Updating Kubernetes with Helm Charts: Build, Test, Deploy

Azure on codefreshlive

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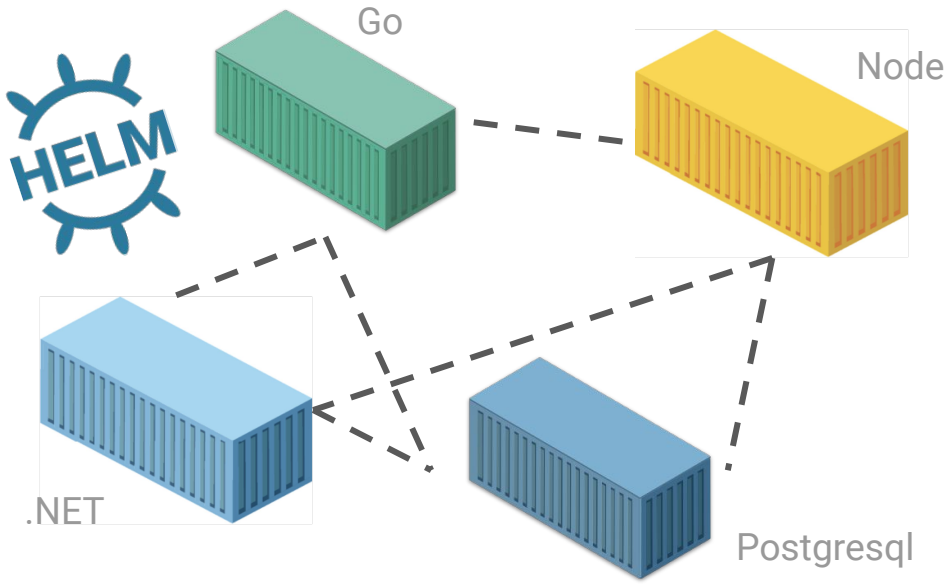
Agenda

- Intro to Helm
- Helm Repositories
- Workflows with Helm
- Demo

HELM

The package manager for Kubernetes



Helm makes Kubernetes apps awesome

Templating
Stop writing the same YAML over and over

Reliable Deployment
Keep all components up-to-date

Manage Dependencies
Your chart needs SQL, it knows how to get the package.

Deployment History
Rollback the entire app and config

Package Your App
All config and images in a simple package.

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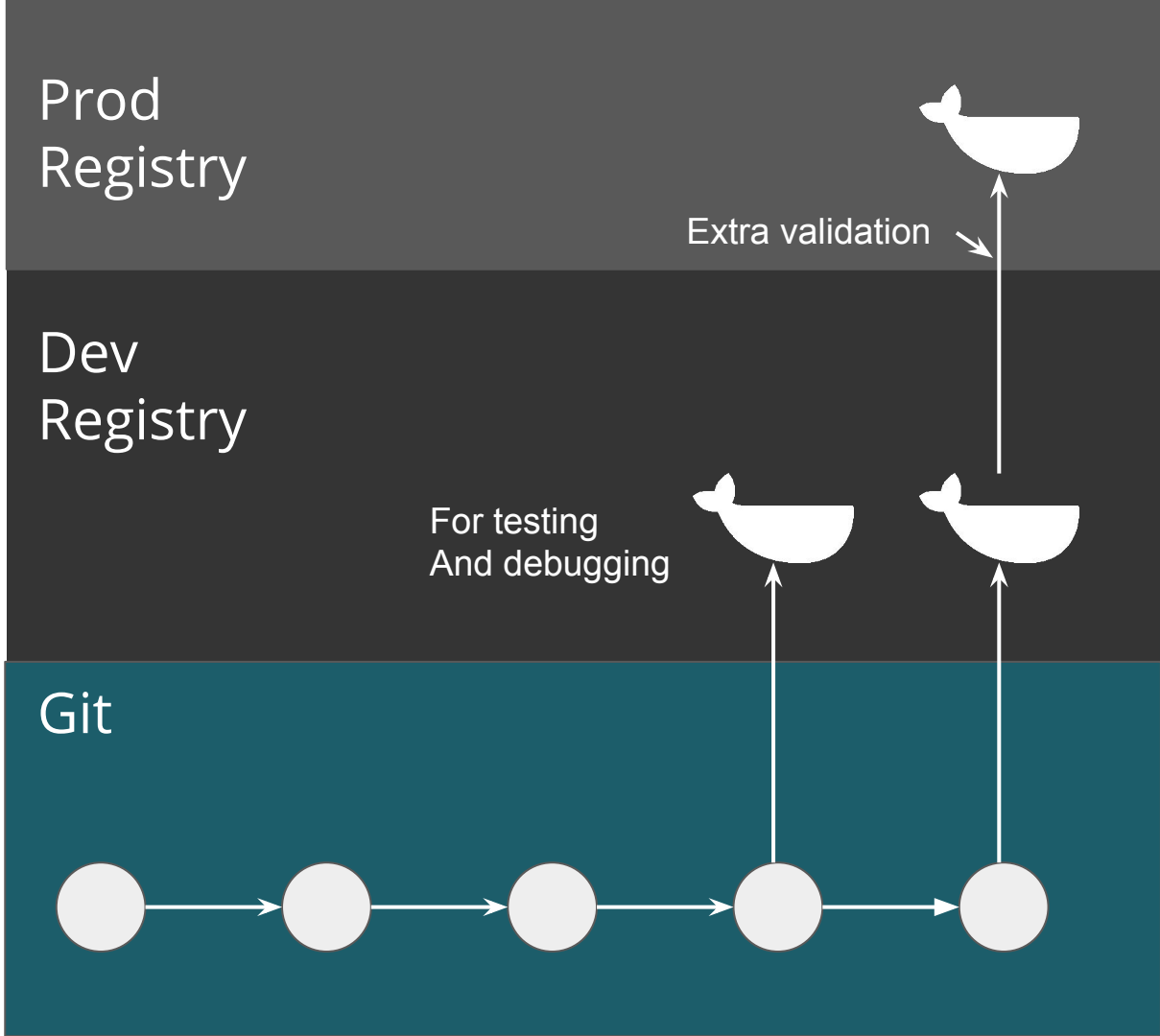
Git

