

# Continuous Delivery using CodePipeline

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# Introduction

## **Continuous Delivery using CodePipeline**

- Path from Development to Production
- Benefits
  - Increases speed and quality
  - Greater productivity
  - Reduces cost

# Introduction

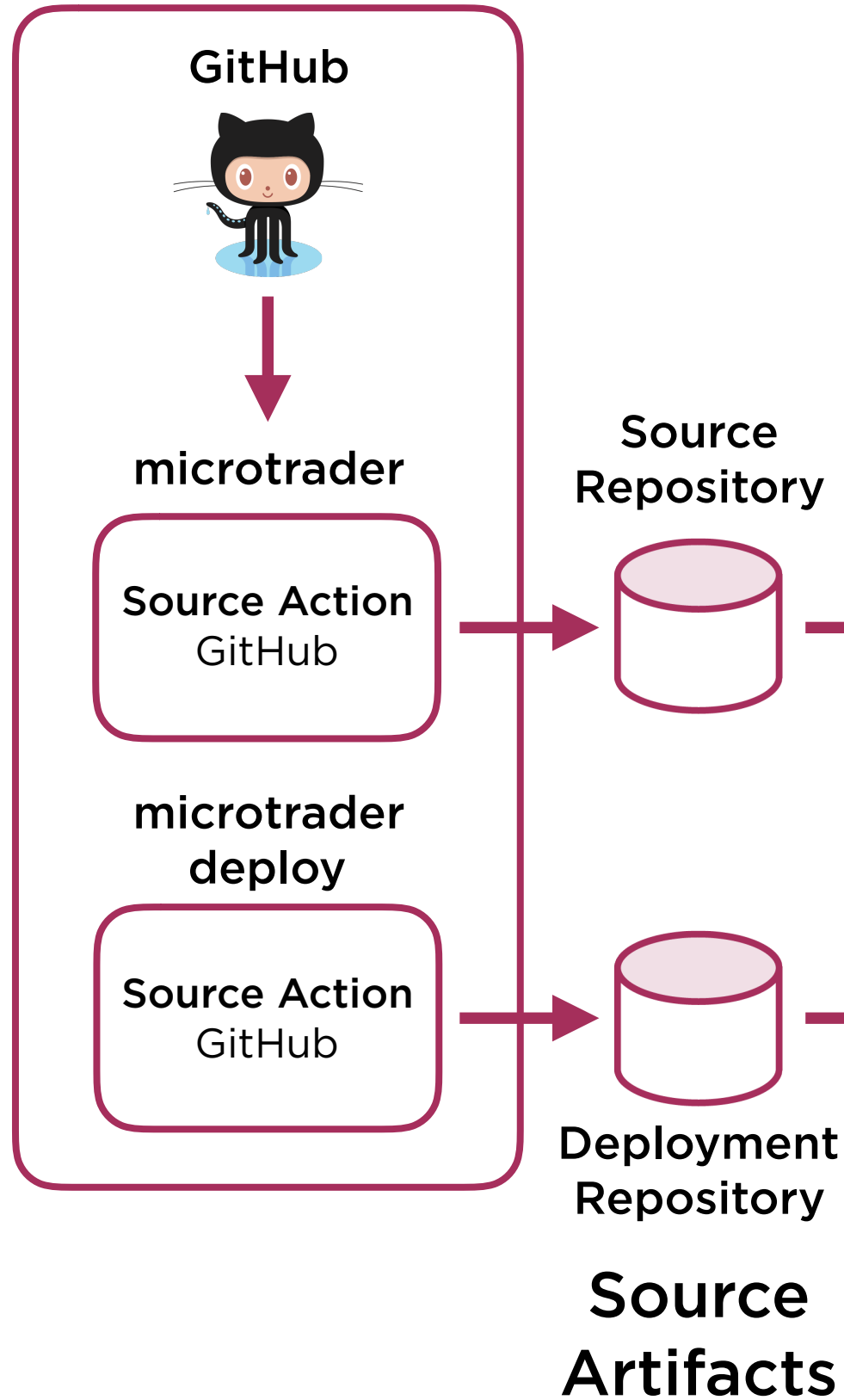
## Continuous Delivery using CodePipeline

- Pipeline building blocks
  - Local Docker workflow
  - CloudFormation templates
- CodePipeline + CodeBuild + CloudFormation
- Pipeline stages
  - Source stage
  - Build stage
  - Development stage
  - Production stage
- Define pipeline in CloudFormation

