

Darwin Information Typing Architecture (DITA) Version 1.3 Part 0: Overview

Candidate OASIS Standard 01

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Additional artifacts:

This prose specification is one component of a work product that also includes:

- Darwin Information Typing Architecture (DITA) Part 0: Overview (this document). <http://docs.oasis-open.org/dita/dita/v1.3/cos01/part0-overview/dita-v1.3-cos01-part0-overview.html>.
- Darwin Information Typing Architecture (DITA) Part 1: Base Edition. <http://docs.oasis-open.org/dita/dita/v1.3/cos01/part1-base/dita-v1.3-cos01-part1-base.html>. This edition contains topic and map; it is designed for implementers and users who need only the most fundamental pieces of the DITA framework.
- Darwin Information Typing Architecture (DITA) Part 2: Technical Content Edition. <http://docs.oasis-open.org/dita/dita/v1.3/cos01/part2-tech-content/dita-v1.3-cos01-part2-tech-content.html>. This edition contains the base architecture plus the technical-content specializations; it is designed for authors who use information typing and document complex applications and devices.
- Darwin Information Typing Architecture (DITA) Part 3: All-Inclusive Edition. <http://docs.oasis-open.org/dita/dita/v1.3/cos01/part3-all-inclusive/dita-v1.3-cos01-part3-all-inclusive.html>. This edition

contains the base architecture, technical content, and the learning and training specializations. It is designed for implementers who want all OASIS-approved specializations, as well as users who develop learning and training materials.

- ZIP file that contains the DITA source for this part. <http://docs.oasis-open.org/dita/dita/v1.3/cos01/part0-overview/dita-v1.3-cos01-part0-overview-dita.zip>

For more information about the editions and what they contain, see [Editions](#) (5).

Abstract:

The Darwin Information Typing Architecture (DITA) 1.3 specification defines both a) a set of document types for authoring and organizing topic-oriented information; and b) a set of mechanisms for combining, extending, and constraining document types.

Status:

This document was last revised or approved by the OASIS Darwin Information Typing Architecture (DITA) TC on the above date. The level of approval is also listed above. Check the “Latest version” location noted above for possible later revisions of this document. Any other numbered Versions and other technical work produced by the Technical Committee (TC) are listed at https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=dita#technical.

TC members should send comments on this specification to the TC’s email list. Others should send comments to the TC’s public comment list, after subscribing to it by following the instructions at the “Send A Comment” button on the TC’s web page at https://www.oasis-open.org/committees/comments/index.php?wg_abbrev=dita.

For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Intellectual Property Rights section of the TC’s web page (<https://www.oasis-open.org/committees/dita/ipr.php>).

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1 Introduction to DITA 1.3

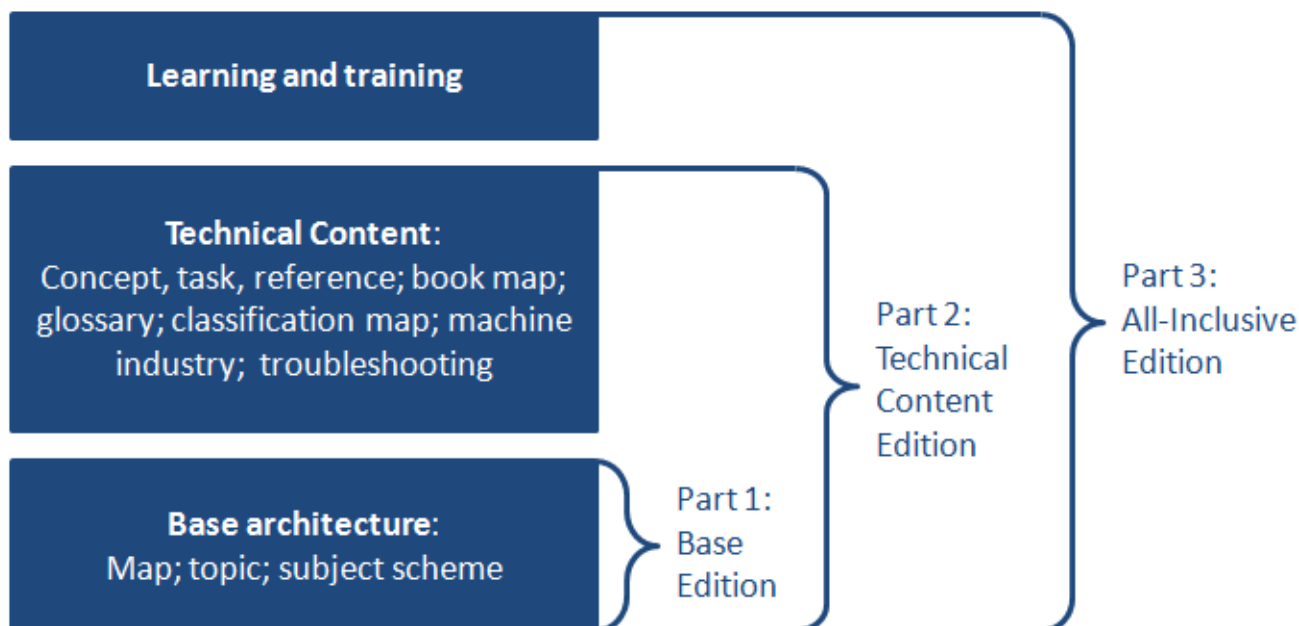
The Darwin Information Typing Architecture (DITA) specification defines a set of document types for authoring and organizing topic-oriented information, as well as a set of mechanisms for combining, extending, and constraining document types.

