

# Continuous Delivery

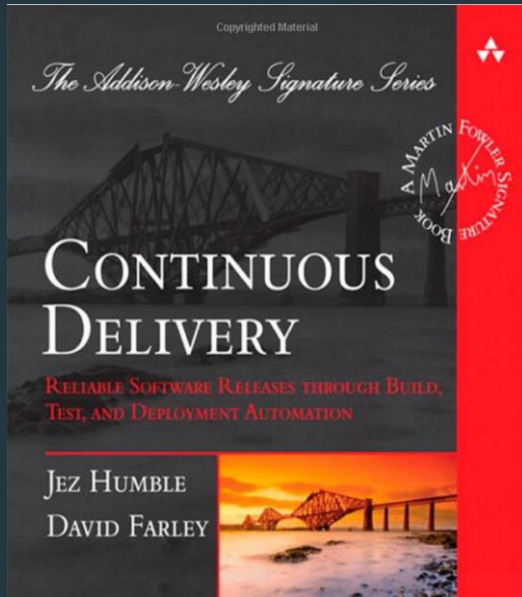
## Agenda

1. Define Continuous Delivery
2. How Pivotal Cloud Foundry Enables Continuous Delivery

“How long would it take in your environment to push a single line of code to production?”

Mary Poppendiek

# Continuous Delivery



Build software so that it can be released to production at anytime.

Continuous Deployment

Continuous Deployment

!=

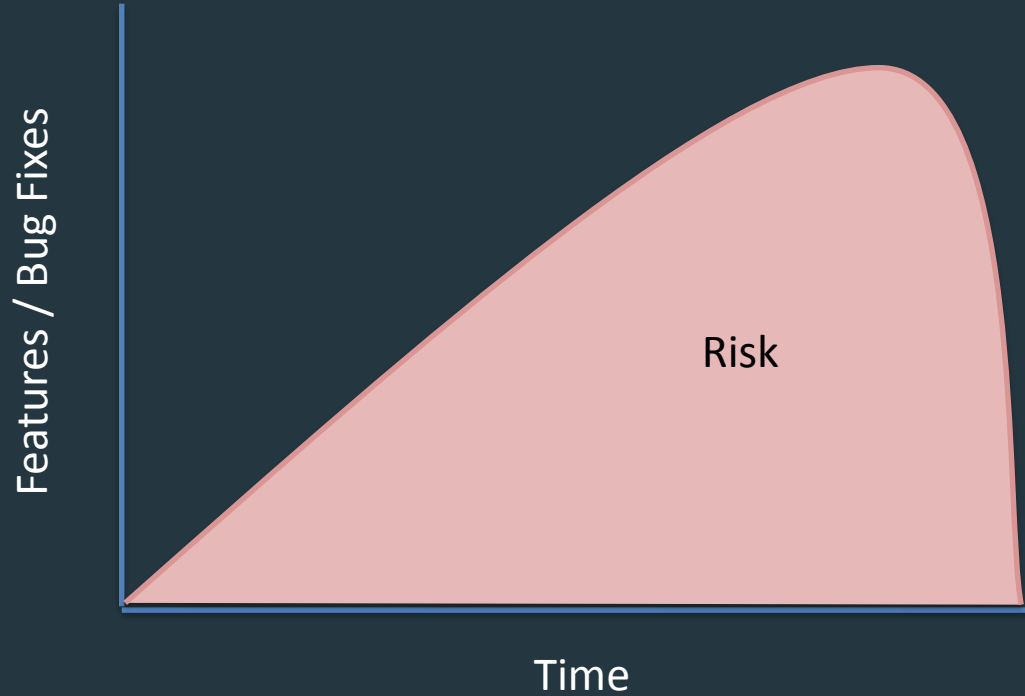
Continuous Delivery

Who Decides When to go to Prod?

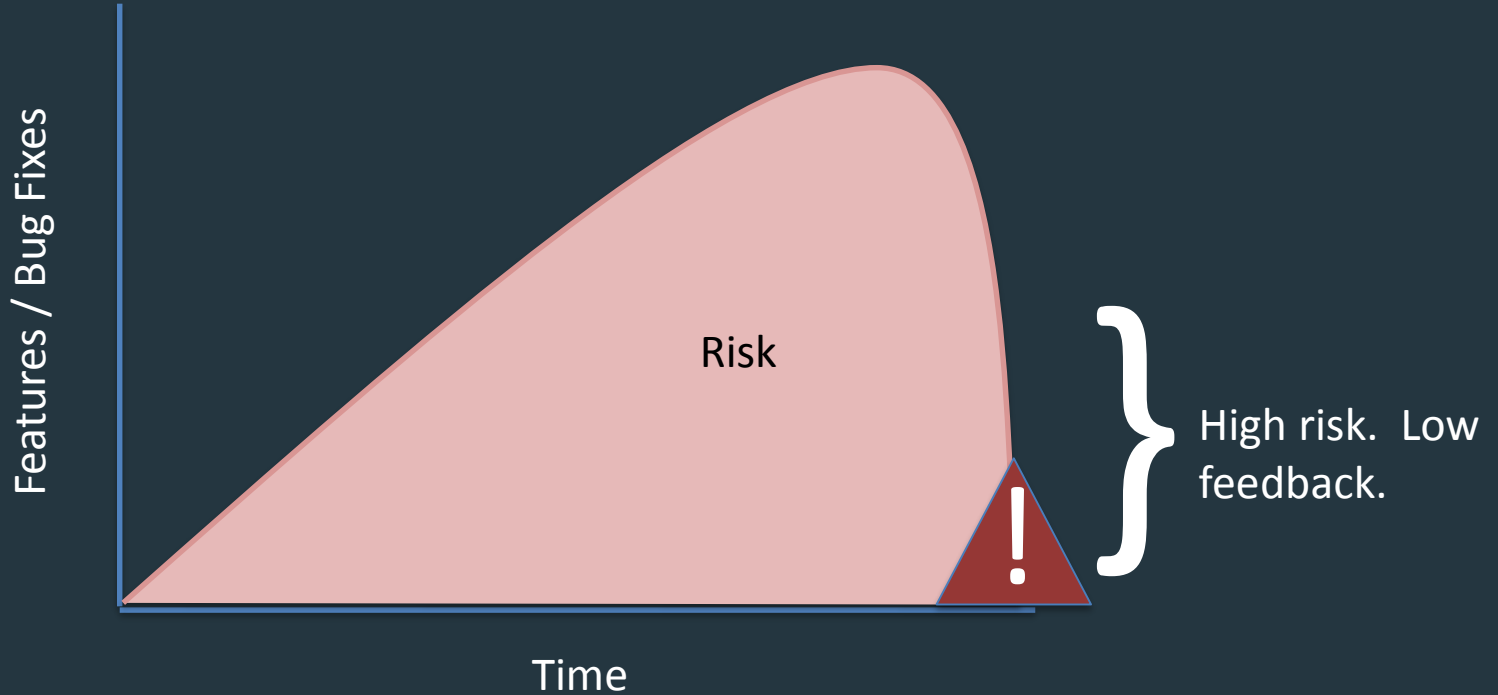
The business.

(Technical teams should be ready)

# Waterfall Application Delivery

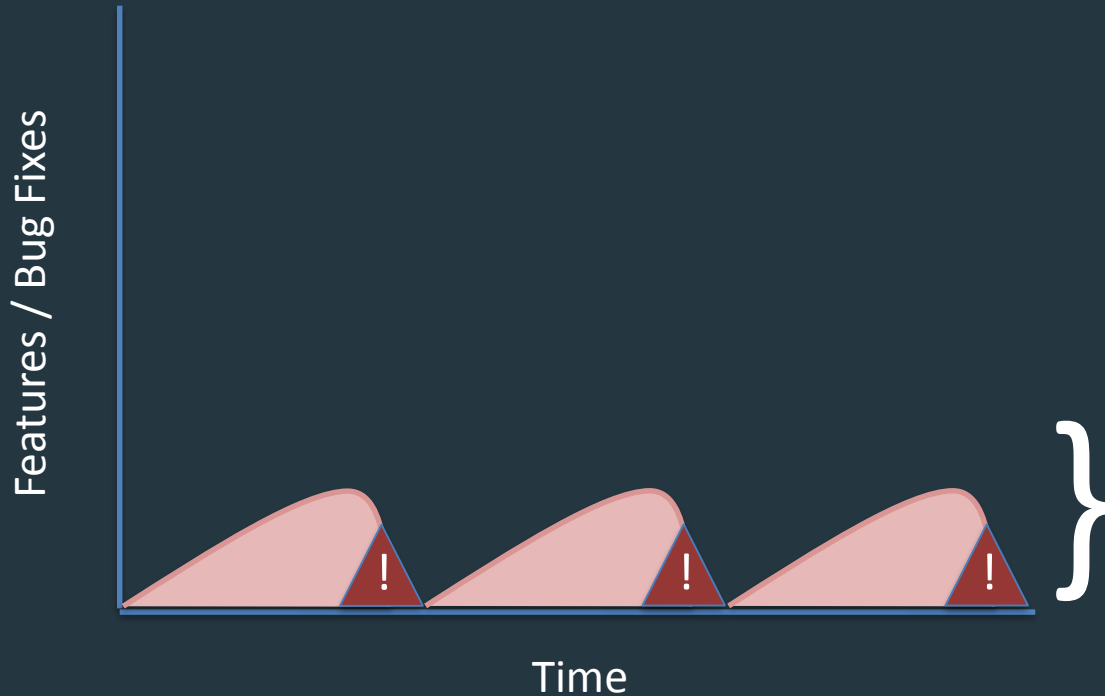


# Waterfall Application Delivery





# Application Delivery with Continuous Delivery



Several smaller deployments reduce risk but increase feedback.

