

# DITA Language Reference

## Learning your way around DITA markup

[vertical list of authors]

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## DITA Language Reference overview

The design of the Darwin Information Typing Architecture (DITA) is based on deriving multiple information types, or *info-types*, from a common, generic topic. This language reference describes the elements that comprise the topic DTD and its initial, info-typed descendents: concept, reference, and task.

The elements that make up the DITA design represent a set of different authoring concerns:

- The main components of a topic, concept, reference, or task document,
- The common elements available for creating content within the body of a topic,
- The elements that make up the two types of tables in DITA,
- Elements that represent different subject domains,
- Elements that appear in many contexts,
- The elements contained in the prolog of a topic,
- The elements contained in the related-links part of a topic,
- Elements that are available for further specialization,
- Commonly referenced descriptions,
- and elements contained in a DITA map.

In addition, this reference also describes elements that are used to manage DITA topics, either for convenience in editing or for production as sets of topics for particular kinds of deliverables.

## Topic elements

Use the generic topic structure for untyped topics.

### dita

The <dita> element provides a top-level container for multiple topics when you create documents using the ditabase document type. The <dita> element lets you create any sequence of concept, task, and reference topics, and the ditabase document type lets you further nest these topic types inside each other. The <dita> element has no particular output implications; it simply allows you to create multiple topics of different types at the same level in a single document.

#### Contains

( [topic](#) or [concept](#) or [task](#) or [reference](#) ) (one or more)

#### Contained by

Not contained by any other element. The root element for the compound DITA document type.

#### Inheritance

Not a specializable DITA element.

#### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

#### Example

```
<dita>
  <concept id="batintro">...</concept>
  <reference id="batparts">...</reference>
  <task id="batfeeding">...</task>
  <task id="battraining">...</task>
  <task id="batcleanup">...</task>
</dita>
```

### topic

The <topic> element is the top-level DITA element for a single-subject topic or article. Other top-level DITA elements that are more content-specific are <concept>, <task>, and <reference>.

To support applications that are namespace-aware, DITA DTDs and Schemas provide the following fixed namespaced declarations for topic, and for topic-level elements derived from topic:

```
ditaarch:DITAArchVersion="1.0"
xmlns:ditaarch="http://dita.oasis-open.org/architecture/2005/"
```

In DTDs, the "ditaarch" prefix is parameterized to enable future specialization.

All DITA elements take the `xmlns=""` fixed attribute, which puts them into the null

namespace by default. This attribute is applied via the %global-atts; group.

### Contains

( [title](#) then ( [titlealts](#) ) (optional) then ( [shortdesc](#) ) (optional) then ( [prolog](#) ) (optional) then ( [body](#) ) (optional) then ( [related-links](#) ) (optional) then ( [topic](#) or [concept](#) or [task](#) or [reference](#) ) (any number) )

### Contained by

[dita](#) , [topic](#) , [concept](#) , [task](#) , [reference](#)

### Inheritance

[topic](#) / [topic](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
id	An anchor point. This ID is the target for references by href and conref attributes, and for external applications that refer to DITA content.	ID	#IMPLIED	No
conref	<p>This attribute is used to reference an ID on a topic that can be reused. For example, you could create a series of topics in a compound (dita) or nested context for authoring convenience and then reference each topic individually into a new target location. During output processing, a lookup process will pull the contents of the first topic into the calling topic markup that has the conref attribute.</p> <p>The conref value follows the same conventions as HTML for normal file links. To refer to target content in a different file, put the full URL of that topic before the # character.</p> <pre>Target elsewhere in the same file: conref="#topicid" First topic in different file: conref="filename.xml" Specific topic in different file: conref="filename.xml#topicid"</pre>	CDATA	#IMPLIED	No
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
xml:lang	Specifies the language of the element content. When no xml:lang value is supplied, the default value of English is assumed. For example, if there is a note element with the attribute xml:lang set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The	NMTOKEN	#IMPLIED	No

	allowed xml:lang values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).			
DITAArchVersion	Designates the version of the architecture that is in use.	CDATA	"1.0" (version dependent; will increase)	Yes
domains	Indicates the specialized domains that are included in the DTD.	CDATA	ui-d hi-d pr-d sw-d	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<topic id="topic">
  <title>Some little topic</title>
  <body>
    <p>Here's a <b><i>cute</i></b>,
    <b>little</b> topic.</p>
    <ul>
      <li>Some item</li>
      <li>Another item</li>
    </ul>
  </body>
</topic>
```

## title

The <title> element contains a heading or label for the main parts of a topic, including the topic as a whole, its sections and examples, and its labelled content, such as figures and tables.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) ) (any number)

### Contained by

[topic](#) , [section](#) , [example](#) , [fig](#) , [figgroup](#) , [linklist](#) , [table](#) , [concept](#) , [task](#) , [reference](#) , [refsyn](#) , [syntaxdiagram](#) , [synblk](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#) , [fragment](#)

### Inheritance

[topic](#) / [title](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>	
--------------------	---	--

**Example**

```
<topic id="topic">
  <title>Some little topic</title>
  <body>
    <p>Some discourse.</p>
  </body>
</topic>
```

**titlealts**

The alternate title element (<titlealts>) is optional, but can occur after the topic title. Two elements can be inserted as sub-elements of <titlealts>: navigation title <navtitle> and search title <searchtitle>.

When your DITA topic is transformed to XHTML, the <searchtitle> element is used to create a title element at the top of the resulting XHTML file. This title may differ from the first level heading that shows in the main browser window. In HTML output, the <navtitle> may be used to create navigation panels when your DITA topics are part of an HTML-based help or information system. The design intent is to enable navigation for HTML Help and Eclipse help systems.

When the <titlealts> element is absent, the title element for is used for all purposes.

**Contains**

( ( [navtitle](#) ) (optional) then ( [searchtitle](#) ) (optional) )

**Contained by**

[topic](#) , [concept](#) , [task](#) , [reference](#)

**Inheritance**

[topic](#) / [titlealts](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<task id="progexample">
  <title>Example of Required Programming</title>
  <titlealts><navtitle>Programming Example</navtitle></titlealts>
  <taskbody> . . . </taskbody>
</task>
```

**navtitle**

The navigation title (<navtitle>) element is one of a set of alternate titles that can be

included inside the <titlealts> element. This navigation title may differ from the first level heading that shows in the main browser window. Use <navtitle> when the actual title of the topic isn't appropriate for use in navigation panes or online contents (for example, because the actual title is too long).

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[titlealts](#)

### Inheritance

[topic](#) / [navtitle](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id=progexample">
  <title>Publishing a DITA information set in PDF</title>
  <titlealts><navtitle>Publishing in PDF</navtitle></titlealts>
  <taskbody> . . . </taskbody>
</task>
```

## searchtitle

When your DITA topic is transformed to XHTML, the <searchtitle> element is used to create a title element at the top of the resulting HTML file. This title is normally used in search result summaries by some search engines, such as that in Eclipse ( <http://eclipse.org> ); if not set, the XHTML's title element defaults to the source topic's title content (which may not be as well optimized for search summaries)

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[titlealts](#)

### Contained by

[topicmeta](#)

### Inheritance

[topic](#) / [searchtitle](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id="progexample">
  <title>Programming Example</title>
  <titlealts><searchtitle>Example of Required
Programming</searchtitle></titlealts>
  <taskbody> . . . </taskbody>
</task>
```

## shortdesc

The short description (<shortdesc>) element occurs between the topic title and the topic body, as the initial paragraph-like content of a topic. The short description, which represents the purpose or theme of the topic, is also intended to be used as a link preview and for searching.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) ) (any number)

### Contained by

[topic](#) , [concept](#) , [task](#) , [reference](#)

### Contained by

[topicmeta](#)

### Inheritance

[topic](#) / [shortdesc](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id="abstractexample">
  <title>Abstract Example</title>
```

```
<shortdesc>This documentation addresses messages...</shortdesc>
<taskbody>...</taskbody>
</task>
```

## body

The <body> element is the container for the main content of a <topic>.

### Contains

( [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [required-cleanup](#) or [section](#) or [example](#) ) (any number)

### Contained by

[topic](#)

### Inheritance

[topic](#) / [body](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<topic>
<title>...</title>
<prolog>...</prolog>
<body> ... .. </body>
</topic>
```

## section

The <section> element represents an organizational division in a topic. Sections are used to organize subsets of information that are directly related to the topic. For example, the titles **Reference Syntax**, **Example** and **Properties** might represent section-level discourse within a topic about a command-line process—the content in each section relates uniquely to the subject of that topic. Multiple sections within a single topic do not represent a hierarchy, but rather peer divisions of that topic. Sections cannot be nested. A section may have an optional title.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [title](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[body](#) , [conbody](#) , [refbody](#)

### Inheritance

[topic](#) / [section](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<reference id="reference">
  <title>Copy Command</title>
  < refbody>
    <section>
      <title>Purpose</title>
      This little command copies
      things.
    </section>
  </refbody>
</reference>
```

## example

The `<example>` element is a section with the specific role of containing examples that illustrate or support the current topic. The `<example>` element has the same content model as `<section>`.

DITA uses `<example>` to contain both discussion and sample code or outputs. Hence, in a DITA topic, to represent programming code and results within the discussion in an example, use the `<codeblock>` and `<systemoutput>` elements within the example element. For lines of text, use the `<lines>` element. For pre-formatted text such as email headers, use the `<pre>` element.

### Contains

( [text data](#) or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [title](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

### Contained by

[body](#) , [conbody](#) , [taskbody](#) , [refbody](#)

## Inheritance

[topic](#) / [example](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## related-links

The related information links of a topic (<related-links> element) are stored in a special section following the body of the topic. After a topic is processed into its final output form, the related links are usually displayed at the end of the topic, although some Web-based help systems might display them in a separate navigation frame.

Prerequisite links are an exception (that is, in which *importance="required"* and the role is *compatible-not ancestor/parent/child/descendant/next*). These get sorted after the <shortdesc> (all topics) or after the <prereq> section (for tasks).

### Processing notes:

1. PDF output typically ignores hierarchical links, for example ancestor/parent/child/descendant/next/previous/sibling, although it may include some child links to produce summaries at the start of chapters.
2. Links not in a <linklist> will be sorted on output based on type, role, and importance.
3. The value of the *format* attribute defaults to "dita" unless the attribute *scope="external"*, when format is assumed to be not-dita.

### Contains

( [link](#) or [linklist](#) or [linkpool](#) ) (one or more)

### Contained by

[topic](#) , [concept](#) , [task](#) , [reference](#)

### Inheritance

[topic](#) / [related-links](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%rel-atts; (type, role, otherrole)	A set of related attributes, described at <a href="#">%rel-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
format	<p>The format attribute identifies the format of the resource being cross referenced. The default format is "dita" .</p> <p>Possible values include:</p> <p><b>dita</b></p> <p>The destination uses DITA topic markup, or markup specialized from a DITA topic. Unless otherwise specified, the corresponding default type will be treated as "topic."</p> <p><b>html</b></p> <p>The format of the linked-to resource is HTML or XHTML.</p> <p><b>pdf</b></p> <p>The format of the linked-to resource is PDF (opens a new window).</p> <p><b>ditamap</b></p> <p>The linked-to resource is a DITA map. It represents a referenced hierarchy at a position within referencing hierarchy, and a referenced relationship table included outside the referencing hierarchy</p> <p><b>(no value)</b></p> <p>Defaults to "dita"</p> <p>For other formats, you can use the file extension without the "." (for example, in a link to file "readme.txt", use "txt" as the value)</p>	CDATA	#IMPLIED	No
scope	<p>The scope attribute identifies the closeness of the relationship between the current document and the target resource.</p> <ul style="list-style-type: none"> <li>• Set scope to <code>local</code> when the resource is part of the current set of content, and should be accessed and copied to the output directory.</li> <li>• Set scope to <code>peer</code> when the resource is part of the current set of content but is not accessible at build time.</li> <li>• Set scope to <code>external</code> when the resource is not part of the current information set and should open in a new browser window.</li> </ul> <p>The default is <code>local</code>.</p>	(local   peer   external)	#IMPLIED	No

%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id="sqlj">
  <title>Creating an SQLJ file</title>
  <taskbody>...</taskbody>
  <related-links>
    <link href="#concept"><linktext>Some little concept</linktext></link>
  </related-links>
</task>
```

## Concept elements

Use the concept topic to introduce the background or overview information for tasks or reference topics. The concept topic has the restriction that following a section or example, only other sections or examples are permitted as content.

### concept

The <concept> element is the top-level element for a topic that answers the question “what is?” Concepts provide background information that users must know before they can successfully work with a product or interface. Often, a concept is an extended definition of a major abstraction such as a process or function. It might also have an example or a graphic, but generally the structure of a concept is fairly simple.

#### Contains

( [title](#) then ( [titlealts](#) ) (optional) then ( [shortdesc](#) ) (optional) then ( [prolog](#) ) (optional) then ( [conbody](#) ) (optional) then ( [related-links](#) ) (optional) then ( [topic](#) or [concept](#) or [task](#) or [reference](#) ) (any number) )

#### Contained by

[dita](#) , [topic](#) , [concept](#) , [task](#) , [reference](#)

#### Inheritance

[topic](#) / [topic](#) , [concept](#) / [concept](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
id	An anchor point. This ID is the target for references by href and conref attributes, and for external applications that refer to DITA content.	ID	#IMPLIED	No
conref	<p>This attribute is used to reference an ID on a topic that can be reused. For example, you could create a series of topics in a compound (dita) or nested context for authoring convenience and then reference each topic individually into a new target location. During output processing, a lookup process will pull the contents of the first topic into the calling topic markup that has the conref attribute.</p> <p>The conref value follows the same conventions as HTML for normal file links. To refer to target content in a different file, put the full URL of that topic before the # character.</p> <pre>Target elsewhere in the same file: conref="#topicid" First topic in different file: conref="filename.xml" Specific topic in different file: conref="filename.xml#topicid"</pre>	CDATA	#IMPLIED	No

%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
xml:lang	Specifies the language of the element content. When no xml:lang value is supplied, the default value of English is assumed. For example, if there is a note element with the attribute xml:lang set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The allowed xml:lang values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).	NMTOKEN	#IMPLIED	No
DITAArchVersion	Designates the version of the architecture that is in use.	CDATA	"1.0" (version dependent; will increase)	Yes
domains	Indicates the specialized domains that are included in the DTD.	CDATA	ui-d hi-d pr-d sw-d	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<concept id="concept">
  <title>Introduction to Bird Calling</title>
  <shortdesc>If you wish to attract more birds to your Acme Bird Feeder,
  learn the art of bird calling. Bird calling is an efficient way
  to alert more birds to the presence of your bird feeder.</shortdesc>
  <conbody>
    <p>Bird calling requires learning:</p>
    <ul>
      <li>Popular and classical bird songs</li>
      <li>How to whistle like a bird</li>
    </ul>
  </conbody>
</concept>
```

## conbody

The <conbody> element is the main body-level element for a concept. Like the <body> element of a general <topic>, <conbody> allows paragraphs, lists, and other elements as well as sections and examples. But <conbody> has a constraint that a section or an example can be followed only by other sections or examples.

### Contains

( ( [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [required-cleanup](#) ) (any number) then ( [section](#) or [example](#) ) (any number) )

**Contained by**  
[concept](#)

**Inheritance**[topic / body](#) , [concept / conbody](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## Reference elements

Use the reference elements to describe regular features of sets of things, most commonly the commands in a programming language. However, this format is also suitable for recipes, bibliographies, catalogues, and similar collections of structured descriptive prose.

### reference

The <reference> element defines a top-level container for a reference topic. Reference topics document programming constructs or facts about a product. Examples of reference topics include language elements, class descriptions, commands, functions, statements, protocols, types, declarators, operands, and API information, which provide quick access to facts, but no explanation of concepts or procedures. Reference topics have the same high-level structure as any other topic type, with a title, short description, and body. Within the body, reference topics are typically organized into one or more sections, property lists, and tables. The reference topic type provides general rules that apply to all kinds of reference information, using elements like <refsyn> for syntax or signatures, and <properties> for lists of properties and values.

#### Contains

( [title](#) then ( [titlealts](#) ) (optional) then ( [shortdesc](#) ) (optional) then ( [prolog](#) ) (optional) then ( [refbody](#) ) (optional) then ( [related-links](#) ) (optional) then ( [topic](#) or [concept](#) or [task](#) or [reference](#) ) (any number) )

#### Contained by

[dita](#) , [topic](#) , [concept](#) , [task](#) , [reference](#)

#### Inheritance

[topic](#) / [topic](#) , [reference](#) / [reference](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
id	An anchor point. This ID is the target for references by href and conref attributes, and for external applications that refer to DITA content.	ID	#IMPLIED	No
conref	This attribute is used to reference an ID on a topic that can be reused. For example, you could create a series of topics in a compound (dita) or nested context for authoring convenience and then reference each topic individually into a new target location. During output processing, a lookup process will pull the contents of the first topic into the calling topic markup that has the conref attribute.  The conref value follows the same conventions as HTML for normal file links. To refer to target content in a different file, put the full URL of that topic before the # character.	CDATA	#IMPLIED	No

	Target elsewhere in the same file: conref="#topicid" First topic in different file: conref="filename.xml" Specific topic in different file: conref="filename.xml#topicid"			
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
xml:lang	Specifies the language of the element content. When no xml:lang value is supplied, the default value of English is assumed. For example, if there is a note element with the attribute xml:lang set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The allowed xml:lang values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).	NMTOKEN	#IMPLIED	No
DITAArchVersion	Designates the version of the architecture that is in use.	CDATA	"1.0" (version dependent; will increase)	Yes
domains	Indicates the specialized domains that are included in the DTD.	CDATA	ui-d hi-d pr-d sw-d	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<reference id="refexample">
  <title>A reference topic</title>
  <refbody>
    <refsyn>Describe command or api syntax here, possibly
      using <lt;/synph> or <lt;/syntax> markup for explicit
      definition of syntax or prototype construction.
    </refsyn>
    <section>
      <title>Some section title</title>
    </section>
    <properties>
      <property>
        <proptype>type</proptype>
        <propvalue>value</propvalue>
        <propdesc>description</propdesc>
      </property>
    </properties>
  </refbody>
</reference>
```

### refbody

The <refbody> element is a container for the main content of the reference topic. Reference topics limit the body structure to tables (both simple and standard), property

lists, syntax sections, and generic sections and examples, in any sequence or number.

Reference topics represent the kind of information that users typically consult to understand programming objects, statements, commands, configuration file options, recipes, terminological descriptions, and so forth.

### Contains

( ( [section](#) or [refsyn](#) or [example](#) or [table](#) or [simpletable](#) or [properties](#) ) (any number) )

### Contained by

[reference](#)

### Inheritance

[topic](#) / [body](#) , [reference](#) / [refbody](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

See [reference](#) .

## refsyn

The <refsyn> element is a special section inside a reference topic. The section often contains syntax or signature content (for example, a command-line utility's calling syntax, or an API's signature). The <refsyn> contains a brief, possibly diagrammatic description of the subject's interface or high-level structure.

### Contains

( [text data](#) or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [title](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[refbody](#)

### Inheritance

[topic](#) / [section](#) , [reference](#) / [refsyn](#)

### Attributes

Name	Description	Data Type	Default	Required?
------	-------------	-----------	---------	-----------

			Value	
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [reference](#) .**properties**

The <properties> element gives a list of properties for the subject of the current topic, for example whether a class is public or protected. Each property can include the type, value, and a description. The typical rendering is usually in a table-like format. To represent multiple values for a type, just create additional property elements and use only the <propvalue> element (and <propdesc> when needed) for each successive value.

**Contains**

( ( [prophead](#) ) (optional) then ( [property](#) ) (one or more) )

**Contained by**

[refbody](#)

**Inheritance**

[topic](#) / [simpletable](#) , [reference](#) / [properties](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
relcolwidth	A relative value to specify the width of a column in relationship to the width of the other columns <b>for print output</b> . The values are totaled and made a percent. For example:  <pre>relcolwidth="1* 2* 3"</pre> causes widths of 16.7%, 33.3%, and 66.7%.  <pre>relcolwidth="90* 150"</pre> causes width of 37.5% and 62.5%.	CDATA	#IMPLIED	No
keycol	Defines the column that will be used for row headings. No value indicates no key column. When present, the numerical value causes the specified column to be	NMTOKEN	#IMPLIED	No

	highlighted as a vertical header.			
refcols	Designates columns that contain references, and are candidates for automated linking (not currently supported). Columns are identified by a comma-delimited list of numbers (for example: 1, 3).	NMTOKENS	#IMPLIED	No
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

```

<properties>
  <prophead>
    <proptypehd>Visual Element</proptypehd>
    <propvaluehd>Value</propvaluehd>
    <propdeschd>Implication</propdeschd>
  </prophead>
  <property>
    <proptype>color</proptype>
    <propvalue>red</propvalue>
    <propdesc>depicts anger</propdesc>
  </property>
  <property>
    <propvalue>green</propvalue>
    <propdesc>depicts permission</propdesc>
  </property>
</properties>

```

## property

The <property> element represents a property of the current topic's subject. For example, if the current topic is a class, the property might show that the class is protected rather than public. It contains three optional elements: type, value, and description.

### Contains

(( [proptype](#) ) (optional) then ( [propvalue](#) ) (optional) then ( [propdesc](#) ) (optional) )

**Contained by**  
[properties](#)

**Inheritance**  
[topic](#) / [strow](#) , [reference](#) / [property](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
------	-------------	-----------	---------------	-----------

%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [properties](#) .

## proptype

The proptype element describes the type of property.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) ( *any number* )

**Contained by**[property](#)**Inheritance**[topic](#) / [stentry](#) , [reference](#) / [proptype](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
specentry	The specialized entry attribute allows architects of specialized types to define a fixed or default header title for a specialized stentry element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [properties](#) .

## propdesc

The &lt;propdesc&gt; element is used to provide a short description of the property type and its listed values (or just the value).

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [image](#) ) (any number)

**Contained by**  
[property](#)

**Inheritance**  
[topic](#) / [stentry](#) , [reference](#) / [propdesc](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
specentry	The specialized entry attribute allows architects of specialized types to define a fixed or default header title for a specialized stentry element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [properties](#) .

## propvalue

The <propvalue> element indicates the value or values for the current property type. You can put values in separate rows if they need separate descriptions, and just leave the <proptype> element blank.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

**Contained by**  
[property](#)

**Inheritance**  
[topic](#) / [stentry](#) , [reference](#) / [propvalue](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
------	-------------	-----------	---------------	-----------

%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
specentry	The specialized entry attribute allows architects of specialized types to define a fixed or default header title for a specialized stentry element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [properties](#) .

## prophead

The prophead element supports regular headings for the properties element.

**Contains**( ( [proptypehd](#) ) (*optional*) then ( [propvaluehd](#) ) (*optional*) then ( [propdeschd](#) ) (*optional*) )**Contained by**[properties](#)**Inheritance**[topic](#) / [sthead](#) , [reference](#) / [prophead](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [properties](#) .

## Task elements

Use the task topic to describe the steps of a particular task, or to provide an overview of a higher-level task. The task topic includes sections for describing the context, prerequisites, actual steps, expected results, example, and expected next steps for a task.

### task

The <task> element is the top-level element for a task topic. Tasks are the main building blocks for task-oriented user assistance. They generally provide step-by-step instructions that will enable a user to perform a task. A task answers the question of "how to?" by telling the user precisely what to do and the order in which to do it. Tasks have the same high-level structure as other topics, with a title, short description and body.

#### Contains

( [title](#) then ( [titlealts](#) ) (optional) then ( [shortdesc](#) ) (optional) then ( [prolog](#) ) (optional) then ( [taskbody](#) ) (optional) then ( [related-links](#) ) (optional) then ( [topic](#) or [concept](#) or [task](#) or [reference](#) ) (any number) )

#### Contained by

[dita](#) , [topic](#) , [concept](#) , [task](#) , [reference](#)

#### Inheritance

[topic](#) / [topic](#) , [task](#) / [task](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
id	An anchor point. This ID is the target for references by href and conref attributes, and for external applications that refer to DITA content.	ID	#IMPLIED	No
conref	<p>This attribute is used to reference an ID on a topic that can be reused. For example, you could create a series of topics in a compound (dita) or nested context for authoring convenience and then reference each topic individually into a new target location. During output processing, a lookup process will pull the contents of the first topic into the calling topic markup that has the conref attribute.</p> <p>The conref value follows the same conventions as HTML for normal file links. To refer to target content in a different file, put the full URL of that topic before the # character.</p> <pre> Target elsewhere in the same file: conref="#topicid" First topic in different file: conref="filename.xml" Specific topic in different </pre>	CDATA	#IMPLIED	No

	<code>file: conref="filename.xml#topicid"</code>			
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
xml:lang	Specifies the language of the element content. When no xml:lang value is supplied, the default value of English is assumed. For example, if there is a note element with the attribute xml:lang set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The allowed xml:lang values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).	NMTOKEN	#IMPLIED	No
DITAArchVersion	Designates the version of the architecture that is in use.	CDATA	"1.0" (version dependent; will increase)	Yes
domains	Indicates the specialized domains that are included in the DTD.	CDATA	ui-d hi-d pr-d sw-d	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id="sqlj">
  <title>Creating an SQLJ file</title>
  <taskbody>
    <context>Once you have set up SQLJ, you need to create a new SQLJ file.
    </context>
    <steps>
      <step><cmd>Open...</cmd></step>
    </steps>
  </taskbody>
</task>
```

## taskbody

The `<taskbody>` element is the main body-level element inside a task topic. A task body has a very specific structure, with the following elements in this order: `<prereq>`, `<context>`, `<steps>`, `<result>`, `<example>` and `<postreq>`. Each of the body sections are optional.

### Contains

( ( [prereq](#) ) (optional) then ( [context](#) ) (optional) then ( [steps](#) or [steps-unordered](#) ) (optional) then ( [result](#) ) (optional) then ( [example](#) ) (optional) then ( [postreq](#) ) (optional) )

### Contained by

[task](#)

**Inheritance**[topic / body](#) , [task / taskbody](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [task](#) .**postreq**

The <postreq> element describes steps or tasks that the user should do after the successful completion of the current task. It is often supported by links to the next task or tasks in the <related-links> section.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**[taskbody](#)**Inheritance**[topic / section](#) , [task / postreq](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<postreq>Notify the proctor upon completing this self-test.</postreq>
```

## prereq

The pre-requisite (<prereq>) section of a task should document things the user needs to know or do before starting the current task. Prerequisite links will be placed in a list after the related-links section; on output the <prereq> links from the related-links section are added to the <prereq> section.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[taskbody](#)

### Inheritance

[topic](#) / [section](#) , [task](#) / [prereq](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id="sqlj">
  <title>Creating an SQLJ file</title>
  <taskbody>
    <prereq>Before creating a new SQLJ file, you must
      log in to the SQLJ server.</prereq>
  </taskbody>
</task>
```

## result

The <result> element describes the expected outcome for the task as a whole.

**Note:** If this is the outcome of a specific step, put this in the <stepresult> element instead.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or

[boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**  
[taskbody](#)

**Inheritance**  
[topic](#) / [section](#) , [task](#) / [result](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id="sqlj">
  <title>Creating an SQLJ file</title>
  <taskbody>
    <context>Once you have set up SQLJ, you need to create a new SQLJ file. You cannot add #sqlj statements directly in the Source pane of the Workbench.</context>
    <result>The SQLJ file is successfully created when the SQLJ server displays the "File Created" dialog.</result>
  </taskbody>
</task>
```

## context

The <context> section of a task provides background information for the task. This information helps the user understand what the purpose of the task is and what they will gain by completing the task. This section should be brief and does not replace or recreate a concept topic on the same subject, although the context section may include some conceptual information.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**  
[taskbody](#)

**Inheritance**  
[topic](#) / [section](#) , [task](#) / [context](#)

## Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<task id="sqlj">
<title>Creating an SQLJ file</title>
<taskbody>
<context>Once you have set up SQLJ, you need to create a new SQLJ file.
</context>
</task>
```

## steps

The <steps> section of a task provides the main content of the task topic. The task is described as a series of steps that the user must follow to accomplish the task. One or more <steps> elements is required inside the <steps> section.

Two or more steps appear as an ordered list. A single step appears as a paragraph. If all of the contained steps are simple (that is, have no more than a <cmd> element each) then the step list should default to compact. Otherwise it should be formatted as uncompact (with blank lines between each step on output).

### Contains

(( [step](#) ) (one or more) )

### Contained by

[taskbody](#)

### Inheritance

[topic](#) / [ol](#) , [task](#) / [steps](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```

<task id="sqlj">
<title>Creating an SQLJ file</title>
<taskbody>
  <context>Once you have set up SQLJ, you need to create a new SQLJ
  file.</context>
  <steps>
    <step>
      <cmd>In a text editor, create a new file.</cmd>
    </step>
    <step>
      <cmd>Enter the first query statement.</cmd>
    </step>
  </steps>
</taskbody>
</task>

```

**steps-unordered**

Like the `<steps>` element, the `<steps-unordered>` section of a task provides the main content of the task topic, but particularly for cases in which the order of steps may vary from one situation to another. One or more steps is required inside the `<steps-unordered>` section.

