

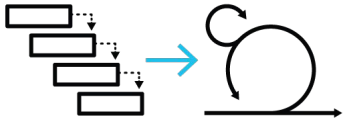
Shifting Security Left with Prisma Cloud and Codefresh



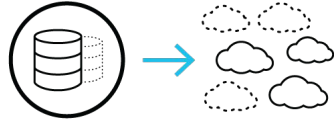
Vinay Venkataraghavan
Cloud CTO, Prisma Cloud

Lindsey Smith
Cloud Systems Engineer

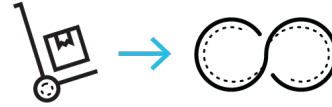
Cloud is modernizing the software development lifecycle



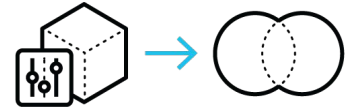
**Waterfall
to agile**



**Monolith to
microservices**

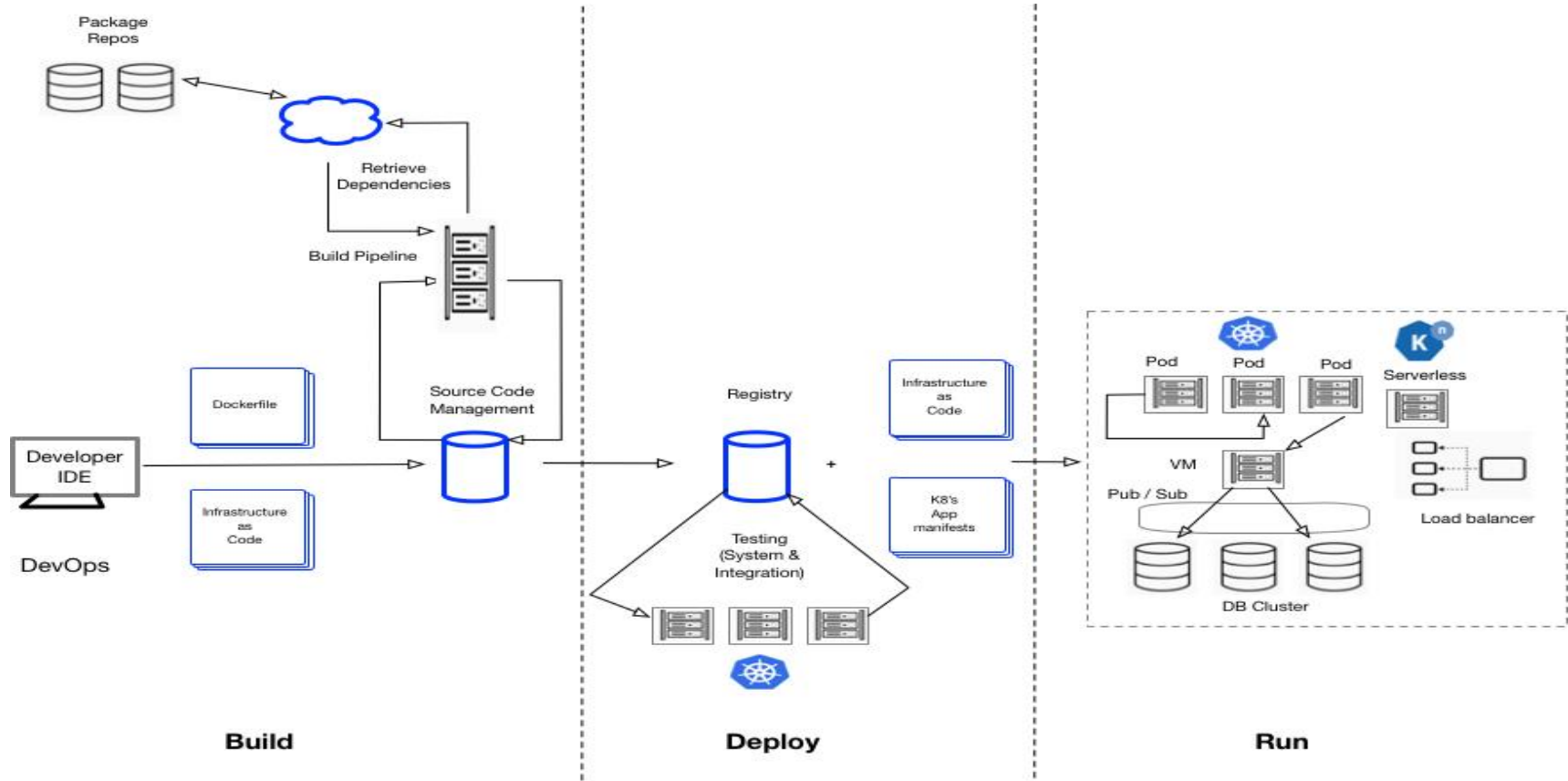


**Batch releases
to DevOps**



**Custom to Common
Cloud Operating
Model**

Cloud Native Deployment Pipeline



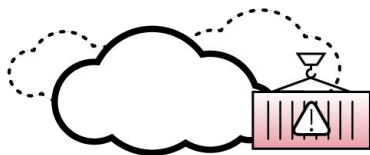
With cloud innovation come security challenges



Insecure Configurations

42%

of CloudFormation
templates are insecure



Vulnerable Defaults

51%

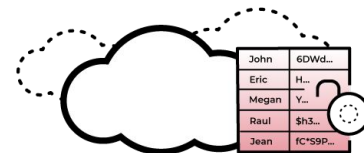
of exposed Docker
containers use insecure
defaults



