Review K: Bookmap elements
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1 Topic and map document types

The Technical Content package contains various document types: concept, glossary entry, glossary group, reference, general task, strict task, and troubleshooting. The package also includes the bookmap document type.

1.1 Bookmap

The DITA bookmap specialization represents the key markup requirements for managing DITA content through book-oriented publication processes, including book metadata and book structures for organizing content.

Purpose

Book maps enable authors to produce documents that are structured like traditional print-oriented media. They also provide metadata for recording information about the book, including authors, owners, versions, and production history.

Content model

A book map can contain the following document structures:

- Titles
- Metadata
- Front matter (including notices and a preface)
- Parts
- Chapters
- Appendixes
- Back matter
- Relationship tables

Other components of a book map enable authors to specify that artifacts such as a table of contents (TOC) or an index should be generated.

Example

The following code sample contains the markup for a bookmap:

```xml
<bookmap id="taskbook">
  <booktitle>
    <mainbooktitle>Product tasks</mainbooktitle>
    <booktitlealt>Tasks and what they do</booktitlealt>
  </booktitle>
  <bookmeta>
    <author>John Doe</author>
    <copyrightfirst>
      <year>2020</year>
    </copyrightfirst>
  </bookmeta>
  <frontmatter>
    <preface href="task-preface.dita"/>
  </frontmatter>
  <chapter format="ditamap" href="installing.ditamap"/>
  <chapter href="configuring.dita"/>
  <chapter href="maintaining.dita"/>
</bookmap>
```
2 Bookmap elements

Elements in the bookmap section are used to organize DITA content into book form. They include elements for dividing up content, such as chapter and appendix, as well as metadata specific to publishing.

2.1 Bookmap content elements

The bookmap specialization of `<map>` supports standard book production for collections of DITA topics.

2.1.1 `<abbrevlist>`

The `<abbrevlist>` element references a list of abbreviations.

**Processing expectations**

When the `@href` attribute is not specified, a processor might generate a list of abbreviations at the specified location in the map.

**Specialization hierarchy**

The `<abbrevlist>` element is specialized from `<topicref>`. It is defined in the bookmap module.

**Attributes**

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `@keyref ( 0 )`.

For this element, the `@href` attribute references a manual listing for the current element. If the `@href` attribute is not specified, processors can choose to generate an appropriate listing for this element.

**Example**

The following code sample shows how to reference a list of abbreviations as part of a publication's back matter:

```xml
<backmatter>
  <booklists>
    <abbrevlist href="abbrev.dita"/>
    <indexlist/>
  </booklists>
</backmatter>
```

2.1.2 `<amendments>`

The `<amendments>` element either references a list of amendments or changes to the book, or it indicates to a processor that a list of changes should be generated at this location in the book.

**Processing expectations**

When the `@href` attribute is not specified, a processor might generate a list of amendments or updates at the specified location in the map.
Specialization hierarchy

The `<amendments>` element is specialized from `<topicref>`. It is defined in the bookmap module.

Attributes

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `<keyref>` (0).

Example

The following code sample specifies that a change history list is generated in the publication front matter. The content of the change history list is contained in the DITA resource referenced by `<keyref>`.

```xml
<frontmatter>
  <booklists>
    <amendments keyref="change-history"/>
  </booklists>
</frontmatter>
```

If the `<amendments>` element did not reference a resource, the change history list would be auto-generated by the processor.

2.1.3 `<appendices>`

The `<appendices>` element is an optional container for `<appendix>` elements.

Specialization hierarchy

The `<appendices>` element is specialized from `<topicref>`. It is defined in the bookmap module.

Attributes

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `<keyref>` (0).

Example

The following code sample shows how the `<appendices>` element functions as a container to hold several appendix topics for an HTML publication:

```xml
<appendices toc="yes" deliveryTarget="html">
  <topicmeta>
    <navtitle>Appendices</navtitle>
  </topicmeta>
  <appendix href="return-codes.dita"/>
  <appendix href="messages.dita"/>
  <appendix href="extra-info.dita"/>
</appendices>
```

2.1.4 `<appendix>`

An `<appendix>` element references a topic or map as an appendix within a book.

Specialization hierarchy

The `<appendix>` element is specialized from `<topicref>`. It is defined in the bookmap module.
Attributes

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

Example

The following code sample shows how the <appendix> element is used to create two appendices for a publication:

```xml
<backmatter>
  <appendix href="intro.dita">
    <topicref href="caring.dita"/>
    <topicref href="feeding.dita"/>
  </appendix>
  <appendix href="setup.dita">
    <topicref href="prereq.dita"/>
    <topicref href="download.dita"/>
  </appendix>
</backmatter>
```

2.1.5 <backmatter>

The <backmatter> element is a container for material that follows the main body of a document and any appendices. Back matter might include items such as a colophon, legal notices, and book lists such as a glossary or an index.

Specialization hierarchy

The <backmatter> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes

The following attributes are available on this element: common map attributes (39), universal attributes (34), @format (0), @keyref (0), @scope (0), and @type (0).

Example

See the example in bookmap (10).

2.1.6 <bibliolist>

The <bibliolist> element references a topic that contains a list of bibliographic entries for the publication.

Processing expectations

When the @href attribute is not specified, a processor might generate a list of bibliographic entries at the specified location in the map.

Specialization hierarchy

The <bibliolist> element is specialized from <topicref>. It is defined in the bookmap module.
Attributes

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

For this element, the @href attribute references a manual listing for the current element. If the @href attribute is not specified, processors can choose to generate an appropriate listing for this element.

Example

The following code sample shows how a <bibliolist> element is used to add a bibliography topic to the publication's back matter:

```xml
<bookmap>
  <!-- ... -->
  <backmatter>
    <amendments href="updatesToTheBook.dita"/>
    <booklists>
      <trademarklist href="listoftrademarks.dita"/>
      <bibliolist href="bibliography.dita"/>
    </booklists>
  </backmatter>
</bookmap>
```

2.1.7 <bookabstract>

The <bookabstract> element references a topic that includes a brief summary of the book content.

Usage information

A book abstract is generally rendered as part of the book's front matter. It is used to help the reader quickly evaluate the book's purpose.

Specialization hierarchy

The <bookabstract> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

Example

See the example in bookmap (10).

2.1.8 <booklibrary>

The <booklibrary> element contains information about the library, series, or collection of documents to which a book belongs.

Specialization hierarchy

The <booklibrary> element is specialized from <ph>. It is defined in the bookmap module.
Attributes
The following attributes are available on this element: universal attributes (34) and @keyref (0).

Example
See the example in bookmap (10).

2.1.9 <booklist>
A <booklist> indicates a list of items within the book.

Usage information
The <booklist> element is a general purpose element, designed for use in specializations, that
references a topic or map containing a list of items within the book. For example, it could be used to
reference a topic that contains a list of authors for the book. When a more specific element is already
available, such as <tablelist> for a list of tables, use that element instead.

Specialization hierarchy
The <booklist> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), link-relationship
attributes (40), universal attributes (34), and @keyref (0).

For this element, the @href attribute references a manual listing for the current element. If the @href
attribute is not specified, processors can choose to generate an appropriate listing for this element.

Example
The following code sample shows how to use <booklist> to reference a topic that contains a list of
authors of topics in this document:

```xml
<booklists>
  <toc/>
  <tablelist/>
  <booklist href="authors.dita">
    <topicmeta>
      <navtitle>List of authors</navtitle>
    </topicmeta>
  </booklist>
</booklists>
```

2.1.10 <booklists>
The <booklists> element is a container for lists of various kinds within the book.

Processing expectations
The <booklists> element indicates to processors that lists are to be rendered or generated at that
location in the front or back matter.
Specialization hierarchy

The `<booklists>` element is specialized from `<topicref>`. It is defined in the bookmap module.

Attributes

The following attributes are available on this element: common map attributes (39), universal attributes (34), `@format (0 )`, `@keyref (0 )`, `@scope (0 )`, and `@type (0 )`.

Example

The following code sample indicates that lists are generated in the front and back matter of the publication.

```xml
<bookmap>
  <booktitle>
    <mainbooktitle>Sample publication</mainbooktitle>
  </booktitle>
  <frontmatter>
    <booklists>
      <toc>
        <amendments/>
        <figurelist/>
        <tablelist/>
      </booklists>
    </frontmatter>
    ...
    <backmatter>
      <booklists>
        <abbrevlist/>
        <glossarylist/>
        <indexlist/>
      </booklists>
    </backmatter>
  </bookmap>
```

2.1.11 `<bookmap>`

The `<bookmap>` element is a map specialization that is used to configure DITA topics as a traditional book.

Usage information

Book maps consist of references to topics organized as book content. The topic references therefore are labeled according to the book components they point to, such as book title, front matter, chapter, and appendix.

Specialization hierarchy

The `<bookmap>` element is specialized from `<map>`. It is defined in the bookmap module.