1.1 About the DITA specification: Overview

The DITA specification is delivered in three editions that are optimized for different audiences. Each edition consists of a written specification, XML grammar files, and DITA source.

Editions

The DITA specification is delivered in three editions.



Base edition

The base edition contains topic, map, and subject scheme map. It is the smallest edition; it is designed for application developers and users who need only the most fundamental pieces of the DITA framework.

Technical content edition

The technical content edition includes the base architecture **and** the specializations usually used by technical communicators: concept, task, and reference topics; machine industry task; troubleshooting topic; bookmap; glossaries; and classification map. It is the medium-sized edition; it is designed for authors who use information typing and document complex applications and devices, such as software, hardware, medical devices, machinery, and more.

All-inclusive edition

The all-inclusive edition contains the base architecture, the technical content pieces, **and** the learning and training specializations. It is the largest edition; it is designed for implementers who want all OASIS-approved specializations, as well as users who develop learning and training materials.

XML grammar files

The DITA markup for DITA vocabulary modules and DITA document types is available in several XML languages: RELAX NG (RNG), XML Document-Type Definitions (DTD), and W3C XML Schema (XSD).

While the files should define the same DITA elements, the RELAX NG grammars are normative if there is a discrepancy.

DITA written specification

The specification is written for implementers of the DITA standard, including tool developers and XML architects who develop specializations. The documentation contains several parts:

- Introduction
- Architectural specification
- Language reference
- Conformance statement
- Appendices

The DITA written specification is available in the following formats; the XHTML version is authoritative:

- XHTML (available from the OASIS Web site)
- CHM
- PDF
- DITA source
- ZIP of XHTML (optimized for local use)

1.2 Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMEND", "MAY", and "OPTIONAL" in this document are to be interpreted as described in **[RFC 2119]**.

MUST

This word, or the terms "REQUIRED" or "SHALL", mean that the definition is an absolute requirement of the specification.

MUST NOT

This phrase, or the phrase "SHALL NOT", means that the definition is an absolute prohibition of the specification.

SHOULD

This word, or the adjective "RECOMMENDED", means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.

SHOULD NOT

This phrase, or the phrase "NOT RECOMMENDED", means that there may exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.

MAY

This word, or the adjective "OPTIONAL", means that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item. An implementation which does not include a particular option must be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein an implementation which does include a particular option must be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides).

1.3 Normative references

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Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997, <<http://www.rfc-editor.org/info/rfc2119>>.

[RFC 3986]

Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, DOI 10.17487/RFC3986, January 2005, <<http://www.rfc-editor.org/info/rfc3986>>.

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Extensible Markup Language (XML) 1.1 (Second Edition), T. Bray, J. Paoli, M. , E. Maler, F. Yergeau, J. Cowan, Editors, W3C Recommendation, 16 August 2006, <http://www.w3.org/TR/2006/REC-xml11-20060816/> . *Latest version* available at <http://www.w3.org/TR/xml11/> .

1.4 Non-normative references

Non-normative references are references to external documents or resources that implementers of DITA might find useful.