Host Vulnerabilities

24%

of exposed cloud hosts
have known
vulnerabilities



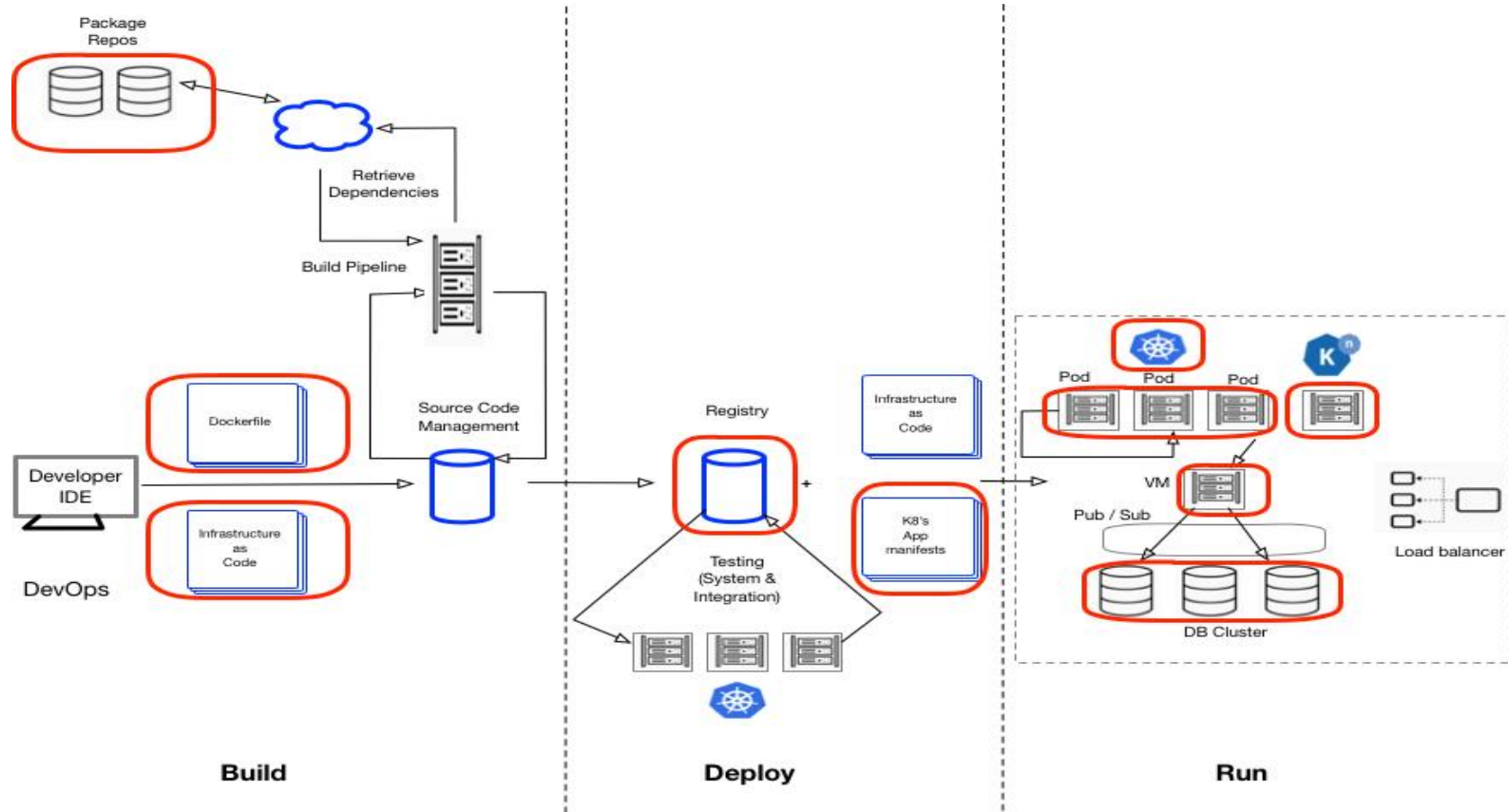
Compliance Risks

43%

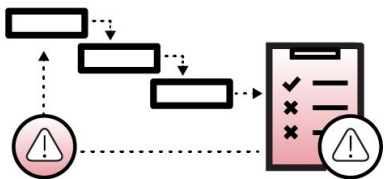
of cloud databases
are not encrypted

SOURCE: Palo Alto Networks Unit 42 research

Security threat vectors for cloud native applications

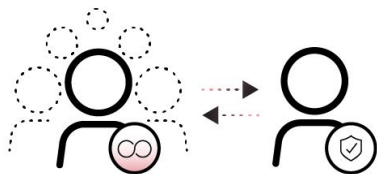


An integrated and comprehensive approach is required



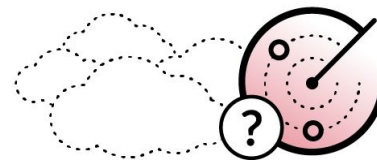
Protection across the dev lifecycle

It has to be integrated, automated and not an afterthought



Trust between DevOps & Security teams

Releasing software faster can not mean short cuts on security



Change is the only constant

Cloud environments constantly evolve - new workloads, ephemeral instances, new architectures, etc.

