OASIS

The DocBook Document Type

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Abstract:
    DocBook is general purpose [XML] and [SGML] document type particularly well suited to books and papers about computer hardware and software (though it is by no means limited to these applications).

    The Version 4.2 release is a maintainance release. It introduces no backwards-incompatible changes.

Status:
    This Committee Specification was approved for publication by the OASIS DocBook Technical Committee. It represents the consensus of the committee.

    Please send comments on this specification to the `<docbook@lists.oasis-open.org>` list. To subscribe, send an email message to `<docbook-request@lists.oasis-open.org>` with the word `"subscribe"` as the body of the message.

    The errata page for this specification is at http://www.oasis-open.org/docbook/specs/cs-docbook-docbook-4.2-errata.html.

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1. Introduction

DocBook is general purpose XML and SGML document type particularly well suited to books and papers about computer hardware and software (though it is by no means limited to these applications).

The DocBook Technical Committee maintains the DocBook schema. DocBook is officially available as a Document Type Definition (DTD) for both XML and SGML. It is unofficially available in other forms as well.

The Version 4.2 release is a maintainance release. It introduces no backwards-incompatible changes. All valid DocBook 4.1 documents are also valid DocBook 4.2 documents.

The DocBook Technical Committee welcomes bug reports and requests for enhancement (RFEs) from the user community. The current list of outstanding requests is available through the SourceForge tracker interface. This is also the preferred mechanism for submitting new requests. Old RFEs, from a previous legacy tracking system, are archived for reference.

2. Terminology

The key words must, must not, required, shall, shall not, should, should not, recommended, may, and optional in this Committee Specification are to be interpreted as described in [RFC 2119]. Note that for reasons of style, these words are not capitalized in this document.

3. The DocBook Document Type V4.2

The DocBook document type is distributed for XML and SGML from the DocBook site at OASIS

3.1. Changes in DocBook V4.2

There are no backwards-incompatible changes in this release.

Each of the changes made between DocBook V4.2CR3 and DocBook V4.2 is summarized here.

The appellation "CR3" was removed from comments, public, and system identifiers.

3.2. Changes in DocBook V4.2CR3

There are no backwards-incompatible changes in this release.

Each of the changes made between DocBook V4.2CR2 and DocBook V4.2CR3 is summarized here.

The only changes made for the CR3 release were in comments in the various modules. The previous release, labelled "Candidate Release 2", erroneously contained the CR1 files. This release fixes that error.

3.3. Changes in DocBook V4.2CR2

There are no backwards-incompatible changes in this release.

Each of the changes made between DocBook V4.2CR1 and DocBook V4.2CR2 is summarized here.

3.3.1. Bug Fixes

- The `%local.info.class;` reference was added to `%info.class;`. Its absence was an oversight, it should always have been there.

- The `SVG` notation was added to `%notation.class;`. Its absence was an oversight, it should always have been there.

- Changed the mechanism for identifying incorrectly configured DocBook customization layers. In DocBook V4.2CR1, if a customization layer incorrectly enabled both `%sgml.features;` and `%xml.features;`, the DTD was syntactically invalid. This caused problems for certain kinds of DTD parsing tools that ignore marked sections.

  Instead of producing a syntax error, the new mechanism simply points all of the DTD modules to a file that contains no declarations. The content of this file, http://www.oasis-open.org/docbook/xml/configerror.txt, explains the cause of the error.

3.4. Changes in DocBook V4.2CR1

Each of the changes made between DocBook V4.1 and DocBook XML V4.1.2 is summarized here. For complete details, consult the individual RFEs and the meeting minutes.

3.4.1. Bug Fixes

- RFE 434439: Add language attribute to MethodSynopsis
- RFE 435485: Parameter entity `%tbl.table.mdl;` can't be redefined cleanly
- Expand the content model of the following elements from `%smallcptr.char.mix;` back to `%cptr.char.mix;`: `interfacename`, `action`, `database`, `filename`, `hardware`, `keycap`, `option`, `parameter`, `property`, and `systemitem` (`command`, `interface`, and `literal` were never reduced).