Attributes

The following attributes are available on this element: architectural attributes (39), common map attributes (39), universal attributes (34), `@format (0 )`, `@scope (0 )`, and `@type (0 )`.
Example
The following code sample shows how a `<bookmap>` can be used to organize content into a common book structure:

```xml
<bookmap xml:lang="en-us">
  <booktitle>
    <booklibrary>Books about stuff</booklibrary>
    <mainbooktitle>A book about one thing</mainbooktitle>
  </booktitle>
  <bookmeta>
    <bookrights>
      <copyrfirst><year>2019</year></copyrfirst>
      <copyrlast><year>2023</year></copyrlast>
      <bookowner>
        <organization>OASIS</organization>
      </bookowner>
    </bookrights>
  </bookmeta>
  <frontmatter>
    <booklists>
      <toc/>
      <figurelist/>
      <tablelist/>
    </booklists>
    <bookabstract href="MyBookAbstract.dita"/>
    <preface href="preface.dita"></preface>
  </frontmatter>
  <chapter href="chapter1.dita">
    <topicref href="subchap1.dita"></topicref>
  </chapter>
  <chapter href="chapter2.dita">
    <topicref href="subchap2.dita"></topicref>
  </chapter>
  <appendix href="app1.dita">
    <topicref href="insideApp1.dita"></topicref>
  </appendix>
  <appendix href="app2.dita">
    <topicref href="insideApp2.dita"></topicref>
  </appendix>
  <backmatter>
    <amendments href="updatesToTheBook.dita"/>
    <booklists>
      <glossarylist href="listofterms.dita"/>
      <trademarklist href="listoftrademarks.dita"/>
    </booklists>
    <indexlist/>
  </backmatter>
</bookmap>
```

2.1.12 `<booktitle>`
The `<booktitle>` element contains the title information for a book, including the library title, main title, subtitle, and any other titles.

Specialization hierarchy
The `<booktitle>` element is specialized from `<title>`. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: ID and conref attributes (35), localization attributes (35), @base (0), @class (0), @outputclass (0), and @rev (0).

Example
See the example in `bookmap` (10).
2.1.13 `<booktitlealt>`

The `<booktitlealt>` element contains an alternative title, subtitle, or short title for a book.

**Specialization hierarchy**

The `<booktitlealt>` element is specialized from `<ph>`. It is defined in the bookmap module.

**Attributes**

The following attributes are available on this element: universal attributes (34) and `@keyref ( 0 )`.

**Example**

The following code sample shows a `<booktitlealt>` element is used to provide a shorter alternative to the main book title:

```xml
<brickmap>
  <booktitle>
    <mainbooktitle>This is my big and fancy book about Product Z</mainbooktitle>
    <booktitlealt>Using Product Z</booktitlealt>
  </booktitle>
</brickmap>
```

2.1.14 `<chapter>`

The `<chapter>` element references a topic or map as a chapter within a book.

**Specialization hierarchy**

The `<chapter>` element is specialized from `<topicref>`. It is defined in the bookmap module.

**Attributes**

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `@keyref ( 0 )`.

**Example**

The following code sample shows how the `<chapter>` element is used to create two chapters within a publication:

```xml
<brickmap>
  <booktitle>
    <mainbooktitle>A book about one thing</mainbooktitle>
  </booktitle>
  <!-- ... metadata and front matter ... -->
  <chapter href="intro.dita">
    <topicref href="caring.dita"/>
    <topicref href="feeding.dita"/>
  </chapter>
  <chapter href="setup.dita">
    <topicref href="prereq.dita"/>
    <topicref href="download.dita"/>
  </chapter>
  <!-- ... more chapters and back matter ... -->
</brickmap>
```
2.1.15 `<colophon>`
The `<colophon>` element references a topic that describes how the document was created.

Usage information
In publishing, a colophon describes details of the production of a book. This information generally includes the typefaces used, and often the names of their designers; the paper, ink and details of the binding materials and methods might also receive mention. In the case of technical books, a colophon might specify the software used to prepare the text and diagrams for publication. The `<colophon>` can appear in the `<frontmatter>` or `<backmatter>`.

Specialization hierarchy
The `<colophon>` element is specialized from `<topicref>`. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `@keyref(0)`.

Example
The following code sample shows how the `<colophon>` element is used to add details about the book's production into the back matter:

```xml
<bookmap>
  <title>Sample book</title>
  <!-- ... -->
  <backmatter>
    <!-- ... other back matter ... -->
    <colophon href="ProductionNotes.dita"/>
  </backmatter>
</bookmap>
```

2.1.16 `<dedication>`
The `<dedication>` element references a topic that contains a dedication for the book, such as to a person or group.

Specialization hierarchy
The `<dedication>` element is specialized from `<topicref>`. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `@keyref(0)`.

Example
The following code sample shows how a `<dedication>` element is used to supply content for the dedication within the book's frontmatter.

```xml
<frontmatter>
  <dedication href="dtm.dita">
    <topicmeta>
      <review-k>Standards Track Work Product</review-k>
      Copyright © OASIS Open. All Rights Reserved.
    </topicmeta>
  </dedication>
</frontmatter>
```
2.1.17 <draftintro>
The `<draftintro>` element references a topic used as an introduction to the current draft of a book.

**Specialization hierarchy**
The `<draftintro>` element is specialized from `<topicref>`. It is defined in the bookmap module.

**Attributes**
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `@keyref` (0).

**Example**
The following code sample uses `<draftintro>` to provide an introductory draft section within the frontmatter of the book.

```xml
<frontmatter>
  <draftintro href="introducing.dita">
    <topicmeta>
      <navtitle>Introduction to this draft</navtitle>
    </topicmeta>
  </draftintro>
</frontmatter>
```

2.1.18 <figurelist>
The `<figurelist>` element either references a topic that contains a list of figures in the book, or it indicates to a processor that a list of figures should be generated at this location in the book.

**Processing expectations**
When the `@href` attribute is not specified, a processor might generate a list of figures at the specified location in the map.

**Specialization hierarchy**
The `<figurelist>` element is specialized from `<topicref>`. It is defined in the bookmap module.

**Attributes**
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and `@keyref` (0).

For this element, the `@href` attribute references a manual listing for the current element. If the `@href` attribute is not specified, processors can choose to generate an appropriate listing for this element.

**Example**
See the example in `bookmap` (10).
2.1.19 <frontmatter>
The <frontmatter> element is a container for the material that precedes the main body of a document.

Usage information
The front matter might include items such as an abstract, notices, a preface, and various types of book lists such as a <toc>, <tablelist>, or <figurelist>.

Specialization hierarchy
The <frontmatter> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), universal attributes (34), @format (0), @keyref (0), @scope (0), and @type (0).

Example
See the example in bookmap (10).

2.1.20 <glossarylist>
The <glossarylist> element either references a topic that contains a list of glossary entries in the book, or it indicates to a processor that a list of glossary entries should be generated at this location in the book.

Processing expectations
When the @href attribute is not specified, a processor might generate a list of glossary entries at the specified location in the map.

Specialization hierarchy
The <glossarylist> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

For this element, the @href attribute references a manual listing for the current element. If the @href attribute is not specified, processors can choose to generate an appropriate listing for this element.

Example
See the example in bookmap (10).
2.1.21 <indexlist>
The <indexlist> element either references a topic that contains an index for the book, or it indicates to a processor that an index should be generated at this location in the book.

Processing expectations
When the @href attribute is not specified, a processor might generate an index at the specified location in the map. If the @href attribute is specified, the referenced topic or map contains a manually created index.

Specialization hierarchy
The <indexlist> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

For this element, the @href attribute references a manual listing for the current element. If the @href attribute is not specified, processors can choose to generate an appropriate listing for this element.

Example
See the example in bookmap (10).

2.1.22 <mainbooktitle>
The <mainbooktitle> element contains the primary title for a book.

Specialization hierarchy
The <mainbooktitle> element is specialized from <ph>. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: universal attributes (34) and @keyref (0).

Example
See the example in bookmap (10).

2.1.23 <notices>
The <notices> element references a topic that contains special notice information, such as legal notices about supplementary copyrights and trademarks associated with the book.

Usage Information
Use a <notices> element within either the front matter or back matter of a book.

Specialization hierarchy
The <notices> element is specialized from <topicref>. It is defined in the bookmap module.
Attributes

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

Example

The following code sample shows how to use a notices topic to include legal content:

```xml
<backmatter>
  <notices href="notices.dita" navtitle="Legal notices">
    <topicmeta>
      <navtitle>Legal notices</navtitle>
    </topicmeta>
  </notices>
  <booklists>
    <!-- Index, glossary, or other lists -->
  </booklists>
</backmatter>
```

2.1.24 <part>

The <part> element references a topic or a map that acts as a part within a book.

Usage information

Use <part> to divide a document's chapters into logical groupings. For example, in a document that contains both guide and reference information, you can define two parts, one containing the guide information and the other containing the reference information.

Specialization hierarchy

The <part> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

Example

The following code sample shows how <part> elements are used to group chapters in order to divide a book into two major sections for task and reference material:

```xml
<bookmap>
  <title>Using and maintaining Product Zed</title>
  <!-- ... metadata and front matter ... -->
  <part href="taskguide.dita">
    <chapter href="intro.dita">
      <topicref href="caring.dita"/>
      <topicref href="feeding.dita"/>
    </chapter>
    <chapter href="setup.dita">
      <topicref href="prereq.dita"/>
      <topicref href="download.dita"/>
    </chapter>
  </part>
  <part href="reference.dita">
    <chapter href="commands.dita">
      <topicref href="care.dita"/>
      <topicref href="feed.dita"/>
    </chapter>
  </part>
</bookmap>
```
2.1.25 <preface>
The <preface> element references a topic or map that contains introductory information about a book, such as the purpose and structure of the document.

Specialization hierarchy
The <preface> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref ( 0 ).

Example
See the example in bookmap (10).

2.1.26 <tablelist>
The <tablelist> element either references a topic that contains a list of tables in the book, or it indicates to a processor that a list of tables should be generated at this location in the book.

Processing expectations
When the @href attribute is not specified, a processor might generate a list of tables at the specified location in the map.

Specialization hierarchy
The <tablelist> element is specialized from <topicref>. It is defined in the bookmap module.

