

Introduction to Kubernetes Docs

Celeste Horgan, Linux Foundation

Irvi Aini, Spotify

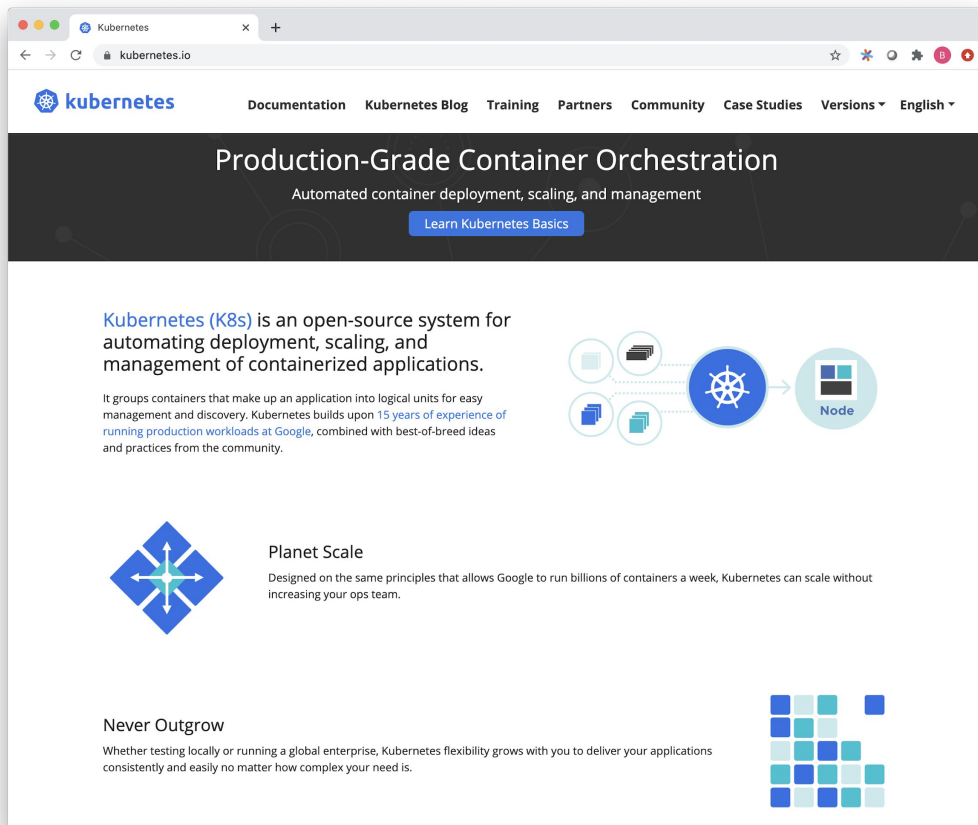
Tim Bannister, The Scale Factory

Brad Topol, IBM



The documentation special interest group maintains the Kubernetes website at

<https://k8s.io/>



Website: Concepts



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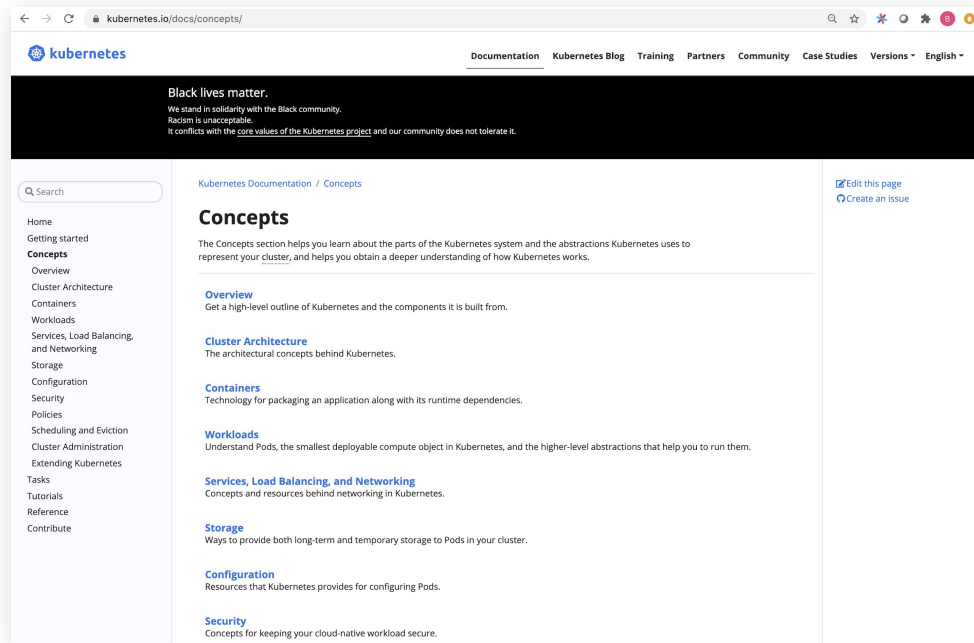
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Concepts provide high-level overviews for topics, linked to more detailed pages.

