Kubernetes

New Contributor Orientation

January 2026

Phippy & Friends are Open Source (CC-BY) CNCF mascots. Learn more at: **https://phippy.io**

Housekeeping

- This meeting is recorded and will be published on YouTube.
- This meeting abides by a **Code of Conduct.**
- Please **use the chat to ask questions** throughout!
    - There will be a chance to ask questions verbally at the end.
- You can find these slides in the kubernetes/community/mentoring/new-contributor-orientation repo on GitHub

https://kubernetes.io/community/code-of-conduct/

Today's Hosts (AMER)

Chris Short

SIG Contributor Experience

Contributor Comms Co-Lead

YouTube Admin

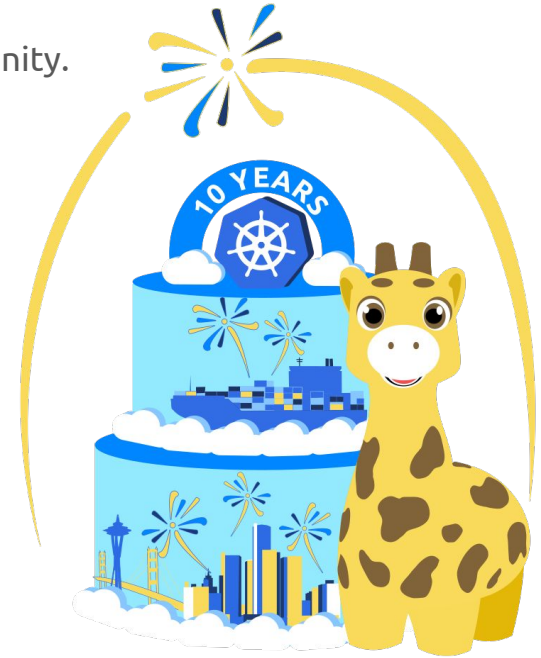
(he/him)

Today's Hosts (EMEA)

Matthias Bertschy
SIG Node Reviewer
(he/him)

Agenda

This meeting is meant to **orient** you in the Kubernetes community.



Presentation (40 min)

- Welcome to Kubernetes!
- What is Kubernetes?
- Kubernetes Community Structure
- What does it mean to be a “Contributor”?
- How to Start Contributing
- Current Work Opportunities
- Contribution Pitfalls

Q&A (20 min)

- Ask Us Anything!

Meet Kubernetes!

Maintainer Summit EU 2025

Community Snapshot - November 2024

94.8k
Contributors

4.56M
Contributions

7.8K
Reviewers

Stats from Kubernetes Devstats, Mar 24 2025

What is Kubernetes?

(Koo-bur-neh-tees)

Open-Source Project

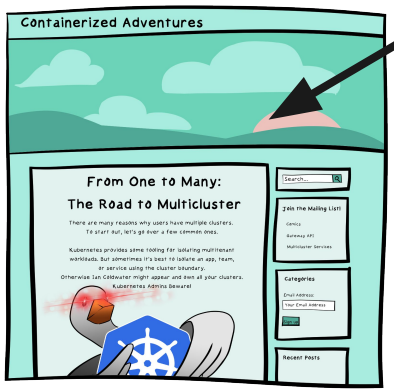
The open source project is hosted by the Cloud Native Computing Foundation (CNCF).

Kubernetes is the second-largest open-source project in the world after Linux.

Container Orchestration Platform

Kubernetes, also known as k8s, is an open source container orchestration engine for automating deployment, scaling, and management of containerized applications.

Kubernetes in a Nutshell

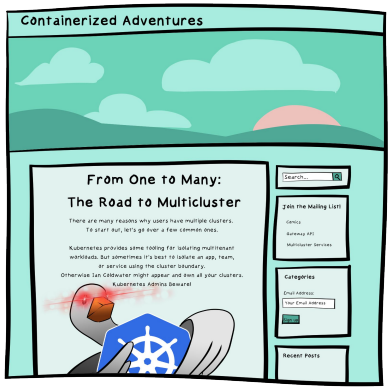


App
(The thing you want to run)

Businesses have a lot of apps they need to run, like:

- Websites, wikis
- HR/Payroll applications
- Inventory Management Applications
- etc

Kubernetes in a Nutshell



App
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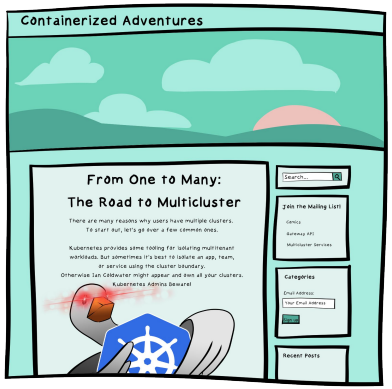
Businesses also have a lot of computers to run these applications on.
(Yes, these are computers.)

Kubernetes in a Nutshell



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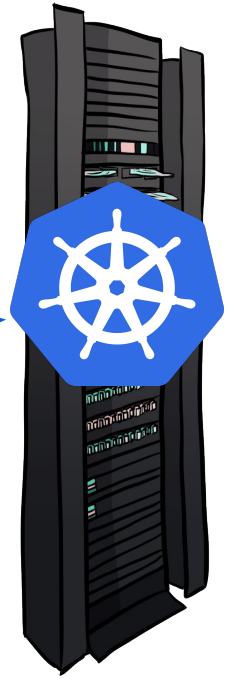
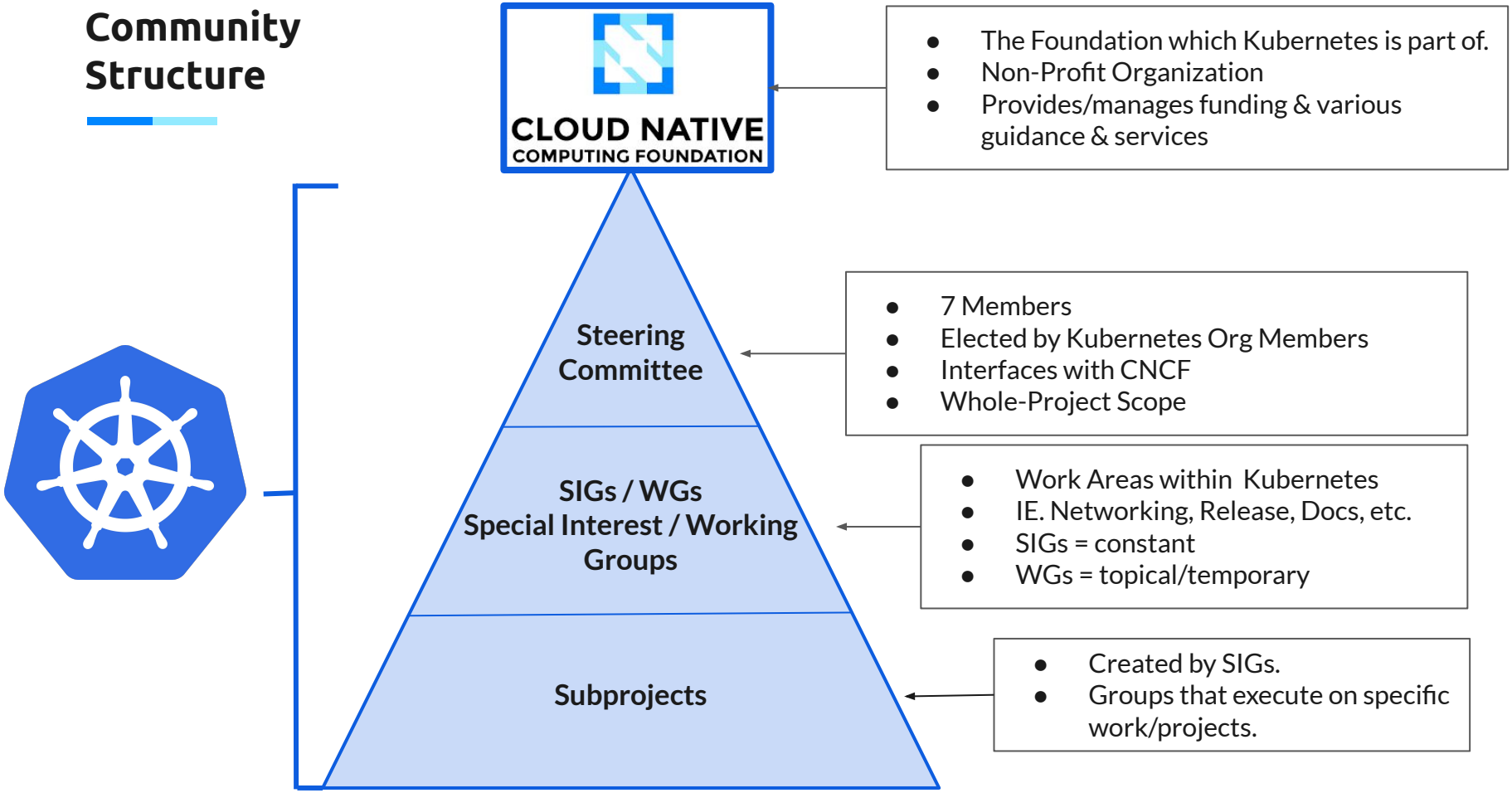