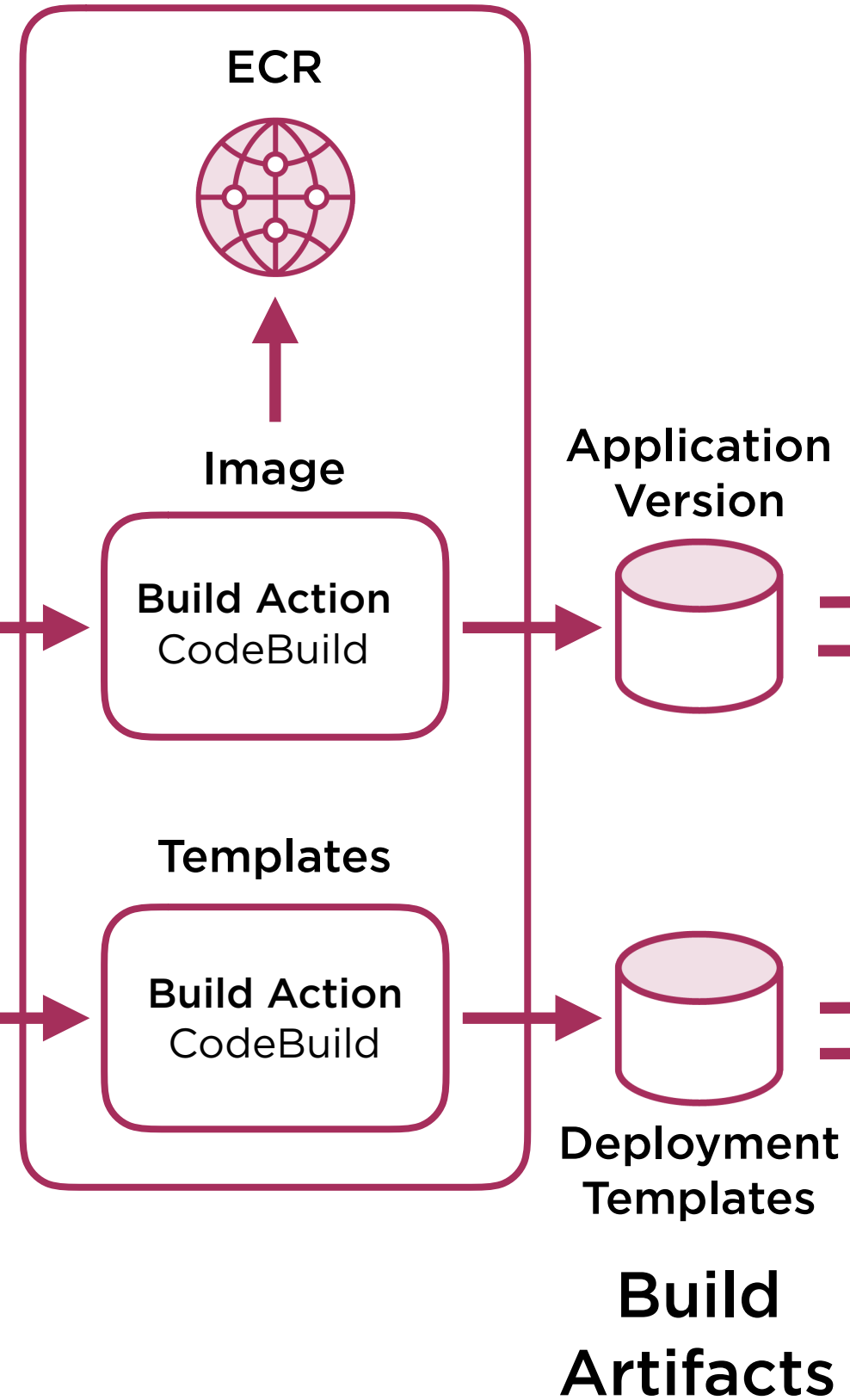
# Solution Overview

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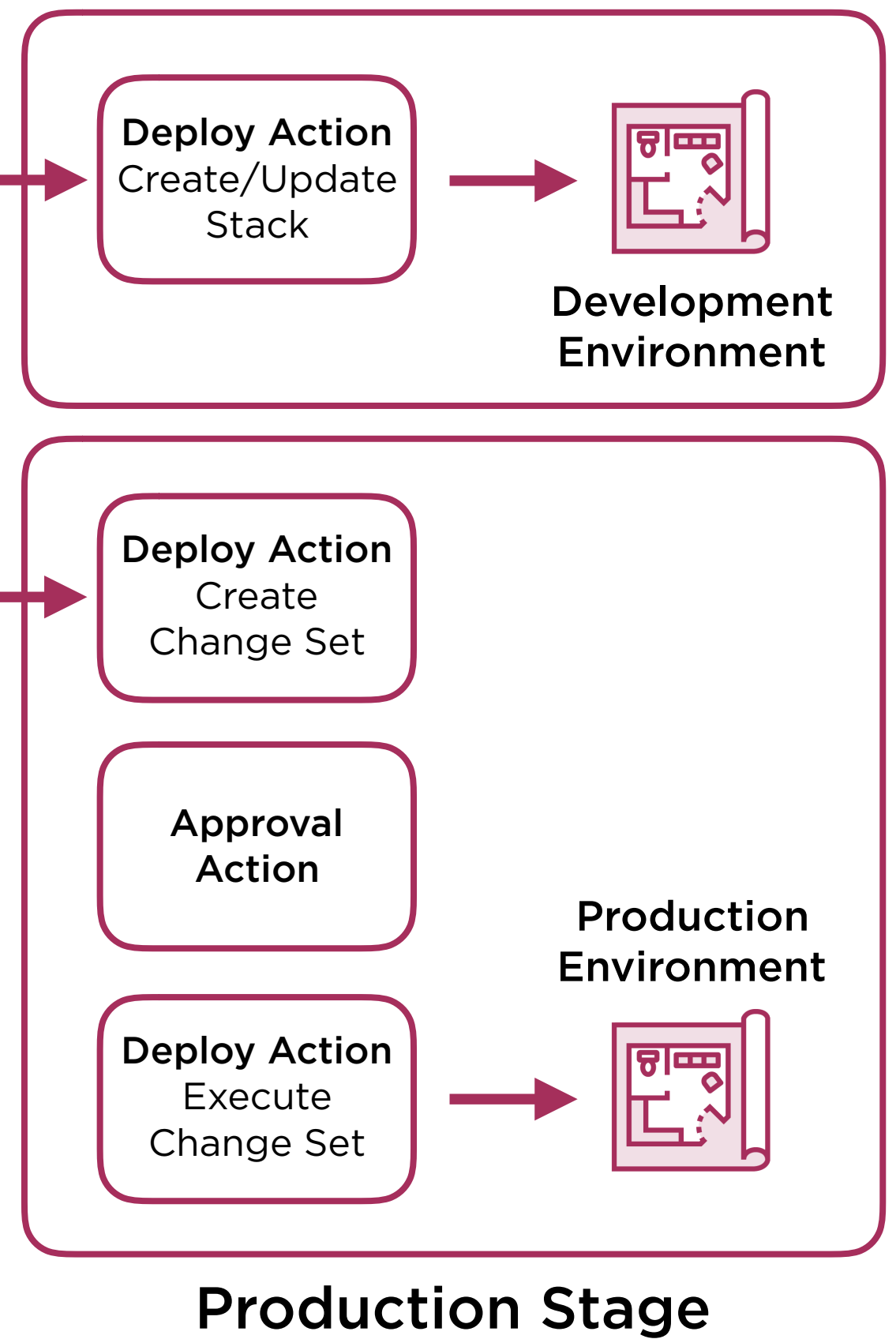
## Source Stage