<https://kubernetes.io/docs/concepts/>



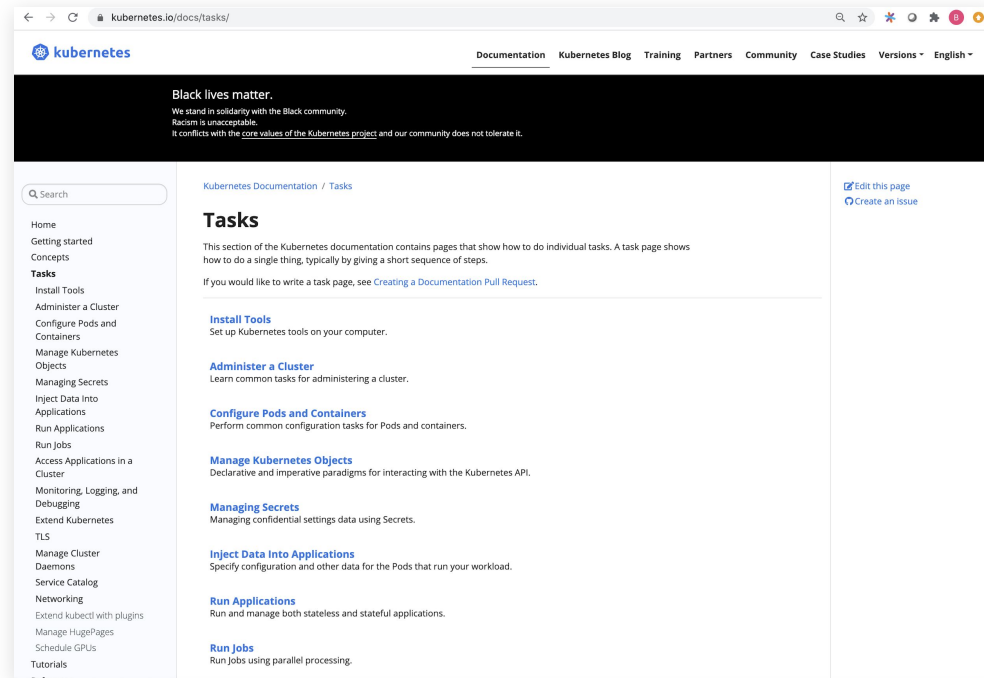
Website: Tasks



Virtual

Tasks provide detailed step-by-step instructions for explaining how to accomplish key actions

<https://kubernetes.io/docs/tasks/>



Website: Reference



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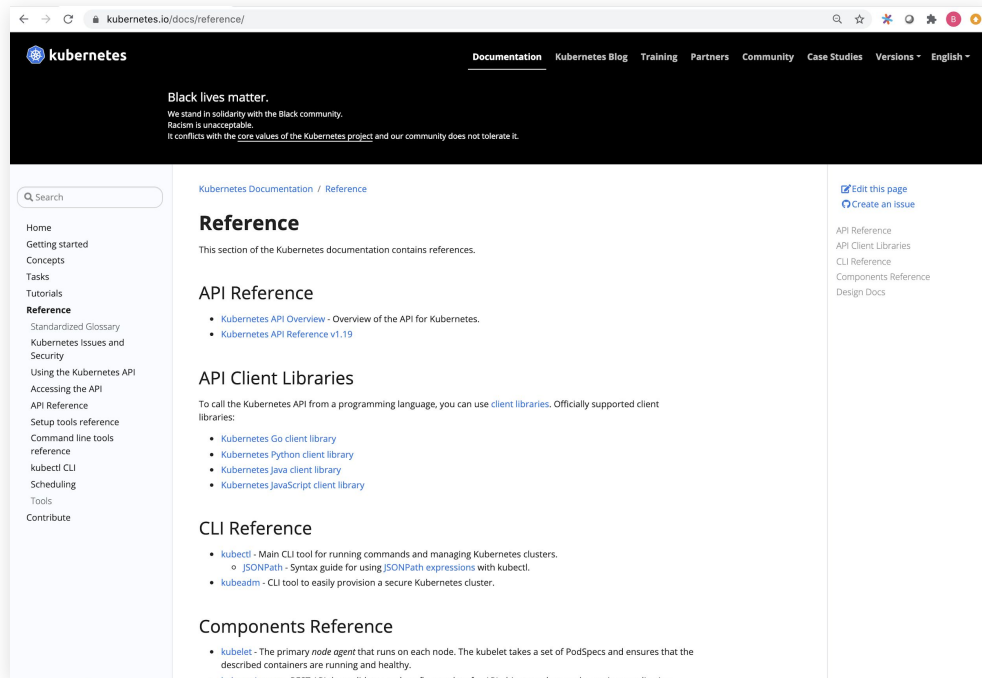
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In the Reference section you'll find:

- a glossary of terms
- lists of options & flags, etc
- a reference for each of the executables that make up Kubernetes

<https://kubernetes.io/docs/reference/>



Localization



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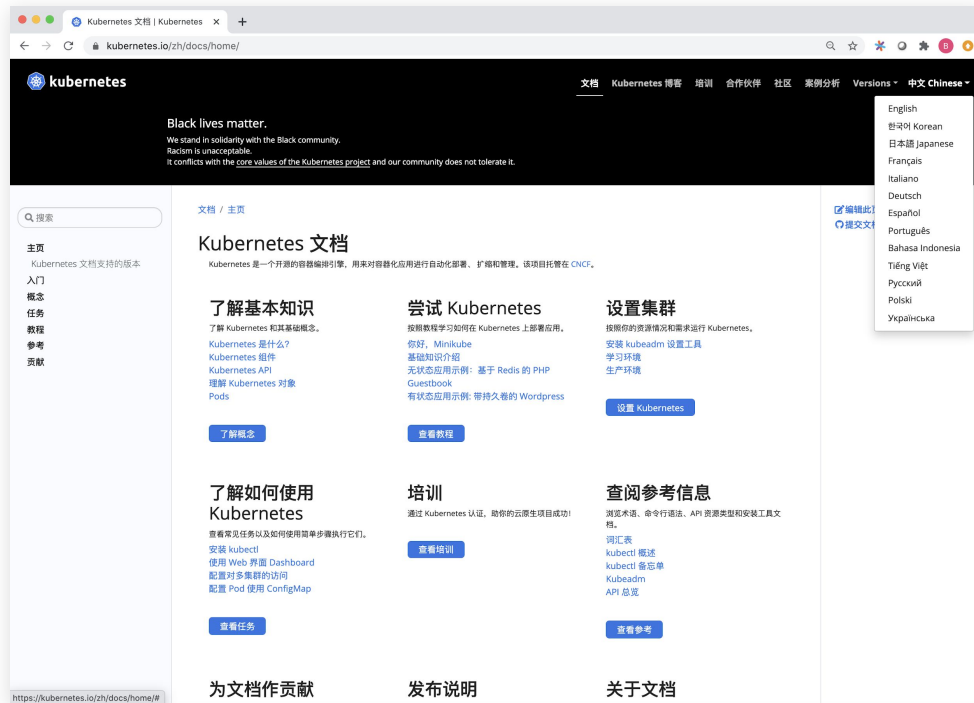
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The documentation is actively being translated into 13 different languages, including:

- English
- Chinese
- French
- German
- Indonesian
- Japanese
- Korean
- Polish
- Portuguese
- Russian
- Spanish
- Ukranian
- Vietnamese





“Contributing is not only about code.
It is about helping a community.”

— Nikhita Raghunath

Source control



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Static site generated from Markdown

Source in GitHub, in the
kubernetes/website repository

<https://github.com/kubernetes/website/>

The screenshot shows the GitHub repository page for `kubernetes/website`. The page header includes navigation links for Pull requests, Issues, Marketplace, and Explore. The repository name is `kubernetes / website`, with 190 stars, 2.2k forks, and 8.3k watchers. The main content area displays a list of files and folders, each with a description of the latest commit and the time since the last update. The files include `.github`, `archetypes`, `assets`, `content`, `data`, `deprecated`, `i18n`, `layouts`, `scripts`, `static`, `themes`, `update-imported-docs`, `.dockerignore`, `.editorconfig`, `.gitignore`, `.gitmodules`, and `.htmltest.yml`. The right sidebar contains sections for About (Kubernetes website and documentation repo), Releases (44 releases, latest on Aug 26), Packages (No packages published), and Contributors (3,120 contributors).

File/Folder	Description	Time
<code>.github</code>	Update new feature doc to add a step to include necessary links	5 days ago
<code>archetypes</code>	cleanup example-tutorial template	3 months ago
<code>assets</code>	Merge pull request #24233 from sftim/20200929_tweak_front_pa...	7 days ago
<code>content</code>	Merge pull request #24557 from tengqm/fix-24542	6 hours ago
<code>data</code>	Remove legacy data	4 months ago
<code>deprecated</code>	Revise the Kubernetes website to use Docus (#20874)	4 months ago
<code>i18n</code>	subscribe button translate	13 days ago
<code>layouts</code>	update tooltip styling to bootstrap	9 days ago
<code>scripts</code>	Add a util script for localization team	9 days ago
<code>static</code>	Improve diagram for "Reserve Compute Resources for System Da..."	2 days ago
<code>themes</code>	updating theme submodule	2 months ago
<code>update-imported-docs</code>	modify k8s_release clone string	2 months ago
<code>.dockerignore</code>	Prevent to send all files to docker daemon (#10129)	2 years ago
<code>.editorconfig</code>	Add CSS files to editorconfig (#19289)	7 months ago
<code>.gitignore</code>	Add a link checker	5 months ago
<code>.gitmodules</code>	Revise the Kubernetes website to use Docus (#20874)	4 months ago
<code>.htmltest.yml</code>	Add a link checker	5 months ago

Markdown looks similar to plain text, with extra highlighting such as **`**bold**`** or *`_italic_`*.

Markdown also offers you:

- * lists
- * hyperlinks - eg to [[Kubernetes](https://k8s.io/)](https://k8s.io/)
- * inline code snippets
 - (for example: `echo Hello World`)
- * tables, that render to standards-compliant HTML

Where to Start



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SIG Docs curates a list of “good first issues” that have been identified to be a good choice for making your first contribution!

<https://github.com/kubernetes/website/contribute>

The screenshot shows the GitHub interface for the 'kubernetes/website' repository. The page title is 'Contribute to kubernetes/website'. Below the title, it says 'Make your first contribution to this repository by tackling one of the issues listed below.' and 'Each issue displayed here is a "good first issue," selected for its relative approachability for first-time contributors.' There is a link to 'Read the contributing guidelines' (website / CONTRIBUTING.md). The 'Good first issues' section lists several issues, each with a 'good first issue' badge and other labels like 'help wanted', 'kind/bug', 'language/en', 'priority/backlog', 'triage/accepted', 'kind/cleanup', 'language/zh', 'language/ja', and 'language/ja'. The issues are numbered and include the issue number, title, and the user who opened it.

Issue Number	Title	Labels	Opened by
#24265	ja-trans: Move content/ja/docs/concepts/configuration/assign-pod-node.md to content/ja/docs/concepts/scheduling-eviction/assign-pod-node.md	good first issue, help wanted, language/ja	kakts
#24105	Configure Pod Initialization	good first issue, help wanted, kind/bug, language/en, priority/backlog, triage/accepted	SystemicEmotions
#23775	Update Chinese localization for v1.19	good first issue, help wanted, kind/cleanup, language/zh	sftim
#23620	ja: Make docs/concepts/extend-kubernetes/_index.md follow v1.18 of the original text	good first issue, help wanted, language/ja	kakts
#23617	ja: Make docs/concepts/extend-kubernetes/extend-cluster.md follow v1.18 of the original text	good first issue, help wanted, language/ja	kakts
#23608	ja: Make docs/concepts/overview/working-with-objects/labels.md follow v1.18 of the original text	good first issue, help wanted, language/ja	kakts
#23602	ja: Make docs/concepts/services-networking/add-entries-to-pod-etc-hosts-with-host-aliases.md follow v1.18 of the original text	good first issue, help wanted, language/ja	kakts
#23599	ja: Make docs/concepts/services-networking/dual-stack.md follow v1.18 of the original text	good first issue, help wanted, language/ja	kakts
#23599	ja: Make docs/concepts/services-networking/dual-stack.md follow v1.18 of the original text	good first issue, help wanted, language/ja	kakts
#23599	ja: Make docs/concepts/services-networking/dual-stack.md follow v1.18 of the original text	good first issue, help wanted, language/ja	kakts