Control Plane
(Brains of the cluster)

Nodes
(Where apps run)

Kubernetes Community Structure

Community Structure



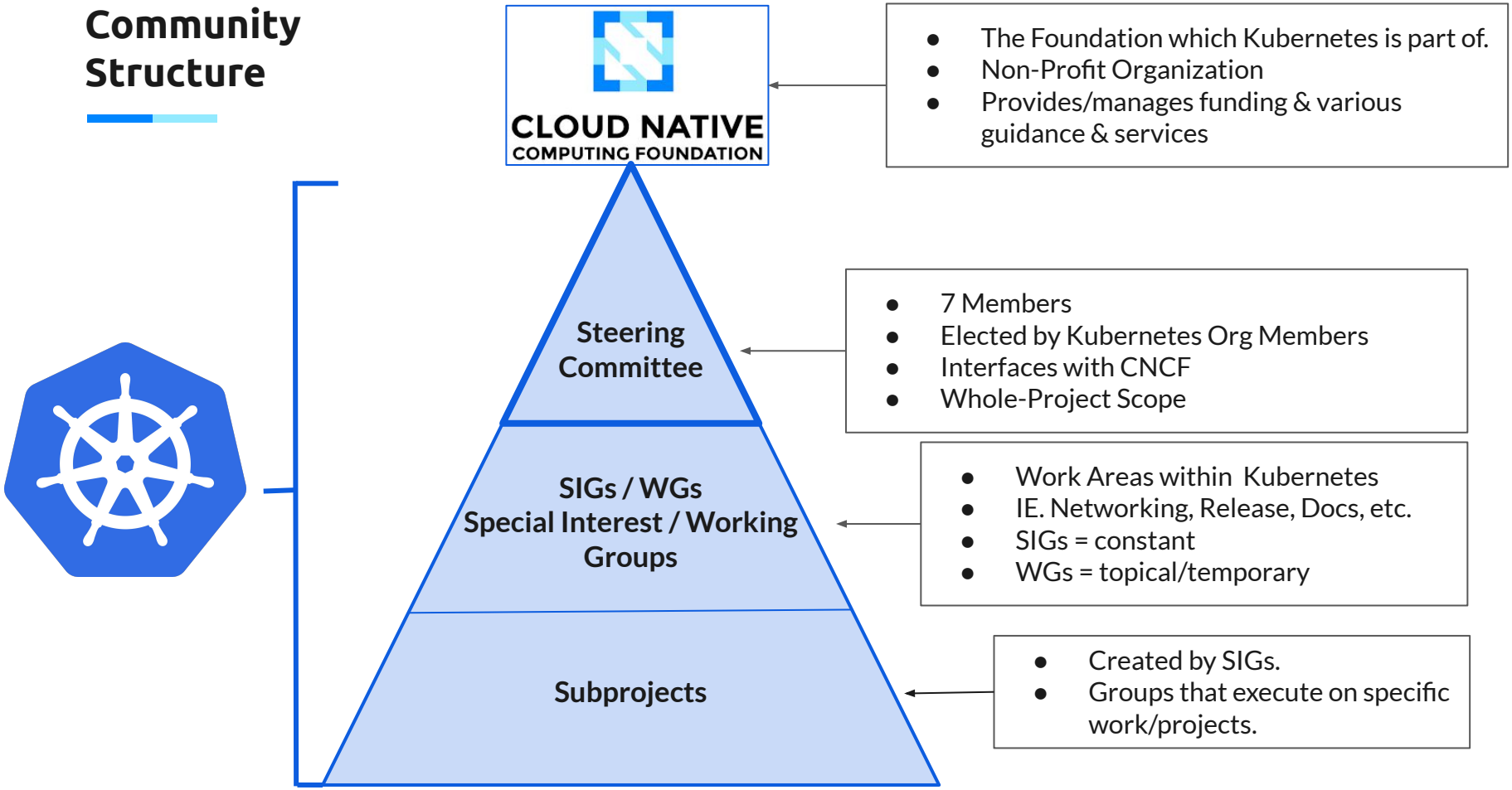
- The Foundation which Kubernetes is part of.
- Non-Profit Organization
- Provides/manages funding & various guidance & services

- 7 Members
- Elected by Kubernetes Org Members
- Interfaces with CNCF
- Whole-Project Scope

- Work Areas within Kubernetes
- IE. Networking, Release, Docs, etc.
- SIGs = constant
- WGs = topical/temporary

- Created by SIGs.
- Groups that execute on specific work/projects.

Community Structure



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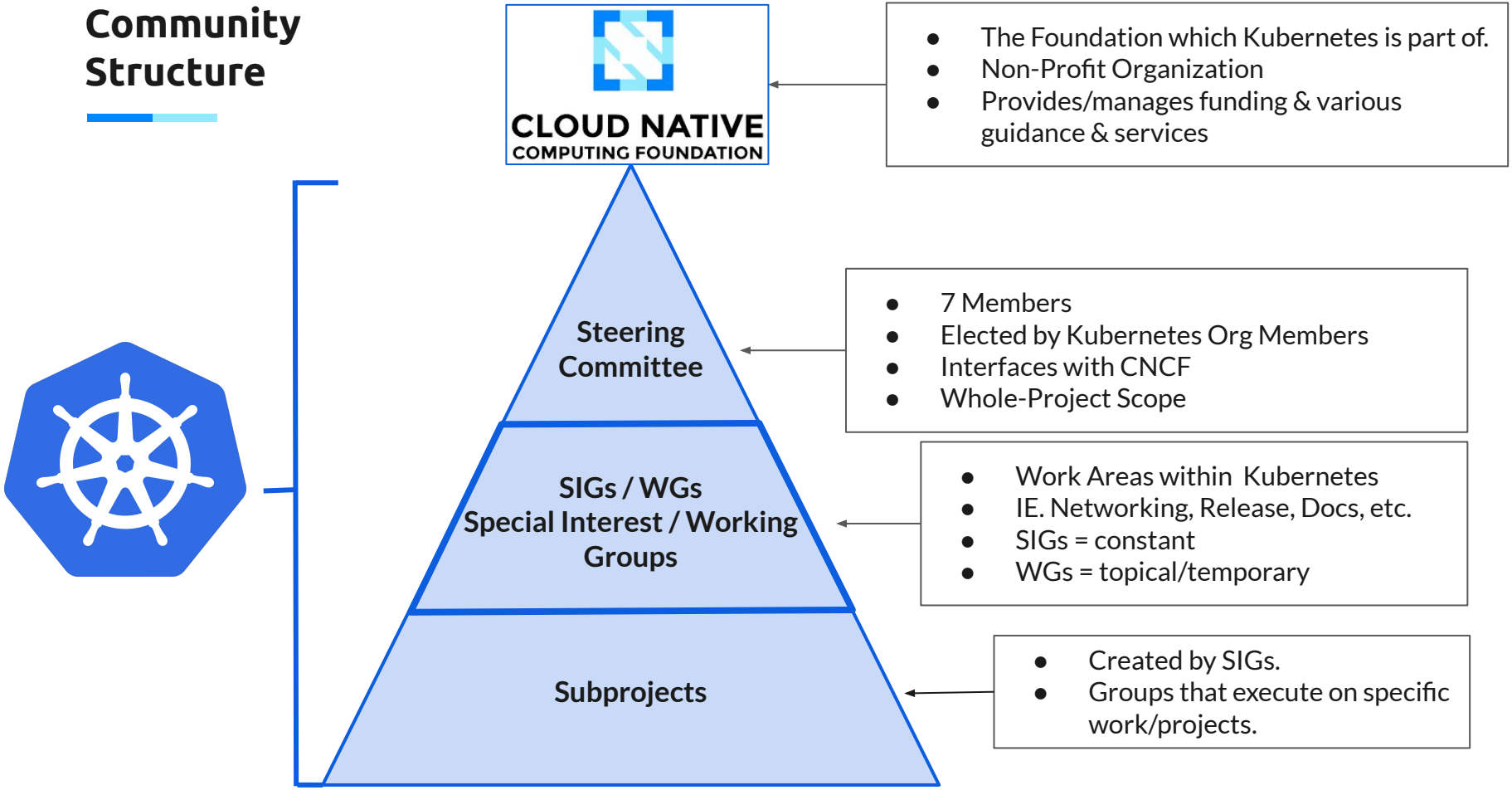