Two or more steps appear as an unordered list. A single step appears as a paragraph. If all of the contained steps are simple (that is, have no more than a `<cmd>` element each) then the list should default to compact. Otherwise it should be formatted as uncompact (with blank lines between each step on output).

**Contains**

(( [step](#) ) (one or more))

**Contained by**

[taskbody](#)

**Inheritance**

[topic](#) / [ul](#) , [task](#) / [steps-unordered](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```

<task id="sqlj">
<title>Creating an SQLJ file</title>
<taskbody>
  <context>Once you have set up SQLJ, you need to create a new SQLJ
  file.</context>
  <steps-unordered>
    <step><cmd>In a text editor, create a new file.</cmd></step>
  </steps-unordered>
</taskbody>
</task>

```

`</task>`

## step

The `<step>` element represents an action that a user must follow to accomplish a task. Each step in a task must contain a command `<cmd>` element which describes the particular action the user must do to accomplish the overall task. The step element can also contain information `<info>`, substeps `<substeps>`, tutorial information `<tutorialinfo>`, a step example `<stepxmp>`, choices `<choices>` or a stepresult `<stepresult>`, although these are optional.

### Contains

( `cmd` then ( `info` or `substeps` or `tutorialinfo` or `stepxmp` or `choicetable` or `choices` ) ( *any number* ) then ( `stepresult` ) ( *optional* ) )

### Contained by

`steps` , `steps-unordered`

### Inheritance

`topic / li` , `task / step`

### Attributes

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether the element it modifies is optional or required.	optional   required	#IMPLIED	No
%select-atts;	A set of related attributes, described at <a href="#">select-atts</a> . <b>Note:</b> For this element, the attribute <i>importance</i> has only the values "required" and "optional."			
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
translate	Indicates whether the content of the element should be translated or not.	yes   no	#IMPLIED	No
xml:lang	Specifies the language of the element content. When no <code>xml:lang</code> value is supplied, the default value of English is assumed. For example, if there is a note element with the attribute <code>xml:lang</code> set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The allowed <code>xml:lang</code> values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).	NMTOKEN	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## Example

```

<task id="sqlj">
<title>Creating an SQLJ file</title>
<taskbody>
<context>Once you have set up SQLJ, you need to create a new SQLJ file.
</context>
<steps>
<step><cmd>Select
<menucascade><uicontrol>File</uicontrol><uicontrol>New</uicontrol>.</cmd>
<info>New files are created with default values based on a standard
template.</info>
</step>
</steps>
</taskbody>
</task>

```

## choices

The `<choices>` element contains a list of `<choice>` elements. It is used when the user will need to choose one of several actions while performing the steps of a task.

### Contains

(( [choice](#) ) (one or more) )

### Contained by

[step](#)

### Inheritance

[topic](#) / [ul](#) , [task](#) / [choices](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## Example

```

<step><cmd>Choose a server.</cmd>
<choices>
<choice>If you have a remote server you want to test on, type the
IP address or hostname of the server here.</choice>
<choice>If you want to do local testing, just type localhost.</choice>
</choices>
</step>

```

## choice

Each `<choice>` element describes one way that the user could accomplish the current step.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or

[boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simplatable](#) or [itemgroup](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**  
[choices](#)

**Inheritance**  
[topic / li](#) , [task / choice](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>Choose a server.</cmd>
<choices>
  <choice>If you have a remote server you want to test on, type the
  IP address or hostname of the server here.</choice>
  <choice>If you want to do local testing, just type localhost.</choice>
</choices>
</step>
```

## stepxmp

The step example (<stepxmp>) element is used to illustrate a step of a task. The example can be a couple of words, or an entire paragraph.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simplatable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**  
[step](#) , [substep](#)

**Inheritance**  
[topic / itemgroup](#) , [task / stepxmp](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<step>
  <cmd>Type a name for the widget.</cmd>
  <stepxmp>For example, <userinput>mywidget</userinput></stepxmp>
</step>
```

**substeps**

The `<substeps>` element allows you to break a step down into a series of separate actions, and should be used only if necessary. Try to describe the steps of a task in a single level of steps. If you need to use more than one level of substep nesting, you should probably rewrite the task to simplify it.

**Contains**

( [substep](#) ) (one or more)

**Contained by**

[step](#)

**Inheritance**

[topic](#) / [ol](#) , [task](#) / [substeps](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<substeps>
  <substep><cmd>Hold pencil in a steady, level position.</cmd></substep>
  <substep><cmd>Turn handle until resistance diminishes.</cmd>
  <info>Note: initially, it may be somewhat difficult to turn the handle if
  pencil has never been sharpened before.</info></substep>
  <substep><cmd>To determine if pencil is sharp, remove it from the
  sharpener
  and inspect the tip.</cmd></substep>
</substeps>
```

**substep**

A `<substep>` element has the same structure as a `<step>`, except that it does not allow lists of choices or substeps within it, in order to prevent unlimited nesting of steps.

**Contains**

( `cmd` then ( `info` or `tutorialinfo` or `stepxmp` ) (any number) then ( `stepresult` ) (optional) )

**Contained by**

`substeps`

**Inheritance**

`topic / li` , `task / substep`

**Attributes**

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether the element it modifies is optional or required.	optional   required	#IMPLIED	No
%select-atts;	A set of related attributes, described at <a href="#">select-atts</a> . <b>Note:</b> For this element, the attribute <i>importance</i> has only the values "required" and "optional."			
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
translate	Indicates whether the content of the element should be translated or not.	yes   no	#IMPLIED	No
xml:lang	Specifies the language of the element content. When no <code>xml:lang</code> value is supplied, the default value of English is assumed. For example, if there is a note element with the attribute <code>xml:lang</code> set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The allowed <code>xml:lang</code> values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).	NMTOKEN	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

See [substeps](#) .

**cmd**

The command (`<cmd>`) element is required as the first element inside a `<step>`. It provides the active voice instruction to the user for completing the step, and should not be more than one sentence. If the step needs additional explanation, this can follow the `<cmd>` element inside an `info` element.

**Contains**

( text data or `ph` or `codeph` or `synph` or `filepath` or `msgph` or `userinput` or `systemoutput` or

[b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**  
[step](#) , [substep](#)

**Inheritance**  
[topic](#) / [ph](#) , [task](#) / [cmd](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to associate the <cmd> with another task that provides more details for that particular step.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>In a text editor, create a new file.</cmd></step>
```

## info

The information element (<info>) occurs inside a <step> element to provide additional information about the step.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**  
[step](#) , [substep](#)

**Inheritance**  
[topic](#) / [itemgroup](#) , [task](#) / [info](#)

**Attributes**

Name	Description	Data Type	Default	Required?
------	-------------	-----------	---------	-----------

			Value	
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>Type a name for the widget.</cmd>
<info>The widget name is created when you configure the widget
in the Widget Configuration Dialog. It is not an actual class
name or file name, just a label for the widget as used in this
application.</info>
</step>
```

## stepresult

The `<stepresult>` element provides information on the expected outcome of a step. If a user interface is being documented, the outcome could describe a dialog box opening, or the appearance of a progress indicator. Step results are useful to assure a user that they are on track, but should not be used for every step, as this quickly becomes tedious.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[step](#) , [substep](#)

### Inheritance

[topic](#) / [itemgroup](#) , [task](#) / [stepresult](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step>
<cmd importance="urgent">Once you have the water place it in the
```

```

microwave.</cmd>
<info>Try not to spill any, as water is very wet.</info>
<substeps>
  <substep importance="required">
    <cmd>Start the Microwave.</cmd>
    <stepxmp>As an example, push the <b>Start</b> button</stepxmp>
    <stepresult>The Microwave starts running. You should hear it
humming.</stepresult>
  </substep>
  <substep importance="optional">
    <cmd>Once the water begins to boil, stop the Microwave.</cmd>
  </substep>
</substeps>
</step>

```

## tutorialinfo

The tutorial info (<tutorialinfo>) element contains information that is included in a step when a task is part of a tutorial. The <tutorialinfo> element allows you to turn a task into a learning exercise by including explanatory content about methods for completing the current step. The information should be excluded when a task is processed on its own.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[step](#) , [substep](#)

### Inheritance

[topic](#) / [itemgroup](#) , [task](#) / [tutorialinfo](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```

<steps>
  <step>
    <cmd>Do this</cmd>
    <tutorialinfo>In your editor, open the first element and click on
the dialog.</tutorialinfo>
  </step>
  <step>
    <cmd>Do that</cmd>
    <tutorialinfo>Move the framulator into the foobar box.</tutorialinfo>
  </step>
</steps>

```

## choicetable

The <choicetable> element contains a series of optional choices available within a step of a task.

### Contains

( ( [chhead](#) ) (optional) then ( [chrow](#) ) (one or more) )

### Contained by

[step](#)

### Inheritance

[topic](#) / [simpletable](#) , [task](#) / [choicetable](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
relcolwidth	A relative value to specify the width of a column in relationship to the width of the other columns <b>for print output</b> . The values are totaled and made a percent. For example:  <code>relcolwidth="1* 2* 3*"</code> causes widths of 16.7%, 33.3%, and 66.7%.  <code>relcolwidth="90* 150*"</code> causes width of 37.5% and 62.5%.	CDATA	#IMPLIED	No
keycol	Defines the column that will be used for row headings. No value indicates no key column. When present, the numerical value causes the specified column to be highlighted as a vertical header.	NMTOKEN	#IMPLIED	No
refcols	Designates columns that contain references, and are candidates for automated linking (not currently supported). Columns are identified by a comma-delimited list of numbers (for example: 1, 3).	NMTOKENS	#IMPLIED	No
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>	
--------------------	---	--

**Example**

```
<step><cmd>Then this</cmd>
<choicetable>
  <chhead>
    <choptionhd>Do something</choptionhd>
    <chdeschd>And this happens</chdeschd>
  </chhead>
  <chrow><choption>Do this</choption>
    <chdesc>and this will happen</chdesc></chrow>
  <chrow><choption>Do that</choption>
    <chdesc>and that will happen</chdesc></chrow>
</choicetable>
</step>
```

**chrow**

The <chrow> element is a container inside the <choicetable> element. The <chrow> element contains both a <choption> and <chdesc> element as a pair.

**Contains**

(( [choption](#) ) then ( [chdesc](#) ))

**Contained by**  
[choicetable](#)

**Inheritance**  
[topic](#) / [strow](#) , [task](#) / [chrow](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<step><cmd>Then this</cmd>
<substeps>
  <substep importance="optional"><cmd>which is done by doing
this</cmd></substep>
  <substep importance="required"><cmd>and then this.</cmd></substep>
</substeps>
<choicetable>
  <chhead>
    <choptionhd>Do something</choptionhd>
    <chdeschd>Or Else this</chdeschd>
  </chhead>
  <chrow><choption>Do this</choption>
    <chdesc>and this will happen</chdesc></chrow>
  <chrow><choption>Do that</choption>
    <chdesc>and that will happen</chdesc></chrow>
</choicetable>
</step>
```

## chhead

The <chhead> element is a container inside the <choicetable> element that provides specific heading text to override the default **Options** and **Description** headings. The <chhead> element contains both a [choptionhd](#) and [chdeschd](#) element as a pair.

### Contains

( ( [choptionhd](#) ) then ( [chdeschd](#) ) )

### Contained by

[choicetable](#)

### Inheritance

[topic](#) / [sthead](#) , [task](#) / [chhead](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>Then this</cmd>
<substeps>
  <substep importance="optional"><cmd>which is done by doing
this</cmd></substep>
  <substep importance="required"><cmd>and then this.</cmd></substep>
</substeps>
<choicetable>
  <chhead>
    <choptionhd>Do something</choptionhd>
    <chdeschd>Or Else this</chdeschd>
  </chhead>
  <chrow><choption>Do this</choption>
    <chdesc>and this will happen</chdesc></chrow>
  <chrow><choption>Do that</choption>
    <chdesc>and that will happen</chdesc></chrow>
</choicetable>
</step>
```

## chdesc

The <chdesc> element is a description of an option that a user chooses while performing a step to accomplish a task. It explains why the user would choose that option, and might explain the result of the choice when it is not immediately obvious.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#)

or [object](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

**Contained by**  
[chrow](#)

**Inheritance**  
[topic](#) / [stentry](#) , [task](#) / [chdesc](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
specentry	The specialized entry attribute allows architects of specialized types to define a fixed or default header title for a specialized stentry element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>Then this</cmd>
<substeps>
  <substep importance="optional"><cmd>which is done by doing
this</cmd></substep>
  <substep importance="required"><cmd>and then this.</cmd></substep>
</substeps>
<choicetable>
  <chrow><choption>Do this</choption>
    <chdesc>and this will happen</chdesc></chrow>
  <chrow><choption>Do that</choption>
    <chdesc>and that will happen</chdesc></chrow>
</choicetable>
</step>
```

## chdeschd

The `<chdeschd>` option provides a specific label for the list of descriptions of options that a user must choose to accomplish a step of a task. The default label overridden by `<chdeschd>` is **Description**.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

**Contained by**  
[chhead](#)

**Inheritance**

topic / stentry , task / chdeschd

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
specentry	The specialized entry attribute allows architects of specialized types to define a fixed or default header title for a specialized stentry element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```

<step><cmd>Then this</cmd>
<choicetable>
  <chhead>
    <choptionhd>Do something</choptionhd>
    <chdeschd>Or Else this</chdeschd>
  </chhead>
  <chrow><choption>Do this</choption>
    <chdesc>and this will happen</chdesc></chrow>
  <chrow><choption>Do that</choption>
    <chdesc>and that will happen</chdesc></chrow>
</choicetable>
</step>

```

**choption**

The <choption> element describes an option that a user could choose to accomplish a step of a task. In a user interface, for example, this might be the name of radio button.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**[chrow](#)**Inheritance**

topic / stentry , task / choption

**Attributes**

Name	Description	Data Type	Default	Required?
------	-------------	-----------	---------	-----------

			Value	
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
spentry	The specialized entry attribute allows architects of specialized types to define a fixed or default header title for a specialized stentry element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>Then this</cmd>
<choicetable>
  <chhead>
    <choptionhd>Do something</choptionhd>
    <chdeschd>And this happens</chdeschd>
  </chhead>
  <chrow><choption>Do this</choption>
    <chdesc>and this will happen</chdesc></chrow>
  <chrow><choption>Do that</choption>
    <chdesc>and that will happen</chdesc></chrow>
</choicetable>
</step>
```

## choptionhd

The <choptionhd> element provides a specific label for the list of options that a user chooses from to accomplish a step. The default label for options is **Option**.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

### Contained by

[chhead](#)

### Inheritance

[topic](#) / [stentry](#) , [task](#) / [choptionhd](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
spentry	The specialized entry attribute allows architects of specialized types to define a	CDATA	#IMPLIED	No

	fixed or default header title for a specialized stentry element. Not intended for direct use by authors.			
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>Then this</cmd>
<choicetable>
  <chhead>
    <choptionhd>Do something</choptionhd>
    <chdeschd>And this happens</chdeschd>
  </chhead>
  <chrow><choption>Do this</choption>
    <chdesc>and this will happen</chdesc></chrow>
  <chrow><choption>Do that</choption>
    <chdesc>and that will happen</chdesc></chrow>
</choicetable>
</step>
```

## Body elements

The body elements support the most common types of content authoring for topics: paragraphs, lists, phrases, figures, and other common types of exhibits in a document.

### alt

The alt element provides an element equivalent of the `alt` attribute on the image element. As an element, it provides direct text entry within an XML editor and is more easily accessed than an attribute for translation.

The use of the alt attribute is deprecated but still supported. The alt element is the preferred way of indicating alternative text for an image.

#### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) ( any number )

#### Contained by

[image](#)

#### Inheritance

[topic](#) / [alt](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

#### Example

The markup for alt text within an image looks like this:

```
<image href="tip-ing.jpg" />
  <alt>Here's a Tip!</alt>
</image>
```

### cite

The `<cite>` element is used when you need a bibliographic citation that refers to a book or article. It specifically identifies the title of the resource. Its `keyref` attribute allows the citation to be associated to other possible bibliographic processing (not supported yet).

#### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [q](#) or [boolean](#) or [state](#) )

or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (any number)

**Contained by**

[section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dt](#) , [dd](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [synnote](#)

**Inheritance**

[topic](#) / [cite](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up the location of the cited material, and potentially create a link to it.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>The online article <cite>Specialization in the Darwin Information Typing Architecture</cite> provides a detailed explanation of how to define new topic types.</p>
```

**desc**

The <desc> element contains the description of the current element. A description should provide more information than the title.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [image](#) ) (any number)

**Contained by**

[fig](#) , [object](#) , [xref](#) , [link](#) , [linklist](#) , [table](#)

**Inheritance**

[topic](#) / [desc](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<fig><title>The Handshake</title>
<desc>This image shows two hands clasped in a formal,
business-like handshake.</desc>
<image href="handshake.jpg" alt="The Handshake" />
</fig>
```

**dd**

The definition description (<dd>) element contains the description of a term in a definition list entry.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [itemgroup](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**

[dentry](#)

**Inheritance**

[topic](#) / [dd](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

See [dl](#)

**ddhd**

The definition descriptions heading (<ddhd>) element contains an optional heading or title for a column of descriptions or definitions in a definition list

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) ) (any number)

**Contained by**  
[dlhead](#)

**Inheritance**  
[topic](#) / [ddhd](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [dl](#) .

## dl

A definition list (<dl>) is a list of terms and corresponding definitions. The term (<dt>) is usually presented flush left. The description or definition (<dt>) is usually presented either indented and on the next line, or on the same line to the right of the term.

You can also provide an optional heading for the terms and definitions, using the <dlhead> element, which contains header elements for those columns. The default formatting for the <dlhead> looks like a table with a heading row.

### Contains

(( [dlhead](#) ) (optional) then ( [dlenry](#) ) (one or more) )

### Contained by

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

**Inheritance**  
[topic](#) / [dl](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
compact	Indicates close vertical spacing between the list items. Expanded spacing is the default value. The output result of compact spacing depends on the processor or browser. Allowed values are: <b>yes</b> Indicates compact spacing. <b>no</b> Indicates expanded spacing.	(yes   no)	"yes"	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## Examples

### Simple:

```
<dl>
<dlentry>
<dt>Bytes returned</dt>
<dd>The number of bytes of data returned.</dd>
</dlentry>
<dlentry>
<dt>Bytes available</dt>
<dd>The number of bytes of data available to be returned.</dd>
</dlentry>
<dlentry><dt>Handle</dt>
<dd>The returned handle value</dd>
</dlentry>
</dl>
```

### With heading:

```
<dl>
<dlhead>
<dthd>Image File View Selection</dthd>
<ddhd>Resulting Information</ddhd>
</dlhead>
<dlentry>
<dt>File Type</dt>
<dd>Image's file extension</dd>
</dlentry>
<dlentry>
<dt>Image Class</dt>
<dd>Image is raster, vector, metafile or 3D</dd>
</dlentry>
<dlentry>
<dt>Number of pages</dt>
<dd>Number of pages in the image</dd>
</dlentry>
<dlentry>
<dt>Fonts</dt>
<dd>Names of the fonts contained within a vector image</dd>
</dlentry>
</dl>
```

## dlentry

In a definition list, each list item is defined by the definition list entry (<dlentry>) element. The definition list entry element includes a term <dt> and one or more definitions or descriptions <dd> of that term.

### Contains

( ( [dt](#) ) (one or more) then ( [dd](#) ) (one or more) )

### Contained by

[dl](#)

### Inheritance

[topic](#) / [dlentry](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

See [dl](#)

## dlhead

The <dlhead> element contains optional headings for the term and description columns in a definition list. The definition list heading contains a heading <dthd> for the column of terms and an optional heading <ddhd> for the column of descriptions.

### Contains

( ( [dthd](#) ) (optional) then ( [ddhd](#) ) (optional) )

### Contained by

[dl](#)

### Inheritance

[topic](#) / [dlhead](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at	parameter	<i>PE not</i>	Not

	<a href="#">%global-atts;</a>	entity	<i>applicable</i>	applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [dl](#) .**dt**

The definition term <dt> element contains a term in a definition list entry.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) ) (*any number*)

**Contained by**[dentry](#)**Inheritance**[topic](#) / [dt](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
<a href="#">%univ-atts;</a> ( <a href="#">%select-atts;</a> , <a href="#">%id-atts;</a> , <a href="#">translate</a> , <a href="#">xml:lang</a> )	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
<a href="#">%global-atts;</a> ( <a href="#">xtrf</a> , <a href="#">xtrc</a> )	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [dl](#) .**dthd**

The definition term heading (<dthd>) element is contained in a definition list head (<dlhead>) and provides an optional heading for the column of terms in a description list.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) ) (*any number*)

**Contained by**

[dlhead](#)**Inheritance**[topic](#) / [dthd](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [dl](#) .**fig**

The figure (<fig>) element is a display context (sometimes called an “exhibit” ) with an optional title for a wide variety of content. Most commonly, the figure element contains an image element (a graphic or artwork), but it can contain several kinds of text objects as well. A title is placed inside the figure element to provide a caption to describe the content.

**Contains**

( ( [title](#) ) (optional) then ( [desc](#) ) (optional) then ( [figgroup](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [image](#) or [object](#) or [simpletable](#) ) (any number) )

**Contained by**

[body](#) , [section](#) , [example](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [pd](#)

**Inheritance**[topic](#) / [fig](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by	CDATA	#IMPLIED	No

	authors.			
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<fig expanse="column"><title>The Handshake</title>
<image href="handshake.jpg" alt="The Handshake"/>
</fig>
```

**figgroup**

The <figgroup> element is used only for specialization at this time. Figure groups can be used to contain multiple cross-references, footnotes or keywords, but not multipart images. Multipart images in DITA should be represented by a suitable media type displayed by the <object> element.

**Contains**

( ( [title](#) ) (optional) then ( [figgroup](#) or [xref](#) or [fn](#) or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) ) (any number) )

**Contained by**

[fig](#) , [figgroup](#)

**Inheritance**

[topic](#) / [figgroup](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**image**

Include artwork or images in a DITA topic by using the <image> element. The <image> element has optional attributes that indicate whether the placement of the included graphic or artwork should be inline (like a button or icon), or on a separate line for a larger image. An href attribute is required on the image element, as this attribute creates a pointer to the image, and allows the output formatting processor to bring the image into the text flow. To make the intent of the image more accessible for users using screen readers or text-only readers, always include a description of the image's content in the alt element.

**Contains**( [alt](#) ) (optional)**Contained by**

[title](#) , [shortdesc](#) , [body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [fig](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [xref](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [uicontrol](#) , [pt](#) , [pd](#) , [imagemap](#)

**Inheritance**[topic](#) / [image](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
href	The relative path or URL to the GIF or JPEG image. The href attribute uses conventional URL syntax to point to the resource:  <code>href=" ../images/construction.gif</code>	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to refer to the <image> by a key rather than referencing it directly.	NMTOKEN	#IMPLIED	No
alt	Alternative text that describes the image to provide accessibility to page readers, or provides a text description when an image cannot be displayed by the user's software. The alt attribute is deprecated; use the alt element instead.	CDATA	#IMPLIED	No
longdescref	A reference to a textual description of the graphic. This attribute supports creating accessible content.	CDATA	#IMPLIED	No
height	Indicates the maximum height of an image.	NMTOKEN	#IMPLIED	No
width	Indicates the maximum width of an image.	NMTOKEN	#IMPLIED	No
align	Controls the horizontal alignment of an image when placement is specified as "break." Allowable values (processor-validated) are: left, right, center, and current.	CDATA	#IMPLIED	No
placement	Indicates whether an image should be displayed inline or separated from the surrounding text. The default is inline. Allowable values are: inline or break.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>	
--------------------	---	--

**Example**

```
<image href="bike.gif" " placement="break"><alt>Two-wheeled bicycle</alt></image>
```

**keyword**

<keyword> represents a word or phrase with special significance in a particular domain. In the general case, <keyword> elements typically do not have any special semantics and processing associated with them, but can still be useful for organizing content for reuse or special processing. <keyword> specializations are more meaningful and are therefore preferable. <keyword> in the <keywords> element distinguishes a word or phrase that describes the content of a topic (a topic description keyword). Topic description keywords are typically used for searching, retrieval and classification purposes.

Specialized elements derived from <keyword> may also have extended processing, such as different formatting or automatic indexing. If the keyref attribute is used, or some other method of key-based lookup based on the value of the element itself, then the keyword can be turned into a hyperlink on output (not currently supported).

When DITA topics are output to XHTML, any <keyword> elements in the <keywords> element are placed in the Web page metadata.

**Contains**

( text data or [tm](#) ) (any number)

**Contained by**

[title](#) , [navtitle](#) , [searchtitle](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [alt](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linktext](#) , [linkinfo](#) , [entry](#) , [author](#) , [source](#) , [publisher](#) , [copyrholder](#) , [category](#) , [keywords](#) , [prodname](#) , [brand](#) , [series](#) , [platform](#) , [prognum](#) , [featnum](#) , [component](#) , [indexterm](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [uicontrol](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [var](#) , [oper](#) , [delim](#) , [sep](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#) , [repsep](#) , [msgph](#) , [msgblock](#) , [filepath](#) , [userinput](#) , [systemoutput](#) , [coords](#)

**Inheritance**

[topic](#) / [keyword](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to associate the <keyword> with another topic that provides more details for that particular keyword.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts; , translate,	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

xml:lang)				
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>The <keyword>assert</keyword> pragma statement allows messages to be passed to the emulator, pre-compiler, etc..
```

**li**

A list (<li>) item is a single item in an ordered <ol> or unordered <ul> list. When a DITA topic is formatted for output, numbers and alpha characters are usually output with list items in ordered lists, while bullets and dashes are usually output with list items in unordered lists.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [itemgroup](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

**Contained by**

[ul](#) , [ol](#)

**Inheritance**

[topic](#) / [li](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<ul>
<li>This is an item in an unordered list.</li>
</ul>
```

**lines**

The <lines> element may be used to represent dialogs, lists, text fragments, and so forth.

The <lines> element is similar to <pre> in that hard line breaks are preserved, but the font style is not set to monospace, and extra spaces inside the lines are not preserved.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

### Inheritance

[topic](#) / [lines](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
xml:space	This attribute is provided on <pre>, <lines>, and on elements specialized from them. It ensures that parsers in editors and transforms respect the line-end characters that are part of the data in those elements. It is intended to be part of the default properties of these elements, and not for authors to change or delete.	(preserve)	#FIXED 'preserve'	Yes
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
On a trip to the beach, don't forget:
<lines>
suntan lotion
sunglasses
a beach towel
</lines>
```

