



Secure Software Supply Chain



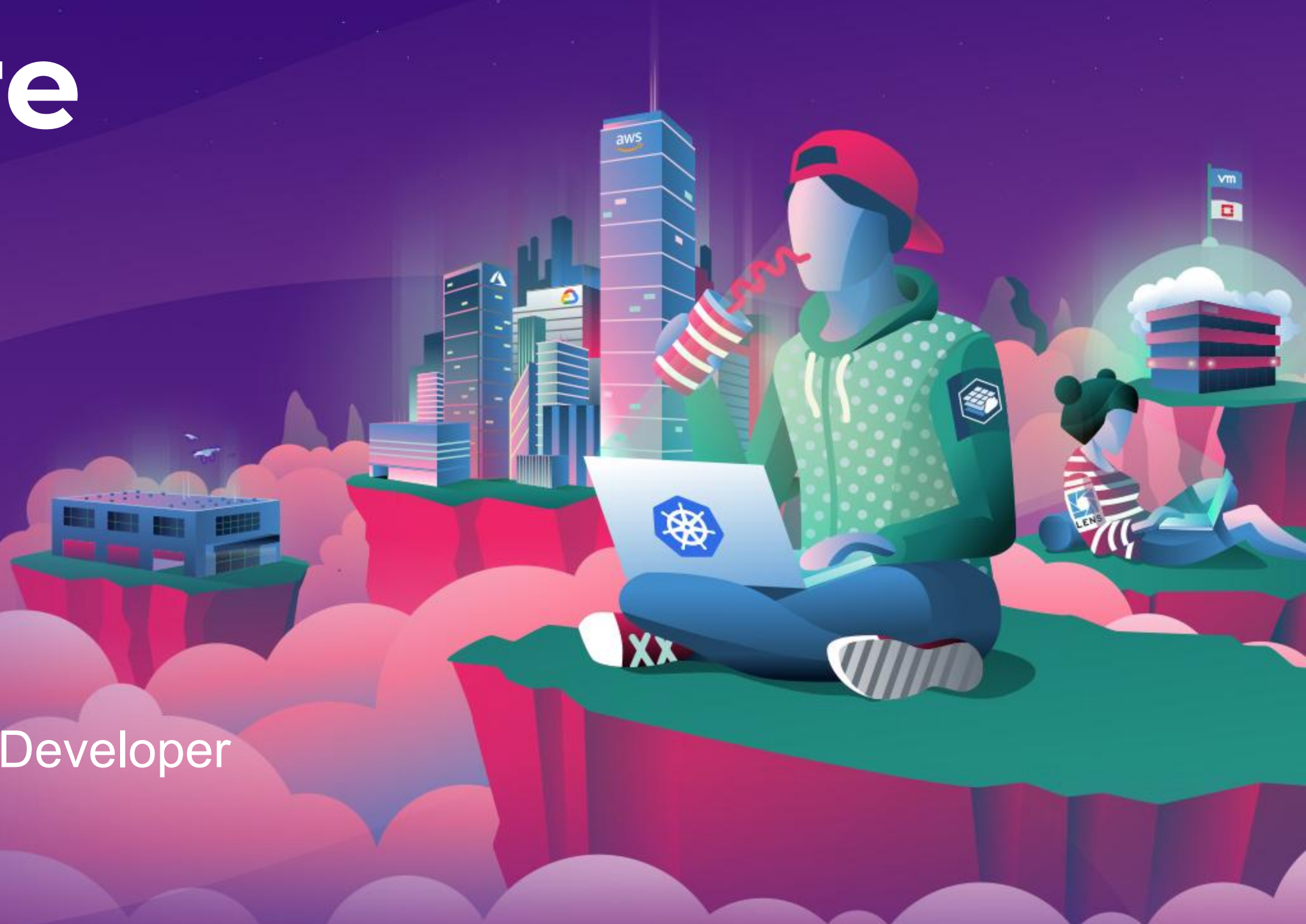
John Jainschigg

Director, Content



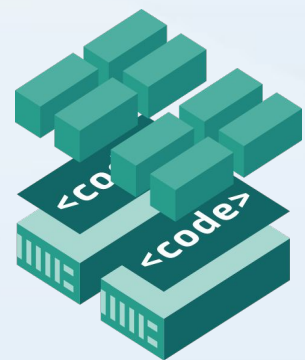
Nick Chase

Director, Technical Marketing and Developer Relations

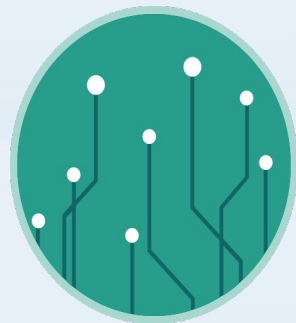


What is the software supply chain?

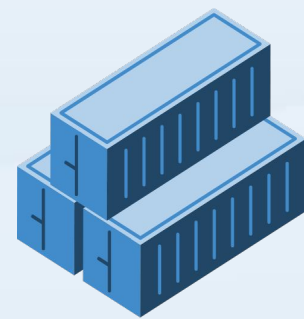
Everything that goes into delivering applications into production



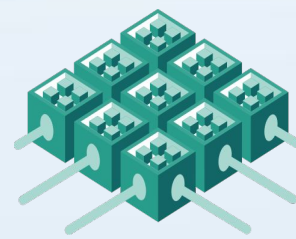
Infrastructure as code



Technology partner



Containers



