

Weekly updates/questions/suggestions : GSoC 2019 CNCF/Prometheus

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proposal: https://docs.google.com/document/d/1vaR0PSdbpUOFWNwNzy40kq0ZfOic7AhGLOb7_EELrZk/edit?usp=sharing

14th May discussions(Hangouts):

- prometheus#21 <https://github.com/prometheus/prometheus/issues/21>
- GitHub Actions (nikita will be working on this)
- Fixing existing prombench issues
- making benchmark.go an external plugin so that we can use the latest prow version on new releases
- investigate logging (prow/spyglass)
 - <https://github.com/kubernetes/test-infra/tree/master/prow/spyglass>
- <https://github.com/prometheus/prombench/issues/133> (e2e sd)
- https? <http://prombench.prometheus.io/> (not needed now)

4th June discussions(Hangouts)

- understand how to generate the calculator from a given go lang profile.
<https://www.robustperception.io/how-much-ram-does-prometheus-2-x-need-for-cardinality-and-ingestion>
 - target counts
 - no of metrics
 - scrape interval
- <https://github.com/open-fresh/avalanche>
 - compare with fake-webserver

11th June discussions(Hangouts)

- no notes here

18th June discussions(Hangouts) TODAY'S NOTES HERE

- no notes here

25th June discussions(Hangouts) **TODAY'S NOTES HERE**

Timeline :

May

Week 0 • Test GitHub Actions • PromQL linter (#21)	6th
Week 1 • fixing issues in prombench • understanding prow better	13th
Week 2 • fixing issues in prombench • working on external benchmark plugin • preparing to make prombench independent of managing prow dependencies like hook/plank etc ◦ reordering of k8s manifest files (#190)	20th

June (coding period begins)

Week 0 • Scalability and logging doc • Working on build tools and CI • Testing out new version of prow with external benchmark plugin ◦ Current external benchmark plugin requires the github bot account to be owner?? • external benchmark plugin also usable with GitHub Actions	1st
Week 1 • Continue working on reminder and restarter once build tools and CI are in place • Working on migrating to new directory structure ◦ upgrade prow ◦ upgrade nginx-ingress ■ default-backend no longer needed ◦ add jobs apply/delete for prombench ◦ adding external benchmark plugin • adding alertmanager to prombench ◦ use alertmanager to send reminder update based on node_exporter's uptime metric on the test prometheus nodes ◦ add other alert rules • improve grafana dashboard so that it gives us more insights on the benchmarks ◦ https://github.com/prometheus/prombench/issues/186 • continue working on scalability tests ◦ still have not caught up with discussions done in last week • start working on logging with loki (prepare a POC) • upgrade prombench production by weekend if possible ◦ https://github.com/testpromorg/prombench ◦ upgrade prow ◦ reduce persistent prow node to n1-standard-2 with 7.5GB ram ◦ upgrade ingress-nginx ◦ upgrade prometheus meta ◦ upgrade grafana if required after improving the dashboard (if this happens) ◦ Do we wish to use the same persistent volume as we're using now? because It'll create a new one, we'll have to add additional manifests if we wish to use the same one in this and future production upgrades (since this is upgrade does a lot, rbac updates, lot of component update, i think a clean install will be a good idea). • complete the circle CI PR. ◦ This can be done using prow too ◦ but we're trying to get rid of prow so circle ci might be the better idea • should we be using coreos/prometheus-operator for prometheus-meta instead? ◦ I don't know why we should do this as we're not having any problems currently but can be something we can look into later. • doing these upgrades will help reduce a lot of complexity from future PRs related to adding more components to prow and deciding how the tests are run and how logging should be	11th

