



# DocBook Documentation at SUSE and Automated Document Quality Assurance

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# Content

1. Meet the Team, Meet the Workflow
2. Documentation: Client-Based Checks
3. Documentation: Server-Based Checks
4. Stylesheet Checks



**Meet the Team, Meet the Workflow**

# Meet the Team

- small team: 12 people\*
- big task: maintenance of ~15000 A4 PDF pages\*
- content that is published at [suse.com/doc](https://suse.com/doc) and release notes
  - HTML, PDF, EPUB
- we do not maintain man pages or `--help`

\* caveats

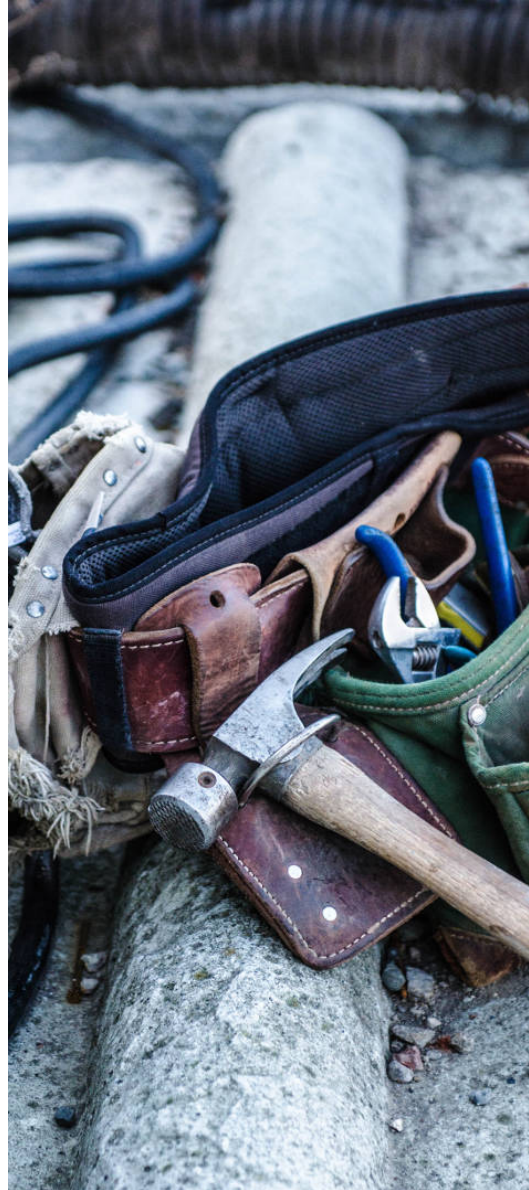
# Meet the Workflow

- DocBook (ASCIIDoc?)
  - “Be conservative in what you do, be liberal in what you accept from others”
- single-sourcing
  - multiple output documents
  - multiple output formats
- Git + GitHub + Git Flow model + PRs + reviews
- OBS builds documentation RPM packages
  - necessitates open-source toolchain



# DAPS

- upstream DocBook toolchain has functionality gaps
- DAPS solves publishing toolchain issue for us
  - and maybe for you too?
- pieces from various upstreams, “glued” together
  - upstream code: Java, C, XSLT, Python
  - glue code: Bash, Make, XSLT
- command-line tool, editor-agnostic



