DITA 2.0 proposed feature #253: Changes to index elements

Refactor indexing to remove redundant elements and reduce complexity

Date and version information

This proposal includes the following information:

Date that this feature proposal was completed

11 June 2019

- Champion of the proposal Kristen James Eberlein
- Links to any previous versions of the proposal Not applicable
- Links to minutes where this proposal was discussed at stage 1 and moved to stage 2 11 June 2019

Reviewers for Stage 2 proposal

Robert Anderson Deb Bissantz

Links to e-mail discussion that resulted in new versions of the proposal Not applicable

Link to the GitHub issue https://github.com/oasis-tcs/dita/issues/253

Original requirement or use case

Clean up indexing elements:

- Remove the indexing domain, and add <index-see> and <index-see-also> to the base
- Remove <index-base>
- Remove <index-sort-as>

See https://lists.oasis-open.org/archives/dita/201906/msg00017.html and https://lists.oasis-open.org/archives/dita/201906/msg00022.html.

Use cases

- Simplify the indexing experience for authors
- · Simplify the experience for DITA practitioners who create document-type shells
- Simplify the experience for maintainers of the DITA grammar files by removing unnecessary elements and domains

New terminology

Not applicable

Proposed solution

Simple changes to grammar files and specification

Benefits

This proposal addresses the following questions:

Who will benefit from this feature? Everyone using DITA 2.0 who indexes content

What is the expected benefit? Decrease in complexity; removal of a domain

How many people probably will make use of this feature? Everyone using DITA 2.0 who indexes content

How much of a positive impact is expected for the users who will make use of the feature? Minor

Technical requirements

This proposal involves the following changes:

Renaming or refactoring elements and attributes

Adding <index-see> and <index-see-also> to commonElementsMod.rng; redefining the value of the @class attribute for those elements

Removing a domain

- Removing indexingDomain.rng
- Removing the indexing domain from basemap.rng and basetopic.rng

Removing an element

- Removing <index-base> from commonElementsMod.rng
- <index-sort-as> will be removed as a result of removing the indexing domain

Overall usability

Simplifies the current authoring experience by removing <indexterm-base>; reduces the number of domains that need to be considered for document-type shells; removes a redundant element

Backwards compatibility

This proposal addresses the following questions:

Was this change previously announced in an earlier version of DITA? No

- Removing a document type that was shipped in DITA 1.3?

No

Removing a domain that was shipped in DITA 1.3?

Yes – Removing the indexing domain

Removing a domain from a document type shell was shipped in DITA 1.3? Yes – Removing the indexing domain from base map and topic

Removing or renaming an element that was shipped in DITA 1.3?

Yes - Removing <index-base> and <index-sort-as>

Removing or renaming an attribute that was shipped in DITA 1.3?

No

Changing the meaning of an element or attribute in a way that would disallow existing usage? No

Changing a content model by removing something that was previously allowed, or by requiring something that was not?

Yes - Removing <index-base> from the content model of <indexterm>

Changing specialization ancestry?

Yes – As follows:

Element	DITA 1.3	DITA 2.0
<index-see></index-see>	"+ topic/index-base indexing-d/index-see "	"- topic/index-see "
<index-see- also></index-see- 	"+ topic/index-base indexing-d/index-see- also "	"- topic/index-see-also "

Removing or replacing a processing feature that was defined in DITA 1.3?

Yes - If processors did not implement support for <sort-as> within <indexterm>

Are element or attribute groups being renamed or shuffled?

Yes - Adding <index-see> and <index-see-also> to base

Migration plan

This proposal addresses the following questions:

Might any existing documents need to be migrated?

- Implementations will need to remove any instances of <indexterm-base> from their DITA source
- Implementations will need to change any instances of <index-sort-as> to <sort-as>. This can be accomplished by search-and-replace or a simple script.
- If the DITA source has values of the @class attribute explicit in the source, that will need to be modified.

Might any existing processors or implementations need to change their expectations?

- Processor should no longer expect to encounter <index-sort-as>; if they have not implemented support for <sort-as>, they will need to do so.
- Processors will need to use new values for @class attribute for <index-see> and <index-see-also>

Might any existing specialization or constraint modules need to be migrated?

- (Removal of elements) If anyone has specialized <indexterm-base>, they will need to redo their specialization modules.
- (Specialization ancestry changes) If anyone has specialized <index-see> or <indexsee-also>, they will need to change the values of the @class attributes in the specialization modules.

Costs

This proposal has a (time and effort) impact on the following groups:

Maintainers of the grammar files

- **Delete** indexingDomain.rng
- Edits to basemap.rng and basetopic.rng
- Edits to commonElementsMod.rng
- Edits to catalog files

Editors of the DITA specification

The changes to the DITA specification will be minor:

- No new topics
- Removal of <index-base> from "Specialization elements" cluster
- Removal of <index-base> and <index-sort-as> topics from the "DITA elements, A to Z" topic
- Removal of the "Indexing elements group" topic cluster from the element-reference topics
- Addition of <indexterm>, <index-see>, and <index-see-also> topics to an "Indexing elements" cluster. I suggest that it be a child of "Metadata elements".
- Moving content from <index-sort-as> topic into other topics about sorting

Vendors of tools

Tools will need to:

- Remove any legacy processing for <index-sort-as>
- Handle the changed @class attributes for <index-see> and <index-see-also>

DITA community-at-large

Overall, this proposal will reduce complexity and might make indexing easier for authors.

Since this proposal removes elements, there is a migration cost. It affects the following:

- DITA source that contains <indexterm-base>, which should NOT be in DITA source
- DITA source that contains <index-sort-as>: Not common for DITA source authored in English, but probably common for (indexed) DITA source authored in Japanese
- Implementations that have specialized <indexterm-base> and <index-sort-as>
- Stylesheets that format <index-see> and <index-see-also>?

Producing migration instructions or tools

Migration instructions can be integrated into the *MIgrating to DITA 2.0* committee note. They will be straight-forward.

Examples

This section contains examples of DITA 1.3 markup and how that markup needs to be modified in DITA 2.0.

DITA 1.3	DITA 2.0
<indexterm></indexterm>	<indexterm></indexterm>
<data></data>	<data></data>
<index-sort-as>data</index-sort-as>	<sort-as>data</sort-as>