# STRATEGIES FOR SUCCESS

## Continuous Delivery Strategies

Do implement continuous integration.

## Continuous Delivery Strategies

Do not create environment specific packages.

## Continuous Delivery Strategies

Do externalize environment specific configuration.

## Continuous Delivery Strategies

Do not assume existing processes are right.

## Continuous Delivery Strategies

Do not use a different process for different environments.

## Continuous Delivery Strategies

Do recreate app environments frequently.



## Continuous Delivery Strategies

Do ensure that database changes are automated.

## Continuous Delivery Strategies

Do deploy less more frequently.

## Continuous Delivery Strategies

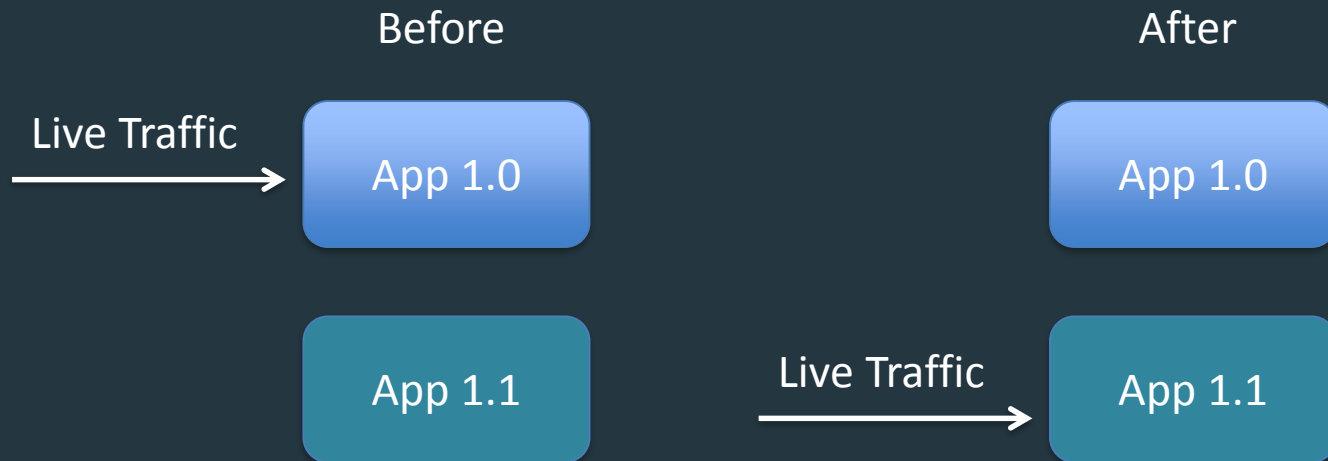
Do automate all testing where test failures would prevent a production release from occurring.

## Continuous Delivery Strategies

Do try to use tools that support the process.

## Continuous Delivery Strategies

Blue-Green deployments can be used with a continuous delivery pipeline.



# YOU KNOW YOU ARE DOING CONTINUOUS DELIVERY WHEN...

<http://martinfowler.com/bliki/ContinuousDelivery.html>

You're Doing Continuous Delivery When

Your software is deployable through its  
lifecycle.

<http://martinfowler.com/bliki/ContinuousDelivery.html>

You're Doing Continuous Delivery When

Your team prioritizes keeping the software deployable over working on new features.

<http://martinfowler.com/bliki/ContinuousDelivery.html>



You're Doing Continuous Delivery When

Anybody can get fast, automated feedback on the production readiness of their systems any time somebody makes a change to them.

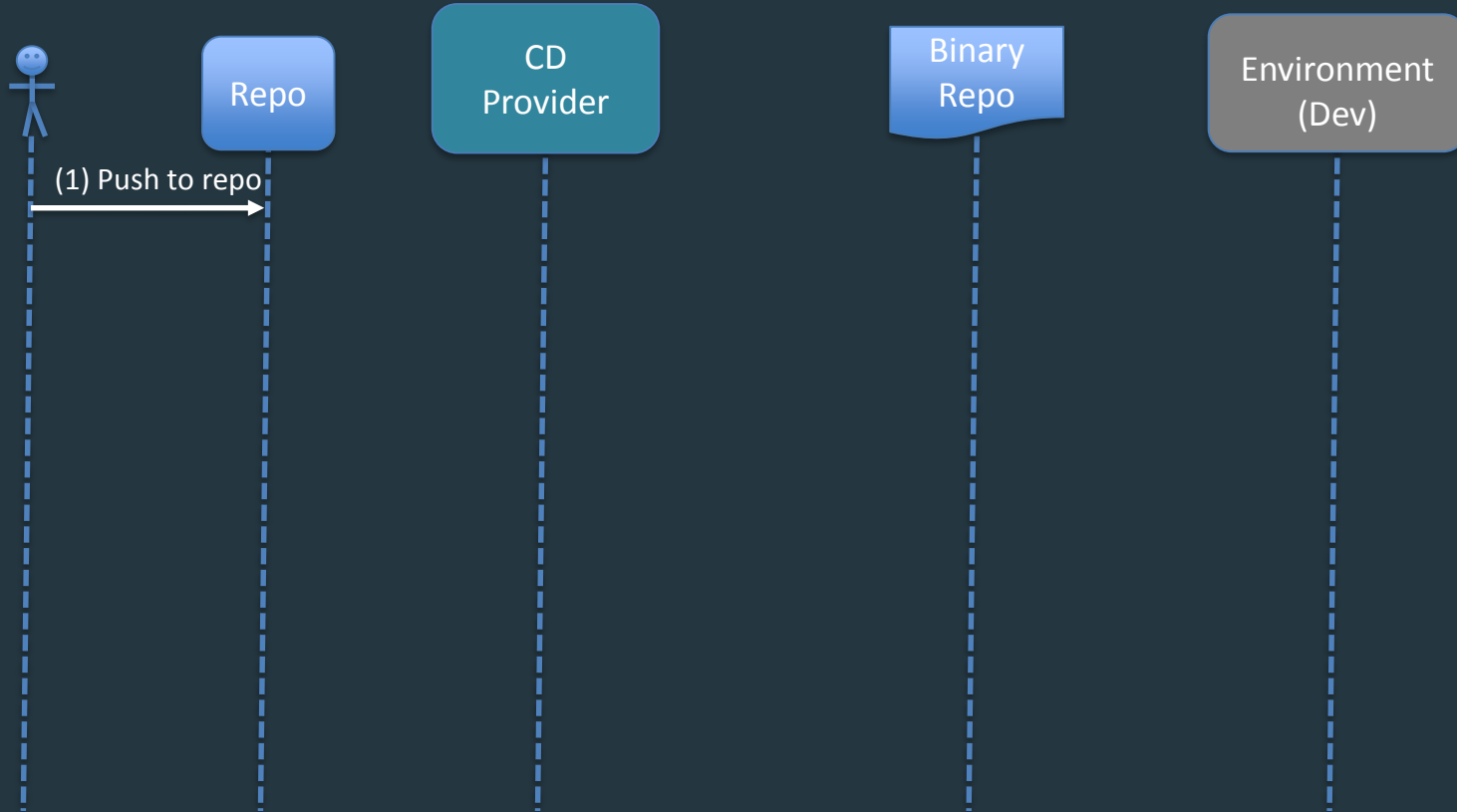
<http://martinfowler.com/bliki/ContinuousDelivery.html>

