

# Getting Started with AWS CodeDeploy

**Andy Troutman, Manager, AWS  
CodeDeploy**

**April 29, 2015**

# Software Deployment is Still a Hard Problem:

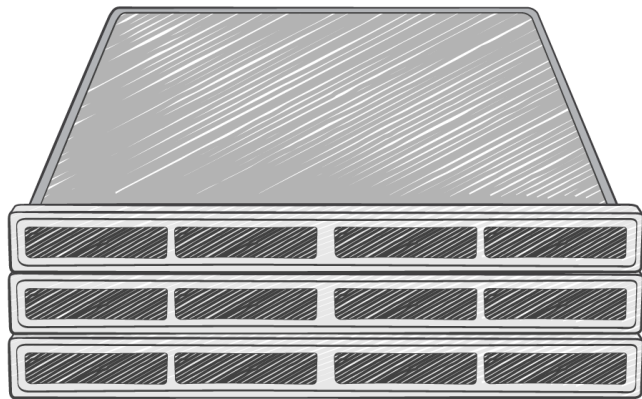


Size of fleet  
small, manual  
process good  
enough.



Cost/Complexity

# Software Deployment is Still a Hard Problem:



Complexity grows  
Customers grow  
Team size grows  
Need to automate

Cost/Complexity

# Software Deployment is Still a Hard Problem:



Ugh oh...

Cost/Complexity

# What is **CodeDeploy**?

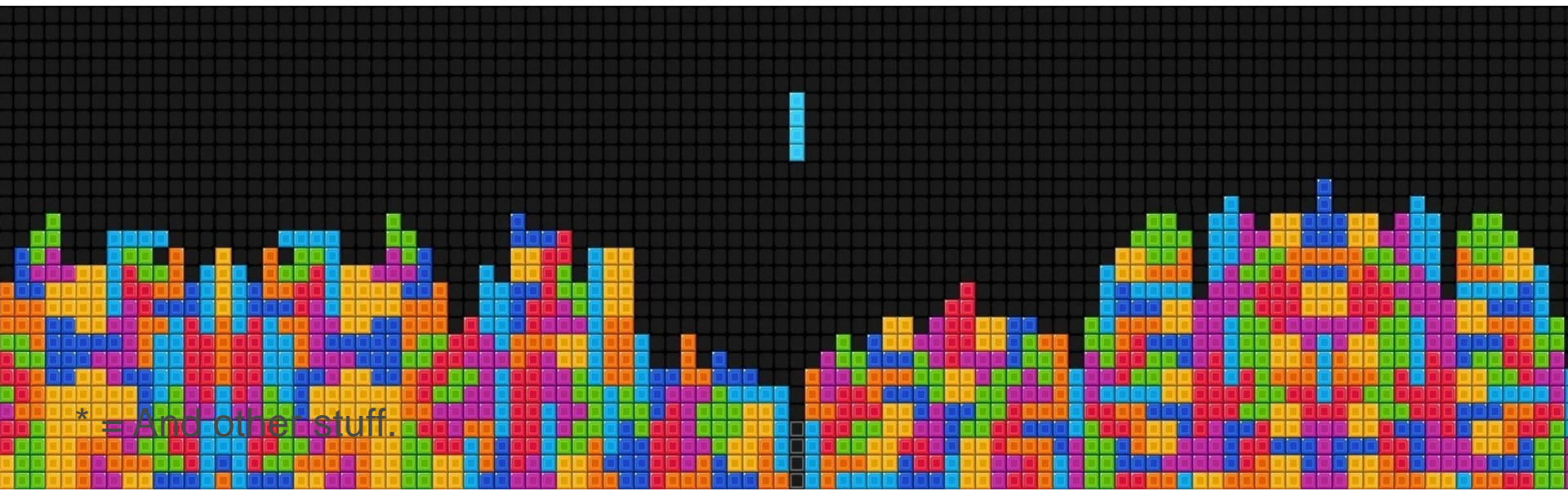
Application  
Deployments for  
EC2\*



\* = And other stuff.