## lq

The long quote (<lq>) element indicates content quoted from another source. Use the quote element <q> for short, inline quotations, and long quote <lq> for quotations that are too long for inline use, following normal guidelines for quoting other sources. You can store a URL to the source of the quotation in the *href* attribute.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

### Inheritance

[topic](#) / [lq](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
href	A hyperlink representing a bibliographic citation to resources that can be accessed by browsers (meaning a URL). The href attribute identifies the destination of the resource using conventional URL syntax.	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
type	Indicates the location of the source of the quote. Allowable values are: <b>external</b> the href is to a Web site <b>internal</b> the href is to a DITA topic <b>bibliographic</b> the href is to a specialized bibliographic topic. Currently not supported in DITA.	(external   internal   bibliographic)	#IMPLIED	No
reftitle	The title of the document or topic being quoted.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at	parameter	<i>PE not</i>	Not

	<a href="#">%global-atts;</a>	entity	<i>applicable</i>	applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<p>This is the first line of the address that
Abraham Lincoln delivered on November 19, 1863 for the dedication
of the cemetery at Gettysburg, Pennsylvania.</p>
<lq>Four score and seven years ago our fathers brought forth on this
continent a new
nation, conceived in liberty, and dedicated to the proposition that all
men
are created equal.</lq>
```

## note

A `<note>` element contains information, differentiated from the main text, which expands on or calls attention to a particular point.

**Tip:** Variant types of note (tip, caution, danger, restriction, etc.) can be indicated through values selected on the type attribute. This note is typed as a “tip.”

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

### Inheritance

[topic](#) / [note](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
type	Defines the type of a note. For example, if the note is a tip, the word <b>Tip</b> is used to draw the reader's attention to it. If type is set to other, the value of the othertype attribute is used. If you use othertype, there needs to be a stylesheet or transform override that does something with the information, or it will be ignored. Allowable values for the type attribute are: <b>note</b> This is just a note. <b>attention</b> Please pay extra attention to this	(note   tip   fastpath   restriction   important   remember   attention   caution   danger   other)	"note"	No

	<p>note.</p> <p><b>caution</b></p> <p>Care is required when proceeding. For example:</p> <pre>&lt;note type="caution"&gt;Contents may be erased.&lt;/note&gt;</pre> <p>produces: <b>CAUTION:</b> You may reformat your hard drive.</p> <p><b>danger</b></p> <p>Important! Be aware of this before doing anything else. For example:</p> <pre>&lt;note type="danger"&gt;You may hurt yourself!&lt;/note&gt;</pre> <p>produces: <b>DANGER:</b> You may hurt yourself!</p> <p><b>fastpath</b></p> <p>This note will speed you on your way.</p> <p><b>important</b></p> <p>This note is important.</p> <p><b>remember</b></p> <p>Don't forget to do what this note says.</p> <p><b>restriction</b></p> <p>You can't do what this note says.</p> <p><b>tip</b></p> <p>This is a fine little tip.</p> <p><b>other</b></p> <p>This is something other than a normal note.</p>			
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
othertype	Indicates an alternate note type, when the type is not available in the type attribute value list. This value is used as the user-provided note title when the type attribute value is set to "other."	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other</a>			

**Example**

This example:

```
<note type="tip">Thinking of a seashore, green meadow, or cool
mountain overlook can help you to relax and be more
patient.</note>
```

produces this result:

**Tip:** Thinking of a seashore, green meadow, or cool mountain overlook can help you to relax and be more patient.

**object**

DITA's `<object>` element corresponds to the HTML `<object>` element. The `<object>` element allows authors to include animated images, applets, plug-ins, ActiveX controls, video clips, and other multimedia objects in a topic for rendering after transformation to HTML.

**Contains**

(( [desc](#) ) (optional) then ( [param](#) ) (any number) )

**Contained by**

[body](#) , [section](#) , [example](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [pd](#)

**Inheritance**

[topic](#) / [object](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
declare	When this attribute is set to declare, the current object definition is a declaration only. The object must be instantiated by a later nested object definition referring to this declaration.			No
classid	Contains a URL that specifies the location of an object's implementation. It can be used together with the data attribute which is specified relative to the value of the codebase attribute.	CDATA	#IMPLIED	No
codebase	Specifies the base path (a URL) used for resolving the URL values given for classid, data, and archive attributes. If codebase is not set, the default is the base URL of the current document.	CDATA	#IMPLIED	No
data	Contains a reference to the location of an object's data. If this attribute is a URL, it is specified relative to the value of the codebase attribute. If this attribute is set, the type attribute should also be set.	CDATA	#IMPLIED	No

type	Indicates the content type for the data specified by the data attribute. This attribute should be set when the data attribute is set to avoid loading unsupported content types.	CDATA	#IMPLIED (No default type)	No
codetype	Indicates the content type for the data specified by the classid attribute. This attribute should be set when the classid attribute is set to avoid loading unsupported content types. If this attribute value is not set, the default is the value of the type attribute.	CDATA	#IMPLIED	No
archive	Specifies a space-separated list of URLs indicating resources needed by the object. These resources may include those URLs specified by the classid and data attributes. Preloading these resources usually results in faster loadtimes for objects. The URLs in the list should be relative to the URL specified in the codebase attribute.	CDATA	#IMPLIED	No
standby	Contains a message to be displayed while an object is loading.	CDATA	#IMPLIED	No
height	Indicates the maximum height of an image.	NMTOKEN	#IMPLIED	No
width	Indicates the maximum width of an image.	NMTOKEN	#IMPLIED	No
usemap	Indicates that a client-side image map is to be used. An image map specifies active geometric regions of an included object and assigns a link to each region. When a link is selected, a document may be retrieved or a program may run on the server.	CDATA	#IMPLIED	No
name	Submit the object as part of a form.	CDATA	#REQUIRED	Yes
tabindex	Position the object in tabbing order.	NMTOKEN	#IMPLIED	No
longdescref	A reference to a textual description of the graphic. This attribute supports creating accessible content.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

Output processors may need to modify data to enable compatible function across various browsers, so these examples are only representative:

```
<p>Cutting the keys from the system unit:</p>
<object classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000"
codebase="http://download.macromedia.com/pub/shockwave/cabs/
flash/swflash.cab#version=6,0,0,0">
```

```

data="cutkey370.swf"
type="application/x-shockwave-flash"
height="280"
width="370"
id="cutkey370">
<desc>A description of the task</desc>
<param name="movie" value="cutkey370.swf"/>
<param name="quality" value="high"/>
<param name="bgcolor" value="#FFFFFF"/>
</object>

```

```

<p>What 's EIM?</p>
<object classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000"
codebase="http://download.macromedia.com/pub/shockwave/cabs/
flash/swflash.cab#version=6,0,0,0"
data="eim.swf"
height="400"
width="500"
id="eim">
<desc>Some great, glorious info</desc>
<param name="movie" value="eim.swf"/>
<param name="quality" value="high"/>
<param name="bgcolor" value="#FFFFFF"/>
<param name="pluginspace"
value="http://www.macromedia.com/go/getflashplayer"/>
</object>

```

## ol

An ordered list (<ol>) is a list of items sorted by sequence or order of importance.

### Contains

([li](#)) (*one or more*)

### Contained by

[body](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [li](#), [itemgroup](#), [dd](#), [fig](#), [stentry](#), [draft-comment](#), [fn](#), [linkinfo](#), [entry](#), [conbody](#), [prereq](#), [context](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [propdesc](#), [pd](#)

### Inheritance

[topic](#) / [ol](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
compact	Indicates close vertical spacing between the list items. Expanded spacing is the default value. The output result of compact spacing depends on the processor or browser. Allowed values are: <b>yes</b> Indicates compact spacing. <b>no</b> Indicates expanded spacing.	(yes   no)	"yes"	No
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts; ,	A set of related attributes, described at	parameter	<i>PE not</i>	Not

%id-atts;, translate, xml:lang)	%univ-atts;	entity	<i>applicable</i>	applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at %global-atts;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
Here are the colors of the rainbow in order of appearance from top to bottom:
<ol>
<li>Red</li>
<li>Orange</li>
<li>Yellow</li>
<li>Green</li>
<li>Blue</li>
<li>Indigo</li>
<li>Violet</li>
</ol>
```

## p

A paragraph element (<p>) is a block of text containing a single main idea.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simplatable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

### Contained by

[body](#), [section](#), [example](#), [desc](#), [note](#), [lq](#), [li](#), [itemgroup](#), [dd](#), [fig](#), [stentry](#), [draft-comment](#), [fn](#), [linkinfo](#), [entry](#), [conbody](#), [prereq](#), [context](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [propdesc](#), [pd](#)

### Inheritance

[topic](#) / [p](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at %univ-atts;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at %global-atts;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<p>
It is probable that <q>temporary</q> or <q>new</q> stars, as these
wonderful apparitions are called, really are <term>conflagrations</term>;
not in the sense of a bonfire or a burning house or city, but in that of
a sudden eruption of <i>inconceivable</i> heat and light, such as would
result from the stripping off the shell of an encrusted sun or the
crashing
together of two mighty orbs flying through space with a hundred times
the velocity of the swiftest cannon-shot.</p>
```

## param

The parameter (<param>)element specifies a set of values that may be required by an <object> at runtime. Any number of <param> elements may appear in the content of an object in any order, but must be placed at the start of the content of the enclosing object. This element is comparable to the XHTML <param> element.

### Contains

no content

### Contained by

[object](#)

### Inheritance

[topic](#) / [param](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
name	The name of the parameter.	CDATA	#REQUIRED	Yes
id	The id of the parameter.	ID	#IMPLIED	No
value	Specifies the value of a run-time parameter specified by the name attribute.	CDATA	#IMPLIED	No
valuetype	Specifies the type of the value attribute. Allowed values are: <b>data</b> A value of data means that the value will be evaluated and passed to the object's implementation as a string. <b>ref</b> A value of ref indicates that the value of valuetype is a URL that designates a resource where run-time values are stored. This allows support tools to identify URLs that are given as parameters. <b>object</b> A value of object indicates that the value of valuetype is an identifier that refers to an object declaration in the document. The identifier must be the value of the	CDATA	#IMPLIED	No

	ID attribute set for the declared object element.			
type	This attribute specifies the content type of the resource designated by the value attribute only in the case where <i>valuetype</i> is set to "ref" . This attribute specifies for the user agent the type of values that will be found at the URI designated by value.	CDATA	#IMPLIED (No default type)	
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**See [object](#) .

## ph

The phrase (<ph>) element is used to organize content for reuse or conditional processing (for example, when part of a paragraph applies to a particular audience). It can be used by specializations of DITA to create semantic markup for content at the phrase level, which then allows (but does not require) specific processing or formatting.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**[topic](#) / [ph](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable

class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>	
--------------------	---	--

**Example**

This was not changed. `<ph rev="v5r2">This was updated.</ph>` This was not.

**pre**

The preformatted element (`<pre>`) preserves line breaks and spaces entered manually by the author in the content of the element, and also presents the content in a monospaced type font (depending on your output formatting processor). Do not use `<pre>` when a more semantically specific element is appropriate, such as `<codeblock>`.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (*any number*)

**Contained by**

[body](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [li](#), [itemgroup](#), [dd](#), [fig](#), [stentry](#), [draft-comment](#), [fn](#), [linkinfo](#), [entry](#), [conbody](#), [prereq](#), [context](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [propdesc](#), [pd](#)

**Inheritance**

[topic](#) / [pre](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass, xml:space	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
MEMO: programming team fun day
Remember to bring a kite, softball glove, or other favorite
outdoor accessory to tomorrow's fun day outing at Zilker Park.
Volunteers needed for the dunking booth.
```

**q**

A quotation element (<q>) indicates content quoted from another source. This element is used for short quotes which are displayed inline. Use the long quote element (<lq>) for quotations that should be set off from the surrounding text.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (*any number*)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [q](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
George said, <q>Disengage the power supply before servicing the unit.</q>
```

**sl**

The simple list (<sl>) element contains a simple list of items of short, phrase-like content, such as in documenting the materials in a kit or package.

On output, the list should have no bullets, on the assumption that each item is short enough to fit on one line, and needs no additional differentiation from its neighbors.

**Contains**

( [sli](#) ) (*one or more*)

**Contained by**

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

**Inheritance**[topic / sl](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
compact	Indicates close vertical spacing between the list items. Expanded spacing is the default value. The output result of compact spacing depends on the processor or browser. Allowed values are: <b>yes</b> Indicates compact spacing. <b>no</b> Indicates expanded spacing.	(yes   no)	"yes"	No
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

In a reference topic discussing related modules, the following sample markup could be used:

```
<section><title>Messages</title>
<p>Messages from the ags_open module are identical with messages
from:</p>
<sl>
  <sl>ags_read</sl>
  <sl>ags_write</sl>
  <sl>ags_close</sl>
</sl>
</section>
```

**sli**

A simple list item (<sli>) is a single item in a simple list<sl>. Simple list items have phrase or text content, adequate for describing package contents, for example. When a DITA topic is formatted for output, the items of a simple list are placed each on its own line, with no other prefix such as a number (as in an ordered list) or bullet (as in an unordered list).

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#)

or [varname](#) or [wintitle](#) or [tm](#) or [image](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

**Contained by**

[sl](#)

**Inheritance**

[topic](#) / [sli](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

See [sl](#) .

**ul**

In an unordered list (<ul>), the order of the list items is not significant. List items are typically styled on output with a "bullet" character, depending on nesting level.

**Contains**

( [li](#) ) (one or more)

**Contained by**

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
compact	Indicates close vertical spacing between the list items. Expanded spacing is the default value. The output result of compact spacing depends on the processor or browser. Allowed values are: <b>yes</b> Indicates compact spacing. <b>no</b> Indicates expanded spacing.	(yes   no)	"yes"	No
spectitle	The specialized title attribute allows architects of specialized types to define a	CDATA	#IMPLIED	No

	fixed or default title for a specialized element. Not intended for direct use by authors.			
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<ul>
  <li>This is an item in an unordered list.</li>
  <li>To separate it from other items in the list, the
  formatter puts a bullet beside it.</li>
  <li>The following paragraph, contained in the list item
  element, is part of the list item which contains it.
  <p>This is the contained paragraph.</p></li>
  <li>This is the last list item in our unordered list.</li>
</ul>
```

## xref

Use the cross-reference (<xref>) element to link to a different location within the current topic, or a different topic within the same help system, or to external sources, such as Web pages, or to a location in another topic. The *href* attribute on the <xref> element provides the location of the target.

Typically it is best to restrict yourself to linking to reference topics where the content of the target is clear from the <xref>'s text, for example API names and their descriptions. With other information types, it may be less clear to the user whether they should follow the link, and often they will, thereby missing important information in following paragraphs. Therefore it is a good idea to use links at the end of the topic, in the <[related-links](#)> element, wherever possible, rather than linking from within body content using <xref>. Links at the end of a topic can also be managed from outside the topic, using DITA maps: this allows topics to be quickly integrated into new contexts without breaking links.

### Contains

( [text data](#) or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) or [desc](#) ) (*any number*)

### Contained by

[section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [synnote](#) , [area](#)

### Inheritance

[topic](#) / [xref](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
href	<p>A hyperlink to an external Web page (URL) or other non-DITA resource, to another DITA topic in the same file or in another file, or to a specific element inside a DITA topic. The format attribute identifies the format of the target. Non-DITA targets use standard URL syntax. DITA content is targetted as follows:</p> <p>Target elsewhere in the same file:  href="#topicID"  href="#topicID/elemID  Target in a different file:  href="filename.dita#topicID"  href="fname.dita#topicID/elemID"</p> <p>Elements inside a topic need to have their location scoped by the containing topic's ID. Only the id of the target element and the topic that contains it matter: id's on any other containing elements (for example an id on the &lt;body&gt; element) are not part of the link syntax.</p> <p>If the URL contains an ampersand character, the ampersand symbol (&amp;#amp;) should be used to indicate that character</p>	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
type	<p>Describes the target of a cross-reference and may generate cross-reference text based on that description. Only the &lt;xref&gt; element can link to content below the topic level: other types of linking can target whole topics, but not parts of topics. Typically &lt;xref&gt; should also be limited to topic-level targets, unless the output is primarily print-oriented. Web-based referencing works best at the level of whole topics, rather than anchor locations within topics.</p> <p>When targetting DITA content, the type should match one of the values in the target's class attribute. For example, if type="topic", the link could be to a generic topic, or any specialization of topic, including concept, task, and reference.</p> <p>Some possible values include:</p> <p><b>fig</b>  Indicates a link to a figure.</p>	CDATA	#IMPLIED (Processed as if the target were of type "topic.")	No

	<p><b>table</b> Indicates a link to a table.</p> <p><b>li</b> Indicates a link to an ordered list item.</p> <p><b>fn</b> Indicates a link to a footnote.</p> <p><b>section</b> "section" indicates a link to a section.</p> <p><b>concept, task, reference, topic</b> Cross-reference to a topic type.</p> <p><b>(no value)</b> Defaults to generic topic, or the processor may retrieve the actual type from the target if available.</p> <p>Other values can be used to indicate other types of topics or elements as targets. Processing is only required to support the above list, or specializations of types in that list. Supporting additional types as targets may require the creation of processing overrides.</p>			
<p>%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)</p>	<p>A set of related attributes, described at <a href="#">%univ-atts;</a></p>	<p>parameter entity</p>	<p><i>PE not applicable</i></p>	<p>Not applicable</p>
<p>format</p>	<p>The format attribute identifies the format of the resource being cross referenced. The default format is "dita" .</p> <p>Possible values include:</p> <p><b>dita</b> The destination uses DITA topic markup, or markup specialized from a DITA topic. Unless otherwise specified, the corresponding default type will be treated as "topic."</p> <p><b>html</b> The format of the linked-to resource is HTML or XHTML.</p> <p><b>pdf</b> The format of the linked-to resource is PDF (opens a new window).</p> <p><b>ditamap</b> The linked-to resource is a DITA map. It represents a referenced hierarchy at a position within</p>	<p>CDATA</p>	<p>#IMPLIED</p>	<p>No</p>

	<p>referencing hierarchy, and a referenced relationship table included outside the referencing hierarchy</p> <p><b>(no value)</b> Defaults to "dita"</p> <p>For other formats, you can use the file extension without the "." (for example, in a link to file "readme.txt", use "txt" as the value)</p>			
scope	<p>The scope attribute identifies the closeness of the relationship between the current document and the target resource.</p> <ul style="list-style-type: none"> <li>Set scope to <code>local</code> when the resource is part of the current set of content, and should be accessed and copied to the output directory.</li> <li>Set scope to <code>peer</code> when the resource is part of the current set of content but is not accessible at build time.</li> <li>Set scope to <code>external</code> when the resource is not part of the current information set and should open in a new browser window.</li> </ul> <p>The default is <code>local</code>.</p>	(local   peer   external)	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## Examples

Here's an example of a cross-reference to another topic; that topic's title will be used as the link text.

```
<p><xref href="whatsdita.dita#tmmdita"></xref>.</p>
```

Here's an example of a cross-reference to another topic; the supplied text will be used as the link text

```
<p><xref href="whatsdita.dita#tmmdita">Background information about DITA</xref> is provided free of charge.</p>
```

If you are linking to anything within a topic, you should use the following format in the href attribute:

```
filename.xml#topicid/elementid
```

If you are linking within the same file, you can leave off the "filename.xml" part. So, for a section with the ID "mysection", you should use:

```
#topicid/mysection
```

For a list item within that section, assuming the item has an ID of "mylist", use

```
#topicid/mylist
```

Regardless of how deeply the target element is nested, the only important pieces are the ID of the containing topic, and the ID of the target element. IDs of topics in DITA must be unique within a file, but IDs of other elements only need to be unique within the topic. You need to be sure that the topic ID is part of your reference.

If your URL has an ampersand in it, you need to code that using a symbol. For example; for this URL:

```
http://www.ibm.com/docview.wss?rs=757&context=SSVNX5
```

You need to enter the **&amp;** in the Href attribute as follows:

```
<xref href="http://www.ibm.com/docview.wss?rs=757&context=SSVNX5">  
Part number SSVNX5</xref>
```

## Table elements

DITA topics support two types of tables. One is the most common table format used in industry, the `<CALStable>` (or more recently known also as the Oasis Table Exchange Model). The CALS table supports the spanning of multiple rows or columns for special layout or organizational needs, and provides a wide variety of controls over the display properties of the data and even the table structure itself.

The other table structure in DITA is called `<simpletable>`. As the name implies, it is structurally less sophisticated than the CALS table, and can be used as a very simple, regular table for which close control of formatting is not as important. However, the main advantage of simpletable is for describing lists of data with regular headings, such as telephone directory listings, display adapter configuration data, or API properties.

### table

The `<table>` element organizes arbitrarily complex relationships of tabular information. This standard table markup allows column or row spanning and table captions or descriptions. An optional title allowed inside the table element provides a caption to describe the table. See [simpletable](#) for a simplified table model that can be specialized to represent more regular relationships of data.

The DITA table is based on the OASIS Exchange Table Model, augmented with DITA attributes which enable it for specialization, conref, and other DITA processing. In addition, the table includes a `desc` element, which enables table description that is parallel with figure description.

In DITA tables, in place of the `expanses` attribute used by other DITA elements, the `pgwide` attribute is used instead, to conform with the OASIS Exchange Table Model. This attribute has a similar semantic (1=page width; 0=resize to galley or column).

**Note:** The `scale` attribute represents a stylistic markup property that is maintained for now in tables for legacy purposes. External stylesheets should enable less dependency on this attribute. You should use the `scale` attribute judiciously in your topics.

#### Contains

(( ([title](#)) (optional) then ([desc](#)) (optional) ) (optional) then ([tgroup](#)) (one or more) )

#### Contained by

[body](#), [section](#), [example](#), [p](#), [note](#), [lq](#), [li](#), [itemgroup](#), [dd](#), [draft-comment](#), [conbody](#), [prereq](#), [context](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [stepresult](#), [result](#), [postreq](#), [refbody](#), [refsyn](#), [pd](#)

#### Inheritance

[topic](#) / [table](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
scale, frame	Described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
pgwide	Determines the horizontal placement of the element. Supported values are 1 for page width, or 0 for resize to galley or	(0   1)	#IMPLIED	No

	column.			
colsep	Column separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
rowsep	Row separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
rowheader	This attribute specifies whether the content of the first column in a table contains row headings. In the same way that a column header introduces a table column, the row header introduces the table row. This attribute makes tables whose first column contains row headings more readable on output. Allowable values are: <b>firstcol</b> The first column contains the row headings. <b>norowheader</b> Indicates that no column contains row headings. This is the default.	(firstCol   norowheader)	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example Source:

```

<table>
<tgroup cols="2">
<colspec colname="COLSPEC0" colwidth="121*" />
<colspec colname="COLSPEC1" colwidth="76*" />
<thead>
<row>
<entry colname="COLSPEC0" valign="top">Animal</entry>
<entry colname="COLSPEC1" valign="top">Gestation</entry>
</row>
</thead>
<tbody>
<row>
<entry>Elephant (African and Asian)</entry>
<entry>19-22 months</entry>
</row>
<row>
<entry>Giraffe</entry>
<entry>15 months</entry>
</row>
<row>
<entry>Rhinoceros</entry>
<entry>14-16 months</entry>
</row>
<row>
<entry>Hippopotamus</entry>
<entry>7 1/2 months</entry>
</row>
</tbody>
</tgroup>
</table>

```

### Formatted output:

Animal	Gestation
Elephant (African and Asian)	19-22 months
Giraffe	15 months
Rhinoceros	14-16 months
Hippopotamus	7 1/2 months

## tgroup

The <tgroup> element in a table contains column, row, spanning, header and footer specifications, and the body (<tbody>) of the table.

### Contains

(( [colspec](#) ) (any number) then ( [thead](#) ) (optional) then [tbody](#) )

### Contained by

[table](#)

### Inheritance

[topic](#) / [tgroup](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
cols	Indicates the number of columns in a <tgroup> in a table.	NMTOKEN	#REQUIRED	No
colsep	Column separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
rowsep	Row separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
align	Describes the alignment of text in a table column. Allowable values are: <b>left</b> Indicates left alignment of the text. <b>right</b> Indicates right alignment of the text. <b>center</b> Indicates center alignment of the text. <b>justify</b> Justifies the contents to both the left and the right.	(left   right   center   justify   char)	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>	
--------------------	---	--

**Example**  
See [table](#) .

## thead

The table header (<thead>) element precedes the table body (<tbody>) element in a complex table.

**Contains**  
( ( [row](#) ) (one or more) )

**Contained by**  
[tgroup](#)

**Inheritance**  
[topic](#) / [thead](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
valign	Indicates the vertical alignment of text in a table entry (cell). Allowable values are: <b>top</b> Align the text to the top of the table entry (cell). <b>bottom</b> Align the text to the bottom of the table entry (cell). <b>middle</b> Align the text to the middle of the table entry (cell).	(top   bottom   middle)	"top"	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [table](#) .

## stentry

The simpletable entry (<stentry>) element represents a single table cell, like <entry> in <table>. You can place any number of stentry cells in either an [sthead](#) element (for headings) or [strow](#) element (for rows of data).

**Contains**

( [text data](#) or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) ( *any number* )

**Contained by**  
[sthead](#) , [strow](#)

**Inheritance**  
[topic](#) / [stentry](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
<a href="#">%univ-atts</a> ; ( <a href="#">%select-atts</a> ;; <a href="#">%id-atts</a> ;; <a href="#">translate</a> , <a href="#">xml:lang</a> )	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
<a href="#">specentry</a>	The specialized entry attribute allows architects of specialized types to define a fixed or default header title for a specialized stentry element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
<a href="#">%global-atts</a> ; ( <a href="#">xtrf</a> , <a href="#">xtrc</a> )	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
<a href="#">class</a> , <a href="#">outputclass</a>	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

See [simpletable](#) .

**colspec**

The `<colspec>` element contains a column specification for a table, including assigning a column name and number, cell content alignment, and column width.

**Contains**

no content

**Contained by**  
[tgroup](#)

**Inheritance**  
[topic](#) / [colspec](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
<a href="#">colnum</a>	Indicates the number of a column in the	NMTOKEN	#IMPLIED	No

	table, counting from the first logical column to the last column.			
colname	Specifies the table column name in which an entry is found.	NMTOKEN	#IMPLIED	No
align	Describes the alignment of text in a table column. Allowable values are: <b>left</b> Indicates left alignment of the text. <b>right</b> Indicates right alignment of the text. <b>center</b> Indicates center alignment of the text. <b>justify</b> Justifies the contents to both the left and the right.	(left   right   center   justify   char)	#IMPLIED	No
char	alignment character Default source for entry elements starting in this column. If character alignment is specified, the value is the single alignment character source for any implied char values for entry immediately in this column. A value of "" (the null string) means there is no aligning character.	CDATA	#IMPLIED	No
charoff	horizontal offset of alignment character when align=char Default source for entry elements starting in this column. For character alignment on an entry in the column, horizontal character offset is the percent of the current column width to the left of the (left edge of the) alignment character. This value should be number, greater than 0 and less than or equal to 100.	NMTOKEN	#IMPLIED	No
colwidth	Describes the column width.	CDATA	#IMPLIED	No
colsep	Column separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
rowsep	Row separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [table](#) .

## tbody

The <tbody> element contains the rows in a table.