3.4.2. Enhancements

- RFE 417671: Add recursive section element to Refentry
- RFE 426382: Allow SimpleSect inside Section
- RFE 431413: Former RFE 121: Add markup for signals
- RFE 431415: Former RFE 124: Add markup for host identifiers
- RFE 431418: Former RFE 128: Typing and linking in FuncDef (partially implemented)
- RFE 431419: Former RFE 130: Markup protocol, Filesystem type, and partion.
- RFE 435466: `%beginpage.exclusion;` not used in dbpool.mod
- RFE 436072: Need parameter entity for info* content
- RFE 439136: Allow literallayout in `epigraph`
- RFE 440597: Add SVG notation

- RFE 440667: Add `class` attribute to `orgname`. This proposal deprecates `corpname` as proposed.
- RFE 470599: Revise graphic attributes as proposed.
- RFE 480956: Add `co` to `userinput`, etc.
- RFE 480957: New name and address markup as proposed.
- Former RFE 133: Added `newsgroup` class to `systemitem`.
- Former RFE 140: Allow multiple `msgexplan` inside `simplemsgentry`.
- RFE 482053: Former RFE 119: Add support for DOI in meta.
- RFE 480955: Add `coref`.
- RFE 482817: An `errortext` element will be added. The processing expectations of `errorname` will be clarified. See also RFE 482922.
- RFE 482820: An `extension` value will be added to the `class` attribute of `filename`.
- RFE 482821: Add introductory material to the beginning of list elements.
- RFE 487482: Add metadata (`blockinfo`) to block elements: `equation`, `example`, `figure`, `informalequation`, `informalexample`, `informalfigure`, `informaltable`, `itemizedlist`, `legalnotice`, `msgset`, `orderedlist`, `procedure`, `qandadiv`, `qandaentry`, `qandaset`, `table`, and `variablelist`.
- RFE 491629: Allow `personname` in inline content as proposed.
- RFE 492099: Add new attributes to `olink`.
- RFE 498848: Allow `segmentedlists` with only a single `seg`.
- RFE 501363: Add `%section.class;` parameter entity.
- RFE 513426: Add text alternative for tables as proposed.
- Extended metadata elements to capture all of the Dublin Core Metadata Element Set, Version 1.0.

4. Release Notes

4.1. Relationship to the QIC Technical Committee

DocBook and the Customer Information Quality (QIC) TC both define markup for names and addresses. In general, the requirements for bibliographic name metadata in DocBook are far less complex than the requirements for maintaining customer information.

DocBook name and address markup is a proper subset of the QIC xNL markup with the following simple transformation:

DocBook Element	QIC xNL Element
`honorific`	`title`
`firstname`	`firstname`
`surname`	`lastname`
`lineage`	`generationidentifier`
`othername`	`othername`

4.2. Relationship to the Dublin Core

DocBook Version 4.2 defines a proper superset of the Dublin Core Metadata Element Set, Version 1.0. In previous versions of DocBook, there were several Dublin Core elements that were not easily derived from DocBook metadata.

The following table summarizes the Dublin Core mapping for DocBook (as amended).

DC Element	DC Label	DocBook Element(s)
Title	Title	`title`

DC Element	DC Label	DocBook Element(s)
Author or Creator	Creator	`author`, `editor`, `othercredit`
Subject and Keywords	Subject	`keywordset`, `subjectset`
Description	Description	`abstract`
Publisher	Publisher	`publisher`, `publishername`
Contributor	Contributor	`author`, `editor`, `othercredit`, `collab`
Date	Date	`date`, `pubdate`
Type	Type	Derived from document element and `status` attribute
Format	Format	`text/xml`
Resource Identifier	Identifier	`biblioid`
Source	Source	`bibliosource`
Language	Language	`lang` or `xml:lang` attribute
Relation	Relation	`bibliorelation`
Coverage	Coverage	`bibliocoverage`
Rights Management	Rights	`copyright`, `legalnotice`

In some cases, additional `role` attributes or other logic may be required to determine the best mapping.