Contributor License Agreement



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Defines the legal status of the contributed code in two different types of Contributor License Agreements (CLAs):



Individual contributors



Corporations

Kubernetes can only accept original source code from CLA signatories

<https://git.k8s.io/community/CLA.md>



Contributor License Agreement




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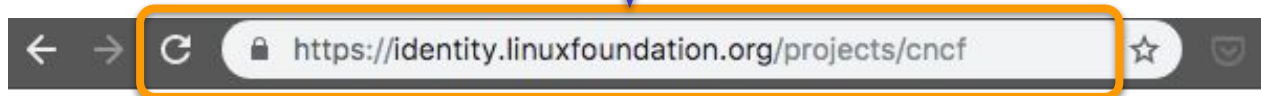
**Some checks were not successful**[Hide all checks](#)

 cla/linuxfoundation — SpireCat needs CLA

Required [Details](#)

 tide Pending — Not mergeable. Needs cncf-cla: yes label.

[Details](#)



kubernetes

Templating



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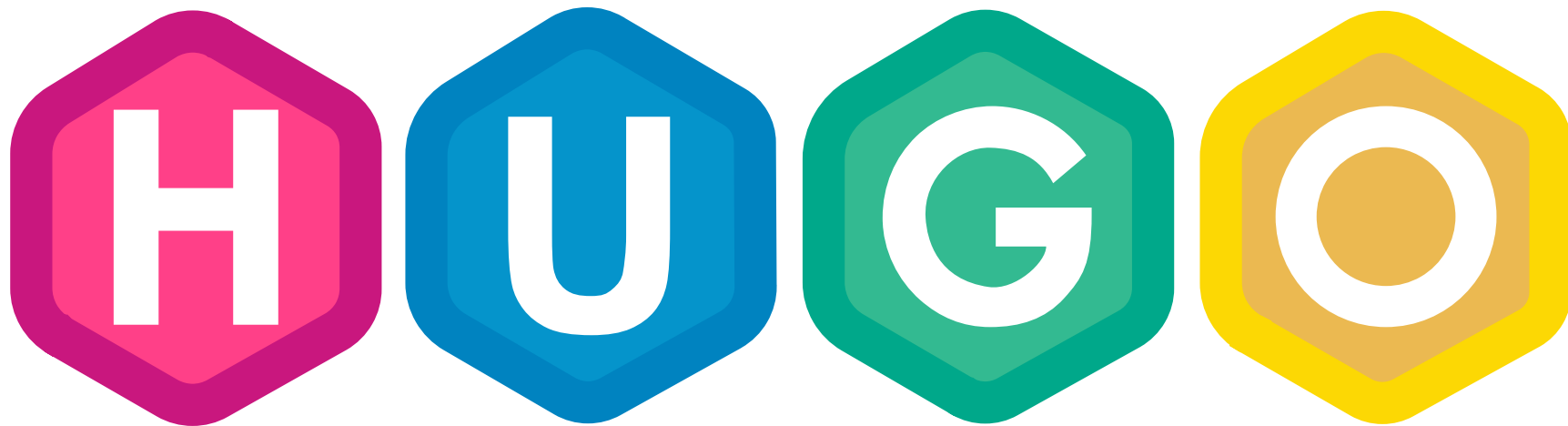
Virtual



= GO

Hugo extends Golang's
built-in templating.





Hugo extends Golang's
built-in templating.

Templating



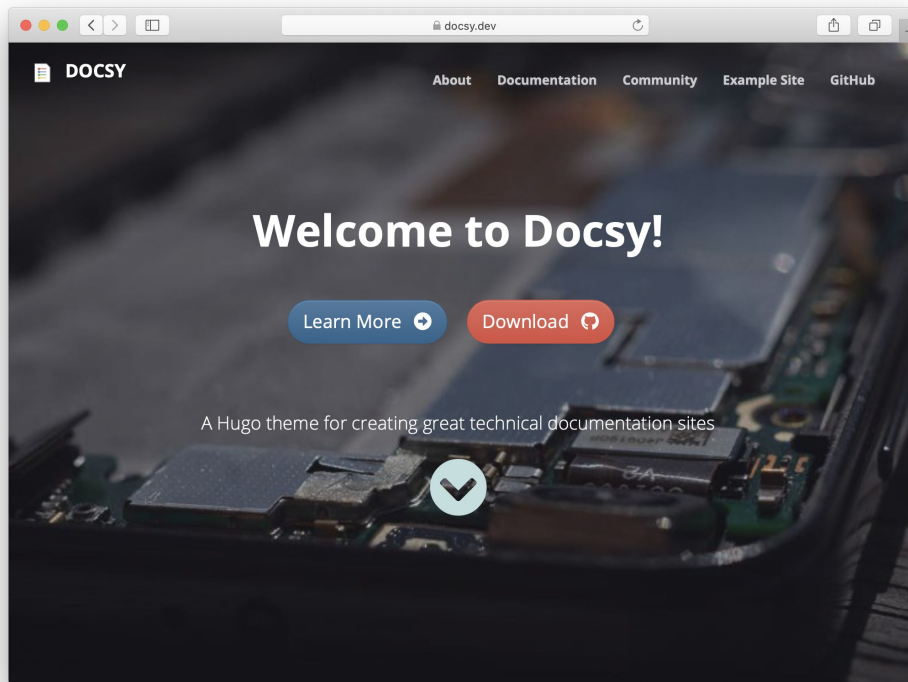
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<https://www.docsy.dev/>

Code review automation



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Prow (Kubernetes code review bot)

