

ADD0

ALL DAY DEVOPS

NOVEMBER 12, 2020

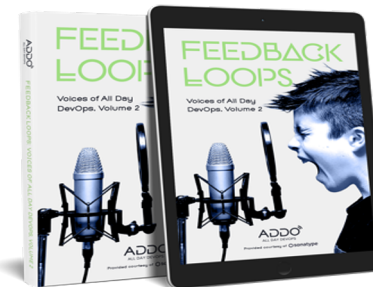
Michael Fraser | @itascode
Co-Founder & CEO, Refactr

CI/CD Pipelines
for DevSecOps
with Hybrid Cloud



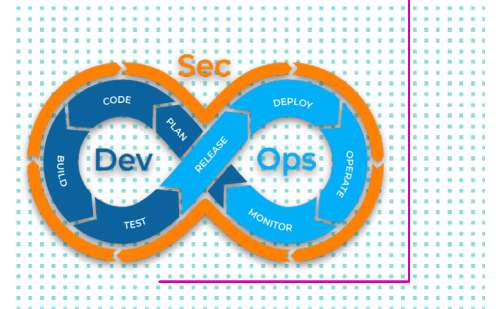
Intro

- US Air Force Veteran
 - F-15 C/D Armament Specialist
 - Cybersecurity Engineer
- Refract
 - Co-Founder | CEO
- Master of Computer Science
 - Seattle University
- Adjunct Instructor
 - Seattle Central College
- Thought Leader | Speaker
 - DeveloperWeek
 - Hashiconf
 - RedHat AnsibleFest



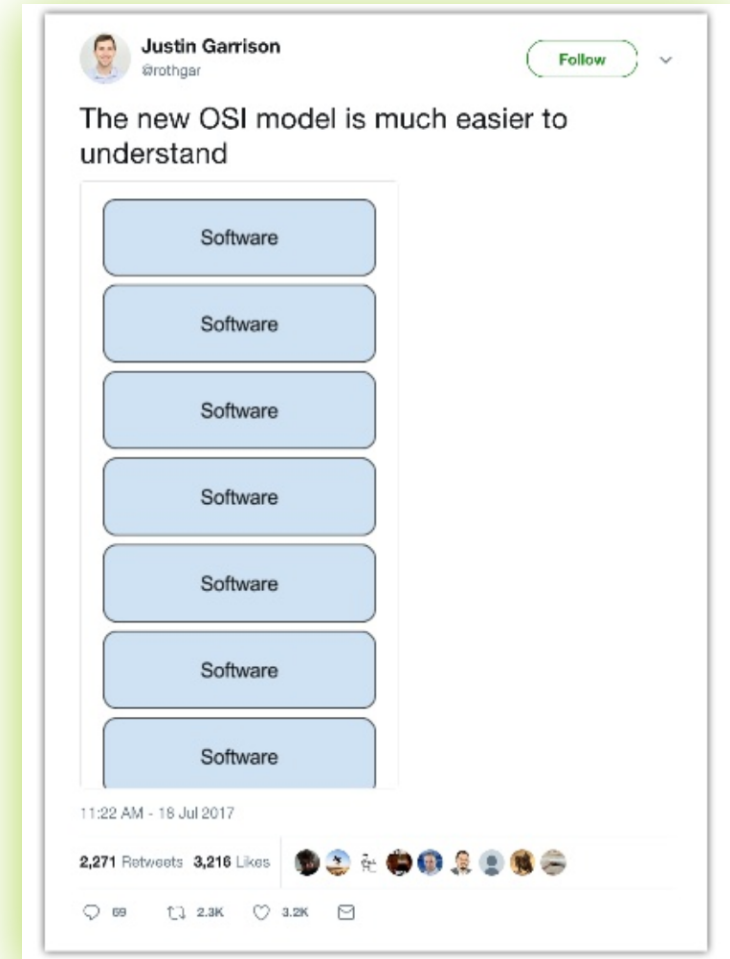
Defined.

DevSecOps is holistic agile automation that seamlessly integrates cybersecurity into existing IT and **DevOps** workflows.