# What is CodeDeploy?

A Building Block Service



# AWS CodeDeploy



## Amazon S3



## Amazon EC2



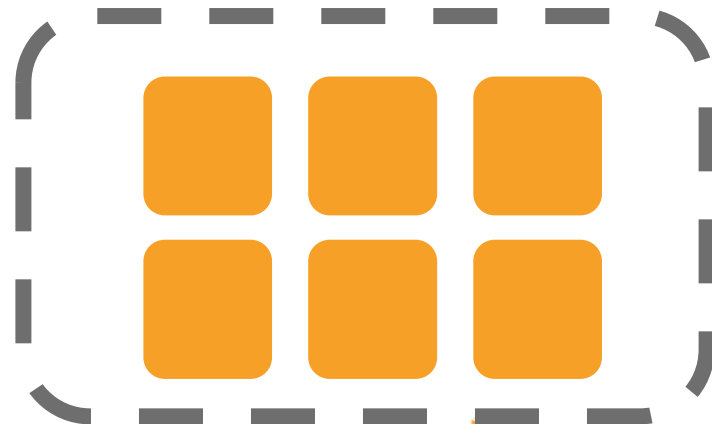
# AWS CodeDeploy



## Amazon S3



## Amazon EC2





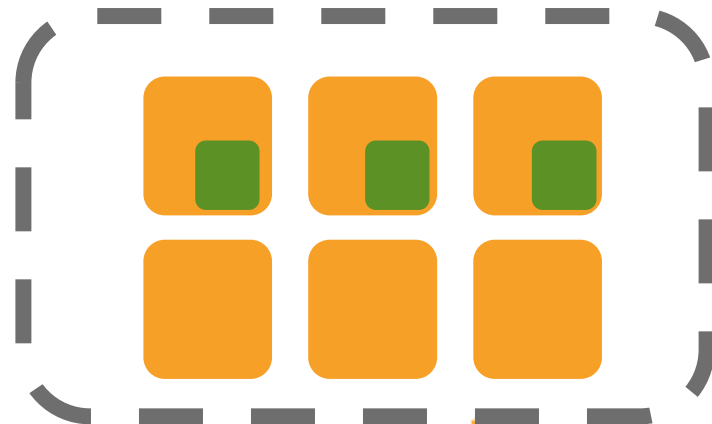
# AWS CodeDeploy



## Amazon S3



## Amazon EC2



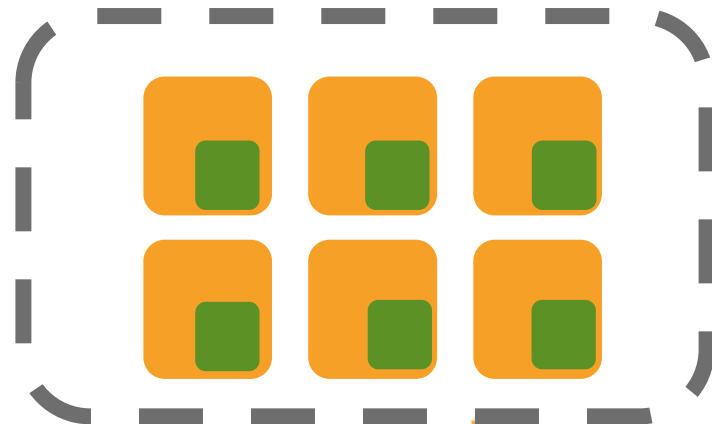
# AWS CodeDeploy



## Amazon S3



## Amazon EC2



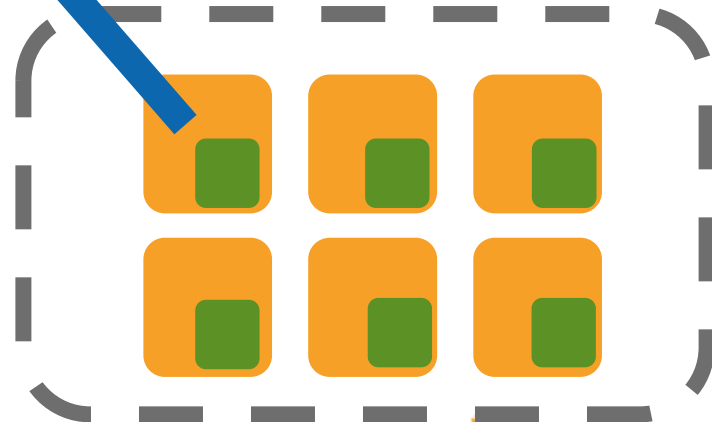
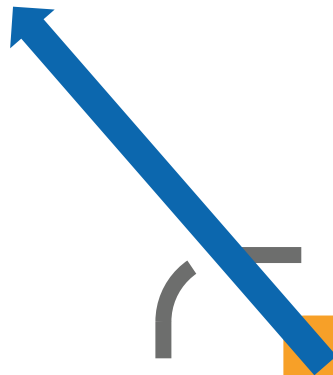
AWS CodeDeploy