Solution: Automation and DevSecOps

Automation

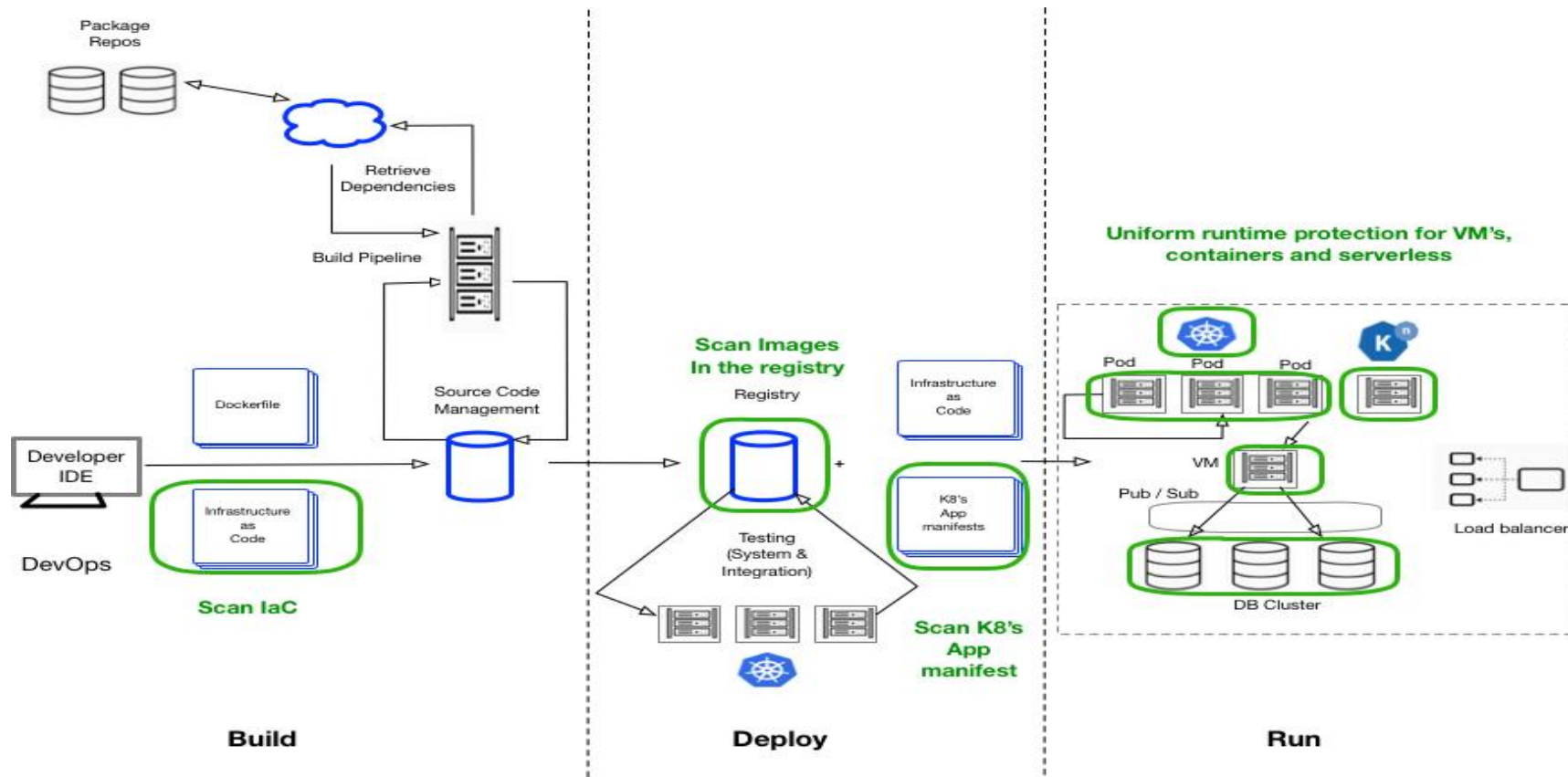
- Represent all aspects of infrastructure as code
- Define security and policy as code
- Application deployments as code
- Automated runtime security that scales
- Automated compliance

DevSecOps

- Security empowers devops with tools
- Security injected into the CI/CD pipeline
- Security testing treated like app / code testing
- Security is embedded (not bolted on)
- End to end security automation
- Scan IaC templates (IDE or CI step)
- Decentralized security for different teams

