

20 years with DocBook

Experiences from the PostgreSQL project

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Who am I?

- FOSS claim to fame: PostgreSQL
- C programmer
- documentation toolsmith
- documentation writer

What is PostgreSQL?

- relational (SQL) database management system
 - 1984: started
 - 1996: open source
- ca. 1 million lines of code (C, Perl, make, autoconf)
- yearly major releases (10, 11, 12, 13, ...)
 - 5 years community maintenance

The PostgreSQL documentation

- DocBook (XML) 4.5
- source code: 368 files; 280k lines; 10 MB
- customization layer: 1,800 lines of XSL
- output: HTML: 1106 files; PDF: 2674 pages A4; 290 man pages
- all in the main Git repo

PostgreSQL 13.1 Documentation

The PostgreSQL Global Development Group

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II. The SQL Language

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<https://www.postgresql.org/docs/current/index.html>

PostgreSQL and DocBook

- originally all man pages, then some HTML
- DocBook (SGML) since 1998
- XSL since 2016
- XML since 2017
- images since 2019

current toolchain

- docbook-xml, docbook-xsl, xmllint, xsltproc
- optional: fop

old toolchains

- docbook-sgml, docbook-dsssl, opensp, openjade
- optional: docbook2x (docbook2man); earlier docbook2man-sgmlspl
- optional: jadetex, Applixware

DocBook pros

- semantic markup
- automatic linking, navigation, TOCs, etc.
- fully customizable
- builds on public standards
- somewhat widely used
- rarely breaks
- longevity
- vendor/ecosystem neutral

DocBook cons

- lots of different pieces (XML, DTD, XSL, stylesheets, etc.)
- (semantic markup)
- (installation of tools)
- maintenance of tools
- handling of large documents

toolchain maintenance (previous)

- OpenSP: last release 2005
- OpenJade: last release 2003
- DocBook DSSSL: last release 2004
- docbook2x: last release 2007/2002
- JadeTeX: last release 2003

toolchain maintenance (now)

- libxml2: last release 2017, last major release 2012
- libxslt: last release 2017, last major release 2003
- DocBook XSL: last release 2016
- FOP: no releases between 2012 and 2015

specifications and standards

- XML 1.1: not implemented by libxml2
- XSLT 2.0 and 3.0: not implemented by libxslt
- DocBook 5: not widely used, issues with adoption
 - Relax-NG has little tooling
- DocBook XSL stylesheets: focus is on XSLT 2.0 and CSS
- alternative: Saxon, but: Java, mixed licenses, not widely packaged

The future for PostgreSQL

- toolchain is stable for now
- focus: images, linking, eye candy, content

The future for DocBook?

- DocBook XSL stylesheets desperately need maintenance resources
- What is the road to DocBook 5 adoption?

Conclusions & Links

- <https://www.postgresql.org/docs/current/index.html>
- <https://www.postgresql.org/docs/current/docguide.html>
- <https://github.com/postgres/postgres/tree/master/doc/src/sgml>
- <https://docbook.org/>
- <https://docbook.org/tools/>