Attributes
The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref ( 0 ).

For this element, the @href attribute references a manual listing for the current element. If the @href attribute is not specified, processors can choose to generate an appropriate listing for this element.

Example
See the example in bookmap (10).
2.1.27 <toc>

The <toc> element either references a topic that contains a table of contents for the book, or it indicates to a processor that a table of contents should be generated at this location in the book.

**Processing expectations**

When the @href attribute is not specified, a processor might generate a table of contents at the specified location in the map. If the @href attribute is specified, the referenced topic or map contains a manually created table of contents.

**Specialization hierarchy**

The <toc> element is specialized from <topicref>. It is defined in the bookmap module.

**Attributes**

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

For this element, the @href attribute references a manual listing for the current element. If the @href attribute is not specified, processors can choose to generate an appropriate listing for this element.

**Example**

See the example in bookmap (10).

2.1.28 <trademarklist>

The <trademarklist> element either references a topic that contains a list of trademarks in the book, or it indicates to a processor that a list of trademarks should be generated at this location in the book.

**Processing expectations**

When the @href attribute is not specified, a processor might generate a list of trademarks at the specified location in the map.

**Specialization hierarchy**

The <trademarklist> element is specialized from <topicref>. It is defined in the bookmap module.

**Attributes**

The following attributes are available on this element: common map attributes (39), link-relationship attributes (40), universal attributes (34), and @keyref (0).

For this element, the @href attribute references a manual listing for the current element. If the @href attribute is not specified, processors can choose to generate an appropriate listing for this element.

**Example**

See the example in bookmap (10).
Appendix A Aggregated RFC-2119 statements

This appendix contains all the normative statements from the DITA for Technical Content 2.0 specification. They are aggregated here for convenience in this non-normative appendix.
Appendix B Attributes

This section contains definitions for commonly-used attributes. If an attribute is defined differently on a specific element, that information is covered in the topic for the specific element.

Comment by Kristen J Eberlein on 29 December 2021
Add a brief overview of the fact that some specific attributes are overloaded – and have different meanings depending on what element they are specified upon.

Appendix B.1 Attribute groups

Many of the attributes used on DITA elements are defined in attribute groups. These attribute groups are used both in the grammar files and the specification.

Architectural attributes

This group contains a set of attributes that are defined for document-level elements such as `<topic>` and `<map>`.

@DITAArchVersion (architectural attributes)
Specifies the version of the DITA architecture that is in use. This attribute is in the namespace http://dita.oasis-open.org/architecture/2005/. This attribute is specified in the topic and map modules, and it uses a default value of the current version of DITA. The current default is "2.0".

@specializations (architectural attributes)
Specifies the attribute-domain specializations that are included in the document-type shell. This attribute is set as a default within the document-type shell. The value varies depending on what domains are integrated into the document-type shell. For example, a grammar file that includes the specialized attributes @audience, @deliveryTarget, and @newBaseAtt would set the value to @props/audience @props/deliveryTarget @base/newBaseAtt.

@xmlns:ditaarch (architectural attributes)
Declares the default DITA namespace. This namespace is declared as such in the RNG modules for `<topic>` and `<map>`, but it is specified as an attribute in the equivalent DTD-based modules. The value is fixed to "http://dita.oasis-open.org/architecture/2005/".

Common map attributes

This group contains attributes that are frequently used on map elements.

Comment by Kristen J Eberlein on 28 September 2022
I've added draft comments to the attribute definitions in this section that explain how the attribute is defined in the "DITA map attributes" topic.

@cascade (common map attributes)
Specifies how metadata attributes cascade within a map. The specification defines the following values:
merge
Indicates that the metadata attributes cascade, and that the values of the metadata attributes are additive. This is the processing default for the @cascade attribute.

nomerge
Indicates that the metadata attributes cascade, but that they are not additive for <topicref> elements that specify a different value for a specific metadata attribute. If the cascading value for an attribute is already merged based on multiple ancestor elements, that merged value continues to cascade until a new value is encountered. That is, setting cascade="nomerge" does not undo merging that took place on ancestor elements.

Processors can also define custom, implementation-specific tokens for this attribute.

See Cascading of metadata attributes in a DITA map for more information about how this attribute interacts with metadata attributes.

@chunk (common map attributes)
Specifies how a processor should render a map or branch of a map. For example, it can be used to specify that individual topic documents should be rendered as a single document, or that a single document with multiple topics should be rendered as multiple documents.

The following values are valid:

combine
Instructs a processor to combine the referenced source documents for rendering purposes. This is intended for cases where a publishing process normally results in a single output artifact for each source XML document.

split
Instructs a processor to split each topic from the referenced source document into its own document for rendering purposes. This is intended for cases where a publishing process normally results in a single output artifact for each source XML document, regardless of how many DITA topics exist within each source document.

Processors can also define custom, implementation-specific tokens for this attribute.

For a detailed description of the @chunk attribute and its usage, see Chunking.

@collection-type (common map attributes)
Specifies how topics or links relate to each other. The processing default is "unordered", although no default is specified in the OASIS-provided grammar files. The following values are valid:

unordered
Indicates that the order of the child topics is not significant.

sequence
Indicates that the order of the child topics is significant. Output processors will typically link between them in order.

choice
Indicates that one of the children should be selected.

family
Indicates a tight grouping in which each of the referenced topics not only relates to the current topic but also relate to each other.
@collection-type
The @collection-type attribute specifies how the children of a <topicref> element relate to their parent and to each other. This attribute, which is set on the parent element, typically is used by processors to determine how to generate navigation links in the rendered topics. For example, a @collection-type value of "sequence" indicates that children of the specifying <topicref> element represent an ordered sequence of topics; processors might add numbers to the list of child topics or generate next/previous links for online presentation. This attribute is available in topics on the <linklist> and <linkpool> elements, where it has the same behavior. Where the @collection-type attribute is available on elements that cannot directly contain elements, the behavior of the attribute is undefined.

Comment by Kristen J Eberlein on 28 September 2022
In the definitions of the supported values, do we want to refer to "resources" instead of "topics"? Since we specify that @collection-type specifies "how topics or links relate to each other" ...

@keyscope (common map attributes)
Specifies that the element marks the boundaries of a key scope.

See STUB CONTENT (51) for information on using this attribute.

Comment by Kristen J Eberlein on 28 September 2022
Here is the content from the "DITA map attributes" topic:

@keyscope
Defines a new scope for key definition and resolution, and gives the scope one or more names. For more information about key scopes, see Indirect key-based addressing.

@linking (common map attributes)
Specifies linking characteristics of a topic specific to the location of this reference in a map. If the value is not specified locally, the value might cascade from another element in the map (for cascade rules, see Cascading of metadata attributes in a DITA map).

Comment by robander on Dec 28 2021
The text below matches 1.3 spec text but I'm nervous about "cannot link" type definition. It's describing how to generate links based on the current context in the map - it's not describing what the topic itself is allowed to link to, which is how I interpret "can".

The following values are valid:

targetonly
A topic can only be linked to and cannot link to other topics.

sourceonly
A topic cannot be linked to but can link to other topics.

normal
A topic can be linked to and can link to other topics. Use this to override the linking value of a parent topic.

none
A topic cannot be linked to or link to other topics.
By default, the relationships between the topics that are referenced in a map are reciprocal:

- Child topics link to parent topics and vice versa.
- Next and previous topics in a sequence link to each other.
- Topics in a family link to their sibling topics.
- Topics referenced in the table cells of the same row in a relationship table link to each other. A topic referenced within a table cell does not (by default) link to other topics referenced in the same table cell.

This behavior can be modified by using the @linking attribute, which enables an author or information architect to specify how a topic participates in a relationship. The following values are valid:

- linking="none"  
  Specifies that the topic does not exist in the map for the purposes of calculating links.

- linking="sourceonly" 
  Specifies that the topic will link to its related topics but not vice versa.

- linking="targetonly" 
  Specifies that the related topics will link to it but not vice versa.

- linking="normal" 
  Default value. It specifies that linking will be reciprocal (the topic will link to related topics, and they will link back to it).

Authors also can create links directly in a topic by using the <xref> or <link> elements, but in most cases map-based linking is preferable, because links in topics create dependencies between topics that can hinder reuse.

Note that while the relationships between the topics that are referenced in a map are reciprocal, the relationships merely imply reciprocal links in generated output that includes links. The rendered navigation links are a function of the presentation style that is determined by the processor.

@processing-role (common map attributes)

Specifies whether the referenced resource is processed normally or treated as a resource that is only included in order to resolve references, such as key or content references. The following values are valid:

- normal 
  Indicates that the resource is a readable part of the information set. It is included in navigation and search results. This is the default value for the <topicref> element.

- resource-only 
  Indicates that the resource should be used only for processing purposes. It is not included in navigation or search results, nor is it rendered as a topic. This is the default value for the <keydef> element.
**-dita-use-conref-target**
See [Using the -dita-use-conref-target value](#) for more information.

If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

**@search (common map attributes)**
Specifies whether the target is available for searching. If the value is not specified locally, the value might cascade from another element in the map (for cascade rules, see Cascading of metadata attributes in a DITA map). The following values are valid: "yes", "no", and "-dita-use-conref-target".

Comment by Kristen J Eberlein on 28 September 2022
Here is the content from the "DITA map attributes" topic:

@search
Specifies whether the topic is included in search indexes.

**@subjectrefs (common map attributes)**
Specifies one or more keys that are each defined by a subject definition in a subject scheme map. Multiple values are separated by white space.