Amazon S3



Amazon EC2



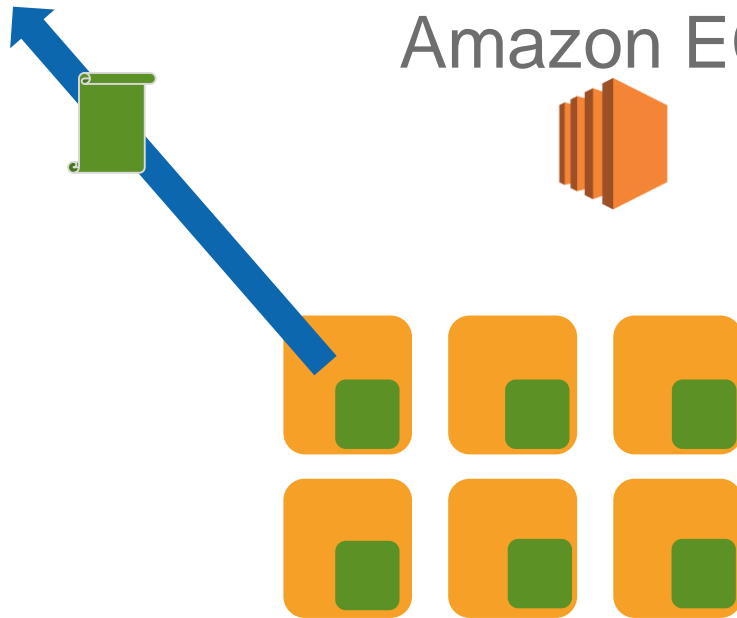
# AWS CodeDeploy



## Amazon S3



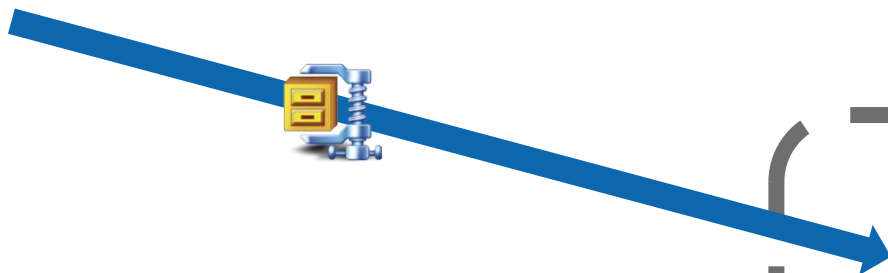
## Amazon EC2



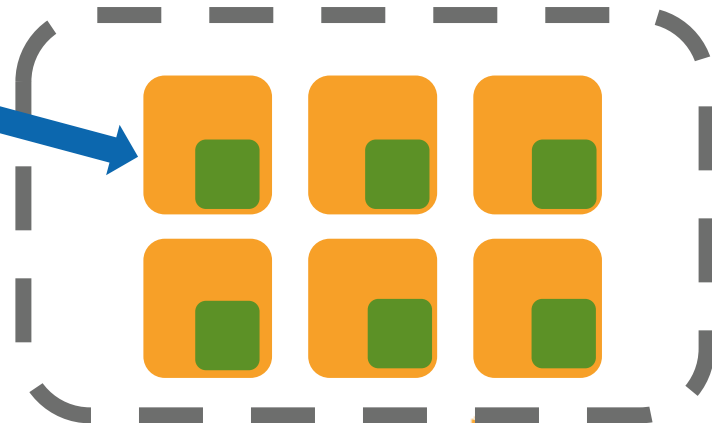
# AWS CodeDeploy



## Amazon S3



## Amazon EC2



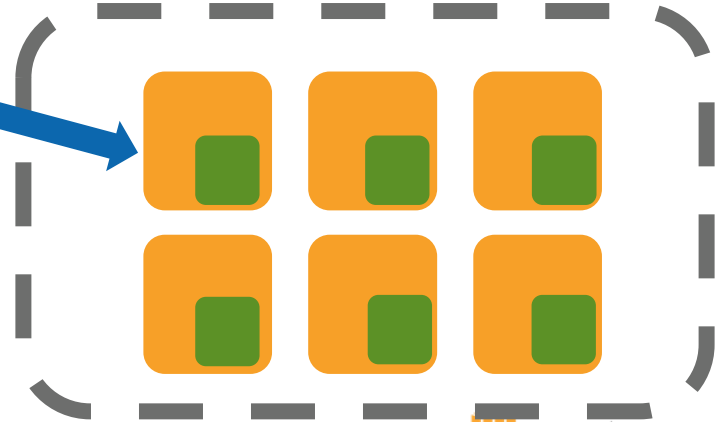
# AWS CodeDeploy



## Amazon S3



## Amazon EC2



# AWS CodeDeploy

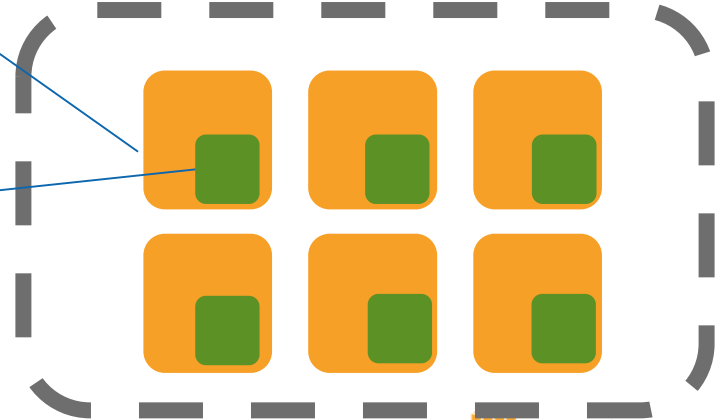


Amazon S3



1. foo.sh  
2. bar.exe  
3. baz  
... etc.

