OASIS OPEN

Review K: Glossary entry topics & abbreviated-form

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1 Glossary entry topics and terminology management

1.1 abbreviated-form elements and glossary entry topics

1.2 Rendering of <abbreviated-form> elements

There are specific rules that specify how processors should render `<abbreviated-form>` elements.

> **Comment by Kristen J Eberlein on 15 August 2023**
>
> I have a LOT of problems with these normative SHOULD statements:
>
> - How can we have normative rules when the whole idea of introductory and non-introductory context is so entirely subjective?
> - If we compare these to the normative rules for key text resolution that are specified in the base spec, we are in trouble. The base rules suggest that the title of the glossary entry topic is what should be used ... See Processing key references to generate text or link text.
>
> **Disposition: Unassigned**

Note that the definition of "introductory context" will vary based on the processor and output format.

1. 001 (21)

   If the referenced topic is not a `<glossentry>` topic or a specialization of `<glossentry>`, the title of the topic **SHOULD** be rendered.

2. 002 (21)

   If the referenced topic is a `<glossentry>` topic or a specialization of `<glossentry>` and the `<abbreviated-form>` element is located in an introductory context:

   - (If the referenced topic contains a non-empty `<glossSurfaceForm>` element) Processors **SHOULD** render the contents of the `<glossSurfaceForm>` element
   - (If the referenced topic does not contain a non-empty`<glossSurfaceForm>` element) Processors **SHOULD** render the contents of the `<glossterm>` element

3. 003 (21)

   If the referenced topic is a `<glossentry>` topic or a specialization of `<glossentry>` and the `<abbreviated-form>` element is located in a non-introductory context:

   - (If the referenced topic contains a non-empty `<glossAcronym>` element) Processors **SHOULD** render the abbreviated form of the term by displaying the contents of the `<glossAcronym>` element.
   - (If the reference topic does not contain a non-empty `<glossAcronym>` element) Processors **SHOULD** render the contents of the `<glossterm>` element

> **Comment by Kristen J Eberlein on 15 August 2023**
>
> The rendering here looks dreadful ...

Disposition: Unassigned

2 Glossary entry elements

The glossary entry specialization contains markup that supports terminological information. In addition to recording information for glossaries, it can be used for other purposes such as inclusion in a terminology database, extraction for pre-translation, reuse in controlled authoring applications, and recording information that may be later retrieved for other lexical resources.

2.1 <glossAbbreviation>

The `<glossAbbreviation>` element provides an abbreviated form of the term. An abbreviated form is typically formed by omitting some letters from a longer form.

Specialization hierarchy

The `<glossAbbreviation>` element is specialized from `<title>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: ID and conref attributes (36), localization attributes (36), `@base` (37), `@class` (37), `@outputclass` (39), and `@rev` (40).

Example

The following code sample shows how the `<glossAbbreviation>` is used in a glossary entry topic:

```
<glossentry id="adjective">
    <glossterm>adjective</glossterm>
    <glossdef>A word that describes a noun or noun phrase</glossdef>
  <glossBody>
    <glossAlt>
      <glossAbbreviation>adj</glossAbbreviation>
    </glossAlt>
  </glossBody>
</glossentry>
```

2.2 <glossAcronym>

The `<glossAcronym>` element defines an acronym for the term. An acronym typically is composed of the initial letters of the components of the full form or from the syllables of the full form.

Usage information

This element can be used with the `<abbreviated-form>` element to display an expanded version of an acronym the first time that acronym appears in a set of text. See `<abbreviated-form>` (19) for information on how the two elements interact.

Note   Several issues arise when acronyms are translated into other languages. For example, an acronym in one language might not have an equivalent in another language. When acronyms are first displayed, some languages will display the expanded form first followed by the acronym in parenthesis, while other languages do the reverse. For some acronyms, a translation might need to render both the original and the translated version of the acronym. For all of these reasons, DITA allows an author or translator to control what is presented to a reader by using the `<glossSurfaceForm>` element, which will often accompany the

`<glossAcronym>`. The `<abbreviated-form>` (19) topic contains information on how the `<glossSurfaceForm>` and `<glossAcronym>` elements affect references to the primary term.

Specialization hierarchy

The `<glossAcronym>` element is specialized from `<title>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: ID and conref attributes (36), localization attributes (36), `@base` (37), `@class` (37), `@outputclass` (39), and `@rev` (40).