You're Doing Continuous Delivery When

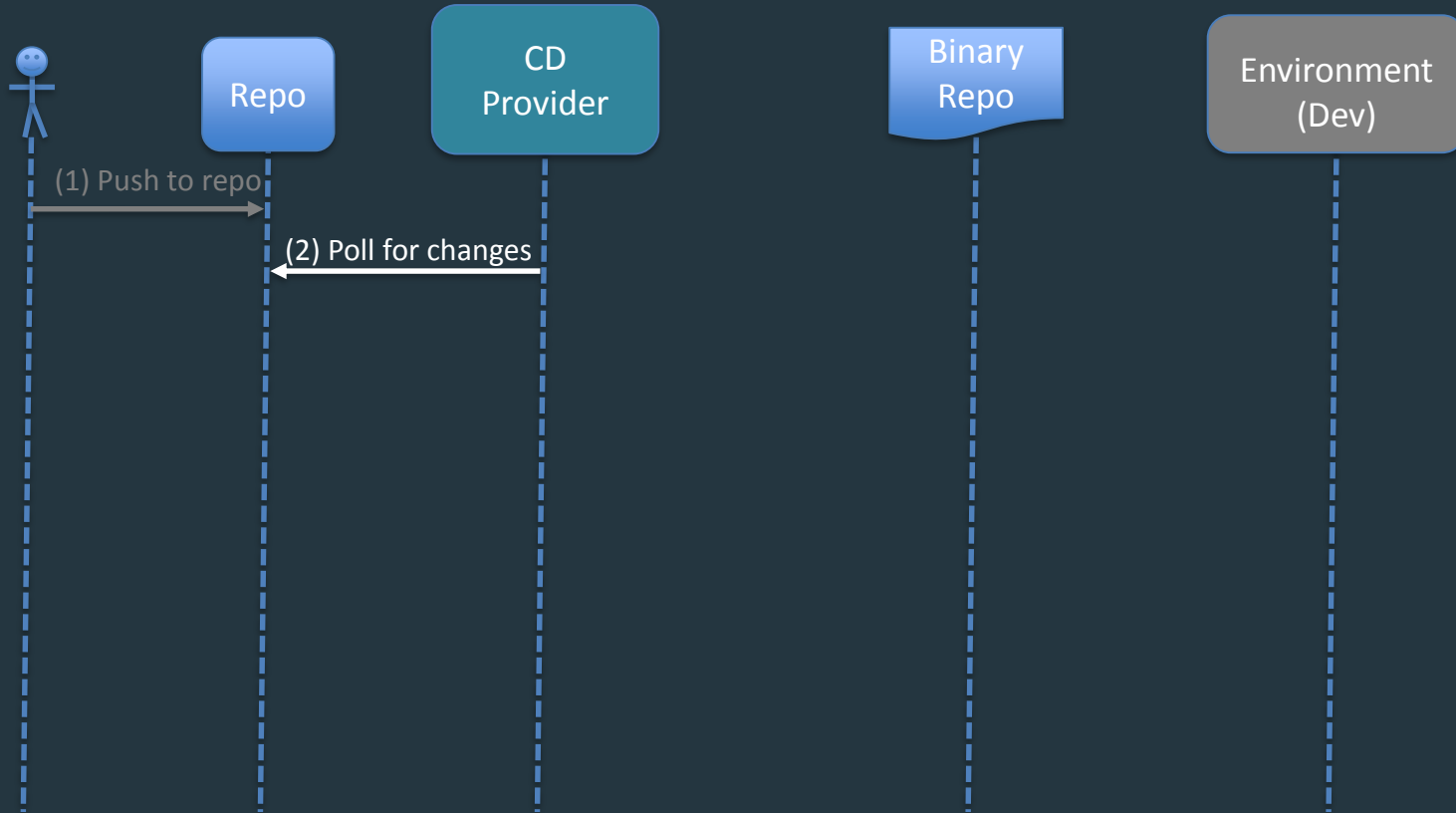
You can perform push-button deployments of any version of the software to any environment on demand.

<http://martinfowler.com/bliki/ContinuousDelivery.html>

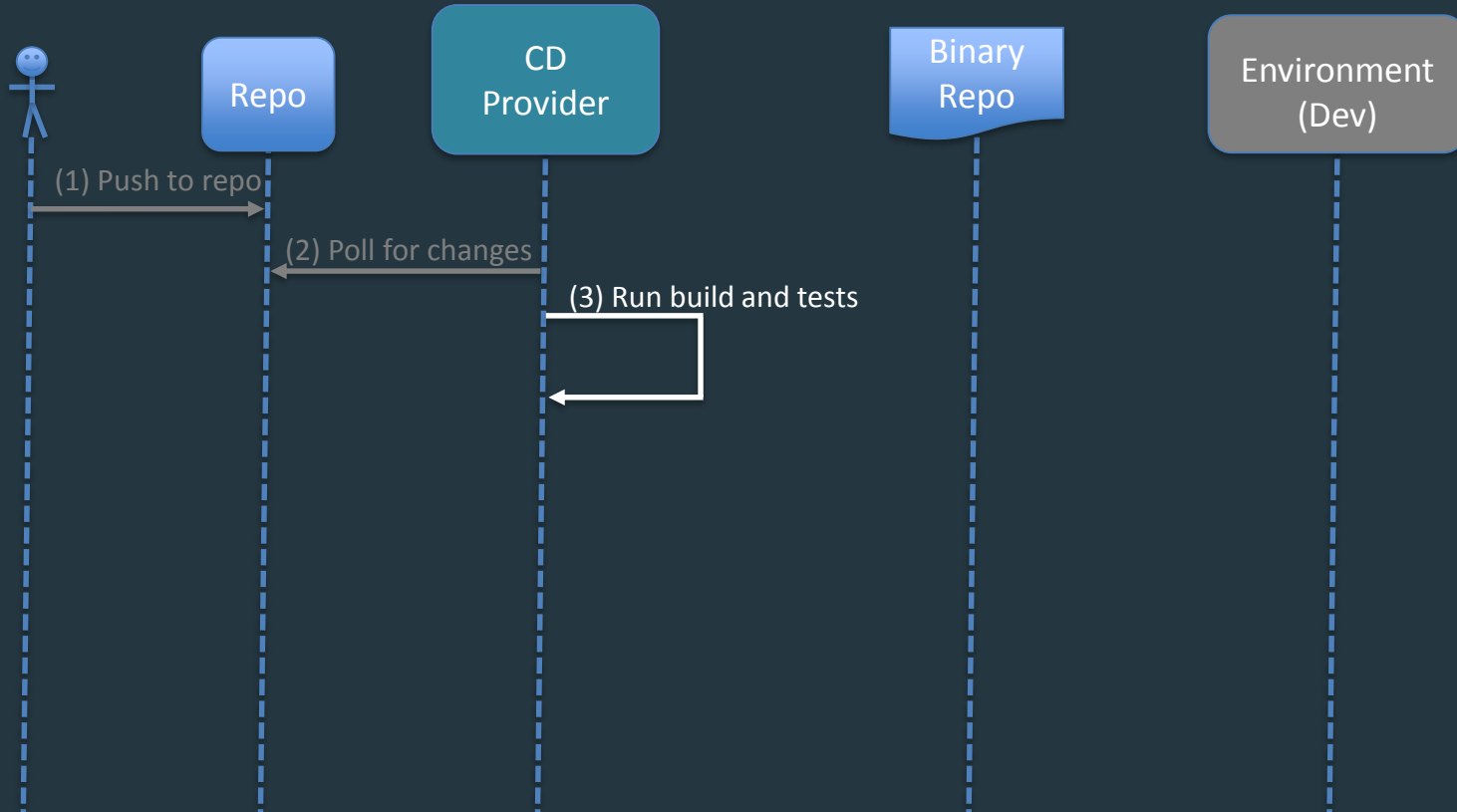
# Continuous Delivery Sequence (Development)