Amazon EC2



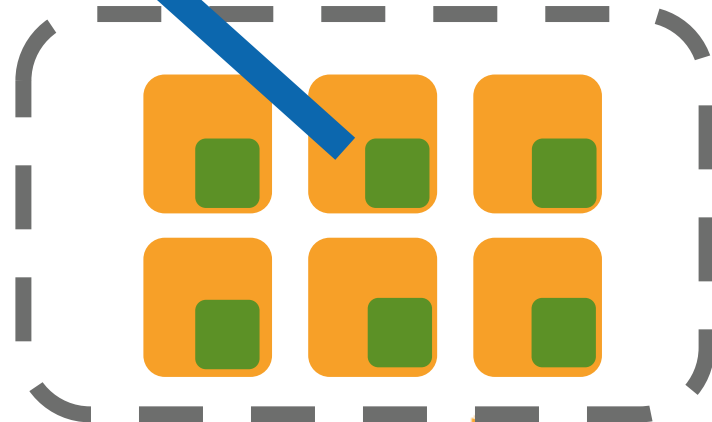
AWS CodeDeploy



Amazon S3



Amazon EC2





AWS CodeDeploy



Amazon S3



Amazon EC2



AWS CodeDeploy



Amazon S3



Amazon EC2



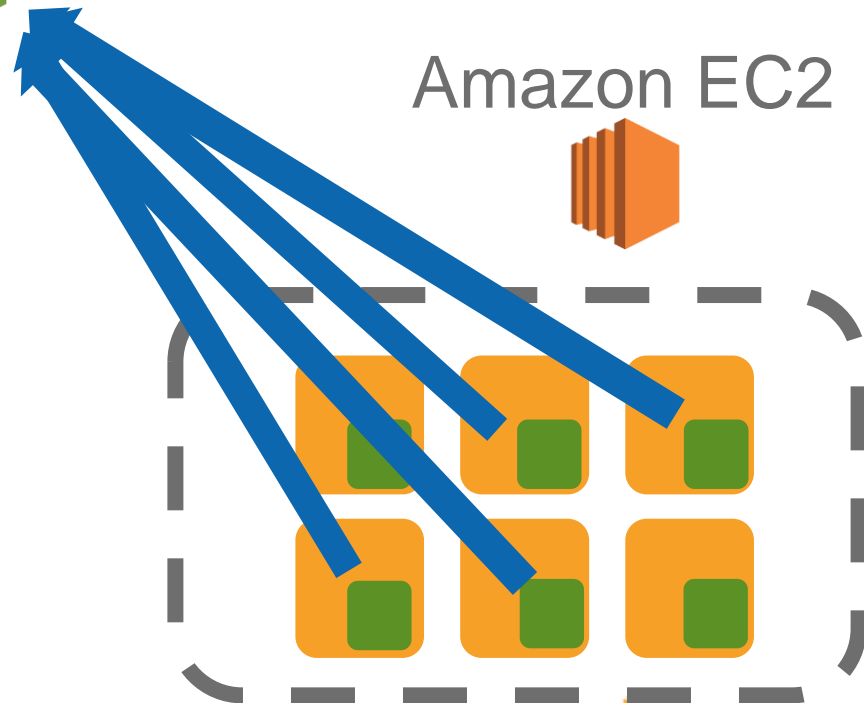
AWS CodeDeploy



Amazon S3



Amazon EC2



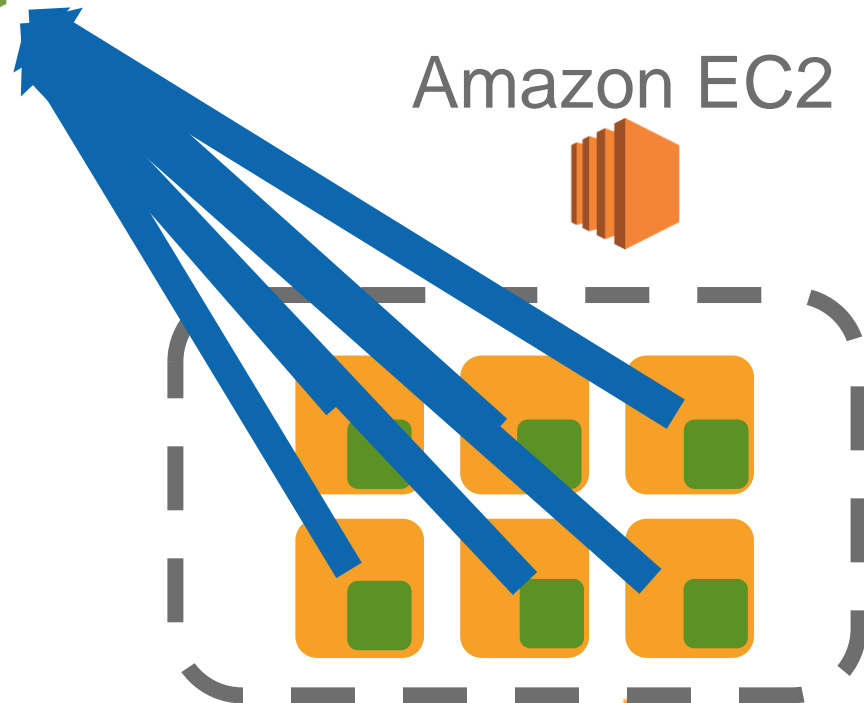
AWS CodeDeploy



Amazon S3

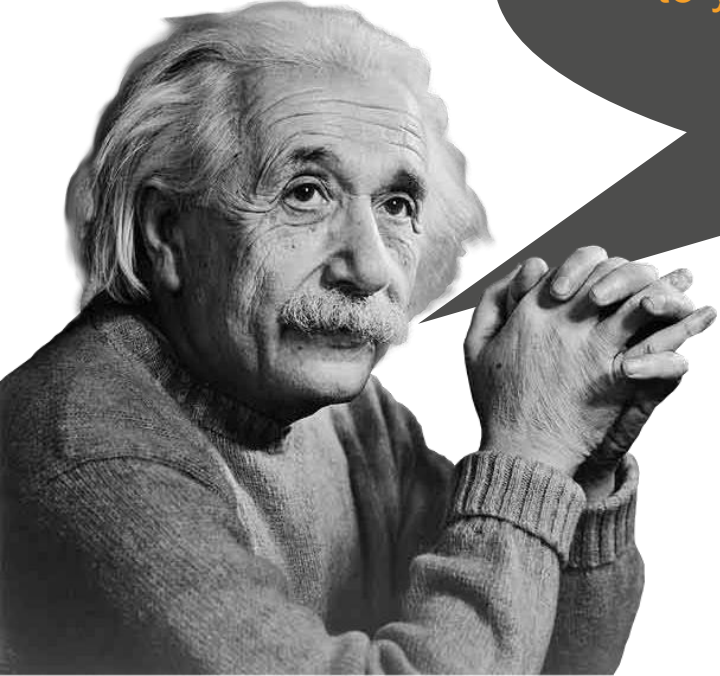