Example

The following code sample shows how the `<glossAcronym>` element can be used:

```
<glossentry id="united-nations">
    <glossterm>United Nations</glossterm>
    <glossdef>The United Nations, referred to informally as the UN, is an
    intergovernmental organization whose stated purposes are to maintain
    international peace and security, develop friendly relations among
    nations, achieve international cooperation, and serve as a center for
    harmonizing the actions of nations.</glossdef>
  <glossBody>
    <glossSurfaceForm>United Nations (UN)</glossSurfaceForm>
    <glossAlt>
      <glossAcronym>UN</glossAcronym>
    </glossAlt>
  </glossBody>
</glossentry>
```

2.3 <glossAlt>

The `<glossAlt>` element contains information about a variant for the preferred term.

Usage information

The variant should have the same meaning as the term in the `<glossterm>` element; the variant is simply another way to refer to the same term. There might be many ways to refer to a term; each variant is placed in its own `<glossAlt>` element. The `<glossUsage>` element can be used within `<glossAlt>` to indicate when use of the alternate term is appropriate.

> **Note** A list of alternative terms is specific to the language, so the translation of a `<glossentry>` topic might result in empty elements within a `<glossAlt>` container.

Specialization hierarchy

The `<glossAlt>` element is specialized from `<section>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: universal attributes (36).

Example

See the example in `<glossentry>`. (9)

2.4 <glossAlternateFor>

The <glossAlternateFor> element indicates when a variant term has a relationship to another variant term in addition to the preferred term.

Usage information

The <glossAlternateFor> element is available inside the <glossAlt> element, which is a container that provides a variant for the primary term. The <glossAlternateFor> element makes it clear that there is a relationship between the primary term, the variant term defined directly in the glossary entry topic, and the term defined in the external glossary entry topic that is linked to.

Specialization hierarchy

The <glossAlternateFor> element is specialized from <xref>. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: link-relationship attributes (41), universal attributes (36), and @keyref (47).

For this element, the @href attribute references a term for which the current variant is an alternate (in addition to the primary term of this <glossentry> topic). The reference will often be to another <glossAlt> element within the same <glossentry> topic, indicating that the current variant is an alternate for both the primary term and the referenced alternate term.

> **Comment by Kristen J Eberlein on 06 August 2023**
>
> The above wording does not track for me, nor does it match the earlier example for <glossentry>, or the 2009 Kara Warburton white paper. You can read my interpretation in the explanation of the example belowe.
>
> **Disposition: Unassigned**

Example

The following code sample shows a glossary entry topic for the term "Refrigerator". In addition to providing a definition, the glossary entry topic defines a variant term ("fridge"). It also links to another glossary entry topic for a variant term ("icebox") which is defined in a separate glossary entry topic:

```
<glossentry id="refridgerator">
    <glossterm>Refrigerator</glossterm>
    <glossdef>A refrigerator is a commercial and home appliance consisting
    of a thermally insulated compartment and a heat pump (mechanical,
    electronic or chemical) that transfers heat from its inside to its
    external environment so that its inside is cooled to a temperature
    below the room temperature.</glossdef>
  <glossBody>
    <glossPartOfSpeech value="noun"/>
    <glossAlt>
      <glossSynonym>fridge</glossSynonym>
      <glossUsage>Casual and colloquial usage only.</glossUsage>
      <glossAlternateFor keyref="glossentry-icebox"/>
    </glossAlt>
  </glossBody>
</glossentry>
```

2.5 <glossBody>

The `<glossBody>` element contains information about a term, such as the part of speech and variants for the term.

Specialization hierarchy

The `<glossBody>` element is specialized from `<conbody>`; it is defined in the glossary entry module. The `<conbody>` element is specialized from `<body>`; it is defined in the concept module.

Attributes

The following attributes are available on this element: universal attributes (36).

