![OASIS]

The DocBook Schema Version 5.0.1

Committee Specification 01

07 November 2018

Specification URIs

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Technical Committee:
OASIS DocBook TC

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Additional artifacts:
This prose specification is one component of a Work Product that also includes:

- Relax NG schemas: http://docs.oasis-open.org/docbook/docbook/v5.0.1/cs01/schemas/rng/
- Schematron schema: http://docs.oasis-open.org/docbook/docbook/v5.0.1/cs01/schemas/sch/
- DTD schema: http://docs.oasis-open.org/docbook/docbook/v5.0.1/cs01/schemas/dtd/
- XML schemas: http://docs.oasis-open.org/docbook/docbook/v5.0.1/cs01/schemas/xsd/
- http://docs.oasis-open.org/docbook/docbook/v5.0.1/cs01/schemas/catalog.xml
- http://docs.oasis-open.org/docbook/docbook/v5.0.1/cs01/schemas/docbook.nvdl

Related work:
This specification replaces or supersedes:

- *The DocBook Schema Version 5.0*. Edited by Norman Walsh. 1 November 2009. OASIS Standard. http://docs.oasis-open.org/docbook/specs/docbook-5.0-spec-os.html.
- *The DocBook Schema Version 5.0 Errata 01*. Edited by Robert Stayton. 29 March 2018. OASIS Approved Errata. http://docs.oasis-open.org/docbook/specs/docbook-5.0-spec-errata01-os.html.

Note that *The DocBook Schema Version 5.0* has been superseded by:

- *DocBook Version 5.1*. Edited by Norman Walsh. 22 November 2016. OASIS Standard. http://docs.oasis-open.org/docbook/docbook/v5.1/os/docbook-v5.1-os.html. Latest version: http://docs.oasis-open.org/docbook/docbook/v5.1/docbook-v5.1.html.

Abstract:

The Schematron rules changed after DocBook 5.0 was released, so some Schematron tools do not work with DocBook 5.0. The DocBook 5.0.1 spec is updated with the new Schematron rules so users can continue using DocBook 5.0 if they need to use newer Schematron tools.

Status:

This document was last revised or approved by the OASIS DocBook 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=docbook#technical.

TC members should send comments on this specification to the TC's email list. Others should send comments to the TC by using the "Send A Comment" button on the TC's web page at https://www.oasis-open.org/committees/docbook/.

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Citation format:

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

[DocBook-v5.0.1]

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1 Introduction

DocBook is a general purpose XML schema particularly well suited to books and papers about computer hardware and software (although it is by no means limited to these applications).

The DocBook Technical Committee **[DocBookTC]** maintains the DocBook schema. Starting with V5.0, DocBook is normatively available as a **[Relax NG]** Schema with some additional Schematron assertions.

After **[DocBook 5.0]** was released as an OASIS Committee Standard in 2009, the Schematron standard was changed. After various tools that work with Schematron were updated, the DocBook 5.0 schema would no longer parse without error because it did not conform to the new Schematron syntax.

DocBook Version 5.0.1 is a minor update of DocBook 5.0 to bring its Schematron rules into conformance with the latest version of Schematron. No changes were made to DocBook elements, attributes, or content models. So any document that conformed to DocBook 5.0 will stil conform to DocBook 5.0.1. This will allow users of DocBook 5.0 to make use of updated Schematron rules without having to upgrade their documents to DocBook Version 5.1 **[DocBook-5.1]**.

This document describes only the changes that were made to DocBook Version 5.0 to bring it into conformance with the new Schematron version. For other information about DocBook Version 5.0 and how it differs from previous versions, see the OASIS Standards document for **[DocBook-5.0]**.

1.1 IPR Policy

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1.2 Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119] and [RFC8174] when, and only when, they appear in all capitals, as shown here.

1.3 Normative References

[RFC2119]	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>.
[RFC8174]	Leiba, B., "Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words", BCP 14, RFC 8174, DOI 10.17487/RFC8174, May 2017, <http://www.rfc-editor.org/info/rfc8174>.
[Docbook-5.0]	*The DocBook Schema Version 5.0*. Edited by Norman Walsh. 1 November 2009, OASIS Standard. http://docs.oasis-open.org/docbook/specs/docbook-5.0-spec-os.html
[DocBook-5.1]	*DocBook Version 5.1.* Edited by Normal Walsh. 22 November 2016, OASIS Standard. http://docs.oasis-open.org/docbook/docbook/v5.1/os/docbook-v5.1-os.html
[Schematron2006]	*ISO/IEC 19757-3:2006 Information Technology—Document Schema Definition Language (DSDL)—Part 3: Rule-based validation—Schematron http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=40833] Publicly available at: http://standards.iso.org/ittf/PubliclyAvailableStandards/c040833_ISO_IEC_19757-3_2006(E).zip.*

[Schematron2016] *ISO/IEC 19757-3:2016 Information Technology—Document Schema Definition Language (DSDL)—Part 3: Rule-based validation—Schematron* Publicly available at: http://standards.iso.org/ittf/PubliclyAvailableStandards/c055982_ISO_IEC_19757-3_2016.zip.

