

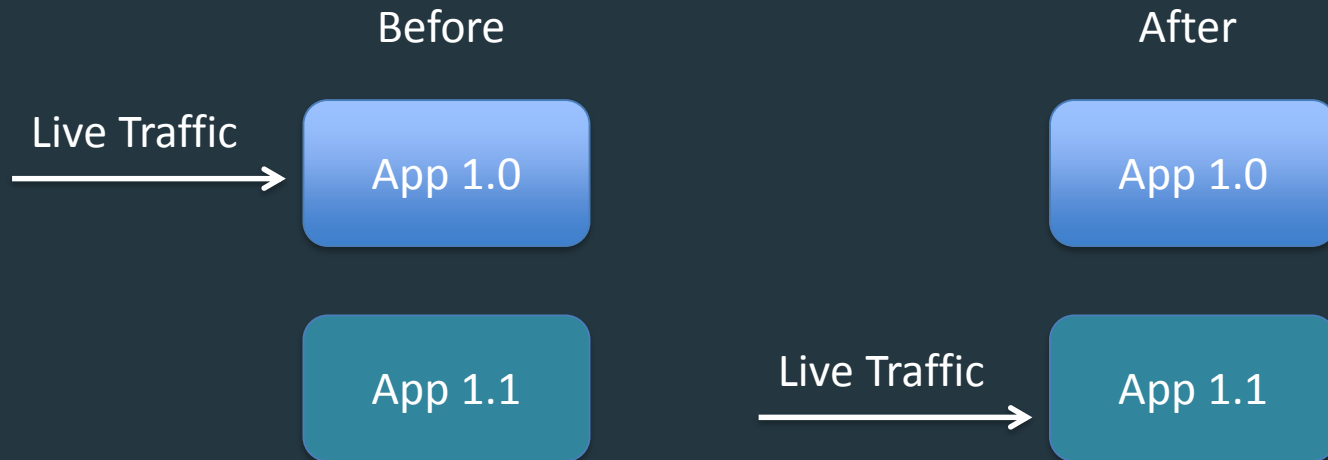
# Blue-Green Deployments

## Agenda

1. Blue-Green Routing
2. Implications on App Design

## Blue-Green Deployment

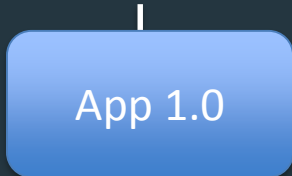
Zero downtime when upgrading can be accomplished with blue-green deployments.



# Blue-Green Deployment

Before

`myapp.cfapps.io`



`myapp-temp.cfapps.io`



# Blue-Green Deployment



# Blue-Green Deployment



## Agenda

1. Blue Green Routing
2. Implications on App & Data Model Design

## Serializing Objects

If using serializing objects, don't make destructive changes.

e.g. don't remove fields, do have a  
`serialVersionUID`



# The 12 Factors

Codebase

Dependencies

Config

Backing  
Services

Build, release,  
run

Processes

Port binding

Concurrency

Disposability

Dev/prod parity

Logs

Admin Processes

## Admin Processes

Run admin/mgmt tasks as one-off processes.

e.g. migrating data

## Database

Do make changes idempotent.

e.g. copy data to a new field (don't delete data)

## Database

No destructive database changes allowed.

e.g. don't drop a column

## Database

Do have backwards compatible changes.

e.g. nullable fields

A dark, atmospheric photograph of the Golden Gate Bridge in San Francisco. The bridge's iconic red-orange towers and suspension cables are visible, extending from a steep, rocky cliff on the left towards the right. The bridge is partially shrouded in a thick, low-lying fog or mist that fills the background and the water below. The sky is a uniform, dark grey, contributing to the moody and dramatic feel of the image. The overall lighting is very low, with the bridge's structure being the primary light source in the scene.

# Pivotal®

Transforming How The World Builds Software