IT-as-Code.

- Infrastructure-as-Code
- Configuration-as-Code
- Security-as-Code
- *-as-Code



Principles of DevSecOps

INSTEAD OF

configuring by hand.

WE

continuously automate.



INSTEAD OF

manually responding to alerts and events.

WE

create automation that cuts down on labor overhead and human error.



INSTEAD OF

being reactive.

WE

are proactive to use an agile approach for cybersecurity use cases.



INSTEAD OF

configuring security manually.

WE

seamlessly integrate cybersecurity into existing agile IT and DevOps workflows.



DevSecOps is Complicated

DevSecOps Reference Architecture

Level 5

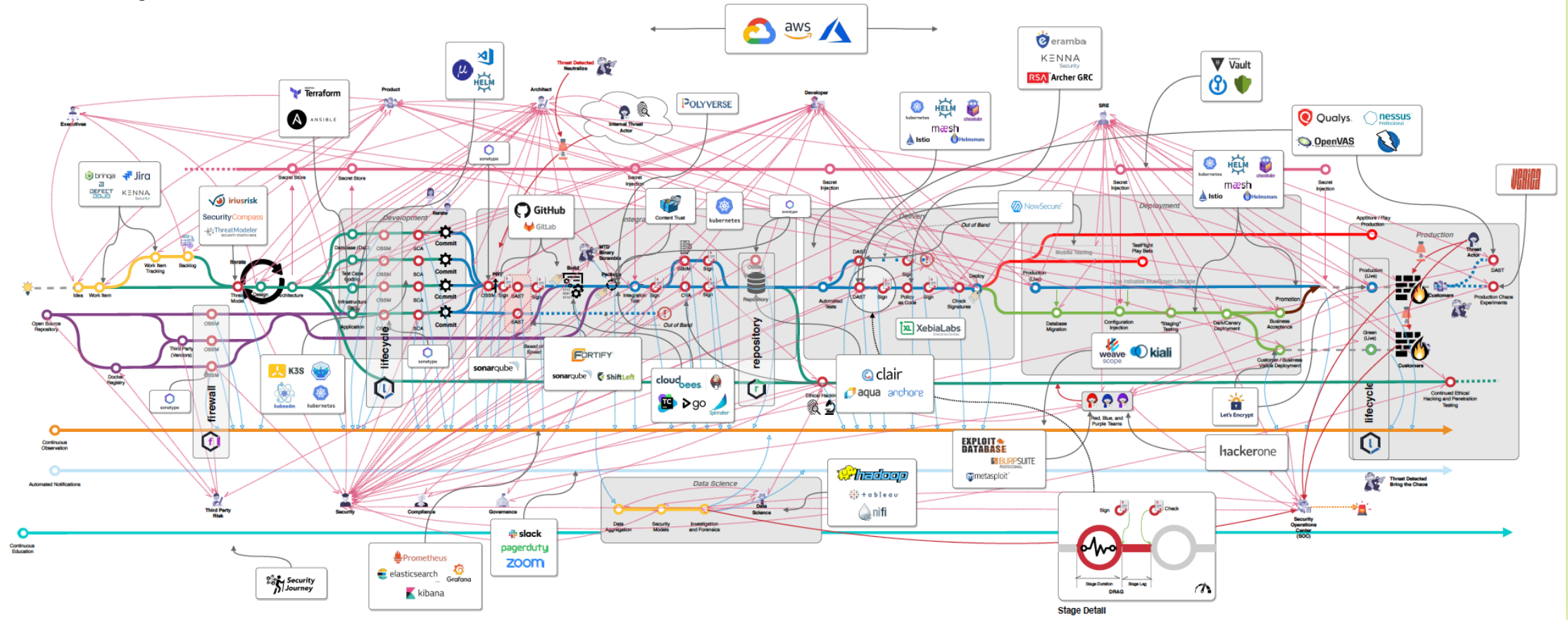
Last Modified: January 16, 2020
Last Modified By: DJ Schwan

