



Skip Staging! Test Docker, Helm, and Kubernetes Apps like a Pro

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@TodayWasAwesome



Over 3.5 million images built



Customers



What we'll cover today

- Traditional staging methods
- How Kubernetes changes the game
- Scaling test methods
- Demo

Codefresh is a CI/CD Platform Built for Kubernetes

Featured in



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ORCHESTRATION

Solutions that coordinate custom-defined DevOps processes and the associated automation tools and tasks.



CI/CD

Tools that allow developers to regularly merge their code changes into a shared repository.



TEST CREATION

Solutions that assist teams in the creation and maintenance of automated test scripts.



TEST MANAGEMENT

Tools used to manage test cases (manual or automated) linked to Agile and DevOps processes.



VISUAL TESTING

Tools that test with a focus on the digital user experience and the visual comparison of applications.

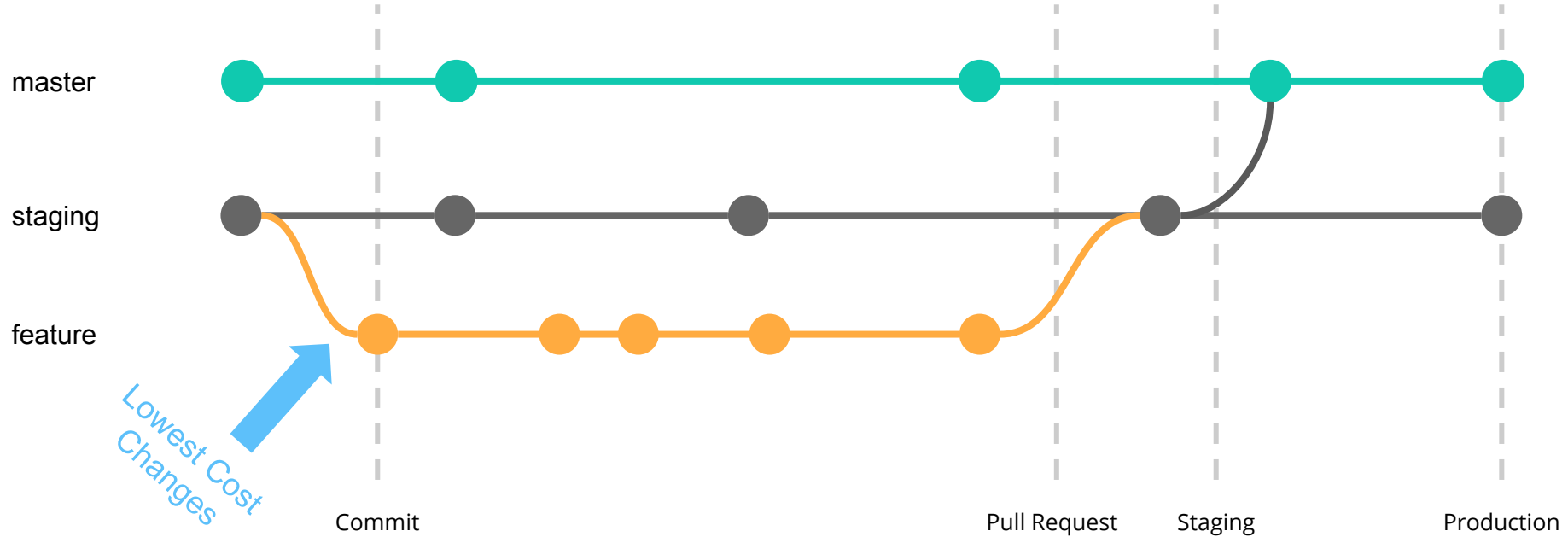
Why Test?

