Agile Dev
Better Software
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DT1

Continuous Integration
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Product Delivery Powered by Continuous Integration: A Case Study

Presented by:

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Credit Karma

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Amit Mishra
Credit Karma

Amit Mishra is a senior build and release engineer at Credit Karma on the platform integration team. He's passionate about making developers' lives easier by implementing continuous integration tools. Amit specializes in setting up scalable CI solutions from scratch using the latest technologies, like Docker, Terraform, and AWS, along with powerful alerting and monitoring tools. Amit's background is in build and release management, and he speaks frequently on DevOps and CI. Amit holds a bachelor's in computer science and engineering.
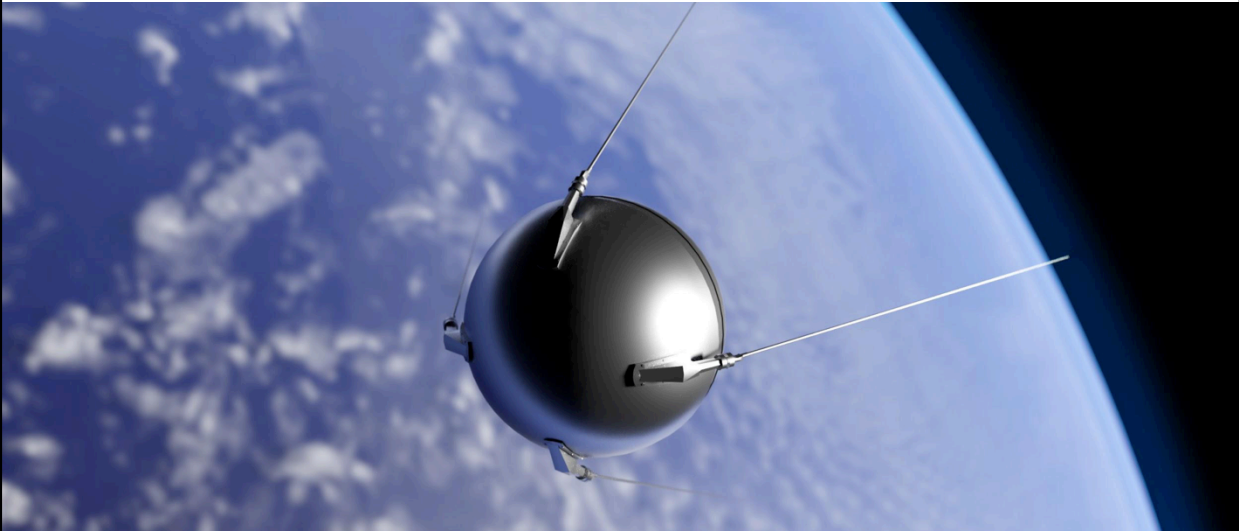
How CI empowers rapid product delivery at Credit Karma

Amit Mishra, Senior Build & Release Engineer

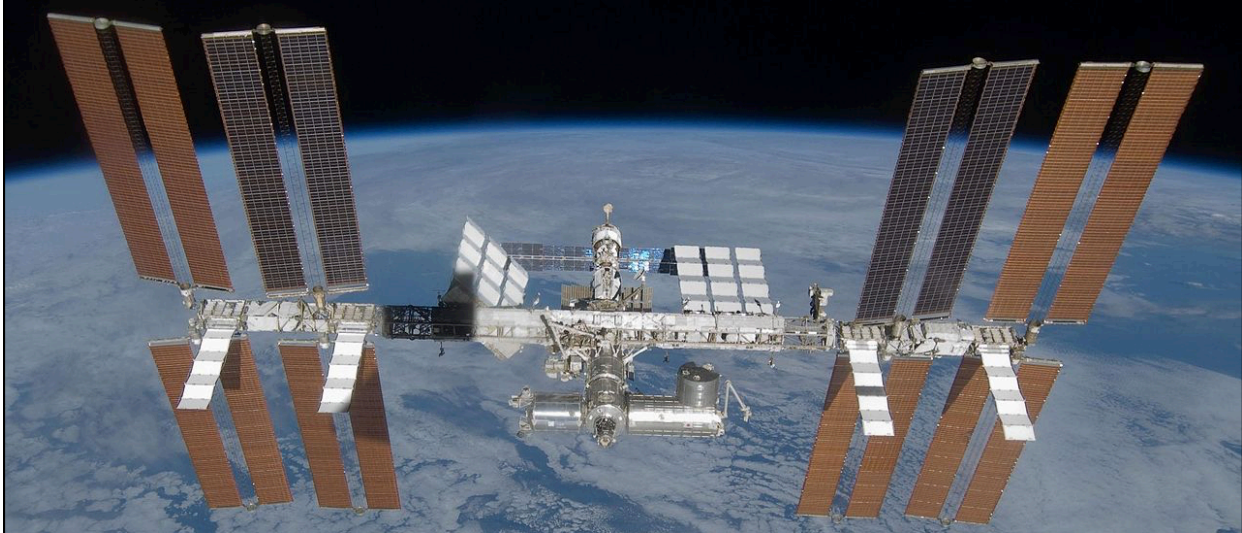1 Proprietary & Confidential

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Early days

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Evolution

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Agenda

1. Why GitHub
2. Continuous Integration (CI)
3. Bots
4. Self-service CI
5. Challenges
6. Future

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Why GitHub scales

SaaS

Standard

Integrations

APIs

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Continuous Integration

Why CI?	How?
Test	Hooks
Build	Status checks
Merge & release	Merge to master

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Bots

GitHub health

Bootstrap repos

Inject hooks

- Approvers
- Validation/Lint
- Commit messages
- Owners

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Self-service capabilities = faster delivery