Example

The following code sample shows how the `<glossBody>` element contains the part of speech and variant forms for the term:

```
<glossentry id="sport-drink">
    <glossterm>Sport drink</glossterm>
    <glossdef>A soft drink designed or marketed for consumption in
    conjunction with sporting activity or strenuous exercise, and which
    typically contains electrolytes such as sodium, potassium, and
    chloride, and a high percentage of sugar to restore energy.</glossdef>
  <glossBody>
    <glossPartOfSpeech value="noun"/>
    <glossAlt>
      <glossSynonym>energy drink</glossSynonym>
    </glossAlt>
  </glossBody>
</glossentry>
```

2.6 <glossdef>

The `<glossdef>` element defines the meaning of the term.

Usage information

If a term has multiple concepts or meaning, create a separate `<glossentry>` topic for each.

Specialization hierarchy

The `<glossdef>` element is specialized from `<abstract>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: universal attributes (36).

Example

The following code sample shows the `<glossdef>` element can be used to define the meaning of the term "raster pattern":

```
<glossentry id="rasterpattern">
  <glossterm>raster pattern</glossterm>
  <glossdef>A series of picture elements (pels) arranged in scan lines to form
```

```
            an image.</glossdef>
</glossentry>
```

2.7 <glossentry>

The `<glossentry>` element is the top-level element for a topic that defines a single sense of a glossary term.

Rendering expectations

Because the glossary entry specialization is designed for the larger task of terminology management, it contains many elements that are not intended to be rendered when a glossary is generated. In addition, when a collections of glossary entry topics are rendered as a guidance for terminology management, generated text might be required for ease of reading. Specialized style sheets and processing are needed to ensure useful output.

Processing expectations

Processing expectations for glossary entry topics are highly implementation-specific and will depend on the output format.

The typical processing for books is to sort and group glossary entries based on the localized term, so a back-of-the-book glossary can contain a collated list of terms with the definitions of the individual senses of each term indented under the term. The glossary can have a different organization in different languages depending on the translation of the terms.

One possible implementation of a glossary in online processing is to associate a hotspot for mentions of terms in `<term>` elements and display the definition on hover or click.

Specialization hierarchy

The `<glossentry>` element is specialized from `<concept>`; it is defined in the glossary entry module. The `<concept>` element is specialized from `<topic>`; it is defined in the concept module.

Attributes

The following attributes are available on this element: architectural attributes (41) and universal attributes (36).

For this element, the `@id` attribute is required.

Example

The following code samples shows how a glossary entry topic provides information about a term that aids in terminology management:

```
<glossentry id="usbfd">
  <glossterm>USB flash drive</glossterm>
  <glossdef>A small portable drive.</glossdef>
  <glossBody>
    <glossPartOfSpeech value="noun"/>
    <glossUsage>Do not use this term in upper case (for example,  in "USB Flash Drive")
      because that suggests a trademark.</glossUsage>
    <glossAlt>
      <glossAcronym>UFD</glossAcronym>
      <glossStatus value="prohibited"/>
    </glossAlt>
    <glossAlt id="memoryStick">
      <glossSynonym>memory stick</glossSynonym>
```

```
        <glossUsage>This is a colloquial term.</glossUsage>
      </glossAlt>
      <glossAlt>
        <glossAbbreviation>stick</glossAbbreviation>
        <glossStatus value="prohibited"/>
        <glossUsage>This is too colloquial.</glossUsage>
        <glossAlternateFor href="#usbfd/memoryStick"/>
      </glossAlt>
      <glossAlt>
        <glossAbbreviation>flash</glossAbbreviation>
        <glossStatus value="prohibited"/>
        <glossUsage>This short form is ambiguous.</glossUsage>
      </glossAlt>
    </glossBody>
</glossentry>
```

2.8 <glossPartOfSpeech>

The `<glossPartOfSpeech>` element identifies the part of speech for the preferred and alternate terms. Alternate terms must have the same part of speech as the preferred term, because all terms in the `<glossentry>` topic designate the same subject.

Usage information

When the part of speech is not specified, the default is "noun."

If validation is required, use a subject scheme to configure controlled values for the `@value` attribute on the `<glossPartOfSpeech>`. This avoids the need to hard code values in the XML grammar files, which would limit extension and would make values difficult to change for different languages.

Specialization hierarchy

The `<glossPartOfSpeech>` element is specialized from `<data>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: data-element attributes (41), link-relationship attributes (41), and universal attributes (36).

For this element, the `@value` attribute specifies the part of speech for the term or terms.