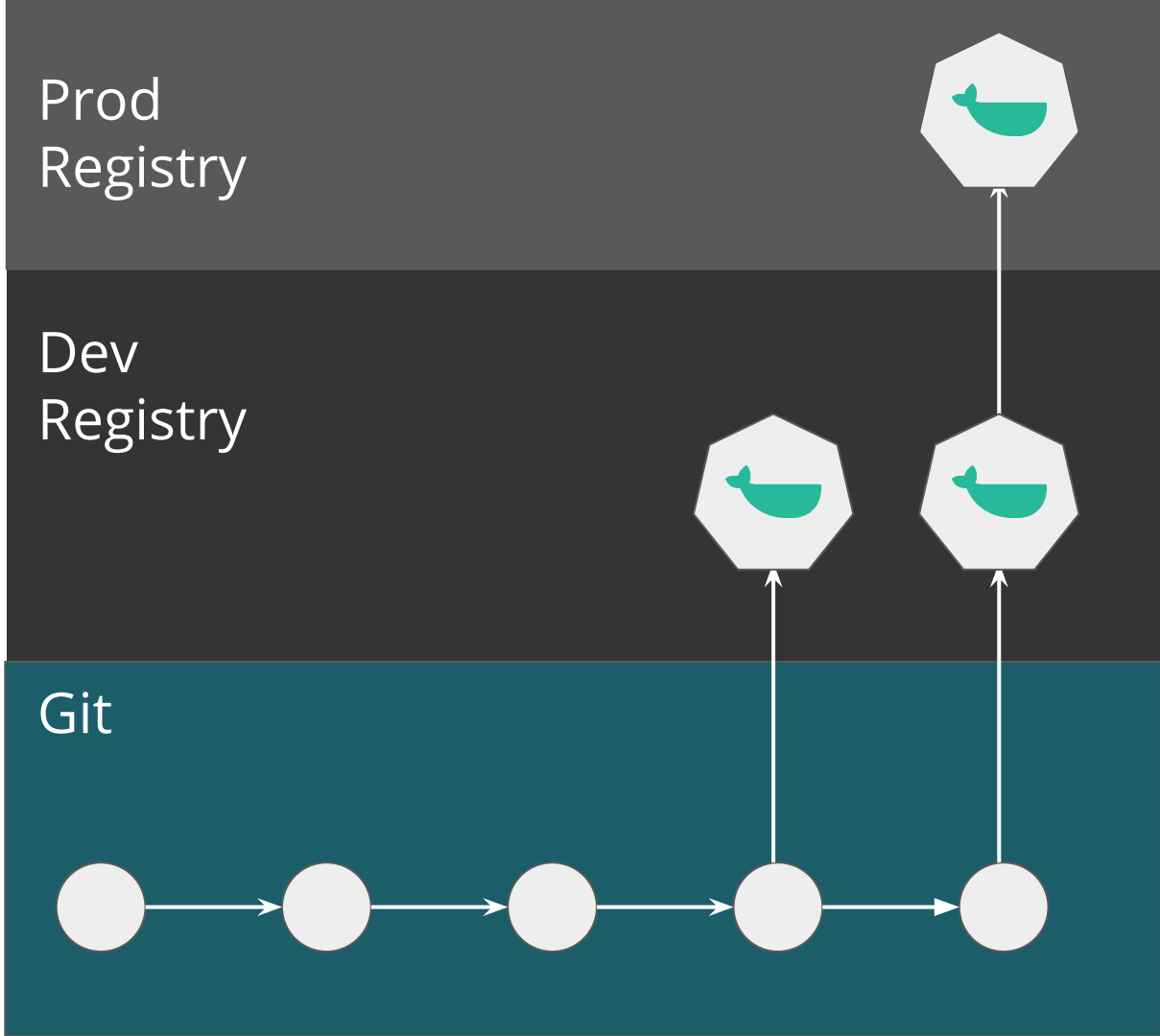
Docker

Helm

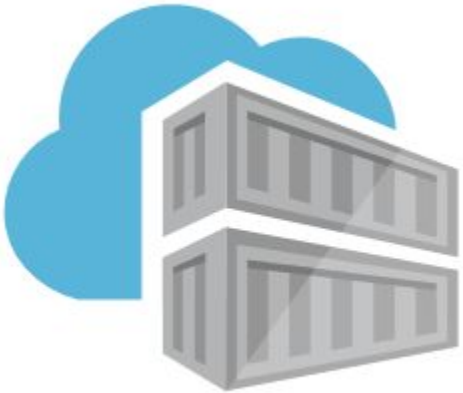
Docker flow


Prod
Registry
Extra validation
Dev
Registry
For testing