## Build Stage



## Development Stage



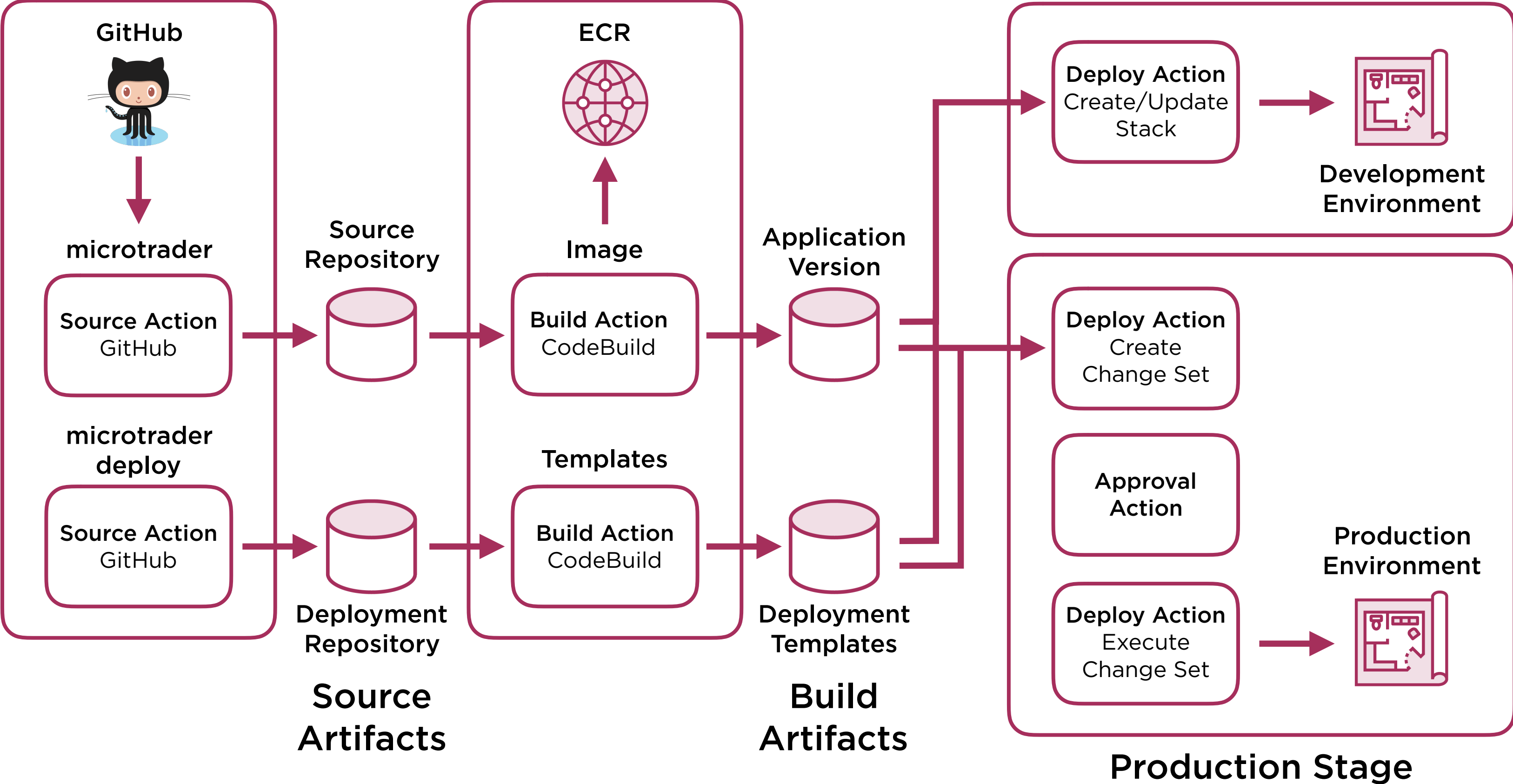
# Creating a CodeBuild Image

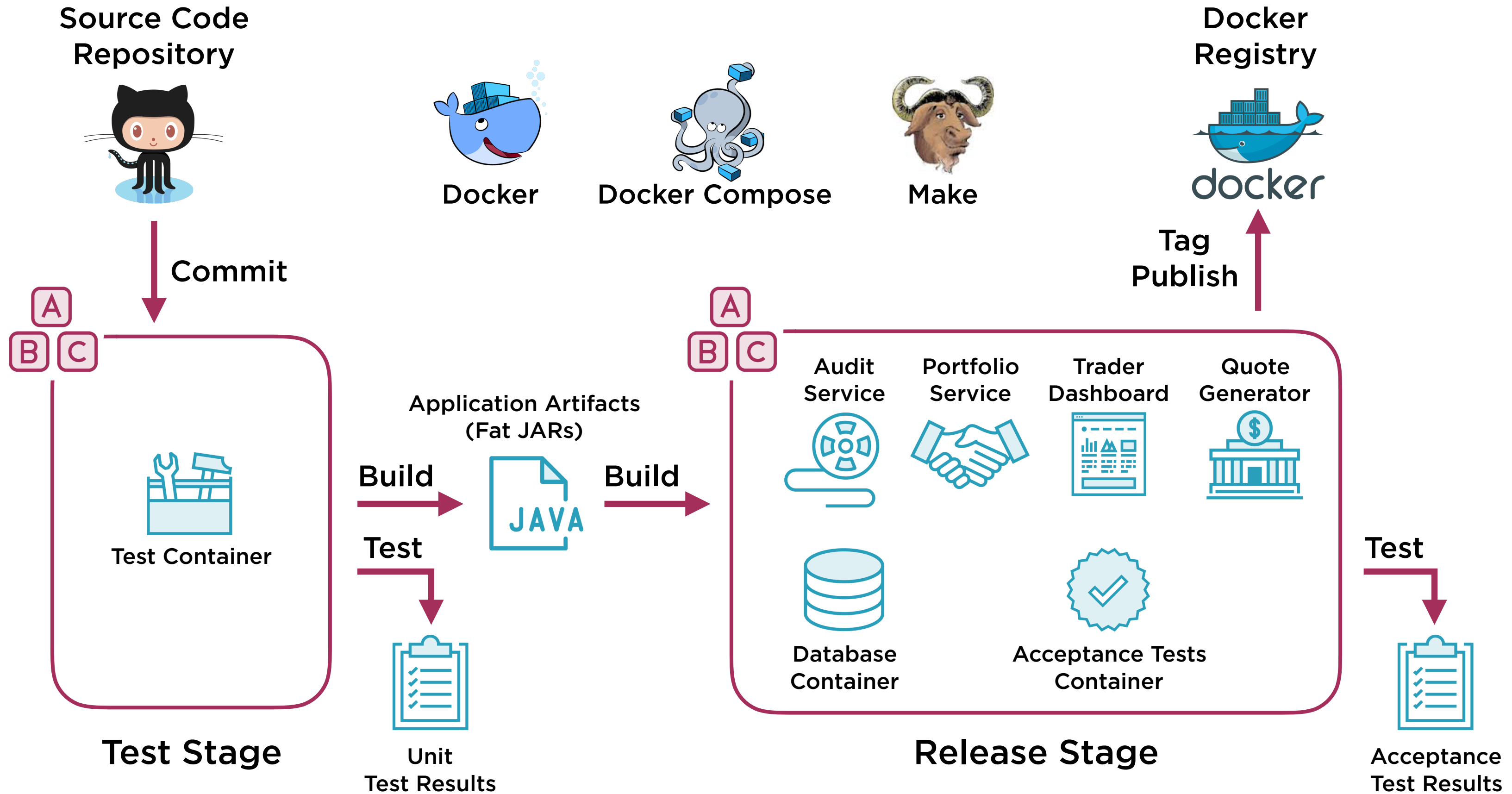
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# Source Stage

