

Machines Can Do the Work

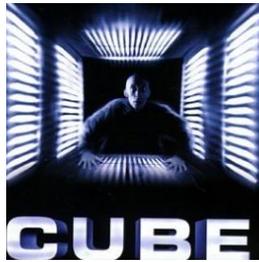
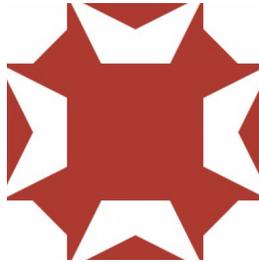
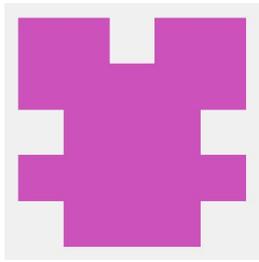
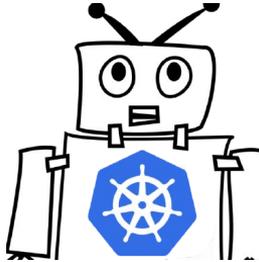
Automation and the Kubernetes Contributor Experience

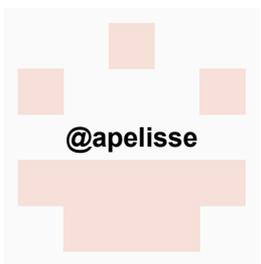


Aaron Crickenberger (@spiffxp)

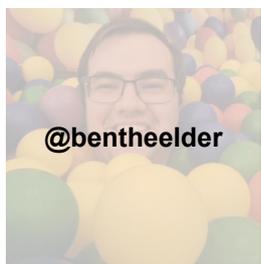
Samsung SDS

May 2, 2018





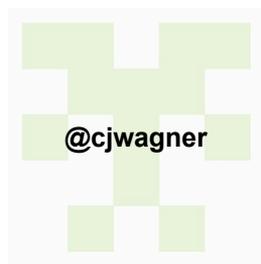
@apelisse



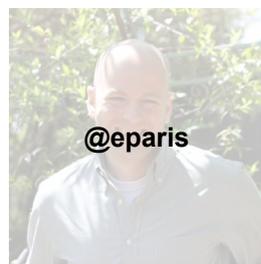
@bentheelder



@cblecker



@cjwagner



@eparis



@fejta



@gmarek



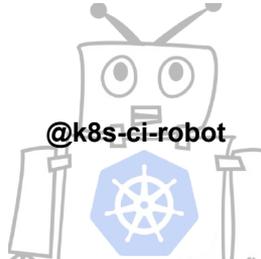
@grodrigues3



@ixdy



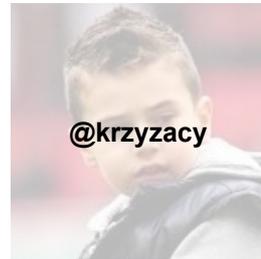
@justinsb



@k8s-ci-robot



@kargakis



@krzyzacy



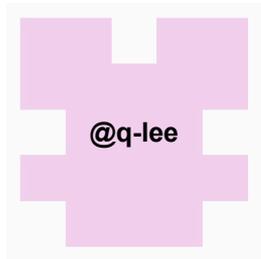
@lavalamp



@michelle192837



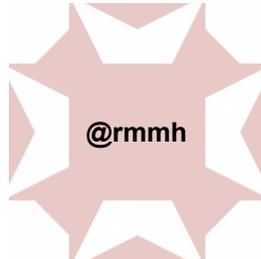
@oomichi



@q-lee



@qhuynh96



@rmmh



@shymjvs



@spiffxp



@spxtr



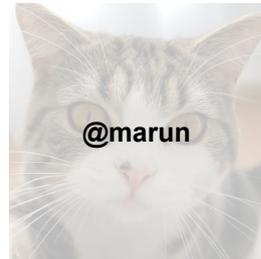
@stevekuznetsov



@wojtek-t



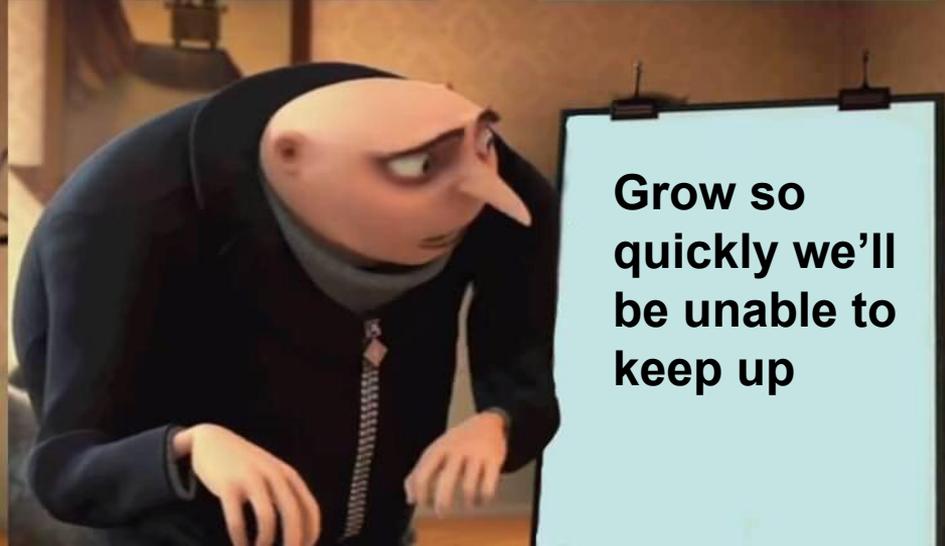
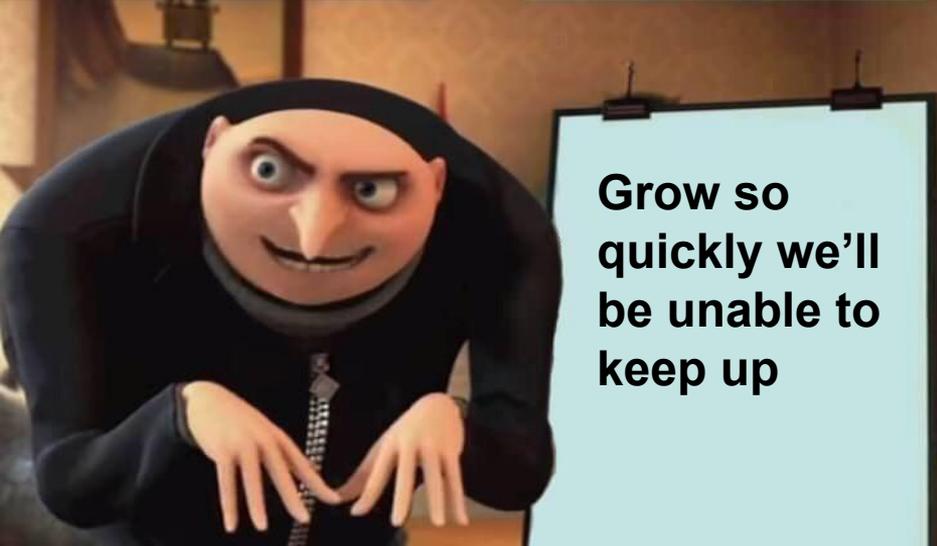
@zmerlynn



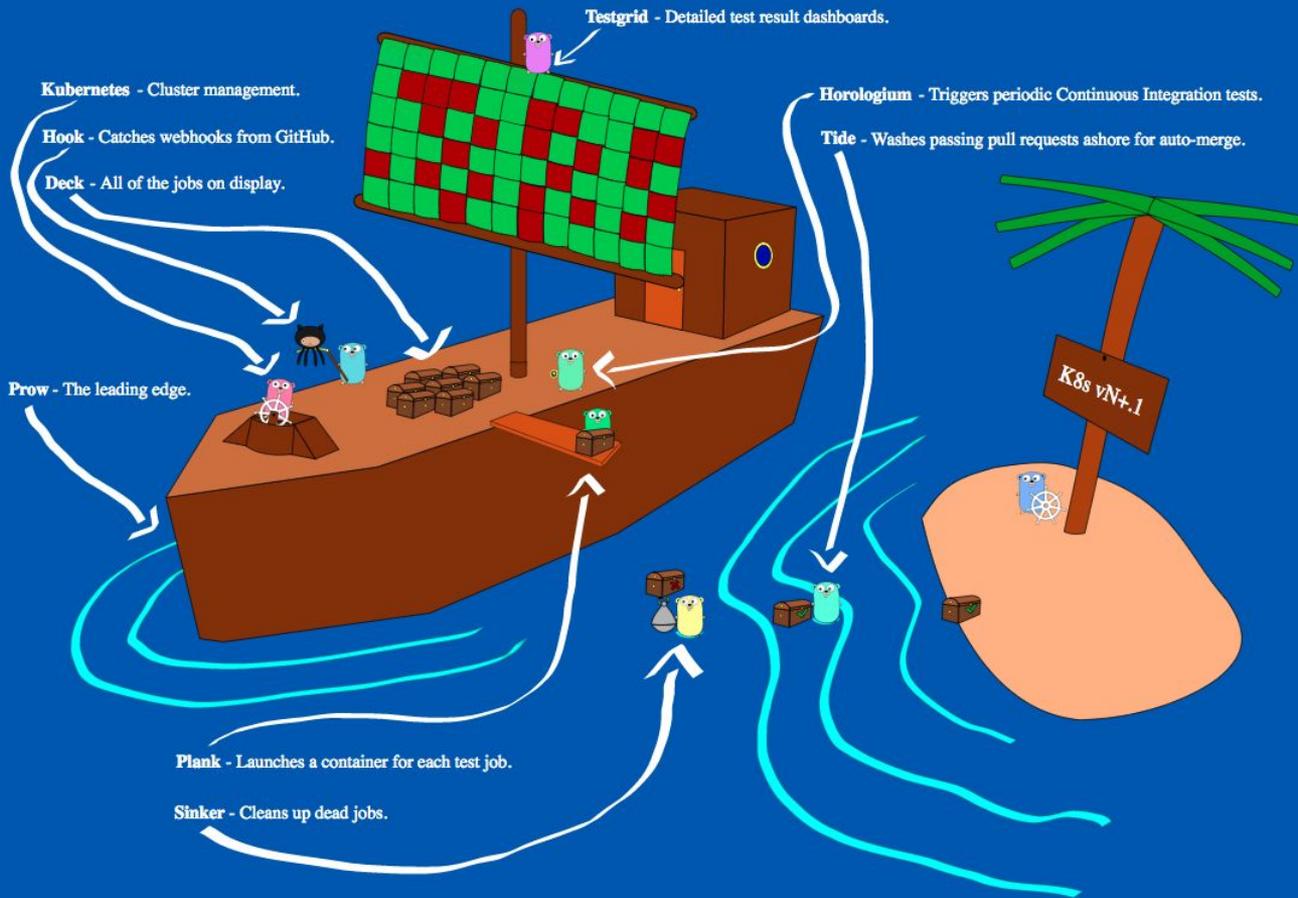
@marun



@timothysc







Prow - extended nautical metaphor. [Go Gopher](#) originally by [Renee French](#), SVG version by [Takuya Ueda](#), modified under the [CC BY 3.0 license](#). Ship's wheel from [Kubernetes logo](#) by [Tim Hockin](#).

prow



used by





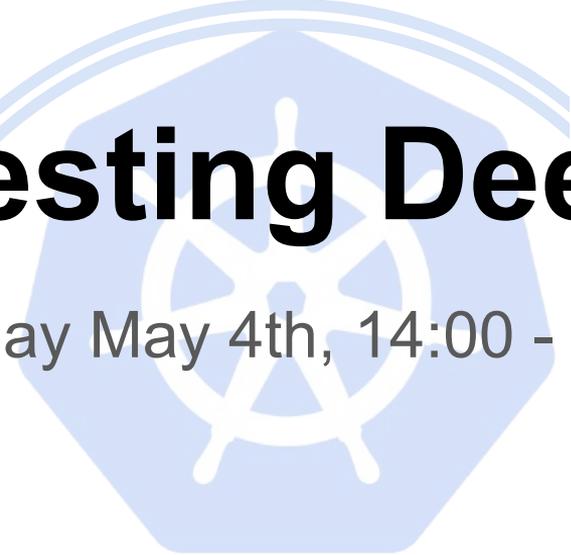
<p>approve</p> <p>The approve plugin implements a pull request approval process that manages the 'approved' label and an approval notification comment.</p> <p>DETAILS</p>	<p>assign</p> <p>The assign plugin assigns or requests reviews from users.</p> <p>DETAILS</p>	<p>blockade</p> <p>The blockade plugin blocks pull requests from merging if they touch specific files.</p> <p>DETAILS</p>	<p>blunderbuss</p> <p>The blunderbuss plugin automatically requests reviews from reviewers when a new PR is created.</p> <p>DETAILS</p>	<p>cat</p> <p>The cat plugin adds a cat image to an issue in response to the '/meow' command.</p> <p>DETAILS</p>	<p>cla</p> <p>The cla plugin manages the application and removal of the 'no-cla' prefixed labels on pull requests as a reaction to the cla/linuxfoundation github status context.</p> <p>DETAILS</p>	<p>close</p> <p>Deprecated! Please use the lifecycle plugin instead of close.</p> <p>DETAILS</p>
<p>config-updater</p> <p>The config-updater plugin automatically redeploys configuration and plugin configuration files when they change.</p> <p>DETAILS</p>	<p>docs-no-retest</p> <p>The docs-no-retest plugin applies the 'retest-not-required-docs-only' label to pull requests that only touch documentation type files and thus do not need to be retested against the latest master commit before merging.</p> <p>DETAILS</p>	<p>dog</p> <p>The dog plugin adds a dog image to an issue in response to the '/woof' command.</p> <p>DETAILS</p>	<p>golint</p> <p>The golint plugin runs golint on changes made to *.</p> <p>DETAILS</p>	<p>heart</p> <p>The heart plugin celebrates certain GitHub actions with the reaction emojis.</p> <p>DETAILS</p>	<p>help</p> <p>The help plugin provides commands that add or remove the 'help wanted' label from issues.</p> <p>DETAILS</p>	<p>hold</p> <p>The hold plugin allows anyone to add or remove the 'do-not-merge/hold' label from a pull request in order to temporarily prevent the PR from merging without withholding approval.</p> <p>DETAILS</p>
<p>label</p> <p>The label plugin provides commands that add or remove certain types of labels.</p> <p>DETAILS</p>	<p>lgtm</p> <p>The lgtm plugin manages the application and removal of the 'lgtm' (Looks Good To Me) label which is typically used to gate merging.</p> <p>DETAILS</p>	<p>lifecycle</p> <p>Close, reopen, flag and/or unflag an issue or PR as stale/putrid/rotten/frozen</p> <p>DETAILS</p>	<p>milestone</p> <p>The milestone plugin allows members of a configurable GitHub team to set the milestone on an issue or pull request.</p> <p>DETAILS</p>	<p>milestonestatus</p> <p>The milestonestatus plugin allows members of the milestone maintainers GitHub team to specify the 'status/*' label that should apply to a pull request.</p> <p>DETAILS</p>	<p>needs-rebaseexternal plugin</p> <p>The needs-rebase plugin manages the 'needs-rebase' label by removing it from Pull Requests that are mergeable and adding it to those which are not.</p> <p>DETAILS</p>	<p>owners-label</p> <p>The owners-label plugin automatically adds labels to PRs based on the files they touch.</p> <p>DETAILS</p>
<p>release-note</p> <p>The releasenote plugin implements a release note process that uses a markdown 'releasenote' code block to associate a release note with a pull request.</p> <p>DETAILS</p>	<p>reopen</p> <p>Deprecated! Please use the lifecycle plugin instead of reopen.</p> <p>DETAILS</p>	<p>require-sig</p> <p>When a new issue is opened the require-sig plugin adds the 'needs-sig' label and leaves a comment requesting that a SIG (Special Interest Group) label be added to the issue.</p> <p>DETAILS</p>	<p>sigmentation</p> <p>The sigmentation plugin responds to SIG (Special Interest Group) GitHub team mentions like '@kubermates/sig-testing-bugs'.</p> <p>DETAILS</p>	<p>size</p> <p>The size plugin manages the 'size/*' labels, maintaining the appropriate label on each pull request as it is updated.</p> <p>DETAILS</p>	<p>skip</p> <p>The skip plugin allows users to clean up GitHub stale commit statuses for non-blocking jobs on a PR.</p> <p>DETAILS</p>	<p>slackevents</p> <p>The slackevents plugin reacts to various GitHub events by commenting in Slack channels.</p> <p>DETAILS</p>
		<p>trigger</p> <p>The trigger plugin starts tests in reaction to commands and pull request events.</p> <p>DETAILS</p>	<p>wip</p> <p>The wip (Work In Progress) plugin applies the 'do-not-merge/work-in-progress' label to pull requests whose title starts with 'WIP' and removes it from pull requests when they remove the title prefix.</p> <p>DETAILS</p>	<p>yuks</p> <p>The yuks plugin comments with jokes in response to the '/joke' command.</p> <p>DETAILS</p>		



Command help for



Command	Example	Description	Who Can Use	Plugin
★ <code>/(approve lgtm) [no-issue cancel]</code>	<pre>/approve /approve no-issue /lgtm /lgtm cancel</pre>	Approves a pull request	Users listed as 'approvers' in appropriate OWNERS files.	APPROVE ↗
★ <code>/[un]cc [[@]...]</code>	<pre>/cc /uncc /cc @k8s-ci-robot</pre>	Requests a review from the user(s).	Anyone can use the command, but the target user must be a member of the org that owns the repository.	ASSIGN ↗
★ <code>/lgtm [cancel]</code>	<pre>/lgtm /lgtm cancel</pre>	Adds or removes the 'lgtm' label which is typically used to gate merging.	Members of the organization that owns the repository. '/lgtm cancel' can be used additionally by the PR author.	LGTM ↗
★ <code>/[un]assign [[@]...]</code>	<pre>/assign /unassign</pre>	Assigns an assignee to the PR	Anyone can use the command, but the target user must be a member of the org that owns the	ASSIGN ↗



SIG Testing Deep Dive

Friday May 4th, 14:00 - 14:35

The Work

Implement PR workflow (review, test, merge)

Facilitate triage workflow (categorize, route, close)

Configure and run jobs

Provide insights into project health

PR Workflow

PR author must have signed CLA

PR must pass tests

PR must be approved

PR must be mergeable

Merge commit must pass tests

The screenshot displays the status of a pull request with the following items:

- Review requested** (green checkmark): Review has been requested on this pull request. It is not required to merge. [Learn more](#). [Show all reviewers](#)
- Some checks haven't completed yet** (orange circle): 1 pending and 14 successful checks. [Hide all checks](#)
- Submit Queue** (orange dot): Pending — PR does not have approved label. [Details](#)
- cla/linuxfoundation** (green checkmark): msau42 authorized. **Required** [Details](#)
- pull-kubernetes-bazel-build** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-bazel-test** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-cross** (green checkmark): Skipped
- pull-kubernetes-e2e-gce** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-e2e-gce-device-plugin-gpu** (green checkmark): Job succeeded. [Details](#)
- pull-kubernetes-e2e-gke** (green checkmark): Skipped
- pull-kubernetes-e2e-kops-aws** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-integration** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-kubemark-e2e-gce** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-local-e2e** (green checkmark): Skipped
- pull-kubernetes-node-e2e** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-typecheck** (green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-verify** (green checkmark): Job succeeded. **Required** [Details](#)
- This branch has no conflicts with the base branch** (green checkmark): Merging can be performed automatically.

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The screenshot displays the status of a pull request with the following sections:

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- Some checks haven't completed yet** (Yellow circle): 1 pending and 14 successful checks. [Hide all checks](#)
- Submit Queue** (Yellow circle with arrow): Pending — PR does not have approved label. [Details](#)
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- pull-kubernetes-e2e-gce-device-plugin-gpu** (Green checkmark): Job succeeded. [Details](#)
- pull-kubernetes-e2e-gke** (Green checkmark): Skipped
- pull-kubernetes-e2e-kops-aws** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-integration** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-kubemark-e2e-gce** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-local-e2e** (Green checkmark): Skipped
- pull-kubernetes-node-e2e** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-typecheck** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-verify** (Green checkmark): Job succeeded. **Required** [Details](#)
- This branch has no conflicts with the base branch** (Green checkmark): Merging can be performed automatically.

TEST ALL THE
THINGS!



BASH SCRIPTS

BASH SCRIPTS EVERYWHERE



test all the things?



test all the things?

