Writing Open Source Documentation for Open Source Projects

How SUSE® is documented and what we can learn from it

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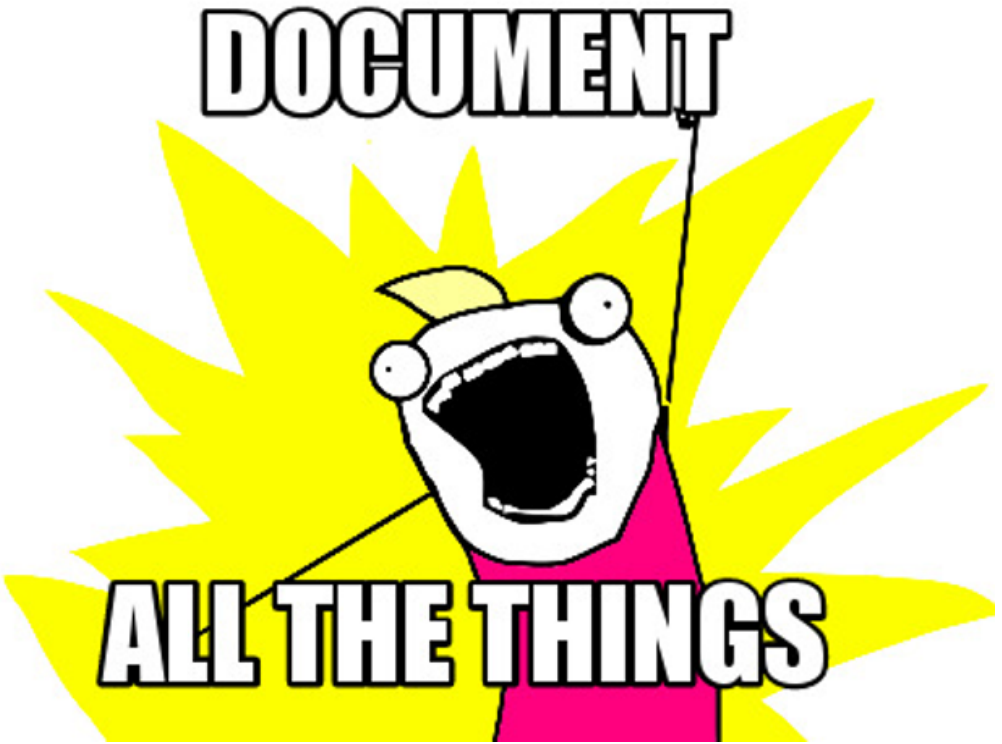
WHOAMI

Christoph Wickert

- 1999: Linux user
- 2005: FLOSS Contributor
  - Fedora
  - Xfce
  - LXDE
  - OLPC
- 2010: Senior Engineer at Kolab Systems
- 2016: Technical Documentation Writer at SUSE