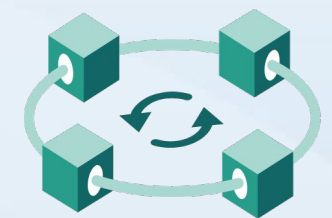
Kubernetes orchestration



Open source



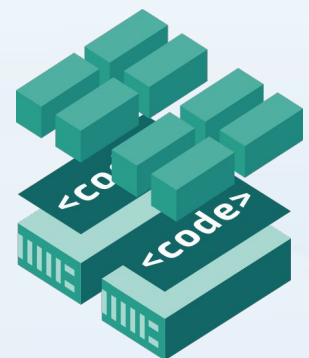
Security



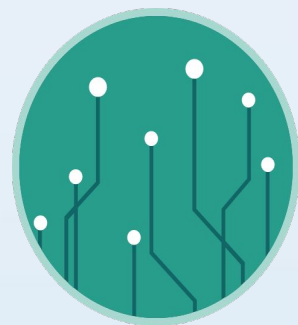
CI/CD

What is the software supply chain?

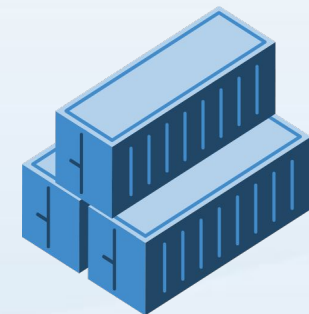
A tangled web of everything that goes into delivering applications into production



Infrastructure as code



Technology partner



Containers



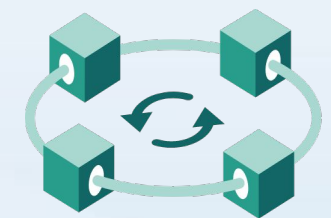
Kubernetes orchestration



Open source



Security



CI/CD

What is the risk?

