

DOCS-AS-CODE

Fix a poor documentation culture in your organization

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TOPICS COVERED

1. The cultural problem with documentation
2. What is Docs-as-Code?
3. Three technical options for implementing
Docs-as-Code + Demo
4. Conclusions



WHOAMI_

I work as consultant at The Scale Factory

The Scale Factory is a cloud infrastructure and DevOps consultancy based in London, UK.



**THE SCALE
FACTORY**



THE PROBLEM WITH DOCUMENTATION_



Bryan Liles
@bryanl



Your company has a poor documentation culture. Things are slow because people don't know how things works. Managers start micromanaging because work is slow. Leadership issues mandates. No one likes mandates, but that isn't the problem. It was poor communication the whole time.

7:50 pm · 9 Nov 2021 · Twitter for Mac


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PROBLEMS_


(in no special order):

- There is no documentation
- There is too much documentation
- Documentation is out-of-date
- Nobody wants to write documentation
- Developers suck at writing good documentation

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CONSEQUENCES OF POOR DOCUMENTATION

- Slow on-boarding of new hires
- Reduced productivity
- Longer time to recover from production outages
- Technical debt
- Slow update of new features
- Poor communication
- Blame culture
- Higher people turnover



UNPOPULAR OPINION_

The Agile Manifesto

We are uncovering better ways of developing software by doing it and helping others do it.
Through this work we have come to value:


Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.



WHAT IS **DOCS-AS-CODE?**

- Also referred to as Documentation-as-Code and Docs-like-Code
- You treat your documentation as you treat your code
- You use the same workflow and tooling (e.g. git, pull requests, tests, CI/CD workflow)
- Benefits: Fosters collaboration (e.g. via PR reviews), automate boring tasks (spell checking and find typos), speed up deployment, and contribute to keep docs up-to-date

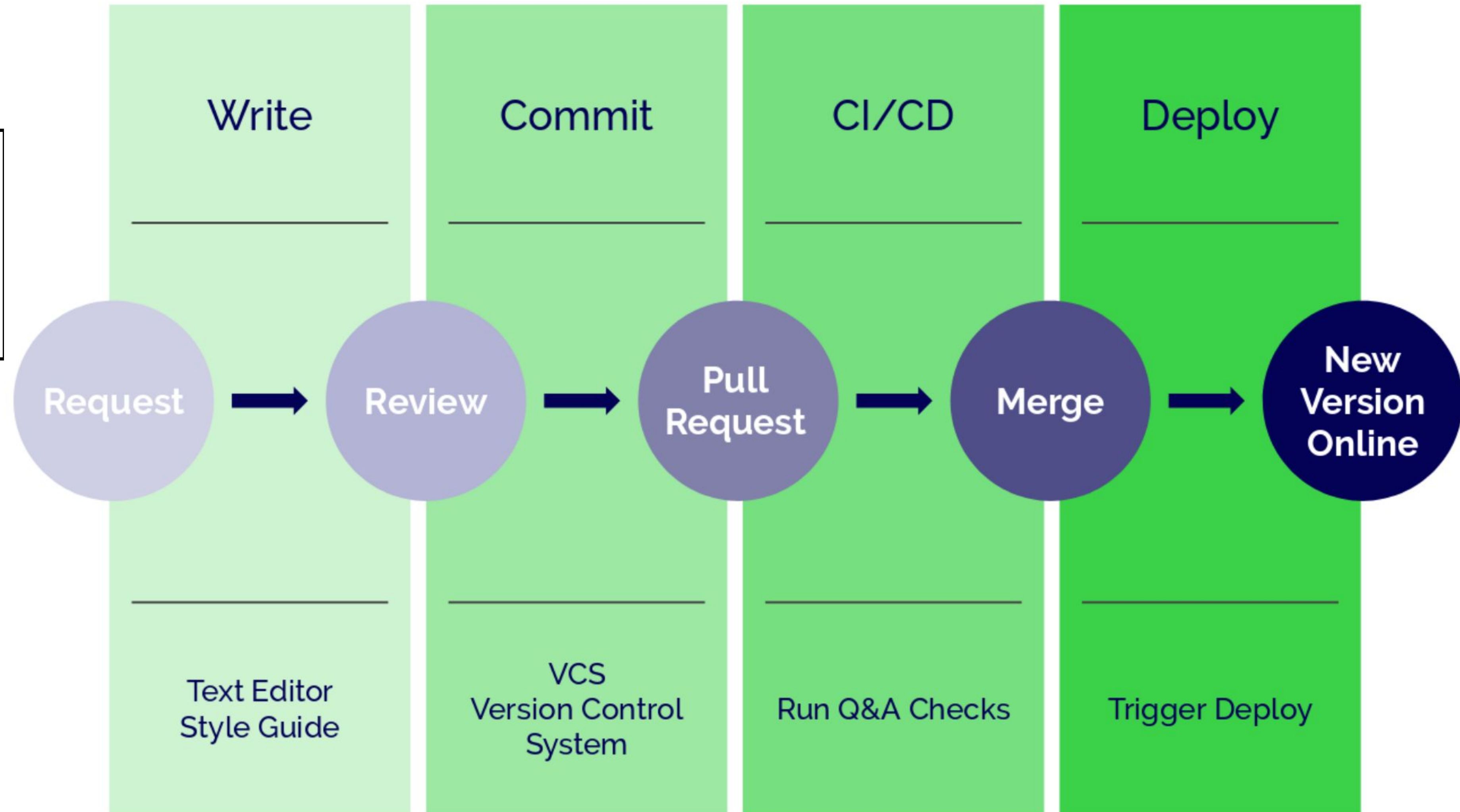
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CONTINUOUS DOCUMENTATION_