implemented.	
Week 2 - cli tool to parse github comments (simpleargs -> text2args) - taking some time to understand the kubernetes_sd plugin esp relabelling as I am rusty on that and it will be required for various other tasks afterwards. - upgrades still at work, the next one involves upgrade to grafana, prometheus and prow. - will get rid of all prow related maintenance done by prombench team and will be using the prow images directly - we can use the trigger plugin (if we use deployment prombench test idea, otherwise have to use an external benchmark plugin like current) - Alertmanager notification for reminder, make it very flexible about how to present the information. logging doc Prombench tests as Deployments	18th
Week 3 - Adding alertmanager, uses `prno` label. https://github.com/prometheus/prombench/pull/208 - Logging loki demo - Prombench tests as deployments demo - Updated prometheus - Update grafana before loki demo - logging+reminder will should be finished this week - remove all current prombench+prow images eg: https://hub.docker.com/r/prombench/hook - use default prow images - upgrade production after that - currently keep using configmaps once things are running try using the config-bootstrapper and update config plugins.	25th

July

Week 0 - No call was set up - I moved to another city for my offline internship so was not able to do any work due to a number of issues	1st
Week 1 - Todo: Understand avalanche tool - Start on scalability test - Upgrade grafana to 6.3 to not use rewrite-target anymore - logging loki demo on test cluster - add prow update pr if time permits (open an issue about this one) - check if node affinity rules can be improved for node-exporter, because similar rules are	7th

required for setting up daemonset for promtail (Loki) Start on #21 by adding yaml.v3 to prometheus	
Week 2 (meet on 19th, Friday) config-bootstrapper pr ready - alertmanager pr new dockerimage for prombench (https://github.com/prometheus/prombench/issues/223) - statefulset (https://gist.github.com/geekodour/2e56fbbbea04867a5d4ee91a5d40d27f) - testing this - server migration https://docs.google.com/document/d/1E70rc_9NccBr2_rPAEeQc03R2v1CFHyk-5x9sN036pw/edit upgrade grafana to 6.3-beta - remove docker images, add new docker images. (add to server migration doc) https://hub.docker.com/u/prombench - discuss scalability test - previous discussion: https://docs.google.com/document/d/1NJgomx_zjQMX9tJA4UZM0jtfQg1L8it3cQbtOcYXFHU/edit - memory - target counts (scrape targets) - no of metrics/time series (cardinality) - scrape interval (ingestion) - cpu? - think we can scale up and down these numbers for various versions. - compare the profiles of the same version under different loads https://docs.google.com/document/d/1hm5XrM9dYYY085yOnmMDXu074E4RxjM7R5FS4-WOflo/edit (example)	14th
Week 3 (meet on 30th, Tuesday) prombench test as stateful set (adding github clone) https://github.com/prometheus/prombench/blob/872521b4f9c91bbf780b8a06e1819367a73f0811/manifests/prombench/ss.yaml#L41 alertmanager pr with description add loki prometheus-builder breaking after some version of promu update, need to update image to install protoc github repo clone issue with emptyDir (complains `fatal: destination path 'prombench' already exists and is not an empty directory.` , when not true, but since it's a mount it contains a directory called `..data` need to find a work around) - dashboard for tests	21st

August

Week 0 — adding loki and promtail — complete am pr • do production test with statefulset — add cancel and start confirmation of test • promu does not seem to work when having go.mod and go.sum in their own directory, similarly `make unused` will not work as it will look at the go.sum of the root directory — test images in official dockerhub	6th
Week 1 — loki — currently working for Main Node components, scrape StatefulSet, Prometheus instances remaining. • migrate to the new github actions if possible. ◦ Will be testing the new actions — think about any risks the github actions bot can have over prometheus/prometheus if the wrong action gets executed somehow (does it have merge access?) — do we really need to migrate the old data from the prometheus-meta volume? (is it being used?) — promu-builder — use GITHUB_ORG and GITHUB_REPO: ◦ use circle ci artifacts for the pr? ◦ we need to keep updating the golang version used in promu-builder time to time because of this. — commentMonitor changes for github actions ◦ — named parameters ◦ — run without comment template (non needed) ◦ — few other refactorings for github actions • new home dashboard for grafana with all running tests • prombench.prometheus.io -> to github repo for prombench	13th