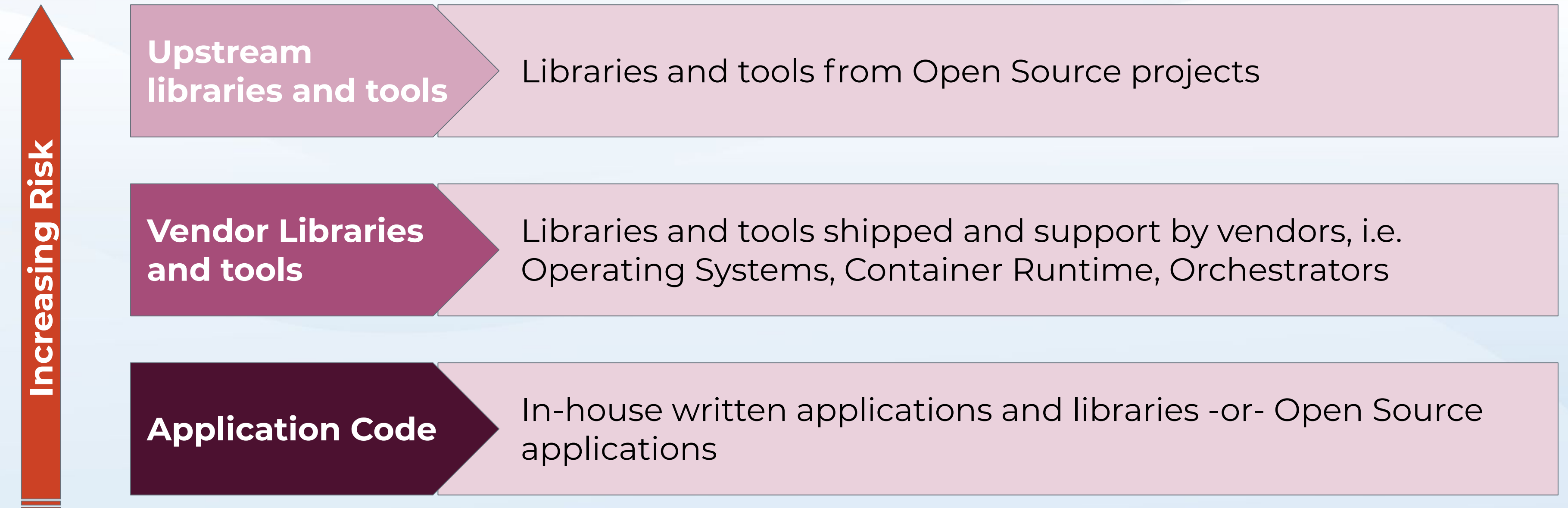
- Data exposure or loss
- Backdoor injection
- Ransomware



Software Supply Chain Cyber attacks:

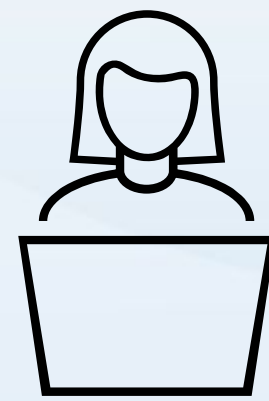
- Stuxnet
- NotPetya / M.E.Doc
- British Airway
- Solarwinds

Key Risk Areas



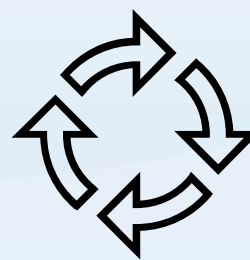
Secure Software Supply Chain

Integrated Dev Tools



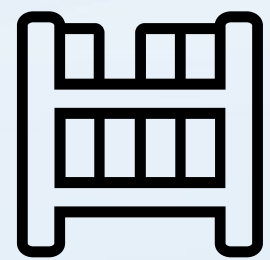
Devs code & test locally (“Inner Loop”)

CI/CD Pipelines

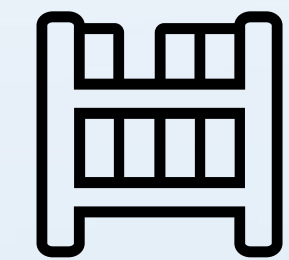


CI/CD tests applications; digitally signs them

Image Security & Governance

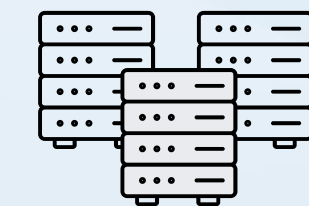
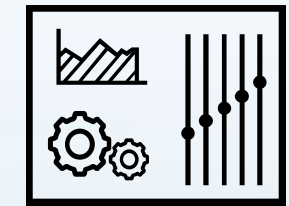