September 2016

6 of 7 checks passed		
●	Submit Queue Github CI tests are not green.	Details
✓	Jenkins GCE Node e2e Build finished. 667 tests run, 175 skipped, 1 failed.	Details
✓	Jenkins GCE e2e Build finished. 406 tests run, 194 skipped, 0 failed.	Details
✓	Jenkins GKE smoke e2e Build succeeded.	Details
✓	Jenkins unit/integration Build finished. 3990 tests run, 24 skipped, 0 failed.	Details
✓	Jenkins verification Build finished.	Details
✓	cla/google All necessary CLAs are signed	



Presubmit Results

Batch Builds

- ✓ [pull-kubernetes-bazel-build](#)
- ✓ [pull-kubernetes-bazel-test](#)
- ✓ [pull-kubernetes-e2e-gce](#)
- ✓ [pull-kubernetes-e2e-kops-aws](#)
- ✓ [pull-kubernetes-integration](#)
- ✓ [pull-kubernetes-kubemark-e2e-gce](#)
- ✓ [pull-kubernetes-node-e2e](#)
- ✓ [pull-kubernetes-typecheck](#)
- ✓ [pull-kubernetes-verify](#)

Single Builds

- ✓ [pull-kubernetes-bazel-build](#)
- ✓ [pull-kubernetes-bazel-test](#)
- ✓ [pull-kubernetes-e2e-gce](#)
- ✓ [pull-kubernetes-e2e-gce-100-performance](#)
- ✓ [pull-kubernetes-e2e-gce-device-plugin-gpu](#)
- ✓ [pull-kubernetes-e2e-kops-aws](#)
- ✓ [pull-kubernetes-integration](#)
- ✓ [pull-kubernetes-kubemark-e2e-gce](#)
- ✓ [pull-kubernetes-kubemark-e2e-gce-big](#)
- ✓ [pull-kubernetes-node-e2e](#)
- ✓ [pull-kubernetes-typecheck](#)
- ✓ [pull-kubernetes-verify](#)

End-to-End Results

Non-Queue-Blocking Builds

- ✓ [ci-kubernetes-bazel-build](#)
- ✓ [ci-kubernetes-bazel-build](#)
- ✓ [ci-kubernetes-bazel-test](#)
- ✓ [ci-kubernetes-bazel-test](#)
- ✓ [ci-kubernetes-build](#)
- ✓ [ci-kubernetes-cross-build](#)
- ✗ [ci-kubernetes-e2e-gce-multizone](#)
- ✓ [ci-kubernetes-e2e-gce-taint-evict](#)
- ✓ [ci-kubernetes-e2e-gci-gce](#)
- ✓ [ci-kubernetes-e2e-gci-gce-autoscaling](#)
- ✓ [ci-kubernetes-e2e-gci-gce-autoscaling-migs](#)
- ✓ [ci-kubernetes-e2e-gci-gce-es-logging](#)
- ✓ [ci-kubernetes-e2e-gci-gce-etcd3](#)
- ✓ [ci-kubernetes-e2e-gci-gce-garbage](#)
- ✓ [ci-kubernetes-e2e-gci-gce-ingress](#)
- ✓ [ci-kubernetes-e2e-gci-gce-proto](#)
- ✓ [ci-kubernetes-e2e-gci-gce-reboot](#)
- ✓ [ci-kubernetes-e2e-gci-gce-scalability](#)
- ✗ [ci-kubernetes-e2e-gci-gce-sd-logging](#)
- ✗ [ci-kubernetes-e2e-gci-gce-serial](#)
- ✓ [ci-kubernetes-e2e-gci-gce-slow](#)
- ✓ [ci-kubernetes-e2e-gci-gce-statefulset](#)
- ✗ [ci-kubernetes-e2e-gci-gke](#)
- ✗ [ci-kubernetes-e2e-gci-gke-alpha-features](#)
- ✗ [ci-kubernetes-e2e-gci-gke-autoscaling](#)
- ✗ [ci-kubernetes-e2e-gci-gke-ingress](#)
- ✗ [ci-kubernetes-e2e-gci-gke-multizone](#)
- ✗ [ci-kubernetes-e2e-gci-gke-prod](#)
- ✓ [ci-kubernetes-e2e-gci-gke-prod-parallel](#)
- ✓ [ci-kubernetes-e2e-gci-gke-prod-smoke](#)
- ✗ [ci-kubernetes-e2e-gci-gke-reboot](#)
- ✗ [ci-kubernetes-e2e-gci-gke-serial](#)
- ✗ [ci-kubernetes-e2e-gci-gke-slow](#)
- ✗ [ci-kubernetes-e2e-gci-gke-updown](#)
- ✓ [ci-kubernetes-e2e-kops-aws](#)
- ✓ [ci-kubernetes-e2e-kops-aws-updown](#)
- ✗ [ci-kubernetes-e2e-kops-aws-weave](#)
- ✓ [ci-kubernetes-integration-master](#)
- ✓ [ci-kubernetes-kubemark-5-gce](#)
- ✓ [ci-kubernetes-kubemark-500-gce](#)
- ✓ [ci-kubernetes-node-kubelet](#)
- ✗ [ci-kubernetes-node-kubelet-serial](#)
- ✓ [ci-kubernetes-verify-master](#)

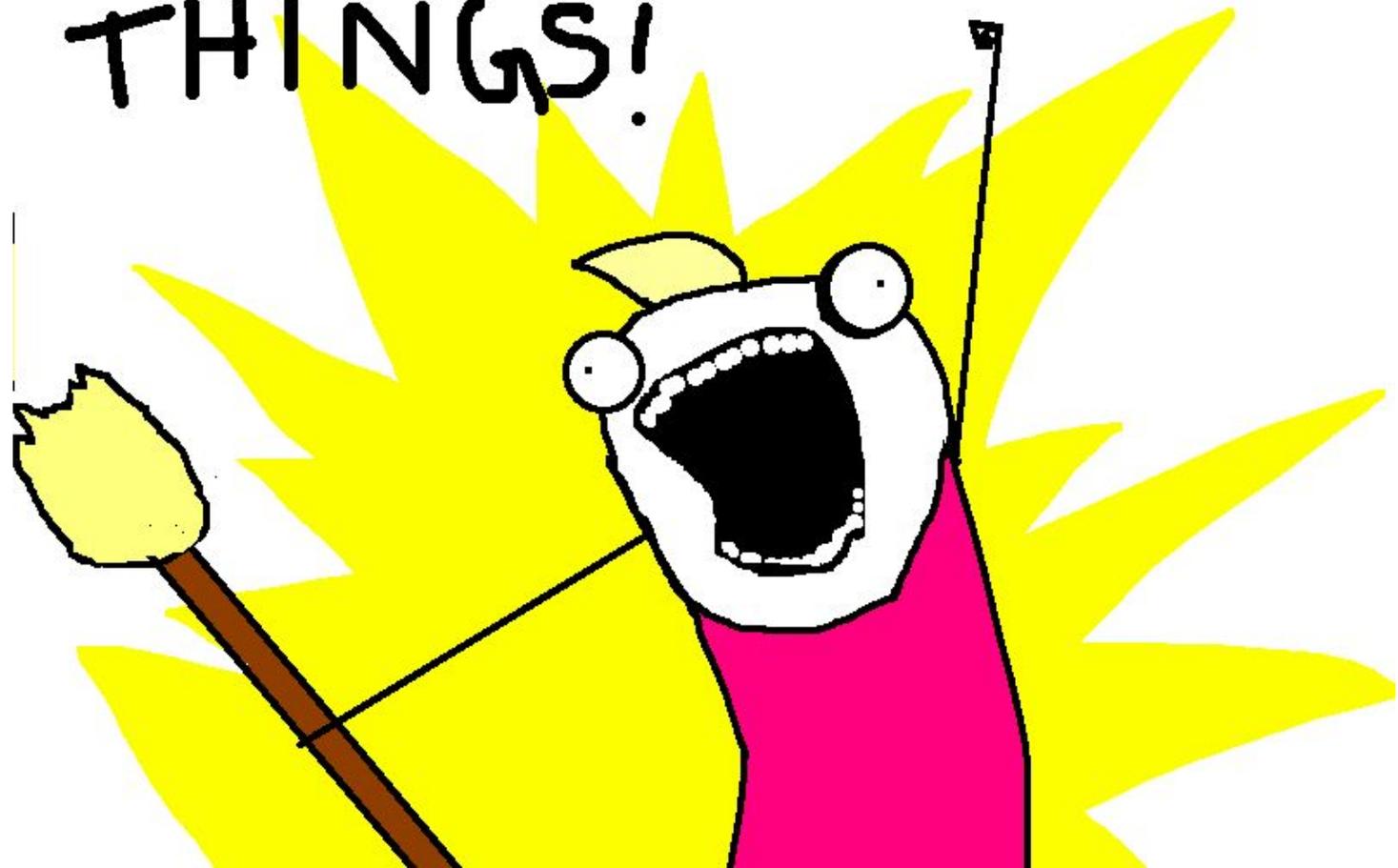
Buildcop problem now



prow

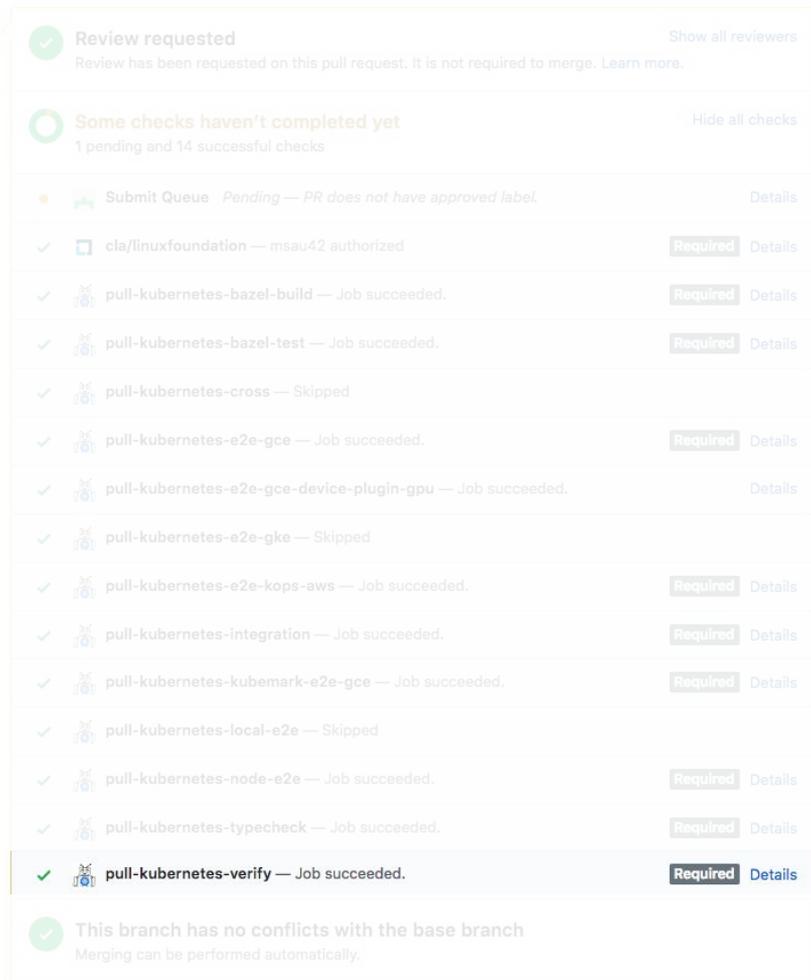


TEST ALL THE
THINGS!



TEST ALL THINGS!

Does it follow coding conventions



A screenshot of a GitHub pull request status panel. The panel is titled 'Review requested' and shows a list of checks. The 'pull-kubernetes-verify' check is highlighted in blue and shows a green checkmark, indicating it has passed. Other checks include 'cla/linuxfoundation', 'pull-kubernetes-bazel-build', 'pull-kubernetes-bazel-test', 'pull-kubernetes-cross', 'pull-kubernetes-e2e-gce', 'pull-kubernetes-e2e-gce-device-plugin-gpu', 'pull-kubernetes-e2e-gke', 'pull-kubernetes-e2e-kops-aws', 'pull-kubernetes-integration', 'pull-kubernetes-kubemark-e2e-gce', 'pull-kubernetes-local-e2e', 'pull-kubernetes-node-e2e', and 'pull-kubernetes-typecheck'. A 'Submit Queue' section shows 'Pending' status. At the bottom, a green checkmark indicates 'This branch has no conflicts with the base branch'.

Review requested Show all reviewers
Review has been requested on this pull request. It is not required to merge. [Learn more.](#)

Some checks haven't completed yet Hide all checks
1 pending and 14 successful checks

Submit Queue *Pending* — PR does not have approved label. Details

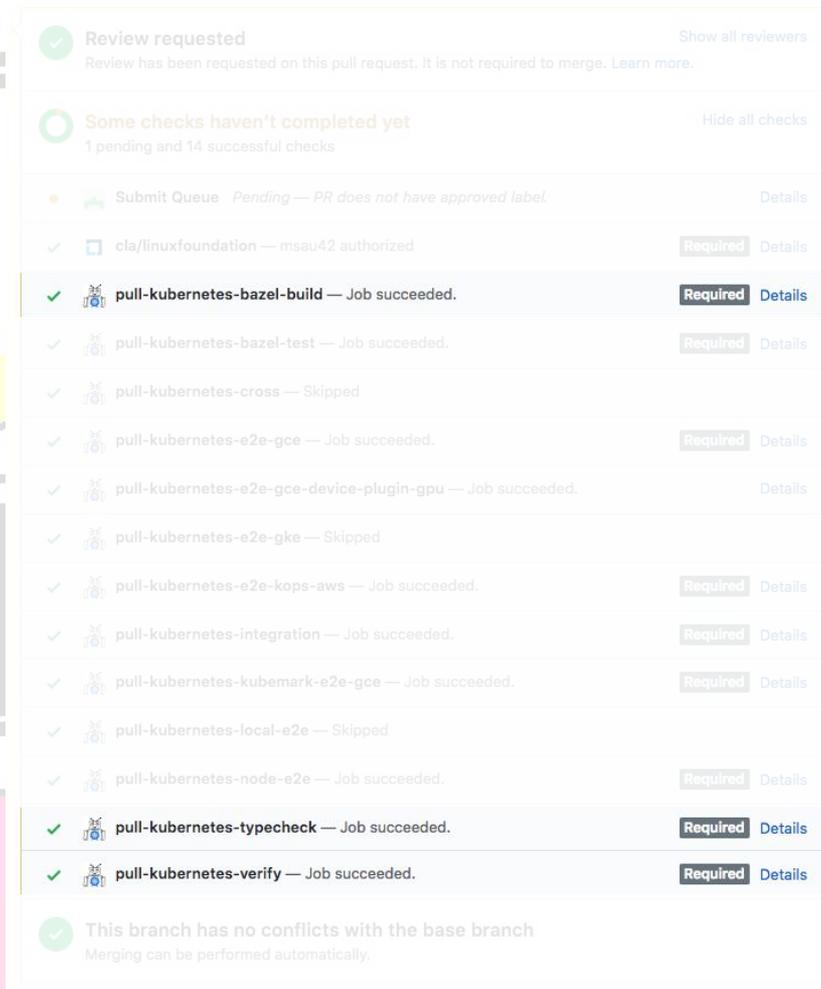
- cla/linuxfoundation — msau42 authorized Required Details
- pull-kubernetes-bazel-build — Job succeeded. Required Details
- pull-kubernetes-bazel-test — Job succeeded. Required Details
- pull-kubernetes-cross — Skipped
- pull-kubernetes-e2e-gce — Job succeeded. Required Details
- pull-kubernetes-e2e-gce-device-plugin-gpu — Job succeeded. Details
- pull-kubernetes-e2e-gke — Skipped
- pull-kubernetes-e2e-kops-aws — Job succeeded. Required Details
- pull-kubernetes-integration — Job succeeded. Required Details
- pull-kubernetes-kubemark-e2e-gce — Job succeeded. Required Details
- pull-kubernetes-local-e2e — Skipped
- pull-kubernetes-node-e2e — Job succeeded. Required Details
- pull-kubernetes-typecheck — Job succeeded. Required Details
- pull-kubernetes-verify** — Job succeeded. Required Details

This branch has no conflicts with the base branch
Merging can be performed automatically.

TEST ALL THINGS!

Does it follow coding conventions

Does it build



The screenshot displays a GitHub pull request status page. At the top, a green checkmark indicates 'Review requested' with a link to 'Show all reviewers'. Below this, a green circle with a white checkmark indicates 'Some checks haven't completed yet' with a link to 'Hide all checks' and a note that 1 check is pending and 14 are successful. A 'Submit Queue' section shows the pull request is 'Pending' and lacks an approved label. A list of checks follows, each with a green checkmark, a 'Required' label, and a 'Details' link. The checks include: 'cla/linuxfoundation' (authorized), 'pull-kubernetes-bazel-build' (Job succeeded), 'pull-kubernetes-bazel-test' (Job succeeded), 'pull-kubernetes-cross' (Skipped), 'pull-kubernetes-e2e-gce' (Job succeeded), 'pull-kubernetes-e2e-gce-device-plugin-gpu' (Job succeeded), 'pull-kubernetes-e2e-gke' (Skipped), 'pull-kubernetes-e2e-kops-aws' (Job succeeded), 'pull-kubernetes-integration' (Job succeeded), 'pull-kubernetes-kubemark-e2e-gce' (Job succeeded), 'pull-kubernetes-local-e2e' (Skipped), 'pull-kubernetes-node-e2e' (Job succeeded), 'pull-kubernetes-typecheck' (Job succeeded), and 'pull-kubernetes-verify' (Job succeeded). At the bottom, a green checkmark indicates 'This branch has no conflicts with the base branch' with a note that merging can be performed automatically.

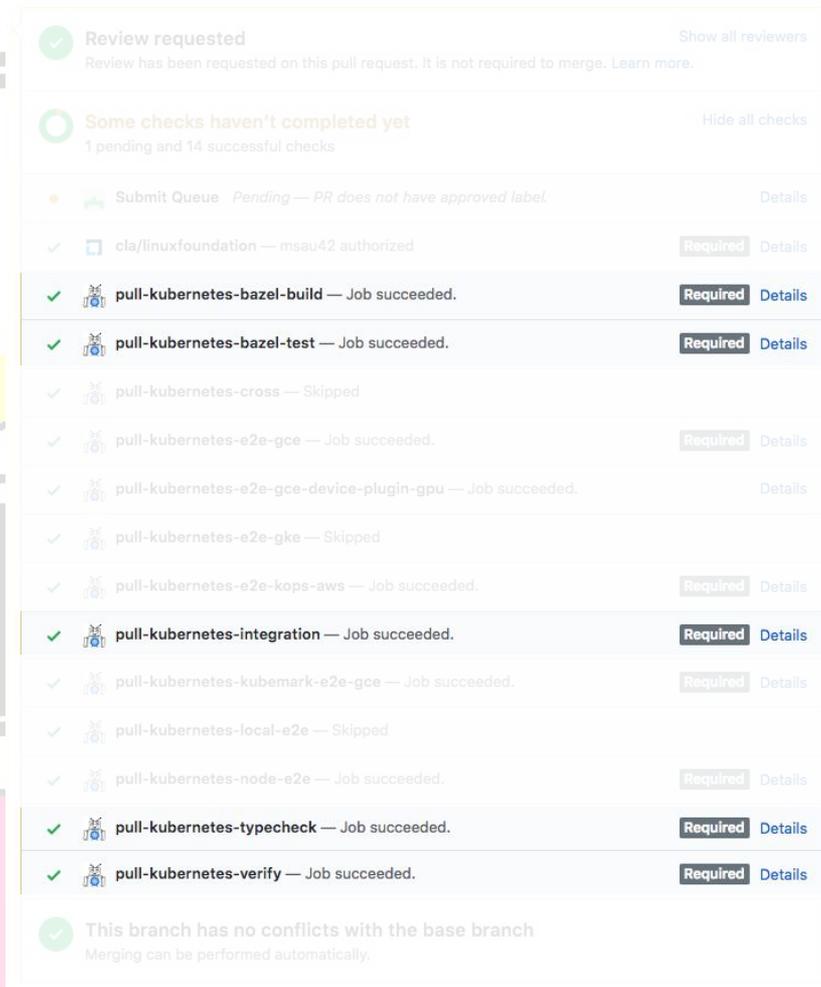
- Review requested [Show all reviewers](#)
Review has been requested on this pull request. It is not required to merge. [Learn more.](#)
- Some checks haven't completed yet [Hide all checks](#)
1 pending and 14 successful checks
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- cla/linuxfoundation — msau42 authorized [Required](#) [Details](#)
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- pull-kubernetes-bazel-test — Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-cross — Skipped
- pull-kubernetes-e2e-gce — Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-e2e-gce-device-plugin-gpu — Job succeeded. [Details](#)
- pull-kubernetes-e2e-gke — Skipped
- pull-kubernetes-e2e-kops-aws — Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-integration — Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-kubemark-e2e-gce — Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-local-e2e — Skipped
- pull-kubernetes-node-e2e — Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-typecheck — Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-verify — Job succeeded. [Required](#) [Details](#)
- This branch has no conflicts with the base branch
Merging can be performed automatically.

TEST ALL THINGS!

Does it follow coding conventions

Does it build

Does it pass unit and integration tests



The screenshot displays a pull request status page with the following items:

- Review requested** (Green checkmark): Review has been requested on this pull request. It is not required to merge. [Learn more.](#) Show all reviewers
- Some checks haven't completed yet** (Yellow circle): 1 pending and 14 successful checks. Hide all checks
- Submit Queue** (Orange dot): Pending — PR does not have approved label. Details
- cla/linuxfoundation** (Green checkmark): msau42 authorized. Required Details
- pull-kubernetes-bazel-build** (Green checkmark): Job succeeded. Required Details
- pull-kubernetes-bazel-test** (Green checkmark): Job succeeded. Required Details
- pull-kubernetes-cross** (Green checkmark): Skipped
- pull-kubernetes-e2e-gce** (Green checkmark): Job succeeded. Required Details
- pull-kubernetes-e2e-gce-device-plugin-gpu** (Green checkmark): Job succeeded. Details
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- pull-kubernetes-verify** (Green checkmark): Job succeeded. Required Details
- This branch has no conflicts with the base branch** (Green checkmark): Merging can be performed automatically.