### Contains

( [row](#) ) (one or more)

### Contained by

[tgroup](#)

### Inheritance

[topic](#) / [tbody](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
valign	Indicates the vertical alignment of text in a table entry (cell). Allowable values are: <b>top</b> Align the text to the top of the table entry (cell). <b>bottom</b> Align the text to the bottom of the table entry (cell). <b>middle</b> Align the text to the middle of the table entry (cell).	(top   bottom   middle)	“top”	No
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [table](#) .

## row

The <row> element contains a single row in a table <tgroup>.

### Contains

(( [entry](#) ) (one or more) )

### Contained by

[thead](#) , [tbody](#)

### Inheritance

[topic / row](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
rowsep	Row separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
valign	Indicates the vertical alignment of text in a table entry (cell). Allowable values are: <b>top</b> Align the text to the top of the table entry (cell). <b>bottom</b> Align the text to the bottom of the table entry (cell). <b>middle</b> Align the text to the middle of the table entry (cell).	(top   bottom   middle)	"top"	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [table](#) .**entry**

The &lt;entry&gt; element defines a single cell in a table.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) ( *any number* )

**Contained by**[row](#)**Inheritance**[topic / entry](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
------	-------------	-----------	---------------	-----------

colnum	Indicates the number of a column in the table, counting from the first logical column to the last column.	NMTOKEN	#IMPLIED	No
colname	Specifies the table column name in which an entry is found.	NMTOKEN	#IMPLIED	No
namest	Specifies the first logical column that is included in a horizontal span.	NMTOKEN	#IMPLIED	No
nameend	Specifies the last logical column that is included in a horizontal span.	NMTOKEN	#IMPLIED	No
spanname	Indicates the name and definition of a horizontal span.	NMTOKEN	#IMPLIED	No
morerows	Specifies the number of additional rows to add in a vertical span.	NMTOKEN	"0"	No
colsep	Column separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
rowsep	Row separator. A value of 0 indicates no separators; 1 indicates separators.	NMTOKEN	"0"	No
valign	Indicates the vertical alignment of text in a table entry (cell). Allowable values are: <b>top</b> Align the text to the top of the table entry (cell). <b>bottom</b> Align the text to the bottom of the table entry (cell). <b>middle</b> Align the text to the middle of the table entry (cell).	(top   bottom   middle)	"top"	No
align	Describes the alignment of text in a table column. Allowable values are: <b>left</b> Indicates left alignment of the text. <b>right</b> Indicates right alignment of the text. <b>center</b> Indicates center alignment of the text. <b>justify</b> Justifies the contents to both the left and the right.	(left   right   center   justify   char)	#IMPLIED	No
char	alignment character  Default source for entry elements starting in this column. If character alignment is specified, the value is the single alignment character source for any implied char values for entry immediately in this column. A value of	CDATA	#IMPLIED	No

	"" (the null string) means there is no aligning character.			
charoff	horizontal offset of alignment character when align=char  Default source for entry elements starting in this column. For character alignment on an entry in the column, horizontal character offset is the percent of the current column width to the left of the (left edge of the) alignment character.  This value should be number, greater than 0 and less than or equal to 100.	NMTOKEN	#IMPLIED	No
%id-atts; (id, conref)	A set of related attributes, described at <a href="#">%id-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
rev	Indicates revision level of an element. It is useful for flagging outputs based on revision.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [table](#) .

## simpletable

The <simpletable> element is used for tables that are regular in structure and do not need a caption. Choose the simple table element when you want to show information in regular rows and columns. For example, multi-column tabular data such as phone directory listings or parts lists are good candidates for simpletable. Another good use of simpletable is for information that seems to beg for a "three-part definition list"—just use the keycol attribute to indicate which column represents the "key" or term-like column of your structure.

This close match of simpletable to tabular, regular data makes simpletable suitable as the basis for specialized structures such as [properties](#) (for programming information) and [choice tables](#) (for tasks).

### Contains

(( [sthead](#) ) (optional) then ( [strow](#) ) (one or more) )

### Contained by

[body](#) , [section](#) , [example](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [draft-comment](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [stepresult](#) , [result](#) , [postreq](#) , [refbody](#) , [refsyn](#) , [pd](#)

### Inheritance

[topic](#) / [simpletable](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
relcolwidth	A relative value to specify the width of a column in relationship to the width of the other columns <b>for print output</b> . The values are totaled and made a percent. For example:  relcolwidth="1* 2* 3*" causes widths of 16.7%, 33.3%, and 66.7%.  relcolwidth="90* 150*" causes width of 37.5% and 62.5%.	CDATA	#IMPLIED	No
keycol	Defines the column that will be used for row headings. No value indicates no key column. When present, the numerical value causes the specified column to be highlighted as a vertical header.	NMTOKEN	#IMPLIED	No
refcols	Designates columns that contain references, and are candidates for automated linking (not currently supported). Columns are identified by a comma-delimited list of numbers (for example: 1, 3).	NMTOKENS	#IMPLIED	No
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example Source:

```
<simpletable>
  <thead>
    <stentry>Type style</stentry>
    <stentry>Elements used</stentry>
  </thead>
  <strow>
    <stentry>Bold</stentry>
    <stentry>b</stentry>
  </strow>
  <strow>
    <stentry>Italic</stentry>
    <stentry>i</stentry>
  </strow>
```

```

<strow>
  <stentry>Underlined</stentry>
  <stentry>u</stentry>
</strow>
</simpletable>

```

**Formatted output:**

Type style	Elements used
Bold	b
Italic	i
Underlined	u

**sthead**

The `simpletable` header (`<sthead>`) element contains the table's header row. The header row is optional in a simple table.

**Contains**

( [stentry](#) ) (one or more)

**Contained by**

[simpletable](#)

**Inheritance**

[topic](#) / [sthead](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

See [simpletable](#) .

**strow**

The `simpletable` row (`<strow>`) element specifies a row in a simple table. [table](#) .

**Contains**

( [stentry](#) ) (any number)

**Contained by**

[simpletable](#)

**Inheritance**

[topic / strow](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [simpletable](#) .

## Domain elements

The base release of the DITA authoring DTDs includes specialized content elements from four particular subject domains:

1. programming related terms and structures
2. software related terms and structures
3. user interface related terms and structures
4. common word-processor like capabilities (to support the correct typographic convention for as-yet-unintroduced domain vocabulary)

## Typographic elements

The typographic elements are used to highlight text with styles (such as bold, italic, and monospace). Never use these elements when a semantically specific element is available. These elements are not intended for use by specializers, and are intended solely for use by authors when no semantically appropriate element is available and a formatting effect is required.

### b

The bold (<b>) element is used to apply bold highlighting to the content of the element. Use this element only when there is not some other more proper element. For example, for specific items such as GUI controls, use the < uicontrol > element. This element is part of the DITA highlighting domain.

#### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (*any number*)

#### Contained by

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

#### Inheritance

[topic](#) / [ph](#) , [hi-d](#) / [b](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p><b>STOP!</b> This is <b>very</b> important!</p>
```

**i**

The italic (<i>) element is used to apply italic highlighting to the content of the element. Use this element only when there is not some other more proper tag. For example, for specific items such as GUI controls, use the [uicontrol](#) tag. Italic highlighting generally means a font that is slanted for emphasis, but this may vary depending on your output formatting process. This element is part of the DITA highlighting domain.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (any number)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [hi-d](#) / [i](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>Unplug the unit <i>before</i> placing the metal screwdriver against the terminal screw.</p>
```

**u**

The underline (<u>) element is used to apply underline highlighting to the content of the element. Use this element only when there is not some other more proper tag. This element is part of the DITA highlighting domain.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or

[boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (*any number*)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [hi-d](#) / [u](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
<a href="#">%univ-atts</a> ; ( <a href="#">%select-atts</a> ;; <a href="#">%id-atts</a> ;; <a href="#">translate</a> , <a href="#">xml:lang</a> )	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
<a href="#">%global-atts</a> ; ( <a href="#">xtrf</a> , <a href="#">xtrc</a> )	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
<a href="#">class</a>	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
Beware: <u>overuse</u> <i>of</i> <b>highlighting</b> is
sometimes known as font-itis!
```

**tt**

The teletype (<tt>) element is used to apply monospaced highlighting to the content of the element. Use this element only when there is not some other more proper tag. This element is part of the DITA highlighting domain.

**Contains**

( [text data](#) or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (*any number*)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [hi-d](#) / [tt](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<p>Make sure that the screen displays <tt>File successfully created</tt>
before
proceeding to the next stage of the task.</p>
```

(Tag purists may delight to point out that this example could be more correctly marked with the [msgph](#) element.)

## sup

The superscript (<sup>) element indicates that text should be superscripted, or vertically raised in relationship to the surrounding text. Superscripts are usually a smaller font than the surrounding text. Use this element only when there is not some other more proper tag. This element is part of the DITA highlighting domain.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (any number)

### Contained by

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

### Inheritance

[topic](#) / [ph](#) , [hi-d](#) / [sup](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
The power produced by the electrohydraulic dam was 10<sup>10</sup> more
than
the older electric plant. The difference was H<sub>2</sub>O.
```

**sub**

A subscript (<sub>)> indicates that text should be subscripted, or placed lower in relationship to the surrounding text. Subscripted text is often a smaller font than the surrounding text. Formatting may vary depending on your output process. This element is part of the DITA highlighting domain.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (any number)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [hi-d](#) / [sub](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
The power produced by the electrohydraulic dam was 10<sup>10</sup> more
than
the older electric plant. The difference was H<sub>2</sub>O.
```

**Programming elements**

The programming domains elements are used to define the syntax and to give examples of programming languages.

**codeph**

The code phrase (<codeph>) element represents a snippet of code within the main flow of text. The code phrase is displayed in a monospaced font for emphasis. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) ) (any number)

### Contained by

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [synph](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

### Inheritance

[topic](#) / [ph](#) , [pr-d](#) / [codeph](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<p>The second line of the sample program code, <codeph>Do
forever</codeph>,
represents the start of a loop construct.</p>
```

## codeblock

The <codeblock> element represents lines of program code. Like the <pre> element, content of this element has preserved line endings and is output in a monospaced font. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[body](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [li](#), [itemgroup](#), [dd](#), [fig](#), [stentry](#), [draft-comment](#), [fn](#), [linkinfo](#), [entry](#), [conbody](#), [prereq](#), [context](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [propdesc](#), [pd](#)

**Inheritance**

[topic](#) / [pre](#), [pr-d](#) / [codeblock](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass, xml:space	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<codeblock>
/* a long sample program */
Do forever
  Say "Hello, World"
End
</codeblock>
```

**option**

The `<option>` element describes an option that can be used to modify a command (or something else, like a configuration). This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data )

**Contained by**

[title](#), [navtitle](#), [searchtitle](#), [shortdesc](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [q](#), [sli](#), [li](#), [itemgroup](#), [dthd](#), [ddhd](#), [dt](#), [dd](#), [figgroup](#), [pre](#), [lines](#), [ph](#), [alt](#), [stentry](#), [draft-comment](#), [fn](#), [cite](#), [xref](#), [linktext](#), [linkinfo](#), [entry](#), [author](#), [source](#), [publisher](#), [copyrholder](#), [category](#), [keywords](#), [prodname](#), [brand](#), [series](#), [platform](#), [prognum](#), [featnum](#), [component](#), [indexterm](#), [prereq](#), [context](#), [cmd](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [proptype](#), [propvalue](#), [propdesc](#), [uicontrol](#), [screen](#), [b](#), [u](#), [i](#), [tt](#), [sup](#), [sub](#), [codeph](#), [codeblock](#), [var](#), [synph](#), [oper](#), [delim](#), [sep](#), [pt](#), [pd](#), [fragref](#), [synnote](#), [repsep](#), [msgph](#), [msgblock](#), [filepath](#), [userinput](#), [systemoutput](#), [coords](#)

**Inheritance**

topic / keyword , pr-d / option

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
something <option>/modifier</option>
```

**kwd**

The <kwd> element defines a keyword within a syntax diagram. A keyword must be typed or output, either by the user or application, exactly as specified in the syntax definition. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data )

**Contained by**

synph , groupseq , groupchoice , groupcomp

**Inheritance**

topic / keyword , pr-d / kwd

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to associate the <kwd> with another topic that provides more details for that particular keyword.	NMTOKEN	#IMPLIED	No
importance	The attribute indicates whether a variable is optional, required, or default.	optional   required   default	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts;</a> , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable

%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<syntaxdiagram frame="bottom">
<title>CopyFile</title>
<groupseq><kwd>COPYF</kwd></groupseq>
<groupcomp><var>input-filename</var><kwd>*INFILE</kwd></groupcomp>
<groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
<groupchoice><var>input-filename</var><kwd>*INFILE</kwd></groupchoice>
<groupchoice><var>output-filename</var><kwd>*OUTFILE</kwd></groupchoice>
</syntaxdiagram>
```

## var

Within a syntax diagram, the `<var>` element defines a variable for which the user must supply content, such as their user name or password. It is represented in output in an italic font. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) ( *any number* )

### Contained by

[synph](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#)

### Inheritance

[topic](#) / [ph](#) , [pr-d](#) / [var](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether a variable is optional, required, or default.	optional   required   default	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts;</a> , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<syntaxdiagram frame="bottom">
<title>CopyFile</title>
<groupseq><kwd>COPYF</kwd></groupseq>
<groupcomp><var>input-filename</var><kwd>*INFILE</kwd></groupcomp>
<groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
<groupchoice><var>input-filename</var><kwd>*INFILE</kwd></groupchoice>
<groupchoice><var>output-filename</var><kwd>*OUTFILE</kwd></groupchoice>
</syntaxdiagram>
```

## parmname

When referencing the name of an application programming interface parameter within the text flow of your topic, use the parameter name (<parmname>) element to markup the parameter. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data )

### Contained by

[title](#) , [navtitle](#) , [searchtitle](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [alt](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linktext](#) , [linkinfo](#) , [entry](#) , [author](#) , [source](#) , [publisher](#) , [copyrholder](#) , [category](#) , [keywords](#) , [prodname](#) , [brand](#) , [series](#) , [platform](#) , [prognum](#) , [featnum](#) , [component](#) , [indexterm](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [uicontrol](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [var](#) , [synph](#) , [oper](#) , [delim](#) , [sep](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#) , [repsep](#) , [msgph](#) , [msgblock](#) , [filepath](#) , [userinput](#) , [systemoutput](#) , [coords](#)

### Inheritance

[topic](#) / [keyword](#) , [pr-d](#) / [parmname](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
Use the <parmname>/env</parmname> parameter of the
<cmdname>config</cmdname>
command to update the field value.
```

## synph

The syntax phrase (<synph>) element is a container for syntax definition elements. It is used when a complete syntax diagram is not needed, but some of the syntax elements, such as [kwd](#), [oper](#), [delim](#), are used within the text flow of the topic content. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data or [codeph](#) or [option](#) or [parmname](#) or [var](#) or [kwd](#) or [oper](#) or [delim](#) or [sep](#) or [synph](#) ) (any number)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [synph](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [pr-d](#) / [synph](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

```
<synph><kwd>format</kwd> <var>volumename</var></synph>
```

**oper**

The operator (<oper>) element defines an operator within a syntax definition. Typical operators are equals (=), plus (+) or multiply (\*). This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**

[synph](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#)

**Inheritance**

[topic](#) / [ph](#) , [pr-d](#) / [oper](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether a variable is optional, required, or default.	optional   required   default	#IMPLIED	No

%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts;</a> , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<syntaxdiagram>
  <title>Adding</title>
  <groupseq><kwd>1</kwd><oper>+</oper><var>two</var>
<delim>=</delim><kwd>something</kwd>
  </groupseq>
</syntaxdiagram>
```

**delim**

Within a syntax diagram, the delimiter (<delim>) element defines a character marking the beginning or end of a section or part of the complete syntax. Typical delimiter characters are the parenthesis, comma, tab, vertical bar or other special characters. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**

[synph](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#)

**Inheritance**

[topic](#) / [ph](#) , [pr-d](#) / [delim](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether the element it modifies is optional or required.	optional   required	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts;</a> , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<syntaxdiagram>
  <title>Adding</title>
  <groupseq><kwd>1</kwd><oper>+</oper><var>two</var><delim>=</delim>
  <kwd>something</kwd>
  </groupseq>
</syntaxdiagram>
```

## sep

The separator (<sep>) element defines a separator character that is inline with the content of a syntax diagram. The separator occurs between keywords, operators or groups in a syntax definition. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) ( any number )

### Contained by

[synph](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#)

### Inheritance

[topic](#) / [ph](#) , [pr-d](#) / [sep](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether the element it modifies is optional or required.	optional   required	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts</a> ; , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<syntaxdiagram>
<title>Adding</title>
<groupseq><kwd>l</kwd><oper>+</oper><sep>(</sep><var>two</var><sep>)</sep>
<delim>=</delim><kwd>something</kwd></groupseq>
</syntaxdiagram>
```

## apiname

The <apiname> element provides the name of an application programming interface (API) such as a Java class name or method name. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data )

### Contained by

[title](#) , [navtitle](#) , [searchtitle](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [alt](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linktext](#) , [linkinfo](#) , [entry](#) , [author](#) , [source](#) , [publisher](#) , [copyrholder](#) ,

[category](#) , [keywords](#) , [prodname](#) , [brand](#) , [series](#) , [platform](#) , [prognum](#) , [featnum](#) , [component](#) , [indexterm](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [uicontrol](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [var](#) , [oper](#) , [delim](#) , [sep](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#) , [repsep](#) , [msgph](#) , [msgblock](#) , [filepath](#) , [userinput](#) , [systemoutput](#) , [coords](#)

**Inheritance**

[topic](#) / [keyword](#) , [pr-d](#) / [apiname](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>Use the <apiname>document.write</apiname> method to create text output in the dynamically constructed view.</p>
```

**parml**

The parameter list (<parml>) element contains a list of terms and definitions that describes the parameters in an application programming interface. This is a special kind of definition list that is designed for documenting programming parameters. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( [plentry](#) ) (one or more)

**Contained by**

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

**Inheritance**

[topic](#) / [dl](#) , [pr-d](#) / [parml](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
------	-------------	-----------	---------------	-----------

compact	Indicates close vertical spacing between the list items. Expanded spacing is the default value. The output result of compact spacing depends on the processor or browser. Allowed values are: <b>yes</b> Indicates compact spacing. <b>no</b> Indicates expanded spacing.	(yes   no)	"yes"	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example****Example source:**

```
This code example is a basic method signature:
<codeblock>returnType methodName(pList1, pList2) {</codeblock>
where
<parml>
  <plentry>
    <pt>pList1</pt>
    <pd>is the first variable declaration passed to methodName</pd>
  </plentry>
  <plentry>
    <pt>pList2</pt>
    <pd>is the second variable declaration passed to methodName</pd>
  </plentry>
</parml>
```

**Example output:**

This code example is a basic method signature:

```
returnType methodName(pList1, pList2) {
```

where

**pList1**

is the first variable declaration passed to methodName

**pList2**

is the second variable declaration passed to methodName

**plentry**

The parameter list entry element (<plentry>) contains one or more parameter terms and definitions (pd and pt). This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( ( [pt](#) ) (one or more) then ( [pd](#) ) (one or more) )

**Contained by**

[parml](#)

**Inheritance**

[topic](#) / [dlentry](#) , [pr-d](#) / [plentry](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

See [parml](#) .

**pt**

A parameter term, within a parameter list entry, is enclosed by the <pt> element. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [image](#) ) (any number)

**Contained by**

[plentry](#)

**Inheritance**

[topic](#) / [dt](#) , [pr-d](#) / [pt](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other</a>			

**Example**See [parml](#) .**pd**

A parameter definition, within a parameter list entry, is enclosed by the <pd> element. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [itemgroup](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

**Contained by**[plentry](#)**Inheritance**[topic](#) / [dd](#) , [pr-d](#) / [pd](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**See [parml](#) .**syntaxdiagram**

The syntax diagram (<syntaxdiagram>) element is the main container for all the syntax elements that make up a syntax definition. The syntax diagram represents the syntax of a statement from a computer language, or a command, function call or programming language statement. Traditionally, the syntax diagram is formatted with “railroad tracks” that connect the units of the syntax together, but this presentation may differ depending on the output media. The syntax diagram element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

(( [title](#) ) (optional) then ( [groupseq](#) or [groupchoice](#) or [groupcomp](#) or [fragref](#) or [fragment](#) or [synblk](#) or [synnote](#) or [synnoteref](#) ) (any number) )

**Contained by**

[body](#), [section](#), [example](#), [p](#), [note](#), [lq](#), [li](#), [itemgroup](#), [dd](#), [stentry](#), [draft-comment](#), [fn](#), [entry](#), [conbody](#), [prereq](#), [context](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [pd](#)

**Inheritance**

[topic](#) / [fig](#), [pr-d](#) / [syntaxdiagram](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<syntaxdiagram>
  <title>CopyFile</title>
  <groupseq><kwd>COPYF</kwd></groupseq>
  <groupcomp><var>input-filename</var><kwd>*INFILE</kwd></groupcomp>
  <groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
  <groupchoice> <var>input-filename</var> <kwd>*INFILE</kwd></groupchoice>
  <groupchoice> <var>output-filename</var>
  <kwd>*OUTFILE</kwd></groupchoice>
</syntaxdiagram>
```

**synblk**

The syntax block (<synblk>) element organizes small pieces of a syntax definition into a larger piece. The syntax block element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( ( [title](#) ) (optional) then ( [groupseq](#) or [groupchoice](#) or [groupcomp](#) or [fragref](#) or [fragment](#) or [synnote](#) or [synnoteref](#) ) (any number) )

**Contained by**

[syntaxdiagram](#)

**Inheritance**

[topic](#) / [figgroup](#), [pr-d](#) / [synblk](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;,	A set of related attributes, described at	parameter	<i>PE not</i>	Not

%id-atts;, translate, xml:lang)	%univ-atts;	entity	<i>applicable</i>	applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at %global-atts;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<synblk>
<groupseq><kwd>this</kwd><sep>-</sep><kwd>is</kwd><sep>-</sep><kwd>a</kwd>
<sep>-</sep><var>test</var></groupseq>
</synblk>
```

## groupseq

The <groupseq> element is part of the subset of elements that define syntax diagrams in DITA. A group is a logical set of pieces of syntax that go together. Within the syntax definition, groups of keywords, delimiters and other syntax units act as a combined unit, and they occur in a specific sequence, as delimited by the <groupseq> element. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

(( [title](#) ) (optional) then ( [repsep](#) ) (optional) then ( [groupseq](#) or [groupchoice](#) or [groupcomp](#) or [fragref](#) or [kwd](#) or [var](#) or [delim](#) or [oper](#) or [sep](#) or [synnote](#) or [synnoteref](#) ) (any number))

### Contained by

[syntaxdiagram](#) , [synblk](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#) , [fragment](#)

### Inheritance

[topic](#) / [figgroup](#) , [pr-d](#) / [groupseq](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether a variable is optional, required, or default.	optional   required   default	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at %univ-atts; , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at %global-atts;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<syntaxdiagram frame="bottom">
<title>CopyFile</title>
<groupseq><kwd>COPYF</kwd></groupseq>
<groupcomp><var>input-filename</var><kwd>* INFILE</kwd></groupcomp>
```

```
<groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
<groupchoice><var>input-filename</var><kwd>*INFILE</kwd></groupchoice>
<groupchoice><var>output-filename</var><kwd>*OUTFILE</kwd></groupchoice>
</syntaxdiagram>
```

## groupchoice

The `<groupchoice>` element is part of the subset of elements that define syntax diagrams in DITA. A group is a logical set of pieces of syntax that go together. A group choice specifies that the user must make a choice about which part of the syntax to use. Groups are often nested. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

(( [title](#) ) (optional) then ( [repseq](#) ) (optional) then ( [groupseq](#) or [groupchoice](#) or [groupcomp](#) or [fragref](#) or [kwd](#) or [var](#) or [delim](#) or [oper](#) or [sep](#) or [synnote](#) or [synnoteref](#) ) (any number))

### Contained by

[syntaxdiagram](#) , [synblk](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#) , [fragment](#)

### Inheritance

[topic](#) / [figgroup](#) , [pr-d](#) / [groupchoice](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether a variable is optional, required, or default.	optional   required   default	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts</a> ; , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<syntaxdiagram frame="bottom">
<title>CopyFile</title>
<groupseq><kwd>COPYF</kwd></groupseq>
<groupcomp><var>input-filename</var><kwd>*INFILE</kwd></groupcomp>
<groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
<groupchoice><var>input-filename</var><kwd>*INFILE</kwd></groupchoice>
<groupchoice><var>output-filename</var><kwd>*OUTFILE</kwd></groupchoice>
</syntaxdiagram>
```

## groupcomp

The `<groupcomp>` element is part of the subset of elements that define syntax diagrams in DITA. A group is a logical set of pieces of syntax that go together. The group composite means that the items that make up the syntax diagram will be formatted close together rather than being separated by a horizontal or vertical line, which is the usual formatting method. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference

information.

