My Great Awakening: Top "Ah-ha" Moments As Former Dev Manager

Devops Enterprise Summit
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When I first started working on PaaS...

Forrester: PaaS makes developers happy

"For us, PaaS is a set of services aimed at **developers** that helps them **develop and test** apps without having to worry about the underlying infrastructure. Developers don't want to have to worry about provisioning the servers, storage and backup associated with developing and launching an app."

... but then I learned



^[1] http://www.javaworld.com/article/2078801/java-app-dev/forrester--paas-makes-developers-happy.html



^[2] http://www.infoworld.com/d/cloud-computing/paas-primer-what-platform-service-and-why-does-it-matter-212696



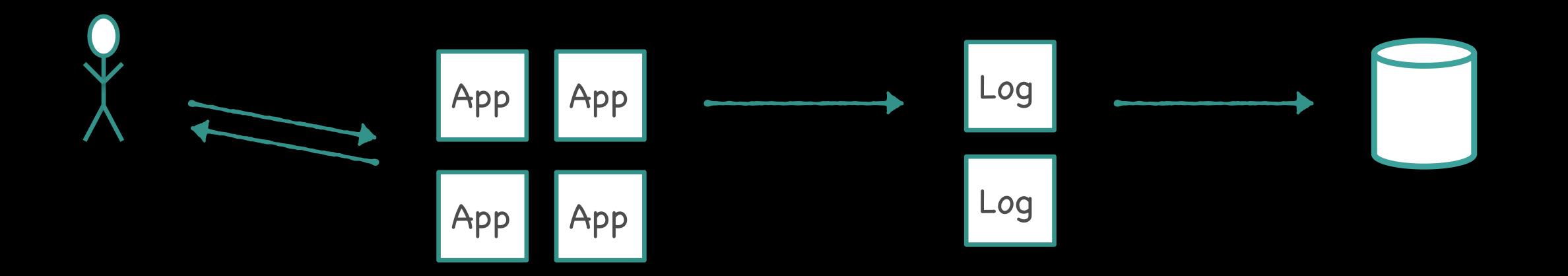
- One month on the ops team
- Production platform deployment
- 24 x 7 x 365

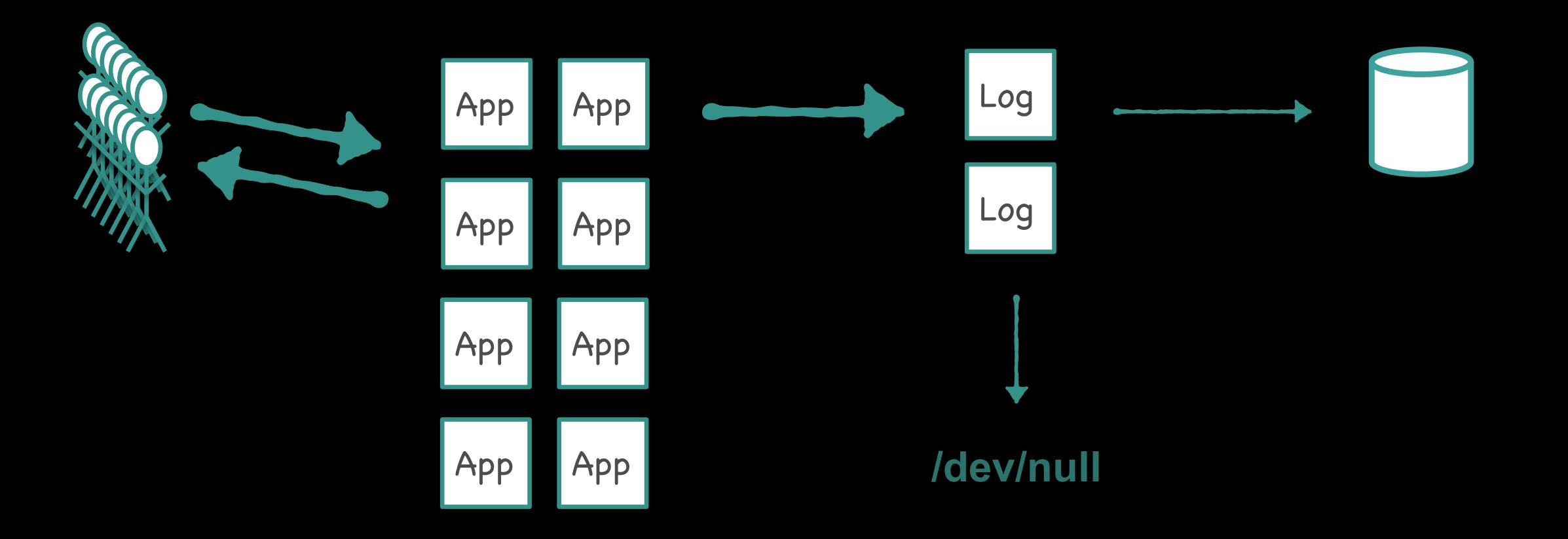
Lessons!!

