Writing Open Source Documentation for Open Source Projects
How SUSE® is documented and what we can learn from it

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WHOAMI

Christoph Wickert

• 1999: Linux user
• 2005: FLOSS Contributor
  – Fedora
  – Xfce
  – LXDE
  – OLPC
• 2010: Senior Engineer at Kolab Systems
• 2016: Technical Documentation Writer at SUSE
WHO ARE WE?
WHAT DO WE WANT?

DOCUMENT
ALL THE THINGS
Documentation Overview

Available from SUSE website:
https://www.suse.com/doc
# Documentation Overview

- **Official SUSE Product documentation**
- Getting Started
- Quick Install Guides
- Deployment Guides
- User Guides
- Administrator Guides
- Tuning Guides
- Release Notes
- Virtualization Guide
- ...
TOOLCHAIN
TOOLCHAIN – DOCBOOK XML

DocBook
• Semantic markup language for technical documentation
• Originally intended for technical documents related to computer hardware and software
• Can be used for any other sort of documentation

DocBook XML
• Based on the eXtensible Markup Language (XML)
• Defines content in semantic way similar to HTML
• Written as a schema which fulfills two tasks: guided editing and validation
• http://docbook.org/
DocBook Publishing Made Easy with a Single Command

2016-08-05: DAPS 2.3.0 has been released. Download / Release Information

For Large Documentation Projects
DocBook is the ideal framework when it comes to publishing large documentation projects in different formats. DocBook provides a “language” (DocBook XML) and a set of stylesheets to translate this language into different output formats such as HTML, PDF, and ePUB.

An Easy-to-Use Toolchain
Transforming the XML sources to output formats such as PDF, requires several steps such as validating, filtering (profiling), converting images, and generating an .ht file. As DocBook does not provide a tool chain, custom solutions (written with make, ant or a scripting language) are necessary for publishing DocBook projects. That is a major hurdle for writers who would like to use DocBook for their documentation projects.

Easy Creation and Publication
The DocBook Authoring and Publishing Suite (DAPS) fills this gap by providing a tool set for easy creation and publication of DocBook sources on Linux. DAPS lets you create HTML (including the brand new Web Help format), PDF, EPUB, man pages, and other formats with a single command. It automatically takes care of validating and filtering (profiling) your sources and of converting the images into the format best suited for the selected output format.

Additional Benefits
Furthermore you can easily create profiled source tarballs for translation or review. DAPS supports authors by providing linkchecker, validator, spellchecker, and editor macros. It is perfectly suited to manage large documentation projects with multiple authors using DAPS docmanager.

100% Open Source
DAPS offers a dual-licensing model at your choice: GPL 2.0 or GPL 3.0.
TOOLCHAIN – DAPS

DAPS examples

• daps validate
• daps pdf (--greyscale) | html (--single)
• daps man | text | mobi | epub | webhelp
• daps spellcheck
• daps stylecheck
• daps xmlformat
• daps images
• daps optipng
TOOLCHAIN – DAPS

Advanced daps commands

• Find out in which files a certain ID is used
  
  \texttt{daps -d <dc-file> list-file --rootid art.daps.quick}

• Print a list of all images with modification date
  
  \texttt{daps -d <dc-file> getimages --modified}

• ... and show them in a viewer
  
  \texttt{daps -d <dc-file> getimages --modified \ --show --viewer ristretto}
TOOLCHAIN – DAPS

SUSE-specific commands

• Generate a “localization drop” for translation
  daps locdrop

• Unpack translated drop file
  daps unpack-lockdrop

• Generate online documentation for the SUSE Website
  daps onlinedoc
TOOLCHAIN – SUSE XSLT STYLE SHEETS

Define the layout for SUSE documentation

• Books: Manuals, Guides
• Articles: Quick Starts, SUSE Best Practices, Shorter Guides
• HTML pages (for all kind of documentation)

Package: suse-xsl-stylesheets
This guide provides answers to writing, style, and layout questions commonly arising when editing SUSE documentation. The Novdoc/DocBook markup reference at the end of this guide will help you choose the right XML element for your purpose. Following this guide will make your documentation more understandable and easier to translate.

Authors: Rebecca Walter, Martina Dejmek, and Stefan Knorr
Publication Date: 03/17/2016, Version: 2016-02

1 Audience
2 Names of Example Items
3 Outline of a Manual
4 Language
5 Structure and Markup
6 Managing Documents
A Terminology and General Vocabulary
   A.1 Terminology
   A.2 General Vocabulary
B GNU Free Documentation License
TOOLCHAIN – STYLE CHECKER

Stylechecker

• Checks whether the SUSE Styleguide guidelines are followed
• Package suse-doc-style-checker

Style Checker Results for SBS-susemanager_bigfile.xml

Abbreviations

In file MAIN-SBS-susemanager.xml within ID sec.arch:

Do not use “ASAP” here: “Security ASAP Exceptions - SLES 11 SP3 i586” Remove “ASAP”.