Prow merges PRs when:

`/lgtm`

`/approve`

`/hold`

Automatic preview



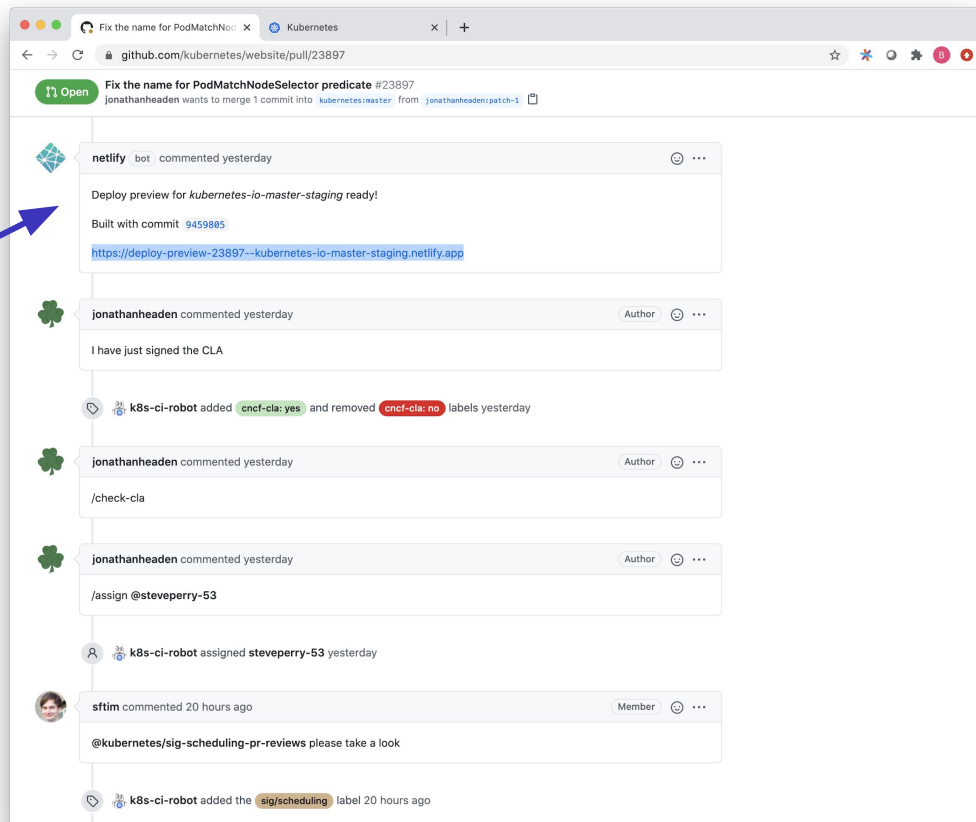
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- After you submit a PR, Netlify does a complete build of the whole site so you can preview the impact of the changes you're proposing.

- Look for the Netlify deploy preview comment.

Click on the provided link.

- *Extra credit:* edit the PR description, adding a link to the specific page(s) that you changed (Netlify can't do this automatically).
 - Reviewers will thank you!



Continuous deployment



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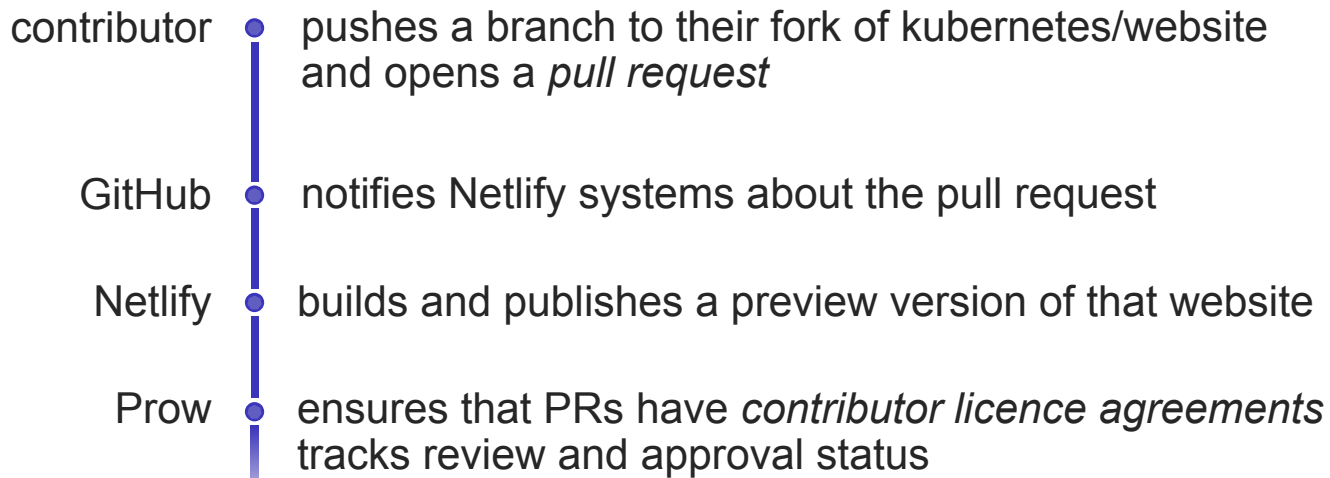


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The Kubernetes website is built and deployed using Netlify



Continuous deployment



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- reviewer • verifies the PR is technically sound; adds “**lgTM**” label
- approver • verifies the change is appropriate; adds “**approved**” label
- Prow • sees the PR is “**LGTM**” *and* **approved**; instructs GitHub to merge it
- GitHub • merges the pull request
- Netlify • builds and deploys the website

Local preview



Virtual

- run Hugo in a container (**recommended**)

`make container-image && make container-serve`

- *can also run Hugo without a container*

...then, visit <http://localhost:1313/> in a browser.