Unit Tests: 2

Integration Tests: 0

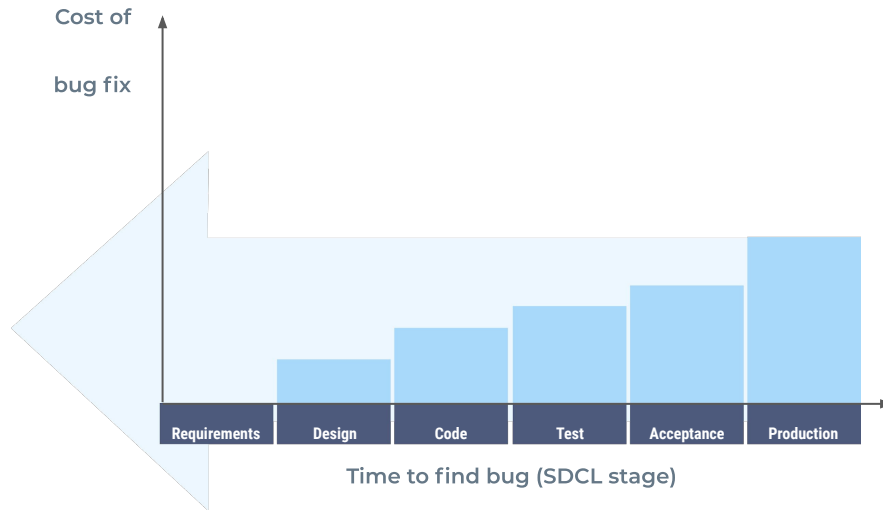


Shift Left - When do the tests happen?



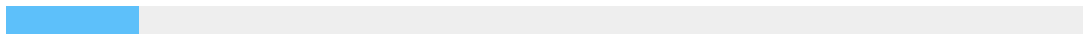
Shift Left

COST OF A BUG FIX ACROSS DEVELOPMENT LIFE CYCLE



How far have you shifted left?

Not at all, we test last, we test quality into the product **13%**



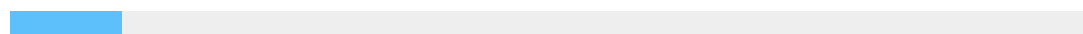
Testing involved early, but still have an extended test phase before release **57%**



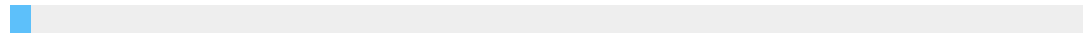
We could probably release after every sprint **19%**



We could ship daily if we wanted to **10%**



We could deploy any minute of any day **2%**



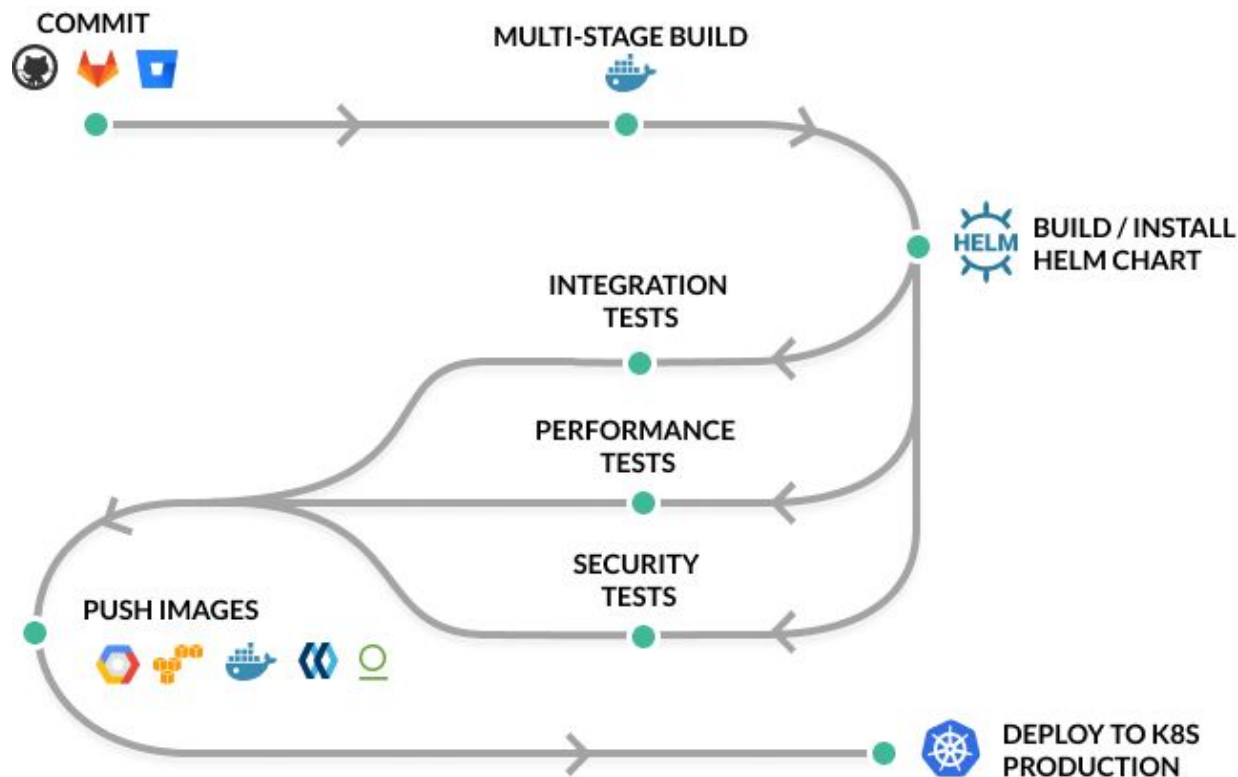
Lack of appropriate environments is the chief obstacle to shifting left