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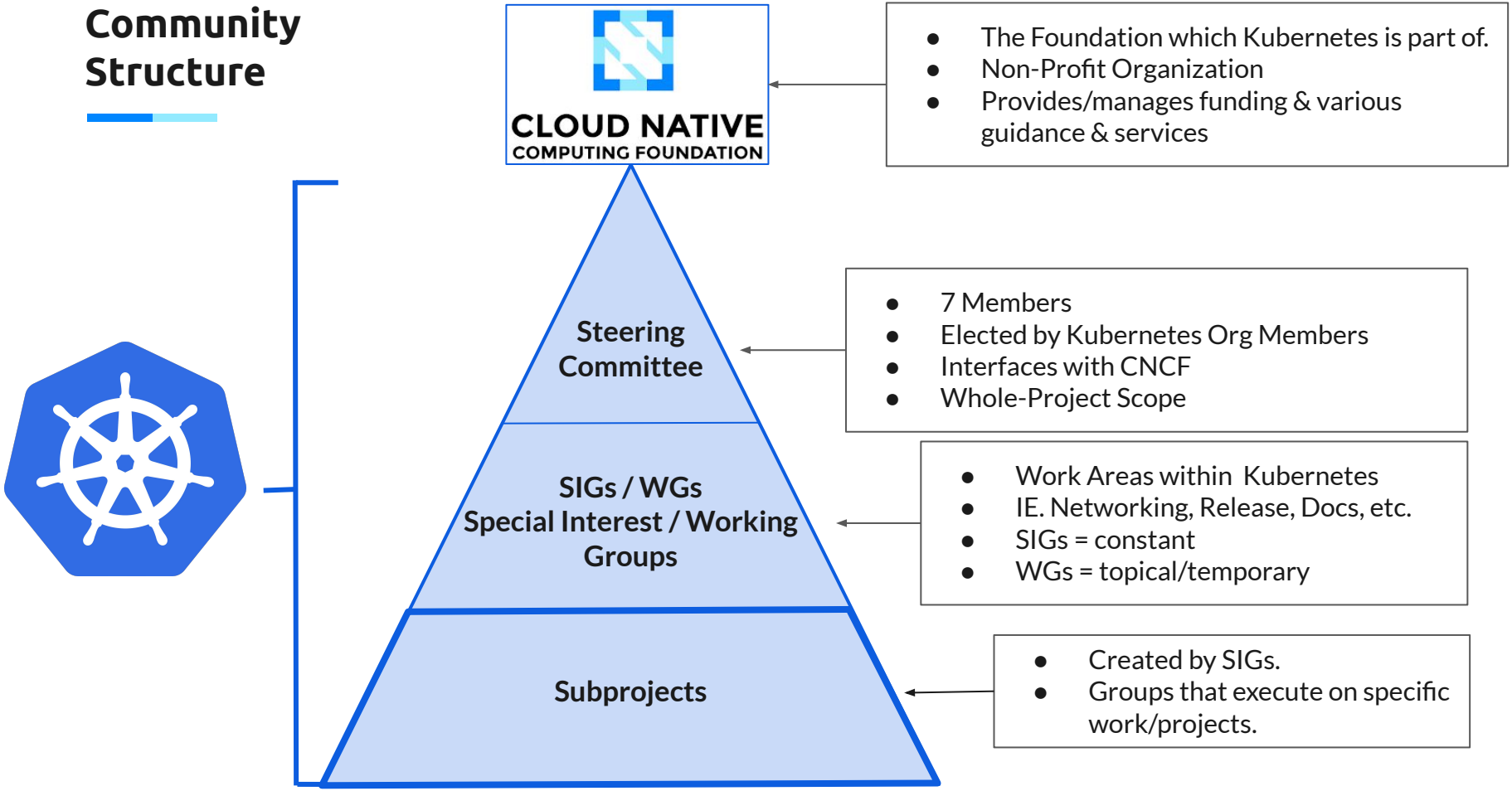

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Kubernetes Community Structure

24	7	3
Special Interest Groups	Working Groups	Committees

https://github.com/kubernetes/community/blob/master/sig-list.md

Kubernetes Community Structure

Project

Does work that affects/supports the entire project.

Collaborates with all other groups.

All other groups depend on the work of these groups.

Horizontal

Has deep, broad technical focus.

Owns core functionality from a project architecture perspective.

Depends on the work of the “Project” groups.

Vertical

Has deep, specific technical focus.

Depends on work of the “Horizontal” and “Project” groups.

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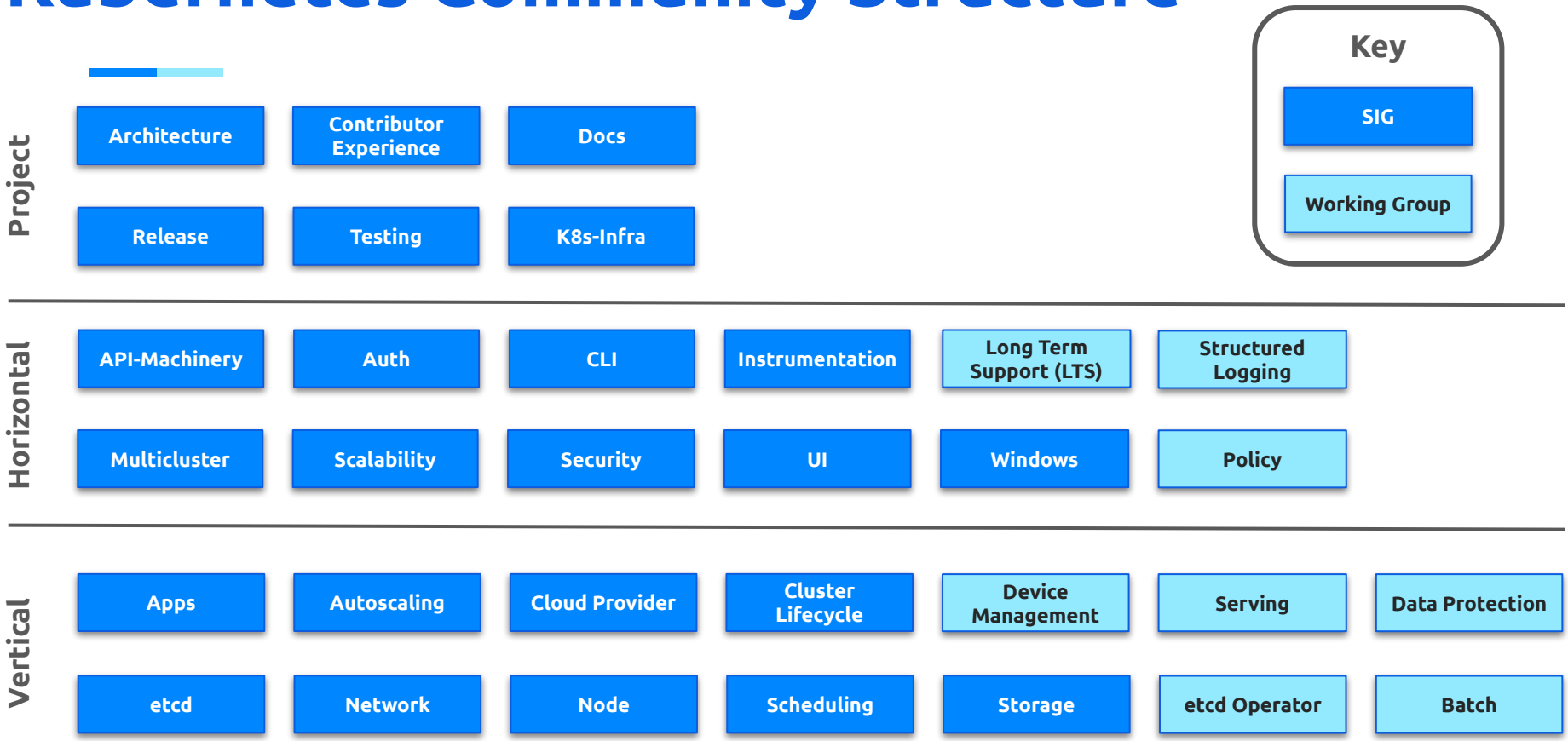

Why Contribute?