Images are stored in a registry, scanned for vulns



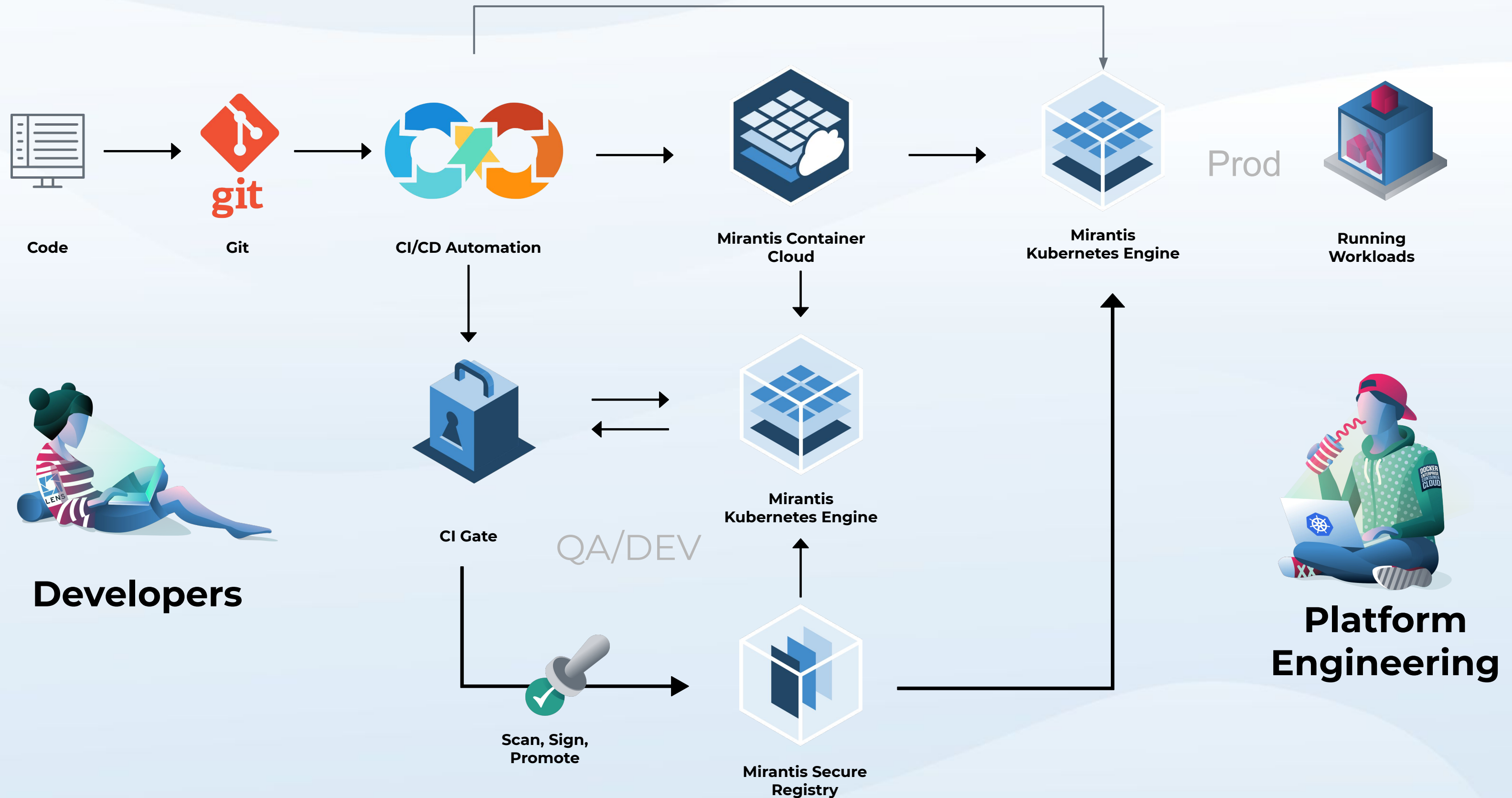
Images that pass all tests & security checks promote to production