WQR 2017

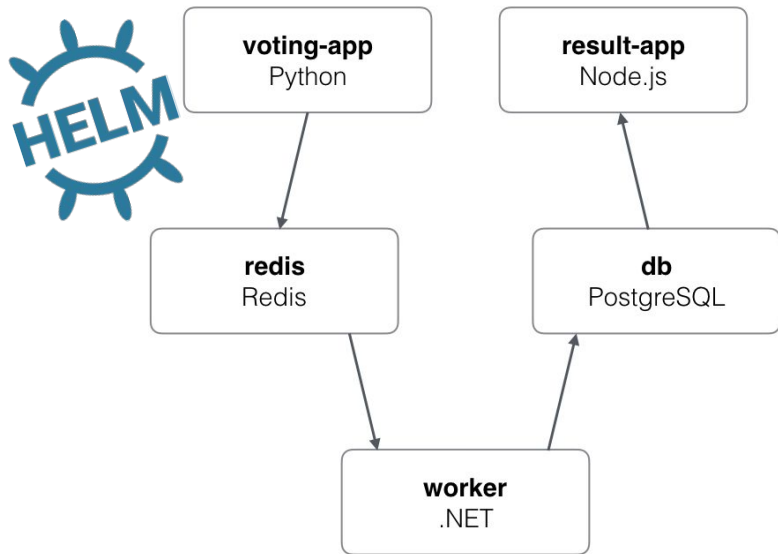
CapGemini

Kubernetes Pipeline

Leveraging Helm



Demo Application - Voting App

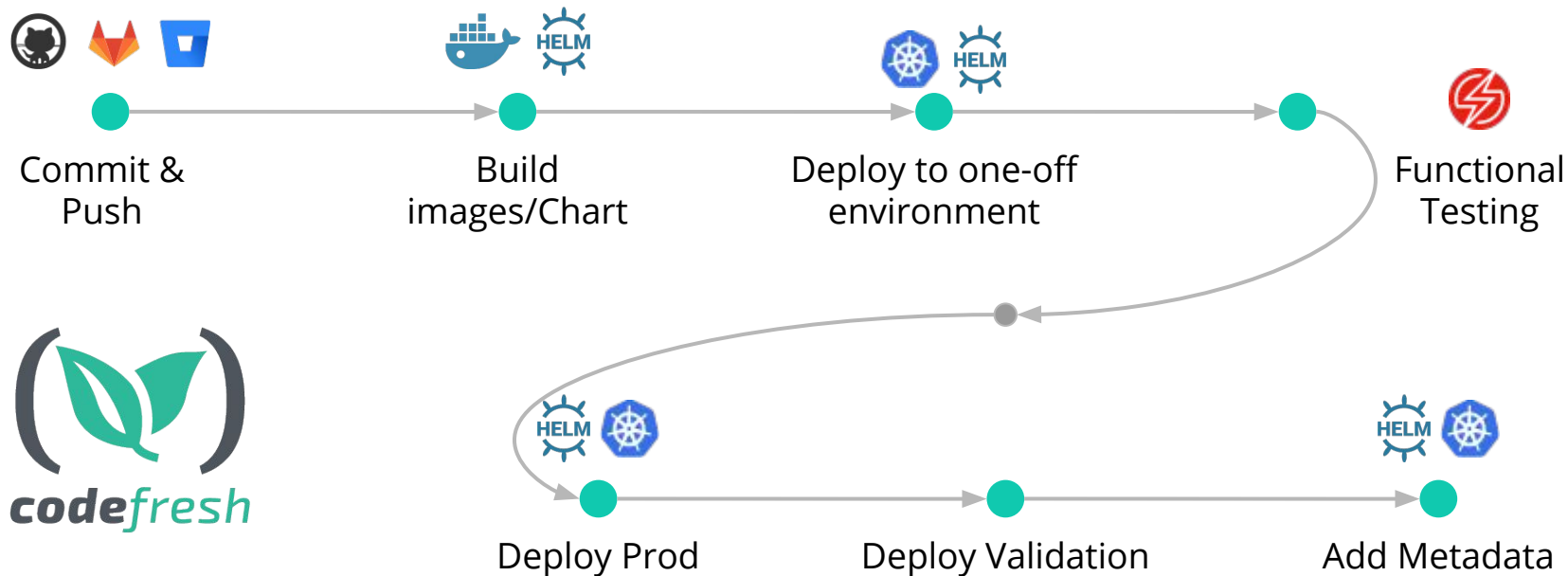


- 12-Factor Microservice App
- Packaged as a Helm Chart
- Helm makes Shift Left with Kubernetes a lot easier

<https://github.com/todaywasawesome/example-voting-app>

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Continuous Delivery Pipeline w/Saucelabs



Why Codefresh?



Adopting Kubernetes by cobbling together lots of tools and scripts is costly and time consuming

- Build servers
- Staging servers
- Build automation
- Webhooks
- Docker registry
- Kubectl
- Helm
- CI Tests
- Integration Tests
- UI Tests
- Performance Tests
- Security Scans
- Deployment tools
- Secrets management
- Configuration testing
- Traceability
- Dashboards