There are many reasons to contribute!

- Your job requires it
- Grow specific career-related skills
- Network & make connections with other professionals
- Cool Technology
- Enjoy being part of the community

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Think carefully about why you want to contribute!

What does it mean to be a “Contributor”?

What Counts as a “Contribution”?

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Any work that you do to support the open source Kubernetes project!

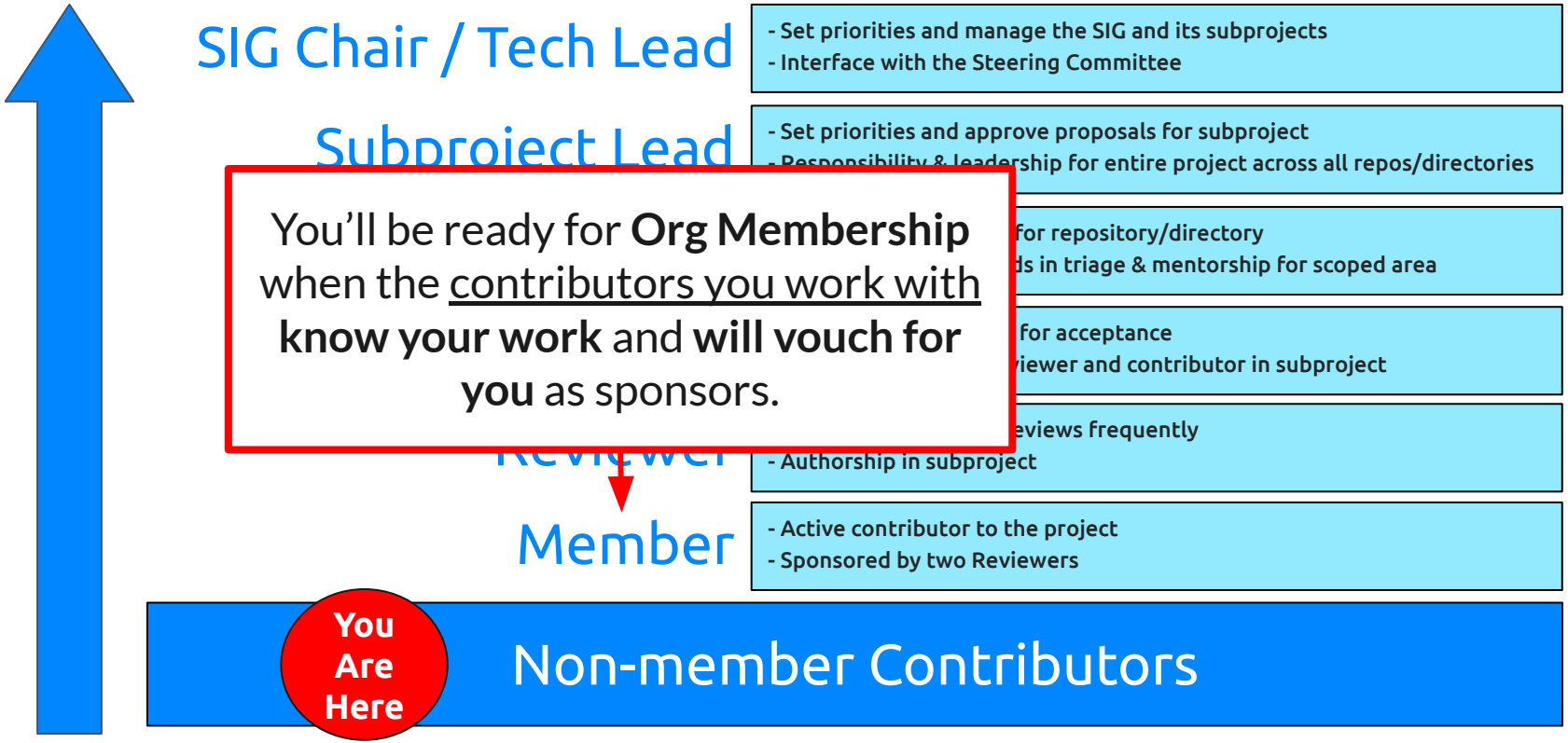
What Counts as a “Contribution”?

- Taking notes during a community meeting
- Asking a question on Slack
- Correcting a grammatical or spelling error in documentation
- Implementing a new feature, or part of a feature
- Commenting on a KEP (Kubernetes Enhancement Proposal) or issue
- Filing an issue
- Writing a blog post
- Helping a fellow contributor work through a problem
- … and much more!

Learn about Org Membership:
https://github.com/kubernetes/community/blob/master/community-membership.md

The Contributor Ladder

The Contributor Ladder



You'll be ready for **Org Membership** when the <u>contributors you work with</u> **know your work** and **will vouch for you** as sponsors.

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The Contributor Ladder

You’re not tied to one SIG or Project!

The ladder represents how ownership might build, but paths are not always so linear!

How to Start Contributing

Just Join a SIG!

The fastest way to learn and make yourself useful is to find a SIG and/or subproject you're interested in, start attending meetings, and KEEP attending meetings.

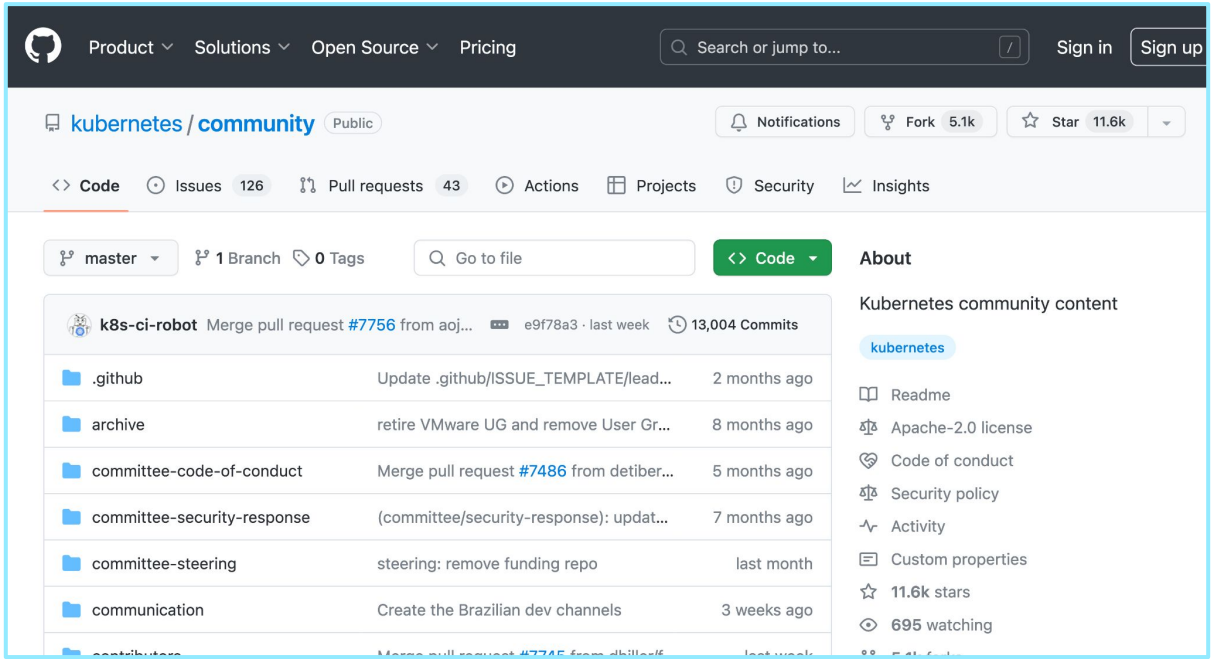
Join the Kubernetes Slack & the K-Dev mailing list!