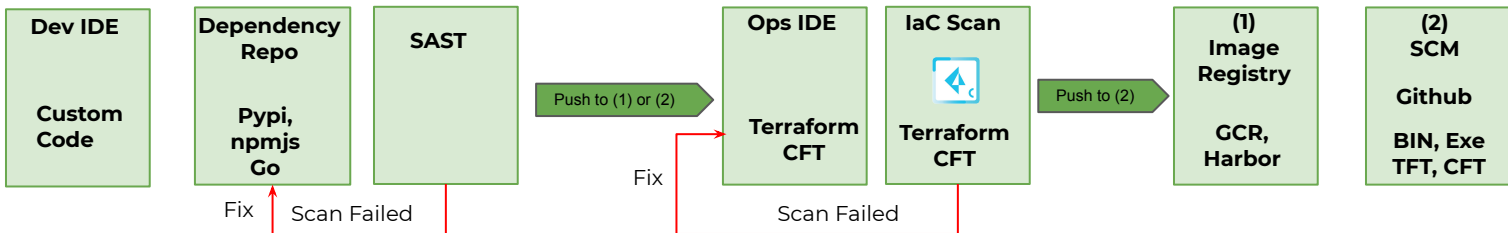
[Ref: Bridging the DevOps and Security Divide with DevSecOps](#)