# Build Stage

# Development Stage







# Adding CodeBuild Support for Build Actions

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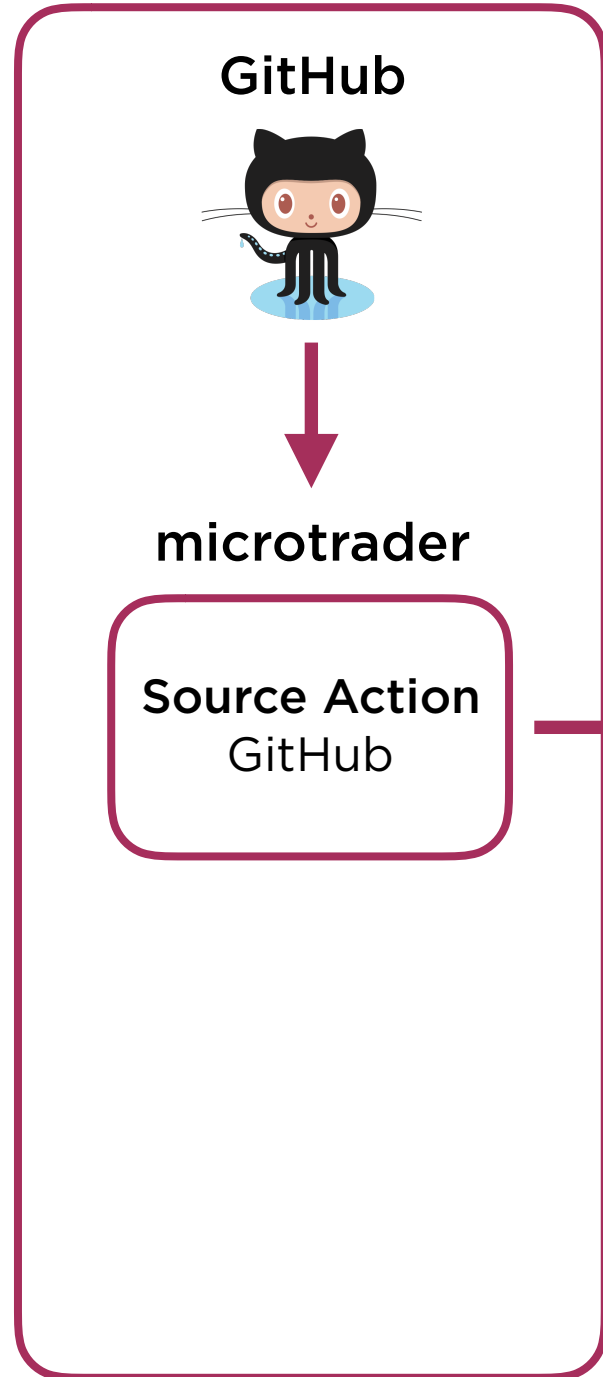
# Creating a Pipeline