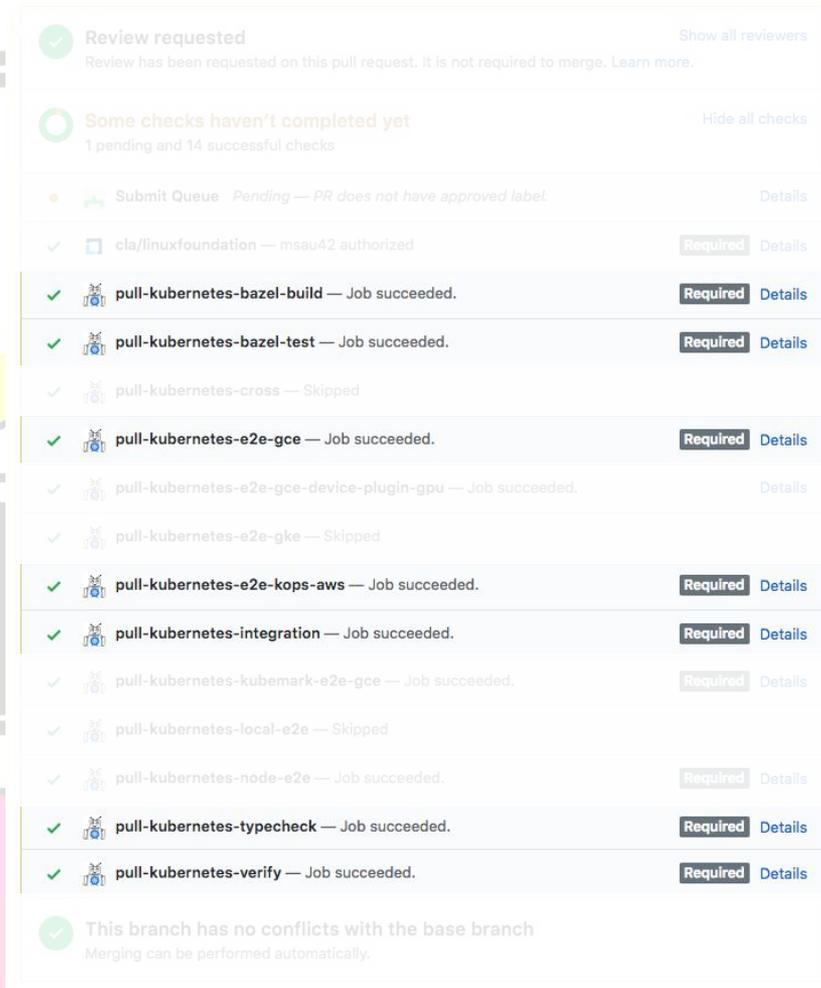
TEST ALL THINGS!

Does it follow coding conventions

Does it build

Does it pass unit and integration tests

Does it pass cluster e2e tests in GCE, AWS



The screenshot displays a pull request status page with the following items:

- Review requested** (Green checkmark): Review has been requested on this pull request. It is not required to merge. [Learn more.](#) [Show all reviewers](#)
- Some checks haven't completed yet** (Yellow circle): 1 pending and 14 successful checks. [Hide all checks](#)
- Submit Queue** (Yellow circle): Pending — PR does not have approved label. [Details](#)
- cla/linuxfoundation** (Green checkmark): msau42 authorized. **Required** [Details](#)
- pull-kubernetes-bazel-build** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-bazel-test** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-cross** (Green checkmark): Skipped
- pull-kubernetes-e2e-gce** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-e2e-gce-device-plugin-gpu** (Green checkmark): Job succeeded. [Details](#)
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- pull-kubernetes-kubemark-e2e-gce** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-local-e2e** (Green checkmark): Skipped
- pull-kubernetes-node-e2e** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-typecheck** (Green checkmark): Job succeeded. **Required** [Details](#)
- pull-kubernetes-verify** (Green checkmark): Job succeeded. **Required** [Details](#)
- This branch has no conflicts with the base branch** (Green checkmark): Merging can be performed automatically.

TEST ALL THINGS!

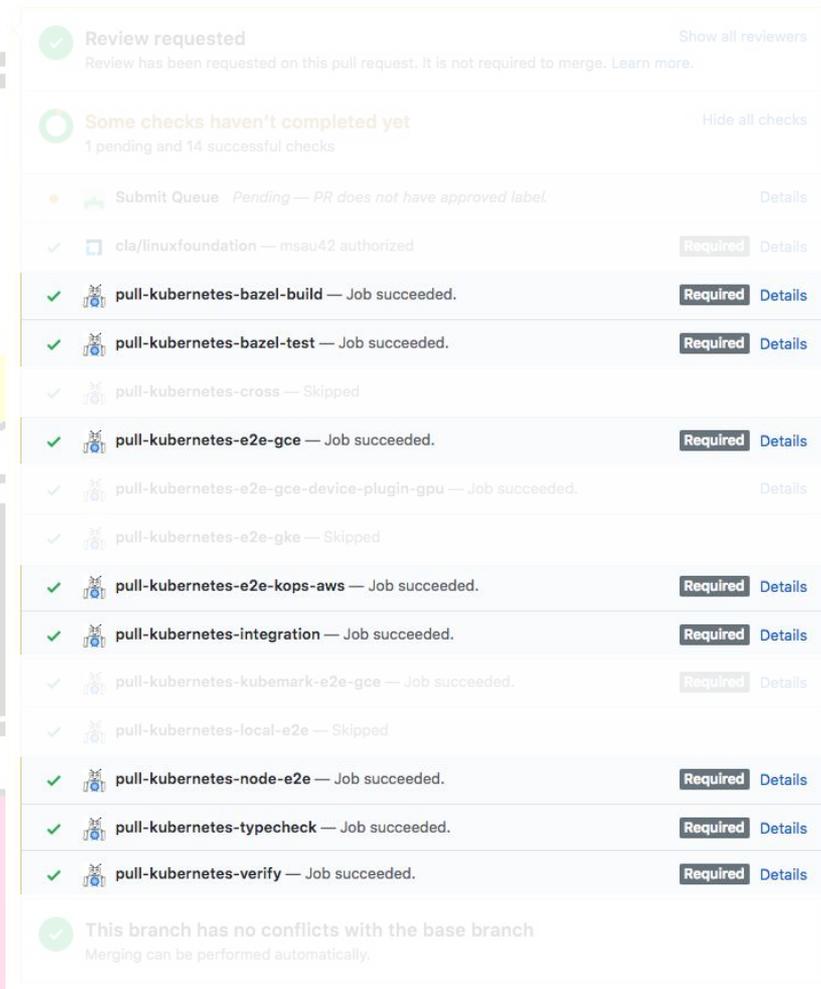
Does it follow coding conventions

Does it build

Does it pass unit and integration tests

Does it pass cluster e2e tests in GCE, AWS

Does it pass node e2e tests



The screenshot displays a GitHub pull request status page. At the top, a green checkmark indicates 'Review requested' with a link to 'Show all reviewers'. Below this, a green circle with a white checkmark indicates 'Some checks haven't completed yet' with a link to 'Hide all checks' and a note that '1 pending and 14 successful checks' are present. A 'Submit Queue' section shows the pull request is 'Pending' and lacks an approved label. A list of checks follows, each with a status icon (checkmark or square), a name, a result, and a 'Required' label. The checks include 'cla/linuxfoundation' (authorized), 'pull-kubernetes-bazel-build' (succeeded), 'pull-kubernetes-bazel-test' (succeeded), 'pull-kubernetes-cross' (skipped), 'pull-kubernetes-e2e-gce' (succeeded), 'pull-kubernetes-e2e-gce-device-plugin-gpu' (succeeded), 'pull-kubernetes-e2e-gke' (skipped), 'pull-kubernetes-e2e-kops-aws' (succeeded), 'pull-kubernetes-integration' (succeeded), 'pull-kubernetes-kubemark-e2e-gce' (succeeded), 'pull-kubernetes-local-e2e' (skipped), 'pull-kubernetes-node-e2e' (succeeded), 'pull-kubernetes-typecheck' (succeeded), and 'pull-kubernetes-verify' (succeeded). At the bottom, a green checkmark indicates 'This branch has no conflicts with the base branch' with a note that merging can be performed automatically.

✓	Review requested	Show all reviewers
	Review has been requested on this pull request. It is not required to merge. Learn more.	
○	Some checks haven't completed yet	Hide all checks
	1 pending and 14 successful checks	
🚧	Submit Queue Pending — PR does not have approved label.	Details
✓	<input type="checkbox"/> cla/linuxfoundation — msau42 authorized	Required Details
✓	pull-kubernetes-bazel-build — Job succeeded.	Required Details
✓	pull-kubernetes-bazel-test — Job succeeded.	Required Details
✓	pull-kubernetes-cross — Skipped	
✓	pull-kubernetes-e2e-gce — Job succeeded.	Required Details
✓	pull-kubernetes-e2e-gce-device-plugin-gpu — Job succeeded.	Details
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✓	pull-kubernetes-verify — Job succeeded.	Required Details
✓	This branch has no conflicts with the base branch	
	Merging can be performed automatically.	

TEST ALL THINGS!

Does it follow coding conventions

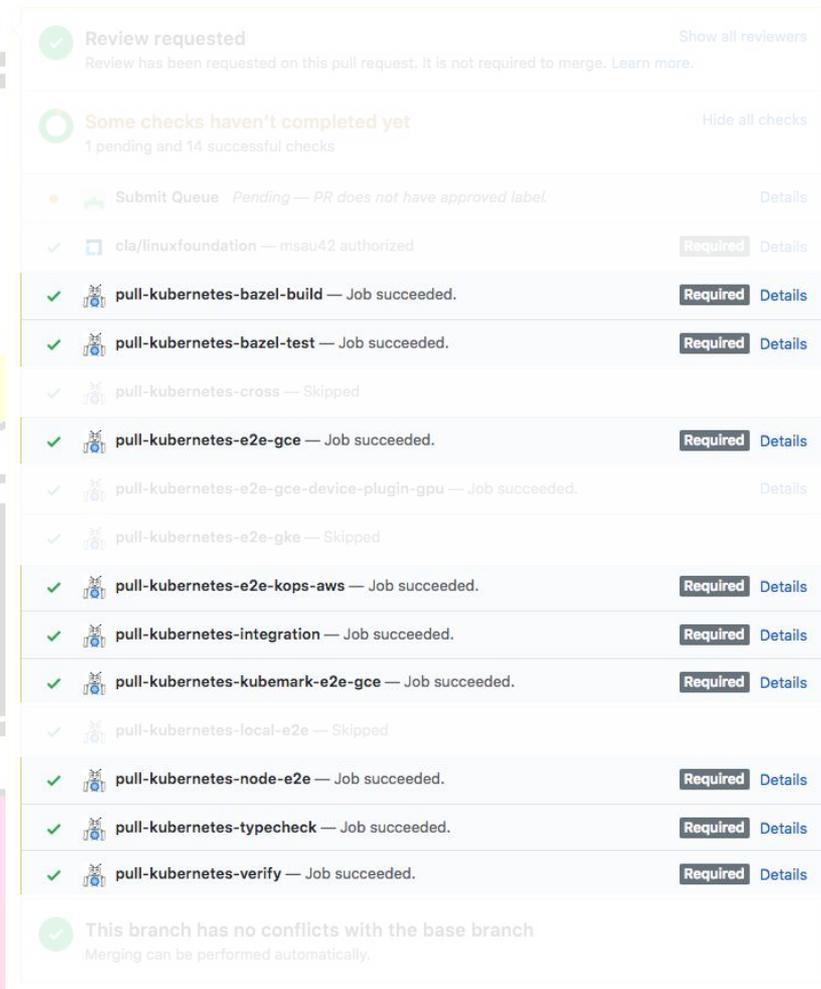
Does it build

Does it pass unit and integration tests

Does it pass cluster e2e tests in GCE, AWS

Does it pass node e2e tests

Does it pass simulated perf tests



The screenshot displays a pull request status page with the following items:

- Review requested** (Green checkmark): Review has been requested on this pull request. It is not required to merge. [Learn more.](#) [Show all reviewers](#)
- Some checks haven't completed yet** (Yellow circle): 1 pending and 14 successful checks. [Hide all checks](#)
- Submit Queue** (Yellow circle): Pending — PR does not have approved label. [Details](#)
- cla/linuxfoundation — msau42 authorized** (Green checkmark): [Required](#) [Details](#)
- pull-kubernetes-bazel-build** (Green checkmark): Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-bazel-test** (Green checkmark): Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-cross** (Green checkmark): Skipped
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- pull-kubernetes-e2e-gce-device-plugin-gpu** (Green checkmark): Job succeeded. [Details](#)
- pull-kubernetes-e2e-gke** (Green checkmark): Skipped
- pull-kubernetes-e2e-kops-aws** (Green checkmark): Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-integration** (Green checkmark): Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-kubemark-e2e-gce** (Green checkmark): Job succeeded. [Required](#) [Details](#)
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- pull-kubernetes-typecheck** (Green checkmark): Job succeeded. [Required](#) [Details](#)
- pull-kubernetes-verify** (Green checkmark): Job succeeded. [Required](#) [Details](#)
- This branch has no conflicts with the base branch** (Green checkmark): Merging can be performed automatically.

TEST ALL THINGS!

Does it follow coding conventions

Does it build

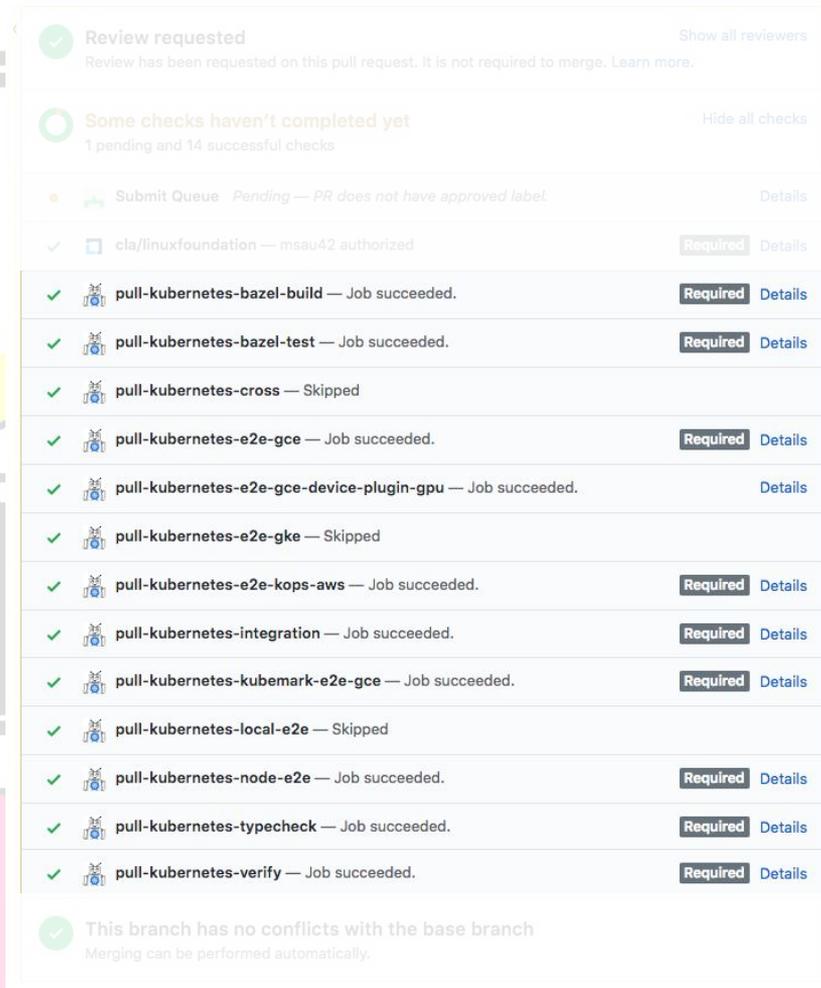
Does it pass unit and integration tests

Does it pass cluster e2e tests in GCE, AWS

Does it pass node e2e tests

Does it pass simulated perf tests

Optional tests

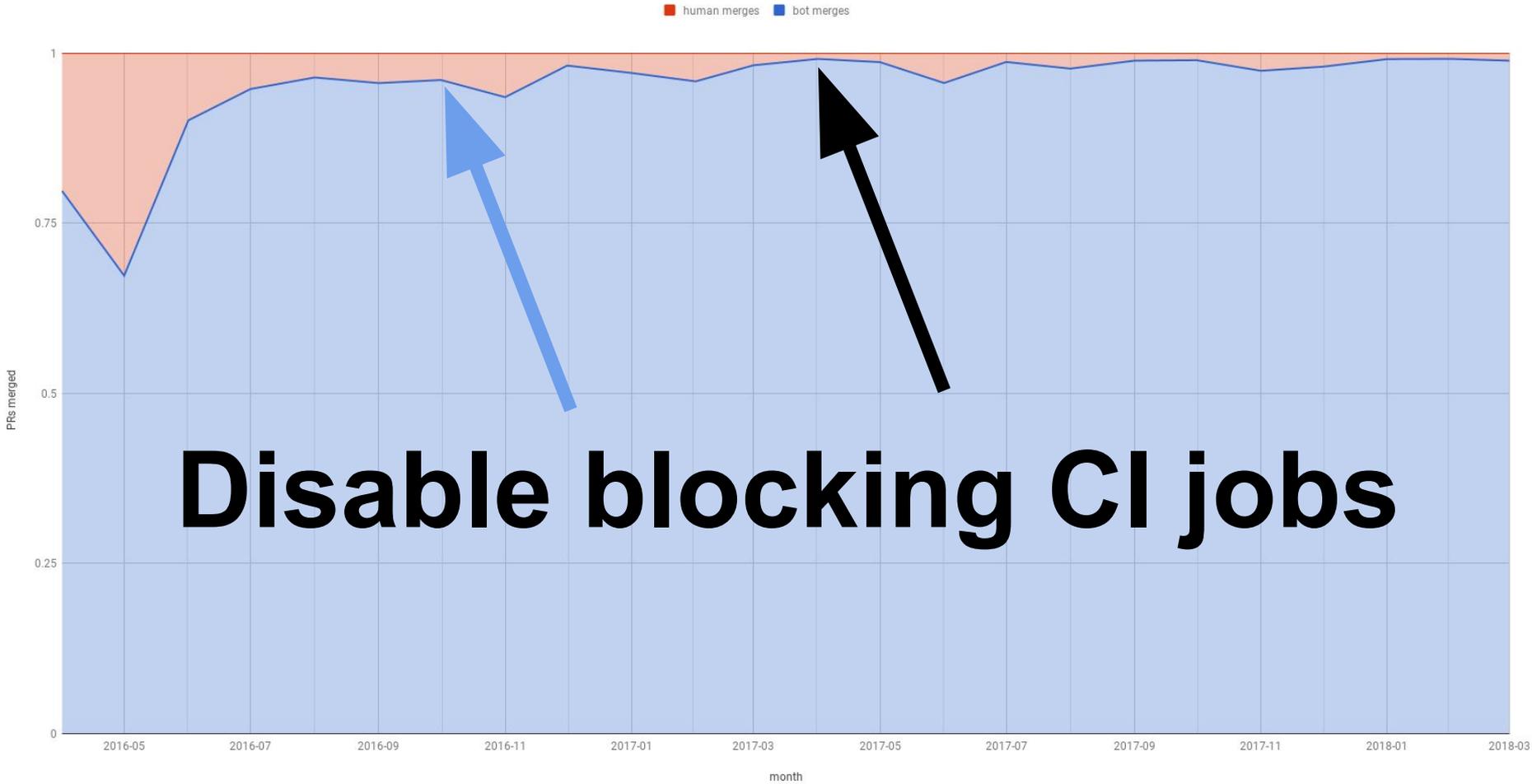


The screenshot shows a GitHub pull request interface with the following elements:

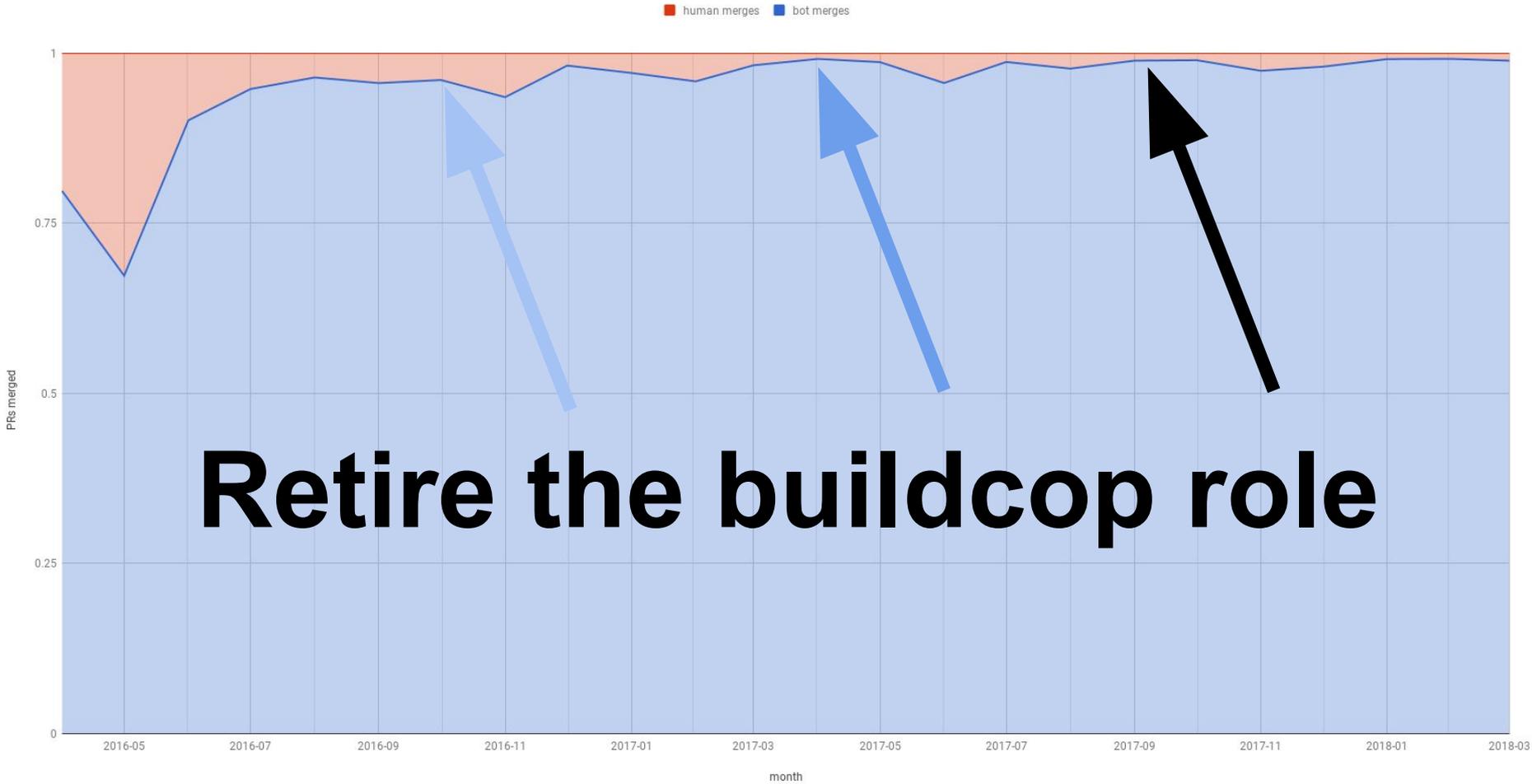
- Review requested:** Review has been requested on this pull request. It is not required to merge. [Learn more.](#) [Show all reviewers](#)
- Some checks haven't completed yet:** 1 pending and 14 successful checks. [Hide all checks](#)
- Submit Queue:** Pending — PR does not have approved label. [Details](#)
- cla/linuxfoundation — msau42 authorized:** Required [Details](#)
- pull-kubernetes-bazel-build — Job succeeded.** Required [Details](#)
- pull-kubernetes-bazel-test — Job succeeded.** Required [Details](#)
- pull-kubernetes-cross — Skipped**
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- pull-kubernetes-e2e-gke — Skipped**
- pull-kubernetes-e2e-kops-aws — Job succeeded.** Required [Details](#)
- pull-kubernetes-integration — Job succeeded.** Required [Details](#)
- pull-kubernetes-kubemark-e2e-gce — Job succeeded.** Required [Details](#)
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- pull-kubernetes-node-e2e — Job succeeded.** Required [Details](#)
- pull-kubernetes-typecheck — Job succeeded.** Required [Details](#)
- pull-kubernetes-verify — Job succeeded.** Required [Details](#)
- This branch has no conflicts with the base branch:** Merging can be performed automatically.