Example

The following code sample shows how the `<glossPartOfSpeech>` element can be used to specify the part of a speech for a term:

```
<glossentry id="refridgerator">
    <glossterm>Refrigerator</glossterm>
    <glossdef>A refrigerator is a commercial and home appliance consisting
    of a thermally insulated compartment and a heat pump (mechanical,
    electronic or chemical) that transfers heat from its inside to its
    external environment so that its inside is cooled to a temperature
    below the room temperature.</glossdef>
  <glossBody>
    <glossPartOfSpeech value="noun"/>
    <glossAlt>
      <glossSynonym>fridge</glossSynonym>
      <glossUsage>Casual and colloquial usage only.</glossUsage>
    </glossAlt>
  </glossBody>
</glossentry>
```

Note that because the `<glossPartOfSpeech>` applies to the entire glossary entry topic, the preferred term and any variants must belong to the same syntactical category (take the same part of speech).

2.9 <glossProperty>

The `<glossProperty>` element specifies additional details about the term or its subject, such as the gender of a noun.

Specialization hierarchy

The `<glossProperty>` element is specialized from `<data>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: data-element attributes (41), link-relationship attributes (41), and universal attributes (36).

Example

The following code sample shows how the `<glossProperty>` element can be used to provide information about the gender of a term:

```
<glossentry id="algorithm" xml:lang="es-es">
  <glossterm>El algoritmo</glossterm>
  <glossdef>Un algoritmo define un método de calcular un resultado.</glossdef>
  <glossBody>
    <glossPartOfSpeech value="noun"/>
    <glossProperty name="gender" value="masculine"/>
  </glossBody>
</glossentry>
```

2.10 <glossScopeNote>

The `<glossScopeNote>` element provides information that clarifies when a term should or should not be used.

Specialization hierarchy

The `<glossScopeNote>` element is specialized from `<note>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: universal attributes (36) and the attributes defined below.

@othertype
　　Specifies an alternate note type. This value is used as the user-provided note label when the `@type` attribute value is set to "other".

@type
　　Specifies the type of a note. This differs from the `@type` attribute on many other DITA elements. The following are the allowable values:

- "attention"
- "caution"
- "danger"
- "important"

- "note"
- "notice"
- "other"
- "remember"
- "restriction"
- "tip"
- "trouble"
- "warning"
- "-dita-use-conref-target"

Example

The following code sample shows how the `<glossScopeNote>` element can be used to clarify how the term "Linux" should be used:

```
<glossentry id="linuxOS" xml:lang="en-us">
  <glossterm>Linux operating system</glossterm>
  <glossdef>An operating system based on the kernel created by Linus Torvald.</glossdef>
  <glossBody>
    <glossPartOfSpeech value="noun"/>
    <glossScopeNote>This term does not apply to the Linux Open Source Project that
develops Linux distributions but only to the distributions themselves.
Examples of Linux operating systems include RedHat, SuSE, and Ubuntu. </glossScopeNote>
  </glossBody>
</glossentry>
```

2.11 <glossShortForm>

The `<glossShortForm>` element is an abbreviated form that includes fewer words than the full form.

Usage information

Note Any list of alternative terms is specific to the language. Translation of a `<glossentry>` topic might result in an empty `<glossShortForm>` element if there is no equivalent short form in the target language.

Specialization hierarchy

The `<glossShortForm>` element is specialized from `<title>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: ID and conref attributes (36), localization attributes (36), `@base` (37), `@class` (37), `@outputclass` (39), and `@rev` (40).

Example

The following code sample shows the `<glossShortForm>` can be used.

```
<glossentry id="www">
  <glossterm>World Wide Web</glossterm>
  <glossdef>A collection of documents that are available through the Internet.</glossdef>
  <glossBody>
    <glossPartOfSpeech value="noun"/>
    <glossAlt>
      <glossShortForm>the web</glossShortForm>
```

```
      </glossAlt>
    </glossBody>
 </glossentry>
```

2.12 <glossStatus>

The `<glossStatus>` element identifies the usage status of a preferred or alternate term. If the status is not specified, the `<glossterm>` provides a preferred term and an alternate term provides an allowed term.

Usage information

If validation is required for status values, use a subject scheme to set up controlled values for the `@value` attribute. Alternatively, processing rules can be used to validate the values.