### Contains

(( [title](#) ) (optional) then ( [repsep](#) ) (optional) then ( [groupseq](#) or [groupchoice](#) or [groupcomp](#) or [fragref](#) or [kwd](#) or [var](#) or [delim](#) or [oper](#) or [sep](#) or [synnote](#) or [synnoteref](#) ) (any number) )

### Contained by

[syntaxdiagram](#) , [synblk](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#) , [fragment](#)

### Inheritance

[topic](#) / [figgroup](#) , [pr-d](#) / [groupcomp](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether a variable is optional, required, or default.	optional   required   default	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts</a> ; , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<syntaxdiagram frame="bottom">
  <title>CopyFile</title>
  <groupseq><kwd>COPYF</kwd></groupseq>
  <groupcomp><var>input-filename</var><kwd>*INFILE</kwd></groupcomp>
  <groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
  <groupchoice><var>input-filename</var><kwd>*INFILE</kwd></groupchoice>
  <groupchoice><var>output-filename</var><kwd>*OUTFILE</kwd></groupchoice>
</syntaxdiagram>
```

## fragment

Within a syntax definition, a `<fragment>` is a labeled subpart of the syntax. The `<fragment>` element allows breaking out logical chunks of a large syntax diagram into named fragments. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

(( [title](#) ) (optional) then ( [groupseq](#) or [groupchoice](#) or [groupcomp](#) or [fragref](#) or [synnote](#) or [synnoteref](#) ) (any number) )

### Contained by

[syntaxdiagram](#) , [synblk](#)

### Inheritance

[topic](#) / [figgroup](#) , [pr-d](#) / [fragment](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<syntaxdiagram frame="none">
  <title>CopyFile</title>
  <groupseq><kwd>COPYF</kwd></groupseq>
  <groupcomp><var>input-filename</var><kwd>*INFILE</kwd></groupcomp>
  <groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
  <groupchoice><var>input-filename</var><kwd>*INFILE</kwd></groupchoice>
  <groupchoice><var>output-filename</var><kwd>*OUTFILE</kwd></groupchoice>
  <fragment>
    <groupchoice><kwd>*OVERLAP</kwd><kwd>*Prompt</kwd></groupchoice>
  </fragment>
</syntaxdiagram>
```

## fragref

The fragment reference (<fragref>) element provides a logical reference to a syntax definition fragment so that you can reference a syntax fragment multiple times. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (any number)

### Contained by

[syntaxdiagram](#) , [synblk](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#) , [fragment](#)

### Inheritance

[topic](#) / [xref](#) , [pr-d](#) / [fragref](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
href	A reference to a syntax diagram fragment element. The href attribute uses conventional URL syntax to point to the ID of the matching syntax diagram fragment:  href="#topicid/fragmentid"	CDATA	#IMPLIED	No
importance	The attribute indicates whether the element it modifies is optional or required.	optional   required	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at	parameter	<i>PE not</i>	Not

	<a href="#">%univ-atts</a> ; , but without the importance attribute	entity	<i>applicable</i>	applicable
<a href="#">%global-atts</a> ; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

This markup example:

```
<syntaxdiagram frame="none">
  <title>CopyFile</title>
  <groupseq><kwd>COPYF</kwd></groupseq>
  <groupcomp><var>input-filename</var><kwd>*INFILE</kwd></groupcomp>
  <groupseq><var>output-filename</var><kwd>*OUTFILE</kwd></groupseq>
  <fragref href="#syntax/overlay"></fragref>
  <groupchoice><var>input-filename</var><kwd>*INFILE</kwd></groupchoice>
  <groupchoice><var>output-filename</var><kwd>*OUTFILE</kwd></groupchoice>
  <fragment id="overlay">
    <title>Overlay</title>
    <groupchoice><kwd>*OVERLAP</kwd><kwd>*Prompt</kwd></groupchoice>
  </fragment>
</syntaxdiagram>
```

produces the following output:

```
CopyFile
>>-COPYF--input-filename*INFILE--output-filename--*OUTFILE----->
>--| Overlay |---+input-filename+---+output-filename+-----><
      '-*INFILE-----' '-*OUTFILE-----'
Overlay
|---+*OVERLAP+-----|
      '-*Prompt--'
```

**synnote**

The syntax note (<synnote>) element contains a note (similar to a footnote) within a syntax definition group or fragment. The syntax note explains aspects of the syntax that cannot be expressed in the markup itself. The note will appear at the bottom of the syntax diagram instead of at the bottom of the page. The syntax block element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) ) (any number)

**Contained by**

[syntaxdiagram](#) , [synblk](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#) , [fragment](#)

**Inheritance**

[topic](#) / [fn](#) , [pr-d](#) / [synnote](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
callout	Specifies what character is used for the	CDATA	#IMPLIED	No

	footnote link, for example a number or an alpha character. Numbers are the default. You could also specify a graphic for the footnote callout during output processing.			
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<groupcomp><var>one</var><var>two</var><var>three</var></groupcomp>
<synnote>My first syntax note.</synnote>
```

**synnoteref**

The syntax note (<synnoteref>) reference element references a syntax note element (<synnote>) that has already been defined elsewhere in the topic. The same notation can be used in more than one syntax definition. The syntax note reference element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

no content

**Contained by**

[syntaxdiagram](#) , [synblk](#) , [groupseq](#) , [groupchoice](#) , [groupcomp](#) , [fragment](#)

**Inheritance**

[topic](#) / [xref](#) , [pr-d](#) / [synnoteref](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
href	Points to the target syntax note (<synnote>), which must be in the same syntax diagram. Use standard DITA href syntax for targeting the element: href="#topicid/synnoteid"	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<synnoteref href="#topicid/mysyn" />
```

## repsep

The repeat separator (<repsep>) element in a syntax diagram defines a group of syntax elements that can (or should) be repeated. If the <repsep> element contains a separator character, such as a plus (+), this indicates that the character must be used between repetitions of the syntax elements. This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[groupseq](#) , [groupchoice](#) , [groupcomp](#)

### Inheritance

[topic](#) / [ph](#) , [pr-d](#) / [repsep](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
importance	The attribute indicates whether the element it modifies is optional or required.	optional   required	#IMPLIED	No
%univ-atts-no-importance	A set of related attributes, described at <a href="#">%univ-atts</a> ; , but without the importance attribute	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## Software elements

The software domain elements are used to describe the operation of a software program.

## msgph

The message phrase (<msgph>) element contains the text content of a message produced by an application or program. It can also contain the variable name (varname) element to illustrate where variable text content can occur in the message. This element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[title](#), [shortdesc](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [q](#), [sli](#), [li](#), [itemgroup](#), [dthd](#), [ddhd](#), [dt](#), [dd](#), [figgroup](#), [pre](#), [lines](#), [ph](#), [stentry](#), [draft-comment](#), [fn](#), [cite](#), [xref](#), [linkinfo](#), [entry](#), [prereq](#), [context](#), [cmd](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [proptype](#), [propvalue](#), [propdesc](#), [screen](#), [b](#), [u](#), [i](#), [tt](#), [sup](#), [sub](#), [codeph](#), [codeblock](#), [pt](#), [pd](#), [fragref](#), [synnote](#)

**Inheritance**

[topic](#) / [ph](#), [sw-d](#) / [msgph](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>A server log entry of <msgnum>I:0</msgnum> is equivalent to the text message, <msgph>informational: successful</msgph>.</p>
```

**msgblock**

The message block (<msgblock>) element contains a multi-line message or set of messages. The message block can contain multiple message numbers and message descriptions, each enclosed in a <msgnum> and <msgph> element. It can also contain the message content directly. This element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**

[body](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [li](#), [itemgroup](#), [dd](#), [fig](#), [stentry](#), [draft-comment](#), [fn](#), [linkinfo](#), [entry](#), [conbody](#), [prereq](#), [context](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [propdesc](#), [pd](#)

**Inheritance**

[topic](#) / [pre](#), [sw-d](#) / [msgblock](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass, xml:space	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<p>A sequence of failed password attempts generates the following
characteristic message stream:</p>
<msgblock>
I:0
S:3
I:1
S:3
I:1
S:4
S:99 (lockup)
</msgblock>
```

## msgnum

The message number (<msgnum>) element contains the number of a message produced by an application or program. This element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

### Contains

( text data )

### Contained by

[title](#) , [navtitle](#) , [searchtitle](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [alt](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linktext](#) , [linkinfo](#) , [entry](#) , [author](#) , [source](#) , [publisher](#) , [copyrholder](#) , [category](#) , [keywords](#) , [prodname](#) , [brand](#) , [series](#) , [platform](#) , [program](#) , [featnum](#) , [component](#) , [indexterm](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [uicontrol](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [var](#) , [oper](#) , [delim](#) , [sep](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#) , [repsep](#) , [msgph](#) , [msgblock](#) , [filepath](#) , [userinput](#) , [systemoutput](#) , [coords](#)

### Inheritance

[topic](#) / [keyword](#) , [sw-d](#) / [msgnum](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No

%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>A server log entry of <msgnum>I:0</msgnum> is equivalent to the text message, <msgph>informational: successful</msgph>.</p>
```

**cmdname**

The command name (<cmdname>) element specifies the name of a command when it is part of a software discussion. This element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

**Contains**

( text data )

**Contained by**

[title](#) , [navtitle](#) , [searchtitle](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [alt](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linktext](#) , [linkinfo](#) , [entry](#) , [author](#) , [source](#) , [publisher](#) , [copyrholder](#) , [category](#) , [keywords](#) , [prodname](#) , [brand](#) , [series](#) , [platform](#) , [prognum](#) , [featnum](#) , [component](#) , [indexterm](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [uicontrol](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [var](#) , [oper](#) , [delim](#) , [sep](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#) , [repsep](#) , [msgph](#) , [msgblock](#) , [filepath](#) , [userinput](#) , [systemoutput](#) , [coords](#)

**Inheritance**

[topic](#) / [keyword](#) , [sw-d](#) / [cmdname](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to associate the <cmdname> with the reference topic for the command, if the command name itself isn't sufficient.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

## varname

The variable name (<varname>) element defines a variable that must be supplied to a software application. The variable name element is very similar to the variable (var) element, but variable name is used outside of syntax diagrams. This element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

### Contains

( text data )

### Contained by

[title](#), [navtitle](#), [searchtitle](#), [shortdesc](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [q](#), [sli](#), [li](#), [itemgroup](#), [dthd](#), [ddhd](#), [dt](#), [dd](#), [figgroup](#), [pre](#), [lines](#), [ph](#), [alt](#), [stentry](#), [draft-comment](#), [fn](#), [cite](#), [xref](#), [linktext](#), [linkinfo](#), [entry](#), [author](#), [source](#), [publisher](#), [copyrholder](#), [category](#), [keywords](#), [prodname](#), [brand](#), [series](#), [platform](#), [prognum](#), [featnum](#), [component](#), [indexterm](#), [prereq](#), [context](#), [cmd](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [proptype](#), [propvalue](#), [propdesc](#), [uicontrol](#), [screen](#), [b](#), [u](#), [i](#), [tt](#), [sup](#), [sub](#), [codeph](#), [codeblock](#), [var](#), [oper](#), [delim](#), [sep](#), [pt](#), [pd](#), [fragref](#), [synnote](#), [repsep](#), [msgph](#), [msgblock](#), [filepath](#), [userinput](#), [systemoutput](#), [coords](#)

### Inheritance

[topic](#) / [keyword](#), [sw-d](#) / [varname](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<filepath>
<varname>install-dir</varname>\projects\working\<varname>project-dir</varname>
  \source\<varname>filename</varname>.java
</filepath>
```

## filepath

The <filepath> element indicates the name and optionally the location of a referenced file by specifying the directory containing the file, and other directories that may precede it in the system hierarchy. This element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) ( *any number* )

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [sw-d](#) / [filepath](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>Uncompress the <filepath>gbbbrsh.gz</filepath> file to the
<filepath>/usr</filepath> directory. Ensure that the
<filepath>/usr/tools/data.cfg</filepath> path is listed in
the execution path system variable.</p>
```

**userinput**

The user input (<userinput>) element represents the text a user should input in response to a program or system prompt. This element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) ( *any number* )

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [sw-d](#) / [userinput](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<p>After you type <userinput>mealplan dinner</userinput>, the meal
planning program
will print a <systemoutput>For what day?</systemoutput> message.
Reply by typing the day of the week for which you want a meal plan,
for example, <userinput>Thursday</userinput>.</p>
```

## systemoutput

The system output (<systemoutput>) element represents computer output or responses to a command or situation. A generalized element, it represents any kind of output from the computer, so the author may wish to choose more specific markup, such as msgph, for messages from the application. The system output element is part of the DITA software domain, a special set of DITA elements designed to document software tasks, concepts and reference information.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

### Inheritance

[topic](#) / [ph](#) , [sw-d](#) / [systemoutput](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>After you type <userinput>mealplan dinner</userinput>, the meal
planning program
will print a <systemoutput>For what day?</systemoutput> message.
Reply by typing the day of the week for which you want a meal plan,
for example, <userinput>Thursday</userinput>.</p>
```

**User interface elements**

The user interface domain elements are used to describe the user interface of a software program.

**uicontrol**

The user interface control (<uicontrol>) element is used to mark up names of buttons, entry fields, menu items, or other objects that allow the user to control the interface. Use the <uicontrol> element inside a <menucascade> element to identify a sequence of menu choices in a nested menu, such as **File** --> **New** . This element is part of the DITA user interface domain, a special set of DITA elements designed to document user interface tasks, concepts and reference information.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) or [image](#) or [shortcut](#) ) (any number)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [menucascade](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [ph](#) , [ui-d](#) / [uicontrol](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

Press the <uicontrol>OK</uicontrol> button.

**wintitle**

The window title `<wintitle>` element can be used to mark up names of windows or dialogs, or other user interface elements at the same level of grouping, including wizard titles, wizard page titles, and window pane titles. This element is part of the DITA user interface domain, a special set of DITA elements designed to document user interface tasks, concepts and reference information.

### Contains

( text data )

### Contained by

[title](#), [navtitle](#), [searchtitle](#), [shortdesc](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [q](#), [sli](#), [li](#), [itemgroup](#), [dthd](#), [ddhd](#), [dt](#), [dd](#), [figgroup](#), [pre](#), [lines](#), [ph](#), [alt](#), [stentry](#), [draft-comment](#), [fn](#), [cite](#), [xref](#), [linktext](#), [linkinfo](#), [entry](#), [author](#), [source](#), [publisher](#), [copyrholder](#), [category](#), [keywords](#), [prodname](#), [brand](#), [series](#), [platform](#), [prognum](#), [featnum](#), [component](#), [indexterm](#), [prereq](#), [context](#), [cmd](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [proptype](#), [propvalue](#), [propdesc](#), [uicontrol](#), [screen](#), [b](#), [u](#), [i](#), [tt](#), [sup](#), [sub](#), [codeph](#), [codeblock](#), [var](#), [oper](#), [delim](#), [sep](#), [pt](#), [pd](#), [fragref](#), [synnote](#), [repsep](#), [msgph](#), [msgblock](#), [filepath](#), [userinput](#), [systemoutput](#), [coords](#)

### Inheritance

[topic](#) / [keyword](#), [ui-d](#) / [wintitle](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step>
  <cmd>Click <uicontrol>Configure</uicontrol>.</cmd>
  <stepresult>The <wintitle>Configuration Options</wintitle> window
  opens with your last set of selections highlighted.</stepresult>
</step>
```

## menucascade

The `<menucascade>` element is used to document a series of menu choices. The `<menucascade>` element contains one or more user interface control (`<uicontrol>`) elements, for example: Start > Programs > Accessories > Notepad. If there is more than one `<uicontrol>` element, the formatter shows connecting characters between the menu items to represent the menu cascade. This element is part of the DITA user interface domain, a special set of DITA elements designed to document user interface tasks, concepts and reference information.

**Contains**( [uicontrol](#) ) (one or more)**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**[topic / ph](#) , [ui-d / menucascade](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

This example:

```
<menucascade>
  <uicontrol>Start</uicontrol>
  <uicontrol>Programs</uicontrol>
  <uicontrol>Accessories</uicontrol>
  <uicontrol>Notepad</uicontrol>
</menucascade>
```

produces this output: **Start --> Programs --> Accessories --> Notepad****shortcut**

The <shortcut> element identifies a keyboard shortcut for a menu or window action. This element is part of the DITA user interface domain, a special set of DITA elements designed to document user interface tasks, concepts and reference information.

**Contains**

( text data )

**Contained by**[uicontrol](#)**Inheritance**[topic / keyword](#) , [ui-d / shortcut](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

This example:

```
<menucascade>
  <uicontrol>Start</uicontrol>
  <uicontrol><shortcut>P</shortcut>rograms</uicontrol>
</menucascade>
```

produces the following result: **Start --> Programs**

**screen**

The <screen> element contains or refers to a textual representation of a computer screen or user interface panel (window).

Use <screen> to contain representations of text-based online panels, text consoles ("term" or "curses" windows, for example), or other text-based user interface components. The default print representation is to enclose the screen within a box, suggesting a computer display screen. In contrast to graphical screen captures normally used to represent GUI parts (see the [image](#) element description), this element specifically supports constructions for which text is the primary content.

This element is part of the DITA programming domain, a special set of DITA elements designed to document programming tasks, concepts and reference information.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

**Contained by**

[body](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [li](#) , [itemgroup](#) , [dd](#) , [fig](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [linkinfo](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [propdesc](#) , [pd](#)

**Inheritance**

[topic](#) / [pre](#) , [ui-d](#) / [screen](#)

**Attributes**



necessarily be semantic, such as image maps.

## imagemap

The `imagemap` element supports the basic functionality of the HTML “client-side” image map markup. `Imagemap` allows you to designate a linkable area or region over an image, allowing a link in that region to display another topic.

An HTML client-side image map binds an image to the navigation structure (the “map”) by means of an ID association from the map to the image. In contrast, the DITA version of `imagemap` markup simply includes the target image as the first required element in the markup, followed by a sequence of area elements that represent the links associated with the contained image.

An `imagemap` structure can be output either to a standard HTML image map or to alternative forms of navigation (such as table-based image maps). When output as PDF, the minimal form would be to represent at least the image; advanced PDF output processors should be able to provide equivalent region-oriented hyperlinks.

The xref content contains the intended alternative text or hover text for the map area.

### Contains

(( `image` ) then ( `area` ) (one or more) )

### Contained by

`body`, `section`, `example`, `p`, `note`, `lq`, `li`, `itemgroup`, `dd`, `stentry`, `draft-comment`, `fn`, `entry`, `conbody`, `prereq`, `context`, `info`, `tutorialinfo`, `stepxmp`, `choice`, `choptionhd`, `chdeschd`, `choption`, `chdesc`, `stepresult`, `result`, `postreq`, `refsyn`, `proptypehd`, `propvaluehd`, `propdeschd`, `pd`

### Inheritance

`topic` / `fig`, `ut-d` / `imagemap`

### Attributes

Name	Description	Data Type	Default Value	Required?
%display-atts; (scale, frame, expanse)	A set of related attributes, described at <a href="#">%display-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

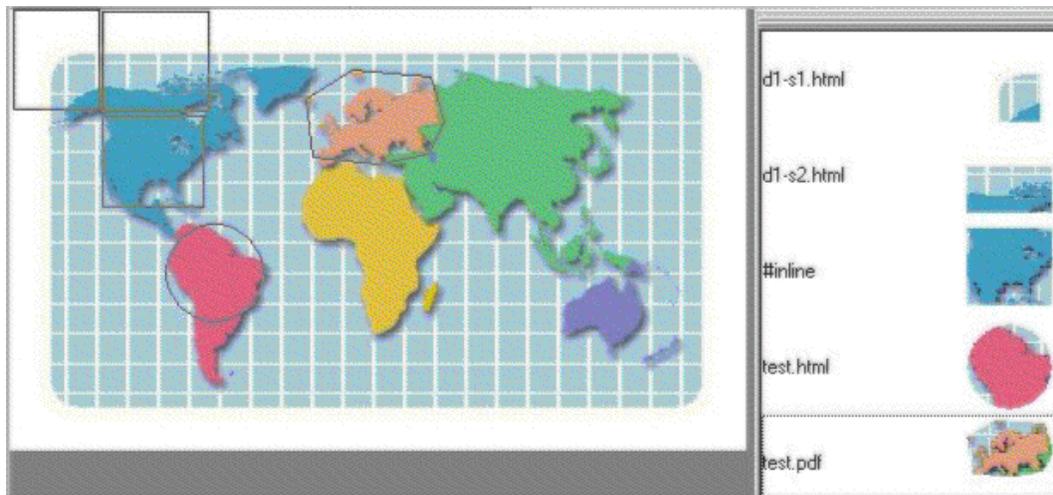
### Example

A simple `imagemap` looks like this (note that the rendering will depend on how this

markup is supported for particular output formats):

```
<imagemap>
<image href="imagemapworld.jpg"></image>
<area><shape>rect</shape><coords>2,0,53,59</coords>
<xref href="d1-s1.xml">Section 1</xref>
</area>
<area><shape>rect</shape><coords>54,1,117,60</coords>
<xref href="d1-s2.xml"></xref>
</area>
<area><shape>rect</shape><coords>54,62,114,116</coords>
<xref href="#inline" type="topic"></xref>
</area>
<area><shape>circle</shape><coords>120,154,29</coords>
<xref format="html" href="test.html"></xref>
</area>
<area><shape>poly</shape>
<coords>246,39,200,35,173,52,177,86,215,90,245,84,254,65</coords>
<xref format="pdf" href="test.pdf"></xref>
</area>
</imagemap>
```

The areas defined correspond to this graphic image; with the areas visible:



The values for use in the shape and coords elements must follow the guidelines defined for image maps in HTML 4.1, [Client-side image maps: the MAP and AREA elements](#)

## area

The area element supports the basic functionality of the HTML image map markup.

### Contains

(( [shape](#) ) then ( [coords](#) ) then ( [xref](#) ))

### Contained by

[imagemap](#)

### Inheritance

[topic](#) / [figgroup](#) , [ut-d](#) / [area](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts; ,	A set of related attributes, described at	parameter	<i>PE not</i>	Not

%id-atts;, translate, xml:lang)	%univ-atts;	entity	<i>applicable</i>	applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at %global-atts;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<area>
  <shape>rect</shape>
  <coords>54,1,117,60</coords>
  <xref href="dl-s2.dita"></xref>
</area>
```

**coords**

The coords element specifies the coordinates of the linkable region in an imagemap area.

The element defines the starting point and size of that area. It uses the following data for the appropriate shapes:

**Shape****Data format****rect**

left-x, top-y, right-x, bottom-y

**circle**

center-x, center-y, radius

**poly**

x1, y1, x2, y2, ..., xN, yN. The first x and y coordinate pair and the last should be the same to close the polygon.

Pixels are recommended; they appear to work with all browsers.

**Note:** The behavior of image maps will depend on the browser on which they are rendered.

This element contains text data representing HTML coordinate data for image maps. The syntax of the coordinate data depends on the shape described by the coordinates.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**

[area](#)

**Inheritance**

[topic](#) / [ph](#) , [ut-d](#) / [coords](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate,	A set of related attributes, described at %univ-atts;	parameter entity	<i>PE not applicable</i>	Not applicable

xml:lang)				
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<area>
  <shape>rect</shape>
  <coords>54,1,117,60</coords>
  <xref href="dl-s2.dita"></xref>
</area>
```

**shape**

The shape element defines the shape of a linkable area in an imagemap.

The shape element supports these values:

**rect**

Define a rectangular region. If you leave the shape element blank, this is assumed.

**circle**

Define a circular region.

**poly**

Define a polygonal region.

**default**

Indicates the entire diagram.

**Contains**

( text data )

**Contained by**

[area](#)

**Inheritance**

[topic / keyword](#) , [ut-d / shape](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to associate the <keyword> with another topic that provides more details for that particular keyword.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<area>  
<shape>rect</shape>  
<coords>54,1,117,60</coords>  
<xref href="dl-s2.dita"></xref>  
</area>
```

## Miscellaneous elements

Most DITA elements represent discourse, or information that is placed exactly as entered. However, there are also types of information that are usually authored in context with a thought or issue, but upon output, the content might be relocated, suppressed, or used only for purposes such as inline annotations for drafts. These elements include footnotes, index entries, draft comments, and special cleanup containers that can hold migrated data that still needs a writer's intervention to get into the right place.

### draft-comment

The <draft-comment> element allows simple review and discussion of topic contents within the marked-up content. Use the <draft-comment> element to ask a question or make a comment that you would like others to review. To indicate the source of the draft comment or the status of the comment, use the author, time or disposition attributes.

Processing systems should provide a run-time flag or parameter to cause the content of this element to be specially displayed for draft output only. By default, it is stripped out to prevent publishing internal comments by mistake.

#### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) ) (*any number*)

#### Contained by

[section](#) , [example](#) , [p](#) , [note](#) , [lq](#) , [sli](#) , [li](#) , [itemgroup](#) , [dd](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [screen](#) , [codeblock](#) , [pd](#)

#### Inheritance

[topic](#) / [draft-comment](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
author	Designates the originator of the draft comment.	CDATA	#IMPLIED	No
time	Describes when the draft comment was created.	CDATA	#IMPLIED	No
disposition	Status of the draft comment. Values can be issue, open, accepted, rejected, deferred, duplicate, reopened, unassigned, or completed.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable

class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>	
--------------------	---	--

**Example**

```
<draft-comment author="EBP">Where's the usage information for this section?</draft-comment>
```

**fn**

Use footnote (<fn>) to annotate text with notes that are not appropriate for inclusion in line or to indicate the source for facts or other material used in the text.

Footnote content is always skipped at the place where it was entered, and reproduced elsewhere, according to these rules:

- A footnote with no given *id* attribute is a **single-use** footnote. Upon output, it generates a number as a superscript “callout” that is linked to the placement of the footnote, usually at the bottom of the immediate printed page or at the end of the Web article. Subsequent footnotes in the same topic will have the next number in sequence for their callouts. If you enter a particular character in the *callout* attribute for the footnote, that character will be used as the superscript “callout” that is linked to the placement of the footnote.
- A footnote entered with an *id* attribute is a **use-by-reference** footnote. Upon output, it does not appear anywhere unless it has been referenced using an <xref> with the *type* attribute set to “fn”. The same callout behaviors will apply.
- Ordinarily, a footnote in one topic can't be referenced in another topic. The previous behaviors are local to each topic. But by using the <conref> mechanism, you can instance another topic's footnote into the local topic where it will then follow those behaviors:
  - If you use <fn conref="thatid"></fn> all by itself, the result will be the same as the single-use footnote entered literally in the same location.
  - If you use <fn conref="thatid" id="thisid"></fn>, then <xref href="thisid" type="fn"/>, the result will be the same as the use-by-reference model described before.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) ) (*any number*)

**Contained by**

[section](#) , [example](#) , [p](#) , [note](#) , [lq](#) , [sli](#) , [li](#) , [itemgroup](#) , [dd](#) , [figgroup](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [screen](#) , [codeblock](#) , [pd](#)

**Inheritance**

[topic](#) / [fn](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
callout	Specifies what character is used for the	CDATA	#IMPLIED	No

	footnote link, for example a number or an alpha character. Numbers are the default. You could also specify a graphic for the footnote callout during output processing.			
%univ-atts; (%select-atts;, %id-atts;,, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

This markup:

```
The memory storage capacity of the computer is
2 GB<fn callout="#">A GB (gigabyte) is equal to
1 million bytes</fn> with error correcting support.
```

produces this output:

The memory storage capacity of the computer is 2 GB  
*#A GB (gigabyte) is equal to 1 million bytes  
with error correcting support.*

**Note:** Footnote support may vary between different output types, depending on conventions and capabilities. For example, PDF output may lack support for the *callout* attribute, or footnotes may be collected as endnotes for certain types of Web publications.

**indexterm**

An <indexterm> is an index entry. You can nest entries to create multi-level indexes. The content is not output as part of topic content, only as part of the index.

When DITA topics are output to XHTML, any indexterm elements in the <keywords> element are placed in the Web page metadata, in addition to becoming part of the generated index.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) or [indexterm](#) ) (*any number*)

**Contained by**

[section](#) , [example](#) , [p](#) , [note](#) , [lq](#) , [sli](#) , [li](#) , [itemgroup](#) , [dd](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [entry](#) , [keywords](#) , [indexterm](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [screen](#) , [codeblock](#) , [pd](#)

**Inheritance**

[topic](#) / [indexterm](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
------	-------------	-----------	---------------	-----------

keyref	Currently not implemented in DITA processors. Provides a key that a process can use to identify a higher-level index term that the current index term should be added under.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<purpose>An indexterm is an index entry. You can nest entries to
create multi-level indexes.<indexterm>indexterm</indexterm>
<indexterm>Valid in Many Places elements<indexterm>indexterm</indexterm>
</indexterm></purpose>
```

## indextermref

An `<indextermref>` is a reference to an index entry in a lookup table used by the indexing process. If you want to create index markers pointing to referenced items, but only want page numbers instead of separate index entries to be generated, use the index term reference `<indextermref>` element. This adds the page number of the reference to the index without creating a separate index entry.

**Note:** Not currently supported in DITA processing. Since the equivalent processing can be provided by simply duplicating the target `indexterm` (or by creating an `indexterm` element with a `conref` attribute pointing to the target), this element might be deprecated in the future.

### Contains

no content

### Contained by

[section](#), [example](#), [p](#), [note](#), [lq](#), [sli](#), [li](#), [itemgroup](#), [dd](#), [pre](#), [lines](#), [ph](#), [stentry](#), [entry](#), [prereq](#), [context](#), [cmd](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [proptype](#), [propvalue](#), [screen](#), [codeblock](#), [pd](#)

### Inheritance

[topic](#) / [indextermref](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to identify the indexterm which the current location should be added to.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable

%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>Use <indextermref keyref="yellow"/> lemon zest to add a tangy citrus flavor to the cake icing.</p>
```

**tm**

The trademark (<tm>) element in DITA is used to markup and identify a term or phrase that is trademarked. Trademarks include registered trademarks, service marks, slogans and logos.

The business rules for indicating and displaying trademarks may differ from company to company and may be enforced by authoring policy and by specific processing.

**Contains**

( text data or [tm](#) ) (any number)

**Contained by**

[title](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [pre](#) , [lines](#) , [keyword](#) , [term](#) , [ph](#) , [tm](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linkinfo](#) , [entry](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#)

**Inheritance**

[topic](#) / [tm](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
trademark	The trademarked term	CDATA	#IMPLIED	No
tmowner	The trademark owner, for example "OASIS"	CDATA	#IMPLIED	No
tmttype	The trademark type: trademark, registered trademark, or service mark	CDATA	#IMPLIED	No
tmclass	Classification of the trademark.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>The advantages of using <tm trademark="DB2 Universal Database" tmttype="tm">
<tm trademark="DB2" tmttype="reg" tmclass="ibm">DB2</tm> Universal
Database</tm> are
```

well known.</p>

## Prolog elements

The prolog elements represent the <metadata> associated with a document.