The Kubernetes Slack is the primary way the community communicates casually.
https://slack.k8s.io

The Kubernetes Developer Google Group is the primary way the community shares announcements https://groups.google.com/a/kubernetes.io/g/dev

How to Learn About SIGs

Find Info About All the SIGs & WGs in k/community



https://git.k8s.io/community

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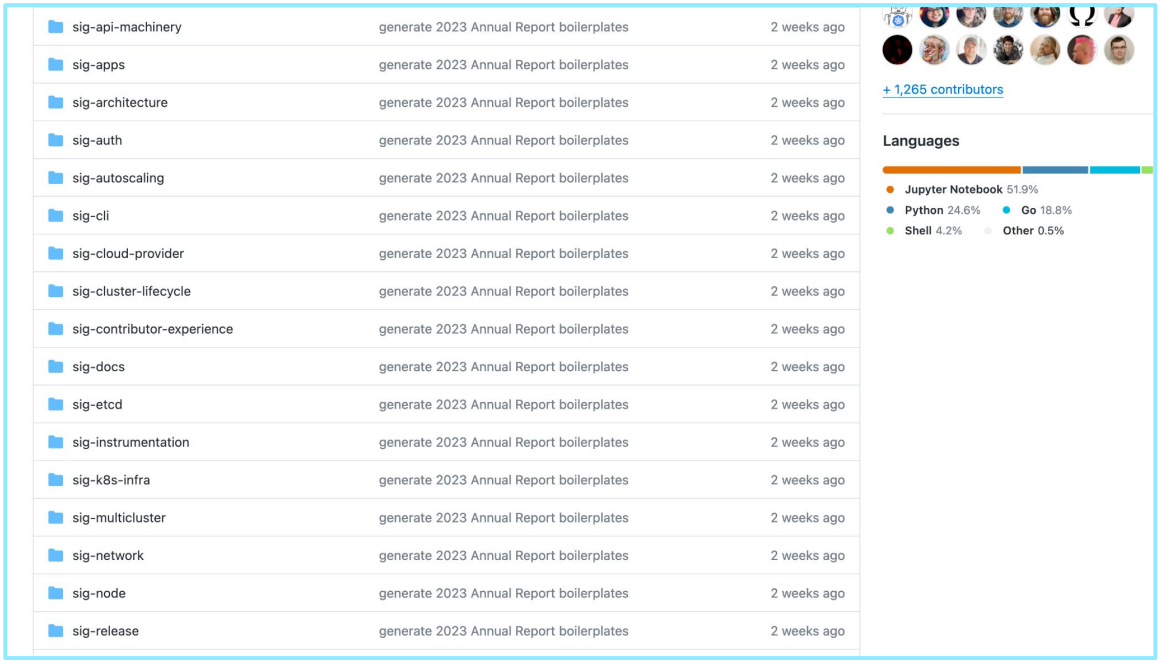

sig-api-machinery	generate 2023 Annual Report boilerplates	2 weeks ago
sig-apps	generate 2023 Annual Report boilerplates	2 weeks ago
sig-architecture	generate 2023 Annual Report boilerplates	2 weeks ago
sig-auth	generate 2023 Annual Report boilerplates	2 weeks ago
sig-autoscaling	generate 2023 Annual Report boilerplates	2 weeks ago
sig-cli	generate 2023 Annual Report boilerplates	2 weeks ago
sig-cloud-provider	generate 2023 Annual Report boilerplates	2 weeks ago
sig-cluster-lifecycle	generate 2023 Annual Report boilerplates	2 weeks ago
sig-contributor-experience	generate 2023 Annual Report boilerplates	2 weeks ago
sig-docs	generate 2023 Annual Report boilerplates	2 weeks ago
sig-etcd	generate 2023 Annual Report boilerplates	2 weeks ago
sig-instrumentation	generate 2023 Annual Report boilerplates	2 weeks ago
sig-k8s-infra	generate 2023 Annual Report boilerplates	2 weeks ago
sig-multicluster	generate 2023 Annual Report boilerplates	2 weeks ago
sig-network	generate 2023 Annual Report boilerplates	2 weeks ago
sig-node	generate 2023 Annual Report boilerplates	2 weeks ago
sig-release	generate 2023 Annual Report boilerplates	2 weeks ago

https://git.k8s.io/community

Example SIG Repo Walkthrough

README.md

What does the group do?

Contributor Experience Special Interest Group

Developing and sustaining a healthy community of contributors is critical to scaling the project and growing the ecosystem. We need to ensure our contributors are happy and productive, and that there are not bottlenecks hindering the project in, for example: feature velocity, community scaling, pull request latency, and absolute numbers of open pull requests and open issues.

The charter defines the scope and governance of the Contributor Experience Special Interest Group.

Meetings

Joining the mailing list for the group will typically add invites for the following meetings to your calendar.

- Regular SIG Meeting: Wednesdays at 9:00 PT (Pacific Time) (Biweekly). Convert to your timezone.
  - Meeting notes and Agenda.
  - Meeting recordings.
- Regular SIG Meeting (APAC/J/NZ timezone friendly): Wednesdays at 7:30 UTC (Biweekly, interleaved with the Regular SIG Meeting). Convert to your timezone.
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When do they meet?

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Example SIG Repo Walkthrough

Leadership

Chairs

The Chairs of the SIG run operations and processes governing the SIG.

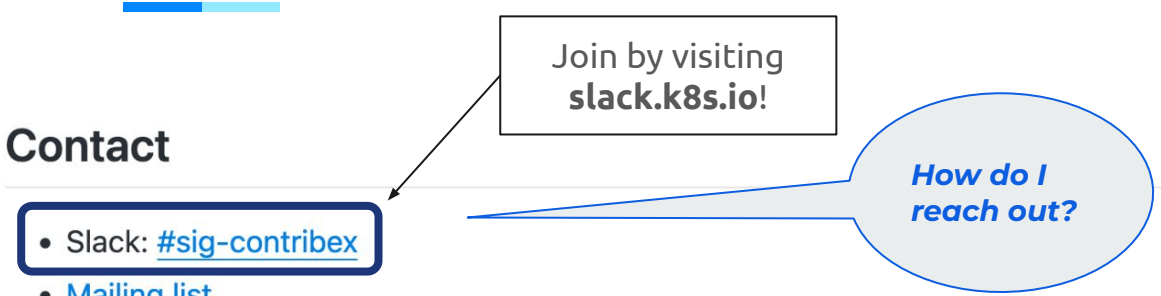
- Kaslin Fields (**@kaslin**), Google
- Nabarun Pal (**@palnabarun**), VMware

Technical Leads

The Technical Leads of the SIG establish new subprojects, decommission existing subprojects, and resolve cross-subproject technical issues and decisions.

- Madhav Jivrajani (**@MadhavJivrajani**), VMware
- Priyanka Saggu (**@Priyankasaggu11929**), SUSE

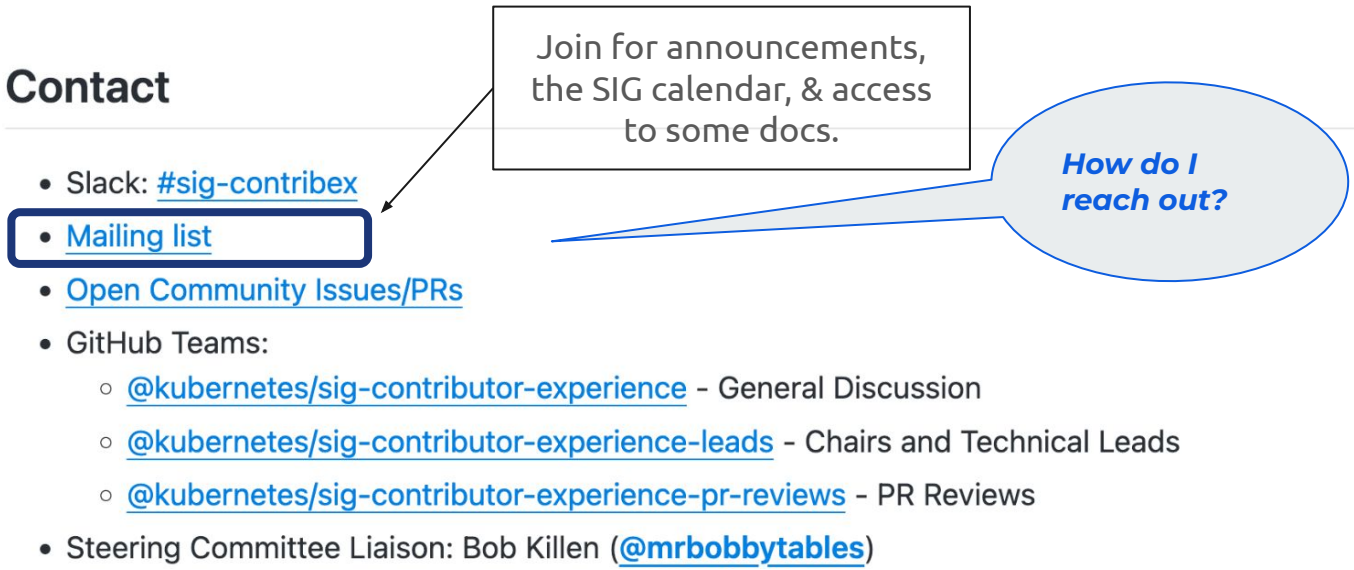
Example SIG Repo Walkthrough



Contact

- Slack: #sig-contribex
- Mailing list
- Open Community Issues/PRs
- GitHub Teams:
  - @kubernetes/sig-contributor-experience - General Discussion
  - @kubernetes/sig-contributor-experience-leads - Chairs and Technical Leads
  - @kubernetes/sig-contributor-experience-pr-reviews - PR Reviews
- Steering Committee Liaison: Bob Killen (**@mrbobbytables**)

Example SIG Repo Walkthrough



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How do I reach out?