# External Processes

- translation
- final publication



# Documentation: Client-Based Checks



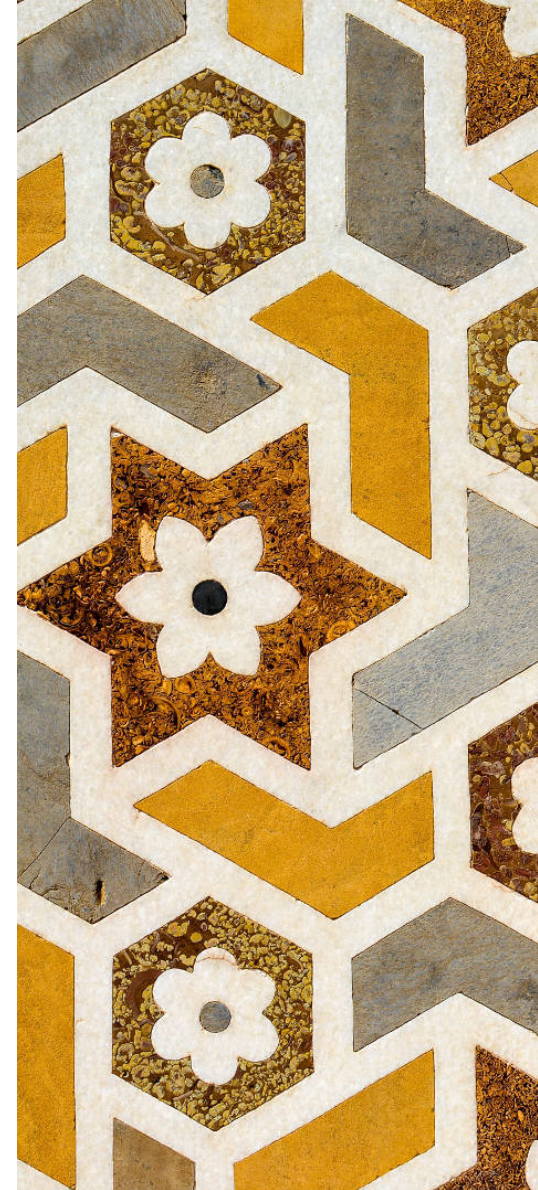
# Validation

- why? DocBook is XML
- own Relax NG schema GeekoDoc (based on DocBook 5.1)
- “daps validate”
- based on jing



# Style Check

- SUSE Style Guide-based
- why? avoid confusion, cost
- language rules + “soft” syntax rules
  - language: “in order to” > “to”
  - syntax: avoid lonely sections
- needs XML integration, hence custom
- Python, XSLT, regular expressions



# Style Check (II)

- future plans
  - spell check
  - source lines
  - output formats



# Documentation: Server-Based Checks

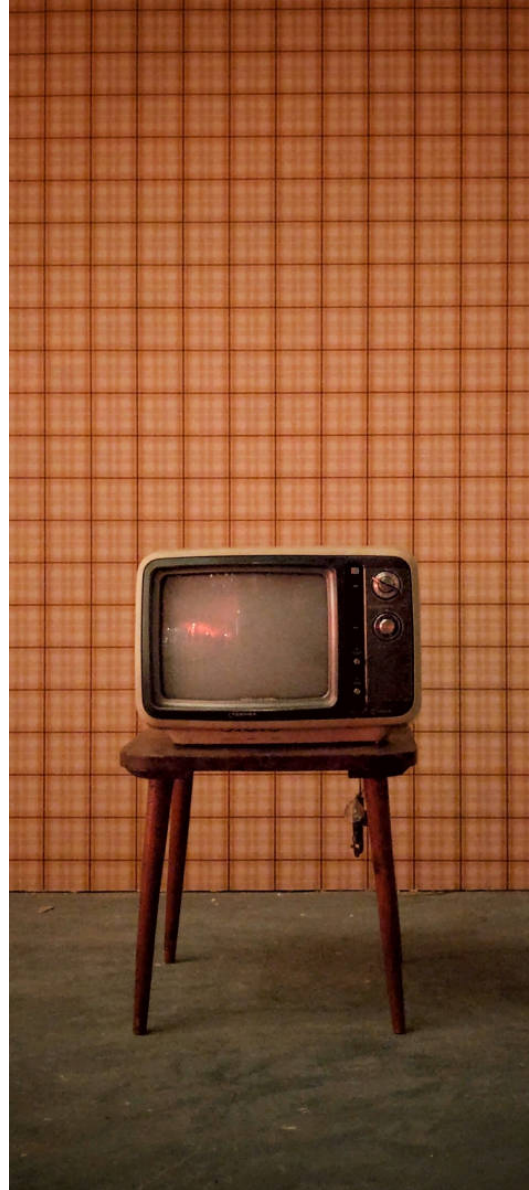
# Travis

- integrates with GitHub
- free like beer
- why?
  - we do not expect everyone to check their PRs (themselves)
  - quick feedback
  - consistently checks all output documents
- Docker container with openSUSE and DAPS
  - validation + image check