The primary types of information that you can store in the prolog include:

- author
- copyright information
- critical tracking dates
- permissions for use/management of the content
- extensive metadata about the content of the document
- a resourceid that allows a topic to be associated with external resources such as linking to programming components as contextual help

Most of the metadata in a topic prolog can also be authored in a DITA map, in the map's <topicmeta> element.

## audience

The <audience> metadata element indicates, through the value of its type attribute, the intended audience for a topic. Since a topic can have multiple audiences, you can include multiple audience elements. For each audience you specify, you can identify the high-level task ( *job* ) they are trying to accomplish and the level of experience ( *experiencelevel* ) expected.

### Contains

no content

**Contained by**  
[metadata](#)

**Inheritance**  
[topic](#) / [audience](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
type	<p>Indicates the kind of person for whom the content of the topic is intended. Allowable values are:</p> <p><b>user</b> A user of the product</p> <p><b>purchaser</b> A product purchaser</p> <p><b>administrator</b> A product administrator</p> <p><b>programmer</b> A programmer</p> <p><b>executive</b> An executive</p> <p><b>services</b> Someone who provides services</p>	(user   purchaser   administrator   programmer   executive   services   other)	#IMPLIED	No

	<p>related to the product</p> <p><b>other</b></p> <p>Use the value specified by the othertype attribute</p>			
othertype	Indicates an alternate audience type, when the type is not available in the type attribute value list. This value is used as the user-provided audience when the type attribute value is set to "other."	CDATA	#IMPLIED	No
job	Indicates the high-level task the audience for the topic is trying to accomplish. Different audiences may read the same topic in terms of different high-level tasks; for example, an administrator may read the topic while administering, while a programmer may read the same topic while customizing. Allowable values are: installing, customizing, administering, programming, using, maintaining, troubleshooting, evaluating, planning, migrating, other.	installing   customizing   administering   programming   using   maintaining   troubleshooting   evaluating   planning   migrating   other	#IMPLIED	No
otherjob	If the job attribute value is "other" the value of this attribute is used to identify a kind of job other than the default ones provided by the job attribute.	CDATA	#IMPLIED	No
experiencelevel	Indicates the level of experience the audience is assumed to possess. Different audiences may have different experience levels with respect to the same topic; for example, a topic may require general knowledge from a programmer, but expert knowledge from a user. Allowable values are: <b>novice</b> A first time user. <b>general</b> The most common user. <b>expert</b> An experienced user.	(novice   general   expert)	#IMPLIED	No
name	Used to associate the audience element with values used in the audience attribute	CDATA	#REQUIRED	Yes
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

For a command reference topic for experienced programmers, the following might be an appropriate indication of that audience:

```
<audience type="programmer" job="programming" experiencelevel="expert"/>
```

**author**

The <author> metadata element contains the name of the topic's author.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**

[prolog](#)

**Inheritance**

[topic](#) / [author](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
href	A hyperlink representing a resource that defines the person or company named in the parent element. For example, you could use this attribute to cite the URL for the named entity's "home page." The href attribute identifies the destination of the resource using conventional URL syntax.	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
type	Indicates the primary author of the content. Allowable values are: <b>creator</b> The primary or original author of the content. <b>contributor</b> An additional author who is not primary.	(author   contributor)	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
<author type="creator">Jane Roe</author>
<author type="contributor">John Doe</author>
</prolog>
```

## brand

The <brand> element indicates the manufacturer or brand associated with the product described by the parent <prodinfo> element.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[prodinfo](#)

### Inheritance

[topic](#) / [brand](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<prodinfo>
<prodname>...</prodname>
<vrmlist>
<brand>eServer</brand>
<series>iSeries</series>
<opsys>Linux</opsys>
</vrmlist>
</prodinfo>
```

## category

The <category> element can represent any category by which a topic might be classified for retrieval or navigation; for example, the categories could be used to group topics in a generated navigation bar. Topics can belong to multiple categories.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[metadata](#)

### Inheritance

[topic](#) / [category](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%select-atts; (platform,	A set of related attributes, described at	parameter	<i>PE not</i>	Not

product, audience, otherprops, importance, rev, status)	<a href="#">%select-atts;</a>	entity	<i>applicable</i>	applicable
<a href="#">%global-atts;</a> (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
  <metadata>
    <category>Things that are blue</category>
  </metadata>
</prolog>
```

**component**

The `<component>` element describes the component of the product that this topic is concerned with. For example, a product might be made up of many components, each of which is installable separately. Components might also be shared by several products so that the same component is available for installation with many products. This identification can be used to check cross-component dependencies when some components are installed, but not others. It could also be used to make sure that topics are hidden, removed, or flagged in some way when the component they describe isn't installed. Such process-control logic is not currently supported in DITA processing.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**

[prodinfo](#)

**Inheritance**

[topic](#) / [component](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
<a href="#">%global-atts;</a> (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prodinfo>
  <prodname>BatCom</prodname>
  <vrmlist>
    <vrmlist version="v5r2" />
  </vrmlist>
  <component>TCP/IP</component>
</prodinfo>
```

## copyrholder

The copyright holder (<copyrholder>) element names the entity that holds legal rights to the material contained in the topic.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[copyright](#)

### Inheritance

[topic](#) / [copyrholder](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<copyright>
<copyryear year=2001></copyryear>
<copyrholder>IBM</copyrholder>
</copyright>
```

## copyright

The <copyright> element is used for a single copyright entry. It includes the copyright years and the copyright holder. Multiple <copyright> statements are allowed.

### Contains

( ( [copyryear](#) ) (one or more) then [copyrholder](#) )

### Contained by

[prolog](#)

### Inheritance

[topic](#) / [copyright](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
type	Indicates the legal status of the copyright holder. Allowable values are: <b>primary</b> The copyright holder with first claim on the copyright	(primary   secondary)	#IMPLIED	No

	<b>secondary</b> An additional copyright holder who is not primary			
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
<copyright>
<copyyear year="2001-04-12"></copyyear>
<copyrholder>IBM</copyrholder>
</copyright>
<copyright type=secondary>
<copyyear year="2002-03-03"></copyyear>
<copyrholder>Schweetones Publishing, Inc.</copyrholder>
</copyright>
</prolog>
```

**copyyear**

The <copyyear> element contains the copyright year as specified by the *year* attribute.

**Contains**

no content

**Contained by**

[copyright](#)

**Inheritance**

[topic](#) / [copyyear](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
year	The year in YYYY format.	CDATA	#IMPLIED	No
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<copyright>
<copyyear year="2001"></copyyear>
<copyrholder>IBM</copyrholder>
</copyright>
```

**created**

The <created> element specifies the document creation date using the *date* attribute.

### Contains

no content

### Contained by

[critdates](#)

### Inheritance

[topic](#) / [created](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
date	The document creation date. Enter the date as YYYY-MM-DD where YYYY is the year, MM is the month from 01 to 12, and DD is the day from 01-31. See <a href="#">A Summary of the International Standard Date and Time Notation</a> for background.	CDATA	#IMPLIED	No
golive	The publication or general availability (GA) date, entered as YYYY-MM-DD, where YYYY is the year, MM is the month from 01 to 12, and DD is the day from 01-31.	CDATA	#IMPLIED	No
expiry	The date when the information should be retired or refreshed, entered as YYYY-MM-DD, where YYYY is the year, MM is the month from 01 to 12, and DD is the day from 01-31.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<prolog>
<critdates>
  <created date="2001-06-12"></created>
  <revised golive="2001-08-20"></revised>
</critdates>
</prolog>
```

## critdates

The <critdates> element contains the critical dates in a document life cycle, such as the creation date and multiple revision dates.

### Contains

( [created](#) then ( [revised](#) ) (any number) )

### Contained by

[prolog](#)**Inheritance**[topic / critdates](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
<critdates>
  <created date="2001-06-12"></created>
  <revised golive="2001-08-20"></revised>
</critdates>
</prolog>
```

**featnum**

The <featnum> element contains the feature number of a product in the metadata.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**[prodinfo](#)**Inheritance**[topic / featnum](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prodinfo>
  <prodname>BatCom</prodname>
  <vrmlist>
    <vrml version="v5r2"/>
  </vrmlist>
  <featnum>135</featnum>
  <component>TCP/IP</component>
</prodinfo>
```

## keywords

The <keywords> element contains a list of key words (using [indexterm](#) or [keyword](#) markup) that can be used by a search engine.

When DITA topics are output to XHTML, any <keyword> or <indexterm> elements in the <keywords> element are placed in the Web page metadata. The index terms in this context are also included in any generated index.

### Contains

( [indexterm](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) ) (any number)

**Contained by**  
[metadata](#)

**Inheritance**  
[topic](#) / [keywords](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

The following example is metadata from an installation task:

```
<prolog>
  <keywords>
    <keyword>installing</keyword>
    <keyword>uninstalling</keyword>
    <keyword>prerequisites</keyword>
    <keyword>helps</keyword>
    <keyword>wizards</keyword>
  </keywords>
</prolog>
```

## metadata

The <metadata> section of the prolog contains information about a topic such as audience and product information. Metadata can be used by computational processes to select particular topics or to prepare search indexes or to customize navigation.

### Contains

( ( [audience](#) ) (any number) then ( [category](#) ) (any number) then ( [keywords](#) ) (any number) then ( [prodinfo](#) ) (any number) then ( [othermeta](#) ) (any number) )

**Contained by**[prolog](#)**Inheritance**[topic](#) / [metadata](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
  <metadata>
    <audience type="user" job="using" experiencelevel="novice"/>
  </metadata>
</prolog>
```

**othermeta**

The `<othermeta>` element can be used to identify properties not otherwise included in `<metadata>` and assign name/content values to those properties. The name attribute identifies the property and the content attribute specifies the property's value. The values in this attribute are output as HTML metadata elements, and have no defined meaning for other possible outputs such as PDF.

**Contains**

no content

**Contained by**[metadata](#)**Inheritance**[topic](#) / [othermeta](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
name	The name of the metadata property.	CDATA	#REQUIRED	Yes
content	The value for the property named in the name attribute.	CDATA	#REQUIRED	No
translate-content	Indicates whether the content attribute of the defined metadata property should be translated or not.	yes   no	#IMPLIED	No
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at	parameter	<i>PE not</i>	Not

	<a href="#">%global-atts;</a>	entity	<i>applicable</i>	applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<othermeta name="ThreadWidthSystem" content="metric"/>
```

**permissions**

The <permissions> empty prolog element can indicate any preferred controls for access to a topic. Topics can be filtered based on the permissions element. This capability depends on your output formatting process.

**Contains**

no content

**Contained by**

[prolog](#)

**Inheritance**

[topic](#) / [permissions](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
view	Defines the classifications of viewers allowed to view the document. Allowable values are: <b>internal</b> For internal use only. <b>classified</b> For a certain group, only. <b>all</b> The world. <b>entitled</b> Special folks, only.	(internal   classified   all   entitled)	#IMPLIED	No
<a href="#">%global-atts;</a> (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
<permissions view="entitled"/>
...
```

**platform**

The <platform> metadata element contains a description of the operating system and/or

hardware related to the product being described by the <prodinfo> element.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) ( any number )

### Contained by

[prodinfo](#)

### Inheritance

[topic](#) / [platform](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

See [prodinfo](#) .

## prodinfo

The <prodinfo> metadata element in the prolog contains information about the product or products that are the subject matter of the current topic.

### Contains

( ( [prodname](#) ) then ( [vrmlist](#) ) then ( [brand](#) or [series](#) or [platform](#) or [prognum](#) or [featnum](#) or [component](#) ) ( any number )

### Contained by

[metadata](#)

### Inheritance

[topic](#) / [prodinfo](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example



%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

See [prodinfo](#) .

## prolog

The <prolog> element contains information about the topic as an whole (for example, author information or subject category) that is either entered by the author or machine-maintained. Much of the metadata inside the <prolog> will not be displayed with the topic on output, but may be used by processes that generate search indexes or customize navigation.

**Contains**

( ( [author](#) ) (any number) then ( [source](#) ) (optional) then ( [publisher](#) ) (optional) then ( [copyright](#) ) (any number) then ( [critdates](#) ) (optional) then ( [permissions](#) ) (optional) then ( [metadata](#) ) (any number) then ( [resourceid](#) ) (any number) )

**Contained by**

[topic](#) , [concept](#) , [task](#) , [reference](#)

**Inheritance**

[topic](#) / [prolog](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	<i>Not for use by authors. If an editor displays class attribute values, do not edit them.</i> The class attribute supports specialization. Its predefined values help the output transforms work correctly with ranges of related content.	CDATA	#IMPLIED	No

```
<prolog>
  <metadata>
    <audience type="user" job="using" experiencelevel="novice"/>
  </metadata>
</prolog>
```

## publisher

The <publisher> metadata element contains the name of the person, company, or organization responsible for making the content or subject of the topic available.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

**Contained by**[prolog](#)**Inheritance**[topic](#) / [publisher](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
href	A hyperlink representing a resource that defines the person or company named in the parent element. For example, you could use this attribute to cite the URL for the named entity's "home page." The href attribute identifies the destination of the resource using conventional URL syntax.	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<publisher>AJ Printing Inc.</publisher>
```

**resourceid**

The <resourceid> element provides an identifier for applications that require them in a particular format, when the normal id attribute of the topic can't be used. Each resourceid entry should be unique. It is one of the metadata elements that can be included within the prolog of a topic, along with document tracking and product information, etc. The element has no content, but takes an *id* attribute and an *apiname* attribute.

**Contains**

no content

**Contained by**[prolog](#)**Inheritance**[topic](#) / [resourceid](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
------	-------------	-----------	---------------	-----------

id	The value used a specific application to identify the topic.	CDATA	#REQUIRED	No
appname	Contains the name of the application that will use the resource id to identify the topic.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	<i>Not for use by authors. If an editor displays class attribute values, do not edit them.</i> The class attribute supports specialization. Its predefined values help the output transforms work correctly with ranges of related content.	CDATA	#IMPLIED	No

**Example**

```
<resourceid id="sqlid00375" appname="dbaccess" />
```

**revised**

The <revised> element in the prolog is used to maintain tracking dates that are important in a topic development cycle, such as the last modification date, the original availability date, and the expiration date.

**Contains**

no content

**Contained by**

[critdates](#)

**Inheritance**

[topic](#) / [revised](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
modified	The last modification date, entered as YYYY-MM-DD, where YYYY is the year, MM is the month from 01 to 12, and DD is the day from 01-31.	CDATA	#IMPLIED	No
golive	The publication or general availability (GA) date, entered as YYYY-MM-DD, where YYYY is the year, MM is the month from 01 to 12, and DD is the day from 01-31.	CDATA	#IMPLIED	No
expiry	The date when the information should be retired or refreshed, entered as YYYY-MM-DD, where YYYY is the year, MM is the month from 01 to 12, and DD is the day from 01-31.	CDATA	#IMPLIED	No
%select-atts; (platform, product, audience, otherprops, importance,	A set of related attributes, described at <a href="#">%select-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable

rev, status)				
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
<critdates>
  <created date="1/1/1999" golive="2/15/1999" expiry="9/9/9999"/>
  <revised modified="3/3/2003" golive="2/3/2002" expiry="9/9/9999"/>
</critdates>
</prolog>
```

**series**

The <series> metadata element contains information about the product series that the topic supports.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (*any number*)

**Contained by**

[prodinfo](#)

**Inheritance**

[topic](#) / [series](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prodinfo>
  <prodname>BatCom</prodname>
  <vrmlist><vrmlist version="5"/></vrmlist>
  <series>tSeries</series>
  <prognum>5412-SS1</prognum>
  <featnum>135</featnum>
  <component>TCP/IP</component>
</prodinfo>
```

**source**

The <source> element contains a reference to a resource from which the present topic is derived, either completely or in part. The element can contain a description of the resource; the *href* reference can be a string or a URL that points to it.

**Contains**

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) ( any number )

**Contained by**[prolog](#)**Inheritance**[topic](#) / [source](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
href	A pointer to the external resource from which the present resource is derived. The href attribute identifies the destination of the resource using conventional URL syntax.	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<prolog>
  <source href="http://www.ibm.com">Somewhere, someplace</source>
</prolog>
```

**vrml**

The vrml empty element contains information about a single product's version, modification, and release, to which the current topic applies.

**Contains**

no content

**Contained by**[vrmlist](#)**Inheritance**[topic](#) / [vrml](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
version	Indicates the released version number of the product(s) that the document describes.	CDATA	#IMPLIED	No
release	Contains the product release identifier.	CDATA	#IMPLIED	No

modification	Indicates when the product described in this topic was last modified.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**See [vrmlist](#) .**vrmlist**

The <vrmlist> element contains a set of <vrmlist> elements for logging the version, release, and modification information for multiple products or versions of products to which the topic applies.

**Contains**( [vrmlist](#) ) (one or more)**Contained by**[prodinfo](#)**Inheritance**[topic](#) / [vrmlist](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

The recent versions of a mythical product might be logged thus using the vrmlist markup:

```
<prolog>
  <metadata>
    <prodinfo>
      <prodname>Widge-o-matic</prodname>
      <vrmlist>
        <vrmlist version="1.0" release="2001-03-30" modification="0"/>
        <vrmlist version="1.0" modification="1" release="2001-10-03"/>
      </vrmlist>
    </prodinfo>
  </metadata>
</prolog>
```

## Related links elements

The related-links section of DITA topics is a special structure that supports the navigational rules from a topic to its related neighbor topics.

Links are different from cross-references in that cross-references occur only within the body of a topic and can target any element in this or other topics; links only represent topic-to-topic connections, or connections to non-DITA-topic resources.

Related links can also be managed indirectly using DITA maps, which provide a more efficient way to manage links as an aspect of the collection of topics rather than as embedded pointers in each topic.

### link

The <link> element defines a relationship to another topic. Links represent the types and roles of topics in a web of information, and therefore represent navigational links within that web. Links are typically sorted on output based on their attributes. The optional container elements for link (<linkgroup> and <linklist>) allow authors to define groups with common attributes, or to preserve the authored sequence of links on output.

#### Contains

( ( [linktext](#) ) (optional) then ( [desc](#) ) (optional) )

#### Contained by

[related-links](#) , [linklist](#) , [linkpool](#)

#### Inheritance

[topic](#) / [link](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
href	<p>A hyperlink to an external Web page (URL) or other non-DITA resource, or to another DITA topic in the same file or in another file. The format attribute identifies the format of the target. Non-DITA targets use standard URL syntax. DITA topics are targetted as follows:</p> <pre> Target elsewhere in the same file:   href="#topicid" First topic in different file:   href="filename.dita" Specific topic in different file:   href="filename.dita#topicid" </pre> <p>If the URL contains an ampersand character, the ampersand symbol (&amp;#amp;) should be used to indicate that character</p>	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process	NMTOKEN	#IMPLIED	No

	can use to look up associated information.			
%rel-atts; (type, role, otherrole)	A set of related attributes, described at <a href="#">%rel-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
format	<p>The format attribute identifies the format of the resource being cross referenced. The default format is "dita".</p> <p>Possible values include:</p> <p><b>dita</b></p> <p>The destination uses DITA topic markup, or markup specialized from a DITA topic. Unless otherwise specified, the corresponding default type will be treated as "topic."</p> <p><b>html</b></p> <p>The format of the linked-to resource is HTML or XHTML.</p> <p><b>pdf</b></p> <p>The format of the linked-to resource is PDF (opens a new window).</p> <p><b>ditamap</b></p> <p>The linked-to resource is a DITA map. It represents a referenced hierarchy at a position within referencing hierarchy, and a referenced relationship table included outside the referencing hierarchy</p> <p><b>(no value)</b></p> <p>Defaults to "dita"</p> <p>For other formats, you can use the file extension without the "." (for example, in a link to file "readme.txt", use "txt" as the value)</p>	CDATA	#IMPLIED	No
scope	<p>The scope attribute identifies the closeness of the relationship between the current document and the target resource.</p> <ul style="list-style-type: none"> <li>Set scope to <code>local</code> when the resource is part of the current set of content, and should be accessed and copied to the output directory.</li> <li>Set scope to <code>peer</code> when the resource is part of the current set of content but is not accessible at build time.</li> <li>Set scope to <code>external</code> when the resource is not part of the current</li> </ul>	(local   peer   external)	#IMPLIED	No

	information set and should open in a new browser window. The default is <code>local</code> .			
query	Lists query criteria, or uses metadata as query criteria. The query pulls in matching topics under the current element if the current element has a title or href; otherwise references to the matching topics replace the element at the current location.	CDATA	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<related-links>
<linkgroup type="concept">
<link href="czover.htm#sqljsupp"/>
<link href="czesqlj.htm#sqljemb/>
</linkgroup>
</related-links>
```

**linkinfo**

The `<linkinfo>` element allows you to place a descriptive paragraph following a list of links in a [linklist](#) element.

**Contains**

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [image](#) ) (*any number*)

**Contained by**

[linklist](#)

**Inheritance**

[topic](#) / [linkinfo](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<linklist collection-type="sequence">
<title>Repairing widgets</title>
<link href="debug.dita" type="task"></link>
<link href="repair.dita" type="task"></link>
```

```
<link href="test.dita" type="task"></link>
<linkinfo>To repair a reciprocating widget,
you must follow the instructions very carefully. Note
the sequence to follow. Do it.</linkinfo>
</linklist>
```

## linklist

The `<linklist>` element defines an author-arranged group of links. Within `<linklist>`, the organization of links on final output is in the same order as originally authored in the DITA topic.

There are two ways to organize related information links: add them all in no particular order, using the `<linkpool>` or `<related-links>` elements, and let the output formatting processor sort them; or pre-group them using one or more `<linklist>` elements. When you pre-group them using `<linklist>`, then the order of the links as you created them is preserved during the output formatting process.

Attributes set on `<linklist>` are inherited by its descendants. For example, if you've got a `<linklist>` that contains all external links, you can set `scope="external"` on that outer `<linklist>` element and leave it off the contained links.

### Contains

( ( [title](#) ) (optional) then ( [desc](#) ) (optional) then ( [linklist](#) or [link](#) ) (any number) then ( [linkinfo](#) ) (optional) )

### Contained by

[related-links](#) , [linklist](#)

### Inheritance

[topic](#) / [linklist](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
collection-type	Collection types describe how links relate to each other. A family represents a tight grouping in which each of the referenced topics not only relates to the current topic but also relate to each other.	(unordered   sequence   choice   family)	"unordered"	No
duplicates	Specifies whether or not duplicate links will be filtered out of a linklist. Allowable values are: "yes" (allow duplicate links), or "no" (filter out duplicate links). In general, duplicate links in linklists are preserved.. Note that links are regarded as duplicates only if their content plus all attributes match. Currently not supported in DITA processing.	#IMPLIED	The attribute value is currently ignored, but should default to yes for links in linklists and no for all other links.	No
mapkeyref	Identifies the map, if any, from which the contained links are derived. This value is automatically generated by the same process that creates the links from the	CDATA	#IMPLIED	No

	map, as a way to identify which map the links came from. If the <linklist> or <linkpool> is manually created by the author, there is no need to use this attribute.			
%rel-atts; (type, role, otherrole)	A set of related attributes, described at <a href="#">%rel-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
spectitle	The specialized title attribute allows architects of specialized types to define a fixed or default title for a specialized element. Not intended for direct use by authors.	CDATA	#IMPLIED	No
format	<p>The format attribute identifies the format of the resource being cross referenced. The default format is "dita".</p> <p>Possible values include:</p> <p><b>dita</b></p> <p>The destination uses DITA topic markup, or markup specialized from a DITA topic. Unless otherwise specified, the corresponding default type will be treated as "topic."</p> <p><b>html</b></p> <p>The format of the linked-to resource is HTML or XHTML.</p> <p><b>pdf</b></p> <p>The format of the linked-to resource is PDF (opens a new window).</p> <p><b>ditamap</b></p> <p>The linked-to resource is a DITA map. It represents a referenced hierarchy at a position within referencing hierarchy, and a referenced relationship table included outside the referencing hierarchy</p> <p><b>(no value)</b></p> <p>Defaults to "dita"</p> <p>For other formats, you can use the file extension without the "." (for example, in a link to file "readme.txt", use "txt" as the value)</p>	CDATA	#IMPLIED	No
scope	The scope attribute identifies the closeness of the relationship between the current document and the target resource.	(local   peer   external)	#IMPLIED	No

	<ul style="list-style-type: none"> <li>Set scope to <code>local</code> when the resource is part of the current set of content, and should be accessed and copied to the output directory.</li> <li>Set scope to <code>peer</code> when the resource is part of the current set of content but is not accessible at build time.</li> <li>Set scope to <code>external</code> when the resource is not part of the current information set and should open in a new browser window.</li> </ul> <p>The default is <code>local</code>.</p>			
<code>%global-atts; (xtrf, xtrc)</code>	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
<code>class, outputclass</code>	Common attributes described in <a href="#">Other common DITA attributes</a>			

## linkpool

The `<linkpool>` element defines a group of links that have common characteristics, such as type or audience or source. When links are not in a `<linklist>` (that is, they are in `<related-links>` or `<linkpool>` elements), the organization of links on final output is determined by the output process, not by the order that the links actually occur in the DITA topic.

There are two ways to organize related information links: add them all in no particular order, using the `<linkpool>` or `<related-links>` elements, and let the output formatting processor sort them; or pre-group them using one or more `<linklist>` elements. When you pre-group them using `<linklist>`, then the order of the links as you created them is preserved during the output formatting process.

Attributes set on `<linkpool>` are inherited by its descendants. For example, if you've got a `<linkpool>` that contains all external links, you can set `scope="external"` on that outer `<linkpool>` element and leave it off the links it contains.

### Contains

( [linkpool](#) or [link](#) ) (any number)

### Contained by

[related-links](#) , [linkpool](#)

### Inheritance

[topic](#) / [linkpool](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
<code>collection-type</code>	Collection types describe how links relate to each other. A family represents a tight grouping in which each of the referenced topics not only relates to the current topic but also relate to each other.	(unordered   sequence   choice   family)	"unordered"	No

duplicates	Specifies whether or not duplicate links will be filtered out of a linklist. Allowable values are: "yes" (allow duplicate links), or "no" (filter out duplicate links). In general, duplicate links in linklists are preserved.. Note that links are regarded as duplicates only if their content plus all attributes match. Currently not supported in DITA processing.	#IMPLIED	The attribute value is currently ignored, but should default to yes for links in linklists and no for all other links.	No
mapkeyref	Identifies the map, if any, from which the contained links are derived. This value is automatically generated by the same process that creates the links from the map, as a way to identify which map the links came from. If the <linklist> or <linkpool> is manually created by the author, there is no need to use this attribute.	CDATA	#IMPLIED	No
%rel-atts; (type, role, otherrole)	A set of related attributes, described at <a href="#">%rel-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
format	<p>The format attribute identifies the format of the resource being cross referenced. The default format is "dita" .</p> <p>Possible values include:</p> <p><b>dita</b></p> <p>The destination uses DITA topic markup, or markup specialized from a DITA topic. Unless otherwise specified, the corresponding default type will be treated as "topic."</p> <p><b>html</b></p> <p>The format of the linked-to resource is HTML or XHTML.</p> <p><b>pdf</b></p> <p>The format of the linked-to resource is PDF (opens a new window).</p> <p><b>ditamap</b></p> <p>The linked-to resource is a DITA map. It represents a referenced hierarchy at a position within referencing hierarchy, and a referenced relationship table included outside the referencing hierarchy</p> <p><b>(no value)</b></p>	CDATA	#IMPLIED	No

	<p>Defaults to "dita"</p> <p>For other formats, you can use the file extension without the "." (for example, in a link to file "readme.txt", use "txt" as the value)</p>			
scope	<p>The scope attribute identifies the closeness of the relationship between the current document and the target resource.</p> <ul style="list-style-type: none"> <li>Set scope to <code>local</code> when the resource is part of the current set of content, and should be accessed and copied to the output directory.</li> <li>Set scope to <code>peer</code> when the resource is part of the current set of content but is not accessible at build time.</li> <li>Set scope to <code>external</code> when the resource is not part of the current information set and should open in a new browser window.</li> </ul> <p>The default is <code>local</code>.</p>	(local   peer   external)	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<related-links>
<linkpool type="task">
<link href="generalfaq.html#installing" role="parent"/>
<link href="register.html#newuser" role="sibling"/>
</linkpool>
</related-links>
```

## linktext

The `<linktext>` element provides the literal label or line of text for a link. In most cases, the text of a link can be resolved during processing by cross reference with the target resource. Use the `<linktext>` element only when the target cannot be reached, such as when it is a peer or external link, or the target is local but not in DITA format.