(Cloud native) Security injected throughout the app life cycle and stack

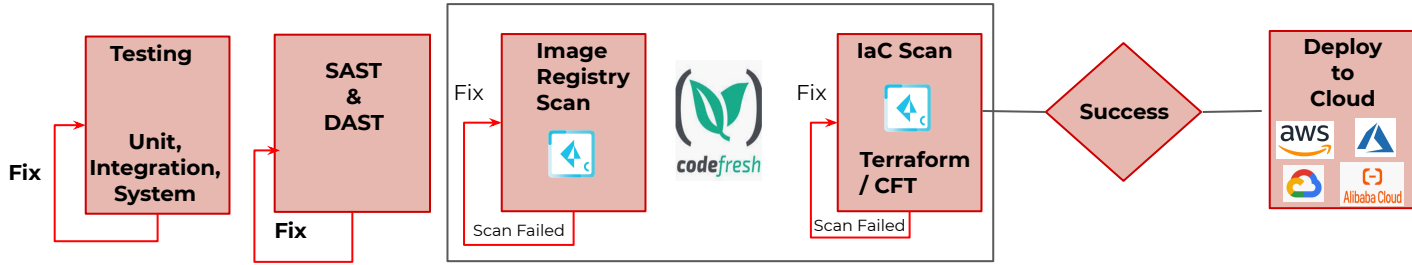


Prisma Cloud Security for Public Cloud and DevSecOps

