



KubeCon



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North America 2018

Tutorial: Building & Running Kubernetes from Source and Submitting Your First PR

Ian Chakeres, Silvia Xu, Michael Taufen, and Federico Bongiovanni, Google



Meet your workshop helpers!



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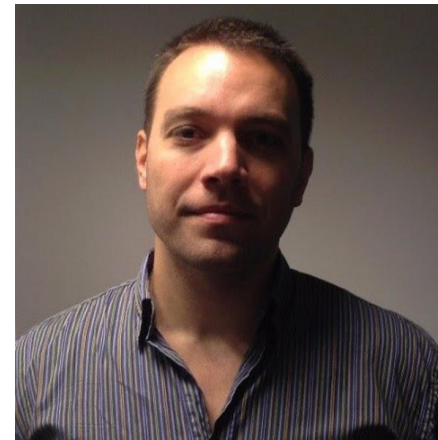
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Kevin Grigsby
David Oppenheimer
Walter Fender

Follow the instructions at <http://buildingk8s.com>, login to <https://console.cloud.google.com/>, and start a VM

Outline



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- **Google Cloud VM startup**
- **Build Kubernetes from source**
- **Start local cluster**
- **Change the code**
- **Run unit tests**
- **Create a Pull-Request**

Follow the instructions at <http://buildingk8s.com>, login to <https://console.cloud.google.com/>, and start a VM

Prerequisites



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- **A computer with a connection to the Internet and a web browser.**
 - **A Google Cloud account will be distributed at the session.**
- **A GitHub account, created prior to the session.**
- **Agree to CNCF code of conduct and sign CLA, prior to the session.**



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**Tutorial: Building & Running
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and Federico Bongiovanni, Google**

**Full Instructions:
buildingk8s.com**





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Logistics for Today's Session





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VM Startup... Complete





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Building & Running Kubernetes from Source





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Fork Kubernetes



Click the "Fork" button



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github.com/kubernetes/kubernetes

kubernetes / kubernetes

Watch

2,816

Star

44,576

Fork

15,453

Code

Issues 2,180

Pull requests 1,020

Projects 12

Insights

Production-Grade Container Scheduling and Management <https://kubernetes.io>

kubernetes

go

cncf

containers



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Create a Pull-Request



Click "New pull request"



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kubernetes / kubernetes

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Insights

Label issues and pull requests for new contributors

Dismiss

Now, GitHub will help potential first-time contributors discover issues labeled with **help wanted** or **good first issue**

Filters

is:pr is:open

Labels

Milestones

New pull request

Click "compare across forks"



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 [kubernetes / kubernetes](#)

 Watch ▾

2,816

 Star

44,576

 Fork

15,453

 Code

 Issues **2,179**

 Pull requests **1,020**

 Projects **12**

 Insights

Compare changes

Compare changes across branches, commits, tags, and more below. If you need to, you can also [compare across forks](#).



base: master ▾



compare: master ▾

Select your fork



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Code

Issues 2,179

Pull requests 1,020

Projects 12

Insights

Compare changes

Compare changes across branches, commits, tags, and more below. If you need to, you can also [compare across forks](#).

base fork: kubernetes/kubernetes base: master head fork: kubernetes/kubernetes compare: master

Create pull request

Choose different branches or forks

Choose a Head Repository

Filter repos

✓ kubernetes/kubernetes

mtaufen/kubernetes

Select your branch



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Insights

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).



base fork: kubernetes/kubernetes

base: master



head fork: mtaufen/kubernetes

compare: cap-node-num-images

There isn't anything to compare.

kubernetes:master is up to date with all commits from mtaufen:cap-node-num-images

Choose a head branch

super

super-important-change

super

Click "Create pull request"



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Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).



base fork: kubernetes/kubernetes

base: master



head fork: mtaufen/kubernetes

compare: super-important-change

✓ **Able to merge.** These branches can be automatically merged.



Create pull request

Discuss and review the changes in this comparison with others.



1 commit

1 file changed

0 commit comments

1 contributor



Commits on Nov 30, 2018



mtaufen

SUPER IMPORTANT CHANGE

f25cdf3

Follow the PR template instructions



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Watch 2,816 Star 44,576 Fork 15,453

Code Issues 2,179 Pull requests 1,020 Projects 12 Insights

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base fork: kubernetes/kubernetes base: master head fork: mtaufen/kubernetes compare: super-important-change

✓ Able to merge. These branches can be automatically merged.

SUPER IMPORTANT CHANGE

Write Preview

AA B i “ < > @

<!-- Thanks for sending a pull request! Here are some tips for you:
1. If this is your first time, read our contributor guidelines
<https://git.k8s.io/community/contributors/guide#your-first-contribution> and developer guide
<https://git.k8s.io/community/contributors/devel/development.md#development-guide>
2. Please label this pull request according to what type of issue you are addressing, especially if this is a release targeted pull request. For reference on required PR/issue labels, read here:
<https://git.k8s.io/community/contributors/devel/release.md#issue-kind-label>
3. Ensure you have added or ran the appropriate tests for your PR:
<https://git.k8s.io/community/contributors/devel/testing.md>

Attachments by dragging & dropping, selecting them, or pasting from the clipboard.

Allow edits from maintainers. [Learn more](#) [Create pull request](#)

Reviewers: No reviews

Assignees: No one—assign yourself

Labels: None yet

Projects: None yet

Milestone: No milestone

Helpful resources: [Contributing](#), [Code of conduct](#), [Support](#)

1 commit 1 file changed 0 commit comments 1 contributor

Commits on Nov 30, 2018

mtaufen SUPER IMPORTANT CHANGE f25cdf3

Become a Part of the Community



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- Attend a SIG meeting, write unit & e2e tests, and become a part of the Kubernetes community.
- Official contributor documentation
 - <https://github.com/kubernetes/community/tree/master/contributors/guide>



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