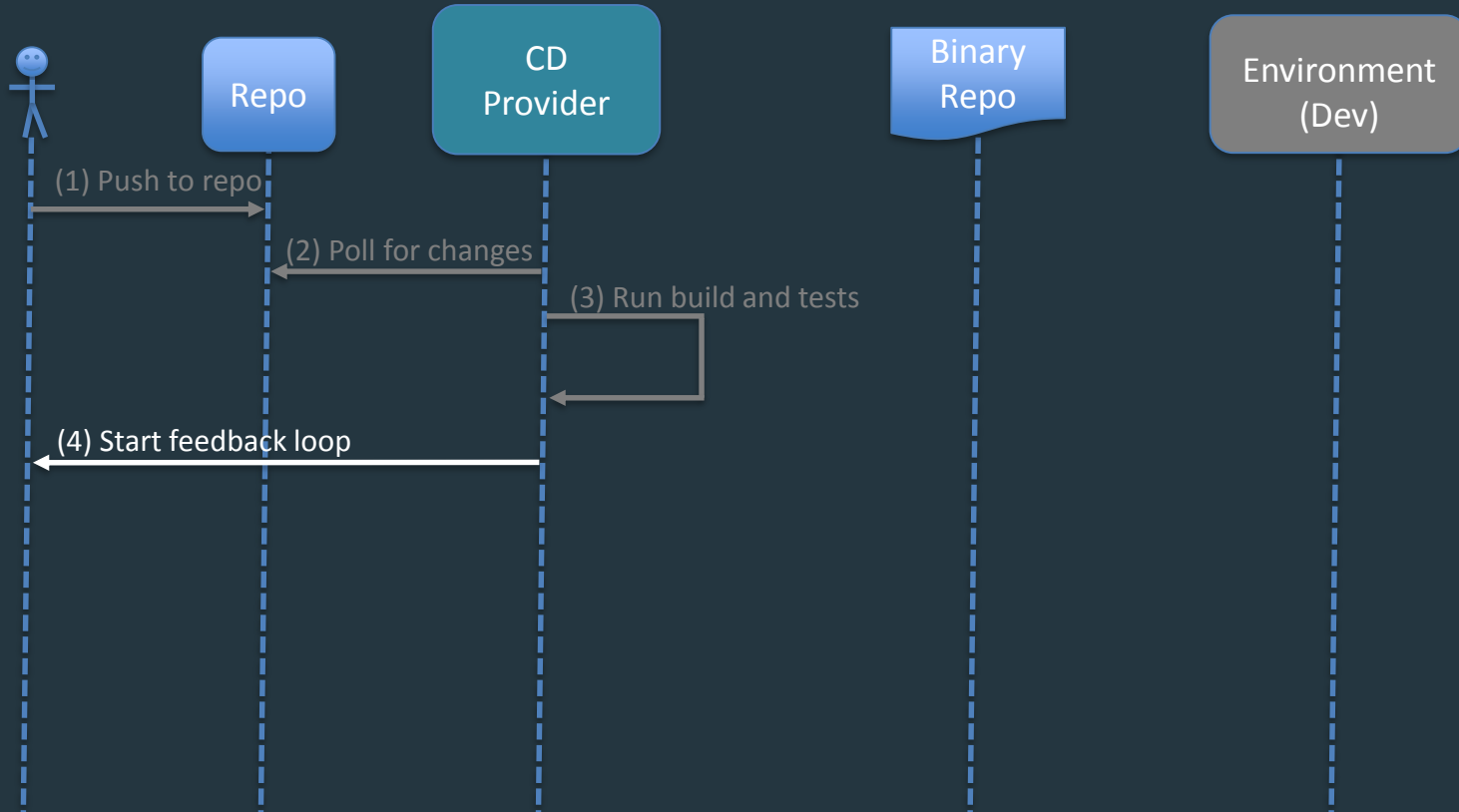
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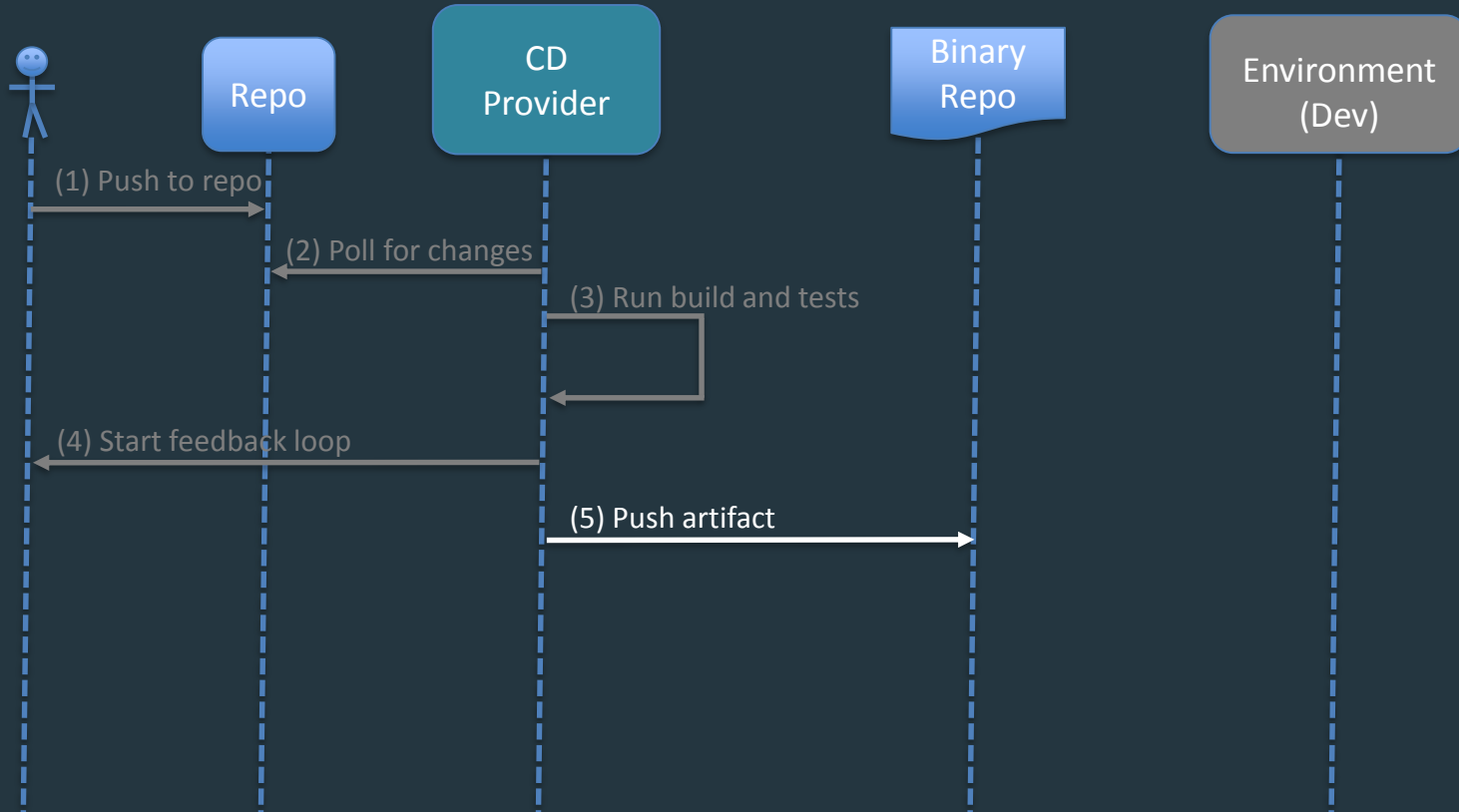
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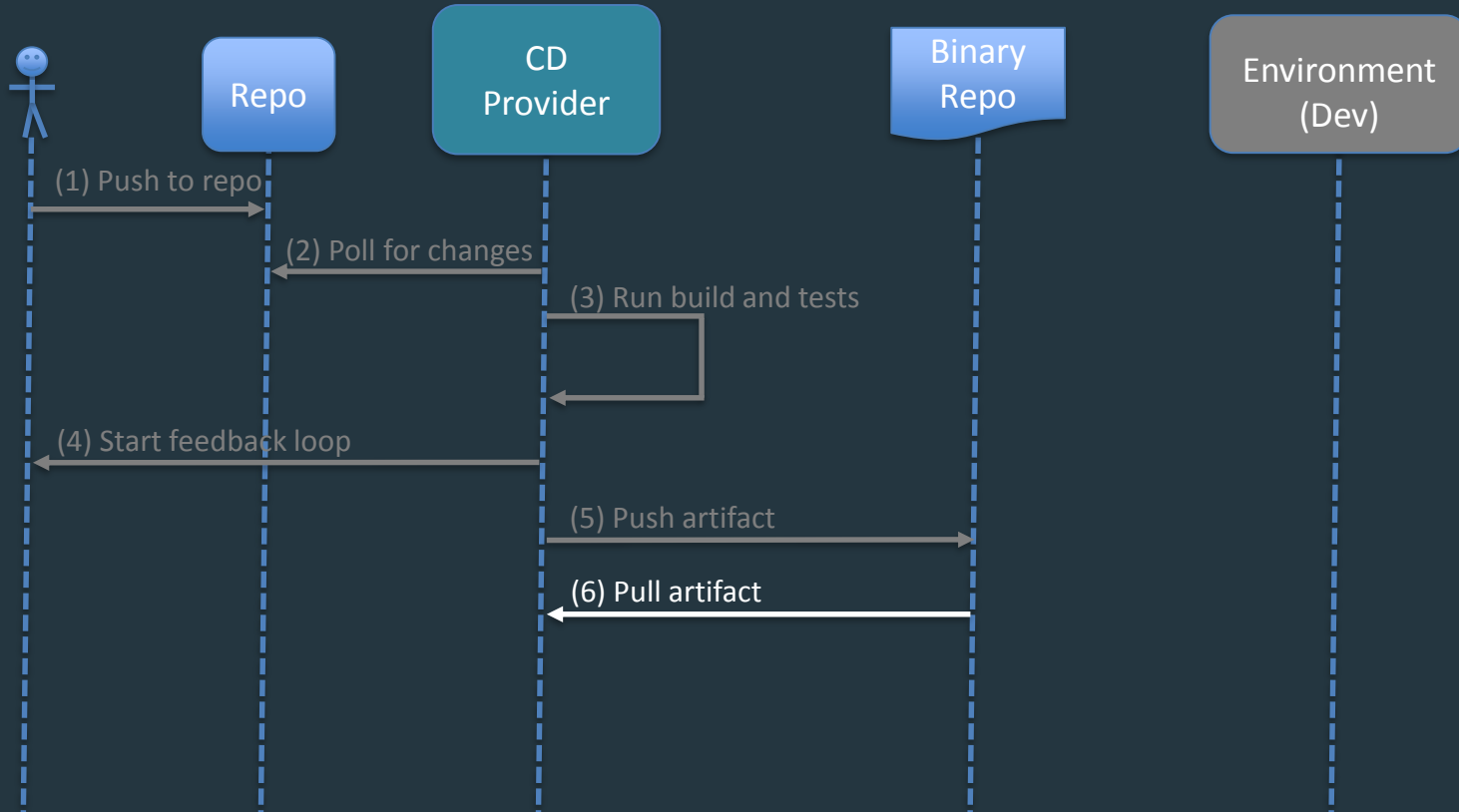
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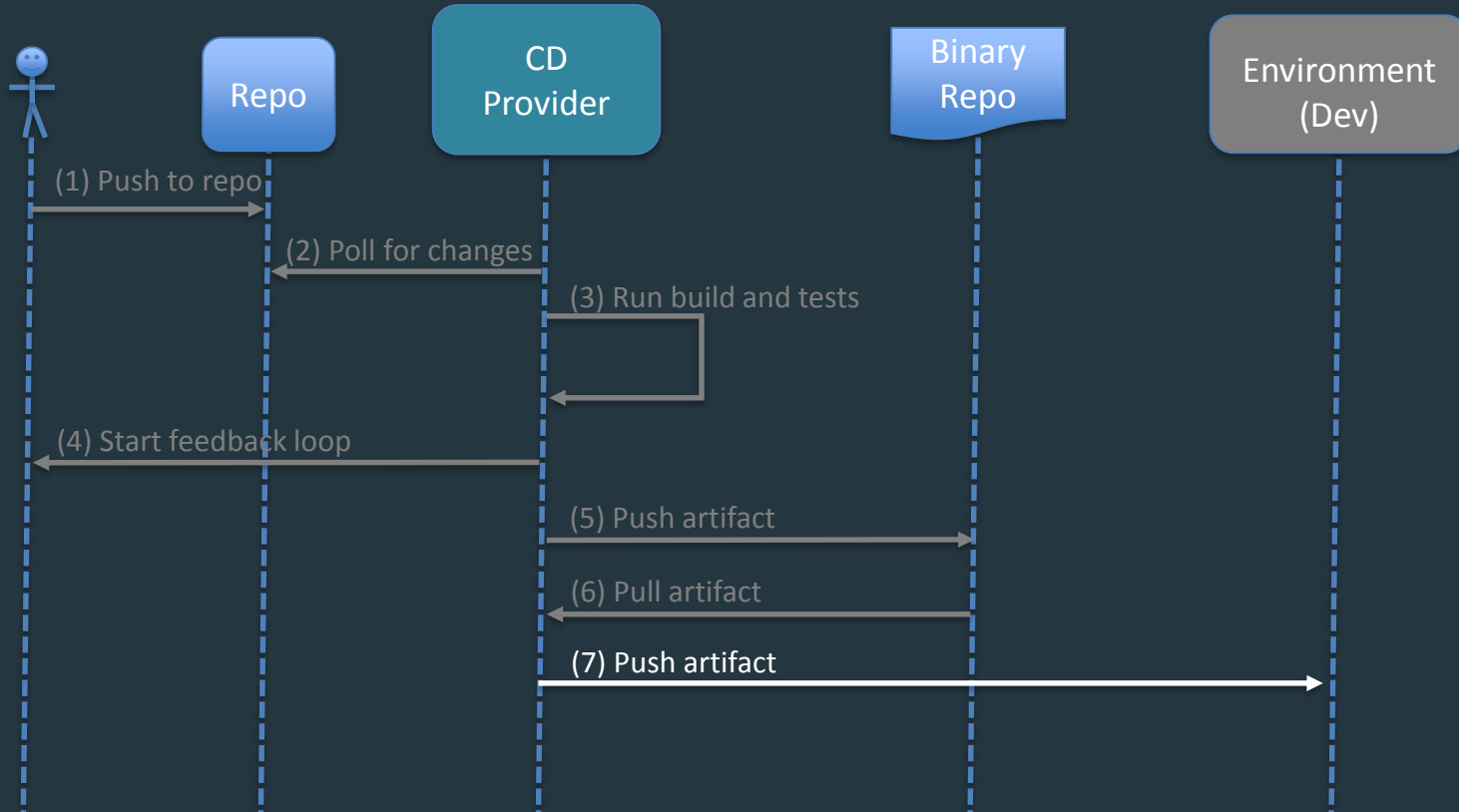