**@toc (common map attributes)**
Specifies whether a topic appears in the table of contents (TOC) based on the current map context. If the value is not specified locally, the value might cascade from another element in the map (for cascade rules, see Cascading of metadata attributes in a DITA map). The following values are valid:

- **yes**
  The topic appears in a generated TOC.

- **no**
  The topic does not appear in a generated TOC.

**-dita-use-conref-target**
See [STUB CONTENT (51)](#) for more information.

Comment by Kristen J Eberlein on 28 September 2022
Here is the content from the "DITA map attributes" topic:

@toc
Specifies whether topics are excluded from navigation output, such as a Web site map or an online table of contents. By default, `<topicref>` hierarchies are included in navigation output; relationship tables are excluded.

**Complex table attributes**
This group includes attributes that are defined on complex table elements. Unless other noted, these attributes are part of the OASIS Exchange Table Model. Complex table elements typically use only a subset of the attributes that are defined in this group.

**@align (complex table attributes)**
Specifies the horizontal alignment of text in table entries. The following values are valid:

- **left**
  Indicates left alignment of the text.
right
  Indicates right alignment of the text.

center
  Indicates center alignment of the text.

justify
  Justifies the contents to both the left and the right.

char
  Indicates character alignment. The text is aligned with the first occurrence of the character
  specified by the @char attribute.

@dita-use-conref-target
  See Using the -dita-use-conref-target value for more information.

The @align attribute is available on the following table elements: <colspec>, <entry>, and
<tgtp>.

@char (complex table attributes)
  Specifies the alignment character, which is the character that is used for aligning the text in table
  entries. This attribute applies when align="char". A value of "" (the null string) means there is no
  aligning character.

  For example, if align="char" and char="." are specified, then text in the table entry aligns with
  the first occurrence of the period within the entry. This might be useful if decimal alignment is
  required.

  The @char attribute is available on the following table elements: <colspec> and <entry>.

@charoff (complex table attributes)
  Specifies the horizontal offset of the alignment character that is specified by the @char attribute. The
  value is a greater-than-zero number that is less than or equal to 100. It represents the percentage of
  the current column width by which the text is offset to the left of the alignment character.

  For example, if align="char", char=".", and charoff="50" are all specified, then text in the
  table entry is aligned 50% of the distance to the left of the first occurrence of the period character
  within the table entry.

  The @charoff attribute is available on the following table elements: <colspec> and <entry>.

@colsep (complex table attributes)
  Specifies whether to render column separators between table entries. The following values are valid:
  "0" (no separators) and "1" (separators).

  The @colsep attribute is available on the following table elements: <colspec>, <entry>,
  <table>, and <tgtp>.

@rowheader (complex table attributes)
  Specifies whether the entries in the respective column are row headers. The following values are
  valid:

  firstcol
  Indicates that entries in the first column of the table are row headers. This applies when the
  @rowheader attribute is specified on the <table> element.

  headers
  Indicates that entries of the column that is described using the <colspec> element are row
  headers. This applies when the @rowheader attribute is specified on the <colspec> element.
Indicates that entries in the first column are not row headers. This applies when the @rowheader attribute is specified on the <table> element.

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

Note This attribute is not part of the OASIS Exchange Table Model upon which DITA tables are based. Some processors or output formats might not support all values.

The @rowheader attribute is available on the following table elements: <table> and <colspec>.

@rowsep (complex table attributes)
Specifies whether to render row separators between table entries. The following values are valid: "0" (no separators) and "1" (separators).

The @rowsep attribute is available on the following table elements: <colspec>, <entry>, <row>, <table>, and <tgroup>.

@valign (complex table attributes)
Specifies the vertical alignment of text in table entries. The following values are valid:

bottom Indicates that text is aligned with the bottom of the table entry.

middle Indicates that text is aligned with the middle of the table entry.

top Indicates that text is aligned with the top of the table entry.

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

The @valign attribute is available on the following table elements: <entry>, <tbody>, <thead>, and <row>.

Data-element attributes
This group contains attributes that are defined on the <data> element and its specializations.

@datatype (data-element attributes)
Specifies the type of data contained in the @value attribute or within the <data> element. A typical use of @datatype will be the identifying URI for an XML Schema datatype.

@name (data-element attributes)
Defines a unique name for the object.

Comment by robander
Do we need to specify the scope of "unique" here?

@value (data-element attributes)
Specifies a value associated with the current property or element.

Date attributes
This group contains attributes that take date values. They are defined on metadata elements that work with date information:
@expiry (date attributes)
Specifies the date when the information should be retired or refreshed. The date is specified using the ISO 8601 format: YYYY-MM-DD, where YYYY is the year, MM is the month (01 to 12), and DD is the day (01-31).

@golive (date attributes)
Specifies the publication or general availability (GA) date. The date is specified using the ISO 8601 format: YYYY-MM-DD, where YYYY is the year, MM is the month (01 to 12), and DD is the day (01-31).

Display attributes
This group contains attributes that affect the rendering of many elements.

@expanse (display attributes)
Specifies the horizontal placement of the element. The following values are valid:

- **column**
  - Indicates that the element is aligned with the current column margin.

- **page**
  - Indicates that the element is placed on the left page margin for left-to-right presentation or the right page margin for right-to-left presentation.

- **spread**
  - Indicates that the object is rendered across a multi-page spread. If the output format does not have anything that corresponds to spreads, then "spread" has the same meaning as "page".

- **textline**
  - Indicates that the element is aligned with the left (for left-to-right presentation) or right (for right-to-left presentation) margin of the current text line and takes indentation into account.

- **-dita-use-conref-target**
  - See Using the -dita-use-conref-target value for more information.

For `<table>`, in place of the @expanse attribute that is used by other DITA elements, the @pgwide attribute is used in order to conform to the OASIS Exchange Table Model.

Some processors or output formats might not support all values.

@frame (display attributes)
Specifies which portion of a border surrounds the element. The following values are valid:

- **all**
  - Indicates that a line is rendered at the top, bottom, left, and right of the containing element.

- **bottom**
  - Indicates that a line is rendered at the bottom of the containing element.

- **none**
  - Indicates that no lines are rendered.

- **sides**
  - Indicates that a line is rendered at the left and right of the containing element.

- **top**
  - Indicates that a line is rendered at the top of the containing element.

- **topbot**
  - Indicates that a line is rendered at the top and bottom of the containing element.
-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

Some processors or output formats might not support all values.

@scale (display attributes)
Specifies the percentage by which fonts are resized in relation to the normal text size. The value of this attribute is a positive integer. When used on <table> or <simpletable>, the following values are valid: "50", "60", "70", "80", "90", "100", "110", "120", "140", "160", "180", "200", and -dita-use-conref-target (51).

This attribute is primarily useful for print-oriented display. Some processors might not support all values.

If the @scale attribute is specified on an element that contains an image, the image is not scaled. The image is scaled only if a scaling property is explicitly specified for the <image> element.

ID and conref attributes
This group contains the attributes that enable the naming and referencing of elements.

@conaction
Specifies how the element content will be pushed into a new location. The following values are valid:

mark
The element acts as a marker when pushing content before or after the target, to help ensure that the push action is valid. The element with conaction="mark" also specifies the target of the push action with @conref. Content inside of the element with conaction="mark" is not pushed to the new location.

pushafter
Content from this element is pushed after the location specified by @conref on the element with conaction="mark". The element with conaction="pushafter" is the first sibling element after the element with conaction="mark".

pushbefore
Content from this element is pushed before the location specified by @conref on the element with conaction="mark". The element with conaction="pushbefore" is the first sibling element before the element with conaction="mark".

pushreplace
Content from this element replaces any content from the element referenced by the @conref attribute. A second element with conaction="mark" is not used when using conaction="pushreplace".

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

See STUB CONTENT (51) for examples and details about the syntax.

@conkeyref
Specifies a key name or a key name with an element ID that acts as an indirect reference to reusable content. The referenced content is used in place of the content of the current element. See STUB CONTENT (51) for more details about the syntax and behaviors.

@conref
Specifies a URI that references a DITA element. The referenced content is used in place of the content of the current element. See STUB CONTENT (51) for examples and details about the syntax.
@conrefend
Specifies a URI that references the last element in a sequence of elements, with the first element of
the sequence specified by @conref. The referenced sequence of elements is used in place of the
content of the current element. See STUB CONTENT (51) for examples and details about the
syntax.

@id
Specifies an identifier for the current element. This ID is the target for references by @href and
@conref attributes and for external applications that refer to DITA or LwDITA content. This attribute
is defined with the XML data type NMTOKEN, except where noted for specific elements within the
language reference.
See id attribute for more details.

Inclusion attributes
This group includes attributes defined on <include> and its specializations:

Comment by Kristen J Eberlein on 28 September 2002
What is specialized from <include>? Both base (if any) and technical content ...

@encoding (inclusion attributes)
Comment by Kristen J Eberlein on 29 April 2019
Can we replace "should" in the following definition?

Specifies the character encoding to use when translating the character data from the referenced
content. The value should be a valid encoding name. If not specified, processors may make attempts
to automatically determine the correct encoding, for example using HTTP headers, through analysis
of the binary structure of the referenced data, or the <?xml?> processing instruction when including
XML as text. The resource should be treated as UTF-8 if no other encoding information can be
determined.

When parse="xml", standard XML parsing rules apply for the detection of character encoding. The
necessity and uses of @encoding for non-standard values of @parse are implementation-
dependent.