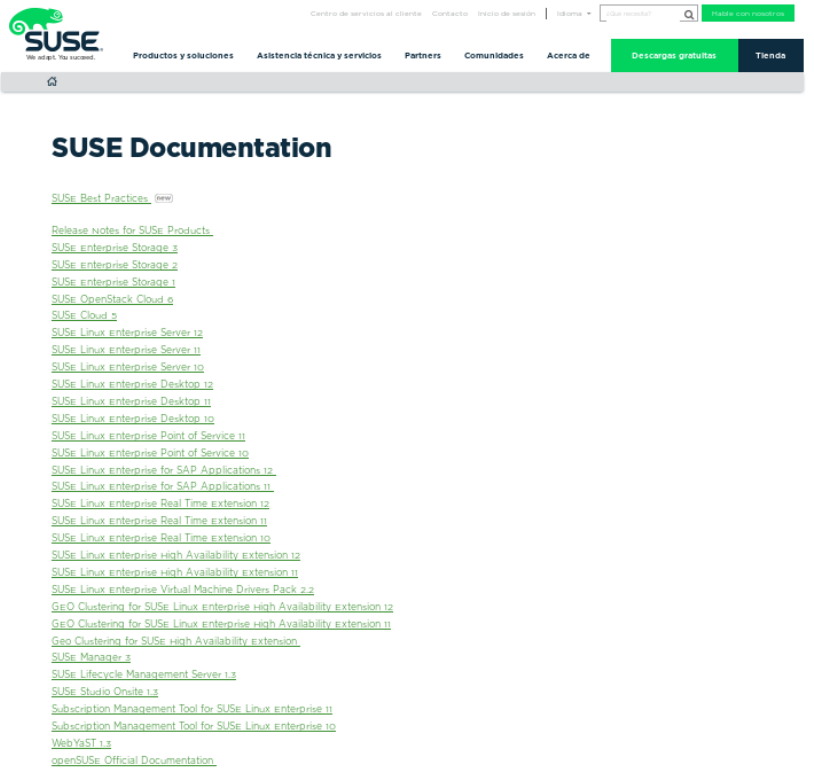
WHO ARE WE?

WHAT DO WE WANT?



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
- …

Getting Started	view	last update
Release Notes	HTML	12/15/2015
Installation Quick Start	HTML PDF	12/15/2015
GNOME User Guide	HTML PDF	12/15/2015

Installation and Administration	view	last update
Deployment Guide	HTML PDF	02/18/2016
Administration Guide	HTML PDF	02/18/2016
Virtualization Guide	HTML PDF	02/18/2016
Storage Administration Guide	HTML PDF	02/18/2016
System Analysis and Tuning Guide	HTML PDF	02/18/2016
Security Guide	HTML PDF	02/18/2016

Additional Information	view	last update
Amazon EC2 Container Service	HTML PDF	11/20/2015
AutoYaST	HTML PDF	12/15/2015
Hardening Guide	HTML PDF	12/15/2015
Xen to KVM Migration Guide	HTML PDF	12/15/2015
Docker Quick Start	HTML PDF	02/25/2016
systemd in SUSE® Linux Enterprise 12 - White Paper	PDF	03/17/2015
Virtualization Technologies	PDF	04/08/2015
Networking with Wicked in SUSE® Linux Enterprise 12 - White Paper	PDF	09/07/2015
Virtualization Best Practice	HTML PDF	12/15/2015
Subscription Management Tool (SMT)	HTML PDF	02/18/2016