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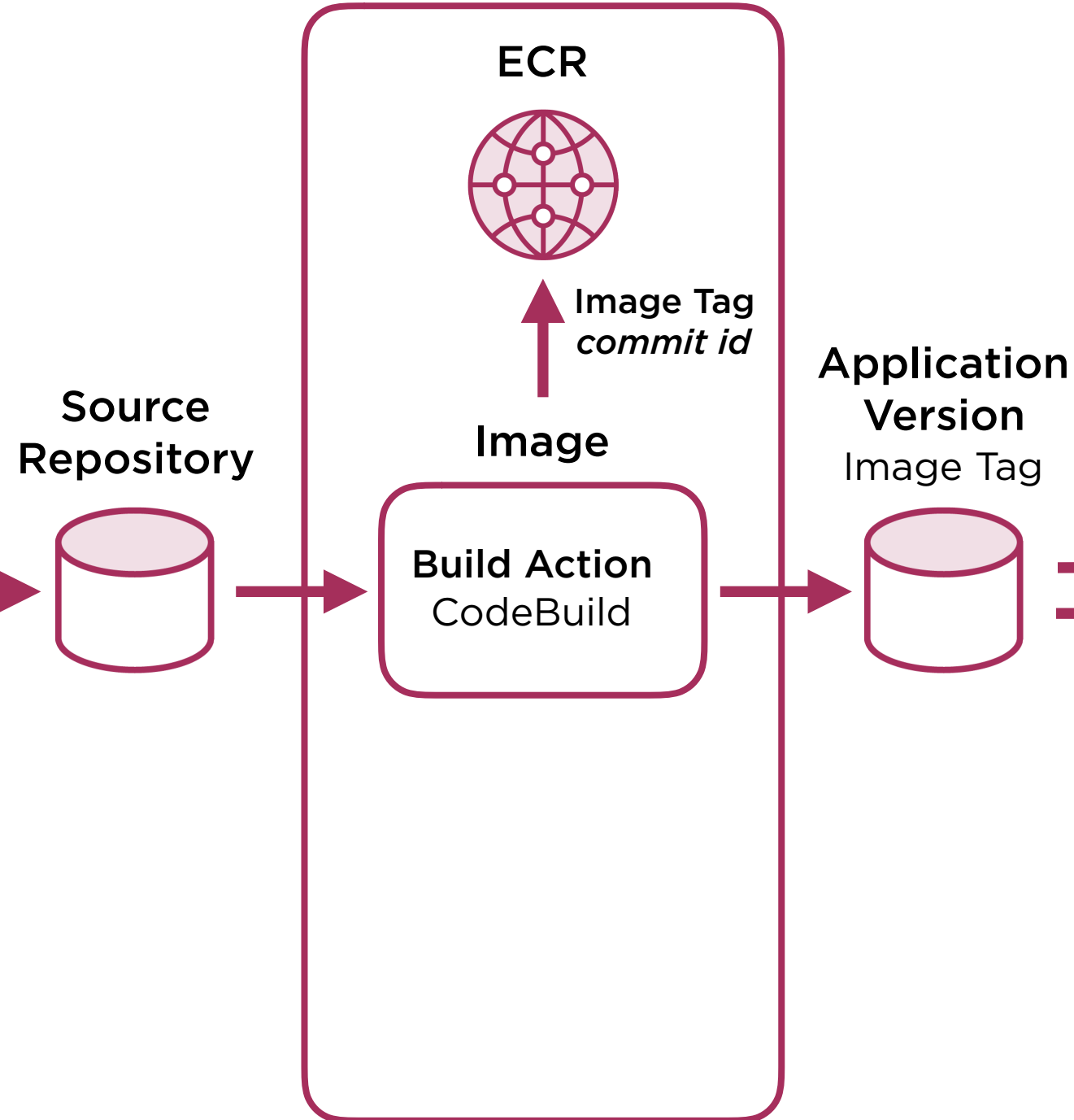
# Creating an Application Version Artifact

