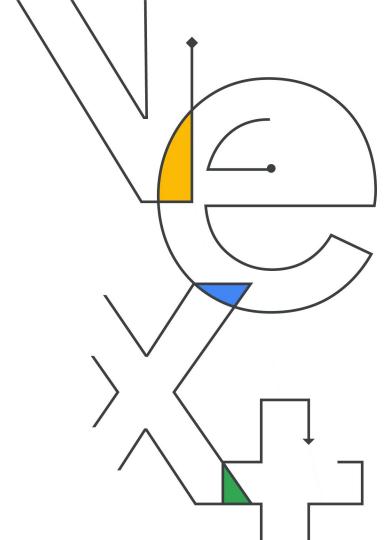
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What's new in cloud-native CI/CD

Speed, scale, security

Oct/





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Product Manager
Google Cloud



Edward Thiele
Software Engineer
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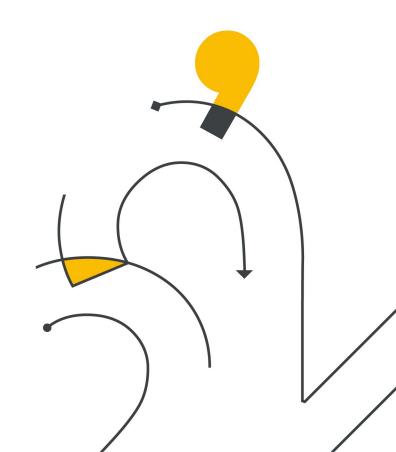
01	The importance and challenges of modern CI/CD

How Software Delivery Shield can help

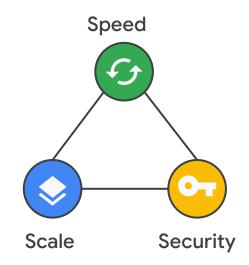
03 Demo

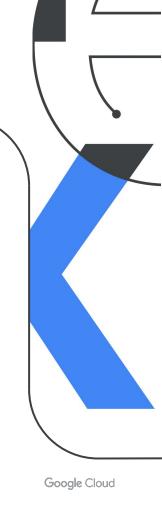
04 Next steps

Continuous integration and delivery are critical to modern software development



Challenges of modern CI/CD





Challenges of modern CI/CD

Speed

Productivity without compromising quality

- Key metrics
- Small, frequent, and incremental changes with automated testing
- Managed services

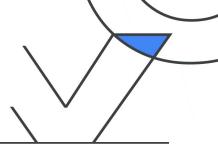






Challenges of modern CI/CD

Scale



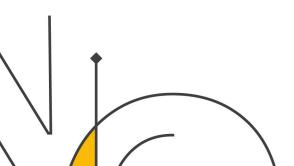
Design for scale, but avoid analysis paralysis

- Start small and then iterate
- Take advantage of industry best practices
- Choose tools & technology that can evolve with your scale

Security

Don't let security be an afterthought

- Early security reviews
- Human in the loop
- Workload observability
- Supply chain-specific security standards, e.g., SLSA

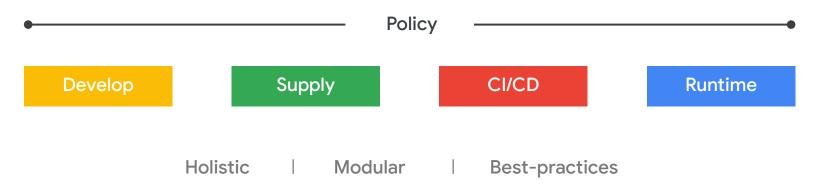






Software Delivery Shield

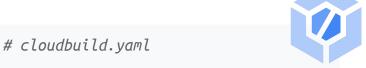
Fully managed, end-to-end software supply chain security solution



Cloud Build

Continuous integration & developer automation

- Fully managed, with pay-as-you-go billing
- Easy to get started and scales with your team
- Native integrations with major source code management systems like GitHub, Bitbucket, and Gitlab
- Customizable build steps
- Flexible execution environments
- SLSA L3 support



steps:

- name: maven
script: |
 mvn dependency:resolve
 mvn test

- name: docker
script: docker build -t \$IMAGE .
env: ...

- name: google/cloud-sdk
 script: gcloud deploy ...

How Software Delivery Shield can help

Artifact Registry

Universal artifact management

- One place to manage container images and a variety of other build artifacts
- Supports management of application dependencies
- Supports native artifact protocols
- Great place to store artifacts that are created during
 CI/CD processes, as well as scan them for vulnerabilities



How Software Delivery Shield can help

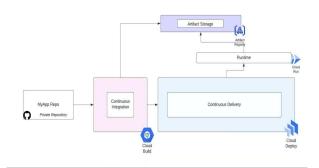
Cloud Deploy

Continuous delivery

- Fully managed, opinionated continuous delivery for GKE, Cloud Run and Anthos Clusters
- Declaratively configured
- Connect local development to continuous delivery through Skaffold
- Control promotions, approvals, and rollbacks to varying environments
- Ensure Deployment success through verification



Demo



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Learn more



Get started

Check out Quickstart tutorials for Cloud Build, Artifact Registry, and Cloud Deploy at <u>cloud.google.com</u>

Software Supply Chain Security

To learn more about software supply chain security, visit: cloud.google.com/software-supply-chain-security

Check out these sessions

- SEC100 How to secure your software supply chain from dependencies to deployment
- BLD100 How to increase developer productivity with Cloud Workstations
- BLD107 7 new features that help you build modern apps with less complexity

Thank you

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