Source: git log



Disable blocking CI jobs



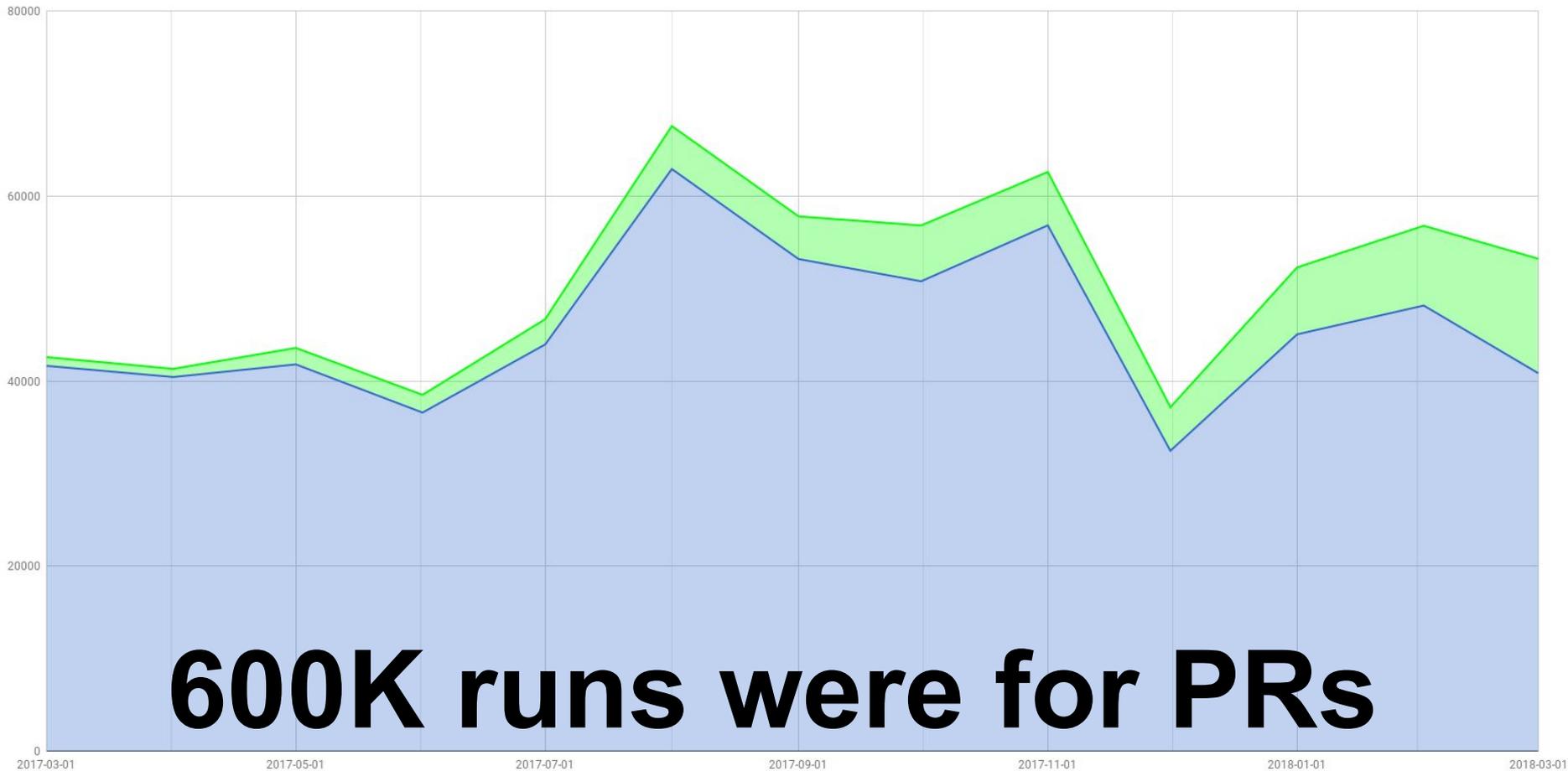
Retire the buildcop role



4.3 million job runs

March 2017 - March 2018

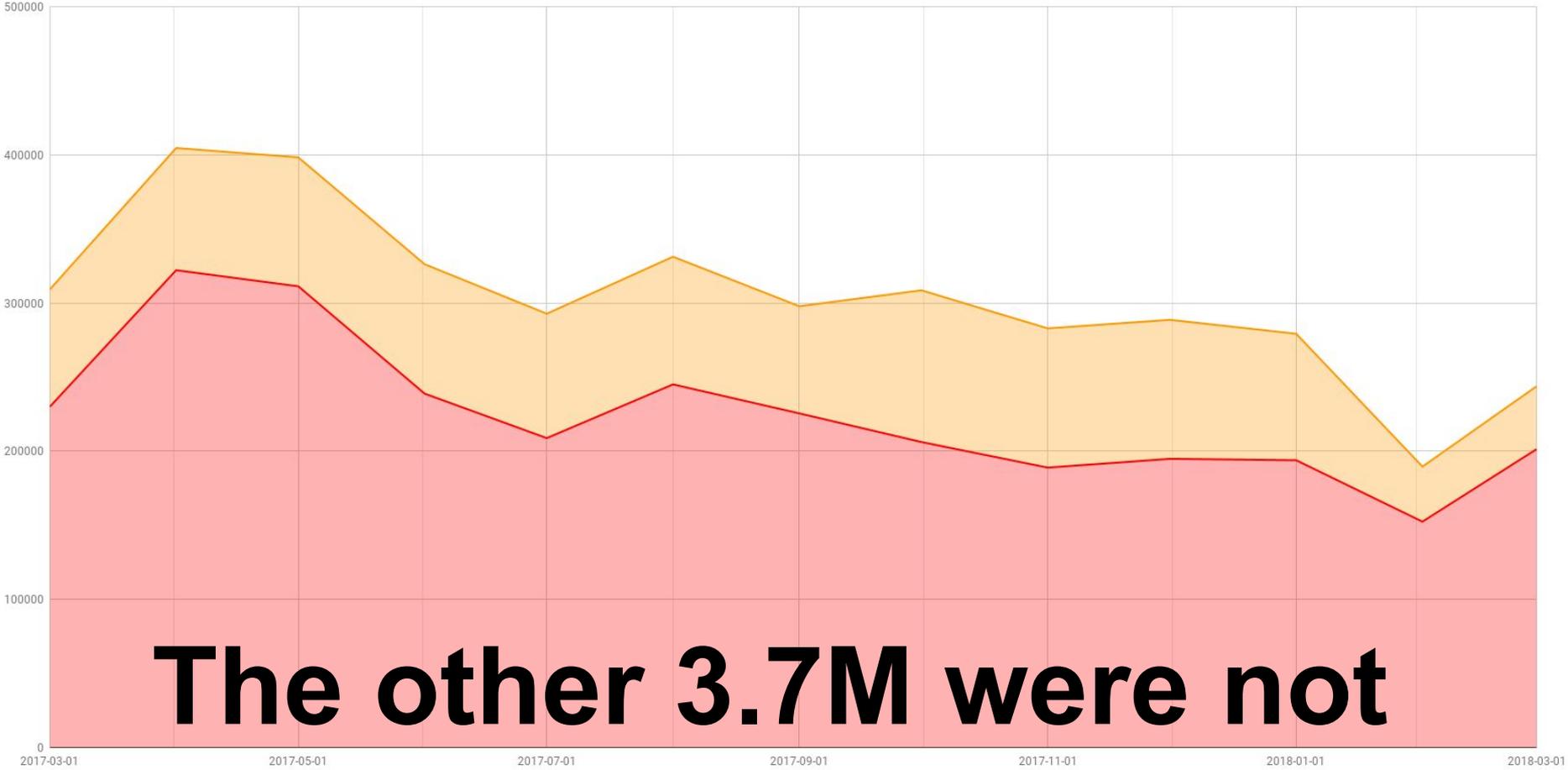
other presubmit runs k/k presubmit runs



600K runs were for PRs

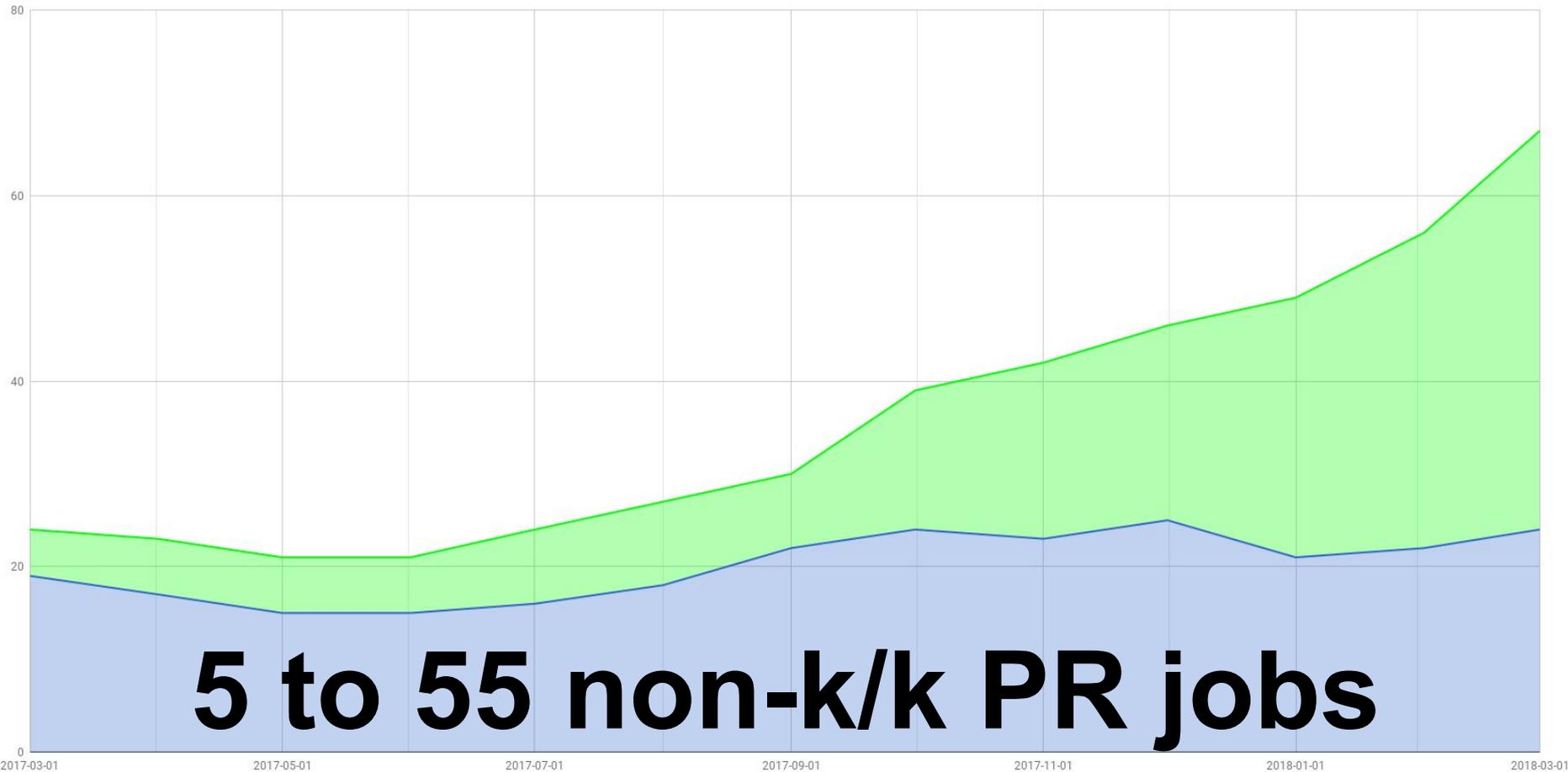
Source: BigQuery

other postsubmit runs k/k postsubmit runs



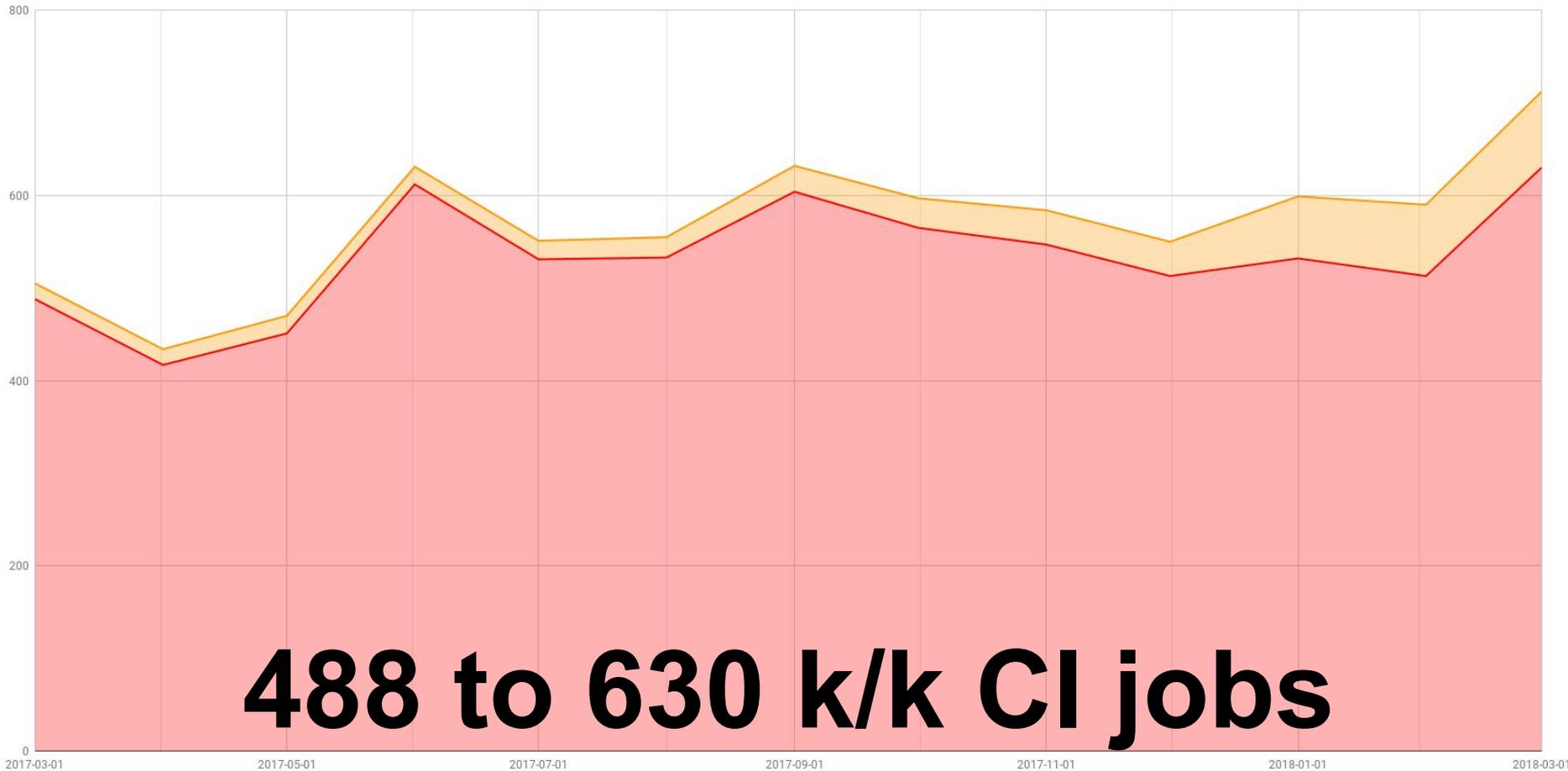
The other 3.7M were not

other presubmits k/k presubmits



5 to 55 non-k/k PR jobs

other postsubmits k/k postsubmits



488 to 630 k/k CI jobs

Source: BigQuery

PR Workflow

PR author must have signed CLA

PR must pass tests

PR must be approved

PR must be mergeable

Merge commit must pass tests

 **Review requested** Show all reviewers
Review has been requested on this pull request. It is not required to merge. [Learn more.](#)

 **Some checks haven't completed yet** Hide all checks
1 pending and 14 successful checks

  **Submit Queue** *Pending* — *PR does not have approved label.* Details

	 cla/linuxfoundation — msau42 authorized Required Details
	 pull-kubernetes-bazel-build — Job succeeded. Required Details
	 pull-kubernetes-bazel-test — Job succeeded. Required Details
	 pull-kubernetes-cross — Skipped
	 pull-kubernetes-e2e-gce — Job succeeded. Required Details
	 pull-kubernetes-e2e-gce-device-plugin-gpu — Job succeeded. Details
	 pull-kubernetes-e2e-gke — Skipped
	 pull-kubernetes-e2e-kops-aws — Job succeeded. Required Details
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	 pull-kubernetes-typecheck — Job succeeded. Required Details
	 pull-kubernetes-verify — Job succeeded. Required Details

 **This branch has no conflicts with the base branch**
Merging can be performed automatically.

Code Review

I need someone to review this PR

I need the right person to review this PR

How do I find out who the right person is

How do I notify the right person to review my code

How do I know when the right people have reviewed my code

Code Review - What we tried

Wait for someone to review

Use GitHub notifications to ask for reviews

Assign PRs to ask for reviews

Use GitHub CODEOWNERS to assign

Only accept reviews from people with repo write access



Code

Issues 99

Pull requests 119

Projects 0

Insights

Settings

Branch: master community / contributors / guide /

Create new file Upload files Find file History

k8s-ci-robot Merge pull request #1970 from spzala/triagelabels Latest commit 668e18c 12 days ago

..		
OWNERS	Add some labels to directory OWNERS files	3 months ago
README.md	update issue triage doc url	21 days ago
coding-conventions.md	Change 'Mac OS X' and OS X' to 'macOS'	26 days ago
community-expectations.md	Fix a typo	26 days ago
contributor-cheatsheet.md	Add a link to @dims profile	26 days ago
git_workflow.png	moved Github workflow and diagram to contributors/guide folder and re...	4 months ago
github-workflow.md	Merge pull request #1761 from guineveresaenger/pullrequests	2 months ago
issue-triage.md	Describe new labels in triage guidelines	15 days ago
owners.md	Move owners file to the contributor guide	3 months ago
pull-requests.md	Change k8s-merge-robot to k8s-ci-robot	2 months ago
release-notes.md	Release Notes: Title added; minor cleanup. Faster reviews tombstone a...	2 months ago
scalability-good-practices.md	Hate it when I miss a tiny error.	a month ago

README.md

Kubernetes Contributor Guide

Disclaimer

OWNERS

reviewers:

- castrojo
- guineveresaenger
- idvoretzkyi
- tpepper

approvers:

- castrojo
- parisrittman

labels:

- sig/contributor-experience
- area/contributor-guide

OWNERS

reviewers:

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approvers:

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labels:

- sig/contributor-experience
- area/contributor-guide

Qualitative

“is it written well”

OWNERS

reviewers:

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- idvoretzkyi
- tpepper

approvers:

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- parisrittman

labels:

- sig/contributor-experience
- area/contributor-guide

Holistic

“is it doing the right thing”

OWNERS

reviewers:

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- idvoretzkyi
- tpepper

approvers:

- castrojo
- parisrittman

labels:

- sig/contributor-experience
- area/contributor-guide

Triage

Code Review - OWNERS

Use OWNERS files in the tree to apply to siblings and children (filtered by regex)

Reviewers and approvers must be org members or collaborators

Request review from those closest to the code, accept from others (/lgtm)

Require approval from those closest to the code (/approve)

<https://git.k8s.io/community/contributors/guide/owners.md>

GitHub Labels

<https://go.k8s.io/github-labels>

Labels



approved

area/platform/gce

cherrypick-candidate

cncf-cla: yes

kind/bug

kind/upgrade-test-failure

lgtn

priority/critical-urgent

priority/failing-test

release-note-none

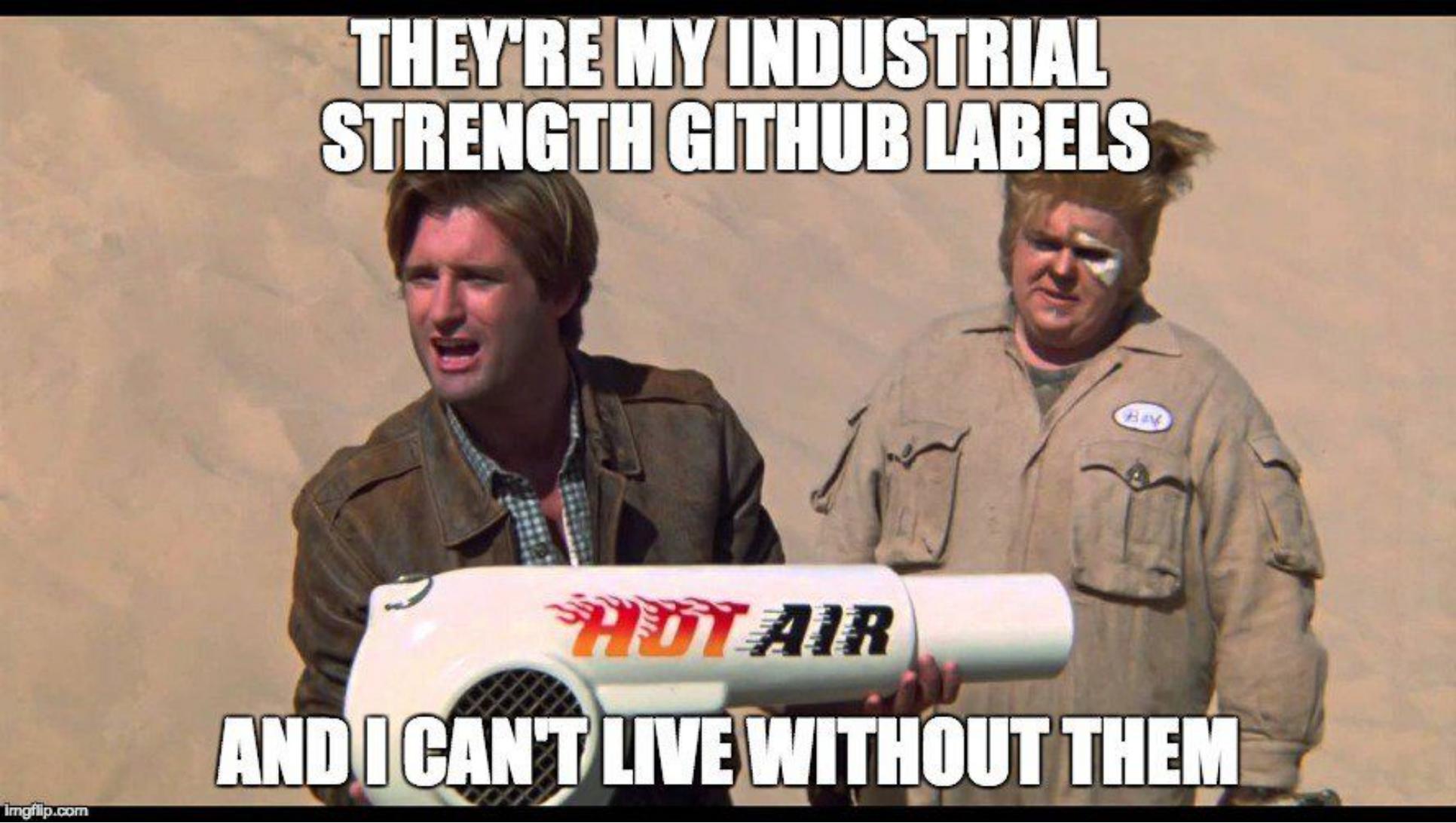
sig/cluster-lifecycle

size/S

status/approved-for-milesto...

status/in-progress

**THEY'RE MY INDUSTRIAL
STRENGTH GITHUB LABELS**



AND I CAN'T LIVE WITHOUT THEM

Labels that apply to only PRs

Name	Description	Added By	Prow Plugin
<code>approved</code>	Indicates a PR has been approved by an approver from all required OWNERS files.	approvers	<code>approve</code>
<code>cherrypick-approved</code>	Indicates a cherrypick PR into a release branch has been approved by the release branch manager. Consumed by the kubernetes/kubernetes cherrypick-queue.	humans	
<code>cherrypick-candidate</code>	Denotes a PR to master as a candidate for cherry picking into a release branch.	humans	
<code>cla: human-approved</code>	REMOVING. This will be deleted after 2018-04-16 00:00:00 +0000 UTC This is a holdover from when we had difficulties getting either the google or cncf CLA bots to behave. It can only be manually applied and is consumed by the submit-queue. It has seen very little use lately.	humans	
<code>cncf-cla: no</code>	Indicates the PR's author has not signed the CNCF CLA according to the CNCF CLA bot.	prow	<code>cla</code>
<code>cncf-cla: yes</code>	Indicates the PR's author has signed the CNCF CLA according to the CNCF CLA bot.	prow	<code>cla</code>
<code>do-not-merge</code>	DEPRECATED. Indicates that a PR should not be merged. The label can only be manually applied/removed. Please use do-not-merge/hold instead.	humans	
<code>do-not-merge/blocked-paths</code>	Indicates that a PR should not be merged because it touches files in blocked paths.	prow	<code>blockade</code>
<code>do-not-merge/cherrypick-not-present</code>	Indicates that a PR should not be merged into a release branch because the cherrypick-approved label is not present	mungegithub cherrypick-label-unapproved	

GitHub Labels

These denote merge requirements

Prow approve plugin: /approve -> approved

Prow lgtm plugin: /lgtm -> lgtm

Prow cla plugin: CNCF CLA signed -> cncf-cla: yes

Labels



approved

area/platform/gce

cherrypick-candidate

cncf-cla: yes

kind/bug

kind/upgrade-test-failure

lgtm

priority/critical-urgent

priority/failing-test

release-note-none

sig/cluster-lifecycle

size/S

status/approved-for-milesto...

status/in-progress

GitHub Labels

These are for triage / categorization

Can be auto-applied via OWNERS files

Prow label plugin: /area, /priority, /kind, /sig

Prow size plugin: auto-determine size

Labels



area/platform/gce

cherrypick-candidate

cncf-cla: yes

kind/bug

kind/upgrade-test-failure

lgtn

priority/critical-urgent

priority/failing-test

release-note-none

sig/cluster-lifecycle

size/S

status/approved-for-milesto...

status/in-progress

GitHub Labels

These help the release team track ongoing work

Being deprecated: cherrypick-candidate

Prow release note plugin: release-note-none

Prow status plugin: /status

Labels



approved

area/platform/gce

cherrypick-candidate

cncf-cla: yes

kind/bug

kind/upgrade-test-failure

lgtn

priority/critical-urgent

priority/failing-test

release-note-none

sig/cluster-lifecycle

size/S

status/approved-for-milesto...

status/in-progress

GitHub Labels

labels:

- color: 00ff00
name: lgtn
- color: ff0000
name: priority/P0
previously:
 - name: P0
- name: dead-label
deleteAfter:2017-01-01T13:00:00Z

https://git.k8s.io/test-infra/label_sync

PR Workflow

PR author must have signed CLA

PR must pass tests

PR must be approved

PR must be mergeable

Merge commit must pass tests

 **Review requested** Show all reviewers
Review has been requested on this pull request. It is not required to merge. [Learn more.](#)

 **Some checks haven't completed yet** Hide all checks
1 pending and 14 successful checks

  **Submit Queue** *Pending* — *PR does not have approved label.* Details

	 cla/linuxfoundation — msau42 authorized Required Details
	 pull-kubernetes-bazel-build — Job succeeded. Required Details
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	 pull-kubernetes-cross — Skipped
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	 pull-kubernetes-verify — Job succeeded. Required Details