Specialization hierarchy

The `<glossStatus>` element is specialized from `<data>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: data-element attributes (41), link-relationship attributes (41), and universal attributes (36).

For this element, the `@value` attribute specifies the usage status of the term or alternate term.

Example

The following code sample shows how the `<glossStatus>` element identifies the usage status of alternate terms:

```
 <glossentry id="usbfd">
   <glossterm>USB flash drive</glossterm>
   <glossdef>A small portable drive.</glossdef>
   <glossBody>
     <glossPartOfSpeech value="noun"/>
     <glossUsage>Do not provide in upper case (as in "USB Flash Drive")
       because that suggests a trademark.</glossUsage>
     <glossAlt>
       <glossAcronym>UFD</glossAcronym>
       <glossStatus value="prohibited"/>
     </glossAlt>
     <glossAlt>
       <glossAbbreviation>flash</glossAbbreviation>
       <glossStatus value="prohibited"/>
       <glossUsage>This short form is ambiguous.</glossUsage>
     </glossAlt>
   </glossBody>
 </glossentry>
```

2.13 <glossSurfaceForm>

The `<glossSurfaceForm>` element specifies an unambiguous presentation of the term that might combine multiple forms. The surface form is suitable to introduce the term in new contexts or the first occurrence in text.

Usage information

The `<glossSurfaceForm>` element is most often used for terms that also specify the `<glossAcronym>` element. In that context, the `<glossSurfaceForm>` element contains the term in a manner that introduces both the term and the acronym, so that later references to the term can be replaced with the acronym alone.

See the `<abbreviated-form>` (19) element for a full description of how the surface form is used together with acronyms.

Specialization hierarchy

The `<glossSurfaceForm>` element is specialized from `<p>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: universal attributes (36).

Example

The following glossary entry topic defines the term "Anti-lock Braking System". Within the topic, the `<glossSurfaceForm>` element provides a version of the term that combines both the primary term and the acronym. The content of the `<glossSurfaceForm>` might be rendered in introductory contexts when the glossary entry topic is referenced from an `<abbreviate-form>` element.

```
<glossentry id="abs">
  <glossterm>Anti-lock Braking System</glossterm>
  <glossBody>
    <glossSurfaceForm>Anti-lock Braking System (ABS)</glossSurfaceForm>
    <glossAlt>
      <glossAcronym>ABS</glossAcronym>
    </glossAlt>
  </glossBody>
</glossentry>
```

2.14 <glossSymbol>

The `<glossSymbol>` element identifies a standard image that is associated with the subject of the term.

Specialization hierarchy

The `<glossSymbol>` element is specialized from `<image>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: universal attributes (36), `@format` (46), `@href` (46), `@keyref` (47), `@scope` (51), and the attributes defined below.

@align
> Controls the horizontal alignment of an image when `@placement` is specified as "break". Common values include "left", "right", and "center".

@height

Specifies the vertical dimension for the resulting display. The value of this attribute is a real number expressed in decimal notation, optionally followed by a unit of measure. The following units of measurement are supported: cm, em, in, mm, pc, pt, and px (centimeters, ems, inches, millimeters, picas, points, and pixels, respectively). The default unit is px (pixels). Possible values include:"5", "5in", and "10.5cm".

@placement

Indicates whether an image is displayed inline or on a separate line. The default value is inline. Allowable values are "inline", "break", and "-dita-use-conref-target" (53).

@scale

Specifies a percentage as an unsigned integer by which to scale the image in the absence of any specified image height or width; a value of 100 implies that the image should be presented at its intrinsic size. If a value has been specified for the `@height` or `@width` attribute (or both), the `@scale` attribute is ignored.

@scalefit

Specifies whether an image is scaled up or down to fit within available space. The allowable values are "yes", "no", and "-dita-use-conref-target" (53). If `@height`, `@width`, or `@scale` is specified, those attributes determine the graphic size, and the `@scalefit` attribute is ignored. If none of those attributes are specified and `scalefit="yes"`, then the image is scaled by the same factor in both dimensions, so that the graphic will just fit within the available height or width, whichever is more constraining.

The available width would be that of the prevailing column or table cell, that is, the width a paragraph of text would have if the graphic were a paragraph instead od text. The available height is implementation dependent, but if feasible, it is suggested to be the page or table cell height or some other reasonable value.