Amazon EC2



# Let's do it Live!

# Application

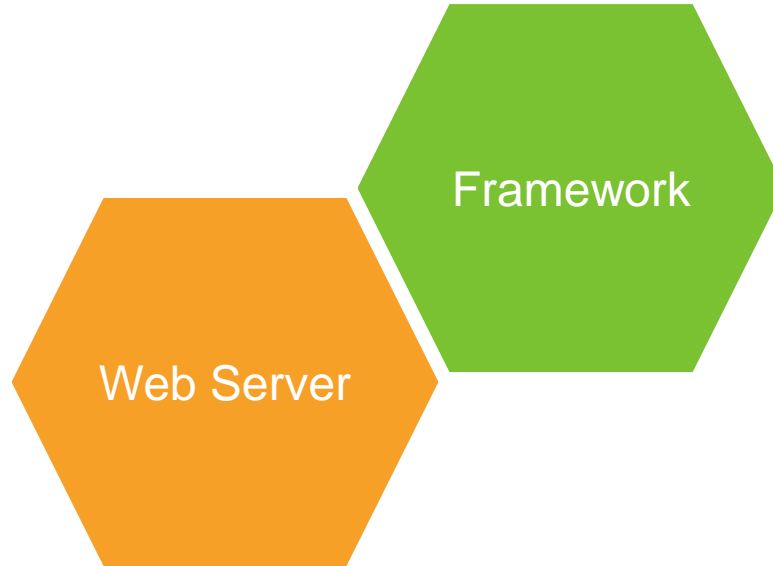
A black and white photograph of Albert Einstein, showing him from the chest up. He has his characteristic wild hair and mustache, and is wearing a dark sweater. His hands are clasped together in front of him, and he is looking slightly to the right with a thoughtful expression.