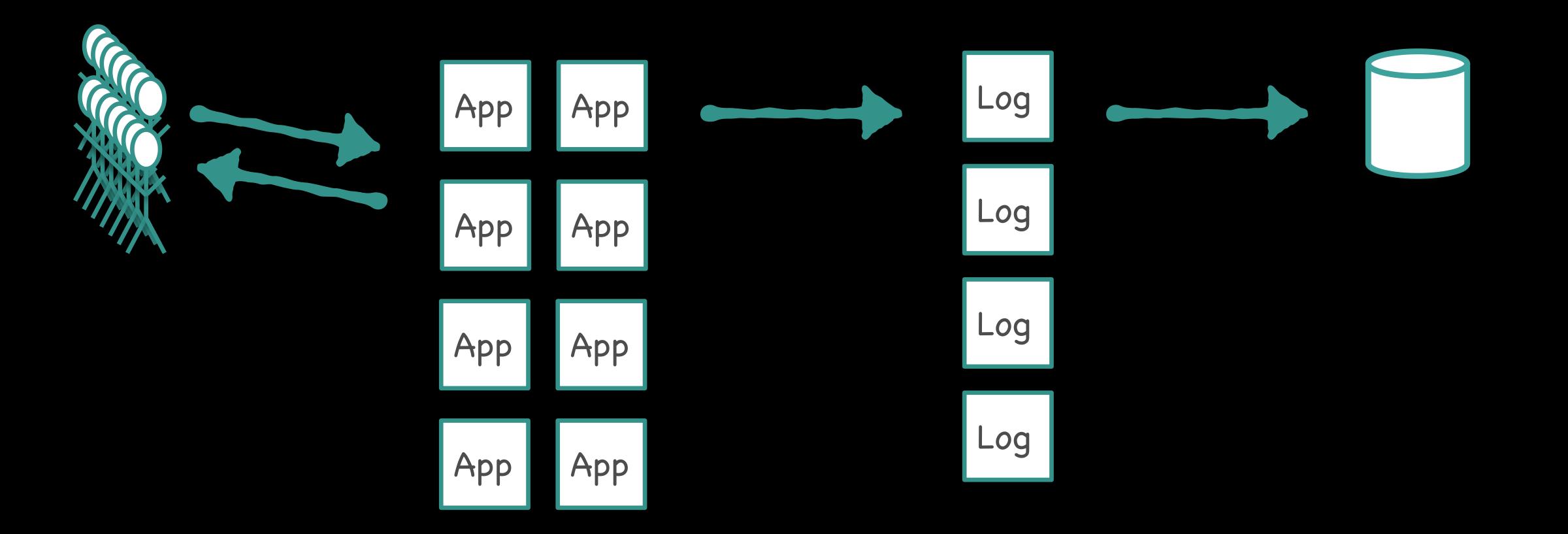
My very first morning...