TOOLCHAIN

TOOLCHAIN – DOCBOOK XML

DocBook

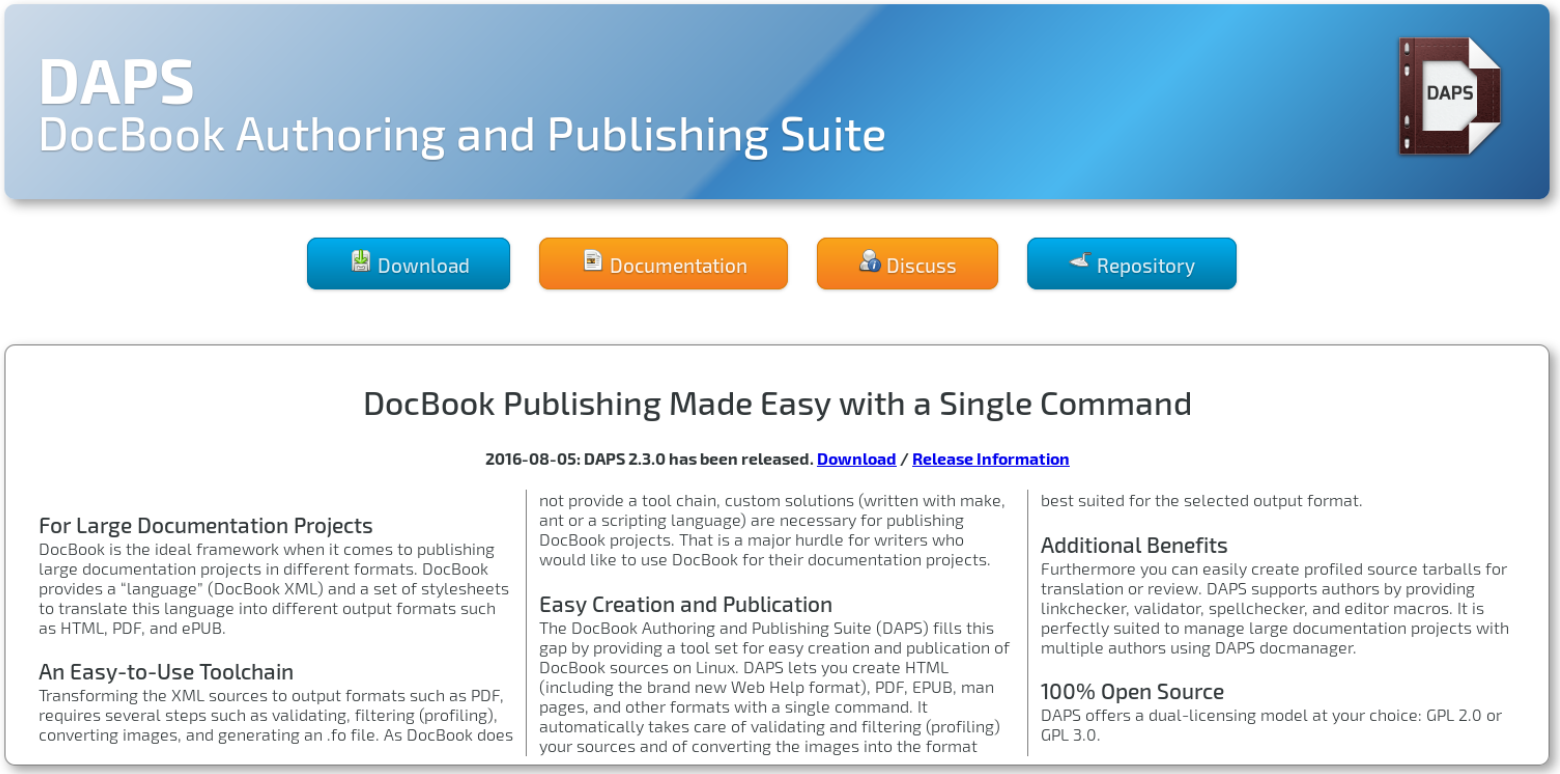
- Semantic markup language for technical documentation
- Originally intended for technical documents related to computer hardware and software
- Can be used for any other sort of documentation

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/

TOOLCHAIN – $EDITOR

TOOLCHAIN – DAPS



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

```
daps -d <dc-file> list-file --rootid art.daps.quick
```

- Print a list of all images with modification date

```
daps -d <dc-file> getimages --modified
```