“Any collection of content that you want to distribute to your servers in a single deployment”

# Application

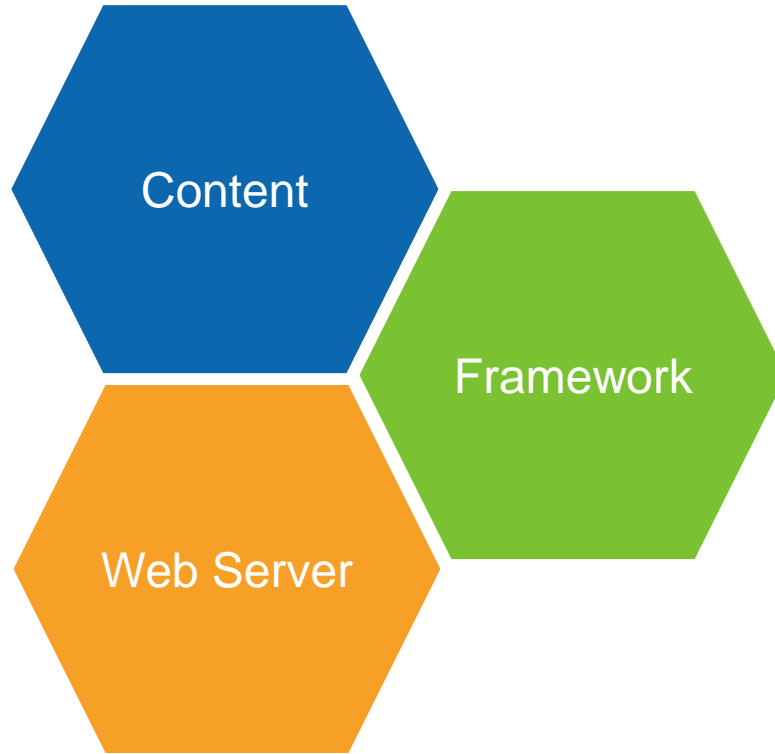


# Application

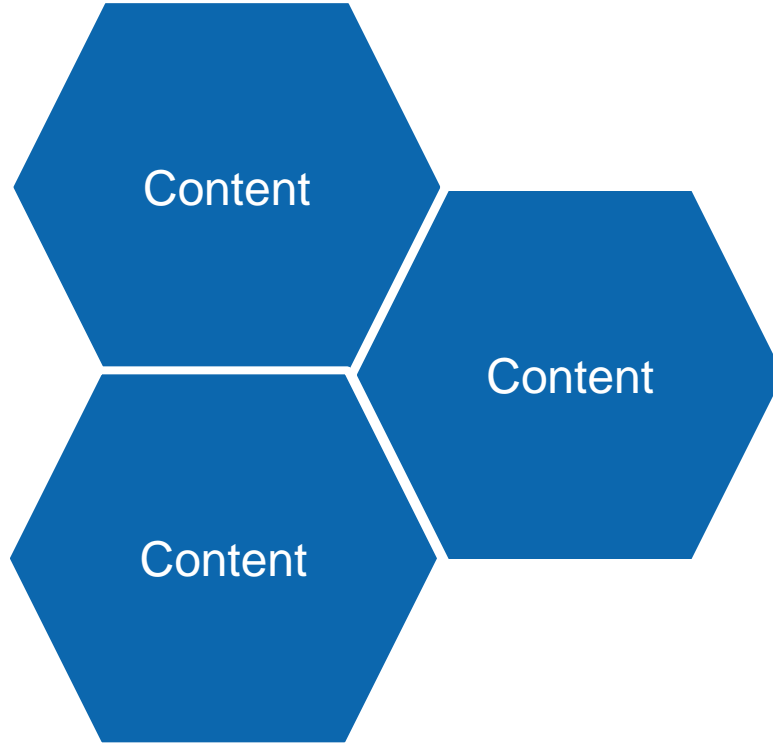




# Application

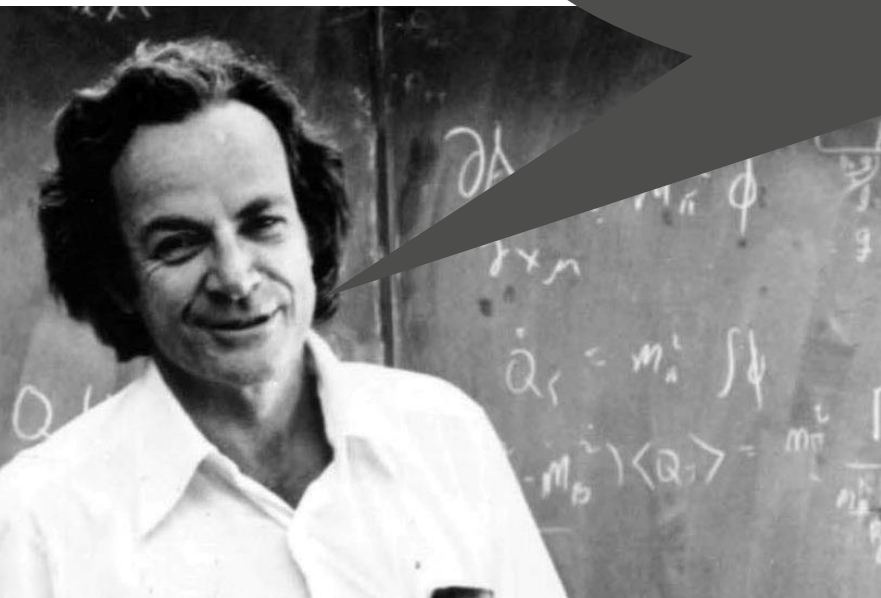


# Application

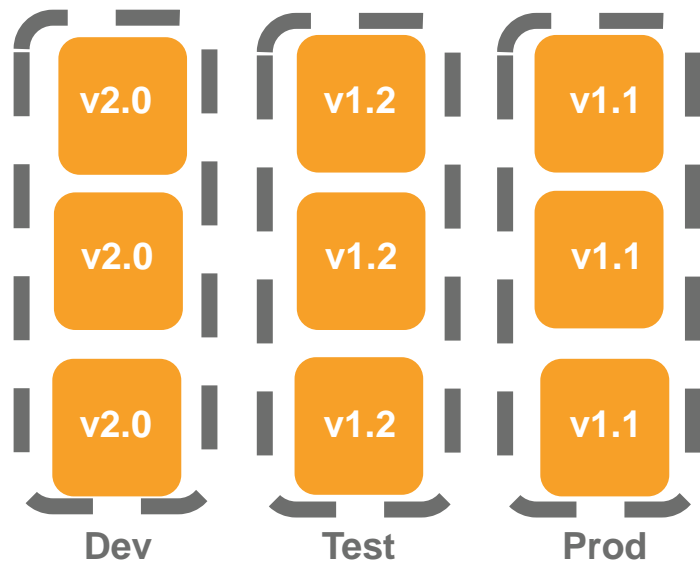


# Deployment Group

“A collection of instances you want to deploy to as a group”



# Deployment Group



# AppSpec file

os: linux

files:

- source: Config/config.txt  
destination: webapps/Config
- source: source  
destination: /webapps/myApp

hooks:

BeforeInstall:

- location: Scripts/UnzipResourceBundle.sh