CI builder

Self-service capability to spin up CI

Preconfigured jobs & release pipelines

Multi-framework support

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Self-service capabilities = faster delivery

Docker pipeline

Secure, consistent way to build images

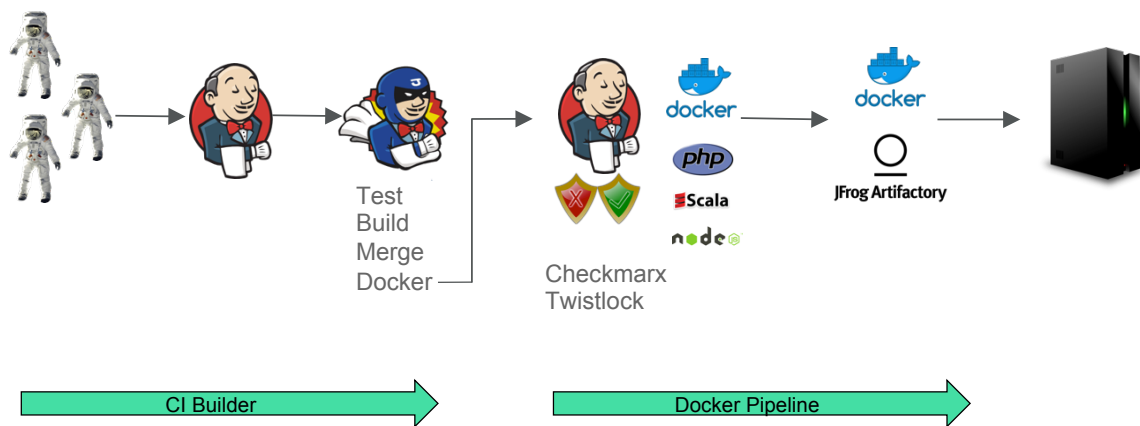Seamless integration with engineering teams' CI

Compliance and audit

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Self-service capabilities = faster delivery

Test
Build
Merge
Docker

Checkmarx
Twistlock

JFrog Artifactory

CI Builder

Docker Pipeline

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Stats

~ 5K/day Builds

> 1K Repositories

> 100 Jenkins

> 500K Artifacts

> 40 Engineering teams

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Challenges

Security

Scale

Internal system integration

Self-service

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Looking to the future

More bots

Config-based CI
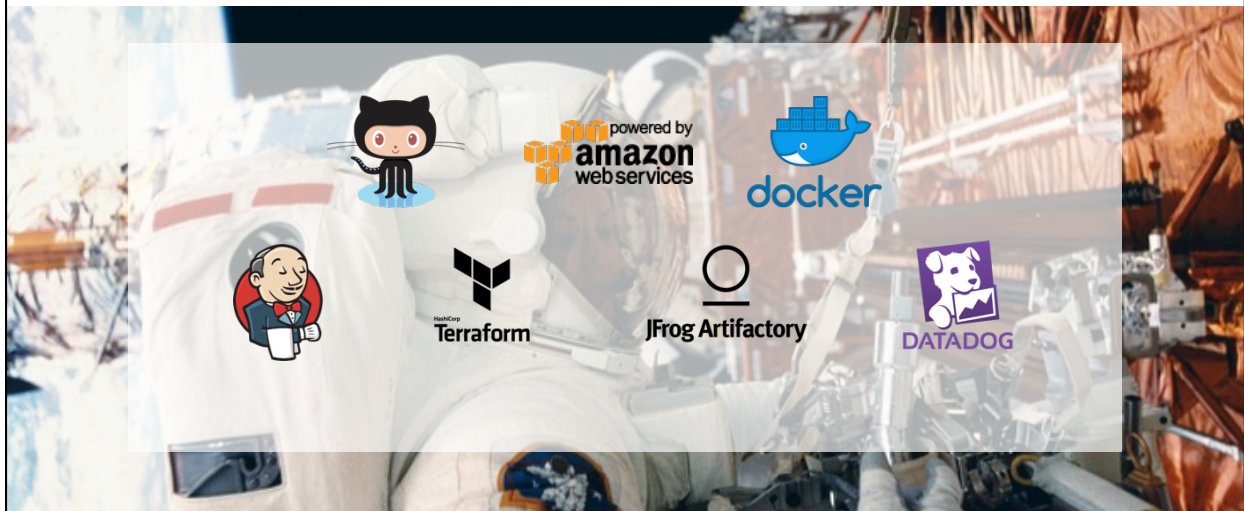
New integrations

Service provisioning

Any cloud

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Tools & technologies

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Thank you!

Q&A

Email amit.mishra@creditkarma.com
Read our blog engineering.creditkarma.com