5. Changes Proposed for DocBook V5.0

The following backwards-incompatible changes were announced in DocBook V4.0, the DocBook Technical Committee expects to incorporate them into DocBook V5.0.

Each of the changes proposed is summarized here. For complete details, consult the individual RFEs and the meeting minutes.

- DocBook V5.0 will be primarily an XML DTD. This will require a wide range of changes. As a result, DocBook V5.0 will more closely resemble The XML version of DocBook V4.x than the SGML version.
- Planned parameter entity reorganization may reduce some content models. The goal of this effort is to remove a large number of spurious elements that snuck into content models during the first parameter entity reorganization (circa DocBook 2.4). In practice the TC expects changes to have very little "real world" impact.
- The `coords` attribute will be removed from `areaset`.
- The `articleinfo` element will be removed from `biblioentry`.
- The `contents` attribute will be removed from `bookinfo` and `setinfo`.
- The `%indexdivcomponent.mix;` parameter entity will be restricted. Numbered figures and other elements inappropriate for an `index` or `setindex` will be removed.
- The `revhistory` element will be removed from `glossterm`.
- RFE 416415: The `constant class` will be removed from `systemitem`.
- The `graphic` and `inlinegraphic` elements will be removed.
- Tables will be restricted from full CALS Table Model to the OASIS Exchange model.

6. Changes Proposed for DocBook V6.0

The DocBook Technical Committee expects to announce the following backwards-incompatible changes in DocBook V5.0, for eventual incorporation into DocBook V6.0.

Each of the changes proposed is summarized here. For complete details, consult the individual RFEs and the meeting minutes.

- RFE 412476: The `class` attribute on `productname` will be `#IMPLIED`.
- RFE 482810: The content model of `msgtext` is far too broad. It will be reduced to the same mixture as `%example.mix;`.
- RFE 482811: The `title` element will be removed from `%bibliocomponent.mix;` (use `citetitle` instead).
- RFE 482812: The content model of `citetitle` will be reduced from `%para.char.mix;` to `%title.char.mix;`.
- RFE 482815: The `synopsis` element will be removed from `%para.char.mix;`.
- RFE 482818: Simplify the content model of `toc`.
- RFE 482819: The content models of the bibliography elements will be adjusted so that it is not possible to mix `biblioset` and `bibliomset` elements.
- RFE 482922: The `msgtext` element will be constrained to occur only inside `msgset`. See also RFE 482817.
- RFE 531851: Remove inline person name elements as proposed.
- RFE 531855: Remove `corpname` as proposed.

OASIS DocBook Technical Committee (Non-Normative)

The following individuals were members of the committee during the formulation of this Committee Specification:

- Dennis Evans
- Patricia Gee-Best
- Paul Grosso
- Dick Hamilton
- Nancy (Paisner) Harrison
- Sabine Ocker
- Michael Sabrio
- Michael Smith
- Tim Teebken (prospective)
- Norman Walsh (Chair, Editor)

Notices

Intellectual Property Rights

For information on wether 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 DocBook web page (http://www.oasis-open.org/committees/docbook/)

Revision History

Committee Specification	16 Jul 2002
Candidate Release 3	28 May 2002
Candidate Release 2	21 May 2002
Candidate Release 1	19 Mar 2002
Working Draft "Beta 1"	20 Nov 2001

References

Normative

[SGML] JTC 1, SC 34. *ISO 8879:1986 Information processing -- Text and office systems -- Standard Generalized Markup Language (SGML)*. 1986.

[XML] Tim Bray, Jean Paoli, C. M. Sperberg-McQueen, and Eve Maler, editors. *Extensible Markup Language (XML) 1.0 Second Edition*. World Wide Web Consortium, 2000.

[RFC 2119] IETF (Internet Engineering Task Force). *RFC 2119: Key words for use in RFCs to Indicate Requirement Levels*. S. Bradner. 1997.