Example SIG Repo Walkthrough

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How do I reach out?

Join the Kubernetes "Dev" Google Group (k-dev)!
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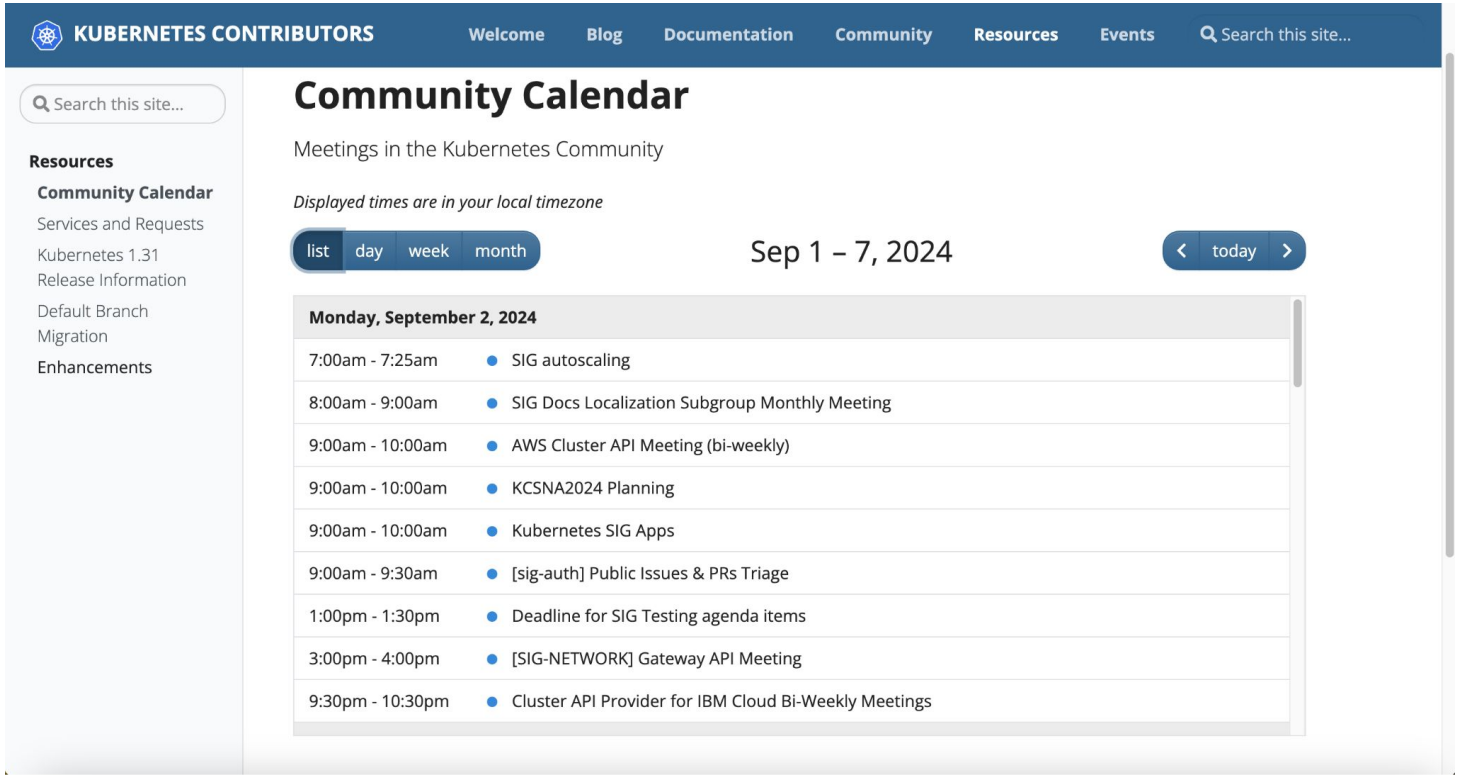
Where to Find SIG Meetings - k8s.dev/calendar



Current Work Opportunities

Evergreen Opportunities

Most SIGs

- Meeting Note Taking
  - Always available
  - Subproject: Most that have meetings
  - No Experience Required
  - See the meeting invite/attend the meeting for details

SIG ContribEx

- ~~SIG Spotlight Blog~~
  - ~~Always available~~
  - ~~Subproject: Comms~~
  - ~~No Experience Required~~
  - ~~More Info: SIG Spotlight Blog Process~~
- Maintainer Summit Staff
  - 2x per year
  - Subproject: Events
  - Org Membership Required
  - More Info: Events Team

On hold due to a lack of kubernetes.io blog reviewers. Consider checking out SIG Docs & becoming a reviewer!

Evergreen Opportunities

SIG Docs

- PR Reviews - anyone can review
  - PR Wrangler shadow program
- New Contributor Meet & Greet
  - First Tuesday of the Month at 10:30 UTC
  - More info on k/community/sig-docs

SIG Arch

  - General call for help. Get to know a broad area of the project!
  - Skills: Willingness to dive in, learn, be engaged over a significant period of time.
  - Pop in to Slack to learn more!

Tasks with Skill Requirements

Can I pick up this task?

Often, the community needs help with important tasks that **require certain skills** to complete. If a task mentions required skills, that usually means the group **doesn't have someone who can teach you those skills.** Ask questions before picking up a task with skill requirements!

The following calls for help have skill requirements.
These tasks are not likely to be a good fit for you if you do not already have the requested skills.

New Opportunities

SIG Etcd

For learning more, finding additional work tasks, asking any questions, general discussion, etc.

- Slack channel: **#sig-etcd**
- Contributing to etcd: CONTRIBUTING.md
- Overview (deep dive) on etcd: https://www.youtube.com/watch?v=D2pm6ufIt98

New Etcd Docs Subproject

- New contributors welcome! Subproject meeting every 2 weeks from 5pm to 5:45pm on Tuesday (PST). Next meeting 20 Jan 2026 - **Meeting Notes**, **Zoom Link**

Help-wanted/good-first-issue

- On etcd-io/website: list issues.
- On etcd-id/etcd: list issues.
- Unify testing framework project: Contributor Guide, Issue.
- Etcd website's first localisation - Ukrainian 🇺🇦 - Call for Ukrainian contributors to help review and maintain it: https://github.com/etcd-io/website/pull/942

New Opportunities

SIG UI

Due to the retirement of the Kubernetes Dashboard, Headlamp is the recommended Kubernetes web UI. Contribute to an exciting part of the project and improve how developers interact with Kubernetes!

For learning more, asking questions and general discussion:

- Slack channel: **#sig-ui**
- Learn more: SIG UI Community Page

Help-wanted/good-first-issues:

- Good first issues: Headlamp good first issues

New Opportunities

gwctl (CLI tool for Gateway API)

gwctl is a command-line tool for managing and understanding Gateway API resources in your Kubernetes cluster. It allows you to create, view, describe, analyze, and delete Gateway API and other Kubernetes resources.

For learning more, asking questions and general discussion:

- Slack channel: **#sig-network**
- Learn more: SIG Network Community Page (scroll down to the gateway-api section!)

