead and add the subjectRelTable as well to it?

dstevens new comment 8/12/2021 20:55:58

### 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 anchorref within a subject scheme map.	dstevens	updated	comment	8/12/2021 20:55:02	
I don't see a use case, either -- but @anchorref is here because subjectScheme is specialized from map, which has @anchorref.	keberlein	updated	comment	9/12/2021 13:33:41	
Marking this comment <b>CLOSED</b> .					
I think it was a design flaw -- that attribute exists for map, 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	

## 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.					
Marking this comment <b>CLOSED</b> .	keberlein	updated	comment	13/12/2021 23:55:02	

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	dstevens	updated	comment	8/12/2021 20:25:34	

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?

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 Hennem 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 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 new 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	

**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 <b>CLOSED</b> .	keberlein	updated	comment	14/12/2021 00:25:34	

**Paragraph-level comments**