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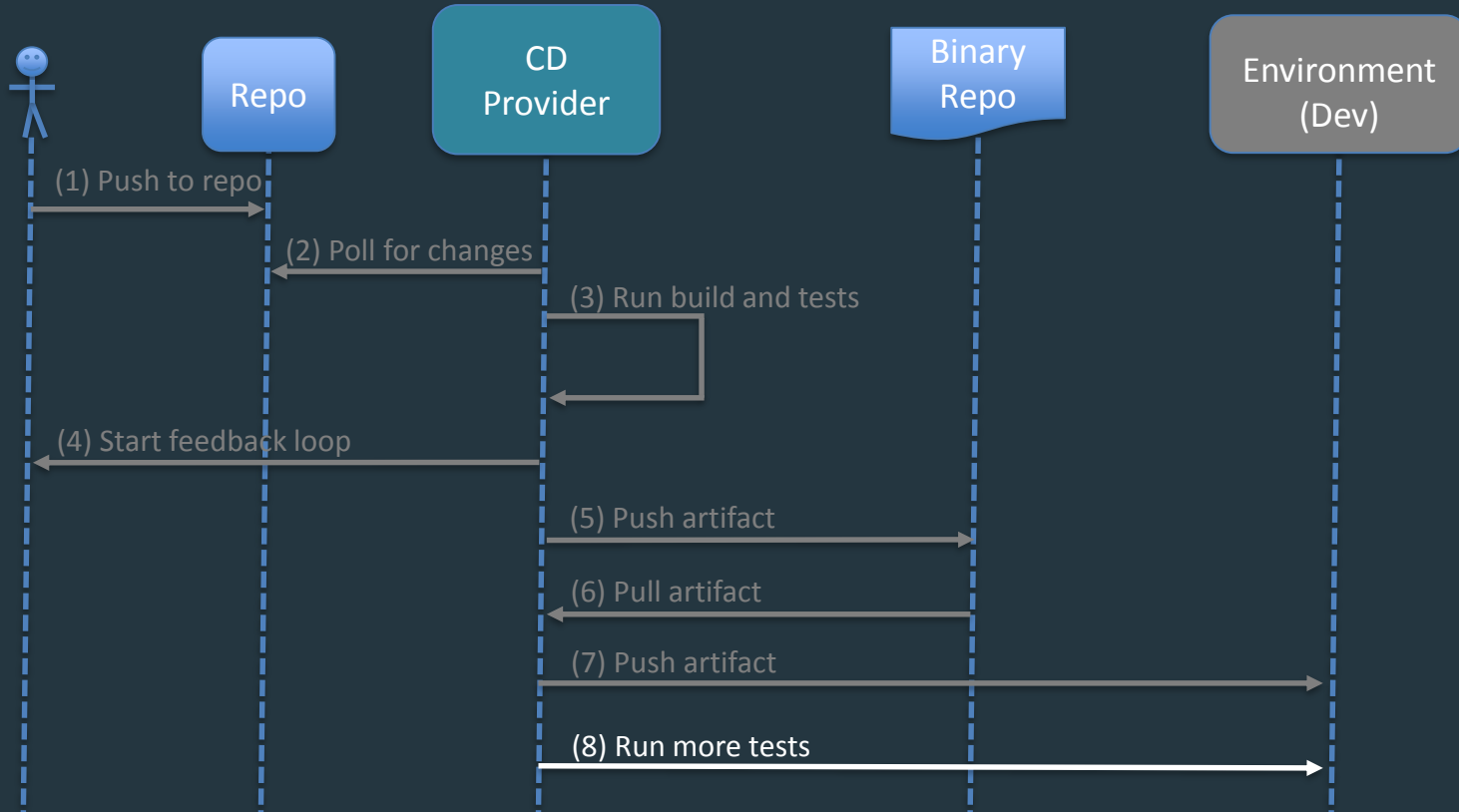