Legend

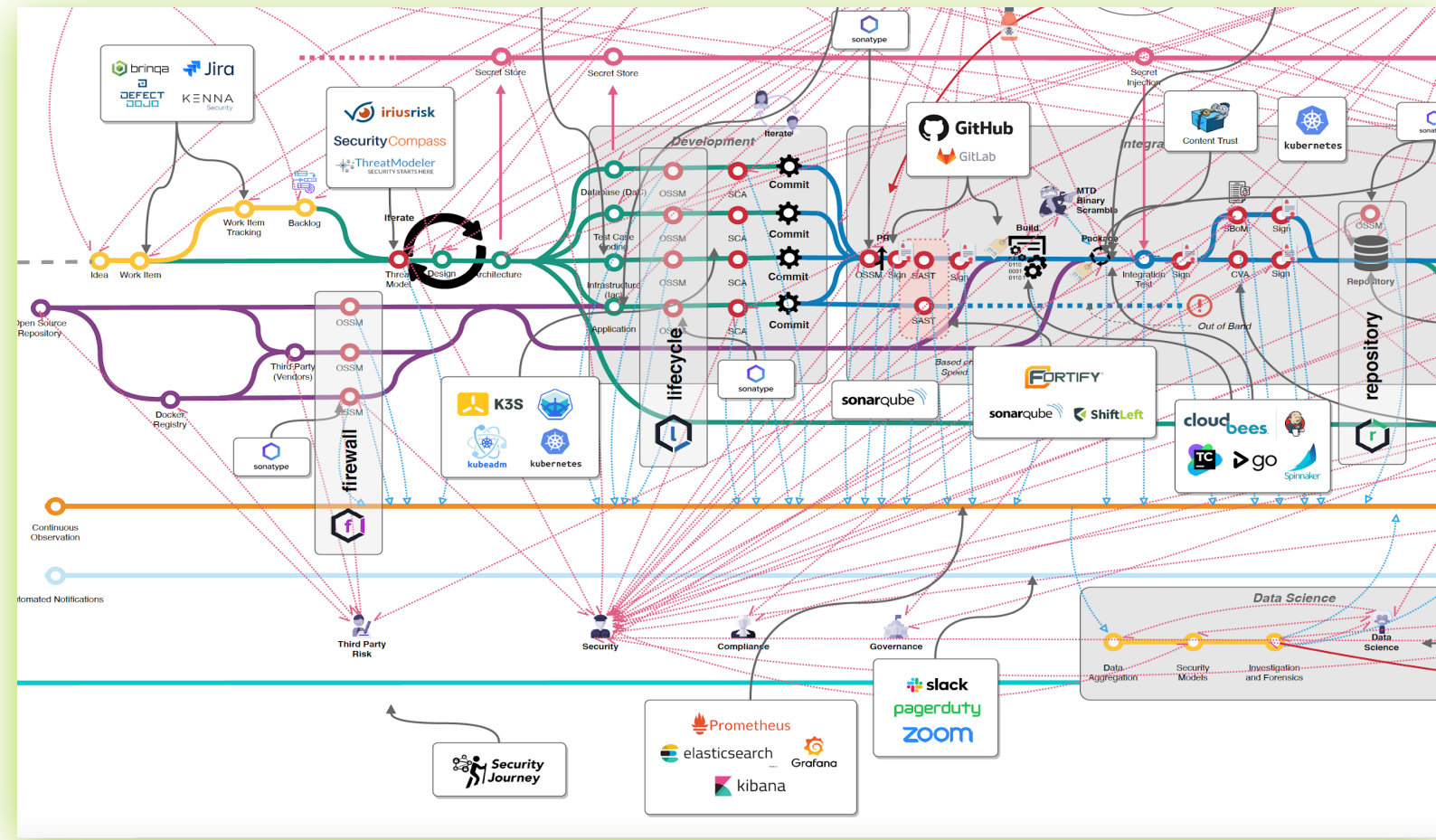
- Security
- Manual
- Automated
- Business
- Green Deploy Environment
- Supply Chain
- Secret Management
- Observation
- Notifications
- Continuous Education