 **This branch has no conflicts with the base branch**
Merging can be performed automatically.

A. always

A always

B be

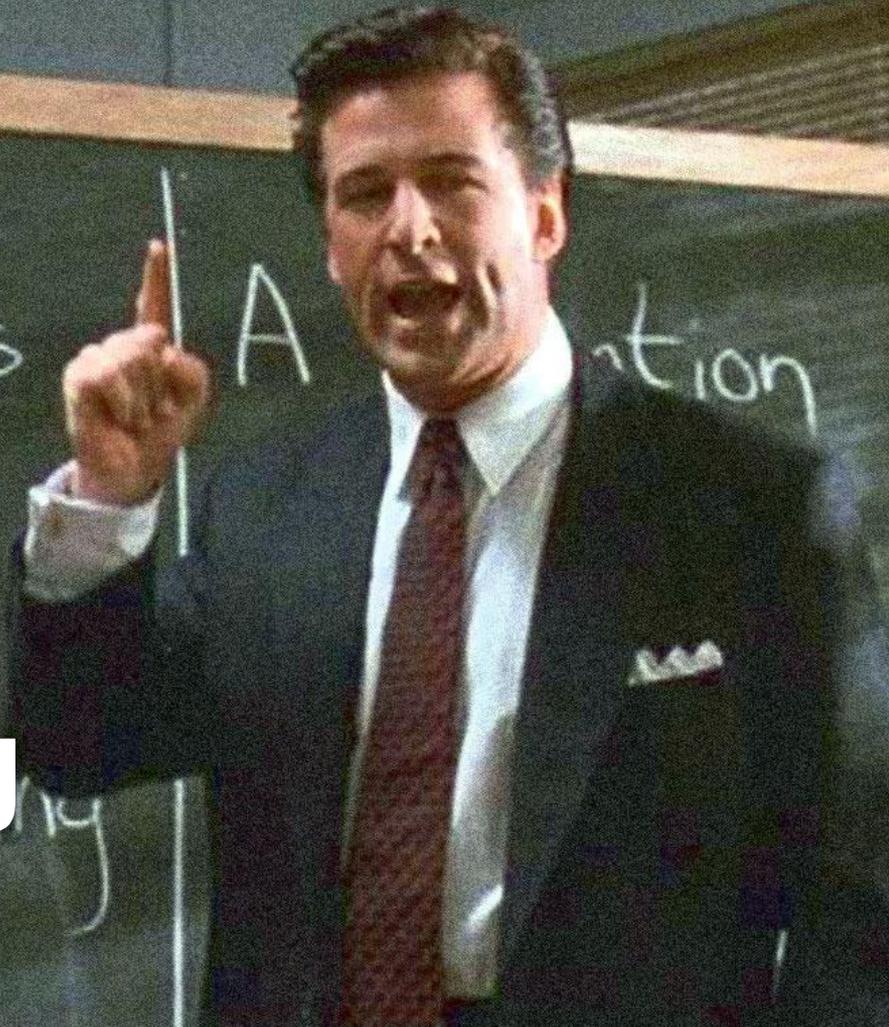
C

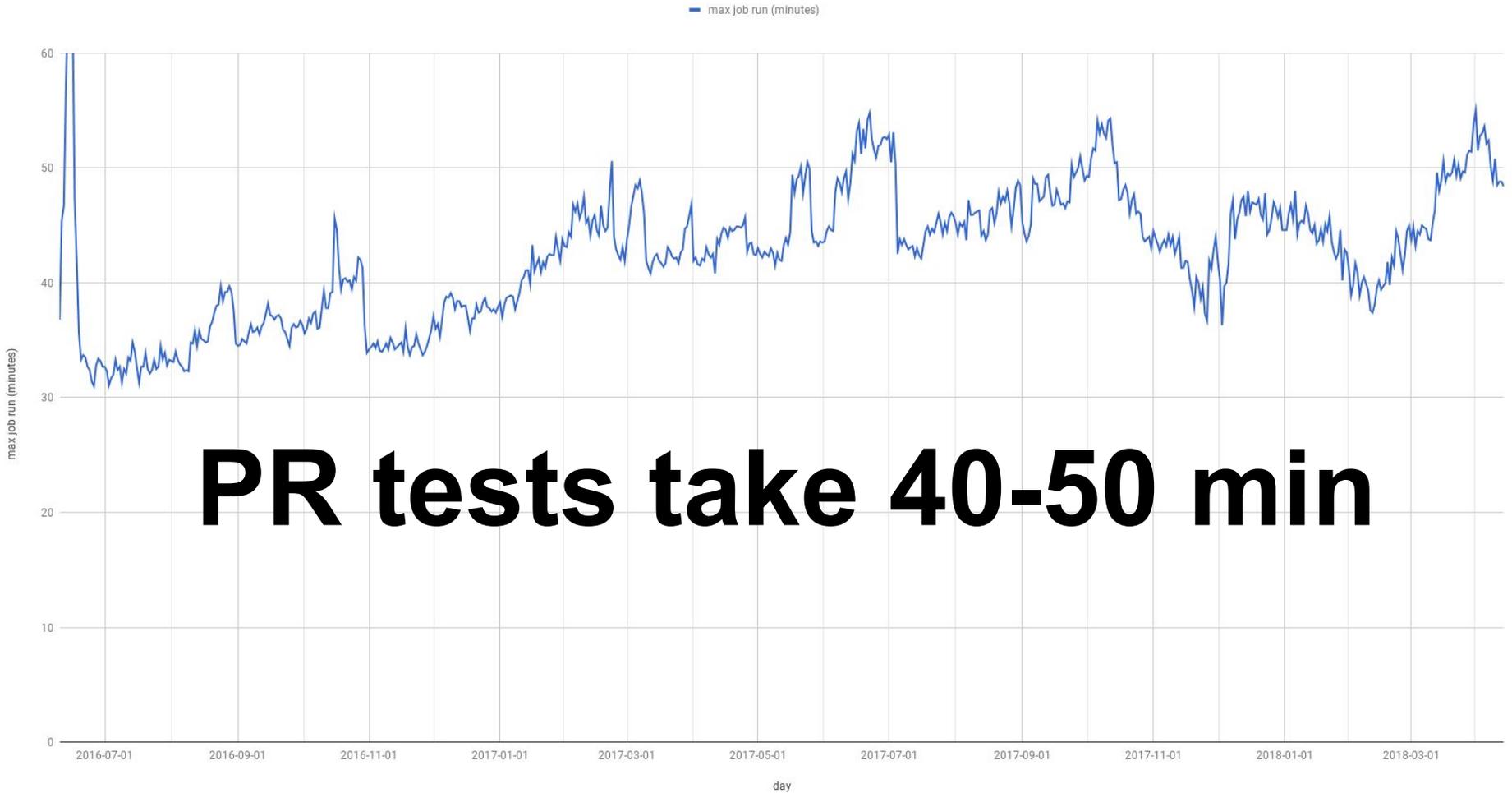
|

A

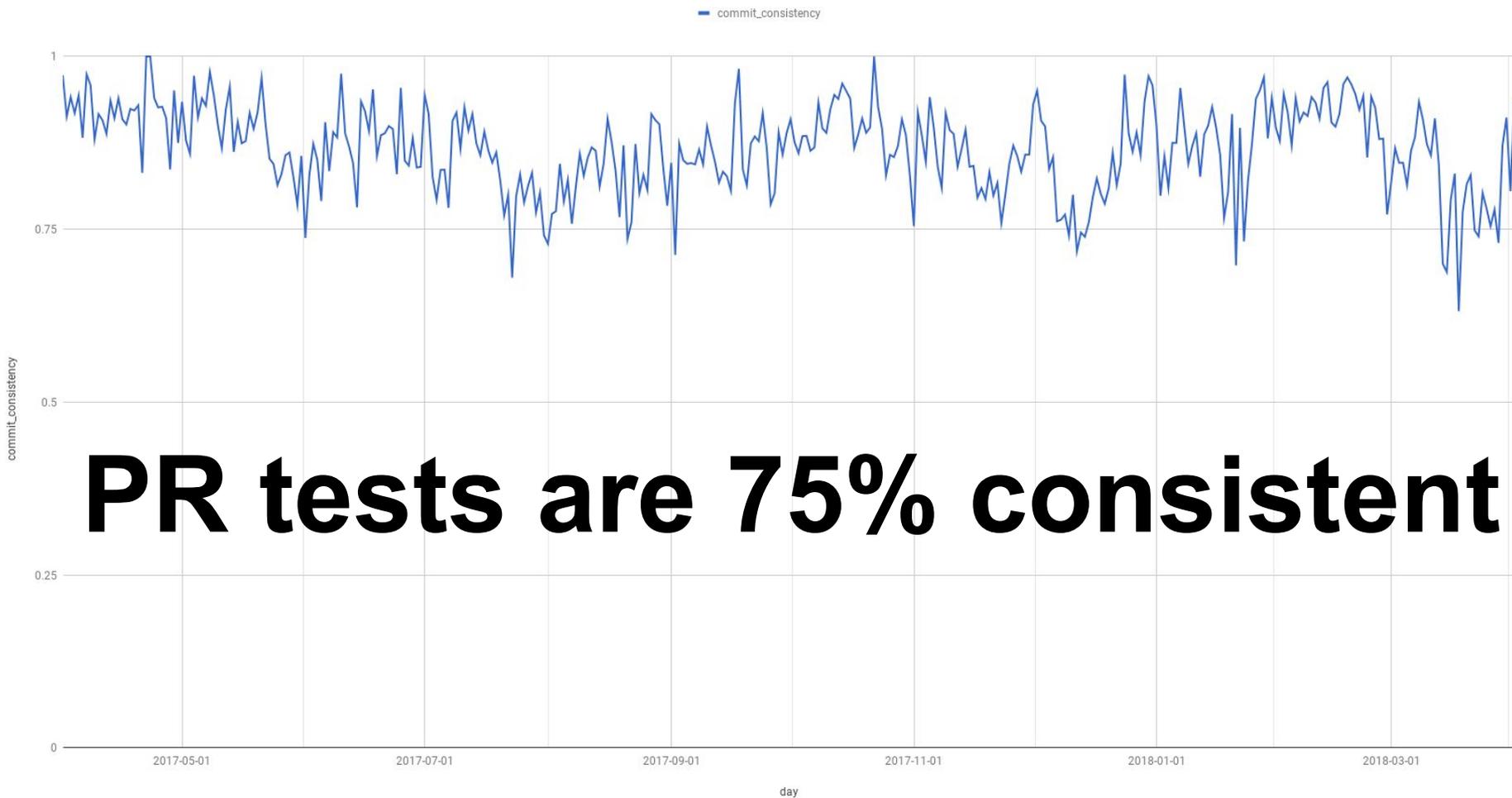
ntion

Merging

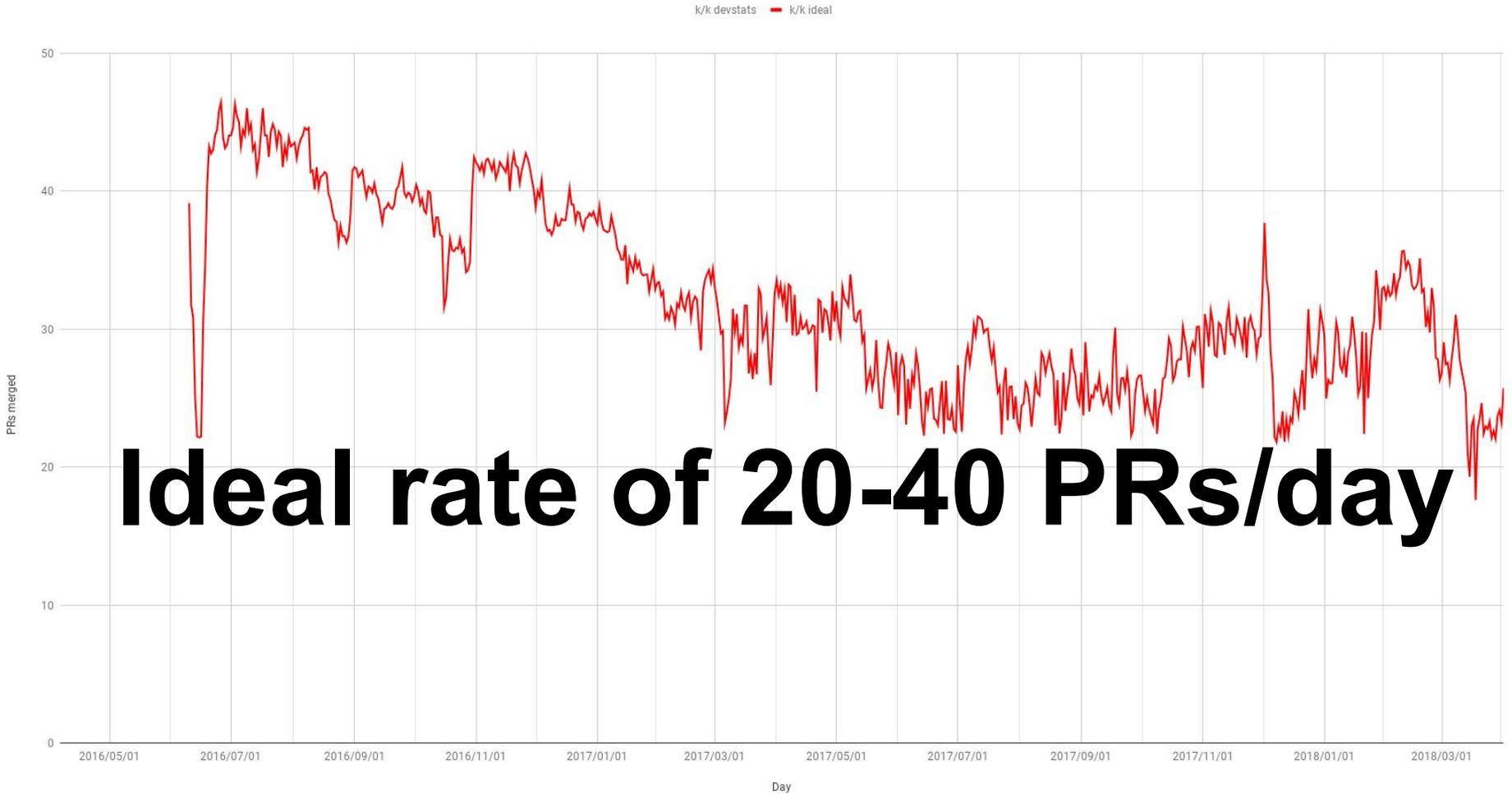




PR tests take 40-50 min

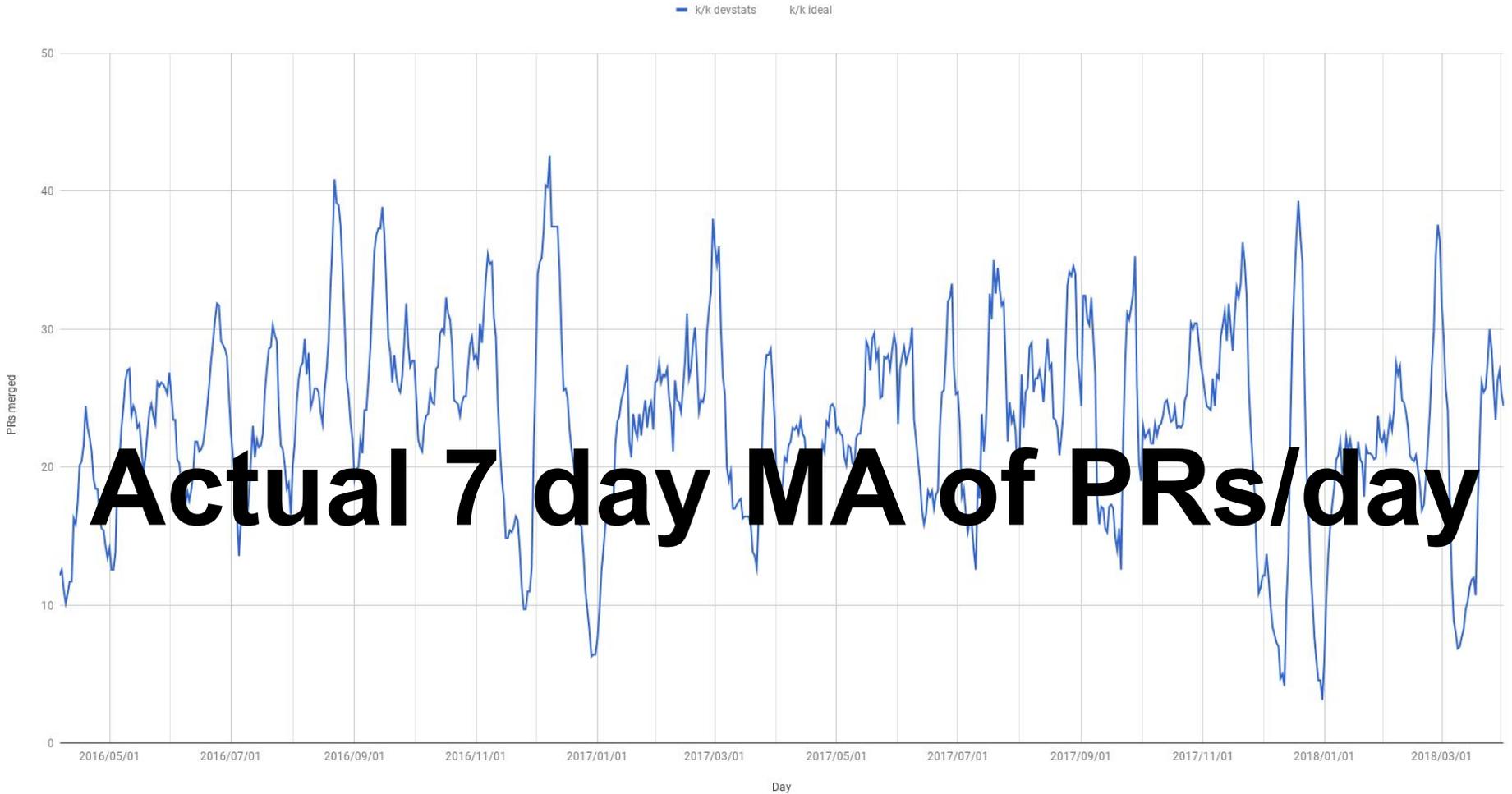


Source: BigQuery k8s-gubernator.build

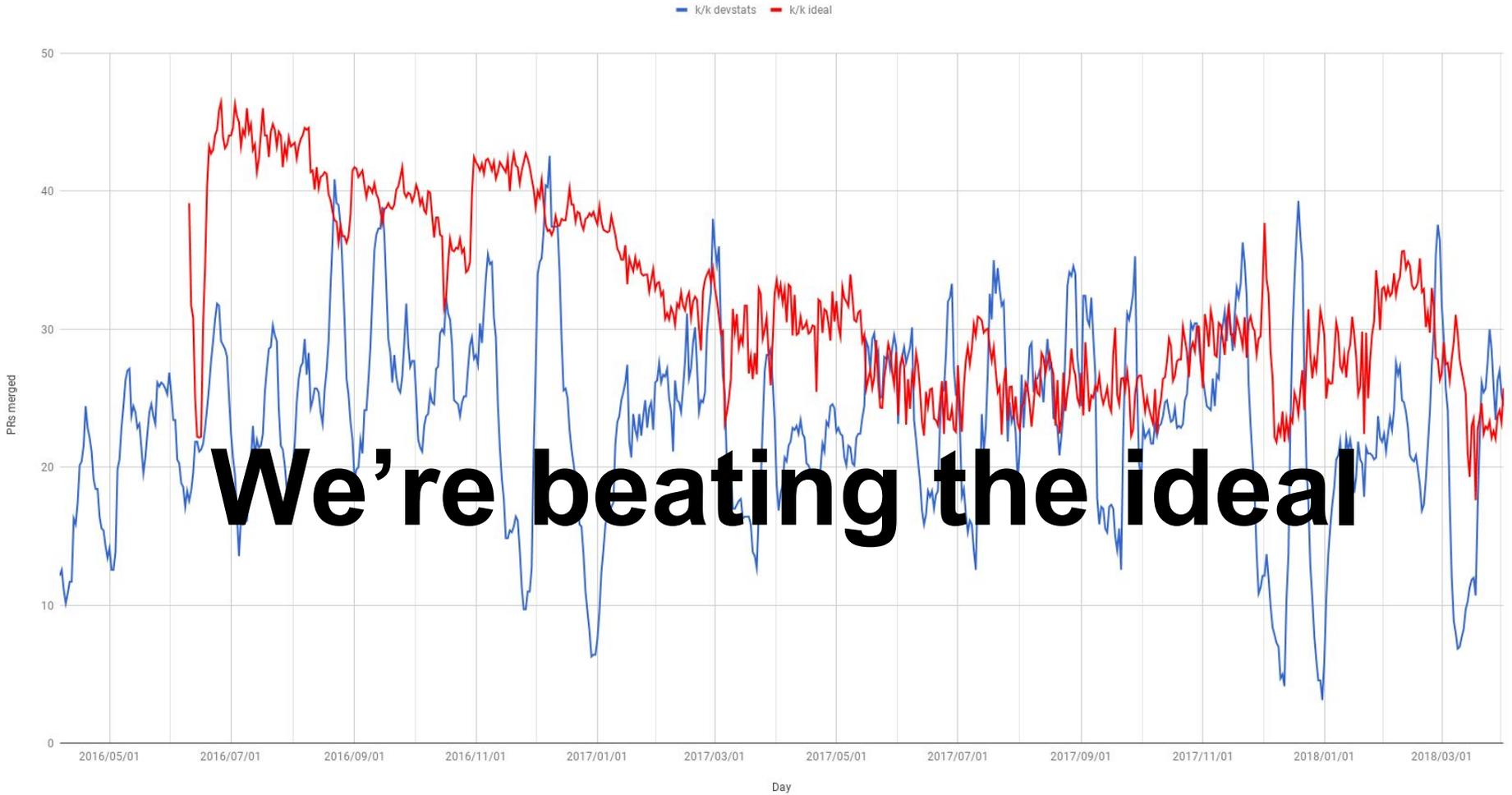


Ideal rate of 20-40 PRs/day

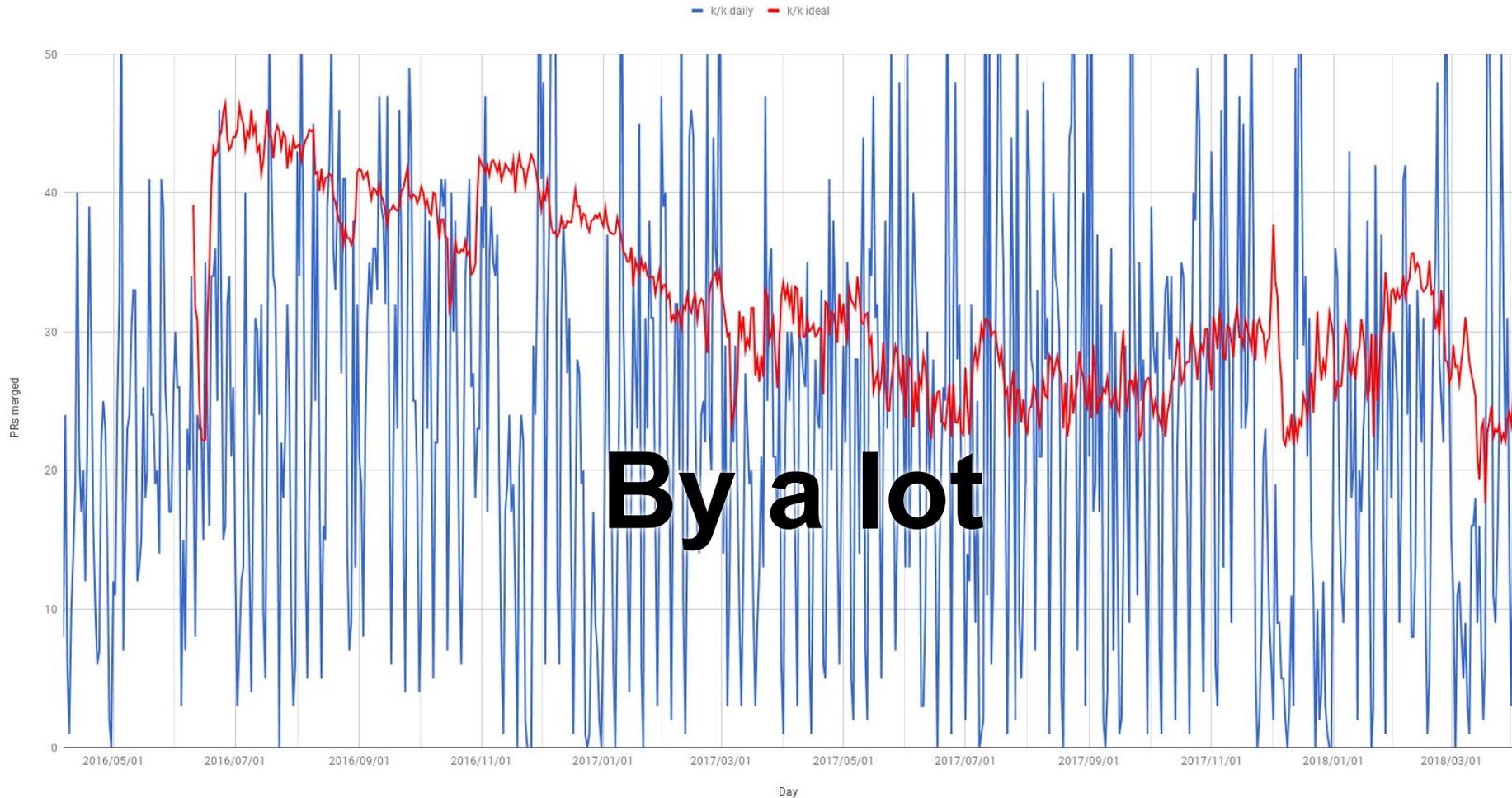
Source: $PR\ rate = P(success) * day / E(duration)$
 $E(duration) = P(success) * pass_duration + P(1 - success) * fail_duration$



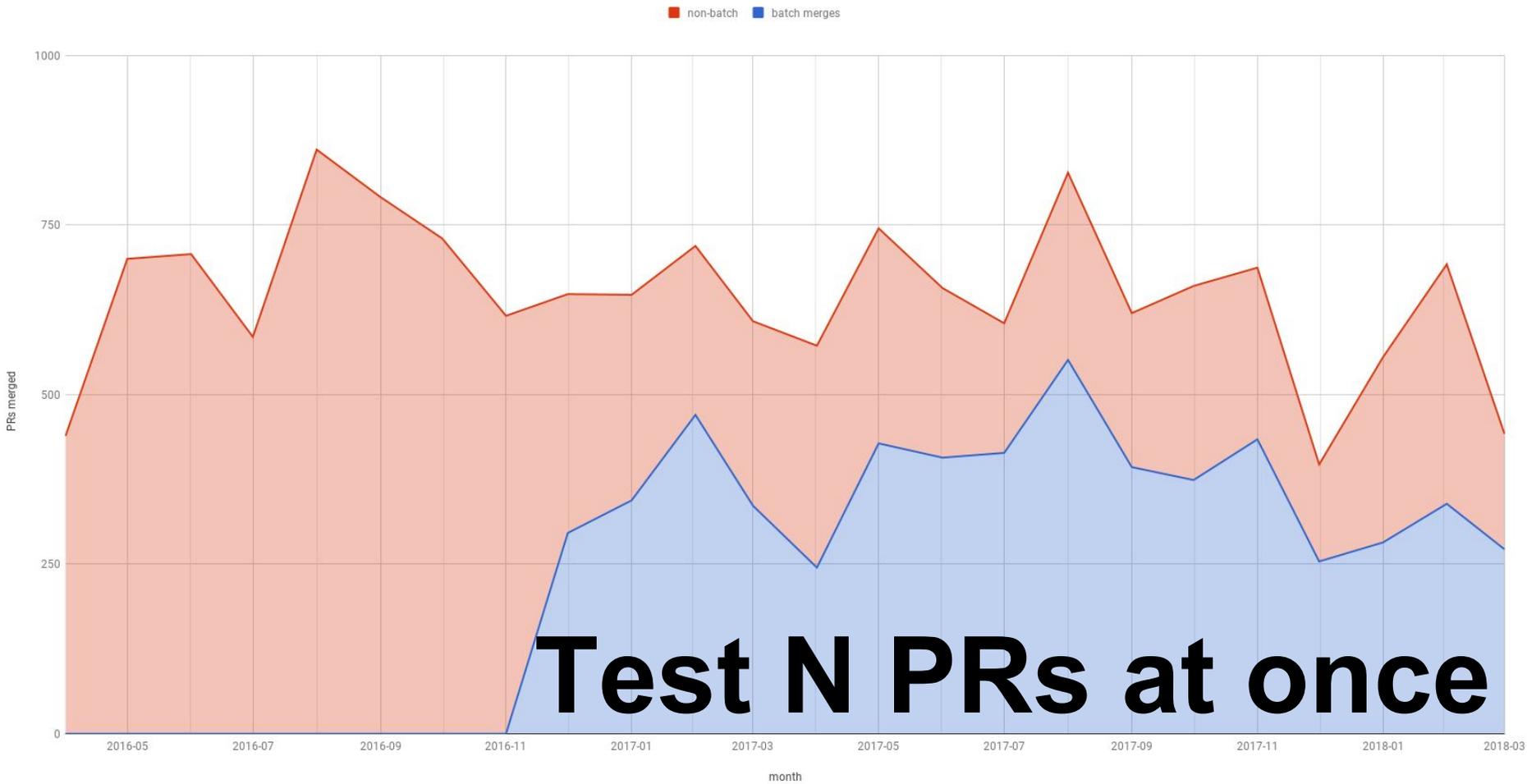
Source: k8s.devstats.cncf.io, PRs merged repos dashboard



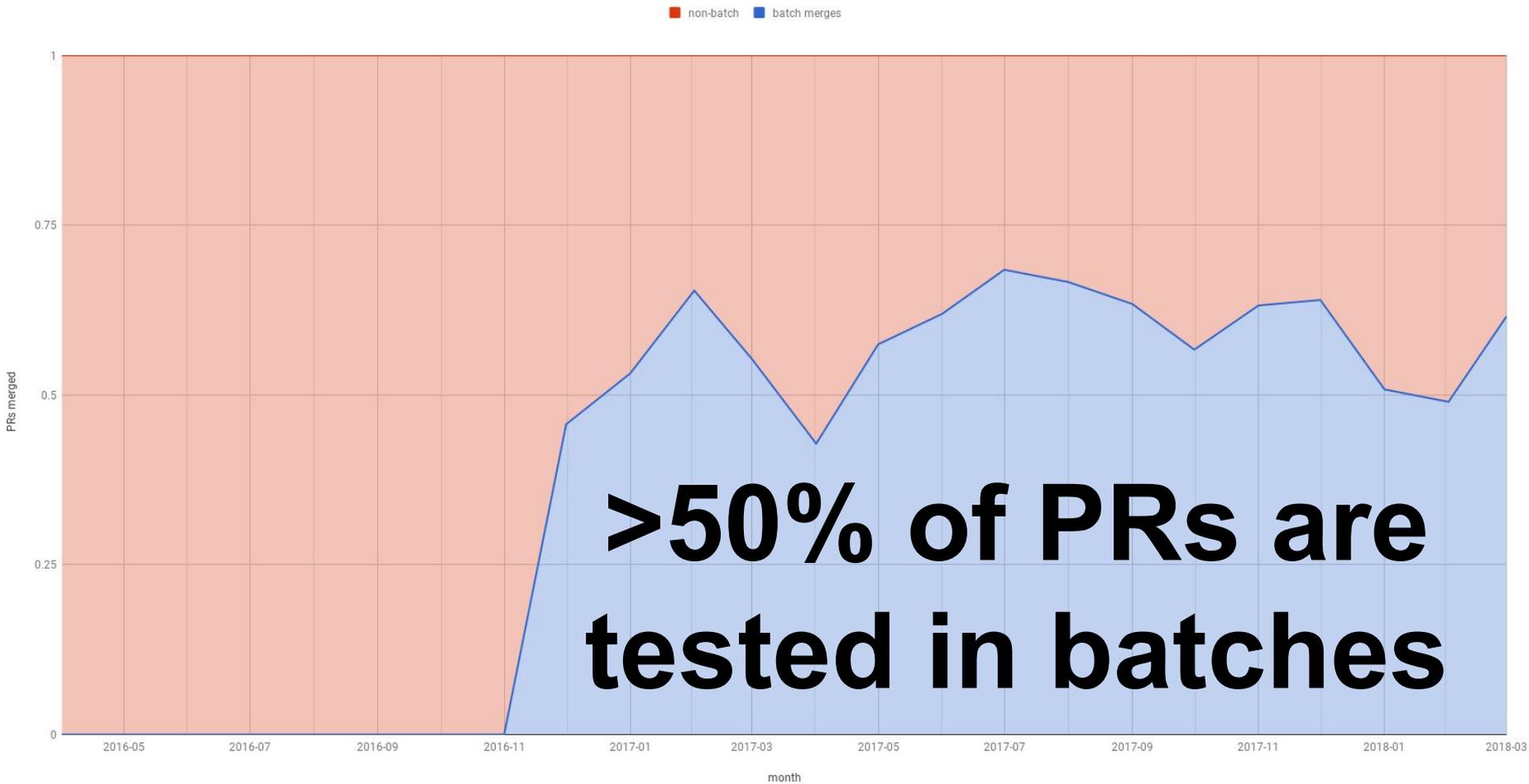
We're beating the ideal



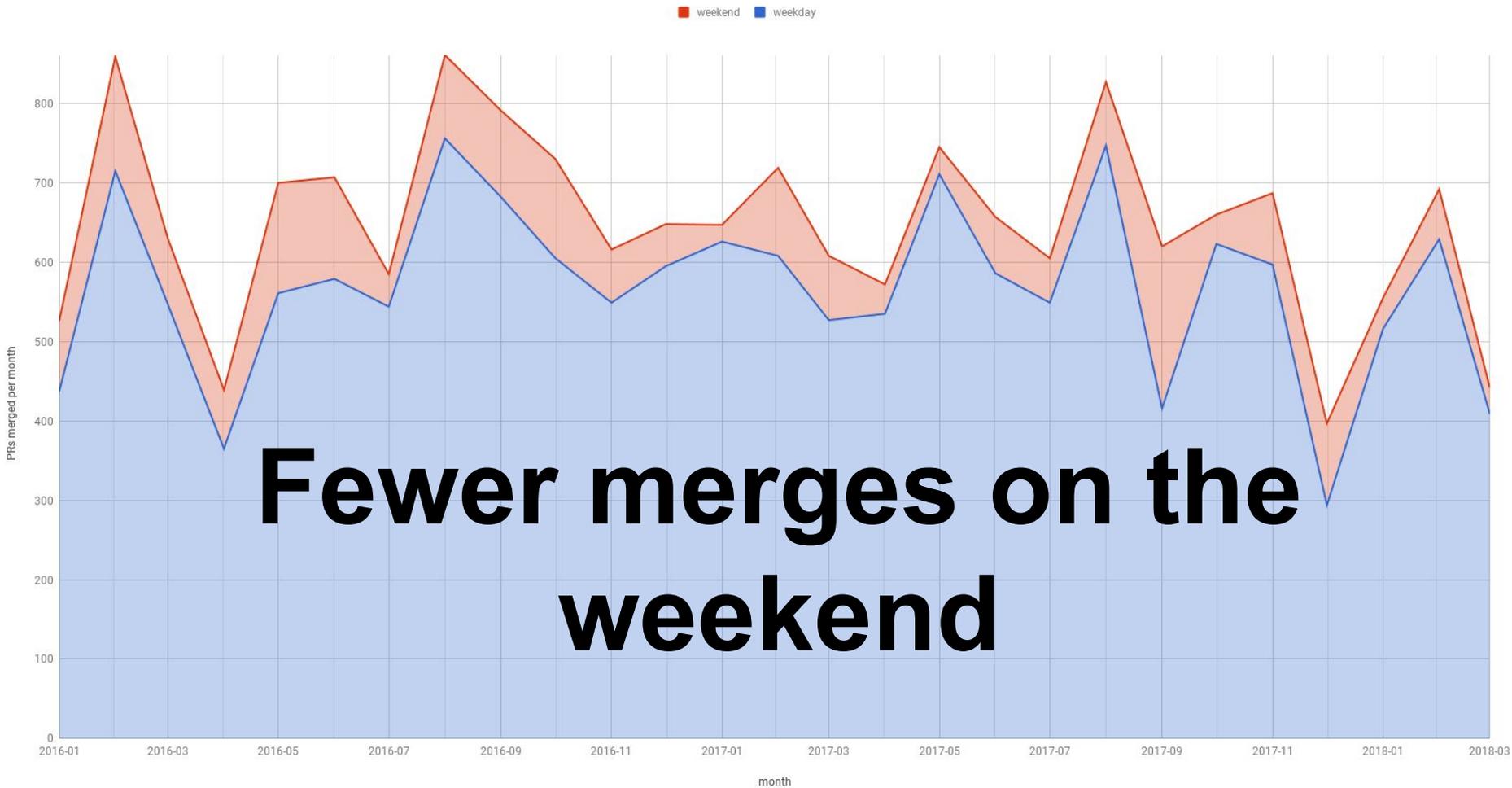
Source: k8s.devstats.cncf.io, PRs merged repos dashboard