Help-wanted/good-first-issues:

- Support retrieval of multiple resource types in a single command: https://github.com/kubernetes-sigs/gwctl/issues/89
- Omit `NAMESPACE` column while querying resources in a single namespace: https://github.com/kubernetes-sigs/gwctl/issues/90

New Opportunities

SIG API Machinery - Declarative Validation (DV) Subproject

- New Contributors Welcome!
  - Subproject meeting first Tuesday of the Month at 9:00 am PST // 4:00pm UTC
    - Next meeting Nov 4th - **Meeting Notes**, **Zoom Link**
- Help-wanted/good-first-issue Issues On kubernetes/kubernetes for DV
  - **[Umbrella][Declarative Validation] Enable Declarative Validation for APIs #134280**
    - **^ choose one of the listed Kubernetes Types To Migrated from the list**
- Declarative Validation Slides Overview
- KEP-5073 - Declarative Validation
- Slack channel: **#sig-api-machinery-dev-tools**
  - ^ for learning more, finding additional work tasks, asking any questions, general discussion, etc.
- Declarative Validation primary source code dirs on kubernetes/kubernetes:
  - staging/src/k8s.io/code-generator/cmd/validation-gen
  - staging/src/k8s.io/apimachinery/pkg/api/validate

New Opportunities

SIG Apps and SIG Scheduling - Add CEL expressions support for Tolerations and NodeAffinity

- Skills Required: Kubernetes and Golang (Proficient)
- Aim: Help with the implementation of this KEP and get it to alpha
- Slack Channels: **#sig-apps, #sig-scheduling**
- To Learn More: https://github.com/kubernetes/enhancements/issues/5500

Current Calls for Help

SIG ContribEx

- Website Maintenance
  - Help maintain k8s.dev
  - **Skills**: Knowledge of Hugo Docsy required
- Mentoring Program Management
  - Help setup, support and execute the Kubernetes group mentoring program.
  - **Skills:** Organization skills, planning, communications.
  - Help the community keep track of the various mentoring programs we work with (ie. LFX, Google Summer of Code, etc.)
  - **Skills**: Familiarity with the Kubernetes community (org membership?), program management, communications
- Elekto
  - Elekto is our homegrown software to run elections for the community.
  - **Skills:** Python, Flask

Current Calls for Help

SIG Docs

- Blog Reviews
  - Help review proposed blog PRs
  - **Skills**: Familiarity with the style guide, content guide, submitting a blog page, and reviewing PR guide
- Localization
  - **Skills:** Familiarity with English and at least one other language

SIG Testing

- Help with Prow
  - **Skills:** Familiarity with prow
- Conformance Testing (Hydrophone)
  - Feedback and help enabling adoption of new conformance testing tools for end users.

Current Calls for Help

SIG Network

- Gateway API
  - Ingress Nginx Gateway API Implementation - build from scratch!
  - General call for help
- API Reviewers
  - **Skills:** Longstanding familiarity with the project in the area of SIG Network

SIG Release

- Release Automation help
  - **Skills:** coding/scripting, willingness to develop deep familiarity with the release process over time

SIG Security

- Help Kubernetes understand and address CVEs
  - **Skills:** Familiarity with CVEs and security concepts

Common Contribution Pitfalls

The “Good First Issue Trap”

- Decide to Contribute
- Pick Up a “Good First Issue”
- ???
- Profit!!!

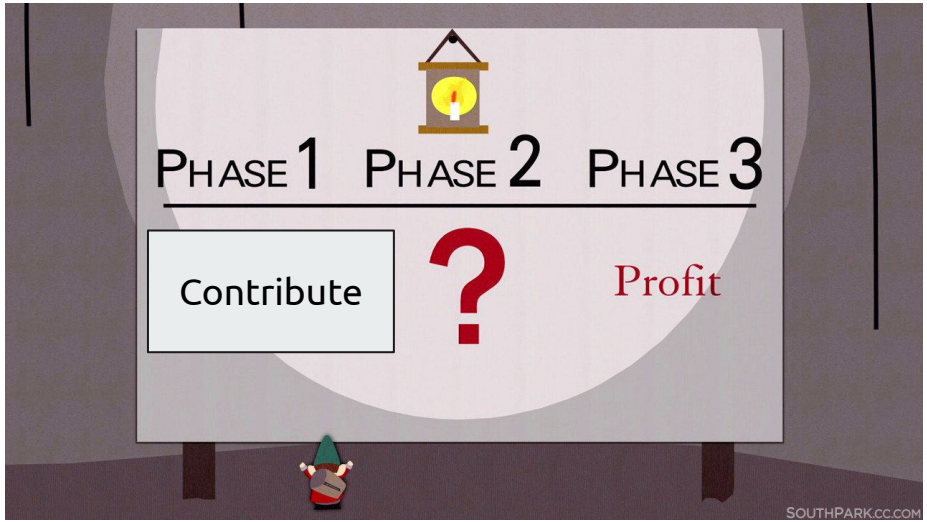


Image from: https://knowyourmeme.com/memes/profit

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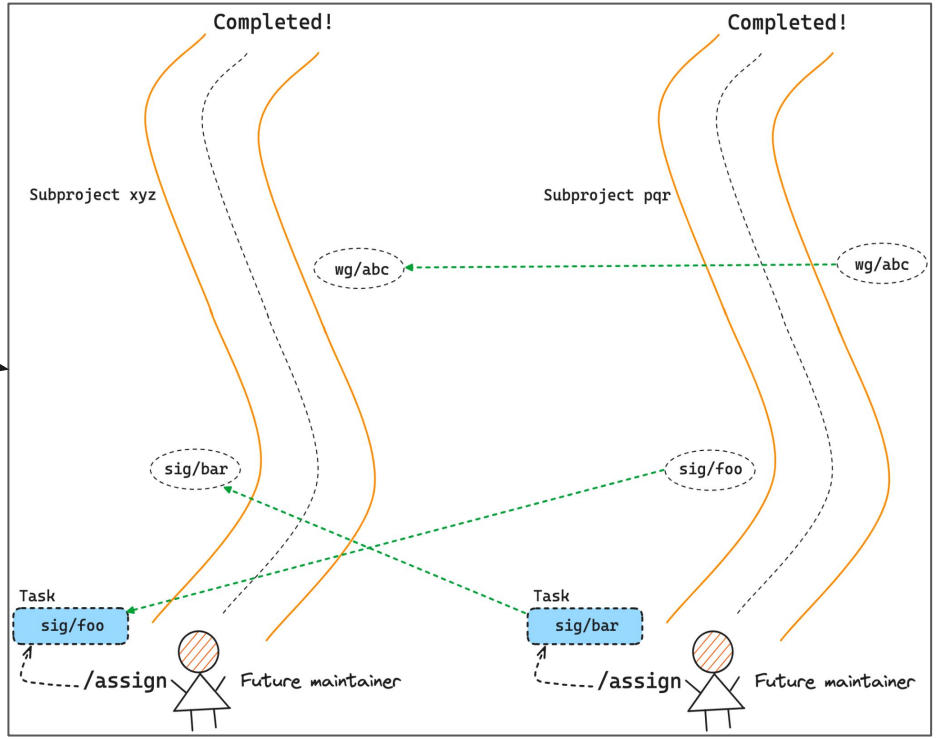
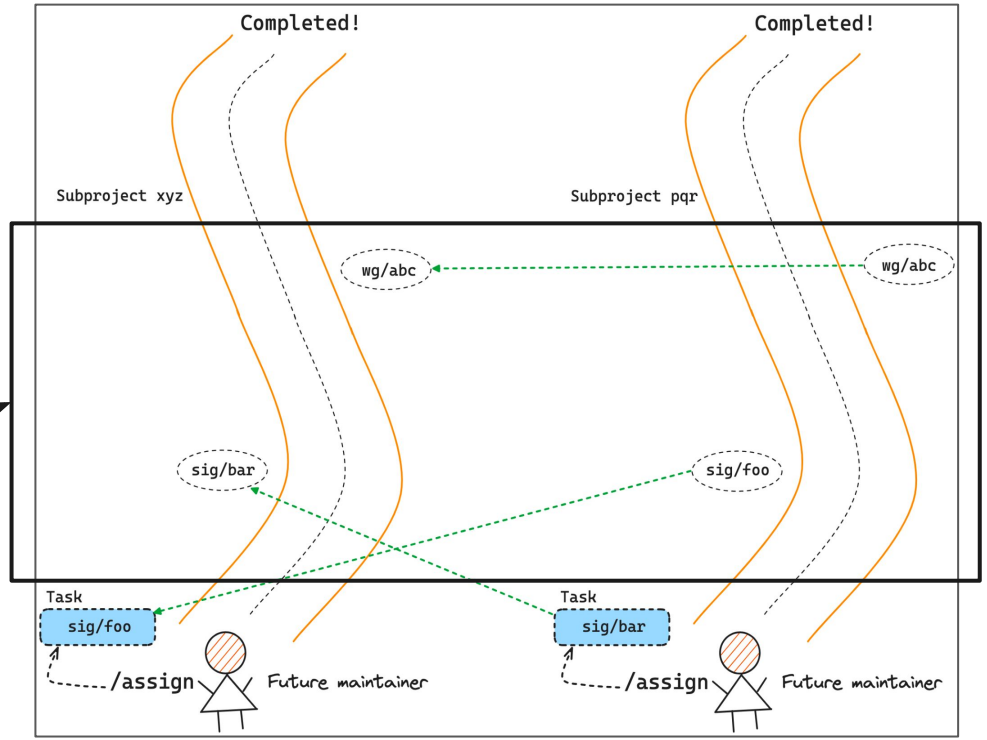


Often, more collaboration is required than you expect.

