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

OASIS Standard

17 December 2015

Specification URIs

This version:

http://docs.oasis-open.org/dita/dita/v1.3/os/part0-overview/dita-v1.3-os-part0-overview.html
(Authoritative version)

http://docs.oasis-open.org/dita/dita/v1.3/os/part0-overview/dita-v1.3-os-part0-overview.pdf

Previous version:

http://docs.oasis-open.org/dita/dita/v1.3/cos01/part0-overview/dita-v1.3-cos01-part0-overview.html
(Authoritative version)

http://docs.oasis-open.org/dita/dita/v1.3/cos01/part0-overview/dita-v1.3-cos01-part0-overview.pdf

Latest version:

http://docs.oasis-open.org/dita/dita/v1.3/dita-v1.3-part0-overview.html
(Authoritative version)

http://docs.oasis-open.org/dita/dita/v1.3/dita-v1.3-part0-overview.pdf

Technical Committee:
OASIS Darwin Information Typing Architecture (DITA) TC

Chair:
Kristen James Eberlein (kris@eberleinconsulting.com), Eberlein Consulting LLC

Editors:
Robert D. Anderson (robander@us.ibm.com), IBM
Kristen James Eberlein (kris@eberleinconsulting.com), Eberlein Consulting LLC

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/os/part0-overview/dita-v1.3-os-part0-overview.html


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/os/part0-overview/dita-v1.3-os-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).

Citation format:
When referencing this specification, the following citation format should be used:

[DITA-v1.3-part0-overview]
Notices

Copyright © OASIS Open 2015. All Rights Reserved.

All capitalized terms in the following text have the meanings assigned to them in the OASIS Intellectual Property Rights Policy (the "OASIS IPR Policy"). The full Policy may be found at the OASIS website.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to OASIS, except as needed for the purpose of developing any document or deliverable produced by an OASIS Technical Committee (in which case the rules applicable to copyrights, as set forth in the OASIS IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by OASIS or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and OASIS DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OASIS requests that any OASIS Party or any other party that believes it has patent claims that would necessarily be infringed by implementations of this OASIS Committee Specification or OASIS Standard, to notify OASIS TC Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification.

OASIS invites any party to contact the OASIS TC Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this specification by a patent holder that is not willing to provide a license to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification. OASIS may include such claims on its website, but disclaims any obligation to do so.

OASIS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on OASIS' procedures with respect to rights in any document or deliverable produced by an OASIS Technical Committee can be found on the OASIS website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this OASIS Committee Specification or OASIS Standard, can be obtained from the OASIS TC Administrator. OASIS makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.

The name "OASIS" is a trademark of OASIS, the owner and developer of this specification, and should be used only to refer to the organization and its official outputs. OASIS welcomes reference to, and implementation and use of, specifications, while reserving the right to enforce its marks against misleading uses. Please see https://www.oasis-open.org/policies-guidelines/trademark for above guidance.
# Table of contents

1 Introduction to DITA 1.3 ................................................................................................................................... 5
  1.1 About the DITA specification: Overview ...................................................................................................5
  1.2 Terminology ............................................................................................................................................. 6
  1.3 Normative references .............................................................................................................................. 7
  1.4 Non-normative references ....................................................................................................................... 7
  1.5 Formatting conventions in the XHTML version of the specification .........................................................9
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

[RFC 2119]

[RFC 3986]

[RFC 5646]

[XML 1.0]

[XML 1.1]

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]
OASIS Committee Specification 02, Customer Information Quality Specifications Version 3.0. Name (xNL), Address (xAL), Name and Address (xNAL) and Party (xPIL), http://www.oasis-open.org/committees/download.php/29877/OASIS%20CIQ%20V3.0%20CS02.zip, 20 September 2008.

[ISO 8601]

[ISO/IEC 19757-3]

[MathML 3.0]

[Namespaces in XML 1.0]
[Namespaces in XML 1.1]


[OASIS Table Model]


[RELAX NG]


[RELAX NG Compact Syntax]


[RELAX NG DTD Compatibility]


[SVG 1.1]


[XHTML 1.0]


[XHTML 1.1]


[XPointer 1.0]


[XML Catalogs 1.1]


[xml:tm 1.0]


[XSD 1.0 Structures]

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:
2.2.1 DITA topics
DITA topics are the basic units of DITA content and the basic units of reuse. Each topic contains a single subject. Topics may be of specific specialized information types, such as task, concept, or reference, or may be generic, that is, without a specified information type.

2.2.2 DITA maps
This topic collection contains information about DITA maps and the purposes that they serve. It also includes high-level information about DITA map elements, attributes, and metadata.

2.2.3 Subject scheme maps and their usage
Subject scheme maps can be used to define controlled values and subject definitions. The controlled values can be bound to attributes, as well as element and attribute pairs. The subject definitions can contain metadata and provide links to more detailed information; they can be used to classify content and provide semantics that can be used in taxonomies and ontologies.

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.