@parse (inclusion attributes)
Specifies the processing expectations for the referenced resource. Processors must support the
following values:

text
The contents should be treated as plain text. Reserved XML characters should be displayed,
and not interpreted as XML markup.

xml
The contents of the referenced resource should be treated as an XML document, and the
referenced element should be inserted at the location of the <include> element. If a fragment
identifier is included in the address of the content, processors must select the element with the
specified ID. If no fragment identifier is included, the root element of the referenced XML
document is selected. Any grammar processing should be performed during resolution, such
that default attribute values are explicitly populated. Prolog content must be discarded.
It is an error to use `parse="xml"` anywhere other than within `<foreign>` or a specialization thereof.

Processors may support other values for the `@parse` attribute with proprietary processing semantics. Processors should issue warnings and use `<fallback>` when they encounter unsupported `@parse` values. Non-standard `@parse` instructions should be expressed as URLs.

**Note** Proprietary `@parse` values will likely limit the portability and interoperability of DITA content, so should be used with care.

**Link relationship attributes**

This group contains attributes whose values can be used for representing navigational relationships.

- **@format** *(link-relationship attributes)*
  Specifies the format of the resource that is referenced. See STUB CONTENT (51) for detailed information on supported values and processing implications.

- **@href** *(link-relationship attributes)*
  Specifies a reference to a resource. See STUB CONTENT (51) for detailed information on supported values and processing implications.

- **@scope** *(link-relationship attributes)*
  Specifies the closeness of the relationship between the current document and the referenced resource. The following values are valid: "local", "peer", "external", and "-dita-use-conref-target". See STUB CONTENT (51) for detailed information on supported values and processing implications.

- **@type** *(link-relationship attributes)*
  Describes the target of a reference. See STUB CONTENT (51) for detailed information on supported values and processing implications.

**Localization attributes**

This group contains the attributes that are related to translation and localization.

- **@dir**
  Identifies or overrides the text directionality. The following values are valid:

  - **lro**
    Indicates an override of the Unicode Bidirectional Algorithm, forcing the element into left-to-right mode.

  - **ltr**
    Indicates left-to-right.

  - **rlo**
    Indicates an override of the Unicode Bidirectional Algorithm, forcing the element into right-to-left mode.

Comment by Kristen J Eberlein on 29 September 2022

The definition of the localizations attribute matches how they are described in the architectural topics. Wherever possible, the definition is reused. Where it is not reused (because the definition in the archSpec topics is in a shortdesc), I've checked to ensure that wording is identical.

This group contains the attributes that are related to translation and localization.
rtl
Indicates right-to-left.

@dita-use-conref-target
See Using the @dita-use-conref-target value for more information.

See The dir attribute for more information.

@translate
Specifies whether the content of the element should be translated. The following values are valid: "yes", "no", and "-dita-use-conref-target".

See Element-by-element recommendations for translators for suggested processing defaults for each element.

Comment by Kristen J Eberlein on 31 December 2021
Does Element-by-element recommendations for translators really provide suggested processing defaults for each element? I thought it covered whether an element was block or in-line and whether there were considerations that translators needed to be aware of.

@xml:lang
Specifies the language and optional locale of the content that is contained in an element. Valid values are language tokens or the null string. The @xml:lang attribute and its values are described in the Extensible Markup Language 1.0 specification, fifth edition.

Comment by Kristen J Eberlein on 29 September 2022
Do we also want to direct readers to the architectural topics about the @xml:lang attribute?

Metadata attributes
This group contains common metadata attributes: @base, @importance, @props, @rev, and @status. The @base and @props attributes can be specialized.

@base
Specifies metadata about the element. It is often used as a base for specialized attributes that have a simple syntax for values, but which are not conditional processing attributes.

The @base attribute takes a space-delimited set of values. However, when serving as a container for generalized attributes, the attribute values will be more complex. See Attribute generalization for more details.

@importance
Specifies the importance or priority that is assigned to an element. The following values are valid: "default", "deprecated", "high", "low", "normal", "obsolete", "optional", "recommended", "required", "urgent", and "-dita-use-conref-target". This attribute is not used for conditional processing, although applications might use the value of the @importance attribute to highlight elements. For example, in steps of a task topic, the value of the @importance attribute indicates whether a step is optional or required.

Comment by Kristen J Eberlein on 29 September 2022
I think the phrase "to highlight elements" is a little off. Maybe "render generated text"? And how about adding "Processors often add text or images to ensure that readers of the generated content understand whether the step is optional or required." to the end of the example?
@props
Specifies metadata about the element. New attributes can be specialized from the @props attribute. This attribute supports conditional processing. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

The @props attribute takes a space-delimited set of values. However, when serving as a container for generalized attributes, the attribute values will be more complex. See Attribute generalization for more details.

@rev
Specifies a revision level of an element that identifies when the element was added or modified. It can be used to flag outputs when it matches a run-time parameter. It cannot be used for filtering nor is it sufficient to be used for version control. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

Comment by Kristen J Eberlein on 29 September 2022
I want to tweak this. How about the following? Also, neither definition describes what values are permitted.

Specifies metadata that identifies when the element was added or the content of the element was modified. The @rev attribute can be used for flagging. It cannot be used for filtering nor is it sufficient to be used for version control. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

@status
Specifies the modification status of the element. The following values are valid: "new", "changed", "deleted", "unchanged", and "-dita-use-conref-target".

Simple table attributes
This group includes attributes that are defined only on the <simpletable> element: @keycol and @relcolwidth. These attributes are listed in a group because the <simpletable> element is frequently used as a specialization base.

@keycol (simpletable attributes)
Specifies the column that contains the content that represents the key to the tabular structure. If @keycol is present and assigned a numerical value, the specified column is treated as a vertical header.

@relcolwidth (simpletable attributes)
Specifies the width of each column in relationship to the width of the other columns. The value is a space-separated list of relative column widths. Each column width is specified as a positive integer or decimal number followed by an asterisk character.

For example, the value relcolwidth="1* 2* 3*" gives a total of 6 units across three columns. The relative widths are 1/6, 2/6, and 3/6 (16.7%, 33.3%, and 50%). Similarly, the value relcolwidth="90* 150*" causes relative widths of 90/240 and 150/240 (37.5% and 62.5%).

Table accessibility attributes
This group defines a set of attributes that promote table accessibility:
@headers
Specifies which entries in the current table provide headers for this cell. The @headers attribute contains an unordered set of unique, space-separated tokens, each of which is an ID reference of an entry from the same table.

@scope
Specifies that the current entry is a header for other table entries. The following values are valid:

- col
  Indicates that the current entry is a header for all cells in the column.

- colgroup
  Indicates that the current entry is a header for all cells in the columns that are spanned by this entry.

- row
  Indicates that the current entry is a header for all cells in the row.

- rowgroup
  Indicates that the current entry is a header for all cells in the rows that are spanned by this entry.

@dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

Universal attributes
This group defines a set of attributes that are available on almost all DITA elements. It includes all elements in the ID, localization, and metadata attribute groups, as well as the following attributes:

@class (not for use by authors)
This attribute is not for use by authors. If an editor displays @class attribute values, do not edit them. Specifies a default value that defines the specialization ancestry of the element. Its predefined values allow DITA tools to work correctly with specialized elements. In a generalized DITA document the @class attribute value in the generalized instance might differ from the default value for the @class attribute for the element as given in the DTD or schema. See The class attribute rules and syntax for more information. This attribute is specified on every element except for the <dita> container element. It is always specified with a default value, which varies for each element.

@outputclass
Specifies a role that the element is playing. The role must be consistent with the basic semantic and expectations for the element. In particular, the @outputclass attribute can be used for styling during output processing; HTML output will typically preserve @outputclass for CSS processing.

Appendix B.2 Universal attribute group
The universal attribute group defines a set of common attributes that are available on almost every DITA element. The universal attribute group includes all attributes from the ID, localization, and metadata attribute groups, plus the @class and @outputclass attributes.

Comment by Kristen J Eberlein on 29 December 2021
Common attribute groups

The following attribute groups are referenced in this specification. They are also used in the grammar files when the element attributes are defined.

Universal attributes

Includes @class and @outputclass, along with every attribute in the ID, localization, and metadata attribute groups.

ID attributes

This group includes the attributes that enable the naming and referencing of elements: @conaction, @conkeyref, @conref, @conrefend, and @id.

Localization attributes

This group includes attributes that are related to translation and localization: @dir, @translate, and @xml:lang.

Metadata attributes

Comment by Kristen J Eberlein on 31 December 2021

Why do we need to mention that two attributes are available for specialization here? I think it makes the paragraph hard to read.

This group includes common metadata attributes, two of which are available for specialization: @base, @importance, @props, @rev, and @status.

The base DITA vocabulary from OASIS includes several specializations of @props: @audience, @deliveryTarget, @otherprops, @platform, and @product. These attributes are defined as attribute-extension domains. By default, they are integrated into all OASIS-provided document-type shells, but they can be made unavailable by implementing custom document-type shells.

Comment by Kristen J Eberlein on 29 December 2021

Why do we provide information about specialization and custom document-type shells here? I think that information could be removed.

Universal attribute definitions

The universal attributes for OASIS DITA elements are defined below. Specialized attributes, which are part of the OASIS distribution but are only available when explicitly included in a shell, are noted in the list.

@audience (specialized attribute)

Indicates the intended audience for the element. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.
@base
Specifies metadata about the element. It is often used as a base for specialized attributes that have a simple syntax for values, but which are not conditional processing attributes.

The @base attribute takes a space-delimited set of values. However, when serving as a container for generalized attributes, the attribute values will be more complex. See Attribute generalization for more details.