The “Good First Issue Trap”

- Decide to Contribute
- Pick Up a “Good First Issue”
- ???

Most new contributors get lost somewhere in here.



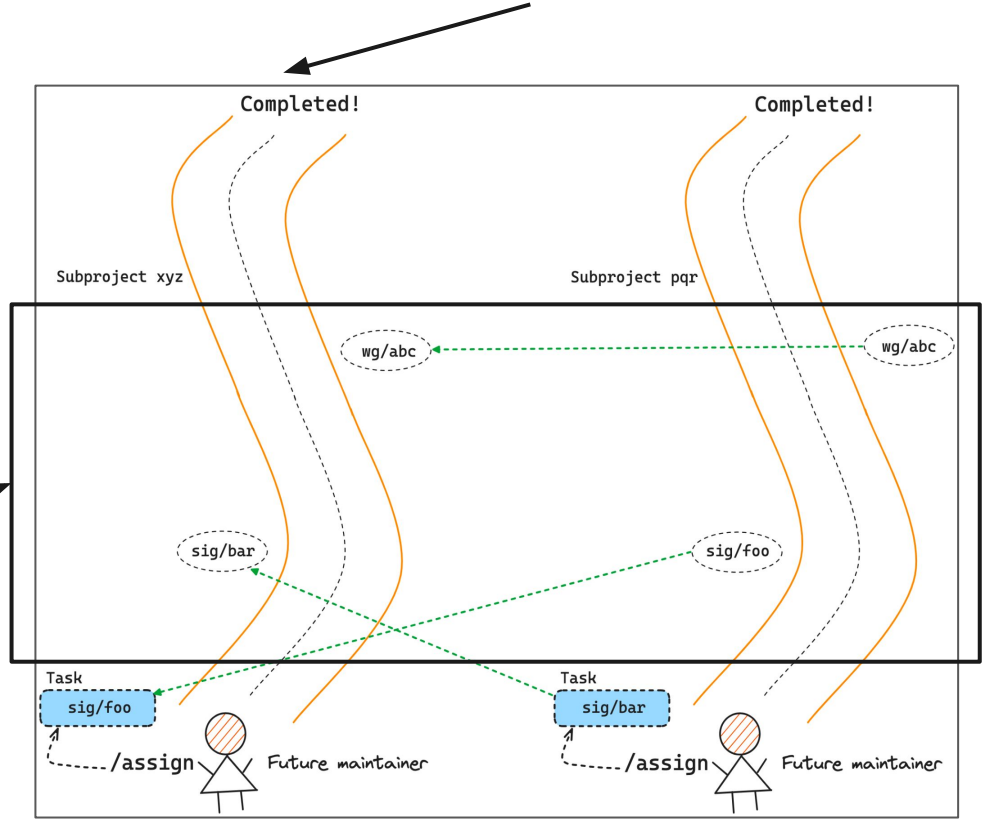
Often, more collaboration is required than you expect.

And never make it here.

The “Good First Issue Trap”

- Decide to Contribute
- Pick Up a “Good First Issue”
- ???

Most new contributors get lost somewhere in here.



Often, more collaboration is required than you expect.

And never make it here.

The “Good First Issue Trap”

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- Pick U
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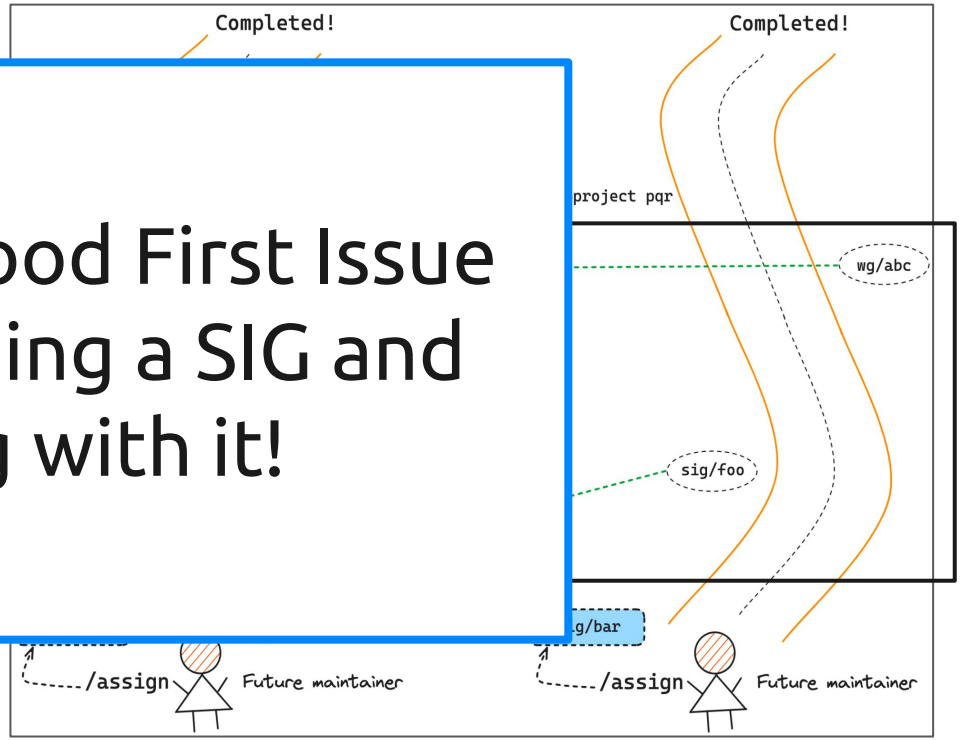
Avoid the “Good First Issue Trap” by joining a SIG and sticking with it!



Often, more collaboration is required than you expect.

Embracing The Entropy

If you're feeling overwhelmed, you're doing something right!

- Kubernetes has a lot of moving parts, and picking up a task that might seem tangible can also prove to be overwhelming! There are a few reasons:
  - Undocumented context
  - Alien terms and language
  - Long and multiple review cycles
- But there is good news: if you decide to embrace this entropy, the results of sticking around will compound.

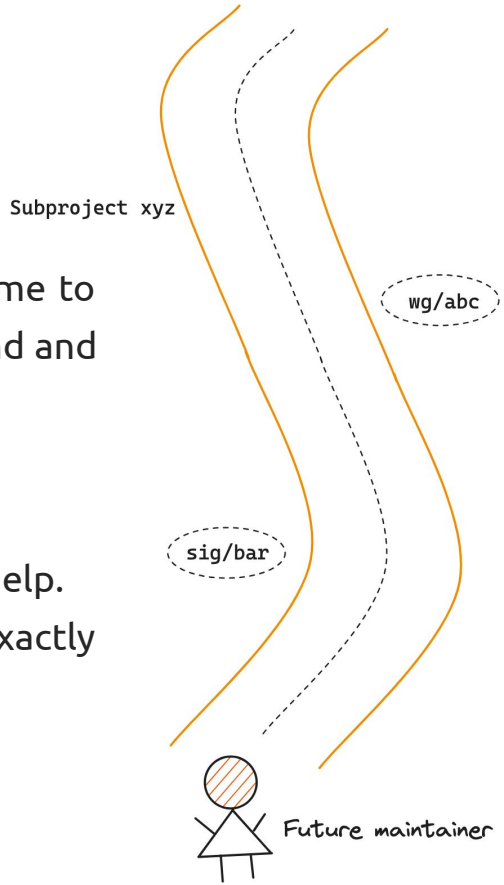
Finding Your Place in the Community

Law of Mobility!

As you're starting off in a large project like Kubernetes, it takes time to figure out what is the best fit for you, so take your time, float around and keep learning!

We need your help!

Regardless of your skillset or background, we could really use your help. We just might need to work together for a while to figure out exactly *how*.



Resources & Come Join Us!

- Join the Kubernetes Developer Google Group (k-dev): https://groups.google.com/a/kubernetes.io/g/dev
- Check out kubernetes/community for an overview of our community.
- Follow the New Contributor Guide (k8s.dev/guide) to get familiar with various contributor tools and processes.
- The First Contribution Guide(k8s.dev/guide/first-contribution/) will walk you through the process for your first Pull Request (PR)
- Check out the Resources List at https://bit.ly/kubernetes-resources
- Come join us in the Kubernetes slack: https://www.slack.k8s.io
    - Join the #kubernetes-new-contributors channel
    - Join the channels of 1 or more SIGs you're interested in

It's not always too easy to get started and its understandably frustrating, but if you can stick around, it's vastly worth it.
We would love to help you stick around, so please join us!

We look forward to working with you, learning from you, and welcoming you as future maintainers!

Q&A