- location: Scripts/UnzipDataBundle.sh

AfterInstall:

- location: Scripts/RunResourceTests.sh  
timeout: 180

ApplicationStart:

- location: Scripts/RunFunctionalTests.sh  
timeout: 3600

validateService:

- location: Scripts/MonitorService.sh  
timeout: 3600  
runas: codedeployuser

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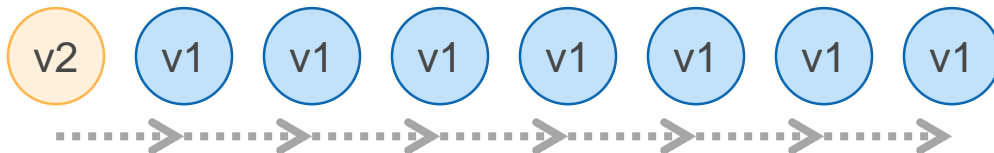
validateService:

- location: Scripts/MonitorService.sh  
timeout: 3600  
runas: codedeployuser

# Deployment Config

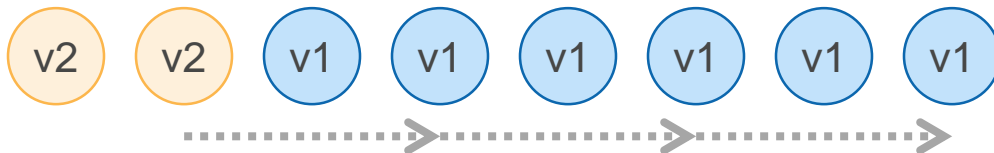
## One-at-a-time

Min. healthy hosts = 99%



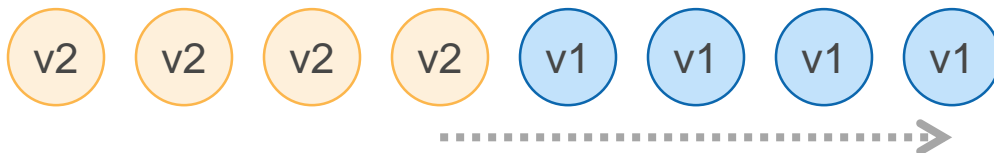
## [Custom]