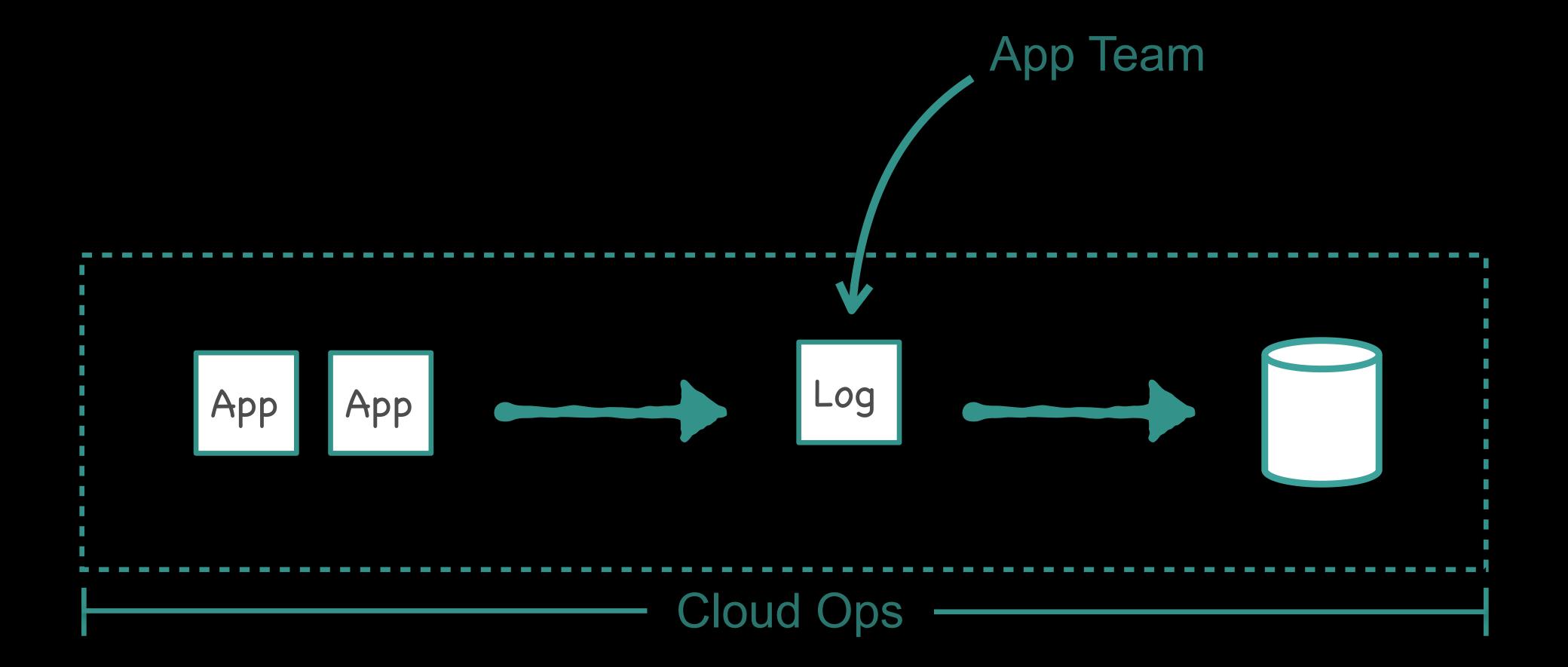


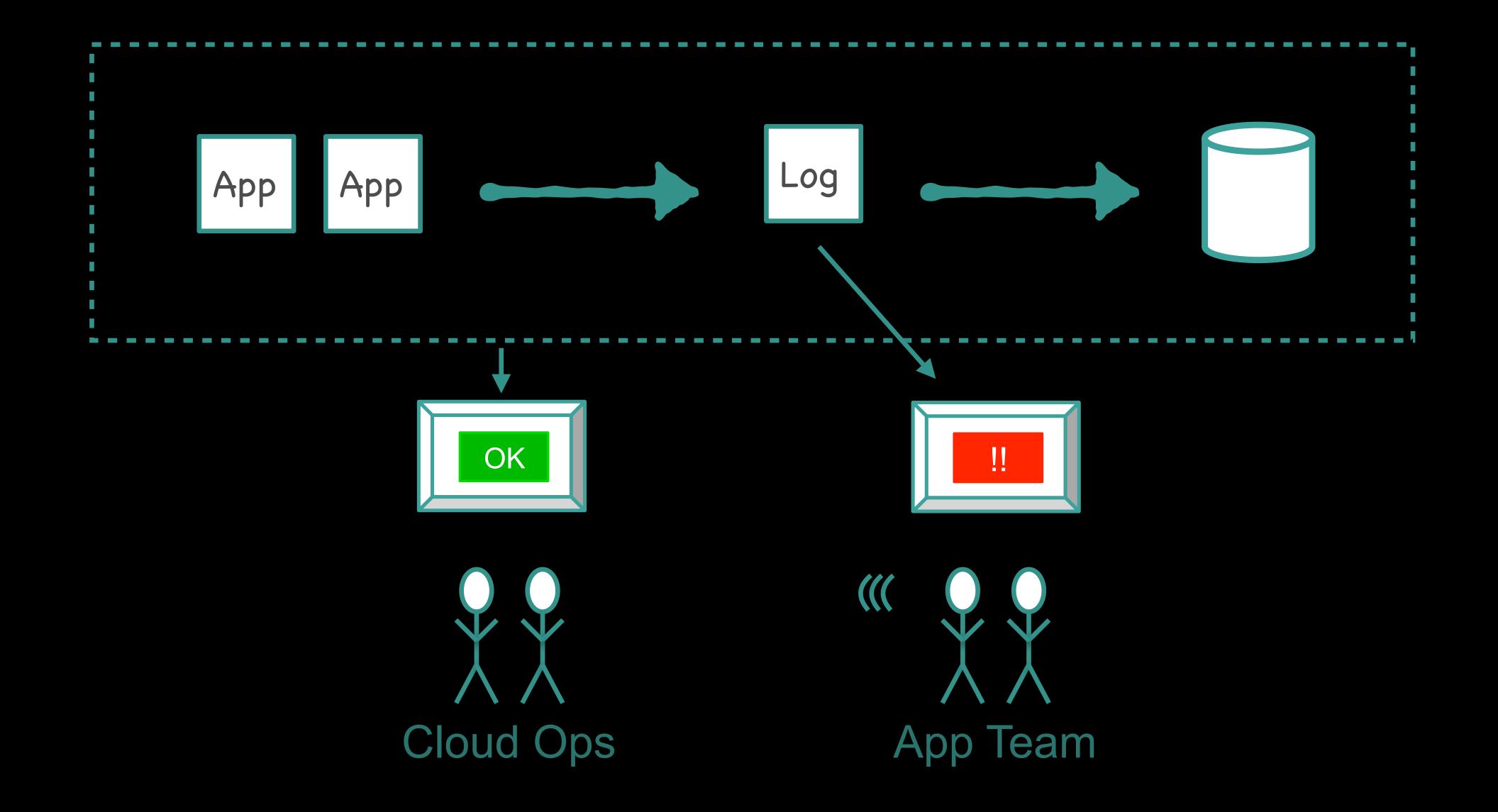














- Ops team has a backlog and a Product Manager
 - (just as app team)
- Ops team has a "prod pair"
- App team has a "prod pair"
- A very sensible way of managing deployments

