

PB138 — Darwin Information Typing Architecture (DITA)

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Outline

- What is DITA?
- History
- Standards
- Principles
- Tools

IBM and the Consortium OASIS have introduced



- [DITA Specification](#)
- Customizable tool for creation of topic-oriented markups.
- It is a predefined markup but extensible.
- Similar principles as in OO languages.
- Enables *specialization* (inherit and modify).
- Suitable where a highly structured, well defined semantics is available.

Links

- [DITA OASIS Home Page](#)
- [Very basic info on DITA by TechWhirl](#)
- [Good tutorial by XMLMind](#)

History and Presence

- Since 2001 DITA developed by IBM (motivation: fixed markups are not enough)
- In 2004, the standard donated to OASIS.
- Maintained by [OASIS DITA Technical Committee](#)
- April 2005 — Version 1.0 of the DITA specification:
 - OASIS: [Darwin Information Typing Architecture \(DITA\) Language Specification](#)
 - OASIS: [Darwin Information Typing Architecture \(DITA\) Architectural Specification](#)
- Latest version 1.2 [OASIS Darwin Information Typing Architecture \(DITA\) Version 1.2 Specification, OASIS standard](#), approved 1 December 2010

Concepts

topic

téma — an atomic information unit defined by name and content; atomic in terms of meaning and origin — a smaller one would not bear a meaning

map

mapa — document organizing topics into bigger units defining relations among topics

DITA Principles 1

specialization

specializace — technique to define new structural types or new information domains by maximal reusing of existing design and code, saving as much costs related to introduction of new types (data exchange, migration, maintenance)

structural specialization

strukturální specializace — allows creation of new topic types or maps (map types)

domain specialization

doménová specializace — enables creation of new markup applicable to more structural types (eg. new keyword types, tables, lists)

DITA Principles 2

integration

integrace — every domain and structural specialization has its own module. Modules can be combined in the so-called integration process.

customization

přizpůsobení — eg. if you require that a change in output can be done without impairing the portability and data exchange, without specialization

generalization

generalizace — offers the opportunity to understand the specialized content as the content of the parent (general) type even with the possibility the proposal back to the specialized content (round-tripping).

Tools

DITA Open Toolkit 2.0

[recent version](#) of the fundamental DITA processing software, enabling production of PDF, ODT, (X)HTML, RTF, JavaHelp and many other output formats. The DITA Open Toolkit is freely available, you can install it and try to publish the following free DITA samples to produce eg. HTML5 output:

Encyclopeadia Brittanica DITA Sample

E.B. Vol.3, Part 3-4 is a part of [DITA2InDesign](#) project

Much simpler sample is part of the DITA OT under <http://dita-ot.sourceforge.net/doc/ot-userguide13/xhtml/samples/samples.html>