→ Message
→ Alert
→ Trigger
→ Deployment Data Flow
→ Secret Flow

sonatype

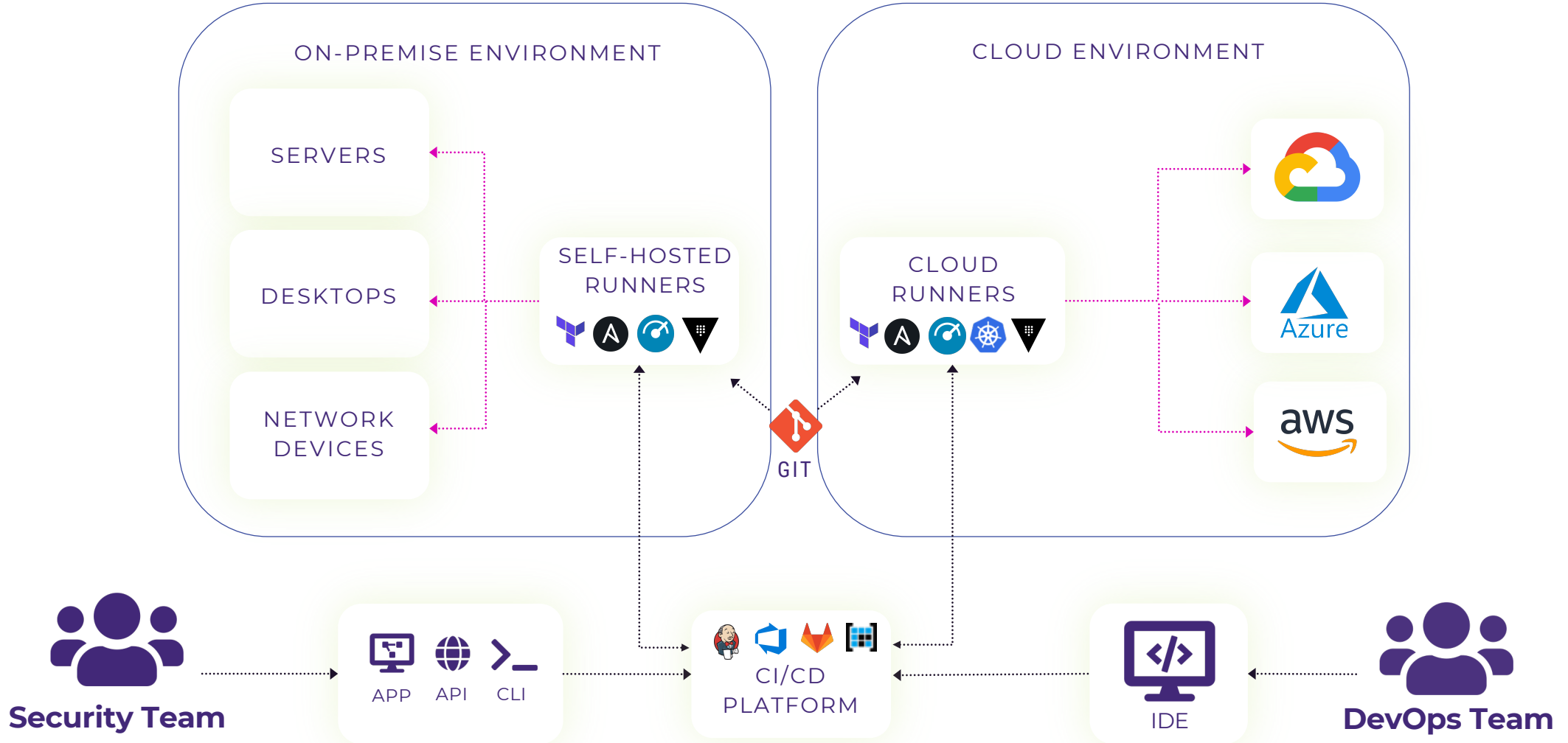


Security Touches Everything

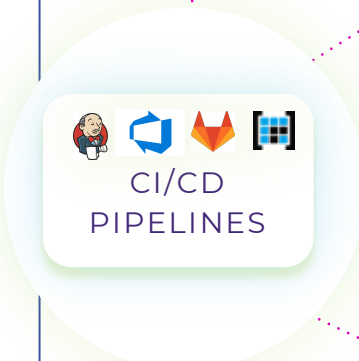





























Hybrid DevSecOps Platform Architecture

PICK A PLATFORM WITH HYBRID RUNNERS THAT CAN RUN ANYWHERE



Cybersecurity Use Case

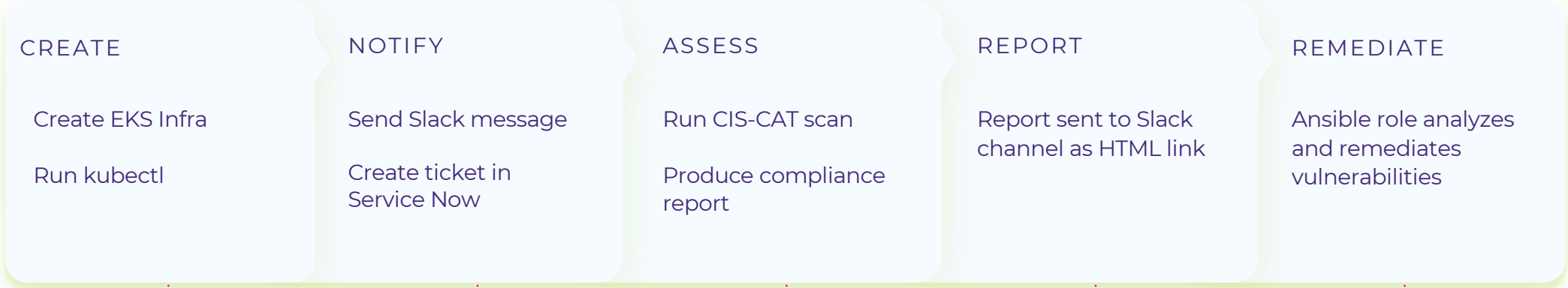


| | | | | | | |
|--|---|--|---|---|--|--|
| <p>AppSec Code Scanning</p> |  CLI |  SCRIPT |  GIT |  SCRIPT |  API | |
| <p>Incident Response User Audit</p> |  API |  GRAPH API |  POWERSHELL |  POWERSHELL |  ARM |  CFT |