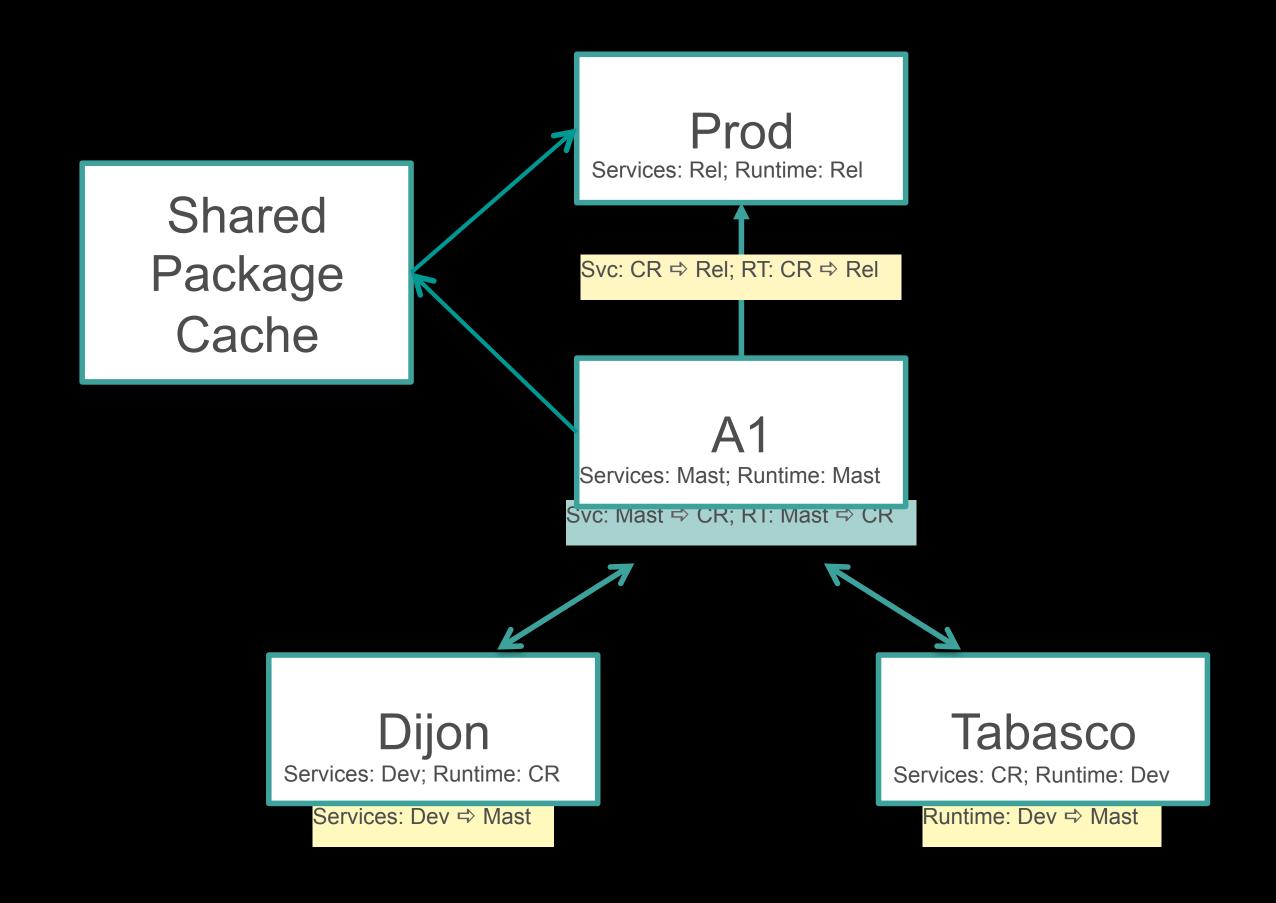
More About Deployments...



1. Do deployments during working hours

HOW???

- 2. Immutable Infrastructure NO SNOWFLAKES!!!
- 3. Single deployable artifact BUILDS DONE BEFORE DEPLOY