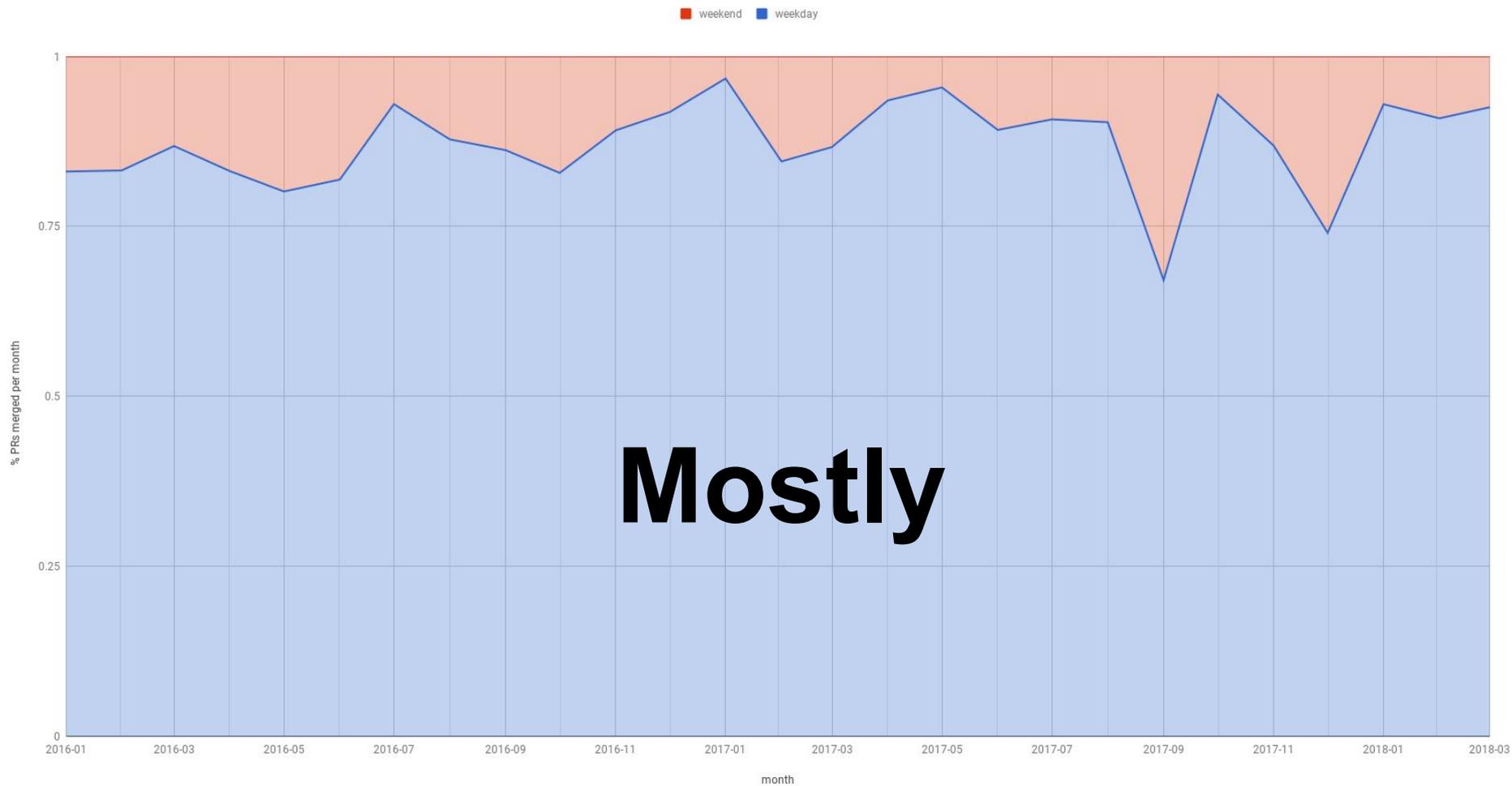
Source: git log



Source: git log



Source: git log



Source: git log

The Work

Implement PR workflow (review, test, merge)

Facilitate triage workflow (categorize, route, close)

Configure and run jobs

Provide insights into project health



  k8s-ci-robot added **kind/bug** **sig/scalability** labels on Dec 1, 2017



fejta-bot commented on Mar 1

+ 😊 ...

Issues go stale after 90d of inactivity.
Mark the issue as fresh with `/remove-lifecycle stale`.
Stale issues rot after an additional 30d of inactivity and eventually close.

If this issue is safe to close now please do so with `/close`.

Send feedback to sig-testing, kubernetes/test-infra and/or fejta.
`/lifecycle stale`

  k8s-ci-robot added the **lifecycle/stale** label on Mar 1



fejta-bot commented on Mar 31

+ 😊 ...

Stale issues rot after 30d of inactivity.
Mark the issue as fresh with `/remove-lifecycle rotten`.
Rotten issues close after an additional 30d of inactivity.

If this issue is safe to close now please do so with `/close`.

Send feedback to sig-testing, kubernetes/test-infra and/or fejta.
`/lifecycle rotten`
`/remove-lifecycle stale`

  k8s-ci-robot added **lifecycle/rotten** and removed **lifecycle/stale** labels on Mar 31



fejta-bot commented 2 days ago

+ 😊 ...

Rotten issues close after 30d of inactivity.
Reopen the issue with `/reopen`.
Mark the issue as fresh with `/remove-lifecycle rotten`.

Send feedback to sig-testing, kubernetes/test-infra and/or fejta.
`/close`

  k8s-ci-robot closed this 2 days ago

Use `cmp.Equal` instead of DeepEqual? #55722

[Edit](#)[New issue](#)

 **Open** thockin opened this issue on Nov 14, 2017 · 2 comments



thockin commented on Nov 14, 2017

Owner



<https://github.com/google/go-cmp/>

I wonder if this can replace our semantic.DeepEqual?

@lavalamp

@kubernetes/sig-api-machinery-bugs

  k8s-ci-robot added **sig/api-machinery** **kind/bug** labels on Nov 14, 2017

  liggitt added **kind/cleanup** and removed **kind/bug** labels on Jan 15



fejta-bot commented 17 days ago



Issues go stale after 90d of inactivity.
Mark the issue as fresh with `/remove-lifecycle stale`.
Stale issues rot after an additional 30d of inactivity and eventually close.

If this issue is safe to close now please do so with `/close`.

Send feedback to [sig-testing](#), [kubernetes/test-infra](#) and/or [fejta](#).
`/lifecycle stale`

  k8s-ci-robot added the **lifecycle/stale** label 17 days ago

  thockin added the **help wanted** label 2 days ago



thockin commented 2 days ago

Owner



`/lifecycle frozen`
`/remove-lifecycle stale`

Assignees



No one—assign yourself

Labels



help wanted

kind/cleanup

lifecycle/frozen

sig/api-machinery

Projects



None yet

Milestone



No milestone

Notifications

 **Subscribe**

You're not receiving notifications from this thread.

4 participants



 Lock conversation



SIG All Milestone All Repository **kubernetes/kubernetes** Releases

Open Issues/PRs (SIG: All, Milestone: All)



— Open Issues
— Open PRs (right-y)

	min	max	avg	current
Open Issues	2548	4898	4087	2614
Open PRs	396	1278	749	1189

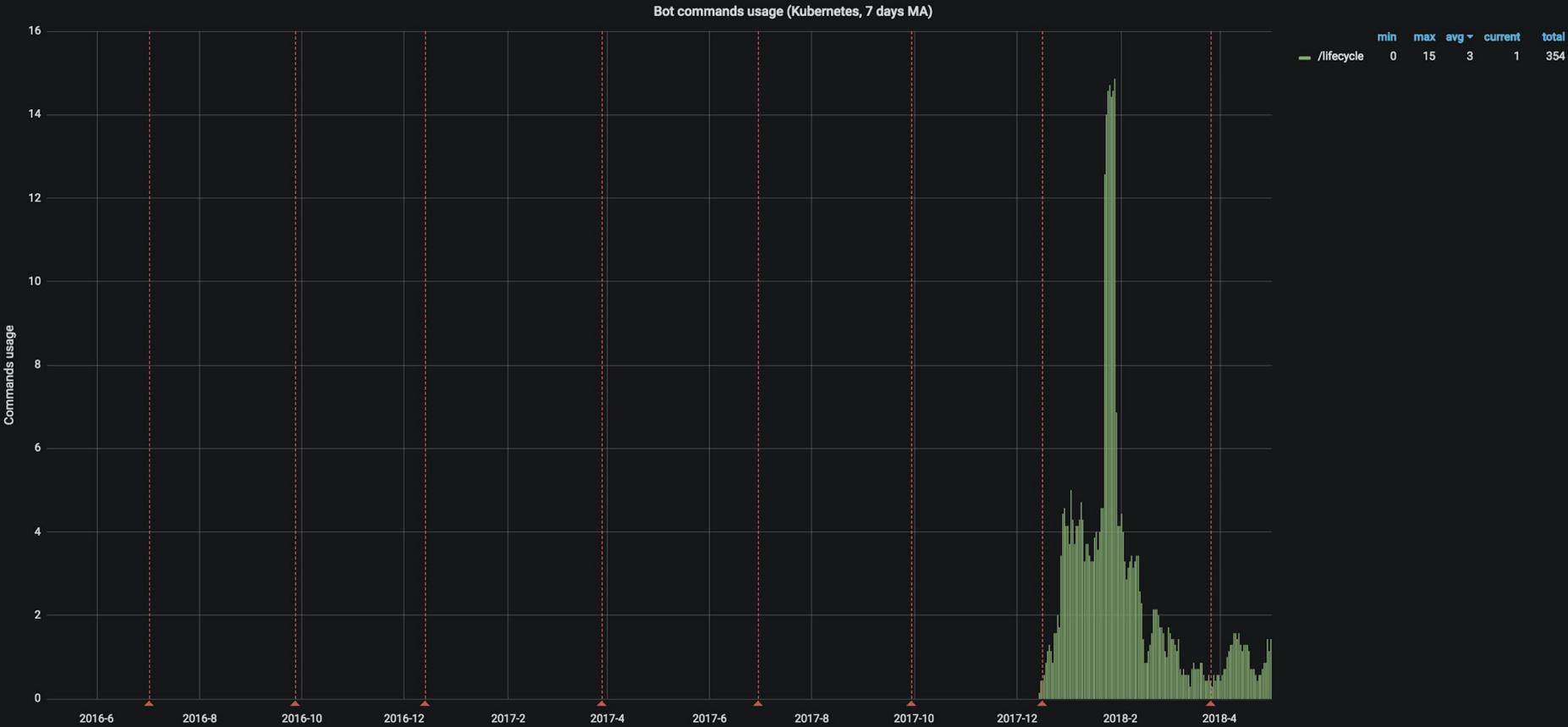


Bot commands repository groups

Last 2 years



Period **7 days MA** Repository group **Kubernetes** Commands **lifecycle** Releases



```
15689 - name: periodic-test-infra-rotten
15690 interval: 1h
15691 agent: kubernetes
15692 spec:
15693   containers:
15694   - image: gcr.io/k8s-testimages/commenter:v20170808-abf66782
15695     args:
15696     - |-
15697       --query=org:kubernetes
15698       -label:lifecycle/frozen
15699       label:lifecycle/stale
15700       -label:lifecycle/rotten
15701     - --updated=720h
15702     - --token=/etc/token/bot-github-token
15703     - |-
15704       --comment=Stale issues rot after 30d of inactivity.
15705       Mark the issue as fresh with `/remove-lifecycle rotten`.
15706       Rotten issues close after an additional 30d of inactivity.
15707
15708       If this issue is safe to close now please do so with `/close`.
15709
15710       Send feedback to sig-testing, kubernetes/test-infra and/or [fejta](https://github.com/fejta).
15711       /lifecycle rotten
15712       /remove-lifecycle stale
15713     - --template
15714     - --ceiling=10
15715     - --confirm
15716     volumeMounts:
15717     - name: token
15718       mountPath: /etc/token
15719   volumes:
15720   - name: token
15721     secret:
15722       secretName: fejta-bot-token
15723
15724 - name: periodic-test-infra-stale
15725 interval: 1h
15726 agent: kubernetes
15727 spec:
15728   containers:
15729   - image: gcr.io/k8s-testimages/commenter:v20170808-abf66782
15730     args:
15731     - |-
15732       --query=org:kubernetes
15733       -label:lifecycle/frozen
```



k8s-ci-robot commented 25 days ago • edited ▾

Owner



@liggitt: The following test **failed**, say `/retest` to rerun them all:

Test name	Commit	Details	Rerun command
pull-kubernetes-e2e-gce-100-performance	<code>7b5118f</code>	link	<code>/test pull-kubernetes-e2e-gce-100-performance</code>

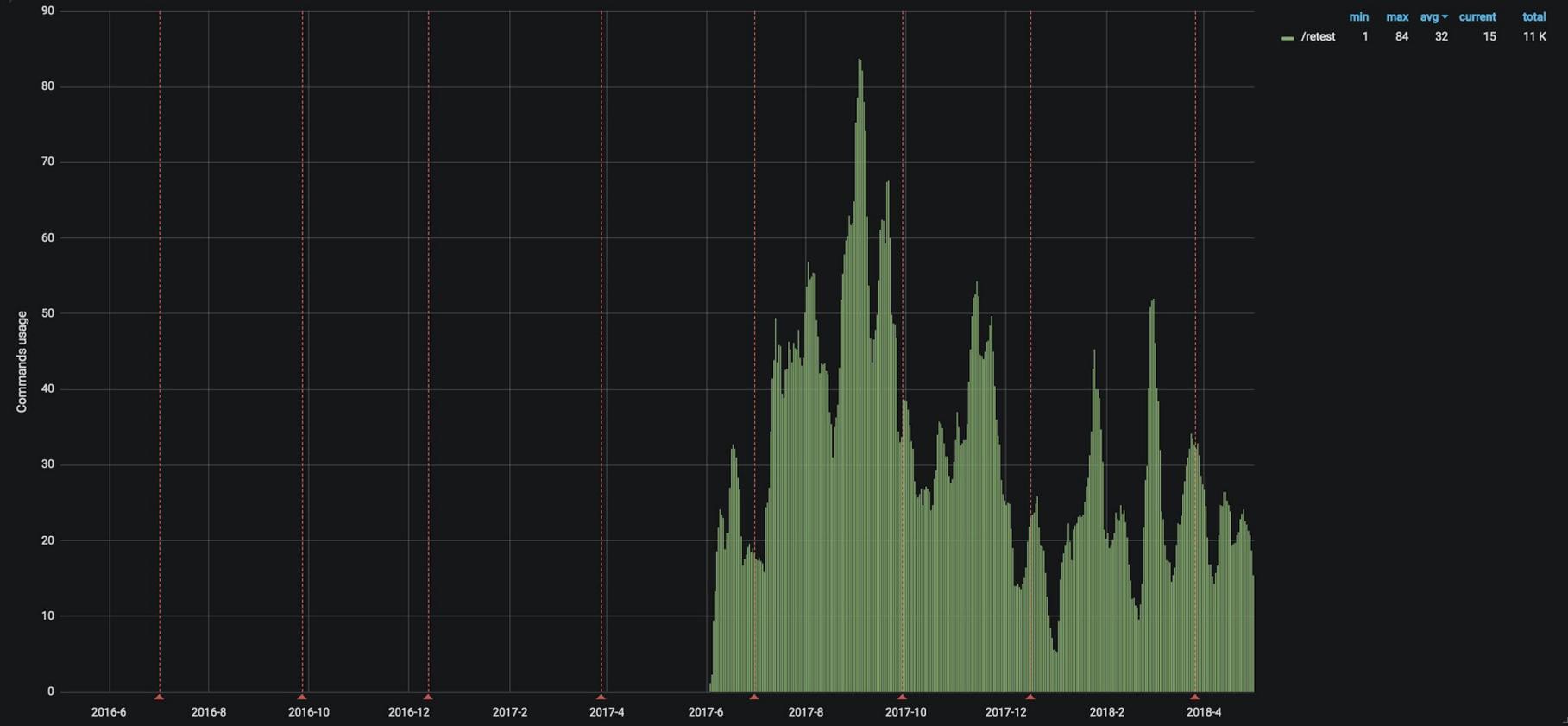
[Full PR test history](#). [Your PR dashboard](#). Please help us cut down on flakes by [linking to an open issue](#) when you hit one in your PR.

► Details



Period: 7 days MA | Repository group: Kubernetes | Commands: retest | Releases:

Bot commands usage (Kubernetes, 7 days MA)





tallclair commented on Mar 26

Member



Lock conversation

/lgtn



k8s-ci-robot assigned tallclair on Mar 26



k8s-ci-robot added the **lgtn** label on Mar 26



fejta-bot commented on Mar 27



/retest

This bot automatically retries jobs that failed/flaked on approved PRs (send feedback to [fejta](#)).

Review the [full test history](#) for this PR.

Silence the bot with an `/lgtn cancel` comment for consistent failures.



fejta-bot commented on Mar 27



/retest

This bot automatically retries jobs that failed/flaked on approved PRs (send feedback to [fejta](#)).

Review the [full test history](#) for this PR.

Silence the bot with an `/lgtn cancel` comment for consistent failures.



fejta-bot commented on Mar 27



/retest

This bot automatically retries jobs that failed/flaked on approved PRs (send feedback to [fejta](#)).

Review the [full test history](#) for this PR.