| <p>Cloud & Compliance Security Assessment</p> |  TERRAFORM |  SLACK |  CIS-CAT |  UPLOAD |  SSH |  SLACK |
| <p>DevSecOps Container Scanning</p> |  GIT |  PULL |  SCAN |  BUILD |  PUSH |  DEPLOY |
| <p>Network Automation Configuration Updates</p> |  SCRIPTS |  HTTP |  ANSIBLE |  HTTP | | |

Example DevSecOps CI/CD Pipeline

CLOUD SECURITY & COMPLIANCE USE CASE

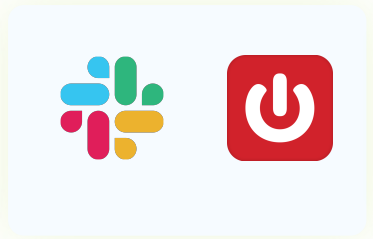

CI/CD
PIPELINES



AUTOMATION TOOLS




EXTERNAL SERVICES



Example DevSecOps CI/CD Pipeline

APPSEC USE CASE - SAST SCANNING

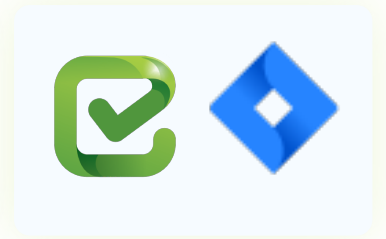

CI/CD
PIPELINES



AUTOMATION
TOOLS



EXTERNAL
SERVICES



Real World.