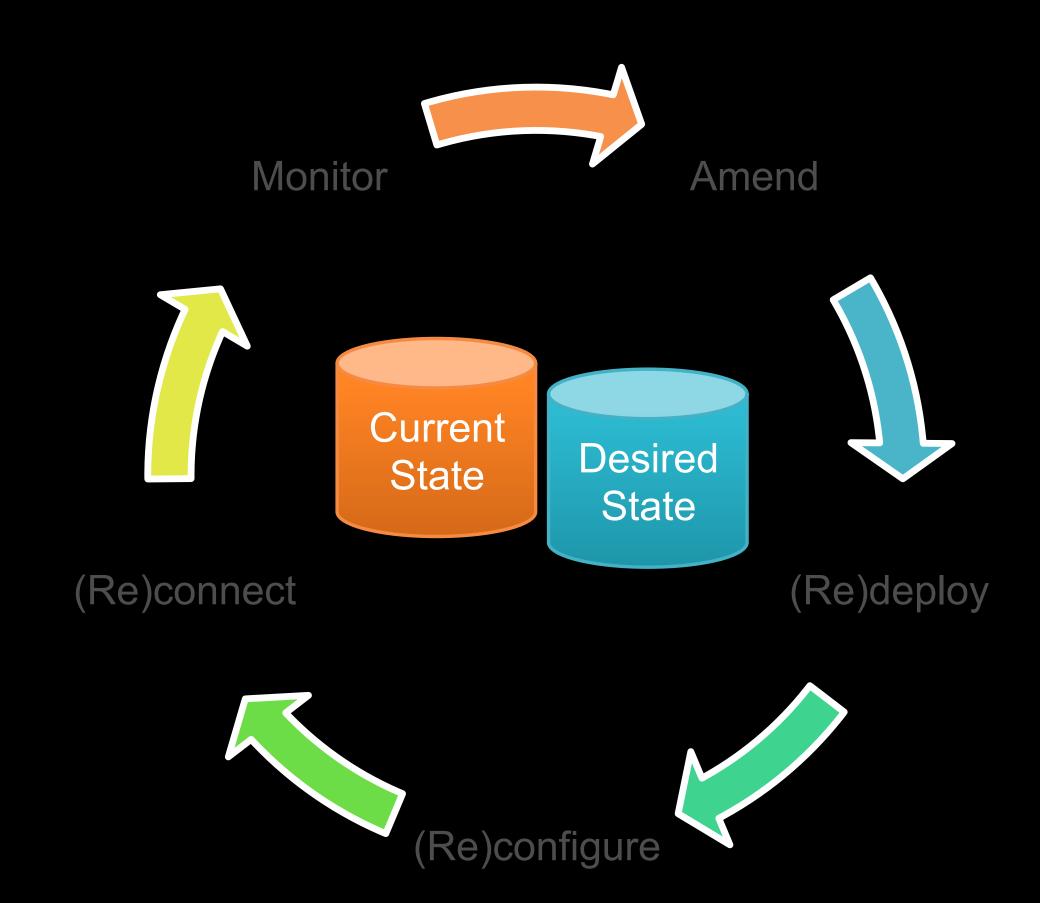




1. Do deployments during working hours

HOW???

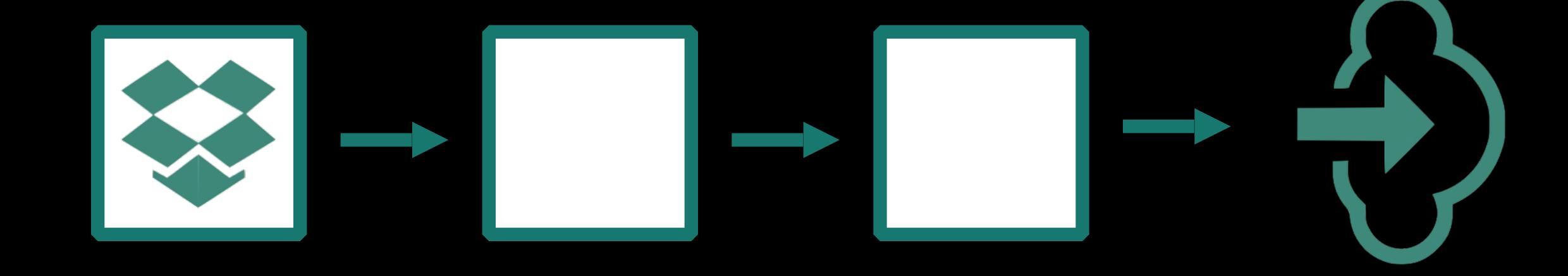
- 2. Immutable Infrastructure NO SNOWFLAKES!!!
- 3. Single deployable artifact BUILDS DONE BEFORE DEPLOY