And debugging
Git

Helm flow



Azure Container Registry



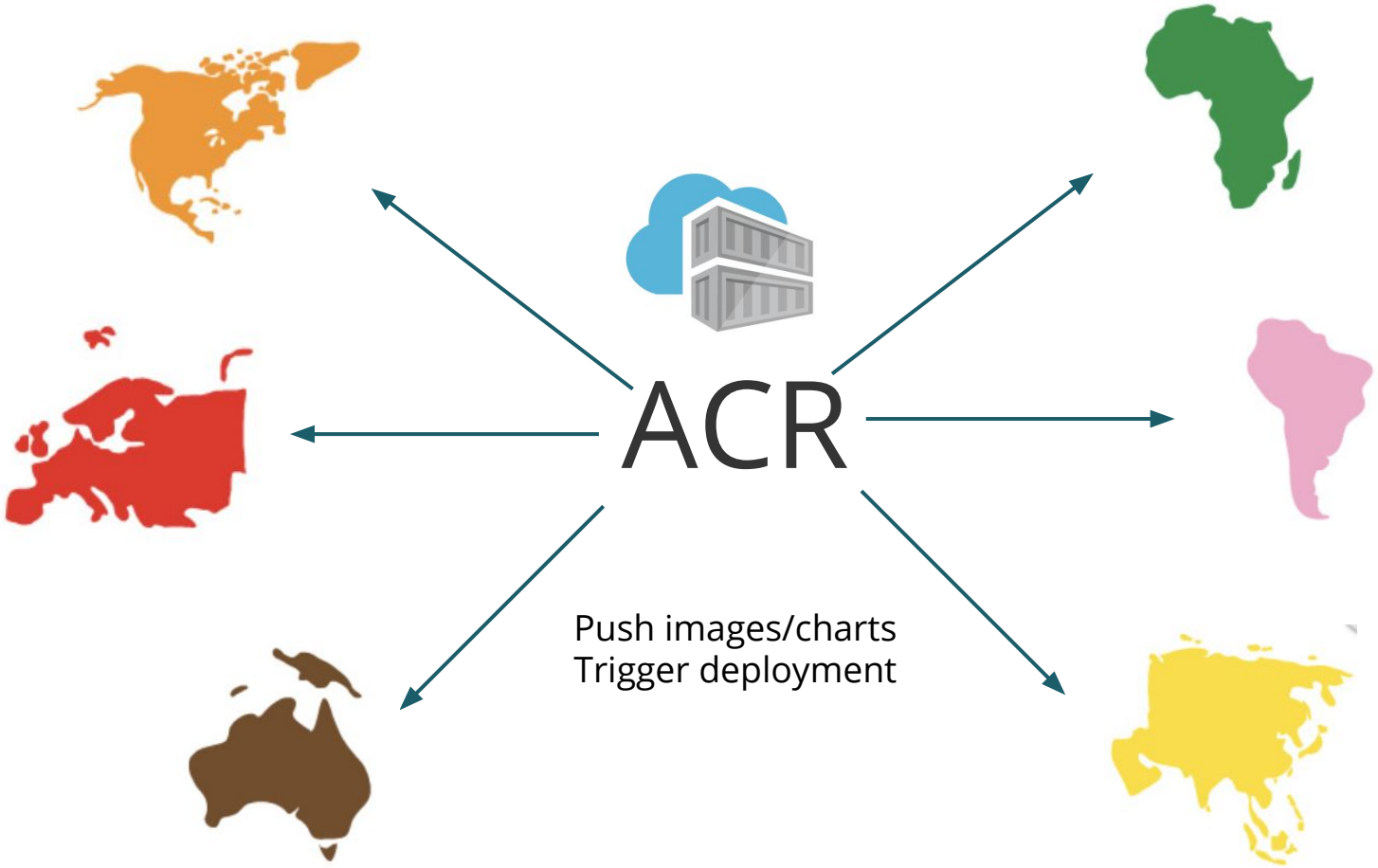
- Store Helm Charts, alongside Images
- Share common authentication & control

