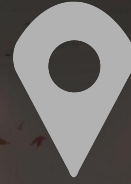


Snowflake Software



Oli Deakin, Andy Newton, Nick Tinsley

A little about Snowflake



2001



2015



35

What does Snowflake do?

Brings the Aviation industry
into the 21st century

What/How do we deliver?

Flight data processing systems

- High-volume, real-time data
- Customer specific deployments

Cloud and on-prem installations

Event-driven, microservices architecture

- Many small components acting independently
- Emergent behaviour

Mixture of agile and waterfall projects

Component Build Pipeline



Push



Feature



Merge Review



Develop



Release

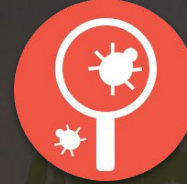


Master

Deployment Pipeline



Push



Feature



Merge
Review



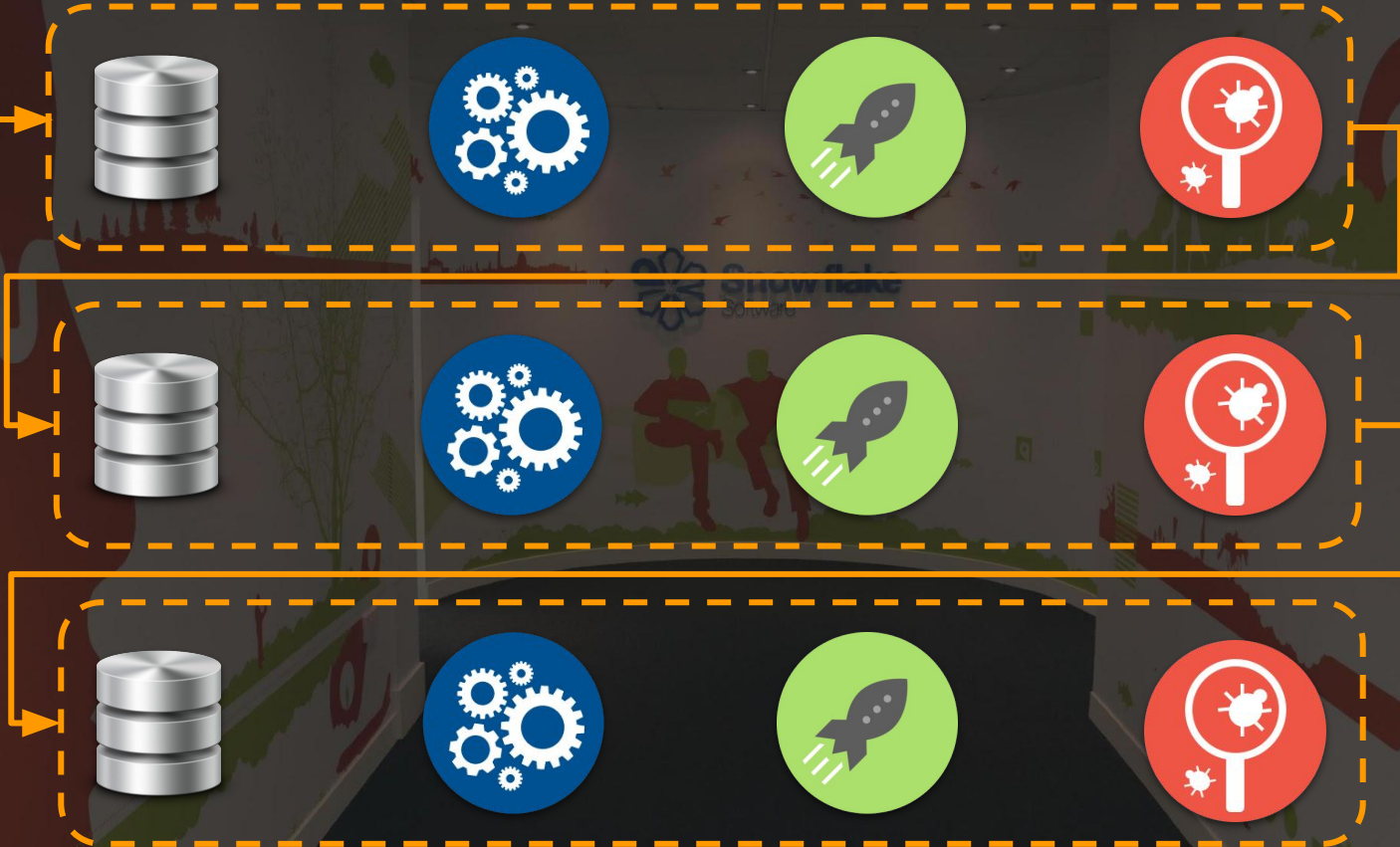
Develop



Release



Master



Awesome bits

Fast feedback cycle - componentisation + consistent pipelines

Quality control is high with consistency across business

Quality extends beyond just the “production” code - even shell scripts!

Highly automated, but we can do better!

All driven out of version control

Not-so-Awesome bits

Hard to update widely used dependencies - libraries and also quality checks

Pipelines contain duplication - feature to develop to master

Maven doesn't fit with a phased GitlabCI build/test/deploy pipeline

Lack of visibility across all components - dependencies, versions and quality

Quality checks can be over-zealous - PMD, CPD, CVE

Great stuff for the future

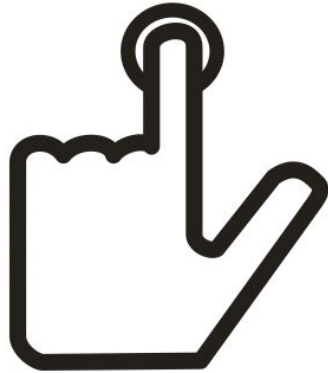
Mutation testing

GitlabCI Auto-devops

Operators/Helm



Questions?!



Push Button



Receive Bacon