- 4. Declarative deployment specification EVENTUAL CONSISTENCY!



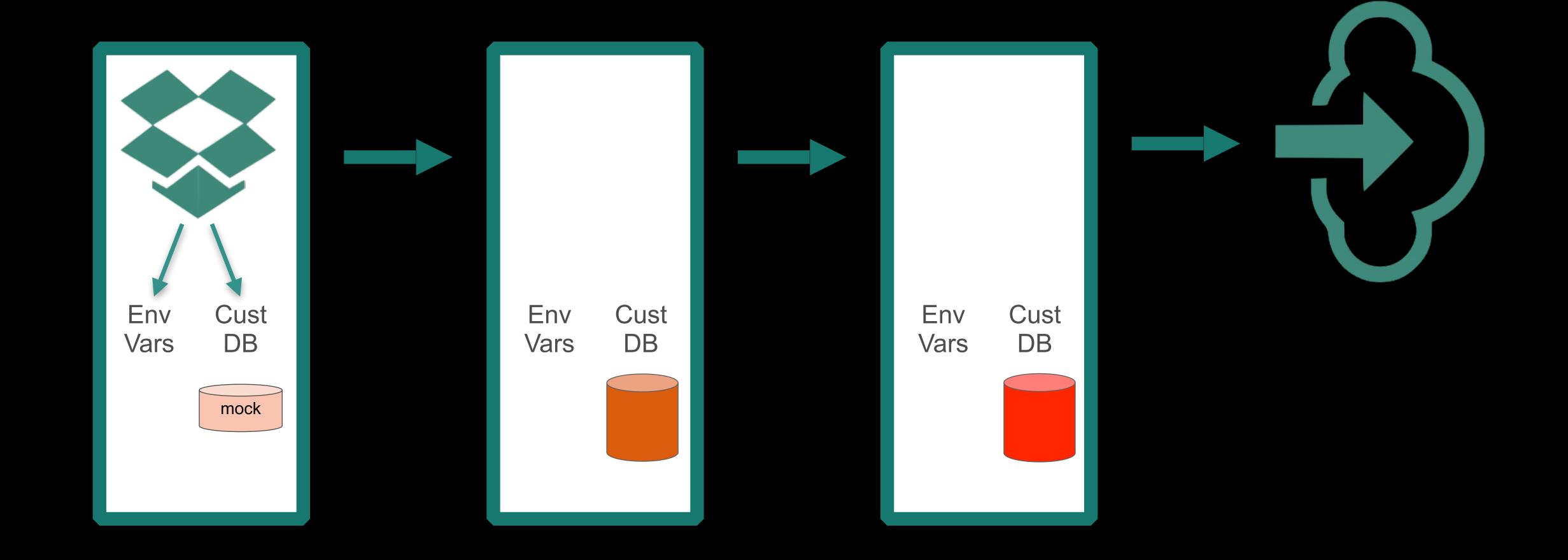
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More About Single Deployable Artifact...