### Contains

( text data or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [term](#) ) (any number)

### Contained by

[link](#)

### Contained by

[topicmeta](#)

### Inheritance

[topic](#) / [linktext](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

```
<link href="tzover.htm#accsqlj">
<linktext>Accessing relational data with SQLJ</linktext>
</link>
```

## Specialization elements

Several DITA elements exist either for architectural reasons or for support of specialized markup yet to be designed. Although there is little need to use these elements unless you are directed to, some of them, such as `<boolean>` and `<state>`, can be used if your content makes use of these semantic distinctions. A discussion of signals on a gate of an integrated logic circuit, for example, might use the state element to represent either on or off conditions of that gate.

### boolean

The `<boolean>` element is used to express one of two opposite values, such as yes or no, on or off, true or false, high or low, and so forth. The element itself is empty; the value of the element is stored in its `state` attribute, and the semantic associated with the value is typically in a specialized name derived from this element. If you need more than two values (for example, "yes," "no" and "don't care") use the `<state>` element instead. This element is primarily for specialization, where it can be used to require a logical true or false designation in a particular part of the document.

**OASIS TC Note:** This element is deprecated. It is functionally equivalent to `<state value="yes|no"/>`, which is recommended as its replacement in all cases.

#### Contains

no content

#### Contained by

[title](#), [shortdesc](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [q](#), [sli](#), [li](#), [itemgroup](#), [dthd](#), [ddhd](#), [dt](#), [dd](#), [pre](#), [lines](#), [ph](#), [stentry](#), [draft-comment](#), [fn](#), [cite](#), [xref](#), [linkinfo](#), [entry](#), [prereq](#), [context](#), [cmd](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [proptype](#), [propvalue](#), [propdesc](#), [screen](#), [b](#), [u](#), [i](#), [tt](#), [sup](#), [sub](#), [codeph](#), [codeblock](#), [pt](#), [pd](#), [fragref](#), [synnote](#)

#### Inheritance

[topic](#) / [boolean](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
state	The state of the boolean element. Allowable values are: yes no	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts; , translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

#### Example

```
She said "<boolean state="yes"/>" when I asked her to marry me!
```

## itemgroup

The <itemgroup> element is reserved for use in specializations of DITA. As a container element, it can be used to sub-divide or organize elements that occur inside a list item, definition, or parameter definition.

### Contains

( text data or [ph](#) or [codeph](#) or [synph](#) or [filepath](#) or [msgph](#) or [userinput](#) or [systemoutput](#) or [b](#) or [u](#) or [i](#) or [tt](#) or [sup](#) or [sub](#) or [uicontrol](#) or [menucascade](#) or [term](#) or [xref](#) or [cite](#) or [q](#) or [boolean](#) or [state](#) or [keyword](#) or [option](#) or [parmname](#) or [apiname](#) or [cmdname](#) or [msgnum](#) or [varname](#) or [wintitle](#) or [tm](#) or [p](#) or [lq](#) or [note](#) or [dl](#) or [parml](#) or [ul](#) or [ol](#) or [sl](#) or [pre](#) or [codeblock](#) or [msgblock](#) or [screen](#) or [lines](#) or [fig](#) or [syntaxdiagram](#) or [imagemap](#) or [image](#) or [object](#) or [table](#) or [simpletable](#) or [draft-comment](#) or [required-cleanup](#) or [fn](#) or [indextermref](#) or [indexterm](#) ) (any number)

### Contained by

[li](#) , [dd](#) , [choice](#) , [pd](#)

### Inheritance

[topic](#) / [itemgroup](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<li>Second point of a list.
  <itemgroup>related discourse</itemgroup>
</li>
```

## no-topic-nesting

The <no-topic-nesting> element is a placeholder in the DITA architecture. It is not actually used by the default DITA document types; it is for use only when creating a validly customized document type where the information designer wants to eliminate the ability to nest topics. Not intended for use by authors, and has no associated output processing.

### Contains

no content

### Contained by

### Inheritance

[topic](#) / [no-topic-nesting](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

## required-cleanup

A <required-cleanup> element is used as a placeholder for migrated elements that cannot be appropriately tagged without manual intervention. As the element name implies, the intent for authors is to clean up the contained material and eventually get rid of the <required-cleanup> element. Authors should not insert this element into documents.

**Note:** Because the content of <required-cleanup> is not considered to be verified data, **DITA processors are required to strip this element from output by default.** A runtime flag *may* be provided to allow a draft view of migrated content in context.

### Contains

#### Contained by

[body](#) , [section](#) , [example](#) , [p](#) , [note](#) , [lq](#) , [sli](#) , [li](#) , [itemgroup](#) , [dd](#) , [pre](#) , [lines](#) , [ph](#) , [stentry](#) , [entry](#) , [conbody](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [screen](#) , [codeblock](#) , [pd](#)

#### Inheritance

[topic](#) / [required-cleanup](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
remap	Indicates the element that the contents of the required-cleanup element were mapped from (provides an idea about what the new intent should be).	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

Presuming an original HTML document had contained some content within a <center> tag (for which there is no clear migrational equivalent in DITA), the following might be the result that is valid within an XML editor, but which requires an author to decide how to better tag or revise this original content:

```
<section>
  <title>Some section title</title>
  <required-cleanup remap="center">Some original content migrated
  from a &lt;center> tag.</required-cleanup>
</section>
```

## state

The `<state>` element specifies a name/value pair whenever it is necessary to represent a named state that has a variable value. The element is primarily intended for use in specializations to represent specific states (like logic circuit states, chemical reaction states, airplane instrumentation states, and so forth).

### Contains

no content

### Contained by

[title](#), [shortdesc](#), [section](#), [example](#), [desc](#), [p](#), [note](#), [lq](#), [q](#), [sli](#), [li](#), [itemgroup](#), [dthd](#), [ddhd](#), [dt](#), [dd](#), [pre](#), [lines](#), [ph](#), [stentry](#), [draft-comment](#), [fn](#), [cite](#), [xref](#), [linkinfo](#), [entry](#), [prereq](#), [context](#), [cmd](#), [info](#), [tutorialinfo](#), [stepxmp](#), [choice](#), [choptionhd](#), [chdeschd](#), [choption](#), [chdesc](#), [stepresult](#), [result](#), [postreq](#), [refsyn](#), [proptypehd](#), [propvaluehd](#), [propdeschd](#), [proptype](#), [propvalue](#), [propdesc](#), [screen](#), [b](#), [u](#), [i](#), [tt](#), [sup](#), [sub](#), [codeph](#), [codeblock](#), [pt](#), [pd](#), [fragref](#), [synnote](#)

### Inheritance

[topic](#) / [state](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
name	The name of the property whose state is being described.	CDATA	#REQUIRED	Yes
value	The state of the property identified by the name attribute.	CDATA	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

### Example

```
<step><cmd>Verify the presence of an "on" or high condition at the input
gate
(ie, <state name="inflag" value="high"/></cmd></step>
```

## term

The `<term>` element identifies words that may have or require extended definitions or explanations. In future development of DITA, for example, terms might provide associative linking to matching glossary entries.

**Contains**( text data or [tm](#) ) (any number)**Contained by**

[title](#) , [navtitle](#) , [searchtitle](#) , [shortdesc](#) , [section](#) , [example](#) , [desc](#) , [p](#) , [note](#) , [lq](#) , [q](#) , [sli](#) , [li](#) , [itemgroup](#) , [dthd](#) , [ddhd](#) , [dt](#) , [dd](#) , [pre](#) , [lines](#) , [ph](#) , [alt](#) , [stentry](#) , [draft-comment](#) , [fn](#) , [cite](#) , [xref](#) , [linktext](#) , [linkinfo](#) , [entry](#) , [author](#) , [source](#) , [publisher](#) , [copyrholder](#) , [category](#) , [prodname](#) , [brand](#) , [series](#) , [platform](#) , [prognum](#) , [featnum](#) , [component](#) , [indexterm](#) , [prereq](#) , [context](#) , [cmd](#) , [info](#) , [tutorialinfo](#) , [stepxmp](#) , [choice](#) , [choptionhd](#) , [chdeschd](#) , [choption](#) , [chdesc](#) , [stepresult](#) , [result](#) , [postreq](#) , [refsyn](#) , [proptypehd](#) , [propvaluehd](#) , [propdeschd](#) , [proptype](#) , [propvalue](#) , [propdesc](#) , [uicontrol](#) , [screen](#) , [b](#) , [u](#) , [i](#) , [tt](#) , [sup](#) , [sub](#) , [codeph](#) , [codeblock](#) , [var](#) , [oper](#) , [delim](#) , [sep](#) , [pt](#) , [pd](#) , [fragref](#) , [synnote](#) , [repsep](#) , [msgph](#) , [msgblock](#) , [filepath](#) , [userinput](#) , [systemoutput](#) , [coords](#)

**Inheritance**[topic](#) / [term](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
%univ-atts; (%select-atts;, %id-atts;, translate, xml:lang)	A set of related attributes, described at <a href="#">%univ-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class, outputclass	Common attributes described in <a href="#">Other common DITA attributes</a>			

**Example**

```
<p>The <term>reference implementation</term> of DITA represents the standard, <q>fallback</q> behaviors intended for DITA elements.</p>
```

## Commonly referenced descriptions

Several parts of a language reference are common between many locations, such as the descriptions for the selection and property attributes of DITA elements. These are described as sets to reduce unnecessary duplication of common information.

### %display-atts;

Display attributes is a parameter entity declaration in the topic DTD that includes attributes whose values may be used for affecting the display of a topic or its selection by search tools.

In DITA tables, in place of the `expense` attribute used by other DITA elements, the `pgwide` attribute is used instead, to conform with the OASIS Exchange Table Model. This attribute has a similar semantic (1=page width; 0=resize to galley or column).

#### Attributes

Name	Description	Data Type	Default Value	Required?
scale	<p>Specifies a percentage, selected from an enumerated list, that is used to resize fonts in relation to the normal text size. DITA processing does not support this attribute for XHTML output.</p> <p>The scale attribute provides an acknowledged style-based property directly on DITA elements. It will be deprecated in favor of external style specifications. For the table and fig elements, the intent of the property is to allow authors to adjust font sizes on the content of the containing element, primarily for print accomodation. An image in these contexts is to be scaled only by its own direct scale property. If not specifically scaled, such an image is unchanged by the scale property of its parent table or fig.</p>	(50   60   70   80   90   100   110   120   140   160   180   200)	#IMPLIED	No
frame	<p>Specifies which portion of a border should surround the element. Allowable values are:</p> <p><b>top</b> Draw a line before the element</p> <p><b>bottom</b> Draw a line after the element</p> <p><b>topbot</b> Draw a line both before and after the element</p> <p><b>all</b></p>	(top   bottom   topbot   all   sides   none)	#IMPLIED	No

	<p>Draw a box around the element</p> <p><b>sides</b></p> <p>Draw a line at each side of the element</p> <p><b>none</b></p> <p>Don't draw any lines around this element</p> <p>DITA processing for XHTML output supports only top, bottom, and topbot rules.</p>			
expanse	<p>Determines the horizontal placement of the element.</p> <p>For PDF, allowable values are: "page" places the element on the left page margin; "column" aligns the element with the current column margin; "textline" aligns the element with the left margin of the current text line and takes indention into account.</p> <p>For XHTML, allowable values are textline only. The table surrounds the table data. Column and page set the table width to 100%.</p> <p>For DITA tables, this attribute is replaced instead by pgwide="0 or 1".</p>	(page   column   textline)	#IMPLIED	No

**Example**

The %display-atts; parameter entity is used within the DITA dtds as a common definition for attributes that affect presentation of certain elements. Not all of these capabilities have been provided yet for DITA topic processing. A typical example might be:

```
<codeblock scale="90" frame="topbot" expanse="page">
/* a long sample program */
Do forever
  Say "Hello, World"
End
</codeblock>
```

**%global-atts;**

Debugging attributes, normally hidden from authoring view.

These attributes are normally hidden from authors and exposed only to processing tools or editor macros. Values used in these attributes may be implementation-dependent.

**Attributes**

Name	Description	Data Type	Default Value	Required?
xtrf	xml-trace-filename, the original filename	CDATA	#IMPLIED	Not

				applicable
xtrc	xml-trace-counter, an element counter for repositioning editors at a known edit location	CDATA	#IMPLIED	No

## %id-atts;

ID attributes (%id-atts;) is a parameter entity declaration in the topic DTD that includes attributes that enable the naming and referencing of elements in a DITA topic: *id* and *conref*.

### Attributes

Name	Description	Data Type	Default Value	Required?
id	An anchor point. This ID is the target for references by href and conref attributes, and for external applications that refer to DITA content.	ID	#IMPLIED	No
conref	<p>This attribute is used to reference an ID on content that can be reused. For example, you could create a &lt;note&gt; in a topic and then reference its ID (using conref) from a &lt;note&gt; in another topic. During output processing, a lookup process will pull the contents of the first note into the note that has the conref attribute.</p> <p>The conref value follows the same conventions as HTML for what HTML calls a "fragment identifier"—a required "#" separator separates an optional filename from the fully qualified id (in the form <code>topicid/elementid</code>). To refer to target content in a different file, put the full URL of that topic before the # character.</p> <p>Same file:  <code>conref="#topicid/elementid"</code>            In different file:  <code>conref="fname.xml#topicid/elementid"</code></p>	CDATA	#IMPLIED	No

### Example

The %id-atts; parameter entity is used within the DITA dtds as a common definition for attributes available to most elements that enable you to name or reference (link to or fetch) the content of particular elements. Some typical examples include:

```
<p id="mainpara">The war cry of Kudzu University, <q id="warcry">To the victor go the spoils!</q>, is often heard on campus during freshman orientation.</p>
<p id="dullpara">One often hears the cry, <q conref="#topicid/warcry"/>, when
```

```
students are competing in intramural sports.</p>
```

## %rel-atts;

Relational attributes (<%rel-atts;>) is a parameter entity declaration in the topic DTD that includes attributes whose values may be used for representing navigational relationships. These attributes occur only on elements that represent relationships between topics.

### Attributes

Name	Description	Data Type	Default Value	Required?
type	<p>Describes the target of a cross-reference and may generate cross-reference text based on that description. Only the &lt;xref&gt; element can link to content below the topic level: other types of linking can target whole topics, but not parts of topics. Typically &lt;xref&gt; should also be limited to topic-level targets, unless the output is primarily print-oriented. Web-based referencing works best at the level of whole topics, rather than anchor locations within topics.</p> <p>When targetting DITA content, the type should match one of the values in the target's class attribute. For example, if type="topic", the link could be to a generic topic, or any specialization of topic, including concept, task, and reference.</p> <p>Some possible values include:</p> <p><b>fig</b> Indicates a link to a figure.</p> <p><b>table</b> Indicates a link to a table.</p> <p><b>li</b> Indicates a link to an ordered list item.</p> <p><b>fn</b> Indicates a link to a footnote.</p> <p><b>section</b> "section" indicates a link to a section.</p> <p><b>concept, task, reference, topic</b> Cross-reference to a topic type.</p> <p><b>(no value)</b> Defaults to generic topic, or the processor may retrieve the actual type from the target if available.</p>	CDATA	#IMPLIED (Processed as if the target were of type "topic.")	No

	<p>Other values can be used to indicate other types of topics or elements as targets. Processing is only required to support the above list, or specializations of types in that list. Supporting additional types as targets may require the creation of processing overrides.</p>			
<p>role</p>	<p>The role attribute defines the role the target 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 structure could be used to sort and classify links at display time.</p> <p>Allowable values are:</p> <p><b>parent</b> Indicates a link to a topic that is a parent of the current topic.</p> <p><b>child</b> Indicates a link to a direct child such as a directly nested or dependent topic.</p> <p><b>sibling</b> Indicates a link between two children of the same parent topic.</p> <p><b>friend</b> Indicates a link to a similar topic that is not necessarily part of the same hierarchy.</p> <p><b>next</b> Indicates a link to the next topic in a sequence.</p> <p><b>previous</b> Indicates a link to the previous topic in a sequence.</p> <p><b>cousin</b> Indicates a link to another topic in the same hierarchy that is not a parent, child, sibling, next, or previous.</p> <p><b>ancestor</b> Indicates a link to a topic above the parent topic.</p> <p><b>descendent</b> Indicates a link to a topic below a child topic.</p> <p><b>sample</b></p>	<p>(parent   child   sibling   friend   next   previous   cousin   ancestor   descendant   <i>sample</i>   <i>external</i>   <i>[deprecated]</i> other)</p>	<p>"friend"</p>	<p>No</p>

	<p>Deprecated.</p> <p><b>external</b></p> <p>Deprecated--use the scope="external" attribute to indicate external links..</p> <p><b>other</b></p> <p>Indicates any other kind of relationship or role. Enter that role as the value for the otherrole attribute.</p>			
otherrole	Indicates an alternate role. This value is used when the role attribute is set to other.	CDATA	#IMPLIED	No

The %rel-atts; parameter entity is used within the DITA dtDs as a common definition for attributes available to elements that represent topic-to-topic relationships. Not all of these capabilities have been provided yet for DITA topic processing. Some typical examples include:

```
<link type="task" role="child" href="how2uninst.dita" scope="local" />
```

## %select-atts;

Attributes that support both filtering and flagging include *platform* , *product* , *audience* , and *otherprops* . Attribute *rev* only lets you flag information that matches a run-time parameter. Attribute *importance* currently provides output effects only for steps (where only the values "optional" and "required" are supported).

### Attributes

Name	Description	Data Type	Default Value	Required?
platform	Indicates operating system and hardware. This is a property attribute which supports conditional processing for filtering or flagging.	CDATA	#IMPLIED	No
product	Contains the name of the product to which the topic applies. This is a property attribute which supports conditional processing for filtering or flagging.	CDATA	#IMPLIED	No
audience	Indicates the intended audience for the element. This is a property attribute which supports conditional processing for filtering or flagging.	CDATA	#IMPLIED	No
otherprops	This attribute can be used for any other properties that might be needed to describe an audience, or to provide selection criteria for the element.	CDATA	#IMPLIED	No
importance	A range of values that describe an importance or priority attributed to an element. For example, in steps of a task,	obsolete   deprecated   optional	#IMPLIED	No

	the attribute indicates whether a step is optional or required. In other contexts or specializations, other values are possible.	default   low   normal   high   recommended   required   urgent		
rev	Indicates revision level of an element. It is useful for flagging outputs based on revision.	CDATA	#IMPLIED	No
status	The status of the current element.	new   changed   deleted   unchanged	#IMPLIED	No

### Example

The `%select-atts;` parameter entity is used within the DITA dtds as a common definition for attributes available to most elements for you to enable the content for improved retrievability or for selection. Some typical examples include:

```
The <keyword platform="Linux">chmod</keyword> command...
<ph product="WhiteknuckleHandsoap">Amalgamated Cleansers get the
grime!</ph>
<msgph audience="programmer administrator">Divide by -1 error.</msgph>
<ph otherprops="java">When using Java, use the
  <apiname>com.ibm.obscurclass</apiname> to calculate the value.</ph>
<p importance="recommended" rev="3.2">Update anti-virus software
often.</p>
```

Note that most of the attributes allow multiple values, for example the audience attribute in the example indicates that the message is of interest to both programmers and administrators.

### %univ-atts;

Universal attributes is a parameter entity declaration in the topic DTD, which defines a set of common attributes available on many DITA elements..

The univ-atts entity includes:

- the attributes in the [select-atts](#) parameter entity ( *platform* , *product* , *audience* , *otherprops* , *importance* , *rev* , *status* )
- the attributes in the [id-atts](#) parameter entity ( *id* , *conref* )
- two additional attributes: *translate* and *xml:lang* .

#### Attributes

Name	Description	Data Type	Default Value	Required?
<code>%select-atts;</code>	A set of related attributes, described at <a href="#">select-atts</a> : <i>platform</i> , <i>product</i> , <i>audience</i> , <i>otherprops</i> , <i>importance</i> , <i>rev</i> , <i>status</i> .			
<code>%id-atts;</code>	A set of related attributes, described at <a href="#">id-atts</a> : <i>id</i> , <i>conref</i> .			
<code>translate</code>	Indicates whether the content of the element should be translated or not.	yes   no	#IMPLIED	No
<code>xml:lang</code>	Specifies the language of the element content. When no <code>xml:lang</code> value is supplied, the default value of English is	NMTOKEN	#IMPLIED	No

	<p>assumed. For example, if there is a note element with the attribute <code>xml:lang</code> set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The allowed <code>xml:lang</code> values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).</p>			
--	--	--	--	--

See examples for the [select-atts](#) and [id-atts](#) parameter entries. The `translate` and `xml:lang` attributes identify language-specific words or phrases for specific processing (or non-processing, in the case of `translate="no"`).

```
<p>The cordial response to the question is
<q translate="no" xml:lang="de-de">nein.</q></p>
```

## Map elements

A map describes the relationships among a set of DITA topics. The following are some examples of relationships that can be described in a map:

- Hierarchical (Parent/Child). Nested topics create a hierarchical relationship. The topic that does the nesting is the parent, and the topics that are nested are the children.
- Ordered. Child topics can be labeled as having an ordered relationship, which means they are referenced in a definite sequence.
- Family. Child topics can be labeled as having a family relationship, which means they all refer to each other.

The relationships defined in a map can be used to create a Table of Contents (TOC), aggregate topics into a PDF document, or to create links between topics in output.

### map

The <map> element is used to define a map which describes the relationships among a set of resources, such as DITA topics. Maps consist of references to topics and other resources organized into hierarchies, groups, and tables. Maps provide a way to express these relationships in a single common format that can be used for different outputs.

The containing element for a map is the <map> element, which can take title and id attributes. Within the map, use the <topicref> element to add and organize references to the topics, and the <topicgroup> and <reftable> elements to provide non-hierarchical relationships. You can use the <map> element to set default attribute values for all <topicref> elements in the map.

While the title attribute on a map is optional, the title attribute is required if the map is being used to provide Eclipse help navigation files. The title attribute of the map becomes the <toc> label attribute in Eclipse output, which is used when the navigation file is set as primary (appearing at the top level of the navigation rather than consumed by other navigation files).

#### Contains

(( [topicmeta](#) ) (*optional*) then ( [navref](#) or [anchor](#) or [topicref](#) or ( [topichead](#) or [topicgroup](#) ) or [reftable](#) ) (*any number*))

#### Contained by

#### Inheritance

[map](#) / [map](#)

#### Attributes

Name	Description	Data Type	Default Value	Required?
title	An identifying title for the map. Used in Eclipse output as the <toc> label. May be used or ignored by other processes.	CDATA	#IMPLIED	No
id	This attribute may be used for debugging purposes, for example to identify which map a link was generated from.	ID	#IMPLIED	No
anchorref	Identifies a location within another map	CDATA	#IMPLIED	No

	file where this map will be anchored (added at runtime, using Eclipse navigation integration). For example, <code>anchorref="map1.ditamap/a1"</code> causes this map to be pulled into the location of the anchor point <code>a1</code> in the other <code>map1.ditamap</code> .			
<code>%topicref-atts;</code> ( <code>collection-type</code> , <code>type</code> , <code>scope</code> , <code>locktitle</code> , <code>format</code> , <code>linking</code> , <code>toc</code> , <code>print</code> , <code>search</code> , <code>chunk</code> )	A set of related attributes. See <a href="#">%topicref-atts;</a> .	parameter entity	<i>PE not applicable</i>	Not applicable
<code>%select-atts;</code> ( <code>platform</code> , <code>product</code> , <code>audience</code> , <code>otherprops</code> , <code>importance</code> , <code>rev</code> , <code>status</code> )	A set of related attributes, described at <a href="#">%select-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
<code>DITAArchVersion</code>	Designates the version of the architecture that is in use.	CDATA	"1.0" (version dependent; will increase)	Yes
<code>%global-atts;</code> ( <code>xtrf</code> , <code>xtrc</code> )	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
<code>class</code>	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

In this example, there are six topicrefs. They are nested and have a hierarchical relationship. The file `bats.dita` is the parent topic and the other topics are its children. The hierarchy could be used to generate a PDF, a navigation pane in an information center, a summary of the topics, or related links between the parent topic and its children.

```
<map title="Bats" id="mybats"> Bats
  <topicref href="bats.dita" type="topic"
  <topicref href="batcaring.dita" type="task"></topicref>
  <topicref href="batfeeding.dita" type="task"></topicref>
  <topicref href="batsonar.dita" type="concept"></topicref>
  <topicref href="batguano.dita" type="reference"></topicref>
  <topicref href="bathistory.dita" type="reference"></topicref>
</topicref>
</map>
```

**anchor**

The `<anchor>` element is used for runtime integration of navigation. It provides an integration point that another map can point to in order to insert its navigation into the current navigation tree. It is currently supported by Eclipse output only.

For build-time integration, you can use the `conref` attribute on an element inside the map (for example, a `topicref`) to pull in content from a matching element (for example, another `topicref`) in another map.

**Contains**

no content

**Contained by**

[map](#) , [topicref](#) , [topichead](#) , [topicgroup](#)

**Inheritance**[map](#) / [anchor](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
id	The id of the anchor, to distinguish it from other anchor points in the same map.	ID	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

In this example, an anchor is defined with an ID of "a1". This ID can be referenced by the anchorref attribute on another map's map element.

```
<map title="MyComponent tasks">
<topicref navtitle="Start here" href="" toc="yes"> Start here
<navref mapref="othermap2.ditamap"/>
<navref mapref="othermap3.ditamap"/>
<anchor id="a1"/>
</topicref>
</map>
```

**navref**

The <navref> element references a map file from within a map file. The reference is resolved at runtime for Eclipse navigation, typically to pull together the navigation for multiple components into a product navigation. This element is for runtime resolution of references, and is for navigation only. **It is currently only supported by Eclipse output.**

For build-time integration, you can use the conref attribute on an element inside the map (for example, a topicref) to pull in content from a matching element (for example, another topicref) in another map.

**Contains**

no content

**Contained by**[map](#) , [topicref](#) , [topichead](#) , [topicgroup](#)**Inheritance**[map](#) / [navref](#)**Attributes**

Name	Description	Data Type	Default Value	Required?
mapref	Specifies the URL (local filename, at least) of the map file to reference. This element is for runtime resolution of references, and is for navigation only. <b>It is currently only supported by Eclipse output.</b>	CDATA	#IMPLIED	No

%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

In this example, the map titled "MyComponent tasks" references the maps "othermap2.ditamap" and "othermap3.ditamap".