Codefresh is a DevOps Platform Built for Kubernetes



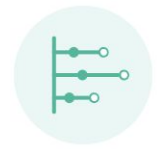
**Kubernetes
CI/CD Pipelines**



**Self-Service Test
Environments**



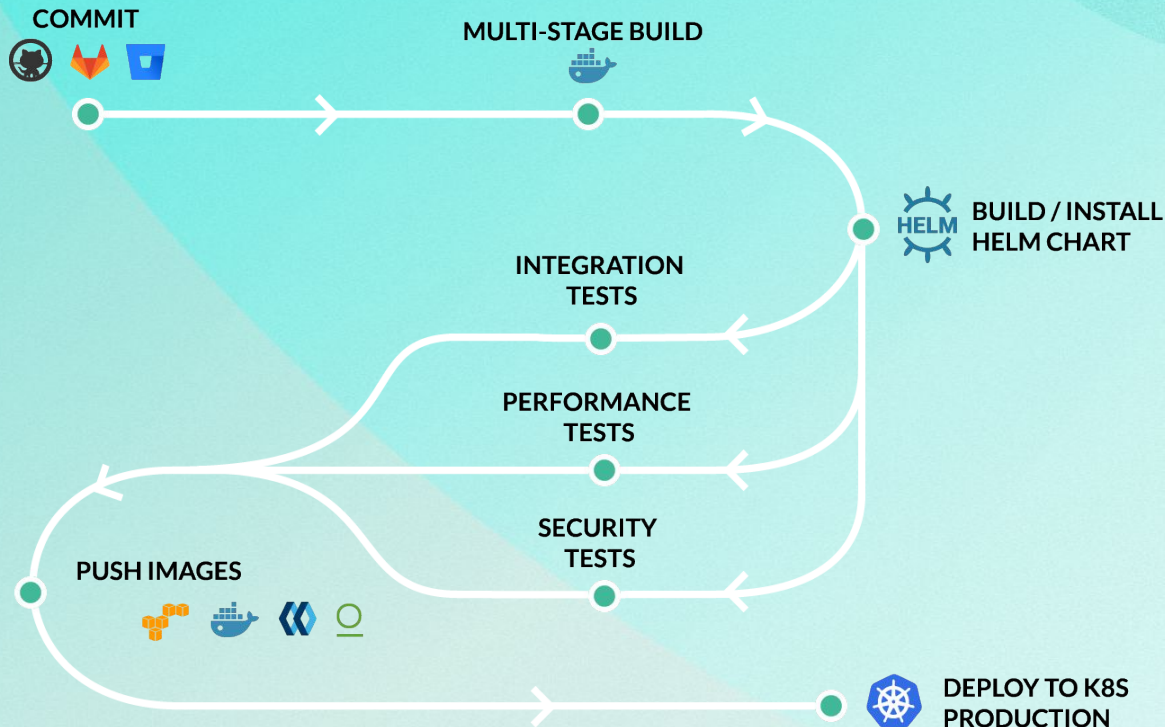
**Release
Management**



**Docker & Helm
Registry**

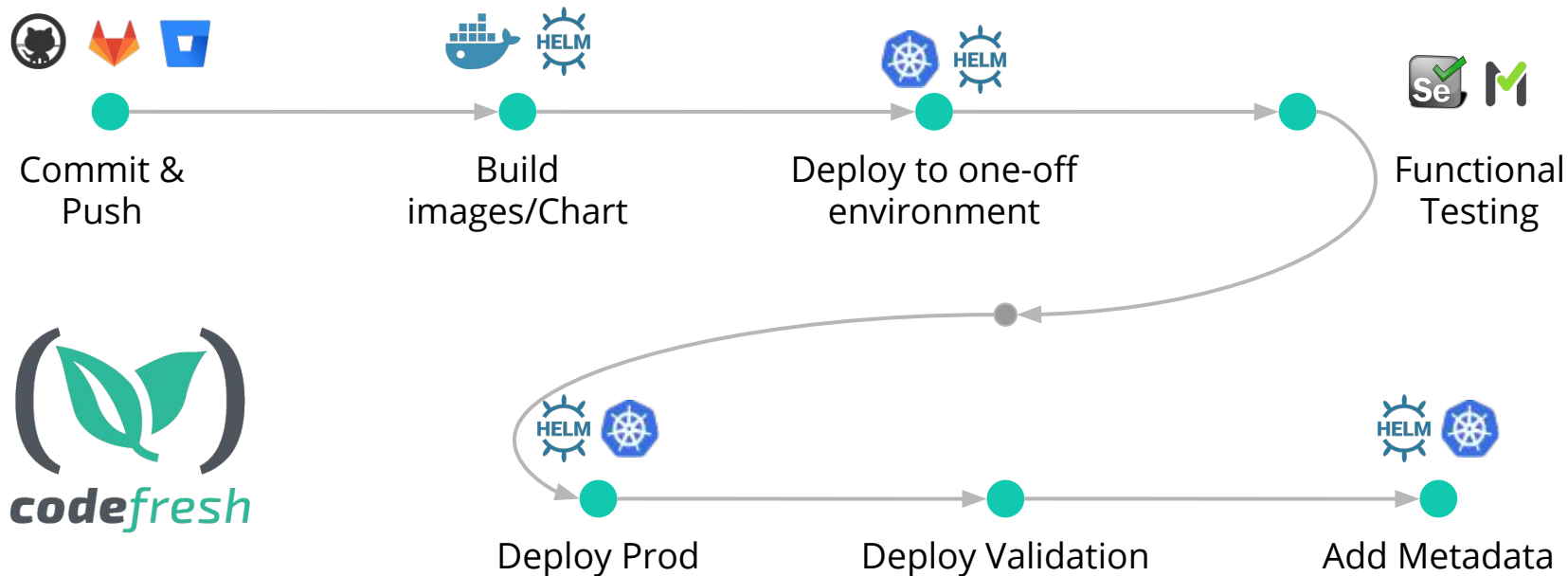
Codefresh pipelines have built-in steps for working with containers

- Deep integration w/ K8s and Helm
- Supports any language
- Complete DevOps platform



Create an account at codefresh.io
Start streamlining your engineering!

Continuous Delivery Pipeline



Questions?



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