- … and show them in a viewer

```
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`

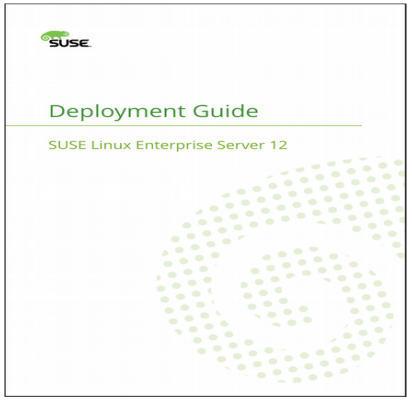
TOOLCHAIN – SUSE XSLT STYLESHEETS

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

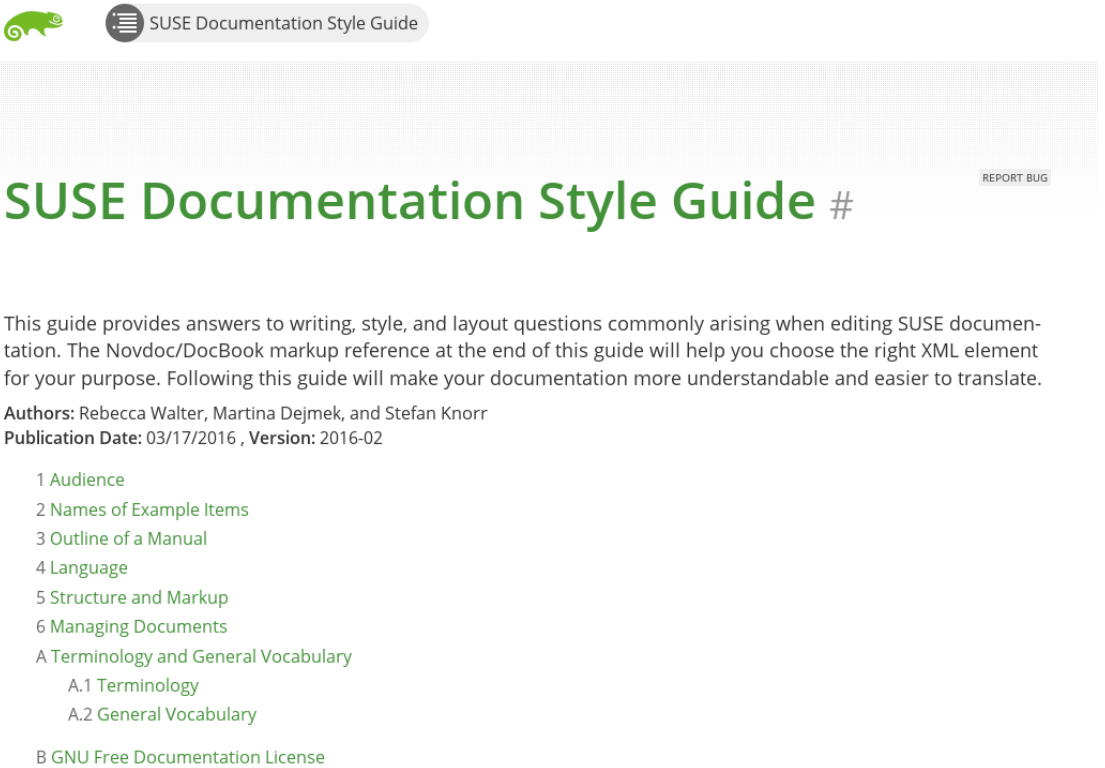
Book / Manual



Article

HTML

TOOLCHAIN – SUSE STYLE GUIDE



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**
- **Admonitions**
- **Figures**
- **Lists**
- **Productnames, Productnumbers, & Dates**
- **Sections**
- **Sentence Length**
- **Terminology**
- **Wordy Phrases**