@class (not for use by authors)
This attribute is not for use by authors. If an editor displays @class attribute values, do not edit them. Specifies a default value that defines the specialization ancestry of the element. Its predefined values allow DITA tools to work correctly with specialized elements. In a generalized DITA document the @class attribute value in the generalized instance might differ from the default value for the @class attribute for the element as given in the DTD or schema. See The class attribute rules and syntax for more information. This attribute is specified on every element except for the <dita> container element. It is always specified with a default value, which varies for each element.

@conaction
Specifies how the element content will be pushed into a new location. The following values are valid:

mark
The element acts as a marker when pushing content before or after the target, to help ensure that the push action is valid. The element with conaction="mark" also specifies the target of the push action with @conref. Content inside of the element with conaction="mark" is not pushed to the new location.

pushafter
Content from this element is pushed after the location specified by @conref on the element with conaction="mark". The element with conaction="pushafter" is the first sibling element after the element with conaction="mark".

pushbefore
Content from this element is pushed before the location specified by @conref on the element with conaction="mark". The element with conaction="pushbefore" is the first sibling element before the element with conaction="mark".

pushreplace
Content from this element replaces any content from the element referenced by the @conref attribute. A second element with conaction="mark" is not used when using conaction="pushreplace".

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

See STUB CONTENT (51) for examples and details about the syntax.

@conkeyref
Specifies a key name or a key name with an element ID that acts as an indirect reference to reusable content. The referenced content is used in place of the content of the current element. See STUB CONTENT (51) for more details about the syntax and behaviors.

@conref
Specifies a URI that references a DITA element. The referenced content is used in place of the content of the current element. See STUB CONTENT (51) for examples and details about the syntax.

@conrefend
Specifies a URI that references the last element in a sequence of elements, with the first element of the sequence specified by @conref. The referenced sequence of elements is used in place of the
content of the current element. See STUB CONTENT (51) for examples and details about the syntax.

@deliveryTarget (specialized attribute)
Specifies the intended delivery target of the content, for example, "html", "pdf", or "epub". If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

@dir
Identifies or overrides the text directionality. The following values are valid:

lro
Indicates an override of the Unicode Bidirectional Algorithm, forcing the element into left-to-right mode.

ltr
Indicates left-to-right.

rlo
Indicates an override of the Unicode Bidirectional Algorithm, forcing the element into right-to-left mode.

rtl
Indicates right-to-left.

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

See The dir attribute for more information.

@id
Specifies an identifier for the current element. This ID is the target for references by @href and @conref attributes and for external applications that refer to DITA or LwDITA content. This attribute is defined with the XML data type NMTOKEN, except where noted for specific elements within the language reference.

See id attribute for more details.

@importance
Specifies the importance or priority that is assigned to an element. The following values are valid: "default", "deprecated", "high", "low", "normal", "obsolete", "optional", "recommended", "required", "urgent", and "-dita-use-conref-target". This attribute is not used for conditional processing, although applications might use the value of the @importance attribute to highlight elements. For example, in steps of a task topic, the value of the @importance attribute indicates whether a step is optional or required.

Comment by Kristen J Eberlein on 29 September 2022
I think the phrase “to highlight elements” is a little off. Maybe “render generated text”? And how about adding “Processors often add text or images to ensure that readers of the generated content understand whether the step is optional or required.” to the end of the example?

@otherprops (specialized attribute)
Specifies a property or properties that provide selection criteria for the element. Alternatively, the @props attribute can be specialized to provide a new metadata attribute instead of using the general @otherprops attribute. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.
@outputclass
Specifies a role that the element is playing. The role must be consistent with the basic semantic and expectations for the element. In particular, the @outputclass attribute can be used for styling during output processing; HTML output will typically preserve @outputclass for CSS processing.

Comment by robander
I don't like "The role must be consistent...", that seems like best practice that cannot be normative – and I could easily say outputclass=“flashy” which makes my element show up with sparkles, and has nothing to do with "the basic semantic and expectations for the element".

@platform (specialized attribute)
Indicates operating system and hardware. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

Comment by robander
I think this could specify a platform that is not an operating system or hardware, right? The current definition explicitly limits platform to those two … maybe “Specifies a platform or platforms to which the element applies, such as the operating system or hardware relevant to a task.”

@product (specialized attribute)
Specifies the name of the product to which the element applies. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

@props
Specifies metadata about the element. New attributes can be specialized from the @props attribute. This attribute supports conditional processing. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

The @props attribute takes a space-delimited set of values. However, when serving as a container for generalized attributes, the attribute values will be more complex. See Attribute generalization for more details.

@rev
Specifies a revision level of an element that identifies when the element was added or modified. It can be used to flag outputs when it matches a run-time parameter. It cannot be used for filtering nor is it sufficient to be used for version control. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

Comment by Kristen J Eberlein on 29 September 2022
I want to tweak this. How about the following? Also, neither definition describes what values are permitted.

Specifies metadata that identifies when the element was added or the content of the element was modified. The @rev attribute can be used for flagging. It cannot be used for filtering nor is it sufficient to be used for version control. If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.
@status
Specifies the modification status of the element. The following values are valid: "new", "changed", "deleted", "unchanged", and "-dita-use-conref-target".

@translate
Specifies whether the content of the element should be translated. The following values are valid: "yes", "no", and "-dita-use-conref-target".

See Element-by-element recommendations for translators for suggested processing defaults for each element.

Comment by Kristen J Eberlein on 31 December 2021
Does Element-by-element recommendations for translators really provide suggested processing defaults for each element? I thought it covered whether an element was block or in-line and whether there were considerations that translators needed to be aware of.

@xml:lang
Specifies the language and optional locale of the content that is contained in an element. Valid values are language tokens or the null string. The @xml:lang attribute and its values are described in the Extensible Markup Language 1.0 specification, fifth edition.

Comment by Kristen J Eberlein on 29 September 2022
Do we also want to direct readers to the architectural topics about the @xml:lang attribute?

Appendix B.3 Common attributes
The common attributes topic collects defines most of the attributes that are used on more than one base element.

Common attribute groups
The following groups are referenced in this specification, and they are also used in grammar files when defining attributes for elements.

Architectural attributes
This group includes a set of attributes that are defined for document-level elements such as <topic> and <map>: @DITAArchVersion, @specializations, and @xmlns:ditaarch.

Common map attributes
This group includes attributes that are frequently used on map elements: @cascade, @chunk, @collection-type, @keyscope, @linking, @processing-role, @search, @toc, and @subjectrefs.

Complex table attributes
This group includes attributes that are defined on table elements but not simple table elements. These attributes are part of the OASIS Exchange Table Model, unless otherwise noted. Table elements generally use only a subset of the attributes that are defined in this group. This group contains the following attributes: @align, @char, @charoff, @colsep, @rowheader, @rowsep, and @valign.
Data-element attributes
Includes attributes defined on `<data>` and its many specializations: `@datatype`, `@name`, and `@value`.

Date attributes
Includes attributes that take date values, and are defined on metadata elements that work with date information: `@expiry` and `@golive`.

Display attributes
This group includes attributes that affect the rendering of many elements: `@expanse`, `@frame`, and `@scale`.

Inclusion attributes
Includes attributes defined on `<include>` and its specializations: `@encoding` and `@parse`.

Link-relationship attributes
This group includes attributes whose values can be used for representing navigational relationships: `@format`, `@href`, `@type`, and `@scope`.

Simple table attributes

Comment by Kristen J Eberlein on 29 December 2021

If I have jumped to this place in a document from the element-reference topic, I want the attributes listed here in the “Simple table group” to be hyperlinked to the actual definition.

This group includes attributes that are defined only on the `<simpletable>` element: `@keycol` and `@relcolwidth`. These attributes are listed in a group because the `<simpletable>` element is frequently used as a specialization base.

Table accessibility attributes
This group contains attributes that are defined on the `<stentry>` element and its specializations: `@headers` (45) and `@scope` (as defined on `<stentry>`) (50).

Other attributes (not in a group)
These are attributes that are used in the same way on more than one base element, but they are not formally grouped together: `@compact`, `@duplicates`, `@impose-role`, `@otherrole`, `@role`, and `@title-role`.

Common attribute definitions
Common attributes, including those in the groups listed above, are defined as follows.

`@align` (complex table attributes)
Specifies the horizontal alignment of text in table entries. The following values are valid:

- **left**: Indicates left alignment of the text.
- **right**: Indicates right alignment of the text.
- **center**: Indicates center alignment of the text.
- **justify**: Justifies the contents to both the left and the right.
**char**

Indicates character alignment. The text is aligned with the first occurrence of the character specified by the `@char` attribute.

**-dita-use-conref-target**

See [Using the -dita-use-conref-target value](#) for more information.

The `@align` attribute is available on the following table elements: `<colspec>`, `<entry>`, and `<tgroup>`.

**@cascade (common map attributes)**

Specifies how metadata attributes cascade within a map. The specification defines the following values:

- **merge**
  
  Indicates that the metadata attributes cascade, and that the values of the metadata attributes are additive. This is the processing default for the `@cascade` attribute.

- **nomerge**
  
  Indicates that the metadata attributes cascade, but that they are not additive for `<topicref>` elements that specify a different value for a specific metadata attribute. If the cascading value for an attribute is already merged based on multiple ancestor elements, that merged value continues to cascade until a new value is encountered. That is, setting `cascade="nomerge"` does not undo merging that took place on ancestor elements.

Processors can also define custom, implementation-specific tokens for this attribute.

See [Cascading of metadata attributes in a DITA map](#) for more information about how this attribute interacts with metadata attributes.