First time?

 **update Git submodules**

```
git submodule update --init --recursive \  
    --depth 1
```

Contribution



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- *Everyone* is welcome to contribute to documentation!
- Contribute to English, another existing language, or even: add support for a new language.
- Check out our docs on how to contribute.

Contribute to Kubernetes docs

This website is maintained by [Kubernetes SIG Docs](#).

Kubernetes documentation contributors:

- Improve existing content
- Create new content
- Translate the documentation
- Manage and publish the documentation parts of the Kubernetes release cycle

Kubernetes documentation welcomes improvements from all contributors, new and experienced!

Getting started

Anyone can open an issue about documentation, or contribute a change with a pull request (PR) to the [Kubernetes/website GitHub repository](#). You need to be comfortable with [git](#) and [GitHub](#) to work effectively in the Kubernetes community.

To get involved with documentation:

1. Sign the [CNCF Contributor License Agreement](#).
2. Familiarize yourself with the [documentation repository](#) and the website's [static site generator](#).
3. Make sure you understand the basic processes for [opening a pull request](#) and [reviewing changes](#).

Some tasks require more trust and more access in the Kubernetes organization. See [Participating in SIG Docs](#) for more details about roles and permissions.

Your first contribution

- Read the [Contribution overview](#) to learn about the different ways you can contribute.
- Check [kubernetes/website issues list](#) for issues that make good entry points.
- [Open a pull request using GitHub](#) to existing documentation and learn more about filing issues in GitHub.
- [Review pull requests](#) from other Kubernetes community members for accuracy and language.
- Read the [Kubernetes content and style guides](#) so you can leave informed comments.
- Learn about [page content types](#) and [Hugo shortcodes](#).

Next steps

- Learn to [work from a local clone](#) of the repository.
- Document [features in a release](#).
- Participate in [SIG Docs](#), and become a [member or reviewer](#).
- Start or help with a [localization](#).

Get involved with SIG Docs

[SIG Docs](#) is the group of contributors who publish and maintain Kubernetes documentation and the website. Getting involved with [SIG Docs](#) is a great way for Kubernetes contributors (feature development or otherwise) to have a large impact on the

Documentation style guide

<https://k8s.io/docs/contribute/style/>

Excerpt

Code snippet formatting

Don't include the command prompt

Do

Don't

kubectl get pods \$ kubectl get pods

Separate commands from output

Verify that the pod is running on your chosen node:

```
kubectl get pods --output=wide
```

The output is similar to this:

NAME	READY	STATUS	RESTARTS	AGE	IP	NODE
nginx	1/1	Running	0	13s	10.200.0.4	worker0

Documentation style guide

<https://k8s.io/docs/contribute/style/>

Contribute to the style guide:

- propose style changes
- help explain existing guidelines

Excerpt

Code snippet formatting

Don't include the command prompt

Do	Don't
<code>kubectl get pods</code>	<code>\$ kubectl get pods</code>

Separate commands from output

Verify that the pod is running on your chosen node:

```
kubectl get pods --output=wide
```

The output is similar to this:

NAME	READY	STATUS	RESTARTS	AGE	IP	NODE
nginx	1/1	Running	0	13s	10.200.0.4	worker0

Getting going



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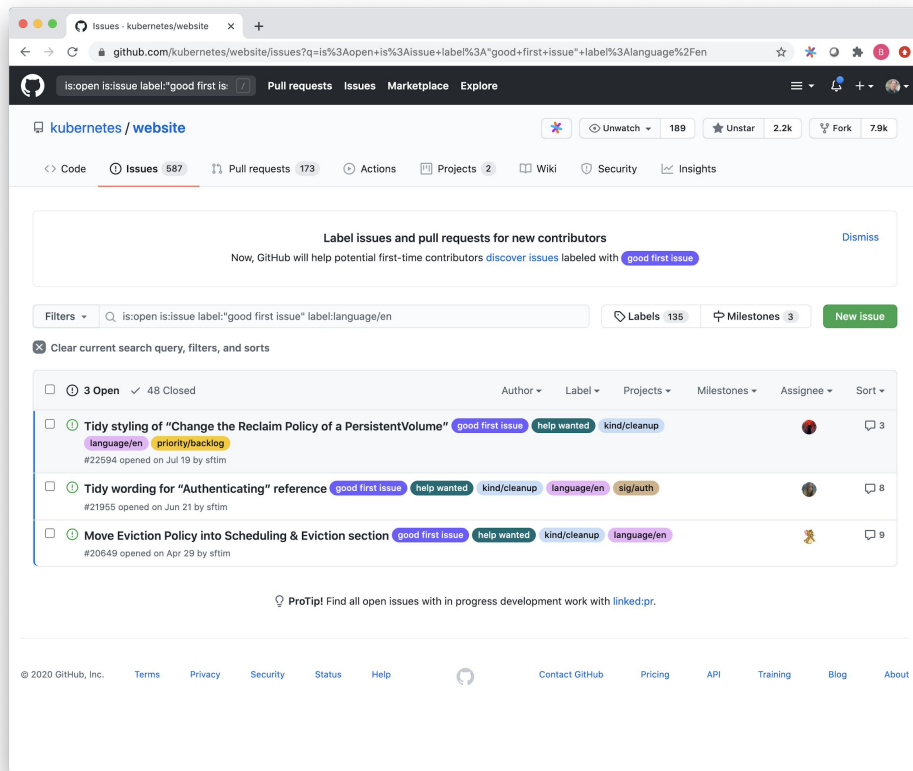
We are here to help to you get started!