@width

Specifies the horizontal dimension for the resulting display. The value of this attribute is a real number expressed in decimal notation, optionally followed by a unit of measure. The following units of measurement are supported: cm, em, in, mm, pc, pt, and px (centimeters, ems, inches, millimeters, picas, points, and pixels, respectively). The default unit is px (pixels). Possible values include:"5", "5in", and "10.5cm".

Example

The following code sample shows how the `<glossSymbol>` can be used to associate an image with glossary entry topic for Atlantic penguins:

```
<glossentry id="atlanticpuffin">
  <glossterm>Atlantic Puffin</glossterm>
  <glossdef>A sea bird that lives in the Atlantic</glossdef>
  <glossBody>
    <glossSymbol href="puffinicon.jpg" scope="local">
      <alt>Atlantic puffin icon</alt>
    </glossSymbol>
  </glossBody>
</glossentry>
```

2.15 <glossSynonym>

The `<glossSynonym>` element provides a term that is a synonym of the term and which is not a abbreviated form.

Usage information

Note A list of synonyms is specific to the language, so translation of a `<glossentry>` topic might result in an empty `<glossSynonym>` element.

Specialization hierarchy

The `<glossSynonym>` element is specialized from `<title>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: ID and conref attributes (36), localization attributes (36), `@base` (37), `@class` (37), `@outputclass` (39), and `@rev` (40).

Example

The following code sample shows how the `<glossSynonym>` element can be used: to identify a synonym for the primary term:

```
<glossentry id="automobile">
    <glossterm>Automobile</glossterm>
    <glossdef>A road vehicle, typically with four wheels, powered by an
    internal combustion engine or an electric motor.</glossdef>
  <glossBody>
    <glossAlt>
      <glossSynonym>car</glossSynonym>
    </glossAlt>
  </glossBody>
</glossentry>
```

2.16 <glossterm>

The `<glossterm>` element specifies the preferred term that is associated with a terminological concept.

Specialization hierarchy

The `<glossterm>` element is specialized from `<title>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: ID and conref attributes (36), localization attributes (36), `@base` (37), `@class` (37), `@outputclass` (39), and `@rev` (40).

Example

The following code sample shows how the `<glossterm>` element specifies the preferred term that is associated with a terminological concept:

```
<glossentry id="css">
    <glossterm>cascading style sheets</glossterm>
    <glossdef>Cascading Style Sheets is a style sheet language that is used
    for rendering the presentation of a document written in a markup
    language such as HTML or XML</glossdef>
```

```
  <glossBody>
    <glossSurfaceForm>cascading style sheets (CSS)</glossSurfaceForm>
    <glossAlt>
      <glossAcronym>CSS</glossAcronym>
    </glossAlt>
    <glossAlt>
      <glossShortForm>web style sheets</glossShortForm>
    </glossAlt>
  </glossBody>
</glossentry>
```

The `<glossShortForm>` also identifies a variant term.

2.17 <glossUsage>

The `<glossUsage>` element provides information about the correct use of a term, such as where or how it can be used.

Specialization hierarchy

The `<glossUsage>` element is specialized from `<note>`. It is defined in the glossary entry module.

Attributes

The following attributes are available on this element: universal attributes (36) and the attributes defined below.

@othertype
Specifies an alternate note type. This value is used as the user-provided note label when the `@type` attribute value is set to "other".

@type
Specifies the type of a note. This differs from the `@type` attribute on many other DITA elements. The following are the allowable values:

- "attention"
- "caution"
- "danger"
- "important"
- "note"
- "notice"
- "other"
- "remember"
- "restriction"
- "tip"
- "trouble"
- "warning"
- "-dita-use-conref-target"

Example

The following code sample shows how the `<glossUsage>` element is used to provide additional information about possible variants for the term "USB flash drive":

```
<glossentry id="usbfd">
  <glossterm>USB flash drive</glossterm>
  <glossdef>A small portable drive.</glossdef>
  <glossBody>
```

```
      <glossPartOfSpeech value="noun"/>
      <glossUsage>Do not use upper case (as in "USB Flash Drive")
        because that suggests a trademark.</glossUsage>
      <glossAlt>
        <glossAbbreviation>flash</glossAbbreviation>
        <glossStatus value="prohibited"/>
        <glossUsage>This short form is ambiguous.</glossUsage>
      </glossAlt>
    </glossBody>
  </glossentry>
```

3 Abbreviated-form domain elements

The abbreviated-form domain contains an element that can be used, in conjunction with a glossary entry topic, for rendering different versions of a term on first and later occurrences in a publication.