[ciq-v3.0]

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[ISO 8601]

ISO/TC 154, *Data elements and interchange formats—Information interchange—Representation of dates and times*, 3rd edition, http://www.iso.org/iso/catalogue_detail?csnumber=40874, 12 December 2004.

[ISO/IEC 19757-3]

ISO/IEC JTC 1/SC 34 Document description and processing languages, *Information technology—Document Schema Definition Languages (DSDL)—Part 3: Rule-based validation—Schematron*, http://www.iso.org/iso/catalogue_detail.htm?csnumber=40833, 1 June 2006.

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XML Exchange Table Model Document Type Definition. Edited by Norman Walsh, 1999. Technical Memorandum TR 9901:1999. <https://www.oasis-open.org/specs/tm9901.htm>.

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J. Clark and M. Murata, editors, *RELAX NG Specification*, <http://www.oasis-open.org/committees/relax-ng/spec-20011203.html>, OASIS Committee Specification, 3 December 2001.

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[SVG 1.1]

Scalable Vector Graphics (SVG) 1.1 (Second Edition), E. Dahlström, P. Dengler, A. Grasso, C. Lilley, C. McCormack, D. Schepers, J. Watt, J. Ferraiolo, J. Fujisawa, D. Jackson, Editors, W3C Recommendation, 16 August 2011, <http://www.w3.org/TR/2011/REC-SVG11-20110816/> . *Latest version* available at <http://www.w3.org/TR/SVG11/> .

[XHTML 1.0]

XHTML™ 1.0 The Extensible HyperText Markup Language (Second Edition), S. Pemberton, Editor, W3C Recommendation, 1 August 2002, <http://www.w3.org/TR/2002/REC-xhtml1-20020801> . *Latest version* available at <http://www.w3.org/TR/xhtml1> .

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XML Pointer Language (XPointer), S. J. DeRose, R. Daniel, P. Grosso, E. Maler, J. Marsh, N. Walsh, Editors, W3C Working Draft (work in progress), 16 August 2002, <http://www.w3.org/TR/2002/WD-xptr-20020816/> . *Latest version* available at <http://www.w3.org/TR/xptr/> .

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A. Zydron, R. Raya, and B. Bogacki, editors, *XML Text Memory (xml:tm) 1.0 Specification*, <http://www.gala-global.org/oscarStandards/xml-tm/>, The Localization Industry Standards Association (LISA) xml:tm 1.0, 26 February 2007.

[XSD 1.0 Structures]

XML Schema Part 1: Structures Second Edition, H. S. Thompson, D. Beech, M. Maloney, N. Mendelsohn, Editors, W3C Recommendation, 28 October 2004, <http://www.w3.org/TR/2004/REC-xmlschema-1-20041028/> . *Latest version* available at <http://www.w3.org/TR/xmlschema-1/> .

[XSD 1.0 Datatypes]

XML Schema Part 2: Datatypes Second Edition, P. V. Biron, A. Malhotra, Editors, W3C Recommendation, 28 October 2004, <http://www.w3.org/TR/2004/REC-xmlschema-2-20041028/> . *Latest version* available at <http://www.w3.org/TR/xmlschema-2/> .

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Extensible Stylesheet Language (XSL) Version 1.0, S. Adler, A. Berglund, J. , S. Deach, T. Graham, P. Grosso, E. Gutentag, A. Milowski, S. Parnell, J. Richman, S. Zilles, Editors, W3C Recommendation, 15 October 2001, <http://www.w3.org/TR/2001/REC-xsl-20011015/> . *Latest version* available at <http://www.w3.org/TR/xsl/> .

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[XTM 1.0]

S. Pepper and G. Moore, editors, *XML Topic Maps (XTM) 1.0*, <http://www.topicmaps.org/xtm/index.html>, TopicMaps.Org XTM 1.0, 2001.

1.5 Formatting conventions in the XHTML version of the specification

Given the size and complexity of the specification, it is not generated as a single XHTML file. Instead, each DITA topic is rendered as a separate XHTML file. The XHTML version of the specification uses certain formatting conventions to aid readers in navigating through the specification and locating material easily: Link previews and navigation links.