Kubernetes Slack: [#sig-docs](#) &
[#sig-docs-localization](#)
(more details later)

Google group: [kubernetes-sig-docs](#)

Weekly SIG meetings on [Zoom](#)

[Good first issues](#) on GitHub



Writing great docs



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- All kinds of writing contributions are valuable!
 - Edits, typo corrections
 - New content
 - Editing/reviewing PRs for language

```
content/en/docs/concepts/workloads/controllers/deployment.md

@@ -13,7 +13,7 @@ weight: 10

13
14 <!-- overview -->
15
16 - A _Deployment_ provides declarative updates for {{< glossary_tooltip text="Pods"
17   term_id="pod" >}}
18   {{< glossary_tooltip term_id="replica-set" text="ReplicaSets" >}}.
19   You describe a _desired state_ in a Deployment, and the Deployment {{<
20     glossary_tooltip term_id="controller" >}} changes the actual state to the desired
21     state at a controlled rate. You can define Deployments to create new ReplicaSets, or
22     to remove existing Deployments and adopt all their resources with new Deployments.

13
14 <!-- overview -->
15
16 + A _Deployment_ provides declarative updates for {{< glossary_tooltip text="Pods"
17   term_id="pod" >}} and
18   {{< glossary_tooltip term_id="replica-set" text="ReplicaSets" >}}.
19   You describe a _desired state_ in a Deployment, and the Deployment {{<
20     glossary_tooltip term_id="controller" >}} changes the actual state to the desired
21     state at a controlled rate. You can define Deployments to create new ReplicaSets, or
22     to remove existing Deployments and adopt all their resources with new Deployments.
```

Writing great docs



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- Break it down into smaller sections
- Understand content types
 - *Concepts*: explain ideas at a high level
 - *Tasks*: Step-by-step instructions explaining one thing
 - *Reference*: lists of options, flags, etc. that help you complete tasks or understand concepts
- Write in bullet points first, then full sentences
- “Always be deleting”
 - *Zach Corleissen*, Lead Technical Writer @ CNCF

Writing great docs



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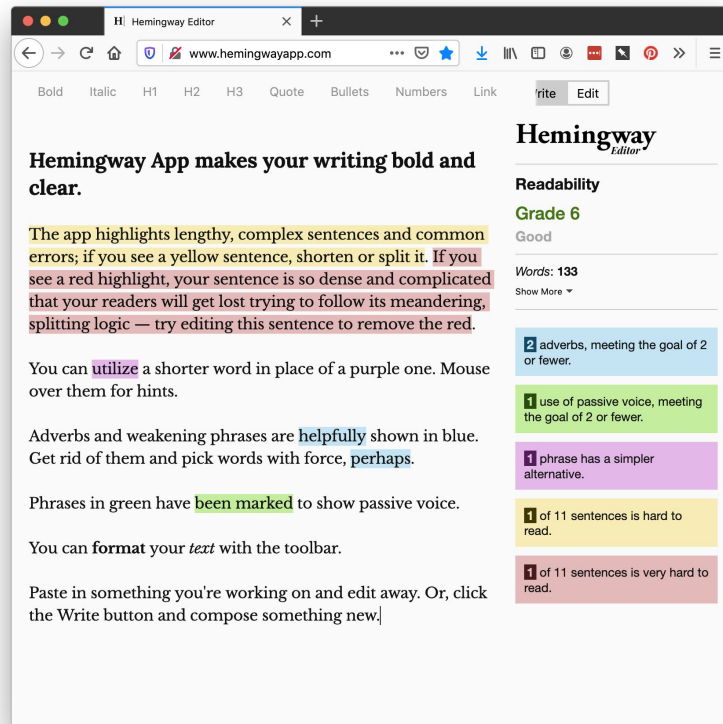


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- Write in the present tense (“I am”, not “I will” or “I was”)
- Keep sentences short
- Use plain language
 - www.hemingwayapp.com is great!
- Ask for help in #sig-docs!



Pull request wrangler



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Kubernetes documentation approvers take weekly shifts doing triage on PRs, as the “PR wrangler”.

- timely feedback
- signposting for technical review *(if needed)*

PR wranglers can also triage incoming issues.

The screenshot shows the Kubernetes documentation page for PR wranglers. The page is titled "PR wranglers" and is part of the "Kubernetes Documentation" section. It includes a sidebar with navigation links, a main content area with sections for "PR wranglers", "Duties", and "Helpful GitHub queries for wranglers", and a right sidebar with links to "Edit this page" and "Create an issue".

PR wranglers

SIG Docs [approvers](#) take week-long shifts [managing pull requests](#) for the repository. This section covers the duties of a PR wrangler. For more information on giving good reviews, see [Reviewing changes](#).

Duties

Each day in a week-long shift as PR Wrangler:

- Triage and tag incoming issues daily. See [Triage](#) and [categorize issues](#) for guidelines on how SIG Docs uses metadata.
- Review [open pull requests](#) for quality and adherence to the [Style](#) and [Content](#) guides.
 - Start with the smallest PRs (`size/XS`) first, and end with the largest (`size/XL`). Review as many PRs as you can.
- Make sure PR contributors sign the [CLA](#).
 - Use [this](#) script to remind contributors that haven't signed the CLA to do so.
- Provide feedback on changes and ask for technical reviews from members of other SIGs.
 - Provide inline suggestions on the PR for the proposed content changes.
 - If you need to verify content, comment on the PR and request more details.
 - Assign relevant `/sig/` labels.
 - If needed, assign reviewers from the `/reviewers:` block in the file's front matter.
- Use the `/approve` comment to approve a PR for merging. Merge the PR when ready.
 - PRs should have a `/lgTM` comment from another member before merging.
 - Consider accepting technically accurate content that doesn't meet the [style guidelines](#). Open a new issue with the label `good first issue` to address style concerns.

Helpful GitHub queries for wranglers

The following queries are helpful when wrangling. After working through these queries, the remaining list of PRs to review is usually small. These queries exclude localization PRs. All queries are against the main branch except the last one.