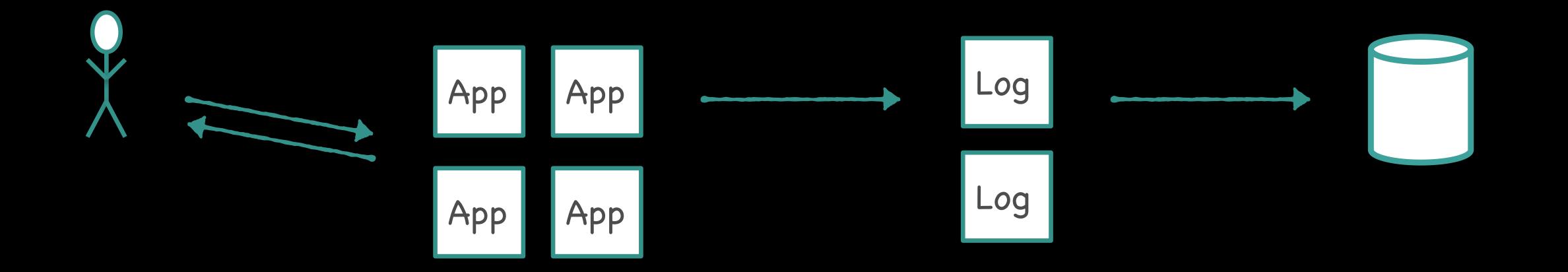




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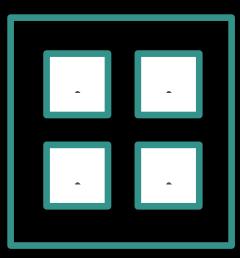


Let's Come Back to Ops and Dev Responsibilities...



App
App
App

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On the	BOSH Agent port:	Directory Server port:
healthy DEA	35560	34567
unhealthy DEA	34567	Port binding failed

Ephemeral Port Range: 32768 to 61000

Developer should not have used port 34567



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Creates deployable artifact

Your Application Code

Platform

Virtualized Infrastructure Application Development
Application Operations

Platform Operations

- Config Prod space
- Deploys application to Prod
- Monitors application
- Scales application (capacity)
- Deploys new app version with zero downtime.
- Deploys platform
- Makes standard runtimes and services available
- Monitors platform
- Scales platform (ensuring sufficient capacity)
- Upgrades platform with zerodowntime

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The Takeaways



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- Treat Ops as any other product
 - backlog, prod pair
- Workday deployments
- Single deployable artifact
- Separate application operations from platform operations
- App team = App Dev + App Ops