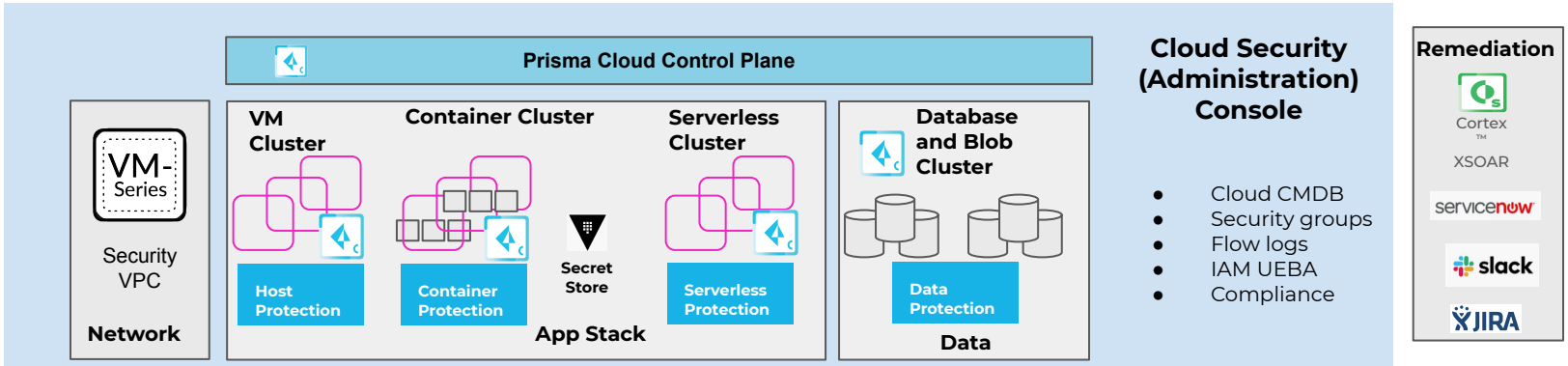
BUILD PHASE



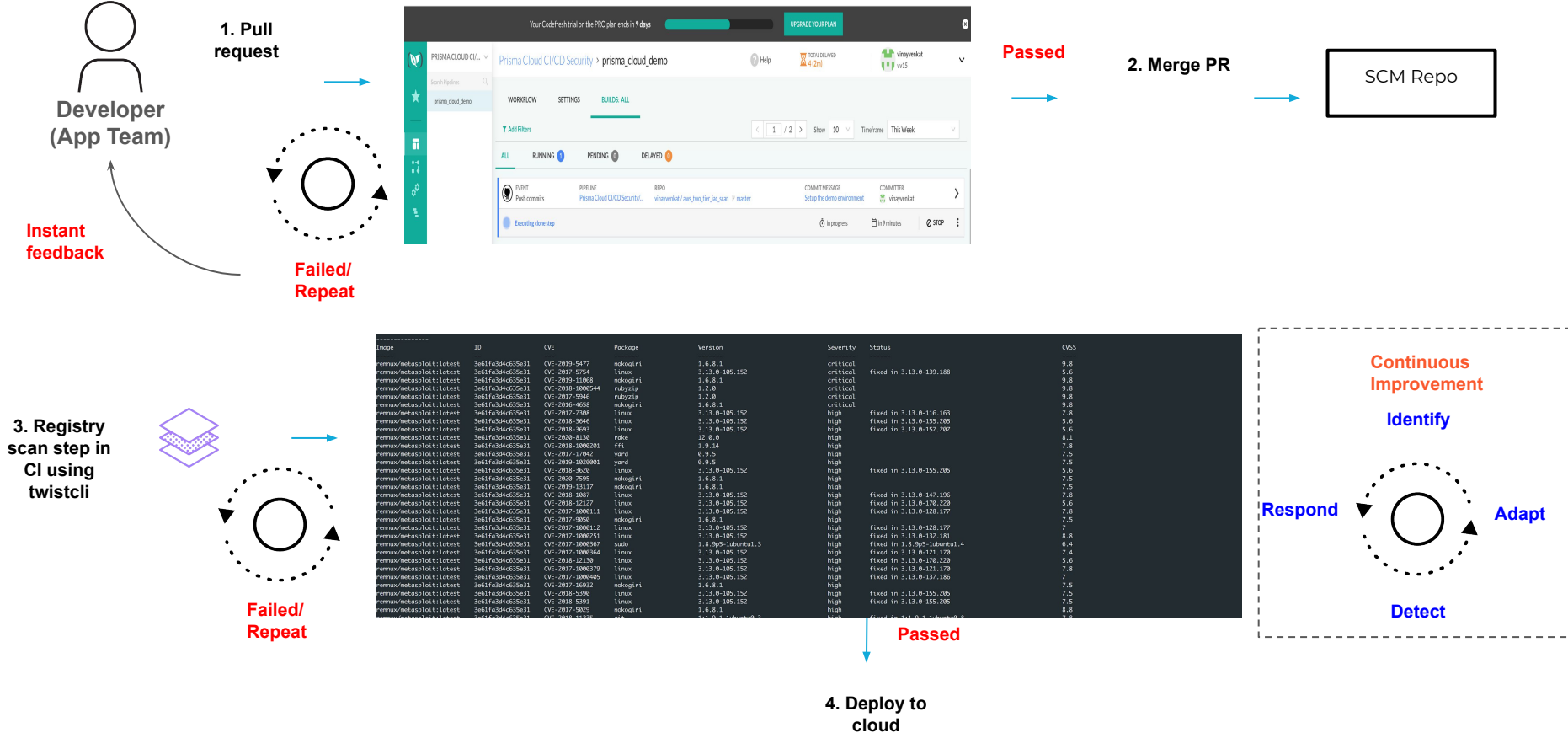
DEPLOY PHASE



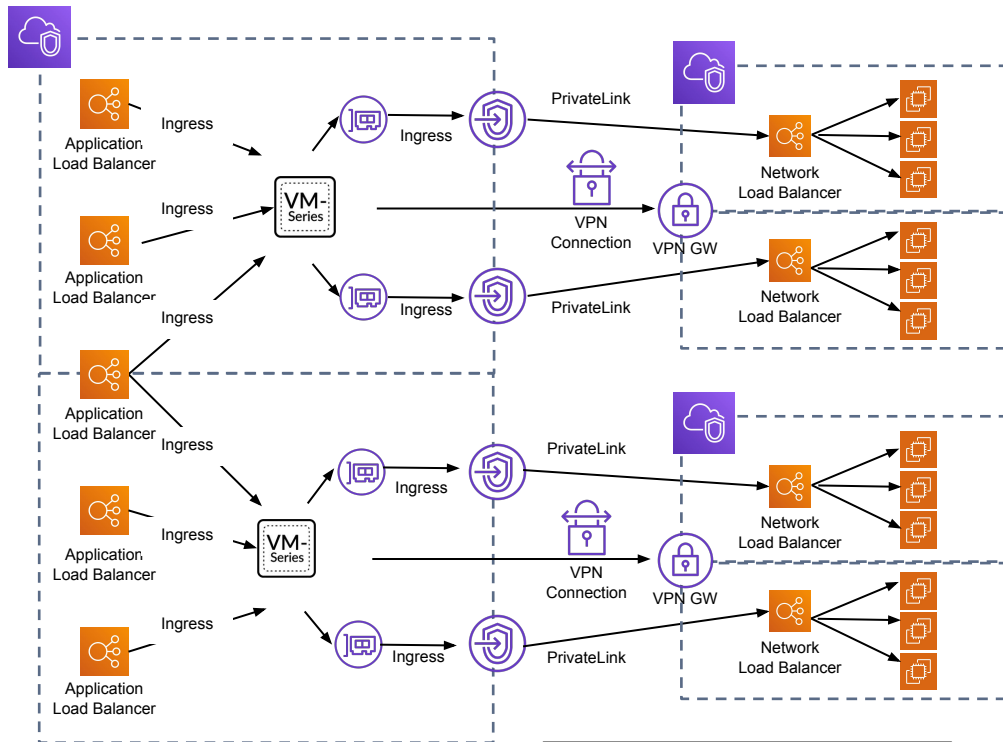
RUN PHASE



Use case: Empower DevOps with DevSecOps



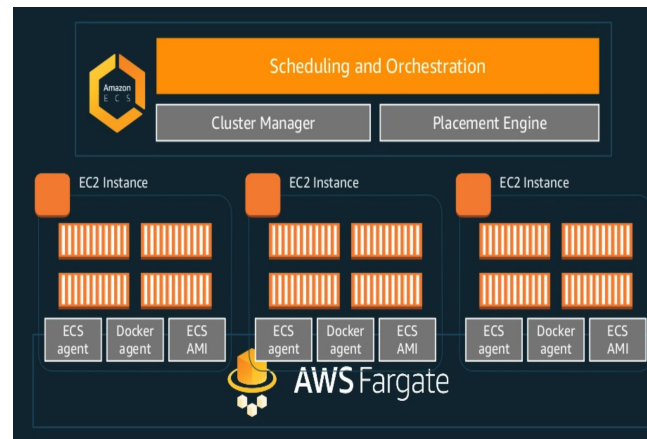
Use Case: Infrastructure as Code / Applications as Code with scanning