Admonitions

In file MAIN-SBS-susemanager.xml within ID sec.guidance:

〈note/> element “Test Your Implementation Some advanced features (I... “ does not contain a <title/> element.
Add a <title/> element.

Figures

In file MAIN-SBS-susemanager.xml within ID sec.patchprocess:

Media object “process-flow.png” does not contain alternative text.
Add a <textobject/> element with a <phrase/> inside it, then add descriptive text for the image to it.

Lists

In file MAIN-SBS-susemanager.xml within ID sec.arch:

List "SUSE Manager Organization Default (Main) - 1 32-bi... “ contains 1 item.
Lists should contain at least 2 items.

Productnames, Productnumbers, & Dates

Deliverable arc.sbp.suma.life does not contain a date.
Add a <date/> element, use <?bitempstamp?> inside.

Sections

Section arc.sbp.suma.life lacks an introductory paragraph or abstract.
Add a <para> or <abstract>.

In file MAIN-SBS-susemanager.xml within ID sec.overview:

Section sec.sunxml contains a lone subsection.
Rearrange the subsection structure.

Wordy Phrases
TOOLCHAIN – ADDITIONAL TOOLS

Yet more tools
• dapsenv – Continuous integration with docker
• dbxinluder – Transclusions for DocBook with XInclude 1.1
• docmanager – Manages DocBook 5 Meta Information
• docstats – Statistics and Metrics for Documentation Team
• geekodoc – RELAX NG Schema for SUSE Documentation
• xmldiffng – Diffing XML with RELAX NG schema

Everything available from https://github.com/openSUSE/
PROCESS
PROCESS – GITHUB

Official SUSE Linux Enterprise documentation: https://www.suse.com/doc/sles-12

3,755 commits  28 branches  13 releases  36 contributors

Latest commit 1a46068 3 days ago

- `background_information` - sle 12 rc3
- `images/src` - optipng
- `xml` - Remove stray <guimenu/>
- `.gitignore` - Various screenshots updated, minor edits.
- `DC-SLED-admin` - rebase on SUSE/doc-sle
- `DC-SLED-all` - rebase on SUSE/doc-sle
PROCESS – GIT WORKFLOW

- ‘Successful git branching modell’ by Vincent Driessen
- Development happens in develop
- Master branch is only used for releases
- Separate branches for
  - Features: feature/fate#12345
  - Bugfixes: bugfix/bsc#123456
  - Maintenance: maintenance/SLE12
- Constant naming with git-flow-avh
- Merges through GitHub reviews
PROCESS – OVERVIEW

• Input comes through
  – FATE (Feature And Enhancement Tracker)
  – Bugzilla
  – DocComments
• Evaluation & Planning
• Research (with developers)
• Documentation (Magic happens here!)
• Feedback (from developers)
• Translation
• Publication
Part I Architecture-Specific Installation Considerations

2 Installation on AMD64 and Intel 64
This chapter describes the steps necessary to prepare for the Installation of SUSE Linux Enterprise Server on AMD64 and Intel 64 computers. It introduces the steps required to prepare for various installation methods. The list of hardware requirements provides an overview of supported systems supported by SUSE Linux Enterprise Server. Find information about available installation methods and several common known problems. Also learn how to control the installation, provide installation media, and boot with regular methods.

3 Installation on IBM POWER
This chapter describes the procedure for preparing the installation of SUSE® Linux Enterprise Server on IBM POWER systems.

4 Installation on IBM z Systems
This chapter describes the procedure for preparing the installation of SUSE® Linux Enterprise Server on IBM z Systems systems. It provides all information needed.

Architecture-Specific Installation Considerations

- Section 2.0, Installation on AMD64 and Intel 64
- Section 3.0, Installation on IBM POWER
- Section 4.0, Installation on IBM z Systems

Provide comments and feedback

Report a bug
PROBLEMS
PROBLEMS

We have achieved a lot, still there are problems we need to solve

• Continuous integration
• Stuck in the Waterfall
  – Short time frame between when a feature is ready for testing/documenting and release
• Decoupled from Development
  – Both feature and bug :-)
  – High coordination effort
• Monolithic
  – High maintenance costs
LESSONS LEARNED
Docs or it didn’t happen!
Developers should not write docs!
You need feedback channels!
You need (the right) tools!
Start small!
Documentation should be open!