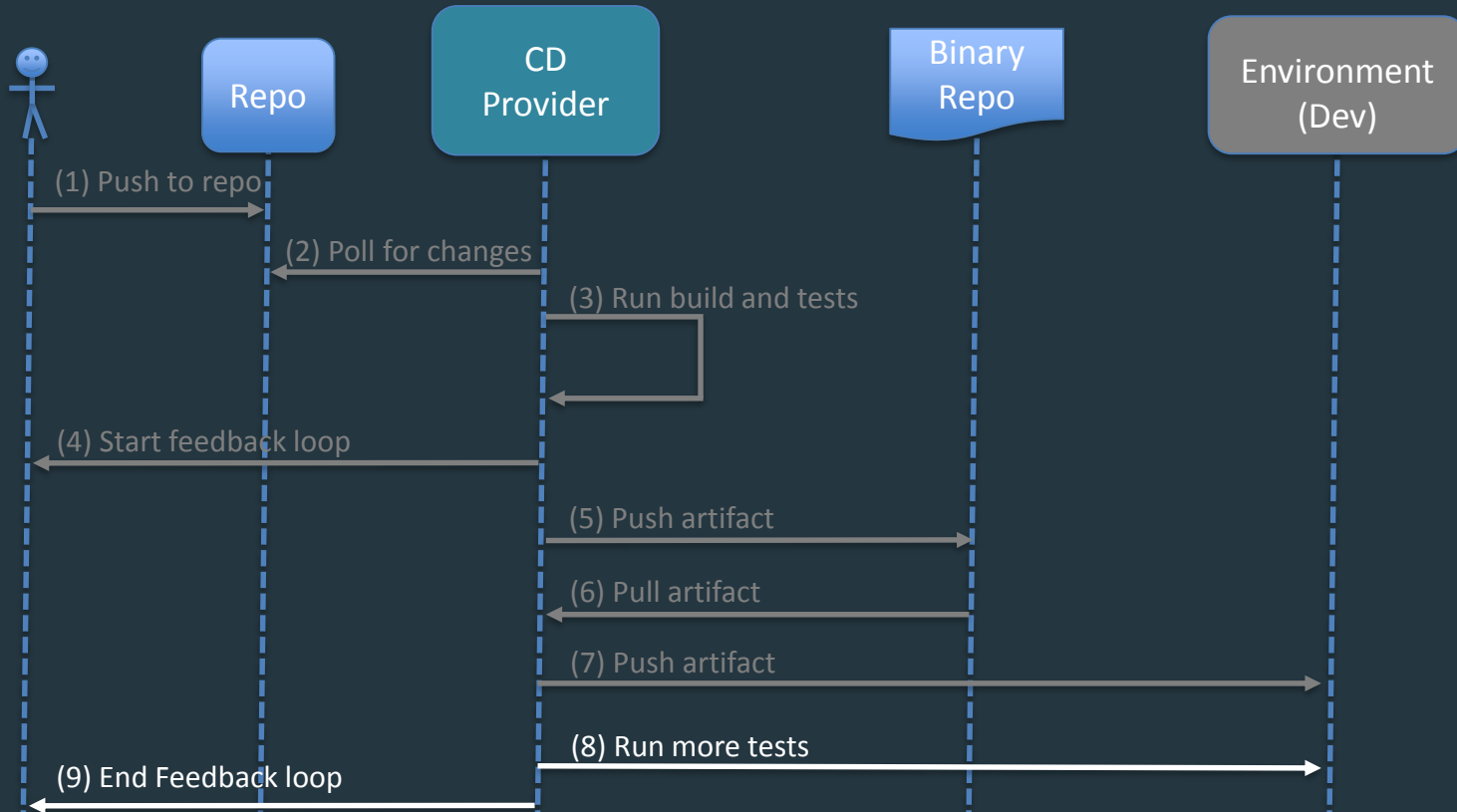
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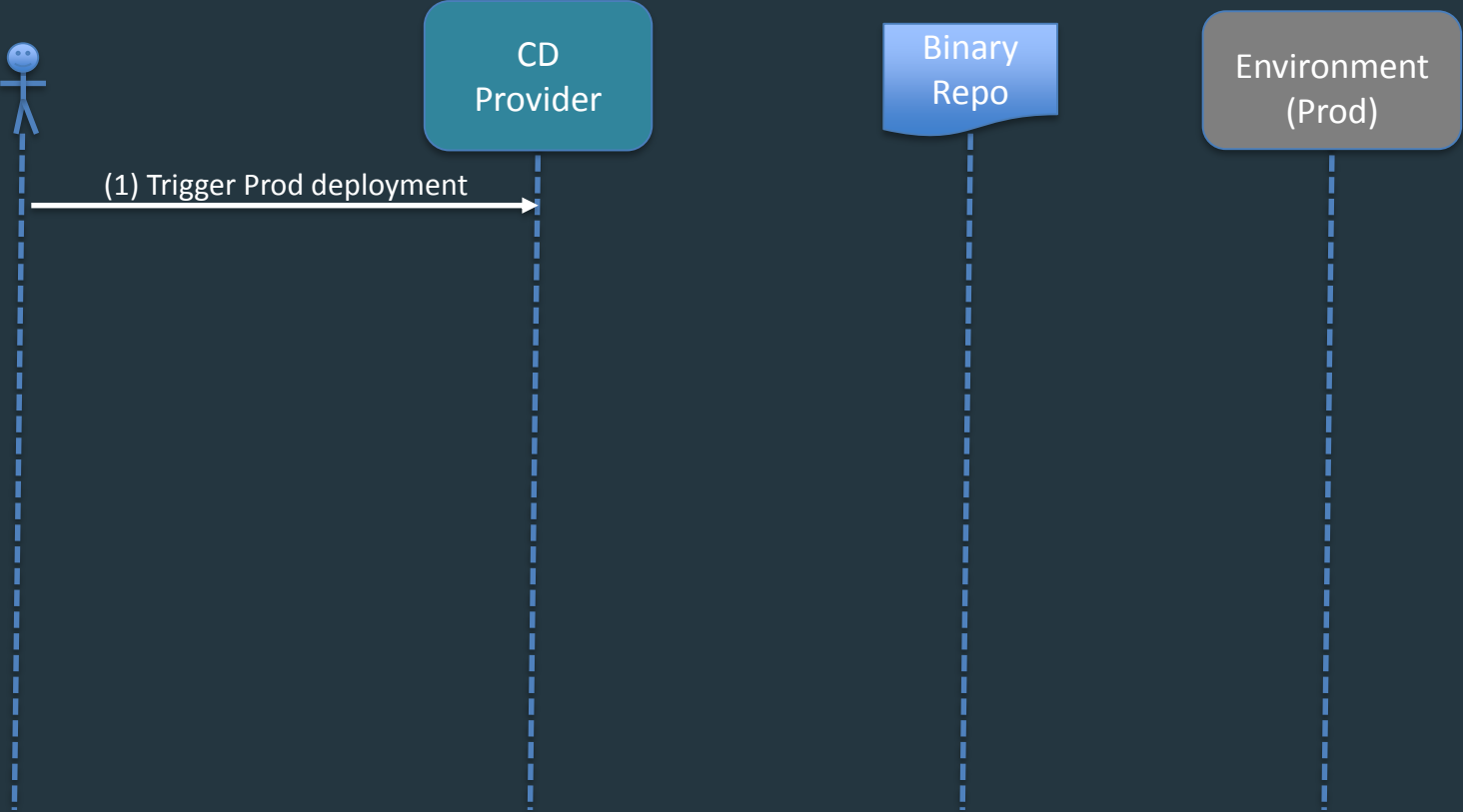
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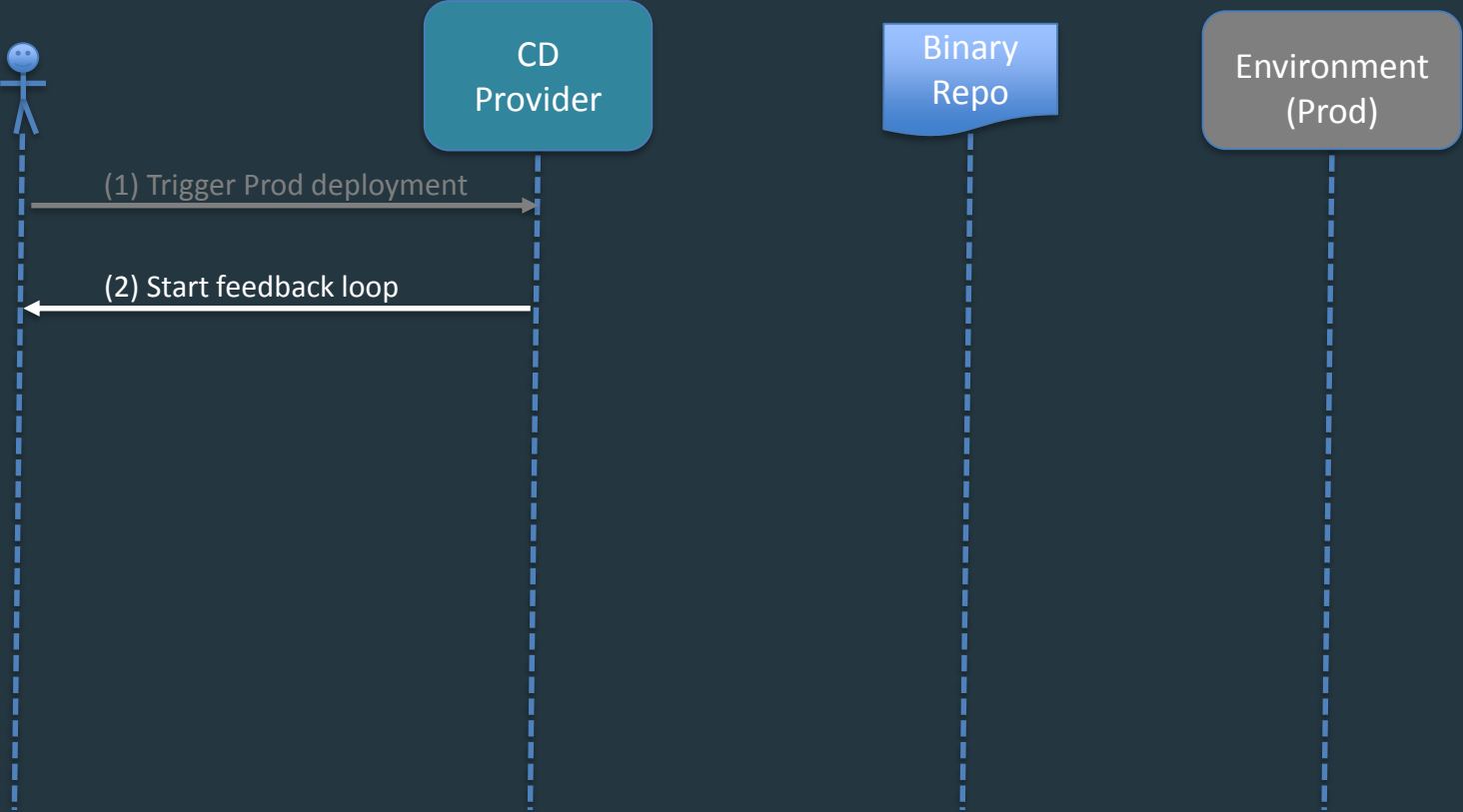
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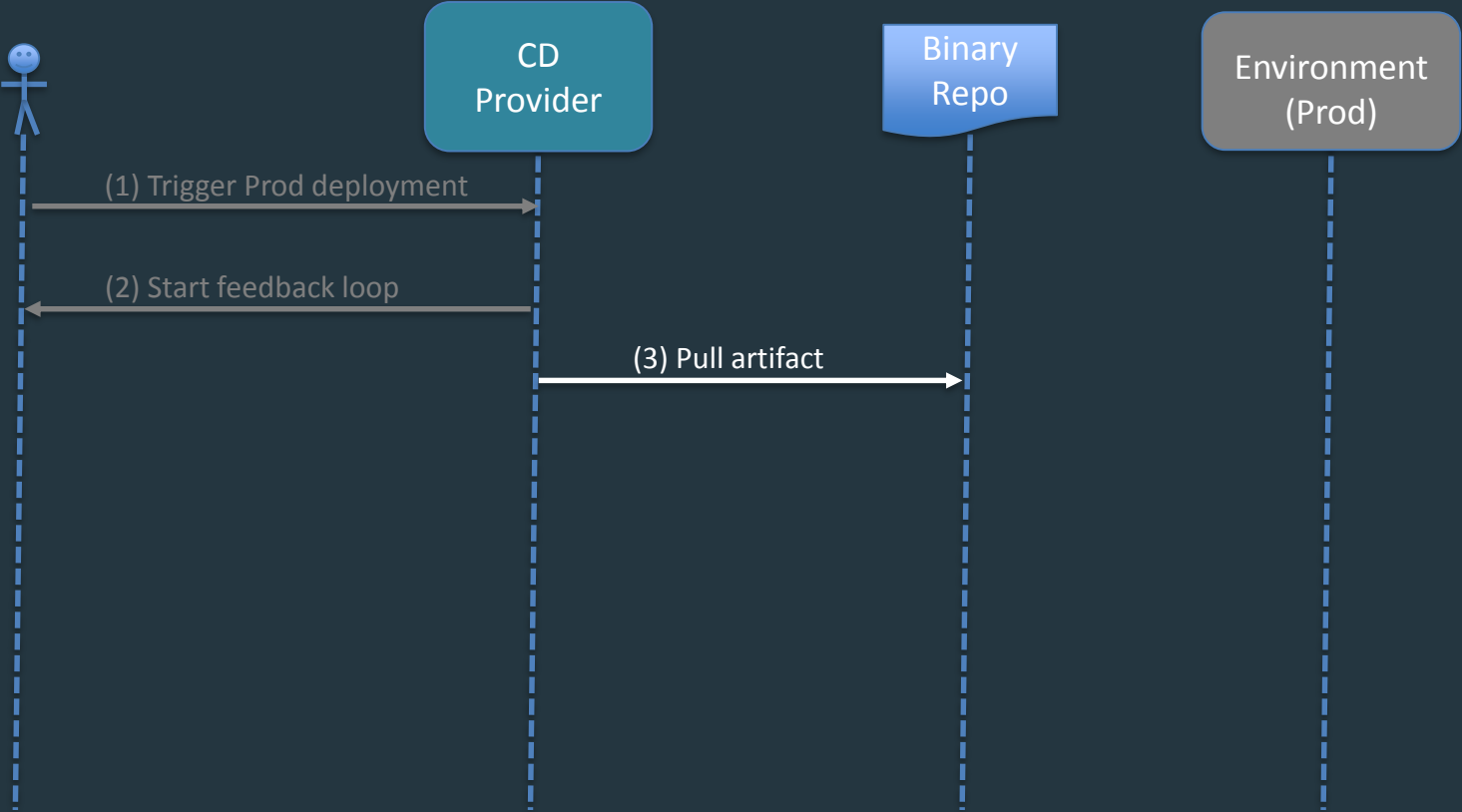
# Continuous Delivery Sequence (Production)