```
<map title="MyComponent tasks">
<navref mapref=" ../com.ibm.xml.doc/othermap1.ditamap" />
<navref mapref=" ../com.ibm.xml.doc/othermap2.ditamap" />
</topicref>
</map>
```

**reliable**

The relationship table (<reliable>) defines relationships between topics, based on the familiar table model of rows (<relrow>), columns (<relheader>), and cells (<relcell>). The <relcell> elements can contain <topicref> elements, which are then related to other <topicref> elements in the same row (although not necessarily in the same cell). By default, the contents of a <reliable> element are not output for navigation or TOC purposes, and are used only to define relationships that can be expressed as topic-to-topic links.

Relationship tables can be used in conjunction with hierarchies and groups to manage all the related links in an information set.

**Contains**

(( [topicmeta](#) ) (optional) then ( [relheader](#) ) (optional) then ( [relrow](#) ) (one or more) )

**Contained by**

[map](#)

**Inheritance**

[map](#) / [reliable](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
title	An identifying title for this element.	CDATA	#IMPLIED	No
%topicref-atts-no-toc; (collection-type, type, locktitle, format, linking, print, search, chunk)	A related set of attributes. See <a href="#">%topicref-atts-no-toc;</a> .	parameter entity	<i>PE not applicable</i>	Not applicable
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts;</a>	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

In this example, a relationship table is defined with three columns; one for "concept", one for "task", and one for "reference". Three cells are defined within one row. The first cell contains one concept topic: batsonar.xml. The second cell contains two task topics: batcaring.xml and batfeeding.xml. The third cell contains two reference topics: batguano.xml and bathistory.xml.

```
<map>
  <reltable>
    <relheader>
      <relcolspec type="concept">
      <relcolspec type="task">
      <relcolspec type="reference">
    </relheader>
    <relrow>
      <relcell><topicref href="batsonar.dita"/></relcell>
      <relcell><topicref href="batcaring.dita"/><topicref
href="batfeeding.dita"/></relcell>
      <relcell><topicref href="batguano.dita"/><topicref
href="bathistory.dita"/></relcell>
    </relrow>
  </reltable>
</map>
```

A table view of the tagging would look like this:

type="concept"	type="task"	type="reference"
batsonar.dita	batcaring.dita, batfeeding.dita	batguano.dita, bathistory.dita

On output, links should be added to topics that are in the same row, but not in the same cell. This allows simple maintenance of parallel relationships: for example, in this case, batcaring.dita and batfeeding.dita are two tasks that require the same supporting information (concept and reference topics) but might otherwise be unrelated. When topics in the same cell are in fact related, the cell's collection-type attribute can be set to family. If some cells or columns are intended solely as supporting information and should not link back to topics in other cells, you can set the linking attribute on the cell or column to targetonly.

In this example, the related links would be as follows:

**batsonar.dita**

batcaring.dita, batfeeding.dita, batguano.dita, bathistory.dita

**batcaring.dita**

batsonar.dita, batguano.dita, bathistory.dita

**batfeeding.dita**

batsonar.dita, batguano.dita, bathistory.dita

**batguano.dita**

batsonar.dita, batcaring.dita, batfeeding.dita

**bathistory.dita**

batsonar.dita, batcaring.dita, batfeeding.dita

Although the table may initially take some time to learn and manipulate, it is inherently a more efficient form to manage these links. It is also easier to see and manage patterns using the table; for example, the fact that batfeeding.dita and batcaring.dita have the same relationships to supporting information is clear from the table, but would require some comparison and counting to determine from just the definition list summary.

**relrow**

A <relrow> is a row in the relationship table. This creates a relationship between the cells in the row, which will end up expressed as links among the <topicref> elements in the cells.

**Contains**

( [relcell](#) ) (any number)

**Contained by**  
[reltable](#)

**Inheritance**  
[map](#) / [relrow](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [reltable](#) .

## relcell

A <relcell> element is a cell in the relationship table. The <topicref> elements it contains will be related to topicrefs in other cells of the same row. By default, topicrefs in the same cell are not related to each other, unless you change the relcell's collection-type attribute to indicate that they are related.

**Contains**  
( ( [topicref](#) or ( [topichead](#) or [topicgroup](#) ) ) ) (any number)

**Contained by**  
[relrow](#)

**Inheritance**  
[map](#) / [relcell](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
%topicref-atts; (collection-type, type, scope, locktitle, format, linking, toc, print, search, chunk)	A set of related attributes. See <a href="#">%topicref-atts</a> ; .	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**  
See [reltable](#) .

## relheader

The <relheader> element is a row of column definitions (<relcolspec> elements) in a relationship table. Each table can have only one set of column definitions.

### Contains

( [relcolspec](#) ) (one or more)

### Contained by

[reltable](#)

### Inheritance

[map](#) / [relheader](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

### Example

See [reltable](#) .

## relcolspec

A column definition in the relationship table. You can use <relcolspec> column definitions to set defaults for the attributes of <topicref> elements in the column. For example, you can set type="concept" to treat all untyped <topicref> elements in the column as concepts.

### Contains

( [topicmeta](#) ) (optional)

### Contained by

[relheader](#)

### Inheritance

[map](#) / [relcolspec](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
%topicref-atts; (collection-type, type, scope, locktitle, format, linking, toc, print, search, chunk)	A set of related attributes. See <a href="#">%topicref-atts</a> ; .	parameter entity	<i>PE not applicable</i>	Not applicable
%select-atts; (platform, product, audience, otherprops, importance,	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable

rev, status)				
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**See [reliable](#) .

## topicmeta

The <topicmeta> element defines the metadata that applies to a topic when it appears in a map, and to the other topics in the map that are contained by the same element that contains the <topicmeta> element. When creating links, it can also be used to override the title and short description of the topic. In addition, it can be used to add index entries to referenced content using the <keywords> element.

**Contains**

( ( [linktext](#) ) (optional) then ( [searchtitle](#) ) (optional) then ( [shortdesc](#) ) (optional) then ( [author](#) ) (any number) then ( [source](#) ) (optional) then ( [publisher](#) ) (optional) then ( [copyright](#) ) (any number) then ( [critdates](#) ) (optional) then ( [permissions](#) ) (optional) then ( [audience](#) ) (any number) then ( [category](#) ) (any number) then ( [keywords](#) ) (any number) then ( [proinfo](#) ) (any number) then ( [othermeta](#) ) (any number) then ( [resourceid](#) ) (any number) )

**Contained by**

[map](#) , [topicref](#) , [reliable](#) , [relcolspec](#) , [topichead](#) , [topicgroup](#)

**Inheritance**

[map](#) / [topicmeta](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
lockmeta	Currently unsupported. Defaults to "yes".	(yes   no)	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

In this example, the metadata defined by the metadata element applies to the associated <topicref> ([bats.xml](#)) and all of its children. The <topicmeta> element contains an audience definition which indicates that [bats.xml](#) and its children are of interest to experienced programmers who are troubleshooting.

```
<map>
  <topicref href="bats.dita">
    <topicmeta>
      <audience type="programmer" job="troubleshooting"
experiencelevel="expert"/>
    </topicmeta>
  </topicref>
  <topicref href="batcaring.dita"></topicref>
  <topicref href="batfeeding.dita"></topicref>
</map>
```

## topicref

The <topicref> element identifies a topic (such as a concept, task, or reference) or other resource. A <topicref> can contain other<topicref> elements, allowing you to express navigation or table-of-contents hierarchies, as well as implying relationships between the containing <topicref> and its children. You can set the collection-type of a container <topicref> to determine how its children are related to each other. You can also express relationships among <topicref>s using group and table structures (using <topicgroup> and <reltable>). Relationships end up expressed as links in the output (with each participant in a relationship having links to the other participants by default).

You can fine tune the output from your map by setting different attributes on topicrefs: for example, the *linking* attribute controls how its relationships to other topicrefs are expressed as links, and the *toc* attribute controls whether the topicref shows up in TOC or navigation output.

### Contains

(( [topicmeta](#) ) (optional) then ( [topicref](#) or ( [topichead](#) or [topicgroup](#) ) or [navref](#) or [anchor](#) ) (any number) )

### Contained by

[map](#) , [topicref](#) , [relcell](#) , [topichead](#) , [topicgroup](#)

### Inheritance

[map](#) / [topicref](#)

### Attributes

Name	Description	Data Type	Default Value	Required?
navtitle	Specifies the title of the topic as it will appear in navigation or tables of contents generated from the map.	CDATA	#IMPLIED	No
id	This ID is the target for references by conref attributes, to allow build-time integration of maps.	ID	#IMPLIED	No
href	A pointer to the resource represented by the <topicref>. References to DITA content cannot be below the topic level: that is, you cannot reference individual elements inside a topic. References to content other than DITA topics should use the format attribute to identify the kind of resource being referenced.	CDATA	#IMPLIED	No
keyref	Currently not implemented in DITA processors. Provides a key that a process can use to look up associated information.	NMTOKEN	#IMPLIED	No
query	Lists query criteria, or uses metadata as query criteria. The query pulls in matching topics under the current element if the current element has a title or href; otherwise references to the matching topics replace the element at the current location.	CDATA	#IMPLIED	No

conref	References an equivalent element in the same map or another map, which will be copied into the current element's location when the conref is resolved. The syntax uses the target's file name and element ID; it does not require the map ID for scoping since there is only ever one map per target file:  Local target: conref="#elementID" In different file: conref="othermap.ditamap#element	CDATA	#IMPLIED	No
copy-to	Use the copy-to attribute on the <topicref> element to provide a different file name for a particular instance of the topic in the map (for example, to separate out the different versions of the topic, rather than combining them on output). The links and navigation associated with that instance will point to a copy of the topic with the file name you specified.  Use the <linktext> and <shortdesc> in the <topicref>'s <topicmeta> to provide a unique name and short description for the new copy.	CDATA	#IMPLIED	No
%topicref-atts; (collection-type, type, scope, locktitle, format, linking, toc, print, search, chunk)	A set of related attributes. See <a href="#">%topicref-atts</a> ; .	parameter entity	<i>PE not applicable</i>	Not applicable
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
translate	Indicates whether the content of the element should be translated or not.	yes   no	#IMPLIED	No
xml:lang	Specifies the language of the element content. When no xml:lang value is supplied, the default value of English is assumed. For example, if there is a note element with the attribute xml:lang set to the value "es-es," then the label on the note, which is normally output as "Note" is now output in Spanish as "Nota." The allowed xml:lang values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see <a href="#">W3C: Language tagging in HTML and XML</a> ).	NMTOKEN	#IMPLIED	No
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

In this example, there are six topicrefs. They are nested and have a hierarchical relationship. Bats.xml is the parent topic and the other topics are its children.

```
<map title="Bats" Bats
  <topicref href="bats.dita" type="topic">
    <topicref href="batcaring.dita" type="task"></topicref>
    <topicref href="batfeeding.dita" type="task"></topicref>
    <topicref href="batsonar.dita" type="concept"></topicref>
    <topicref href="batguano.dita" type="reference"></topicref>
    <topicref href="bathistory.dita" type="reference"></topicref>
  </topicref>
</map>
```

**Map group elements**

The mapgroup domain elements represent particular containment strategies within a set of topicrefs in a map.

**topicgroup**

The <topicgroup> element is for creating groups of <topicref> elements without affecting the hierarchy, as opposed to nested <topicref> elements within a <topicref>, which does imply a structural hierarchy. It is typically used outside a hierarchy to identify groups for linking without affecting the resulting toc/navigation output.

**Contains**

(( [topicmeta](#) ) (*optional*) then ( [topicref](#) or ( [topichead](#) or [topicgroup](#) ) or [navref](#) or [anchor](#) ) (*any number*))

**Contained by**

[map](#) , [topicref](#) , [relcell](#) , [topichead](#) , [topicgroup](#)

**Inheritance**

[map](#) / [topicref](#) , [mapgroup-d](#) / [topicgroup](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
id	This ID is the target for references by conref attributes, to allow build-time integration of maps.	ID	#IMPLIED	No
conref	References an equivalent element in the same map or another map, which will be copied into the current element's location when the conref is resolved. The syntax uses the target's file name and element ID; it does not require the map ID for scoping since there is only ever one map per target file:  Local target: conref="#elementID" In different file: conref="othermap.ditamap#element"	CDATA	#IMPLIED	No
%topicref-atts; (collection-type, type, scope, locktitle, format,	A set of related attributes. See <a href="#">%topicref-atts</a> ; .	parameter entity	<i>PE not applicable</i>	Not applicable

linking, toc, print, search, chunk)				
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

The following <topicgroup> adds a set of related links among the members of the family it defines using collection-type="family", but does not affect generated navigation files or tables of contents since the group is set to toc="no"

```
<map title="DITA Reference">
  <topicref href="anchor.dita" type="topic"></topicref>
  <topicref href="apiname.dita" type="topic"></topicref>
  <topicref href="audience.dita" type="topic"></topicref>
  <topicref href="author.dita" type="topic"></topicref>
  <topicgroup collection-type="family" toc="no">
    <topicref href="global-atts.dita" type="topic"></topicref>
    <topicref href="select-atts.dita" type="topic"></topicref>
    <topicref href="univ-atts.dita" type="topic"></topicref>
    <topicref href="topicref-atts.dita" type="topic"></topicref>
  </topicgroup>
</map>
```

**topichead**

The <topichead> element provides a title-only entry in a navigation map, as an alternative to the fully-linked title provided by the <topicref> element.

**Contains**

(( [topicmeta](#) ) (optional) then ( [topicref](#) or ( [topichead](#) or [topicgroup](#) ) or [navref](#) or [anchor](#) ) (any number) )

**Contained by**

[map](#) , [topicref](#) , [relcell](#) , [topichead](#) , [topicgroup](#)

**Inheritance**

[map](#) / [topicref](#) , [mapgroup-d](#) / [topichead](#)

**Attributes**

Name	Description	Data Type	Default Value	Required?
navtitle	Specifies the title of the topic as it will appear in navigation or tables of contents generated from the map.	CDATA	#IMPLIED	No
id	This ID is the target for references by conref attributes, to allow build-time integration of maps.	ID	#IMPLIED	No
conref	References an equivalent element in the same map or another map, which will be copied into the current element's location when the conref is resolved. The syntax	CDATA	#IMPLIED	No

	uses the target's file name and element ID; it does not require the map ID for scoping since there is only ever one map per target file:  Local target: conref="#elementID" In different file: conref="othermap.ditamap#element"			
%topicref-atts; (collection-type, type, scope, locktitle, format, linking, toc, print, search, chunk)	A set of related attributes. See <a href="#">%topicref-atts</a> ; .	parameter entity	<i>PE not applicable</i>	Not applicable
%select-atts; (platform, product, audience, otherprops, importance, rev, status)	A set of related attributes, described at <a href="#">%select-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
%global-atts; (xtrf, xtrc)	A set of related attributes, described at <a href="#">%global-atts</a> ;	parameter entity	<i>PE not applicable</i>	Not applicable
class	A common attribute described in <a href="#">Other common DITA attributes</a>			

**Example**

The following markup, for HTML Help output, will produce a book icon that expands into a nested set when toggled.

```
<map title="DITA Reference">
  <topicref href="anchor.dita" type="topic"></topicref>
  <topicref href="apiname.dita" type="topic"></topicref>
  <topicref href="audience.dita" type="topic"></topicref>
  <topicref href="author.dita" type="topic"></topicref>
  <topichead navtitle="Parameter Entity elements">
    <topicref href="global-atts.dita" type="topic"></topicref>
    <topicref href="select-atts.dita" type="topic"></topicref>
    <topicref href="univ-atts.dita" type="topic"></topicref>
    <topicref href="topicref-atts.dita" type="topic"></topicref>
  </topichead>
</map>
```

**%topicref-atts;**

The %topicref-atts; parameter entity represents a group of attributes used in numerous map elements: map, topicref, relcolspec, relcell, topichead, and topicgroup. The set is similar to those documented in [topicref-atts-no-toc](#) but includes the *toc* attribute.

**Attributes**

Name	Description	Data Type	Default Value	Required?
collection-type	Collection types describe how links relate to each other. A family represents a tight grouping in which each of the referenced topics not only relates to the current topic but also relate to each other.	(unordered   sequence   choice   family)	"unordered"	No
type	Describes the target of a cross-reference and may generate cross-reference text based on that description. Only the <xref>	CDATA	#IMPLIED (Processed as if the	No

	<p>element can link to content below the topic level: other types of linking can target whole topics, but not parts of topics. Typically &lt;xref&gt; should also be limited to topic-level targets, unless the output is primarily print-oriented. Web-based referencing works best at the level of whole topics, rather than anchor locations within topics.</p> <p>When targetting DITA content, the type should match one of the values in the target's class attribute. For example, if type="topic", the link could be to a generic topic, or any specialization of topic, including concept, task, and reference.</p> <p>Some possible values include:</p> <p><b>fig</b> Indicates a link to a figure.</p> <p><b>table</b> Indicates a link to a table.</p> <p><b>li</b> Indicates a link to an ordered list item.</p> <p><b>fn</b> Indicates a link to a footnote.</p> <p><b>section</b> "section" indicates a link to a section.</p> <p><b>concept, task, reference, topic</b> Cross-reference to a topic type.</p> <p><b>(no value)</b> Defaults to generic topic, or the processor may retrieve the actual type from the target if available.</p> <p>Other values can be used to indicate other types of topics or elements as targets. Processing is only required to support the above list, or specializations of types in that list. Supporting additional types as targets may require the creation of processing overrides.</p>		target were of type "topic." )	
scope	<p>The scope attribute identifies the closeness of the relationship between the current document and the target resource.</p> <ul style="list-style-type: none"> <li>Set scope to <code>local</code> when the resource is part of the current set of content, and should be accessed and copied to the output directory.</li> </ul>	(local   peer   external)	#IMPLIED	No

	<ul style="list-style-type: none"> <li>Set scope to <code>peer</code> when the resource is part of the current set of content but is not accessible at build time.</li> <li>Set scope to <code>external</code> when the resource is not part of the current information set and should open in a new browser window.</li> </ul> <p>The default is <code>local</code>.</p>			
locktitle	<p>This attribute makes sure the <i>navtitle</i> attribute is used if it is present; if <i>locktitle</i> isn't set to "yes", the <i>navtitle</i> attribute is ignored and text is retrieved from the target</p> <p><b>yes</b></p> <p>The navtitle in the map is used.</p> <p><b>no</b></p> <p>Default. The navtitle or title of the topic is used.</p>	(yes   no)	#IMPLIED	No
format	<p>The format attribute identifies the format of the resource being cross referenced. The default format is "dita".</p> <p>Possible values include:</p> <p><b>dita</b></p> <p>The destination uses DITA topic markup, or markup specialized from a DITA topic. Unless otherwise specified, the corresponding default type will be treated as "topic."</p> <p><b>html</b></p> <p>The format of the linked-to resource is HTML or XHTML.</p> <p><b>pdf</b></p> <p>The format of the linked-to resource is PDF (opens a new window).</p> <p><b>ditamap</b></p> <p>The linked-to resource is a DITA map. It represents a referenced hierarchy at a position within referencing hierarchy, and a referenced relationship table included outside the referencing hierarchy</p> <p><b>(no value)</b></p> <p>Defaults to "dita"</p> <p>For other formats, you can use the file extension without the "." (for example, in a link to file "readme.txt", use "txt" as the value)</p>	CDATA	#IMPLIED	No

linking	<p>Defines some specific linking characteristics of a topic's current location in the map.</p> <p><b>targetonly</b> A topic can only be linked to and cannot link to other topics.</p> <p><b>sourceonly</b> A topic cannot be linked to but can link to other topics.</p> <p><b>normal</b> A topic can be linked to and can link to other topics. Use this to override the linking value of a parent topic.</p> <p><b>none</b> A topic cannot be linked to or link to other topics.</p>	(targetonly   sourceonly   normal   none)	#IMPLIED	No
toc	Specifies whether a topic appears in the table of contents (toc). This value is set to no.			No
print	<p>Specifies whether the topic should be included in a portable document format (PDF) file.</p> <p><b>yes</b> Include the topic in a PDF file.</p> <p><b>no</b> Do not include the topic in a PDF file.</p>	(yes   no)	#IMPLIED	No
search	<p>Currently not used.</p> <p><b>yes</b></p> <p><b>no</b></p>	(yes   no)	#IMPLIED	No
chunk	Intended to allow re-chunking of content on output: for example, combining topics from separate files into one output file, or splitting multiple topics in one file into separate files. Currently the file names and chunking of input files determines the file names and chunking of output files, during output to HTML. The chunking attribute is not currently supported.	CDATA	#IMPLIED	No

## %topicref-atts-no-toc;

The %topicref-atts-no-toc; parameter entity represents the set of attributes used in the [reliable](#) map element. The set is similar to those documented in [topicref-atts](#) but for <reliable> the *toc* attribute defaults to “no”. For the other elements that use the %topicref-atts; group declaration, the *toc* attribute doesn't have a default; they can inherit their *toc* value from the nearest container, otherwise it functions upon output as if set to “yes”.

## Attributes

Name	Description	Data Type	Default Value	Required?
collection-type	Collection types describe how links relate to each other. A family represents a tight grouping in which each of the referenced topics not only relates to the current topic but also relate to each other.	(unordered   sequence   choice   family)	"unordered"	No
type	<p>Describes the target of a cross-reference and may generate cross-reference text based on that description. Only the &lt;xref&gt; element can link to content below the topic level: other types of linking can target whole topics, but not parts of topics. Typically &lt;xref&gt; should also be limited to topic-level targets, unless the output is primarily print-oriented. Web-based referencing works best at the level of whole topics, rather than anchor locations within topics.</p> <p>When targetting DITA content, the type should match one of the values in the target's class attribute. For example, if type="topic", the link could be to a generic topic, or any specialization of topic, including concept, task, and reference.</p> <p>Some possible values include:</p> <p><b>fig</b> Indicates a link to a figure.</p> <p><b>table</b> Indicates a link to a table.</p> <p><b>li</b> Indicates a link to an ordered list item.</p> <p><b>fn</b> Indicates a link to a footnote.</p> <p><b>section</b> "section" indicates a link to a section.</p> <p><b>concept, task, reference, topic</b> Cross-reference to a topic type.</p> <p><b>(no value)</b> Defaults to generic topic, or the processor may retrieve the actual type from the target if available.</p> <p>Other values can be used to indicate other types of topics or elements as</p>	CDATA	#IMPLIED (Processed as if the target were of type "topic.")	No

	<p>targets. Processing is only required to support the above list, or specializations of types in that list. Supporting additional types as targets may require the creation of processing overrides.</p>			
locktitle	<p>This attribute makes sure the <i>navtitle</i> attribute is used if it is present; if <i>locktitle</i> isn't set to "yes", the <i>navtitle</i> attribute is ignored and text is retrieved from the target</p> <p><b>yes</b></p> <p>The navtitle in the map is used.</p> <p><b>no</b></p> <p>Default. The navtitle or title of the topic is used.</p>	(yes   no)	#IMPLIED	No
format	<p>The format attribute identifies the format of the resource being cross referenced. The default format is "dita" .</p> <p>Possible values include:</p> <p><b>dita</b></p> <p>The destination uses DITA topic markup, or markup specialized from a DITA topic. Unless otherwise specified, the corresponding default type will be treated as "topic."</p> <p><b>html</b></p> <p>The format of the linked-to resource is HTML or XHTML.</p> <p><b>pdf</b></p> <p>The format of the linked-to resource is PDF (opens a new window).</p> <p><b>ditamap</b></p> <p>The linked-to resource is a DITA map. It represents a referenced hierarchy at a position within referencing hierarchy, and a referenced relationship table included outside the referencing hierarchy</p> <p><b>(no value)</b></p> <p>Defaults to "dita"</p> <p>For other formats, you can use the file extension without the "." (for example, in a link to file "readme.txt", use "txt" as the value)</p>	CDATA	#IMPLIED	No
linking	<p>Defines some specific linking characteristics of a topic's current location</p>	(targetonly   sourceonly	#IMPLIED	No

	<p>in the map.</p> <p><b>targetonly</b> A topic can only be linked to and cannot link to other topics.</p> <p><b>sourceonly</b> A topic cannot be linked to but can link to other topics.</p> <p><b>normal</b> A topic can be linked to and can link to other topics. Use this to override the linking value of a parent topic.</p> <p><b>none</b> A topic cannot be linked to or link to other topics.</p>	normal   none)		
print	<p>Specifies whether the topic should be included in a portable document format (PDF) file.</p> <p><b>yes</b> Include the topic in a PDF file.</p> <p><b>no</b> Do not include the topic in a PDF file.</p>	(yes   no)	#IMPLIED	No
search	<p>Currently not used.</p> <p><b>yes</b></p> <p><b>no</b></p>	(yes   no)	#IMPLIED	No
chunk	<p>Intended to allow re-chunking of content on output: for example, combining topics from separate files into one output file, or splitting multiple topics in one file into separate files. Currently the file names and chunking of input files determines the file names and chunking of output files, during output to HTML. The chunking attribute is not currently supported.</p>	CDATA	#IMPLIED	No

## xml:lang values

The allowed xml:lang values are based on ISO-3166 Country Codes and RFC 3066 Language Codes (see [W3C: Language tagging in HTML and XML](#) ).

### xml:lang values

Value	Language	Value	Language
ar-eg	Arabic	nl-be	Belgian Dutch
fr-be	Belgian French	pt-br	Brazilian Portuguese
bg-bg	Bulgarian	ca-es	Catalan
en-ca	Canadian English	fr-ca	Canadian French
hr-hr	Croatian	cs-cz	Czech
da-dk	Danish	nl-nl	Dutch
en-us	US English	et-ee	Estonian
fi-fi	Finnish	fr-fr	French
de-de	German	el-gr	Greek
he-il	Hebrew	hu-hu	Hungarian
is-is	Icelandic	it-it	Italian
ja-jp	Japanese	ko-kr	Korean
lv-lv	Latvian	lt-lt	Lithuanian
mk-mk	Macedonian	no-no	Norwegian
pl-pl	Polish	pt-pt	Portuguese
ro-ro	Romanian	ru-ru	Russian
zh-cn	Simplified Chinese	sr-sp	Serbian
fr-ch	Swiss French	de-ch	Swiss German
it-ch	Swiss Italian	sk-sk	Slovak
sl-si	Slovenian	es-es	Spanish
sv-se	Swedish	zh-tw	Traditional Chinese
th-th	Thai	tr-tr	Turkish
en-gb	UK English		

## outputclass processing

During transformation from XML to HTML, the value of `outputclass` is output instead of the class name ordinarily generated for the element. This new class can then be used by a CSS stylesheet to apply alternate formatting rules to the output HTML document.

For example, if a paragraph element is normally rendered in regular font but a bold paragraph is required, you could put `boldpara` as a value for the `outputclass` attribute, and then write a CSS stylesheet that applies bold formatting to result elements that will have that class value (for example, `.boldpara {font-weight: bold; display: block; }`). The paragraph is then displayed as bold when you view the HTML output using your CSS in a web browser.

## keyref processing

**Design note:**

The intent of keyref is to provide indirection to linking information as an alternative to using href for hardcoded paths directly in your content. When you use keyref, you allow different processes to form the linking relationship in different ways: for example, a reviewing process might look up internal address and phone number information for the author, while a publishing process might look up a company address and feedback email address.

This functionality is not yet supported in DITA processing.