Ongoing Production Controls



Continual security checks to surface new security issues

Ship Code Faster: Secure Software Supply Chain



What we need

Images that are scanned, tested, reviewed, and verified.

What we need

Images that are **scanned**, **tested**, **reviewed**, and **verified**.

What we need

Images that are **scanned**, **tested**, **reviewed**, and **verified**.

Build code with
Jenkins

Scan for
vulnerabilities

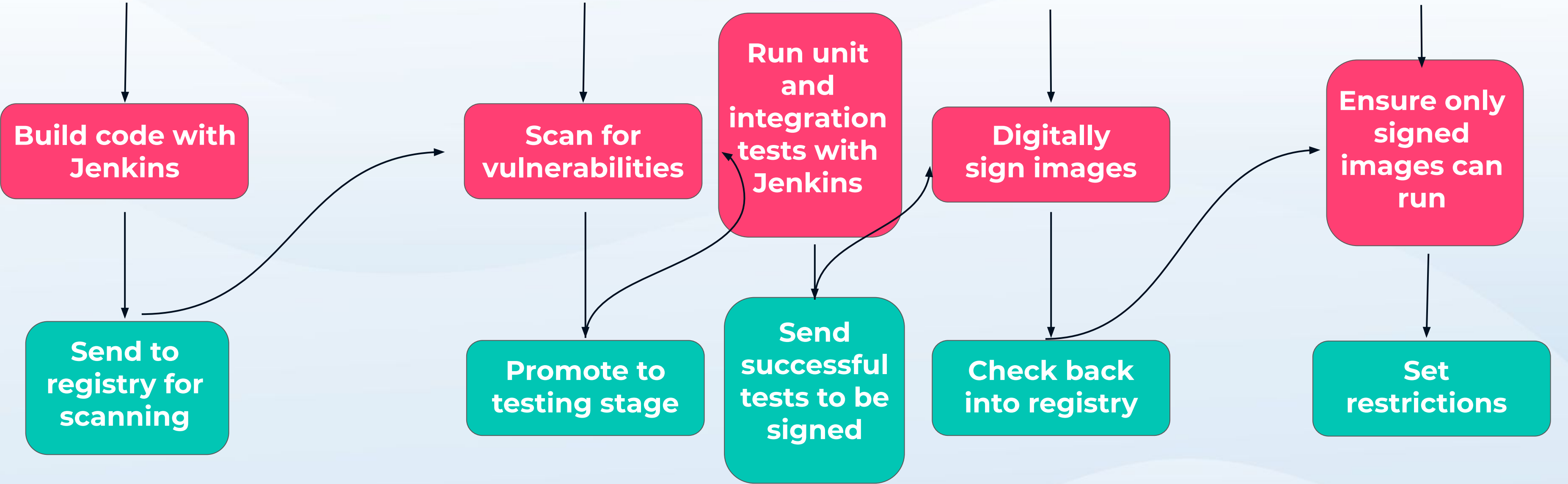
Run unit
and
integration
tests with
Jenkins

Digitally
sign images

Ensure only
signed
images can
run

What we need

Images that are **scanned**, **tested**, **reviewed**, and **verified**.



The infrastructure



**CI/CD
Cluster**



**Image
Registry**



**Application
Cluster**



**Code
Repository**



Thank you!

Questions? Please contact us at
<http://www.mirantis.com/contact>



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Ship Code Faster.