**@char (complex table attributes)**

Specifies the alignment character, which is the character that is used for aligning the text in table entries. This attribute applies when `align="char"`. A value of "" (the null string) means there is no aligning character.

For example, if `align="char"` and `char="."` are specified, then text in the table entry aligns with the first occurrence of the period within the entry. This might be useful if decimal alignment is required.

The `@char` attribute is available on the following table elements: `<colspec>` and `<entry>`.

**@charoff (complex table attributes)**

Specifies the horizontal offset of the alignment character that is specified by the `@char` attribute. The value is a greater-than-zero number that is less than or equal to 100. It represents the percentage of the current column width by which the text is offset to the left of the alignment character.

For example, if `align="char"`, `char="."`, and `charoff="50"` are all specified, then text in the table entry is aligned 50% of the distance to the left of the first occurrence of the period character within the table entry.

The `@charoff` attribute is available on the following table elements: `<colspec>` and `<entry>`.

**@chunk (common map attributes)**

Specifies how a processor should render a map or branch of a map. For example, it can be used to specify that individual topic documents should be rendered as a single document, or that a single document with multiple topics should be rendered as multiple documents.

The following values are valid:
combine
Instructs a processor to combine the referenced source documents for rendering purposes. This is intended for cases where a publishing process normally results in a single output artifact for each source XML document.

split
Instructs a processor to split each topic from the referenced source document into its own document for rendering purposes. This is intended for cases where a publishing process normally results in a single output artifact for each source XML document, regardless of how many DITA topics exist within each source document.

Processors can also define custom, implementation-specific tokens for this attribute.

For a detailed description of the @chunk attribute and its usage, see Chunking.

@collection-type (common map attributes)
Specifies how topics or links relate to each other. The processing default is "unordered", although no default is specified in the OASIS-provided grammar files. The following values are valid:

unordered
Indicates that the order of the child topics is not significant.

sequence
Indicates that the order of the child topics is significant. Output processors will typically link between them in order.

choice
Indicates that one of the children should be selected.

family
Indicates a tight grouping in which each of the referenced topics not only relates to the current topic but also relate to each other.

Comment by Kristen J Eberlein on 28 September 2022
Here is the content from the "DITA map attributes" topic:

@collection-type
The @collection-type attribute specifies how the children of a <topicref> element relate to their parent and to each other. This attribute, which is set on the parent element, typically is used by processors to determine how to generate navigation links in the rendered topics. For example, a @collection-type value of "sequence" indicates that children of the specifying <topicref> element represent an ordered sequence of topics; processors might add numbers to the list of child topics or generate next/previous links for online presentation. This attribute is available in topics on the <linklist> and <linkpool> elements, where it has the same behavior. Where the @collection-type attribute is available on elements that cannot directly contain elements, the behavior of the attribute is undefined.

Comment by Kristen J Eberlein on 28 September 2022
In the definitions of the supported values, do we want to refer to "resources" instead of "topics"? Since we specify that @collection-type specifies "how topics or links relate to each other" ...
@colsep (complex table attributes)
Specifies whether to render column separators between table entries. The following values are valid:
"0" (no separators) and "1" (separators).
The @colsep attribute is available on the following table elements: <colspec>, <entry>, <table>, and <tgroup>.

@compact
Specifies whether the vertical spacing between list items is tightened. The following values are valid:
"yes", "no", and ":dita-use-conref-target". Some DITA processors or output formats might not support the @compact attribute.

@datatype (data-element attributes)
Specifies the type of data contained in the @value attribute or within the <data> element. A typical use of @datatype will be the identifying URI for an XML Schema datatype.

@DITAArchVersion (architectural attributes)
Specifies the version of the DITA architecture that is in use. This attribute is in the namespace
http://dita.oasis-open.org/architecture/2005/. This attribute is specified in the topic and map modules, and it uses a default value of the current version of DITA. The current default is "2.0".

@duplicates
Specifies whether duplicate links are removed from a group of links. Duplicate links are links that
address the same resource using the same properties, such as link text and link role. How duplicate
links are determined is processor-specific. The following values are valid:

yes
Specifies that duplicate links are retained.

no
Specifies that duplicate links are removed.

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.
The suggested processing default is "yes" within <linklist> elements and "no" for other links.

Comment by robander on Dec 28 2021
"How duplicate links are determined is processor-specific" => this should be included in any updates to standardize language around "implementation dependent".

@encoding (inclusion attributes)
Specifies the character encoding to use when translating the character data from the referenced
content. The value should be a valid encoding name. If not specified, processors may make attempts
to automatically determine the correct encoding, for example using HTTP headers, through analysis
of the binary structure of the referenced data, or the <?xml?> processing instruction when including
XML as text. The resource should be treated as UTF-8 if no other encoding information can be
determined.

When parse="xml", standard XML parsing rules apply for the detection of character encoding. The
necessity and uses of @encoding for non-standard values of @parse are implementation-
dependent.

Comment by Kristen J Eberlein on 29 April 2019
Can we replace "should" in the following definition?
@expanse (display attributes)
Specifies the horizontal placement of the element. The following values are valid:

- **column**
  Indicates that the element is aligned with the current column margin.

- **page**
  Indicates that the element is placed on the left page margin for left-to-right presentation or the right page margin for right-to-left presentation.

- **spread**
  Indicates that the object is rendered across a multi-page spread. If the output format does not have anything that corresponds to spreads, then "spread" has the same meaning as "page".

- **textline**
  Indicates that the element is aligned with the left (for left-to-right presentation) or right (for right-to-left presentation) margin of the current text line and takes indentation into account.

@dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

For `<table>`, in place of the @expanse attribute that is used by other DITA elements, the @pgwide attribute is used in order to conform to the OASIS Exchange Table Model.

Some processors or output formats might not support all values.

@expiry (date attributes)
Specifies the date when the information should be retired or refreshed. The date is specified using the ISO 8601 format: YYYY-MM-DD, where YYYY is the year, MM is the month (01 to 12), and DD is the day (01-31).

@format (link-relationship attributes)
Specifies the format of the resource that is referenced. See STUB CONTENT (51) for detailed information on supported values and processing implications.

@frame (display attributes)
Specifies which portion of a border surrounds the element. The following values are valid:

- **all**
  Indicates that a line is rendered at the top, bottom, left, and right of the containing element.

- **bottom**
  Indicates that a line is rendered at the bottom of the containing element.

- **none**
  Indicates that no lines are rendered.

- **sides**
  Indicates that a line is rendered at the left and right of the containing element.

- **top**
  Indicates that a line is rendered at the top of the containing element.

- **topbot**
  Indicates that a line is rendered at the top and bottom of the containing element.

@dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

Some processors or output formats might not support all values.
@golive (date attributes)
Specifies the publication or general availability (GA) date. The date is specified using the ISO 8601 format: YYYY-MM-DD, where YYYY is the year, MM is the month (01 to 12), and DD is the day (01-31).

@headers
Specifies which entries in the current table provide headers for this cell. The @headers attribute contains an unordered set of unique, space-separated tokens, each of which is an ID reference of an entry from the same table.

@href (link-relationship attributes)
Specifies a reference to a resource. See STUB CONTENT (51) for detailed information on supported values and processing implications.

@impose-role
Specifies whether this element will impose its role on elements in a referenced map. The attribute is ignored if the target of the reference is not a map or branch of a map. The following values are valid:

keepTarget
The role of the current reference is not imposed on the target of the reference. This is the default for the unspecialized <topicref> element and for many convenience elements such as <keydef>.

impose
The role of the current reference is imposed on the target of the reference. For example, if a specialized topic reference <chapter> uses this value and references a map, a topic reference that resolves in place of the <chapter> will be treated as if it were a chapter.

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

See STUB CONTENT (51) for detailed information on supported values and processing implications.

@keycol (simpletable attributes)
Specifies the column that contains the content that represents the key to the tabular structure. If @keycol is present and assigned a numerical value, the specified column is treated as a vertical header.

@keyref
Specifies a key name that acts as a redirectable reference based on a key definition within a map. See STUB CONTENT (51) for information on using this attribute.

For HDITA, the equivalent of @keyref is @data-keyref

Comment by robander
The definition above for @keyref should be synchronized with the definition in the linked section on keys.

@keys
Specifies one or more names for a resource. See STUB CONTENT (51) for information on using this attribute.

For HDITA, the equivalent of @keys is @data-keys

@keyscope (common map attributes)
Specifies that the element marks the boundaries of a key scope.

See STUB CONTENT (51) for information on using this attribute.
Here is the content from the "DITA map attributes" topic:

@keyscope
Defines a new scope for key definition and resolution, and gives the scope one or more names. For more information about key scopes, see Indirect key-based addressing.

@linking (common map attributes)
Specifies linking characteristics of a topic specific to the location of this reference in a map. If the value is not specified locally, the value might cascade from another element in the map (for cascade rules, see Cascading of metadata attributes in a DITA map).

The following values are valid:

- targetonly
  A topic can only be linked to and cannot link to other topics.

- sourceonly
  A topic cannot be linked to but can link to other topics.

- normal
  A topic can be linked to and can link to other topics. Use this to override the linking value of a parent topic.

- none
  A topic cannot be linked to or link to other topics.

- dita-use-conref-target
  See Using the -dita-use-conref-target value for more information.

By default, the relationships between the topics that are referenced in a map are reciprocal:

- Child topics link to parent topics and vice versa.
- Next and previous topics in a sequence link to each other.
- Topics in a family link to their sibling topics.
- Topics referenced in the table cells of the same row in a relationship table link to each other. A topic referenced within a table cell does not (by default) link to other topics referenced in the same table cell.