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.patchpromo* :
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 *art.sbp.suma.life* does not contain a date.
Add a <date/> element, use <?dbtimestamp?> inside.

Sections

:
Section *art.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.susesol* contains a lone subsection.
Flatten the subsection structure.

TOOLCHAIN – ADDITIONAL TOOLS

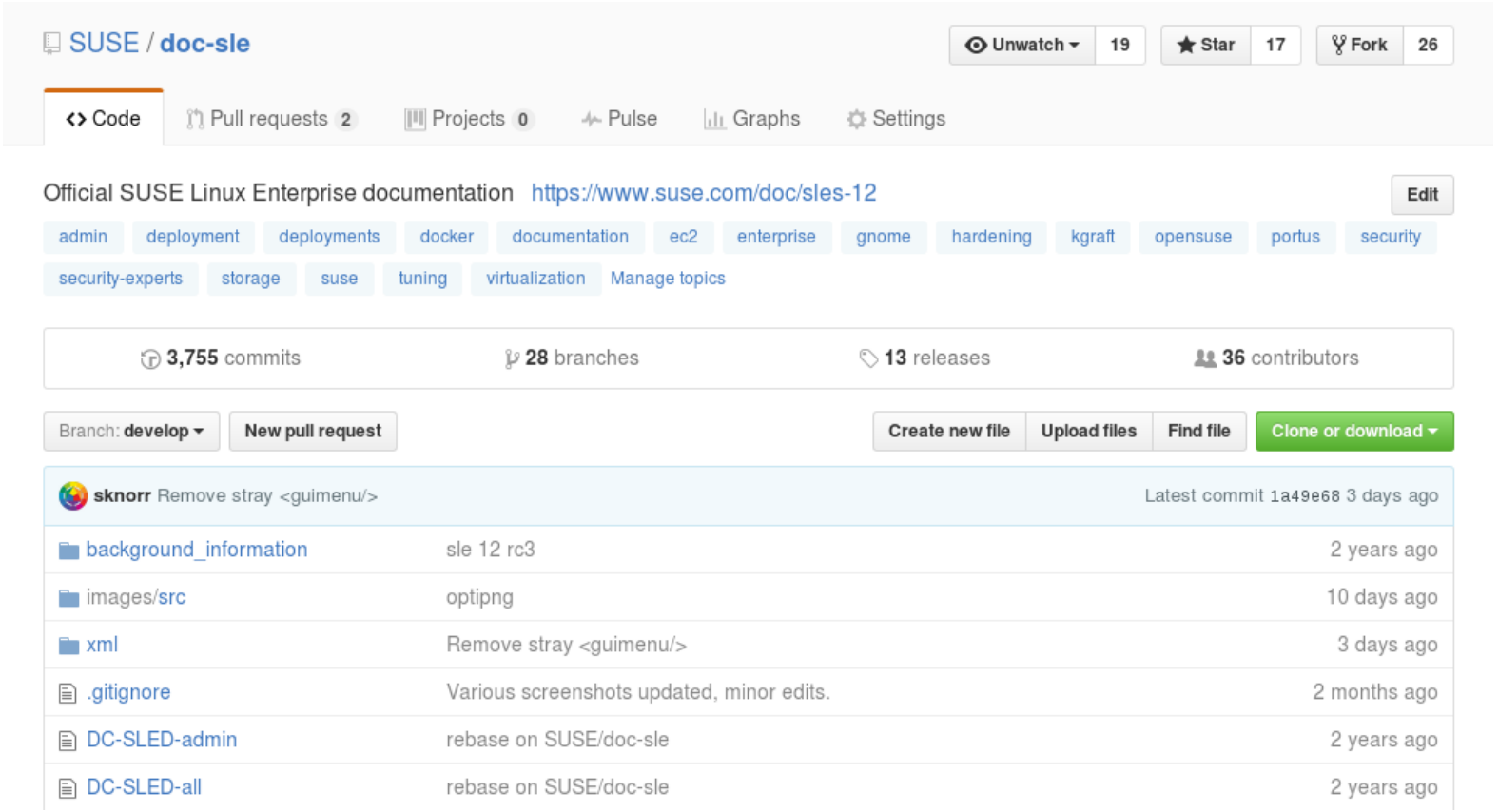
Yet more tools

- 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/

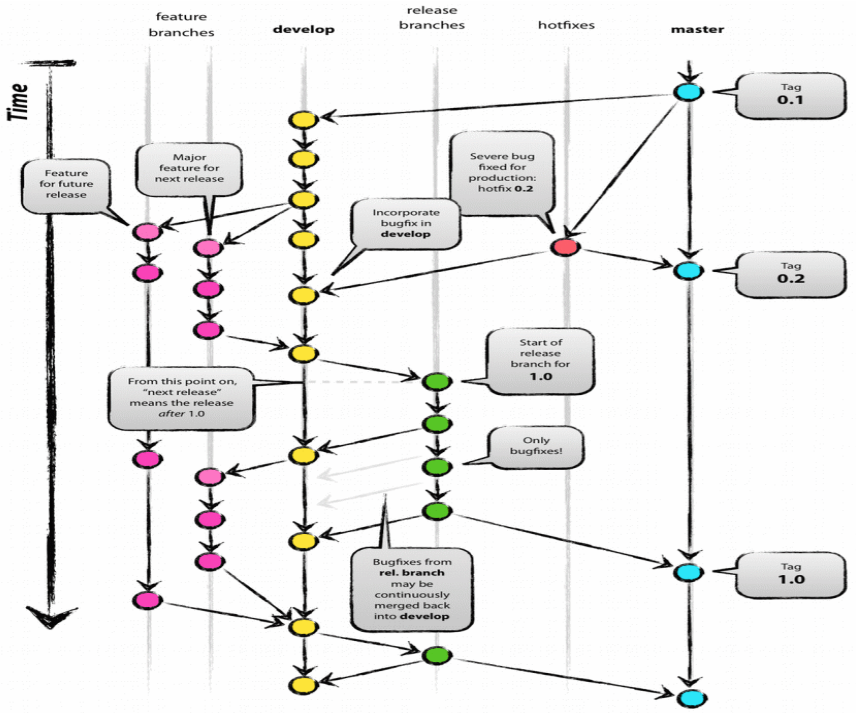
PROCESS

PROCESS – GITHUB