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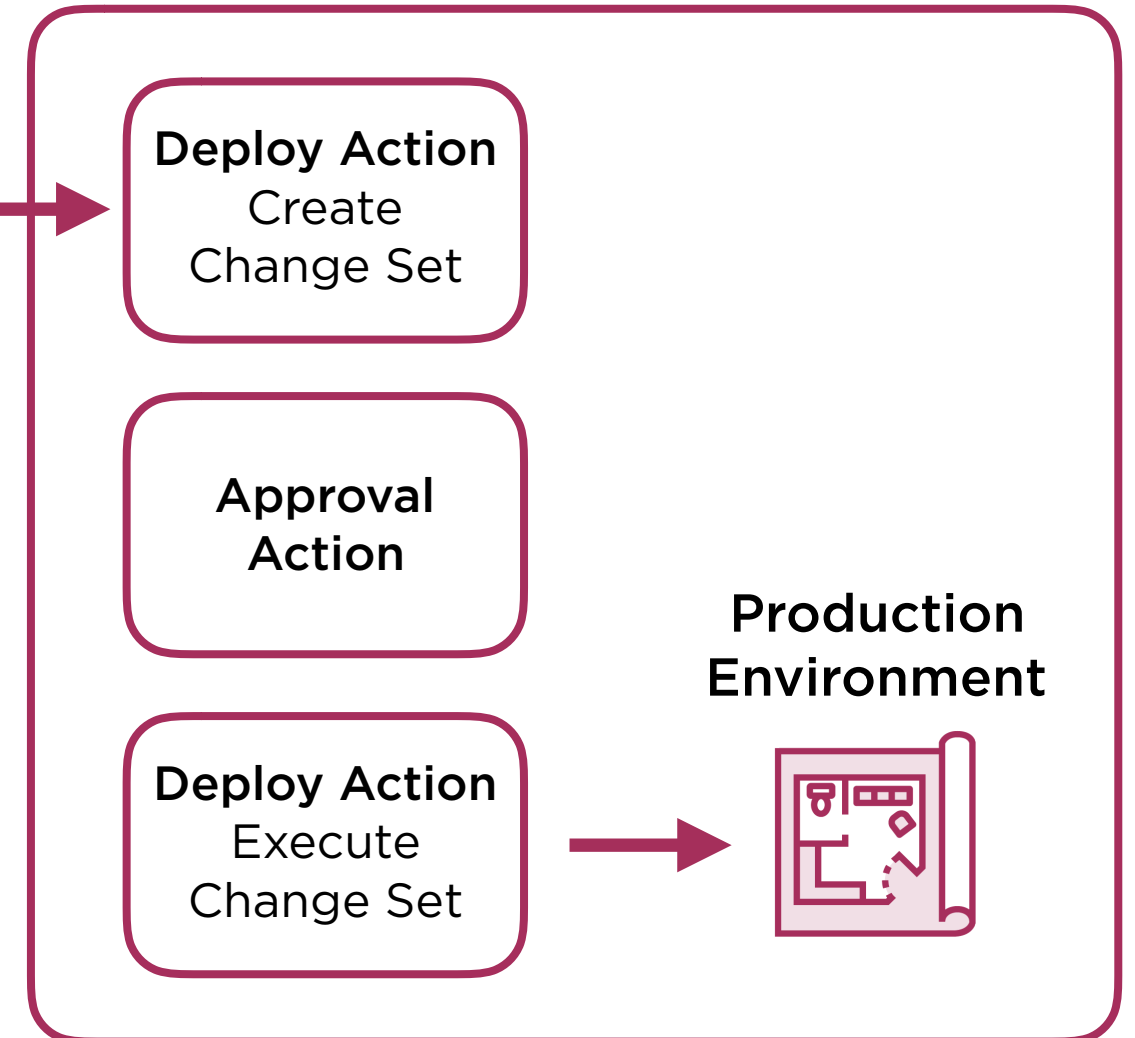
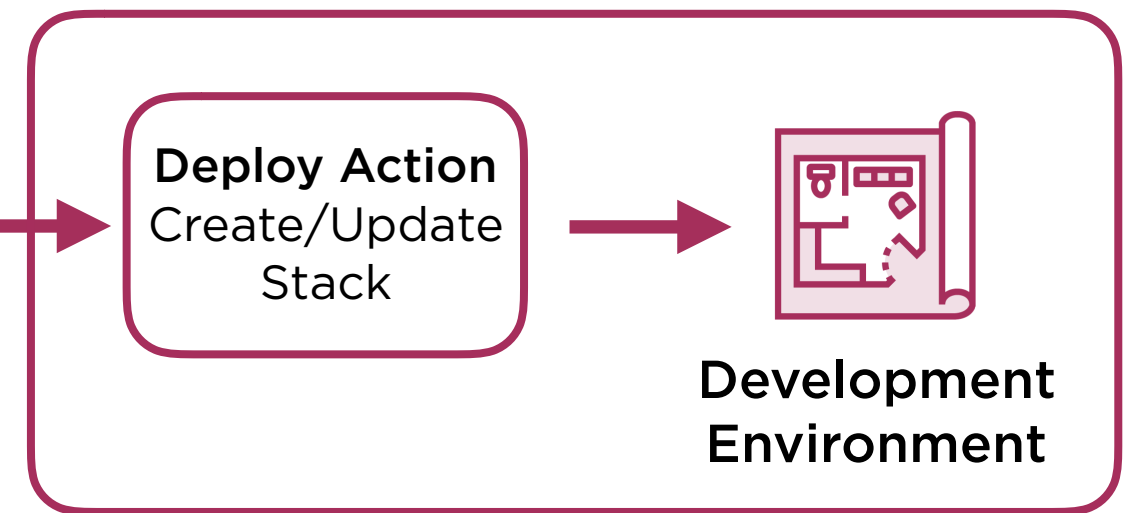
## Source Stage



