

# Technical Documentation Versioning with Hugo & Netlify

Nate Waddington

[nwaddington@cncf.io](mailto:nwaddington@cncf.io)



**CLOUD NATIVE**  
COMPUTING FOUNDATION

# Introduction

Technical Documents Versioning is an intersection of:

**Changes + Language + Navigation + Search**

For small to medium sized sites using one language/location, a folder based method is likely the best method to balance these considerations.

# Versioning Considerations

What are the main concerns when versioning technical documentation in a website?

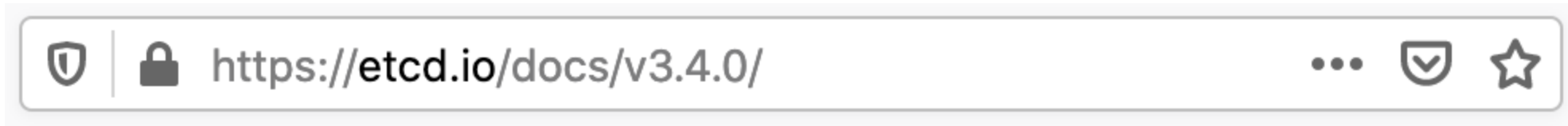
- Readers
- Maintainers / Writers
- Necessity (Does the documentation need versioning yet?)
- Navigation
- Searchability
- Localization / Internationalization
- Compartmentalization
- Switchability

# Versioning Schemes

For a Hugo / Netlify setup:

<b>friendly schemes</b>	<b>unfriendly schemes</b>
None (don't version)	
Folder based	Query Strings
Subdomain based	Cookies

# Folder based



Each version of the documentation is placed in its own folder

```
content
└── docs
    ├── _index.md
    ├── v1
    ├── v2.2
    ├── ⋮
    └── v3.4.0
```

# Folder based navigation code example

velero.io /site/layouts/docs/versions.html

```
<div class="dropdown-menu" aria-labelledby="dropdownMenuButton">
  {{ $original_version := printf "%s/" .CurrentSection.Params.version }}
  {{ $latest_url := replace .Params.url .CurrentSection.Params.version .Site.Params.latest | relURL }}
  {{ $currentUrl := .Permalink }}

  {{ range .Site.Params.versions }}
    {{ $new_version := printf "%s/" . }}
    <a class="dropdown-item"
      href="{{ replace $currentUrl $original_version $new_version | relURL }}">{{ . }}</a>
  {{ end }}
</div>
```

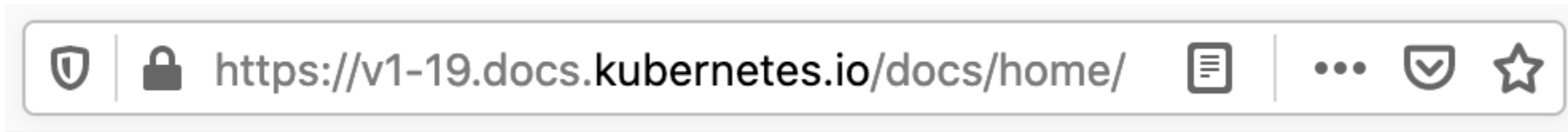
Batard (2020, L8-L18)

velero.io velero/site/config.yaml

```
versioning: true
latest: v1.5
versions:
  - main
  - v1.5
  - v1.4
  - v1.3.2
  :
```

Brubaker et al. (2020, L14-L20)

# Subdomain based



Each version of the documentation is its own site

- Uses git feature branches rather than folders to organize versions
- Separate site in Netlify for each version supported
- Simpler template code, more complex config



# Subdomain based navigation code example

<https://kubernetes.io> website/layouts/partial/navbar-version-selector.html

```
<div class="dropdown-menu dropdown-menu-right" aria-labelledby="navbarDropdownMenuLink">
  {{ $p := . }}
  {{ range .Site.Params.versions }}
    <a class="dropdown-item" href="{{ .url }}"{{ $p.RelPermalink }}">{{ .version }}</a>
  {{ end }}
</div>
```

Pursley et al. (2020, L4-L9)

<https://kubernetes.io> website/config.toml

```
[[params.versions]]
fullversion = "v1.20.0"
version = "v1.20"
githubbranch = "v1.20.0"
docsbranch = "master"
url = "https://kubernetes.io"

[[params.versions]]
fullversion = "v1.19.4"
version = "v1.19"
githubbranch = "v1.19.4"
docsbranch = "release-1.19"
url = "https://v1-19.docs.kubernetes.io"
⋮
```

Bannister et al. (2020, L180-L192)

# Summary

Version using `folders` if:

- maintainer ease of updates is a priority
- localization / internationalization not a priority
- it is important that only the documentation is versioned

Version using `subdomains` if:

- localization / internationality is planned
- compartmentalization not a priority

For small to medium sized sites using one language/location, a `folder based method` is likely the best method to balance versioning considerations.

**Questions?**

# References / Credits

Bannister, T. et al. (2020, December 23). kubernetes/website. GitHub. Retrieved February 2, 2021 from <https://github.com/kubernetes/website/blob/7462297ee388332a7b0d27625929fbf44d0c1ea9/config.toml>

Batard, T. (2020, August 13). vmware-tanzu/velero. GitHub. Retrieved January 19, 2021 from <https://github.com/vmware-tanzu/velero/blob/db403c6c54b0048fada2b5db628c44be4ac0fd79/site/layouts/docs/versions.html>

Brubaker, N., Rosland, J., Thompson, C., Batard, T. (2020, September 16). vmware-tanzu/velero. GitHub. Retrieved February 2, 2021 from <https://github.com/vmware-tanzu/velero/blob/1fd49f4fd66ecf6cd959ce258efbd9a549d8902b/site/config.yaml>

Pursley, B., Horgan, C., Takahashi, S. (2020, July 21). *kubernetes/website*. GitHub.  
Retrieved February 2, 2021 from <https://github.com/kubernetes/website/blob/072d4b41b45f5311538c24d375432a755f9e3f4c/layouts/partials/navbar-version-selector.html>



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).