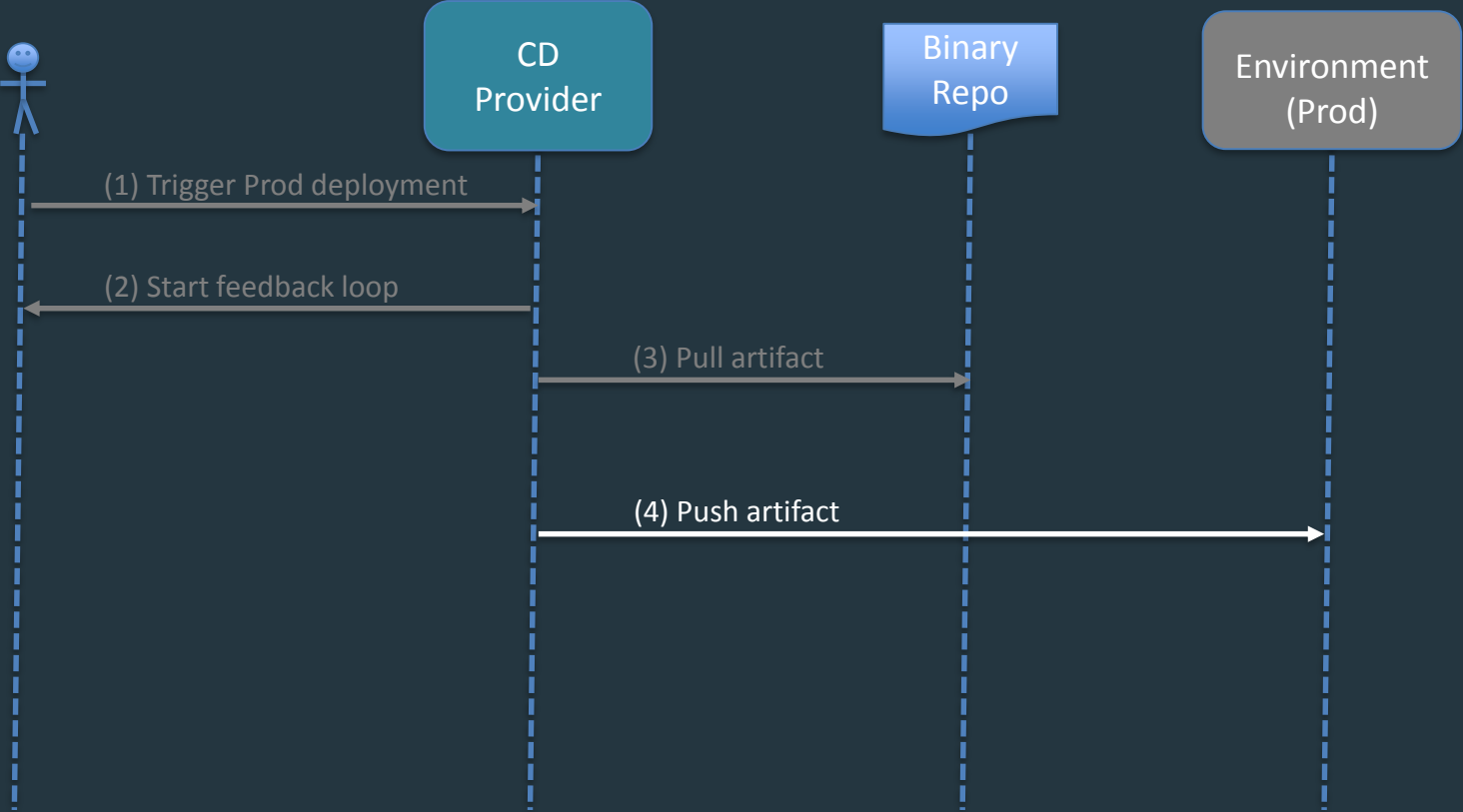
# Continuous Delivery Sequence (Production)