3.1 <abbreviated-form>

The `<abbreviated-form>` element represents a reference to a term that might appear in an abbreviated form. The abbreviated form often is an acronym.

Usage information

The `<abbreviated-form>` element typically is used in conjunction with a glossary entry topic that defines a term and an abbreviated form of that term. The glossary entry topic might also provide a surface form that specifies both the term and the abbreviation. The surface form is intended to be rendered on first use or in introductory contexts where the term might be unfamiliar to a reader. In other contexts, processors typically render the abbreviated form of the term. Note that the definition of an introductory context will differ for every deliverable format and is highly processor-specific.

For instance, a process composing a book deliverable might render the surface form of a term on the first reference to the `<glossentry>` topic within the book or for every reference within a copyright or a warranty-related warning. A process generating an online page might render the surface form as a hover tooltip on every instance of the term.

Rendering expectations

See .

Specialization hierarchy

The `<abbreviated-form>` element is specialized from `<term>`. It is defined in the abbreviated-form domain module.

Attributes

The following attributes are available on this element: universal attributes (36) and `@keyref` (47).

Example

This section contains examples of how the `<abbreviated-form>` element works in conjunction with a glossary entry topic that defines a term and its variations.

Figure 1: Markup for a glossary entry topic

The following code sample shows the markup for a simple glossary entry topic:

```
<glossentry id="id-attribute-value">
  <glossterm>Anti-lock Braking System</glossterm>
  <glossBody>
    <glossSurfaceForm>Anti-lock Braking System (ABS)</glossSurfaceForm>
    <glossAlt>
      <glossAcronym>ABS</glossAcronym>
    </glossAlt>
```

```
    </glossBody>
  </glossentry>
```

For the purposes of rendering, the code sample contains three important elements:

<glossSurfaceform>
> Defines the term as it should be rendered in an introductory context. Typically this is the long form of a term, followed by an abbreviation or acronym. Note that other languages often do not follow the same conventions as English.

<glossAcronym>
> Defines the terms as it should be rendered in a non-introductory context. Typically this is the acronym or abbreviation that is associated with the term.

<glossterm>
> Provides a fallback version of the term, which will be displayed in situations where the preferred representation is unavailable.

Figure 2: The glossary entry topic is associated with a key

In order for the <abbreviated-form> element to reference the glossary entry topic, the glossary entry topic must be associated with a key. This can happen using standard key definition, or a map architect can use the specialized <glossref> element"

```
<glossref keys="abs" href="antilock.dita"/>
```

Figure 3: The <abbreviated-form> element references the key

The <abbreviated-form> element references the key defined for the glossary entry topic, for example:

```
<section>An <abbreviated-form keyref="abs"/> helps a driver to stop. For this reason
many find an <abbreviated-form keyref="abs"/> useful.
<!-- ... -->
</section>
```

The typical rendering is that the first use of the <abbreviated-form keyref="ab"> will result in the surface form of the term, while subsequent usages will result in the acronym, as shown in the following screen capture:
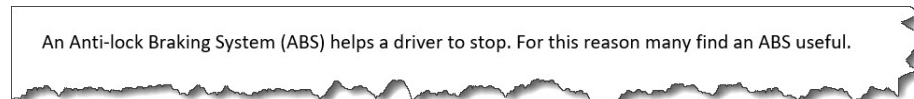
Do note, however, that processors implement varying levels of support for the <abbreviated-form> element.

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.