Silence the bot with an `/lgtn cancel` comment for consistent failures.



fejta-bot commented on Mar 27



```
15646
15647 - name: periodic-test-infra-retester
15648   interval: 20m # Retest at most 1 PR per 20m, which should not DOS the queue.
15649   agent: kubernetes
15650   spec:
15651     containers:
15652     - image: gcr.io/k8s-testimages/commenter:v20170808-abf66782
15653       args:
15654       - |-
15655         --query=is:pr
15656         -label:do-not-merge
15657         -label:do-not-merge/blocked-paths
15658         -label:do-not-merge/cherry-pick-not-approved
15659         -label:do-not-merge/hold
15660         -label:do-not-merge/release-note-label-needed
15661         -label:do-not-merge/work-in-progress
15662         label:lgTM
15663         label:approved
15664         status:failure
15665         -label:needs-rebase
15666         -label:needs-ok-to-test
15667         -label:"cncf-cla: no"
15668         repo:kubernetes/kubernetes
15669       - --token=/etc/token/bot-github-token
15670       - |-
15671         --comment=/retest
15672         This bot automatically retries jobs that failed/flaked on approved PRs (send feedback to [fejta](https://github.com/fejta))
15673
15674         Review the [full test history](https://k8s-gubernator.appspot.com/pr/{{.Number}}) for this PR.
15675
15676         Silence the bot with an `/lgTM cancel` comment for consistent failures.
15677
15678       - --template
15679       - --ceiling=1
15680       - --confirm
15681     volumeMounts:
15682     - name: token
15683       mountPath: /etc/token
15684     volumes:
15685     - name: token
15686       secret:
15687         secretName: fejta-bot-token
15688
15689 - name: periodic-test-infra-rotten
15690   interval: 1h
```

The Work

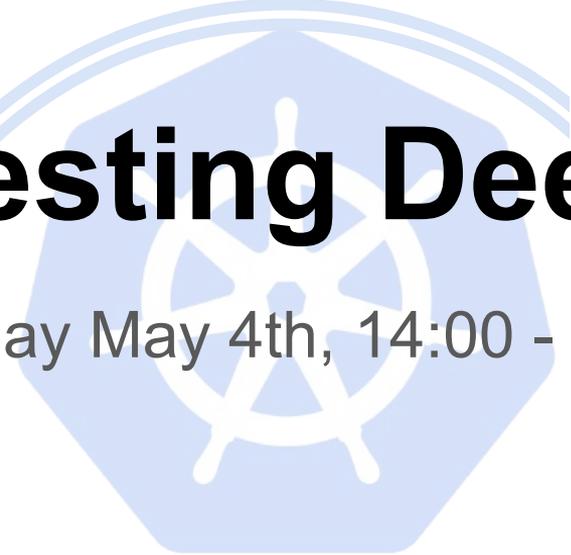
Implement PR workflow (review, test, merge)

Facilitate triage workflow (categorize, route, close)

Configure and run jobs

Provide insights into project health





SIG Testing Deep Dive

Friday May 4th, 14:00 - 14:35

Used for kubernetes

<https://prow.k8s.io>

<https://prow.k8s.io/pr>

<https://prow.k8s.io/plugins>

<https://prow.k8s.io/command-help.html> (<https://go.k8s.io/bot-commands>)

Used for kubernetes

<https://go.k8s.io/github-labels>

<https://go.k8s.io/triage>

<https://k8s-gubernator.appspot.com/>

<https://testgrid.k8s.io/>

<http://velodrome.k8s.io/dashboard/db/bigquery-metrics?orgId=1>

Used for CNCF projects

<https://k8s.devstats.cncf.io/>

<https://github.com/cncf/devstats>

Use on your own project

<https://git.k8s.io/test-infra/prow>

- OWNERS-based code review plugins: approve / blunderbuss / lgtm
- Helpful PR plugins: blockade / golint / needs-rebase / hold
- Tide: use labels and retests to merge in batches
- Issue triage plugins: assign / labels / lifecycle / milestone

https://git.k8s.io/test-infra/label_sync

The Work

Implement PR workflow (review, test, merge)

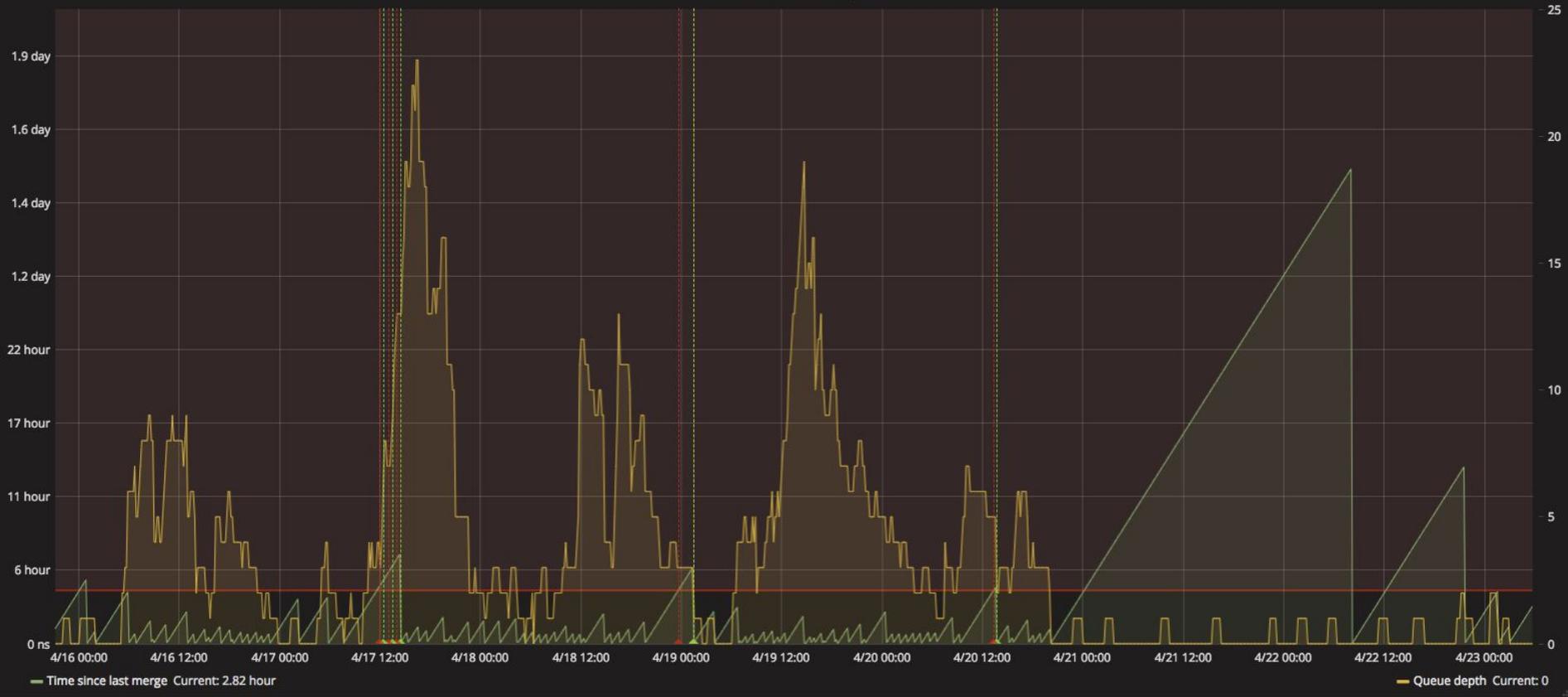
Facilitate triage workflow (categorize, route, close)

Configure and run jobs

Provide insights into project health



Time since last merge



Summary	build	integration	bazel-build	bazel-test	verify	kubelet	gci-gce	gci-gke	aws	gce-device-plugin-gpu	gke-device-plugin-gpu	gke-device-plugin-gpu-p100	gci-gce-slow	gci-gke-slow	gci-gce-serial	gci-gke-serial
gci-gce-alpha-features	gci-gce-100	gce-scale-correctness	gce-scale-performance	gci-gce-ingress	gci-gke-ingress	gci-gce-reboot	gci-gke-reboot	kubeadm-gce	kubeadm-gce-selfhosting							

✓ [build: PASSING](#) Last green run: 24783
Tests last ran on: 04-27 12:46
Last update: 04-27 12:53
3 of 1511 tests (0.2%) and 3 of 1511 runs (0.2%) failing in the past week

✓ [integration: PASSING](#) Last green run: 1901
Tests last ran on: 04-27 12:03
Last update: 04-27 12:45
64 of 46860 tests (0.1%) and 32 of 165 runs (19.4%) failing in the past week

✓ [bazel-build: PASSING](#) Last green run: 238256
Tests last ran on: 04-27 12:51
Last update: 04-27 12:54
12 of 1614 tests (0.7%) and 12 of 1614 runs (0.7%) failing in the past week

✓ [bazel-test: PASSING](#) Last green run: 23705
Tests last ran on: 04-27 12:45
Last update: 04-27 12:47
9 of 1085276 tests (0.0%) and 9 of 1499 runs (0.6%) failing in the past week

⊖ [verify: FLAKY](#) Last green run: 20211
Tests last ran on: 04-27 12:29
Last update: 04-27 12:38
40 of 5412 tests (0.7%) and 20 of 164 runs (12.2%) failing in the past week

⊖ [kubelet: FLAKY](#) Last green run: 12368
Tests last ran on: 04-27 12:14
Last update: 04-27 12:37
97 of 123004 tests (0.1%) and 33 of 161 runs (20.5%) failing in the past week

⊖ [gci-gce: FLAKY](#) Last green run: 24682
Tests last ran on: 04-27 12:37
Last update: 04-27 12:52
231 of 129015 tests (0.2%) and 109 of 305 runs (35.7%) failing in the past week

▲ [gci-gke: FAILING](#) Last green run: 25619
Tests last ran on: 04-27 12:30
Last update: 04-27 12:53
358 of 2440 tests (14.7%) and 138 of 305 runs (45.2%) failing in the past week

Test Name	# Fails	Failure Messages	First Failed	Last Passed	Bugs	Regression
Overall	73		04-25 14:11	04-25 13:41		
Up	73		04-25 14:11	04-25 13:41		

✓ [aws: PASSING](#) Last green run: 27149
Tests last ran on: 04-27 12:23
Last update: 04-27 12:41
172 of 117530 tests (0.1%) and 85 of 322 runs (26.4%) failing in the past week

✓ [gce-device-plugin-gpu: PASSING](#) Last green run: 3059
Tests last ran on: 04-27 10:48
Last update: 04-27 12:42
24 of 1660 tests (1.4%) and 16 of 83 runs (19.3%) failing in the past week

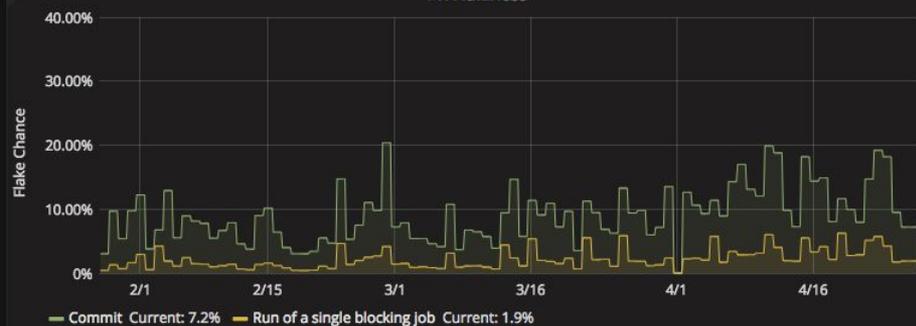
▲ [gke-device-plugin-gpu: FAILING](#) Last green run: 2521
Tests last ran on: 04-27 10:48
Last update: 04-27 12:46
97 of 664 tests (14.6%) and 37 of 83 runs (44.6%) failing in the past week

Test Name	# Fails	Failure Messages	First Failed	Last Passed	Bugs	Regression
Overall	22		04-25 16:27	04-25 14:27		
Deferred TearDown	22		04-25 16:27	04-25 14:27		Changes
Up	22		04-25 16:27	04-25 14:27		Changes

▲ [gke-device-plugin-gpu-p100: FAILING](#) Last green run: 335
Tests last ran on: 04-27 05:21
Last update: 04-27 12:37
20 of 294 tests (6.8%) and 8 of 14 runs (57.1%) failing in the past week



PR Flakiness



Longest Failing PR Jobs

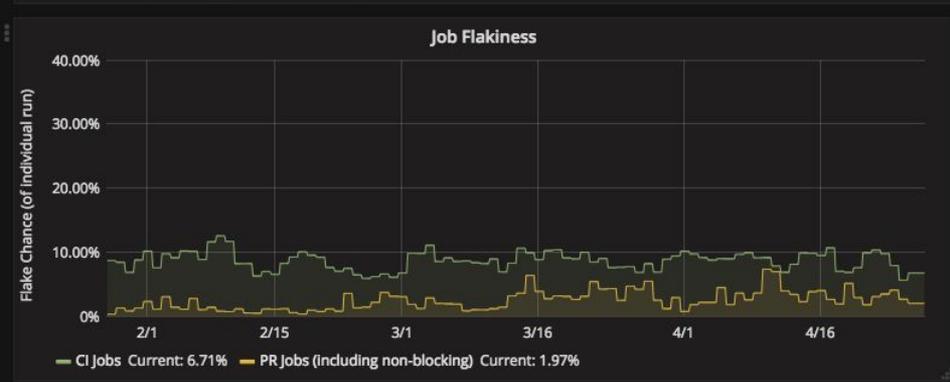
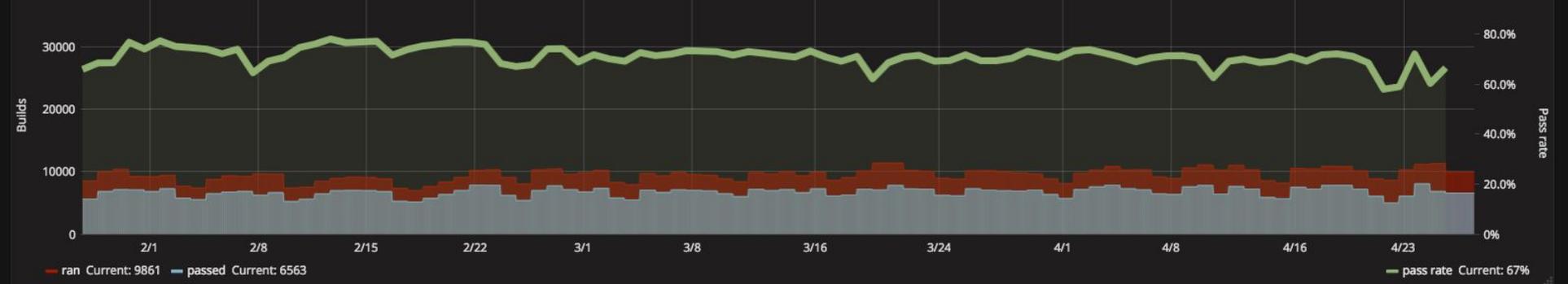
Job	Failing Days
pr:pull-kubernetes-e2e-gce-big-performance	37
pr:kubeflow-hp-tuning-presubmit	7
pr:pull-cadvisor-e2e	5
pr:pull-cloud-provider-azure-lint	4
pr:pull-test-infra-verify-labels	4
pr:pull-cloud-provider-azure-unit	4
pr:kubeflow-testing-presubmit	3

Flakiest PR Jobs (past week)

Job	Flakes	Flakiest Test	2nd Flakiest Test
pr:pull-kubernetes-e2e-kops-aws	79	67 flakes: Up	8 flakes: Timeout
pr:pull-kubernetes-kubemark-e2e-gce-big	62	66 flakes: Up	4 flakes: Timeout
pr:pull-kubernetes-integration	60	50 flakes: k8s.io/kubernetes/test/integration/etcd TestEtcdStoragePath	9 flakes: k8s.io/kubernetes/test/integration/garbagecollector TestCustomResourceCascadingDeletion
pr:pull-kubernetes-e2e-gce-100-performance	57	52 flakes: Up	9 flakes: [sig-scalability] Density [Feature:Performance] should allow starting 30 pods per node using { ReplicationController} with 0 secrets, 0 configmaps and 0 daemons
pr:pull-kubernetes-e2e-gce	35	12 flakes: [sig-api-machinery] Aggregator Should be able to support the 1.7 Sample API Server using the current Aggregator	9 flakes: Up
pr:pull-kubernetes-kubemark-e2e-gce	31	21 flakes: Up	6 flakes: Build
pr:pull-kubernetes-e2e-gce-device-plugin-gpu	24	16 flakes: Up	10 flakes: Build

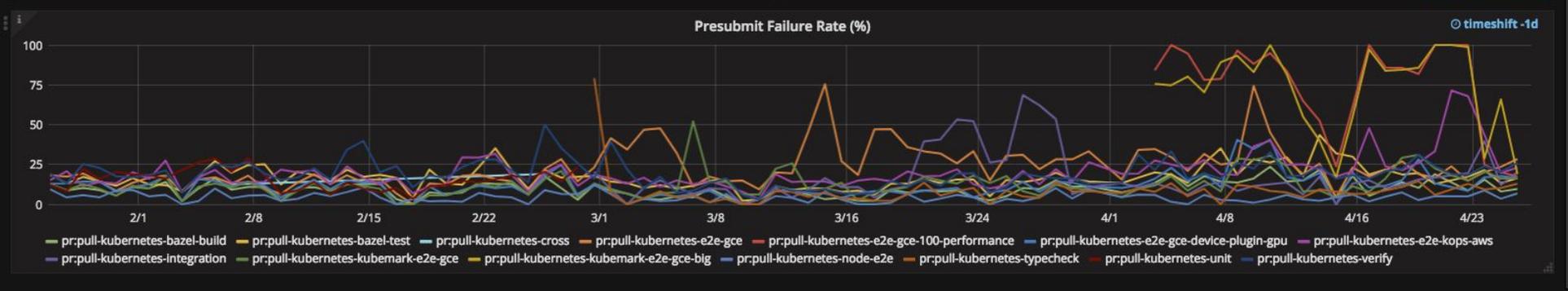
Pass rate





Longest Failing Jobs

Job	Failing Days
ci-kubernetes-soak-cos-docker-validation	184
ci-kubernetes-e2e-gci-gce-ipv6	164
ci-kubernetes-e2e-kops-aws-ena-nvme	145
ci-kubernetes-e2e-gke-gci-stable3-gci-stable1-upgrade-master	142
ci-kubernetes-e2e-gke-gci-stable3-gci-stable1-upgrade-cluster	142
ci-kubernetes-e2e-gke-gci-new-gci-master-upgrade-master	129
ci-kubernetes-e2e-gke-gci-new-gci-master-upgrade-cluster	129



Kubernetes Aggregated Failures from today

Show clusters for SIG: api-machinery apps autoscaling big-data cli cluster-lifecycle multicuster instrumentation network node scalability scheduling storage testing ui

Sort by total count count in last day error message

Include results from: CI PR

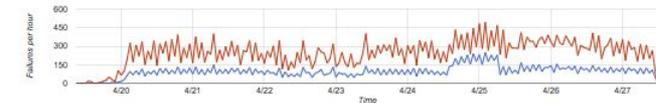
Filter (these are regexes):

Failure text:

Job:

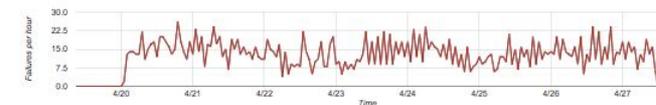
Test:

982 clusters of 48383 failures (6535 in last day) out of 74969 builds from 4/19/2018, 9:03:57 AM to 4/27/2018, 12:01:34 PM.



2433 FAILURES (336 TODAY) MATCHING [e685e87e70236748fafc](#) [github search](#) testing

error during ./hack/ginkgo-e2e.sh --ginkgo.skip={Slow}\|[Serial\]\|[Disruptive\]\|[Flaky\]\|[Feature:.+]\ --minStartupPods=8 --report-dir=/workspace/_artifacts --disable-log-dump=true: exit status 1



Latest Failures

Time	Job	Test
4/27/2018, 11:21:11 AM	ci-kubernetes-e2e-gke-staging-default-parallel	Test
4/27/2018, 11:17:17 AM	ci-kubernetes-e2e-gce-gci-qa-master	Test
4/27/2018, 11:12:20 AM	ci-kubernetes-e2e-gke-staging-stable1-parallel	Test
4/27/2018, 11:12:14 AM	ci-kubernetes-e2e-gke-ubuntu1-k8stable1-default	Test
4/27/2018, 11:08:12 AM	ci-kubernetes-e2e-gce-gci-qa-m65	Test

- Failed in 60 Jobs ▶
- Failed in 1 Test: ▼
- o 2433 Test ▶

801 FAILURES (263 TODAY) MATCHING [d1f38bc799b8c60180](#) [github search](#) testing

error creating cluster: error during gcloud container clusters create --quiet --project=k8s-e2e-gke-prod-parallel --zone=us-central1-f --machine-type=n1-standard-2 --image-type=gci --num-nodes=3 --network=bootstrap-e2e --cluster-version=1.11.0-alpha.1.82+afa66cc28749c0 bootstrap-e2e: exit status 1



Latest Failures

Time	Job	Test
4/27/2018, 11:19:13 AM	ci-kubernetes-e2e-gke-sd-logging-gci-latest	Up
4/27/2018, 11:18:12 AM	ci-kubernetes-e2e-gke-stackdriver	Up
4/27/2018, 11:14:13 AM	ci-kubernetes-e2e-gke-master-new-gci-kubectl-skew-serial	Up
4/27/2018, 11:02:15 AM	ci-kubernetes-e2e-gke-regional-serial	Up
4/27/2018, 11:02:13 AM	ci-kubernetes-e2e-gke-master-new-gci-kubectl-skew	Up

- Failed in 26 Jobs ▶
- Failed in 1 Test: ▼
- o 801 Up ▶



Github search query i

is:pr state:open author:spiffxp



#7653 kubernetes/test-infra

Needs to Resolve Labels

Stop using the cherrypick-auto-approve munger for k/k

No test found ?

! Does not meet merge requirements ?

PR's Labels

approved cncf-cla: yes do-not-merge/hold lgtm size/XS

Required Labels (Missing)

Forbidden Labels (Shouldn't have)

do-not-merge/hold i

#6071 kubernetes/test-infra

Needs to Resolve Labels

Remove some unused mungers

No test found ?

kubernetes/test-infra

Automation

- boskos
- bootstrap
- jenkins
- jobs
- kubetest
- mungegithub
- prow
- scenarios

Visualization

- gcsweb
- gubernator
- kettle
- metrics
- testgrid
- triage
- velodrome

Other

- commenter
- issue-creator
- label_sync
- logexporter
- migratestatus
- planter
- queue_health