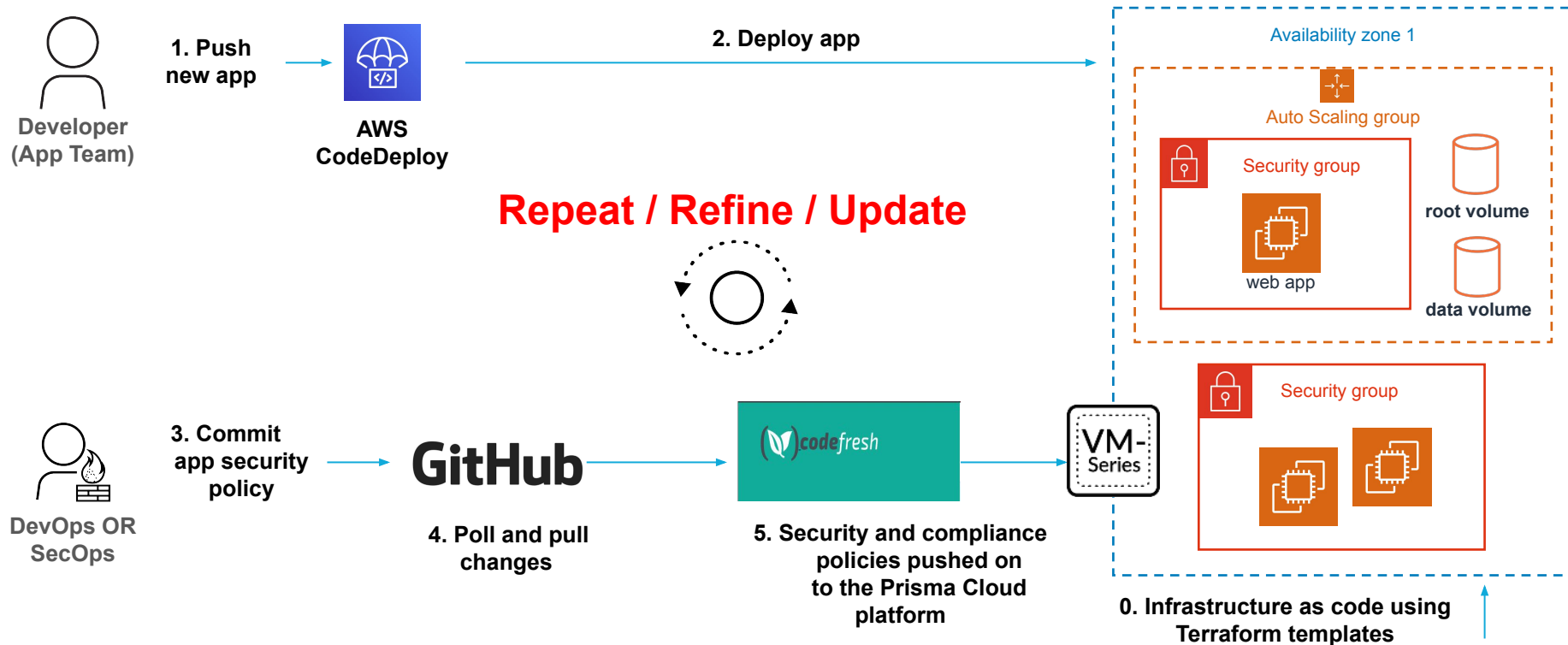
Iac + K8s manifests

Codefresh Pipeline
Security Scan

Identify and fix
security issues



Use Case: CLOUD SECURITY AT THE SPEED OF DEVOPS



DEMO

Thank you



QUESTIONS?



Palo Alto State of Cloud Native Security 2020:
<https://www.paloaltonetworks.com/state-of-cloud-native-security>



Signup for a **FREE** account with **UNLIMITED** builds

& schedule a 1:1 with
our experts at

<https://codefresh.io>