## Build Stage



## Development Stage



## Production Stage

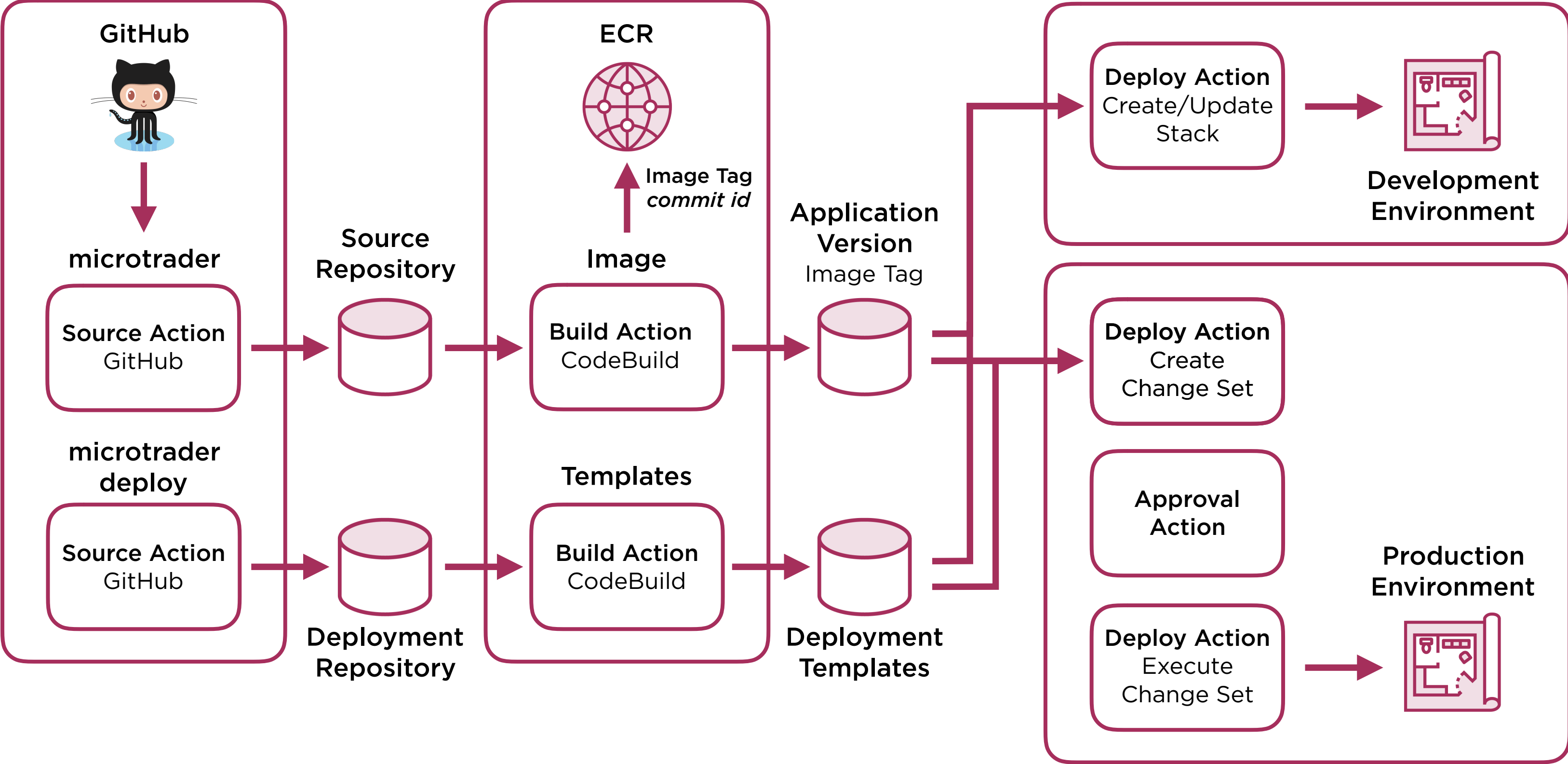
# Adding CodeBuild Support for Deploy Tasks