Visual interface to enable collaboration

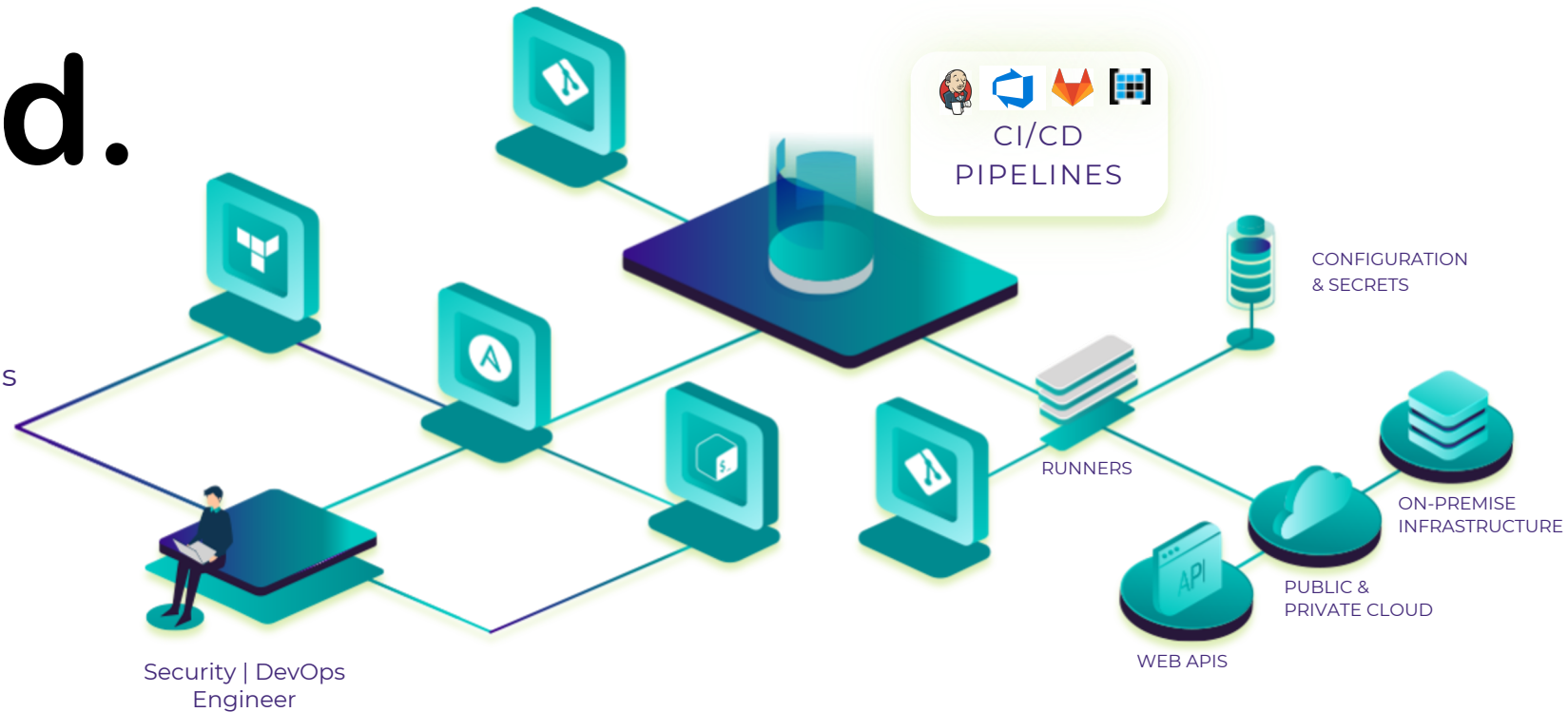
Shared language and **runtime**

Supports open-source DevOps and security tools

Sandboxed runners, for any environment

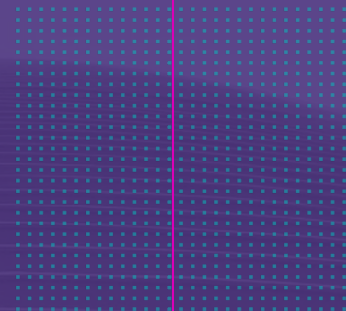
Integrates with many third-party platforms

Share automation content between teams





QUESTIONS?





Contact Mike



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