RFC 586 WIP: Adding Pre-Prod Environment to Cloud CD Pipeline

Recommender: jennifer.mitchell@sourcegraph.com

Date: 02/04/2022 Status: WIP Decider:

Input providers: Filip Haftek Dax McDonald Daniel Dides

Approvers (please review by EOD YYYY-MM-DD):

Approvals:

Team (<u>follow these conventions</u> so we can search by team):

Problem

Our current CD process does not include a way to stage and test changes being made before they are pushed out into production. This creates many issues including downtime, overnight alerts and code rollback. As sourcegraph.com gets more customers we want to ensure as little bugs or issues get pushed into production as possible and get us to 99.9% uptime.

Proposal

We're recommending the addition of a Pre-Production test environment be added to the pipeline. This testing environment will be part of the CD pipeline into the production cloud environment.

Within the new pipeline we will be automatically creating PRs as soon as the final release candidate Docker Image is available. This image will then be pushed out into the Pre-Prod environment and smoke tests will then be run. Mock up of this new pipeline and be found here. Once tests succeed in the pre-production environment, images will be promoted into production.

To help in accomplishing this new pipeline we would like to also introduce a new CD application called <u>CodeFresh</u>, which is essentially SaaS ArgoCD. With this application we can easily see what part of the process the release is in and easily promote or roll back by hand if needed.

Definition of success

- We are able to test new features or changes before they go into production.
- Bugs or issues with the latest deployment are found before they go out into production.
- Rollbacks and Production promotion happen often and automatically.
- Anyone is able to see the status of a build by being able to log into CodeFresh and seeing the status.