Stage 3 proposal: Feature #13001

Define a same document/same topic URI reference syntax

Champion

Originally proposed by Jeff Ogden. Paul Grosso presented the Stage 2 proposal. The champion of the proposal is now .David Helfinstine

Tracking information

Event	Date	Links
Stage 1 proposal accepted	June 21, 2011	Minutes from 2011 June 21
Stage 2 proposal submitted	January 6, 2012	DITA: DITA 1.3 proposed feature #13001
		HTML:DITA 1.3 proposed feature #13001
Stage 2 proposal discussed	January 10, 2012	Minutes of the OASIS DITA TC Tuesday, 10 Jan 2012
Stage 2 proposal approved	January 17, 2012	Minutes of the OASIS DITA TC Tuesday, 17 Jan 2012
Stage 3 proposal submitted to reviewers	June 30, 2013	Richard Hamilton, Debra Bissantz, Eliot Kimber
Stage 3 proposal (this document) submitted	November 14, 2013	

Approved technical requirements

Expand the syntax of the fragment identifier to include a special syntax for a same topic reference. The current syntax for a same topic reference is either #topicID or #topicID/elementID, where topicID is the @id of the topic that elementID is within. A new syntax is being introduced with this proposal. The new syntax replaces the 'topicID' with the period "." character. The new syntax for a fragment identifier referring to the same topic could optionally be either #. or #./elementID. Both forms of fragment identifiers are acceptable and would refer to the same topic or element.

This syntax is not applicable for maps, as maps do not use the #mapID/mapElementID syntax.

This proposal highlights an ambiguity within the current Specification. Namely what to do with references embedded inside of a conref.

The two most common cases would be xref/conref element. When a conrefed component includes an xref/conref within it, what address is the xref/conref referring to. There are four cases for a conref containing an xref/conref:

- 1. An xref or conref that uses a direct URI reference to its target where the URI consists of more than just a fragment identifier, e.g. "../../common/topic-01.dita#topic-01/p2". In this case the URI must be is resolved relative to the location of the authored xref and not in any referencing context it might be used in. If the URI is absolute then there is only one location it can resolve to. If the URI is relative, it is reasonable to resolve it in its original context, since that's the only context that correct resolution can be assured in the general case. The use of keys, and especially scoped keys, should remove any need for this type of linking and should be avoided by authors.
- 2. An xref or conref that uses a URI reference that is only a fragment identifier with an explicit topic ID, e.g. "#topic-01/p2". As in case (1), the only reliable resolution is within the context of the authored xref, because that's the only context in which there is guaranteed to be a topic with the id "topic-01" (assuming that the xref is resolvable as authored, which is the only case we can usefully consider). This can effectively turn a local referencing xref into a non-local reference. As with (1) the use of keys should remove a need for this type of linking and should be avoided by authors.

Note

This type of xref can be converted into an xref of the first type (1) by adding a topic URI.

- 3. An xref or conref that uses a key reference.
 - For global keys there is only one possible resolution target regardless of use context.
 - For scoped keys there is potential ambiguity as different use contexts may be in different key scopes. The expected behavior would be to resolve the key relative to the scope of the reference, not the authored scope. This behavior is consistent with the general intent of scoped keys whereby the same topic used in two different scopes may have its key-based links resolve to different targets based on the scope details.
- 4. An xref or conref that uses a URI reference consisting of only a fragment identifier with the "same topic" topic ID, e.g. "#./p2". In this case, as for key references, the reference would be resolved in the referencing context and not in the authored context. This makes the difference between (2) and this use is that this use will always insure a "local" reference, and not be turned into a reference to another topic.

The implication for processors is that for cases (3) and (4), xref resolution must be done after any conref processing, so that you can, for example, have a reference in one conrefed element resolve to an element contained within another conrefed element by using the same-topic topic ID or key ref that happens to resolve to something also brought in by conref.

Note

This comes at the cost of potential resolution failure if the author fails to conref the targets required by other conrefed elements. This is unavoidable in this kind of latebound addressing feature.

Dependencies or interrelated proposals

There are no dependencies or interrelated proposals.