Continuous Documentation is the process of creating and updating documentation incrementally and as part of the development workflow.

Code and its documentation are in sync.

WORKFLOW_





DOCS STRATEGY_

- Define your documentation goals
- Start small and iterate
- Whenever possible stick to a single or a consistent place for storing your documentation
- Create a style guide according to your organization's standards (tone, voice, wording, writing style, and branding)



TESTING_

Code Tests

Test your code snippets as you test your code (unit testing, code style, linting, , etc.)

Content Tests

- Spell check and grammar check
- Link check
- Style check (e.g. using [Vale](#))

CUSTOMER FACING DOCS

- [Swagger](#)/OpenAPI for documenting APIs
- Check accessibility, performance, SEO (e.g. using [Lighthouse](#)).
- Refer to the docs when supporting your customers (RTFM).





3 SOLUTIONS FOR DOCS-AS-CODE_

1. Static Site Generator
2. Read the Docs
3. Antora



STATIC SITE GENERATOR

A static site generator is a tool generating a full static HTML website based on raw data and templates.

- Good for single code repository and small size docs
- Markdown as markup language
- Use a docs directory in the code repo or a dedicated docs repo

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SOLUTIONS_

- Sphinx, Jekyll & GitHub Pages, Hugo, etc.
- Can be hosted on a cloud object store like Amazon S3, Azure Blob, Google Storage, etc.
- Can use a Content Delivery Network (CDN) for caching and performance



FEATURES_

- Simple deployment workflow
- Local development environment
- Speed, performance, and security (static content)

STATIC SITE GENERATOR DEMO_





READ THE DOCS_

- Read the Docs is an open source documentation hosted platform.
- Good for medium-size docs
- ReStructuredText as markup language, supports Markdown too



FEATURES

- Full text search and versioning included
- Automatic deployment
- Publish it via an external service (readthedocs.io)
or host your own
- Can generated PDF and ebook manuals

READ THE DOCS
DEMO_





ANTORA

Antora is an open source multi-repository documentation site generator.

- Good for multiple code repositories and large size docs
- AsciiDoc as markup language, supports Markdown too



FEATURES_

- Aggregate content from multiple repositories in a single documentation website
- Multiple teams can manage their own docs
- AsciiDoc powerful yet simple syntax
- No need for plugins, shortcodes, or extensions

ANTORA
DEMO_



CONCLUSIONS_

& TAKEAWAYS

- Instil a culture of good documentation in your organization
- Treat your documentation as you treat code
- Use the tools that best fit your documentation



FURTHER READING_

The Art of Documentation by Chelsea Troy

<https://chelseatroy.com/2021/09/14/the-art-of-documentation>

Docs Like Code by Anne Gentle

<https://www.docslikecode.com/book>

Hugo

<https://gohugo.io>

Read the Docs

<https://readthedocs.org>

Antora

<https://antora.org>

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**THANK YOU
ANY QUESTION?_**

Slides at <https://sandrocirulli.net/devopsdays-geneva-2022>

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