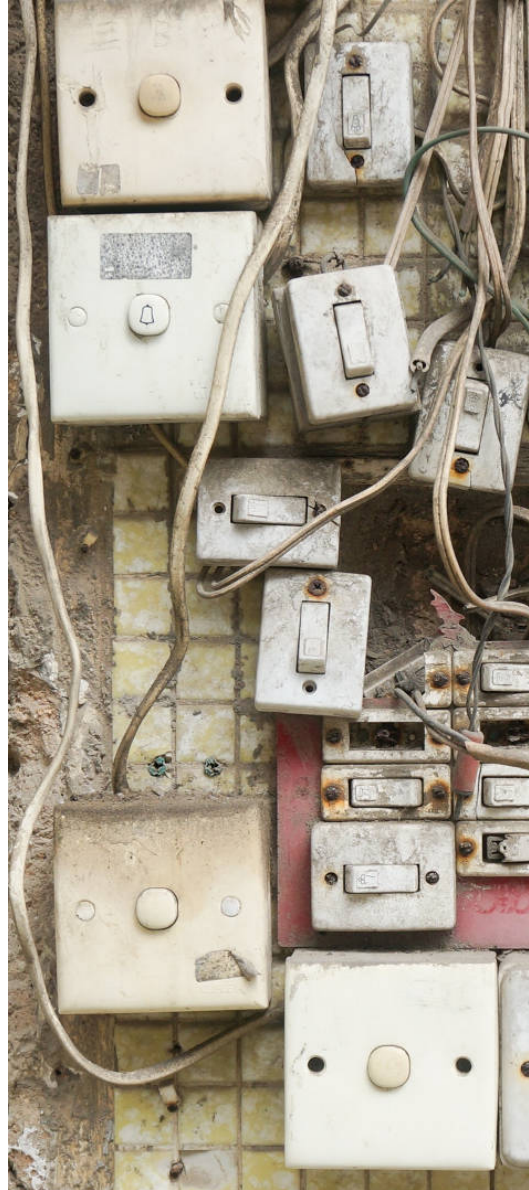
# Travis (II)

- future plans
  - publish to GitHub pages
  - integrate style checker (?)



# “docserv”: Internal Publishing

- why?
  - early (developer) feedback
  - valid XML does not in all cases mean valid PDF (unfortunately)
- server that builds documentation
  - automatically once a day
  - on-demand from Web UI
- sends mail on breakage
- document search
- cron + PHP + Python + XSLT + ElasticSearch + web stuff



# Stylesheet Checks



# “dapscompare”: Checking Stylesheets

- custom DocBook XSL-based stylesheets
- why?
  - XSLT is complicated (in its very own way)
  - DocBook 4 and DocBook 5 compatibility
  - many output formats to check
  - check whether bug fixes work
  - bonus: example documents for manual tests!



# “dapscompare”: Checking Stylesheets (II)

- heavy-handed “competitors”
- Python runner for DAPS, qtwebkit, Imagemagick
- run before commit, run after commit
- Python-QT GUI for comparing



# “dapscompare”: Checking Stylesheets (III)

- future plans
  - more example documents
  - run on Travis





# Links, Sources

- (most) SUSE documentation repos: <https://github.com/SUSE/?q=doc->
  - DAPS: <http://opensuse.github.io/daps/>
  - Stylesheets: <http://github.com/openSUSE/suse-xsl/>
  - Style Guide: <https://github.com/SUSE/doc-styleguide>
  - Style Checker: <http://github.com/openSUSE/suse-doc-style-checker>
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- Images from Unsplash (under the Unsplash License): <https://unsplash.com/photos/UBhpOIHnazM> (Ajeet Mestry), <https://unsplash.com/photos/lstXvxHGoA4> (35mm), <https://unsplash.com/photos/L9VXW4A9QZM> (Charlotte Coneybeer), <https://unsplash.com/photos/5-WslPUwhll> (Cia Gould), [https://unsplash.com/photos/3sl9\\_ubYlno](https://unsplash.com/photos/3sl9_ubYlno) (Daniel Hjalmarsson), <https://unsplash.com/photos/UHM0l0d6iBU> (Daniel von Appen), <https://unsplash.com/photos/2XrFBLiTzKo> (Evan Smogor), <https://unsplash.com/photos/L94dWXNKwrY> (Jesse Orrico), [https://unsplash.com/photos/aWBpk\\_GBaCk](https://unsplash.com/photos/aWBpk_GBaCk) (Koushik C), <https://unsplash.com/photos/0tfz7ZoXaWc> (Matt Briney), <https://unsplash.com/photos/7oh6dJVhurM> (Maxim Melnikov), <https://unsplash.com/photos/TuAZPj1uaZs> (Sam Poullain), <https://unsplash.com/photos/CQl3Y5bV6FA> (Scott Walsh), <https://unsplash.com/photos/UHM0l0d6iBU> (Yung Chang)



We adapt. You succeed.