Min. healthy hosts = 75%



## Half-at-a-time

Min. healthy hosts = 50%



## All-at-once

Min. healthy hosts = 0

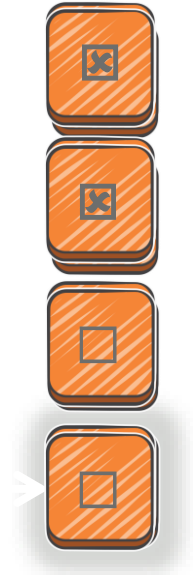




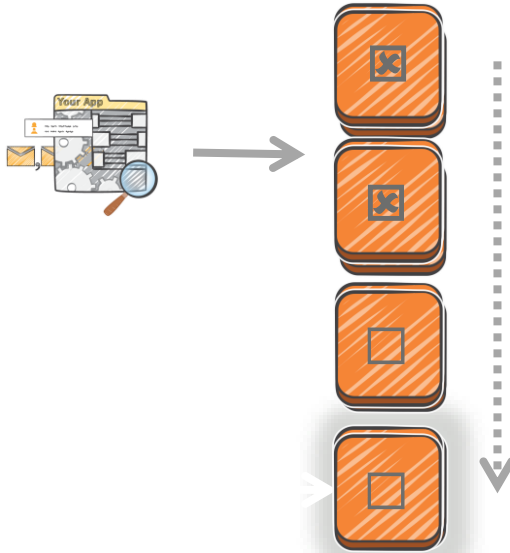


**Let's deploy  
something!**

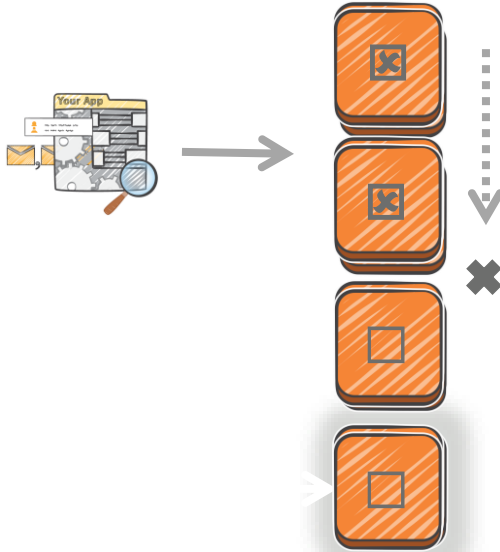
# Auto Scaling support



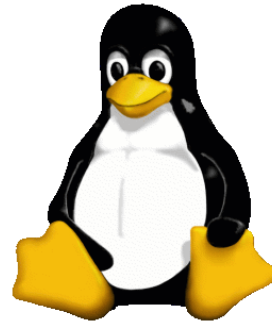
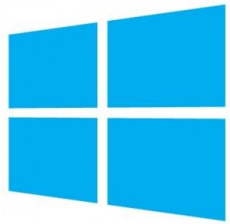
# Auto Scaling support



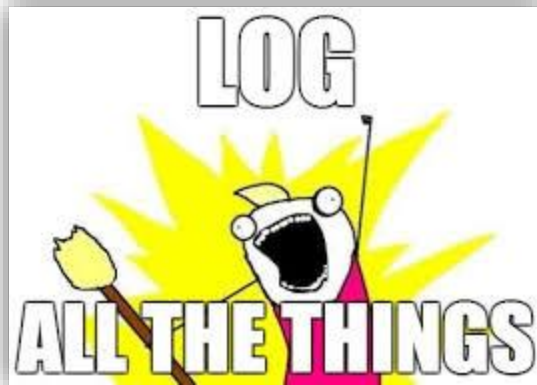
# Auto Scaling support



# Windows and Linux



# Error Logs and Deployment Data



# On Premises Deployments



# Product Integrations

**GitHub**

 **Atlassian**

  
**CloudBees**

 **Travis CI**

 **CODESHIP**

 **circleci**

 **Jenkins**

  
**Solano Labs**

  
**CHEF**

  
**puppet  
labs**

  
**ANSIBLE**

  
**SALTSTACK**



Questions?