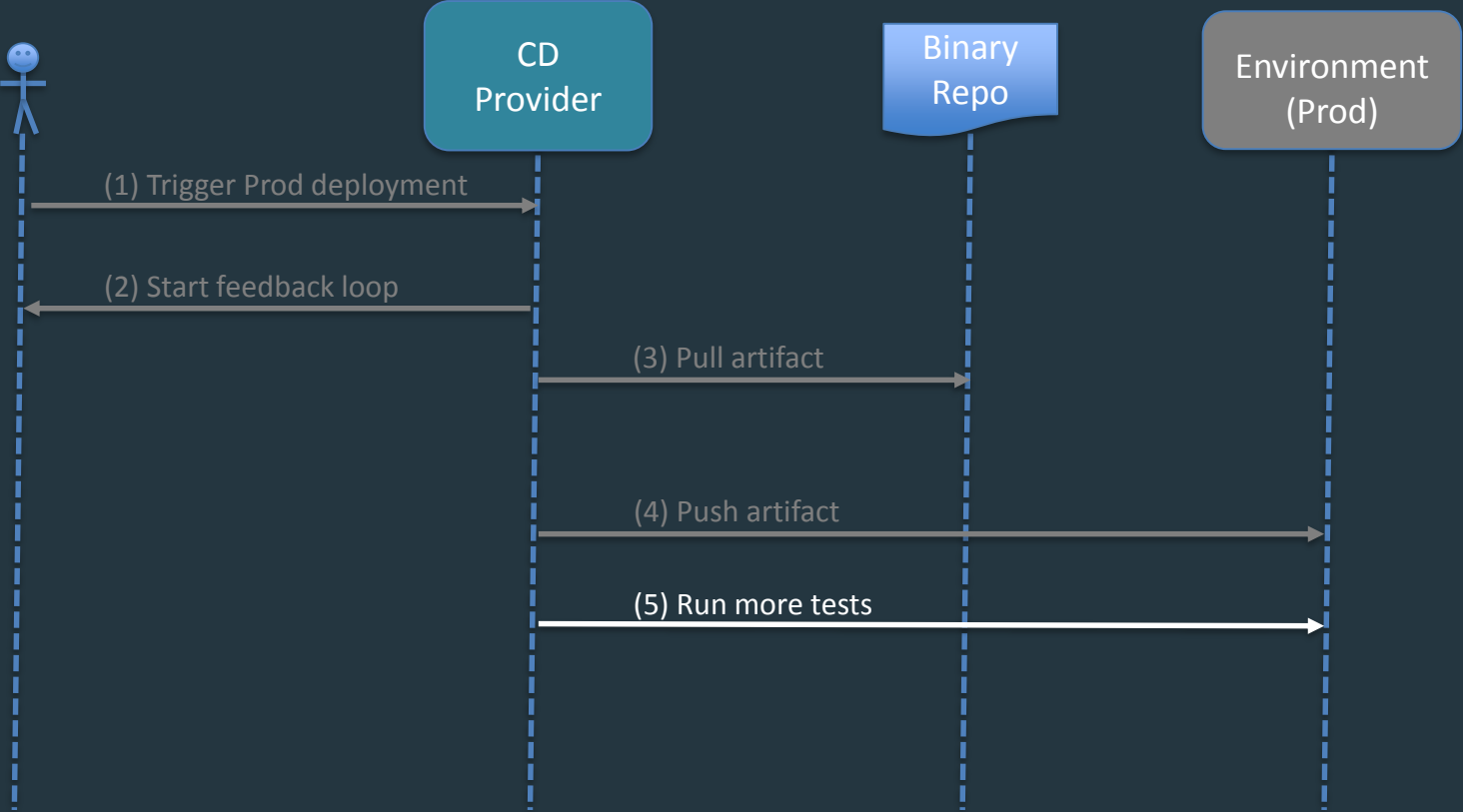
# Continuous Delivery Sequence (Production)



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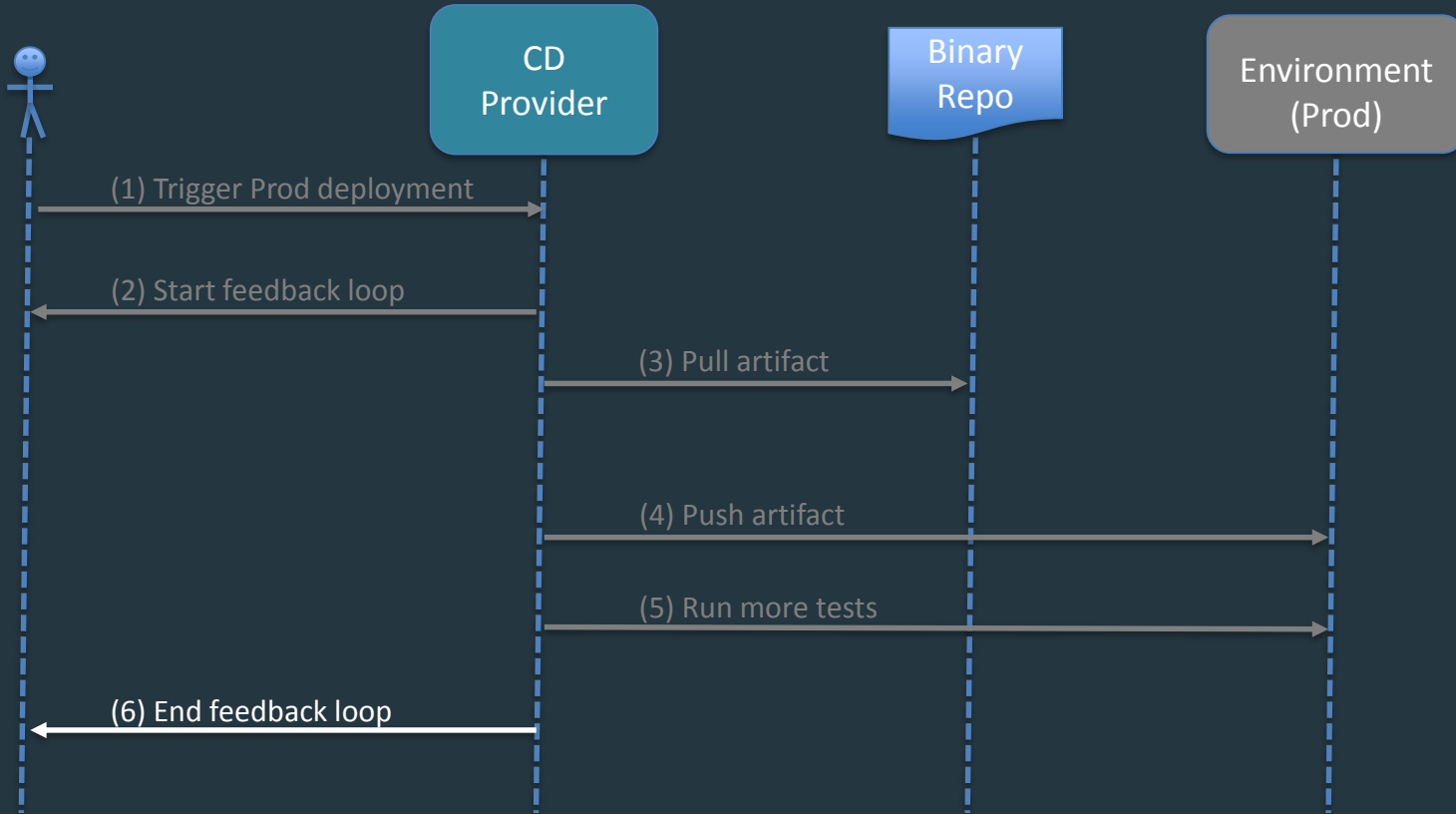


# Continuous Delivery Sequence (Production)





# Continuous Delivery Sequence (Production)



## Agenda

1. Define Continuous Delivery
2. Pivotal Cloud Foundry Enables Continuous Delivery

## PCF Enabling Continuous Delivery

Get a new app environment in seconds.

## PCF Enabling Continuous Delivery

Have complete consistency between environments.

## PCF Enabling Continuous Delivery

Have a consistent API to automate deployments.

## PCF Enabling Continuous Delivery

Inject environment specific configuration.

## PCF Enabling Continuous Delivery

Promote apps through environments with the same process.

A dark, atmospheric photograph of the Golden Gate Bridge in San Francisco, partially obscured by a thick layer of fog. The bridge's iconic towers and suspension cables are visible against a grey, overcast sky. The foreground shows a dark, rocky hillside.

# Pivotal<sup>®</sup>

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