This behavior can be modified by using the @linking attribute, which enables an author or information architect to specify how a topic participates in a relationship. The following values are valid:

- linking="none"
  Specifies that the topic does not exist in the map for the purposes of calculating links.
linking="sourceonly"
    Specifies that the topic will link to its related topics but not vice versa.

linking="targetonly"
    Specifies that the related topics will link to it but not vice versa.

linking="normal"
    Default value. It specifies that linking will be reciprocal (the topic will link to related topics,
    and they will link back to it).

Authors also can create links directly in a topic by using the <xref> or <link> elements, but
in most cases map-based linking is preferable, because links in topics create dependencies
between topics that can hinder reuse.

Note that while the relationships between the topics that are referenced in a map are
reciprocal, the relationships merely imply reciprocal links in generated output that includes
links. The rendered navigation links are a function of the presentation style that is determined
by the processor.

@name (data-element attributes)
    Defines a unique name for the object.

Comment by robander
    Do we need to specify the scope of "unique" here?

@otherrole
    Specifies an alternate role for a link relationship when the @role attribute is set to "other".

@parse (inclusion attributes)
    Specifies the processing expectations for the referenced resource. Processors must support the
    following values:

    text
        The contents should be treated as plain text. Reserved XML characters should be displayed,
        and not interpreted as XML markup.

    xml
        The contents of the referenced resource should be treated as an XML document, and the
        referenced element should be inserted at the location of the <include> element. If a fragment
        identifier is included in the address of the content, processors must select the element with the
        specified ID. If no fragment identifier is included, the root element of the referenced XML
        document is selected. Any grammar processing should be performed during resolution, such
        that default attribute values are explicitly populated. Prolog content must be discarded.
        It is an error to use parse="xml" anywhere other than within <foreign> or a specialization
        thereof.

        Processors may support other values for the @parse attribute with proprietary processing semantics.
        Processors should issue warnings and use <fallback> when they encounter unsupported @parse
        values. Non-standard @parse instructions should be expressed as URIs.

        Note  Proprietary @parse values will likely limit the portability and interoperability of DITA
        content, so should be used with care.
@processing-role (common map attributes)
Specifies whether the referenced resource is processed normally or treated as a resource that is only included in order to resolve references, such as key or content references. The following values are valid:

**normal**
Indicates that the resource is a readable part of the information set. It is included in navigation and search results. This is the default value for the `<topicref>` element.

**resource-only**
Indicates that the resource should be used only for processing purposes. It is not included in navigation or search results, nor is it rendered as a topic. This is the default value for the `<keydef>` element.

@dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

If no value is specified but the attribute is specified on a containing element within a map or within the related-links section, the value cascades from the closest containing element.

@relcolwidth (simpletable attributes)
Specifies the width of each column in relationship to the width of the other columns. The value is a space-separated list of relative column widths. Each column width is specified as a positive integer or decimal number followed by an asterisk character.

For example, the value `relcolwidth="1* 2* 3*"` gives a total of 6 units across three columns. The relative widths are 1/6, 2/6, and 3/6 (16.7%, 33.3%, and 50%). Similarly, the value `relcolwidth="90* 150*"` causes relative widths of 90/240 and 150/240 (37.5% and 62.5%).

@role
Specifies the role that a linked topic plays in relationship with the current topic.

For example, in a parent/child relationship, the role would be "parent" when the target is the parent of the current topic, and "child" when the target is the child of the current topic. This can be used to sort and classify links when rendering.

The following values are valid:

**ancestor**
Indicates a link to a topic above the parent topic.

**child**
Indicates a link to a direct child such as a directly nested or dependent topic.

**cousin**
Indicates a link to another topic in the same hierarchy that is not a parent, child, sibling, next, or previous.

**descendant**
Indicates a link to a topic below a child topic.

**friend**
Indicates a link to a similar topic that is not necessarily part of the same hierarchy.

**next**
Indicates a link to the next topic in a sequence.

**other**
Indicates any other kind of relationship or role. The type of role is specified as the value for the @otherrole attribute.
parent
   Indicates a link to a topic that is a parent of the current topic.

previous
   Indicates a link to the previous topic in a sequence.

sibling
   Indicates a link between two children of the same parent topic.

@dita-use-conref-target
   See Using the -dita-use-conref-target value for more information.

@rowheader (complex table attributes)
   Specifies whether the entries in the respective column are row headers. The following values are valid:

   firstcol
      Indicates that entries in the first column of the table are row headers. This applies when the @rowheader attribute is specified on the <table> element.

headers
      Indicates that entries of the column that is described using the <colspec> element are row headers. This applies when the @rowheader attribute is specified on the <colspec> element.

norowheader
      Indicates that entries in the first column are not row headers. This applies when the @rowheader attribute is specified on the <table> element.

@dita-use-conref-target
   See Using the -dita-use-conref-target value for more information.

   Note   This attribute is not part of the OASIS Exchange Table Model upon which DITA tables are based. Some processors or output formats might not support all values.

   The @rowheader attribute is available on the following table elements: <table> and <colspec>.

@rowsep (complex table attributes)
   Specifies whether to render row separators between table entries. The following values are valid: "0" (no separators) and "1" (separators).

   The @rowsep attribute is available on the following table elements: <colspec>, <entry>, <row>, <table>, and <tgroup>.

@scale (display attributes)
   Specifies the percentage by which fonts are resized in relation to the normal text size. The value of this attribute is a positive integer. When used on <table> or <simpletable>, the following values are valid: "50", "60", "70", "80", "90", "100", "110", "120", "140", "160", "180", "200", and -dita-use-conref-target (51).

   This attribute is primarily useful for print-oriented display. Some processors might not support all values.

   If the @scale attribute is specified on an element that contains an image, the image is not scaled. The image is scaled only if a scaling property is explicitly specified for the <image> element.

@scope (link-relationship attributes)
   Specifies the closeness of the relationship between the current document and the referenced resource. The following values are valid: "local", "peer", "external", and "-dita-use-conref-target".

   See STUB CONTENT (51) for detailed information on supported values and processing implications.
@scope
Specifies that the current entry is a header for other table entries. The following values are valid:

* col
  Indicates that the current entry is a header for all cells in the column.

* colgroup
  Indicates that the current entry is a header for all cells in the columns that are spanned by this entry.

* row
  Indicates that the current entry is a header for all cells in the row.

* rowgroup
  Indicates that the current entry is a header for all cells in the rows that are spanned by this entry.

@dita-use-conref-target
See Using the @dita-use-conref-target value for more information.

@search (common map attributes)
Specifies whether the target is available for searching. If the value is not specified locally, the value might cascade from another element in the map (for cascade rules, see Cascading of metadata attributes in a DITA map). The following values are valid: “yes”, “no”, and “@dita-use-conref-target”.

Comment by Kristen J Eberlein on 28 September 2022
Here is the content from the "DITA map attributes" topic:

@search
  Specifies whether the topic is included in search indexes.

@specializations (architectural attributes)
Specifies the attribute-domain specializations that are included in the document-type shell. This attribute is set as a default within the document-type shell. The value varies depending on what domains are integrated into the document-type shell. For example, a grammar file that includes the specialized attributes @audience, @deliveryTarget, and @newBaseAtt would set the value to @props/audience @props/deliveryTarget @base/newBaseAtt.

@subjectrefs (common map attributes)
Specifies one or more keys that are each defined by a subject definition in a subject scheme map. Multiple values are separated by white space.

@title-role (REQUIRED)
Specifies the role that the alternative title serves. Multiple roles are separated by white space. The following roles are defined in the specification: “linking”, “navigation”, “search”, “subtitle”, and “hint”. Processors can define custom values for the @title-role attribute.

@toc (common map attributes)
Specifies whether a topic appears in the table of contents (TOC) based on the current map context. If the value is not specified locally, the value might cascade from another element in the map (for cascade rules, see Cascading of metadata attributes in a DITA map). The following values are valid:

* yes
  The topic appears in a generated TOC.

* no
  The topic does not appear in a generated TOC.
Comment by Kristen J Eberlein on 28 September 2022

Here is the content from the "DITA map attributes" topic:

@toc
Specifies whether topics are excluded from navigation output, such as a Web site map or an online table of contents. By default, <topicref> hierarchies are included in navigation output; relationship tables are excluded.

@type (link-relationship attributes)
Describes the target of a reference. See STUB CONTENT (51) for detailed information on supported values and processing implications.

@value (data-element attributes)
Specifies a value associated with the current property or element.

@valign (complex table attributes)
Specifies the vertical alignment of text in table entries. The following values are valid:

- bottom
  Indicates that text is aligned with the bottom of the table entry.

- middle
  Indicates that text is aligned with the middle of the table entry.

- top
  Indicates that text is aligned with the top of the table entry.

-dita-use-conref-target
See Using the -dita-use-conref-target value for more information.

The @valign attribute is available on the following table elements: <entry>, <tbody>, <thead>, and <row>.

@xml:space
Specifies how to handle white space in the current element. This attribute is provided on <pre>, <lines>, and on elements specialized from those. It ensures that parsers respect white space that is part of the data in those elements, including line-end characters. When defined, it has a fixed value of "preserve", making it a default property of the element that cannot be changed or deleted by authors.

@xmlns:ditaarch (architectural attributes)
Declares the default DITA namespace. This namespace is declared as such in the RNG modules for <topic> and <map>, but it is specified as an attribute in the equivalent DTD-based modules. The value is fixed to "http://dita.oasis-open.org/architecture/2005/".

Appendix B.4 STUB CONTENT

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