Modified DTDs

There are no DTD modifications required for this proposal.

Modified specification documentation

archSpec/uri-based-addressing.dita common/thehrefattribute.dita langref/xref.dita

DITA 1.2 Specification

uri-based-addressing.dita: Change section 2.1.3.4.2 **URIs and DITA fragment identifiers** paragraph 3:

When addressing a DITA topic element, URI references may include a fragment identifier that includes the ID of the topic element (filename.dita#topicId or #topicId).

uri-based-addressing.dita: Change section 2.1.3.4.2 **URIs and DITA fragment identifiers** paragraph 4:

When addressing a non-topic element within a DITA topic, a URI reference must use a fragment identifier that contains the ID of the ancestor topic element of the non-topic element being referenced, a solidus ("/"), and the ID of the non-topic element (filename.dita#topicId/elementId).

DITA 1.3 Specification

When addressing a DITA topic element, URI references may include a fragment identifier that includes the ID of the topic element (filename.dita#topicId or #topicId). When addressing the DITA topic element that contains the URI reference the URI reference may include the same topic fragment identifier of '.' (#.).

When addressing a non-topic element within a DITA topic, a URI reference must use a fragment identifier that contains the ID of the ancestor topic element of the non-topic element being referenced, a solidus ("/"), and the ID of the non-topic element (filename.dita#topicId/elementId) or #topicId/elementId). When addressing a non-topic element within the topic that contains the URI reference the URI reference may include the same topic fragment identifier of '.' (#./elementId).

DITA 1.2 Specification	DITA 1.3 Specification
uri-based-addressing.dita: Change section 2.1.3.4.2 URIs and DITA fragment identifiers paragraph 6: When addressing a DITA map element, URI references may include a fragment identifier that includes the ID of the map element (filename.ditamap#mapId or #mapId).	When addressing a DITA map element, URI references may include a fragment identifier that includes the ID of the map element (filename.ditamap#mapId or #mapId). The same topic URI reference fragment identifier of '.' may not be used in DITA map elements.
N/A	uri-based-addressing.dita: In section 2.1.3.4.2 URI reference syntax examples add a table entry after the 'target a figure contained in the same XML document' entry
	Use case cell:
	target a figure contained in the same topic of an XML document
	Sample syntax cell:
	"#./figureID"
N/A	uri-based-addressing.dita: In section 2.1.3.4.2 URI reference syntax examples add a table entry after the 'reference a spe- cific topic in the same file' entry
	Use case cell:
	reference to the same topic in the same file
	Sample syntax cell:
	"#."
Change section 1, paragraph 3 of thehrefattribute.dita: An href value consisting of a URI with a fragment identifier must have a valid DITA local identifier as the portion after the hash. A DITA local identifier consists of topicID/elementID for a subelement of a topic and of elementID for topics, maps, and map subelements.	An href value consisting of a URI with a fragment identifier must have a valid DITA local identifier as the portion after the hash. A DITA local identifier consists of topicID/ elementID for a subelement of a topic and of elementID for topics, maps, and map subelements. If the topic being referenced by a DITA local identifier is for the same topic then the topicID may be replaced by a '.'.
N/A	thehrefattribute.dita: Insert a paragraph after the following paragraph
	• Target a non-topic element inside a DITA topic: href="#topicid/elementid"

DITA 1.2 Specification	DITA 1.3 Specification
	• Target a non-topic element inside the same DITA topic as the reference: href="#./elementid"
N/A	xref.dita: Insert a phrase after the following If you are linking within the same file, you can leave off the "filename.dita" part. So, for a section with the ID "mysection", you
	should use: #topicid/mysection or if the link is to an element within the same topic you can use: #./mysection
N/A	xref.dita: Insert a phrase after the following For a list item within that section, assuming the item has an ID of "mylist", use #topicid/mylist or if the link is to an element within the same topic you can use #./mylist
Section 2.1.3.5 Content Inclusion (conref) conref.dita. Make the addendum above regarding processing of xrefs and conrefs within a conref.	"Handling xrefs and conrefs within a conref" (paragraphs above)