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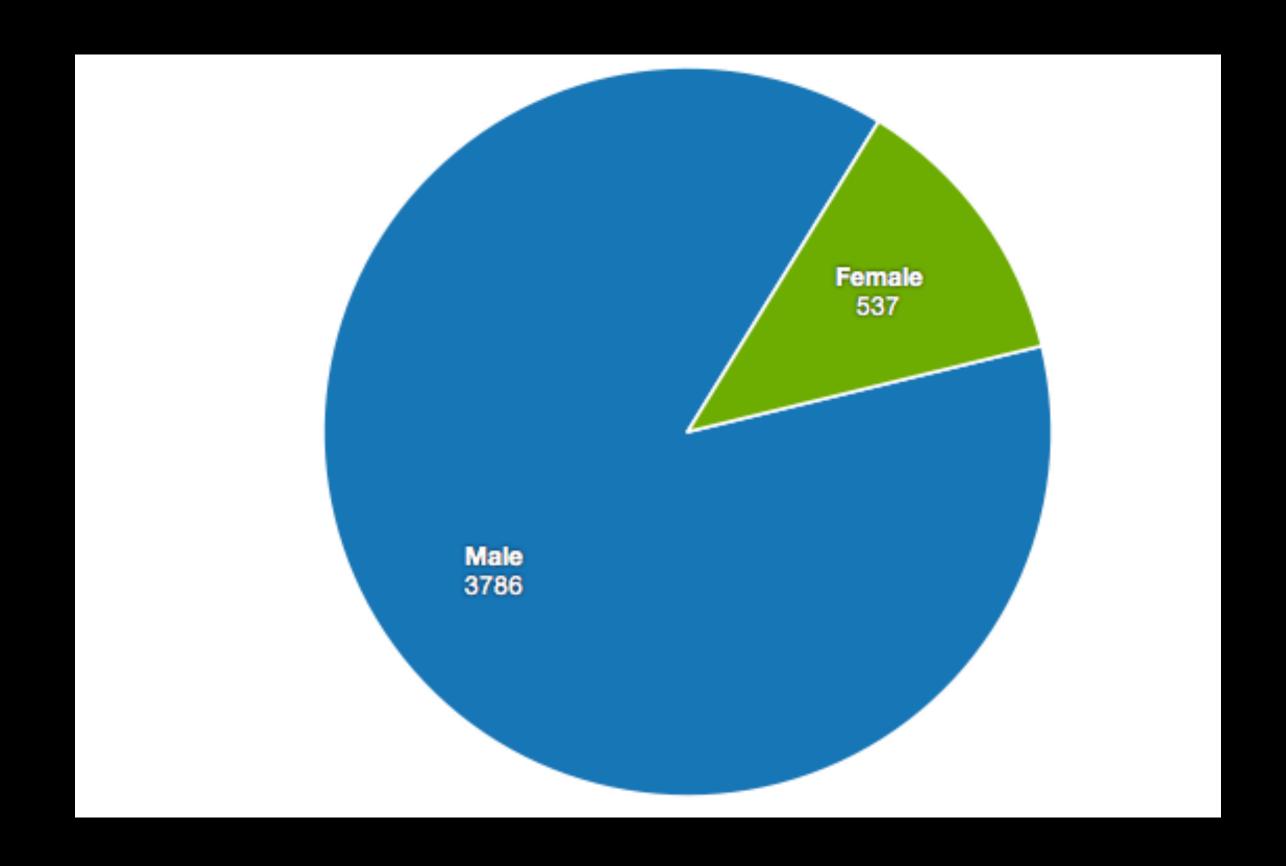
- Revelations From the Field Life in the Operations Team
 (the one about the loggregator scaling)
 http://blog.pivotal.io/cloud-foundry-pivotal/p-o-v/revelations-from-the-field-life-in-the-operations-team
- Is Continuous Delivery a First Class Concern of Your Platform?
 (the one about dashboards)
 http://blog.pivotal.io/cloud-foundry-pivotal/products/is-continuous-delivery-a-first-class-concern-of-your-platform
- Cloud Foundry Ops: Ephemeral Ports and the Value of a Platform as a Service

(the one about, well, ephemeral ports)

http://blog.pivotal.io/cloud-foundry-pivotal/p-o-v/cloud-foundry-ops-ephemeral-ports-and-the-value-of-a-platform-as-a-service

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Here's what I need help with



Changing the distribution will take effort from all of us!

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https://www.washingtonpost.com/news/innovations/wp/2014/02/14/silicon-valleys-gender-imbalance-in-one-chart/

Thank you!

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