Item	Conformance statement
001 (3)	If the referenced topic is not a `<glossentry>` topic or a specialization of `<glossentry>`, the title of the topic **SHOULD** be rendered.
002 (3)	If the referenced topic is a `<glossentry>` topic or a specialization of `<glossentry>` and the `<abbreviated-form>` element is located in an introductory context: • (If the referenced topic contains a non-empty `<glossSurfaceForm>` element) Processors **SHOULD** render the contents of the `<glossSurfaceForm>` element • (If the referenced topic does not contain a non-empty `<glossSurfaceForm>` element) Processors **SHOULD** render the contents of the `<glossterm>` element
003 (3)	If the referenced topic is a `<glossentry>` topic or a specialization of `<glossentry>` and the `<abbreviated-form>` element is located in a non-introductory context: • (If the referenced topic contains a non-empty `<glossAcronym>` element) Processors **SHOULD** render the abbreviated form of the term by displaying the contents of the `<glossAcronym>` element. • (If the reference topic does not contain a non-empty `<glossAcronym>` element) Processors **SHOULD** render the contents of the `<glossterm>` element

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.
>
> **Disposition: Unassigned**

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.
>
> **Disposition: Unassigned**

@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.

> **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.

Disposition: Unassigned

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" ...

Disposition: Unassigned

@keyscope (common map attributes)

Specifies that the element marks the boundaries of a key scope.

See B.4 STUB CONTENT (53) 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.

Disposition: Unassigned

@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".

Disposition: Unassigned

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.

Comment by Kristen J Eberlein on 28 September 2022

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

@linking

> 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.

Disposition: Unassigned

@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.
>
> **Disposition: Unassigned**

@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 B.4 STUB CONTENT (53) 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.
>
> **Disposition: Unassigned**

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 `<tgroup>`.

@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 `<tgroup>`.

@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>`.

@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?
> **Disposition: Unassigned**

@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 (53).
>
> 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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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 ...
>
> **Disposition: Unassigned**

@encoding (inclusion attributes)

> **Comment by Kristen J Eberlein on 29 April 2019**
>
> Can we replace "should" in the following definition?
>
> **Disposition: Unassigned**

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 URIs.

> **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 B.4 STUB CONTENT (53) for detailed information on supported values and processing implications.

@href (link-relationship attributes)
Specifies a reference to a resource. See B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) for detailed information on supported values and processing implications.

@type (link-relationship attributes)
Describes the target of a reference. See B.4 STUB CONTENT (53) for detailed information on supported values and processing implications.

Localization attributes

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.

Disposition: Unassigned

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.

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.
>
> **Disposition: Unassigned**

@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?
>
> **Disposition: Unassigned**

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?
>
> **Disposition: Unassigned**

@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.
>
> **Disposition: Unassigned**

@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.

> **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".
> **Disposition: Unassigned**

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**
>
> This is something wrong with the organizational structure of this topic ... Look at it in outline form, and check that the sections, titles, and content all make logical sense with the topic title of "Universal attribute group".
>
> **Disposition: Unassigned**

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.
>
> **Disposition: Unassigned**

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.
>
> **Disposition: Unassigned**

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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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?
>
> **Disposition: Unassigned**

@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".
> **Disposition: Unassigned**

@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."
> **Disposition: Unassigned**

@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.
>
> **Disposition: Unassigned**

@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.
>
> **Disposition: Unassigned**

@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?
>
> **Disposition: Unassigned**

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.
>
> **Disposition: Unassigned**

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` (46) and `@scope` (as defined on `<stentry>`) (51).

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.

Disposition: Unassigned

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" ...

Disposition: Unassigned

@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".
> **Disposition: Unassigned**

@encoding (inclusion attributes)

> **Comment by Kristen J Eberlein on 29 April 2019**
>
> Can we replace "should" in the following definition?
>
> **Disposition: Unassigned**

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.

@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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) for information on using this attribute.

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

> **Comment by robander**
> The definiton above for @keyref should be synchronized with the definition in the linked section on keys.
> **Disposition: Unassigned**

@keys

Specifies one or more names for a resource. See B.4 STUB CONTENT (53) 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 B.4 STUB CONTENT (53) 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.
>
> **Disposition: Unassigned**

@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".
> **Disposition: Unassigned**

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.

Comment by Kristen J Eberlein on 28 September 2022

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

@linking

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.

Disposition: Unassigned

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

> **Comment by robander**
> Do we need to specify the scope of "unique" here?
> **Disposition: Unassigned**

@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 (53).

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 B.4 STUB CONTENT (53) 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.
>
> **Disposition: Unassigned**

@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.

-dita-use-conref-target
See B.4 STUB CONTENT (53) 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.
>
> **Disposition: Unassigned**

@type (link-relationship attributes)
Describes the target of a reference. See B.4 STUB CONTENT (53) 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/".

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