[RelaxNG] ISO/IEC 19757-2:2008 Information Technology—Document Schema Definition Language (DSDL)—Part 2: Regular-grammar-based validation—RELAX NG [http://www.iso.org/iso/home/*store/catalogue_tc/catalogue_detail.htm?csnumber =52348]*. Publicly available at: *http://standards.iso.org/ittf/PubliclyAvailableStandards/c052348_ISO_IEC_19757-2_2008(E).zip*.

1.4 Non-Normative References

[DocBookTC] OASIS Open DocBook Technical Committee, https://www.oasis-open.org/committees/docbook/.

2 Schematron rule change

The DocBook 5.0 **[DocBook-5.0]** RelaxNG schema utilized embedded Schematron **[Schematron2006]** assertions to express certain constraints that cannot be expressed in RelaxNG syntax. After DocBook 5.0 was released, a new version of Schematron **[Schematron2016]** was released that made two changes that affected DocBook 5.0. The two changes were:

1. The updated standard Schematron syntax replaced the @name attribute with an <s:title> element that serves the same purpose.

2. The Schematron namespace was changed from "http://www.ascc.net/xml/schematron" to "http://purl.oclc.org/dsdl/schematron".

The result of these changes was that the DocBook 5.0 RelaxNG schema no longer parsed properly with updated Schematron validators.

2.1 Replace @name with <s:title>

In DocBook 5.0.1, every instance of the DocBook Schematron patterns that used @name has been updated in DocBook 5.0.1 to use an <s:title> element instead.

For example, the original syntax for this pattern:

```
  <s:pattern name="Cardinality of segments and titles">
   <s:rule context="db:seglistitem">
     <s:assert test="count(db:seg) = count(../db:segtitle)">The number of seg elements must be the same as the number of segtitle elements in the parent segmentedlist</s:assert>
   </s:rule>
  </s:pattern>
```

was replaced with (changes highlighted in boldface):

```
  <s:pattern>
    <s:title>Cardinality of segments and titles</s:title>
   <s:rule context="db:seglistitem">
     <s:assert test="count(db:seg) = count(../db:segtitle)">The number of seg elements must be the same as the number of segtitle elements in the parent segmentedlist</s:assert>
   </s:rule>
  </s:pattern>
```

Note that the only change is to replace the @name attribute with an <s:title> element with the same content. This change was applied to Schematron patterns in DocBook 5.0 with the following names:

```
  <s:pattern name="Glossary 'firstterm' type constraint">
  <s:pattern name="Footnote reference type constraint">
  <s:pattern name="Glossary 'glossterm' type constraint">
  <s:pattern name="Synopsis fragment type constraint">
  <s:pattern name="Glosssary 'see' type constraint">
  <s:pattern name="Glossary 'seealso' type constraint">
  <s:pattern name="Glossary term definition constraint">
  <s:pattern name="Cardinality of segments and titles">
```

```
<s:pattern name="Root must have version">
<s:pattern name="Element exclusion">
```

2.2 New Schematron namespace

The Schematron namespace was declared in two places in the DocBook, the <grammar> element and one <s:ns> element.

2.2.1 Namespace change in <grammar> element

The DocBook 5.0 RNG schema's <grammar> element was changed from:

```
<grammar xmlns:s="http://www.ascc.net/xml/schematron" ...
```

to:

```
<grammar xmlns:s="http://purl.oclc.org/dsdl/schematron" ...
```

2.2.2 Namespace change in <s:ns> element

The DocBook 5.0 RNG schema contains several rules in the Schematron namespace that declare namespaces used by the Schematron rules. One of those declarations was for the Schematron namespace itself. It was changed from:

```
<s:ns prefix="s" uri="http://www.ascc.net/xml/schematron"/>
```

to:

```
<s:ns prefix="s" uri="http://purl.oclc.org/dsdl/schematron"/>
```

3 Conformance

Since neither @name nor <s:title> in Schematron assertions is necessary for validating DocBook document instances, this change will not require any changes to the conformance rules for existing DocBook documents. So the Conformance section of the DocBook 5.0 **[Docbook-5.0]** standard is unchanged.

Appendix A. Acknowledgments

The following individuals have participated in the creation of this specification and are gratefully acknowledged:

Participants:

      Robert Stayton, Sagehill Enterprises, Individual

      Jirka Kosek, Individual

Appendix B. Revision History

Revision	Date	Editor	Changes Made
[Rev number]	[Rev Date]	[Modified By]	[Summary of Changes]