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
- More info: http://nvie.com/posts/a-successful-git-branching-model/



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

PROCESS – FEEDBACK

Part I Architecture-Specific Installation Considerations

REPORT BUG

Report a bug

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.

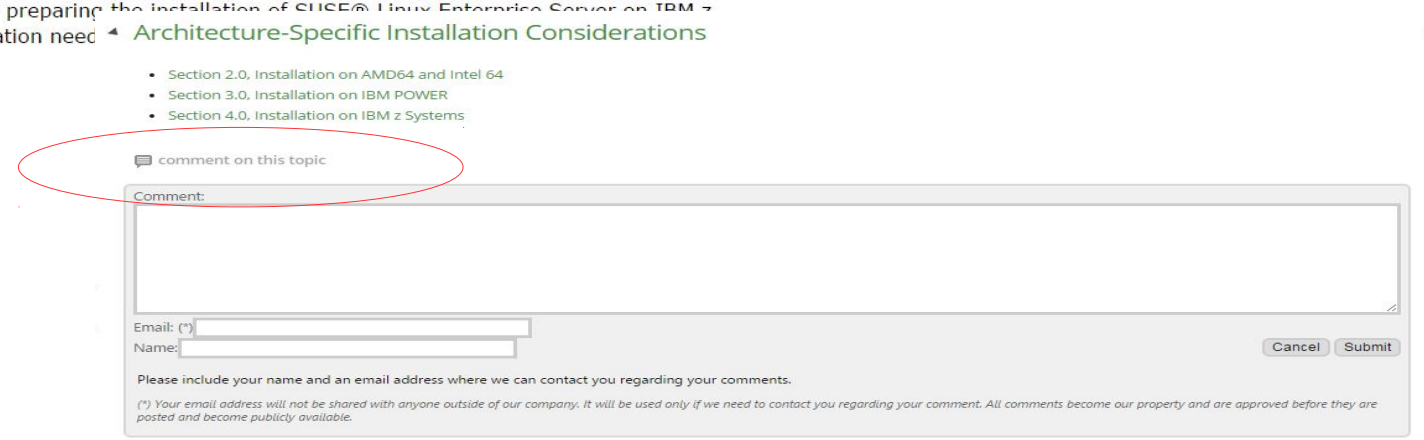
3 Installation on IBM POWER

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 need

Provide comments and feedback



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!

SUSE®
We adapt. You succeed.