aka.ms/acr/helm-charts

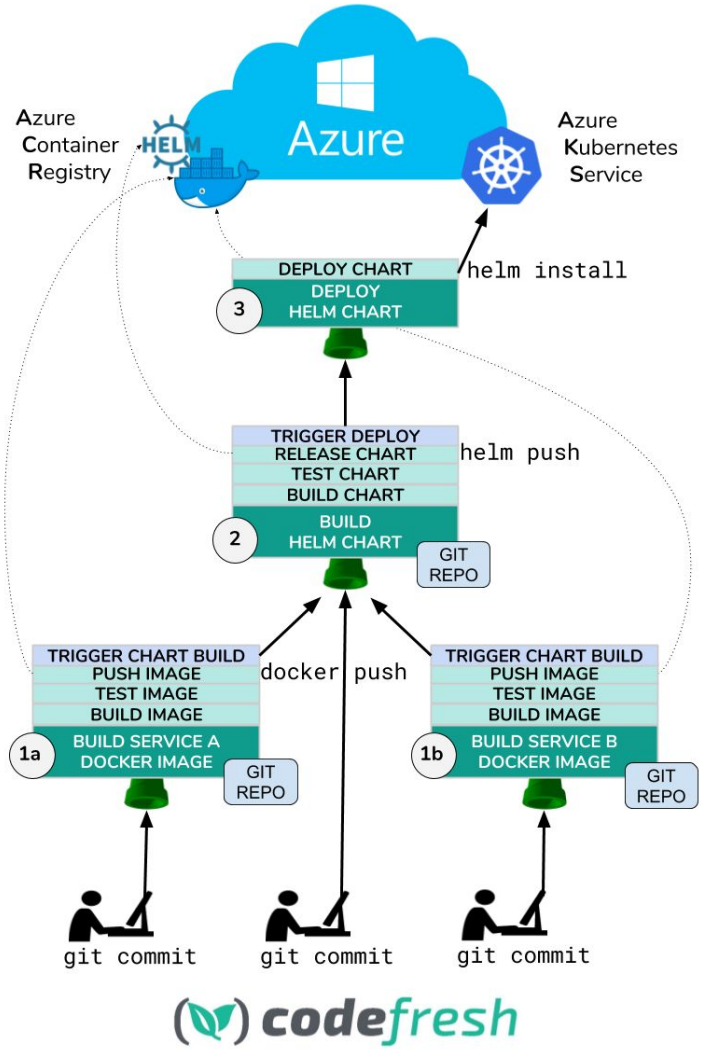
ACR Geo-replication

- Mange global/local deployments as one resource
- Geo-redundant for active-active-active failover

aka.ms/ACR/Geo-replication


ACR
Push images/charts
Trigger deployment

github.com/codefresh-io/
azure-helm-webinar



Demo time

Key Takeaways

- Helm workflows are similar to Docker Workflows
- Azure Container Registry supports Docker and Helm
- Codefresh + Azure FTW

Questions?

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Azure

Azure Container Registry
Helm Repos
aka.ms/acr/helm-repos