- **No CLA, not eligible to merge:** Remind the contributor to sign the CLA. If both the bot and a human have reminded them, close the PR and remind them that they can open it after signing the CLA. **Do not review PRs whose authors have not signed the CLA!**
- **Needs LGTM:** Lists PRs that need an LGTM from a member. If the PR needs technical review, loop in one of the reviewers suggested by the bot. If the content needs work, add suggestions and feedback in-line.
- **Has LGTM, needs docs approval:** Lists PRs that need an `/approve` comment to merge.
- **Quick Wins:** Lists PRs against the main branch with no clear blockers. (change `"XS"` in the size label

Localization



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Localization



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Available localizations include:

- English
- Chinese
- French
- German
- Indonesian
- Japanese
- Korean
- Polish
- Portuguese
- Russian
- Spanish
- Ukranian
- Vietnamese

The screenshot shows a web browser displaying the Kubernetes documentation page titled "Localizing Kubernetes documentation". The page is part of the Kubernetes documentation site, with a navigation bar at the top including links for Documentation, Kubernetes Blog, Training, Partners, Community, Case Studies, Versions, and English. The main content area is titled "Localizing Kubernetes documentation" and includes a sub-header "Getting started". The text explains that contributors need at least two contributors to begin a localization and that localization teams must be self-sustaining. It provides instructions on how to find a two-letter language code, fork and clone the repository, and open a pull request. A code block shows the command to clone the repository: `git clone https://github.com/<username>/website`. The page also includes a sidebar with a search bar and a list of navigation links, and a right sidebar with a list of links for getting started, including finding a two-letter language code, forking and cloning the repository, and opening a pull request.

Localization



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- We also provide documentation on how to add new language support
 - eg [kubernetes/website#12548](https://kubernetes.io/docs/contribute/localization/)
- Guide to localizing content:
<https://k8s.io/docs/contribute/localization/>

The screenshot shows a web browser displaying the Kubernetes documentation page for localizing content. The page title is "Localizing Kubernetes documentation". The left sidebar contains a navigation menu with links to Home, Getting started, Concepts, Tasks, Tutorials, Reference, Contribute, and Advanced contributing. The main content area is titled "Localizing Kubernetes documentation" and includes a "Getting started" section. The "Getting started" section explains that contributors need at least two contributors to begin a localization and that localization teams must be self-sustaining. It provides a link to the "Find your two-letter language code" section, which instructs users to consult the ISO 639-1 standard. The "Fork and clone the repo" section provides a code block for cloning the repository:

```
git clone https://github.com/<username>/website
cd website
```

 The "Open a pull request" section explains that users need to open a pull request (PR) to add a localization and that the PR must include all the minimum required content. The "Join the Kubernetes GitHub organization" section explains that users need to become members of the Kubernetes GitHub organization. The "Add your localization team in GitHub" section is partially visible at the bottom.

Kubernetes Documentation / Contribute / Localizing Kubernetes documentation

Localizing Kubernetes documentation

This page shows you how to [localize](#) the docs for a different language.

Getting started

Because contributors can't approve their own pull requests, you need at least two contributors to begin a localization.

All localization teams must be self-sustaining with their own resources. The Kubernetes website is happy to host your work, but it's up to you to translate it.

Find your two-letter language code

First, consult the [ISO 639-1 standard](#) to find your localization's two-letter country code. For example, the two-letter code for Korean is `ko`.

Fork and clone the repo

First, [create your own fork](#) of the `kubernetes/website` repository.

Then, clone your fork and `cd` into it:

```
git clone https://github.com/<username>/website
cd website
```

Open a pull request

Next, [open a pull request](#) (PR) to add a localization to the `kubernetes/website` repository.

The PR must include all of the [minimum required content](#) before it can be approved.

For an example of adding a new localization, see the PR to enable [docs in French](#).

Join the Kubernetes GitHub organization

Once you've opened a localization PR, you can become members of the Kubernetes GitHub organization. Each person on the team needs to create their own [Organization Membership Request](#) in the `kubernetes/org` repository.

Add your localization team in GitHub

[Edit this page](#)
[Create an issue](#)

Getting started
Find your two-letter language code
Fork and clone the repo
Open a pull request
Join the Kubernetes GitHub organization
Add your localization team in GitHub
Configure the workflow
Find community
Minimum required content
Modify the site configuration
Add a new localization directory
Localize the community code of conduct
Add a localized README file
Setting up the OWNERS files
Translating content
Source files
Site strings in i18n
Language specific style guide and glossary
Branching strategy
Upstream contributions
Help an existing localization
What's next



One language per PR
(exceptions can apply)

Blog



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Guidelines:

- Should not be vendor pitches
- Not published on specific dates
- Relevant to Kubernetes users
- Original content
- Aim to be future proof

<https://k8s.io/blog>

Anyone can write a blog post and [submit](#) it for review!



Recap



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You can contribute by:

- filing issues: suggest features, or report bugs
- helping with web design
- reviewing pull requests
- localizing existing pages
- writing new content
- improving existing content (text *and* diagrams)

SIG Docs uses Git, GitHub, Hugo and Netlify to make it all work

- you can edit pages and open pull requests directly within GitHub's website
- if you're suggesting changes, you can preview them locally first

Next steps



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Lurk if you like

- ✓ OK to feel overwhelmed
(but we want to help!)
- ✓ start small

Get an idea of

- **who** is working on what?
- what **tasks** are under way?
- what's on the **roadmap**?



Get in touch



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Not signed up yet? Get an invitation from
<https://slack.k8s.io/>

#sig-docs on Kubernetes Slack

#sig-docs-localizations

plus language-specific channels

#sig-docs-blog



Get in touch



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Good first issues on GitHub

Google group: [kubernetes-sig-docs](#)

You also can say Hello at one of our weekly SIG meetings on [Zoom](#)



(see Slack for details)