Link previews

The DITA specification uses the content of the DITA `<shortdesc>` element to provide link previews for its readers. These link previews are visually highlighted by a border and a colored background. The link previews are not normative; they contain the content of the `<shortdesc>` element for the child topic, which is rendered in a normative context as the first paragraph of the topic; the content is identical in both renditions. The link previews serve as enhanced navigation aids, enabling readers to more easily locate content. This usability enhancement is one of the ways in which the specification illustrates the capabilities of DITA and exemplifies DITA best practices.

The following screen capture illustrates how link previews are displayed in the XHTML version of the specification:

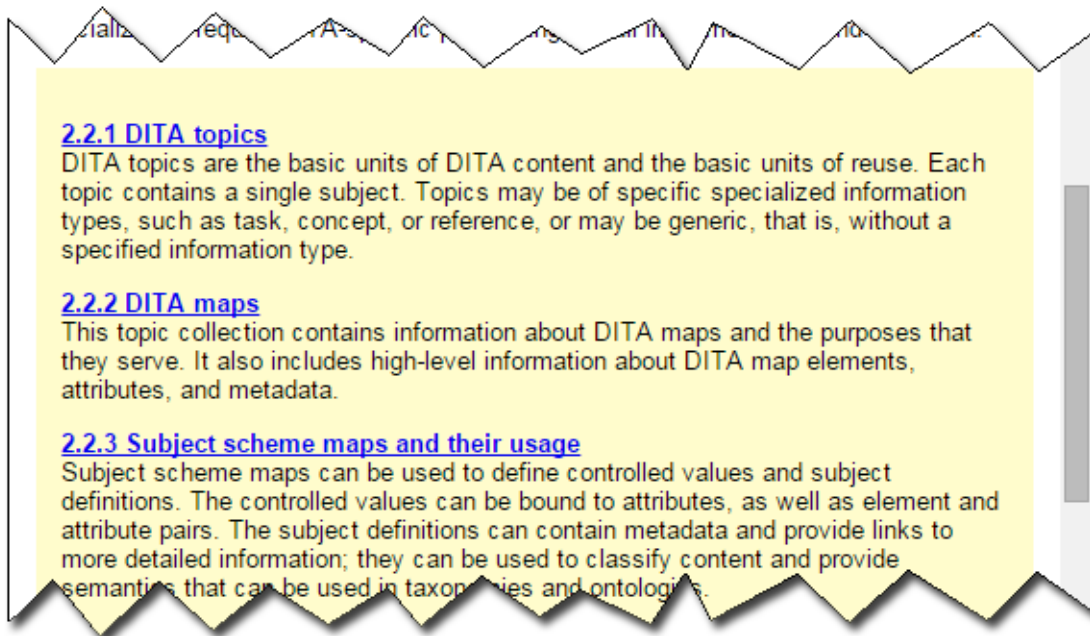


Figure 1: Link previews

Navigation links

To ease readers in navigating from one topic to another, each XHTML file generated by a DITA topic contains the following navigation links at the bottom:

Parent topic

Takes readers to the parent topic, which the topic referenced by the closest topic in the containment hierarchy

Previous topic

Takes readers to the previous topic in the reading sequence

Next topic

Takes readers to the next topic in the reading sequence

Return to main page

Takes readers to the place in the table of contents for the current topic in the reading sequence

The following screen capture illustrates how navigation links are displayed in the XHTML version of the specification:

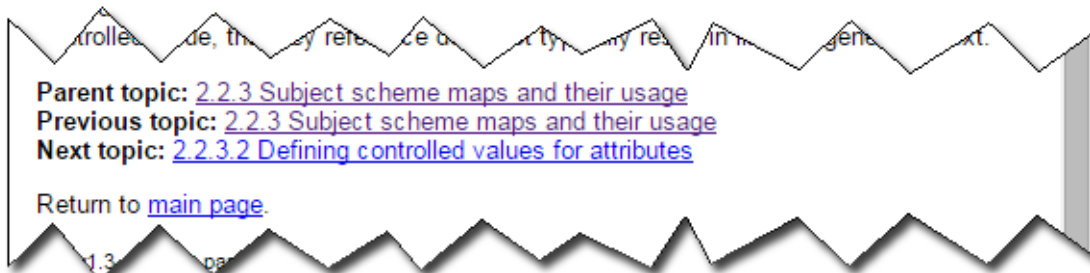


Figure 2: Navigation links

When readers hover over the navigation links, the short description of the DITA topic also is displayed.