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# Source Stage

# Build Stage

# Development Stage

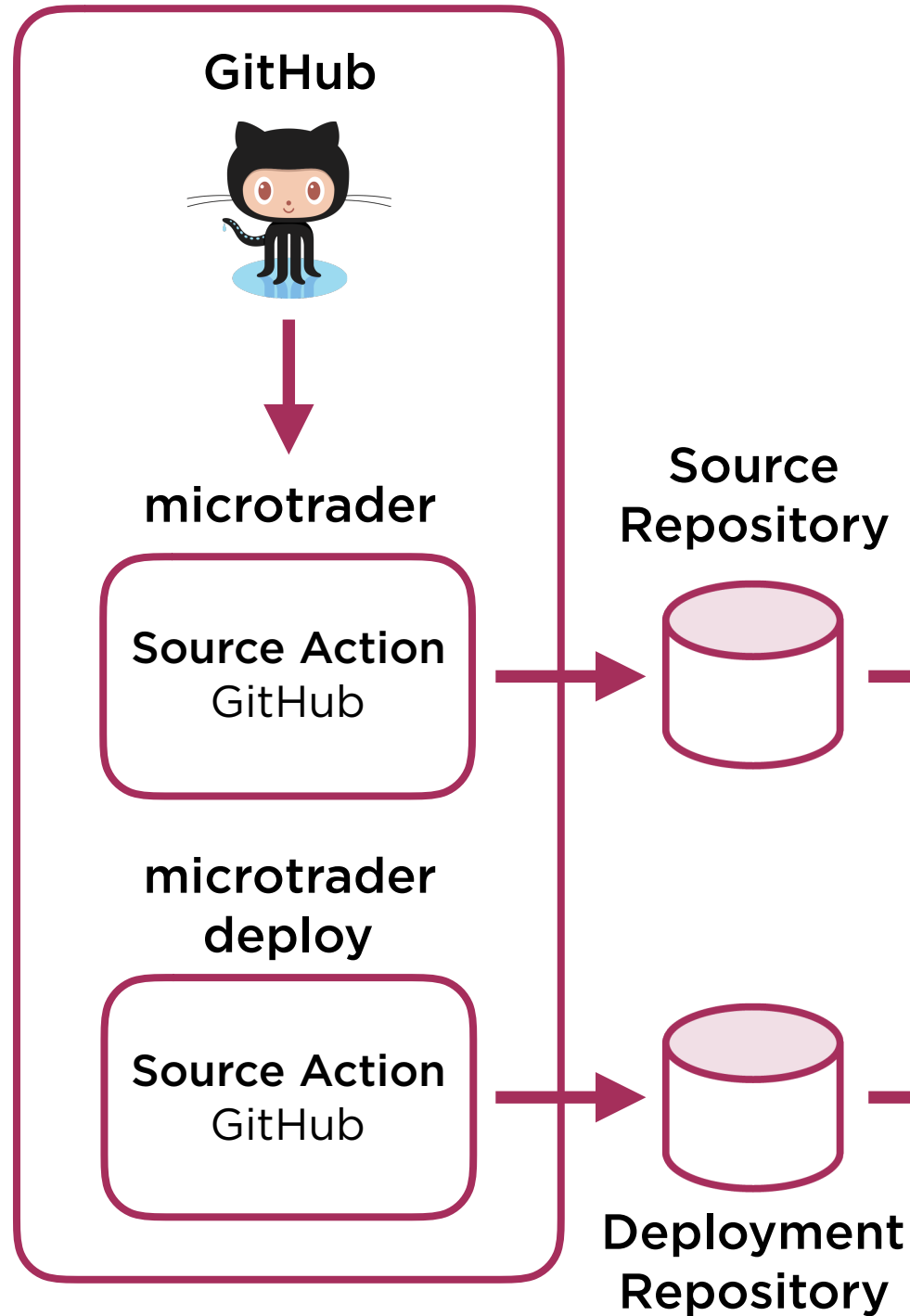


# Production Stage

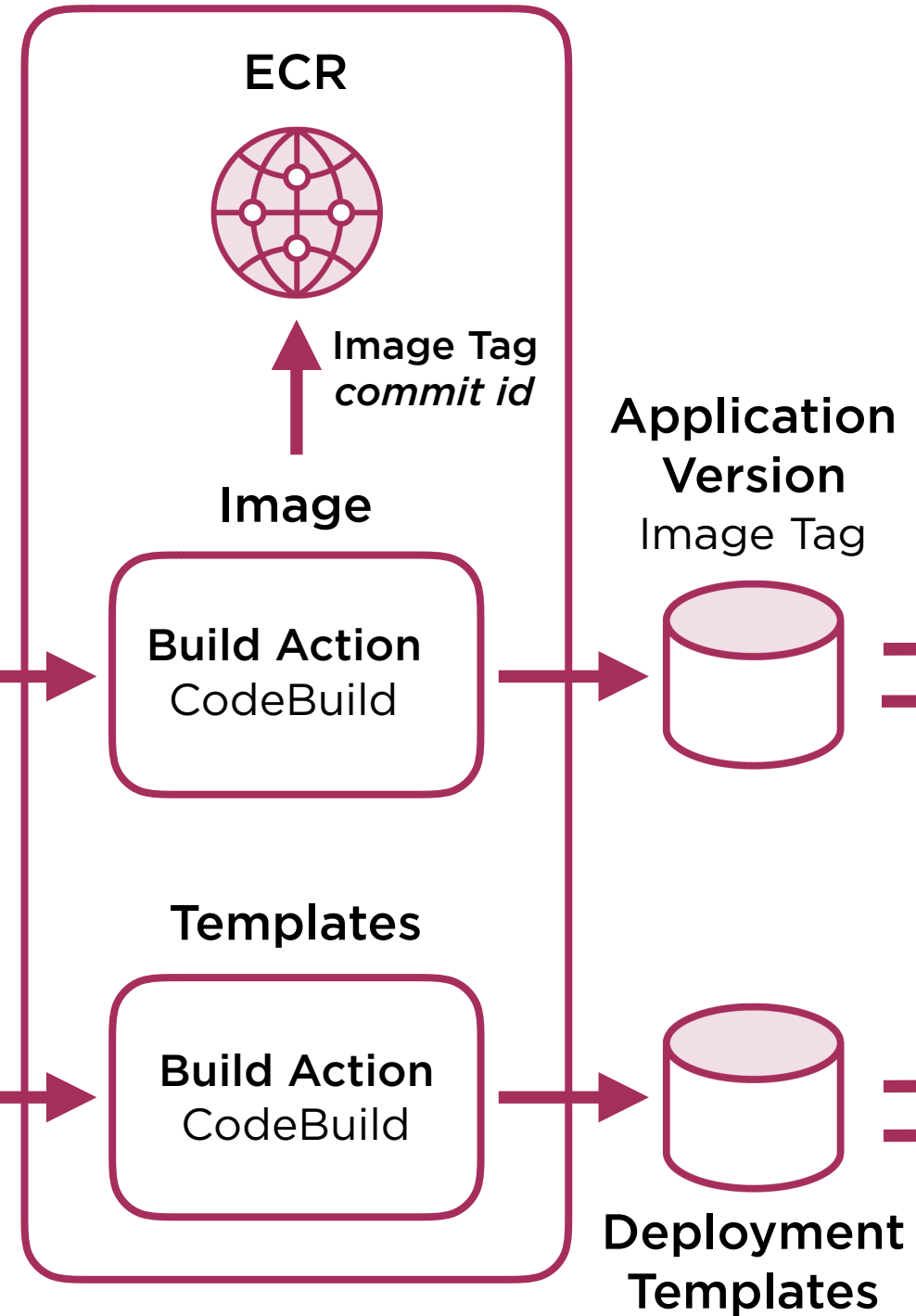
# Creating Deployment Templates

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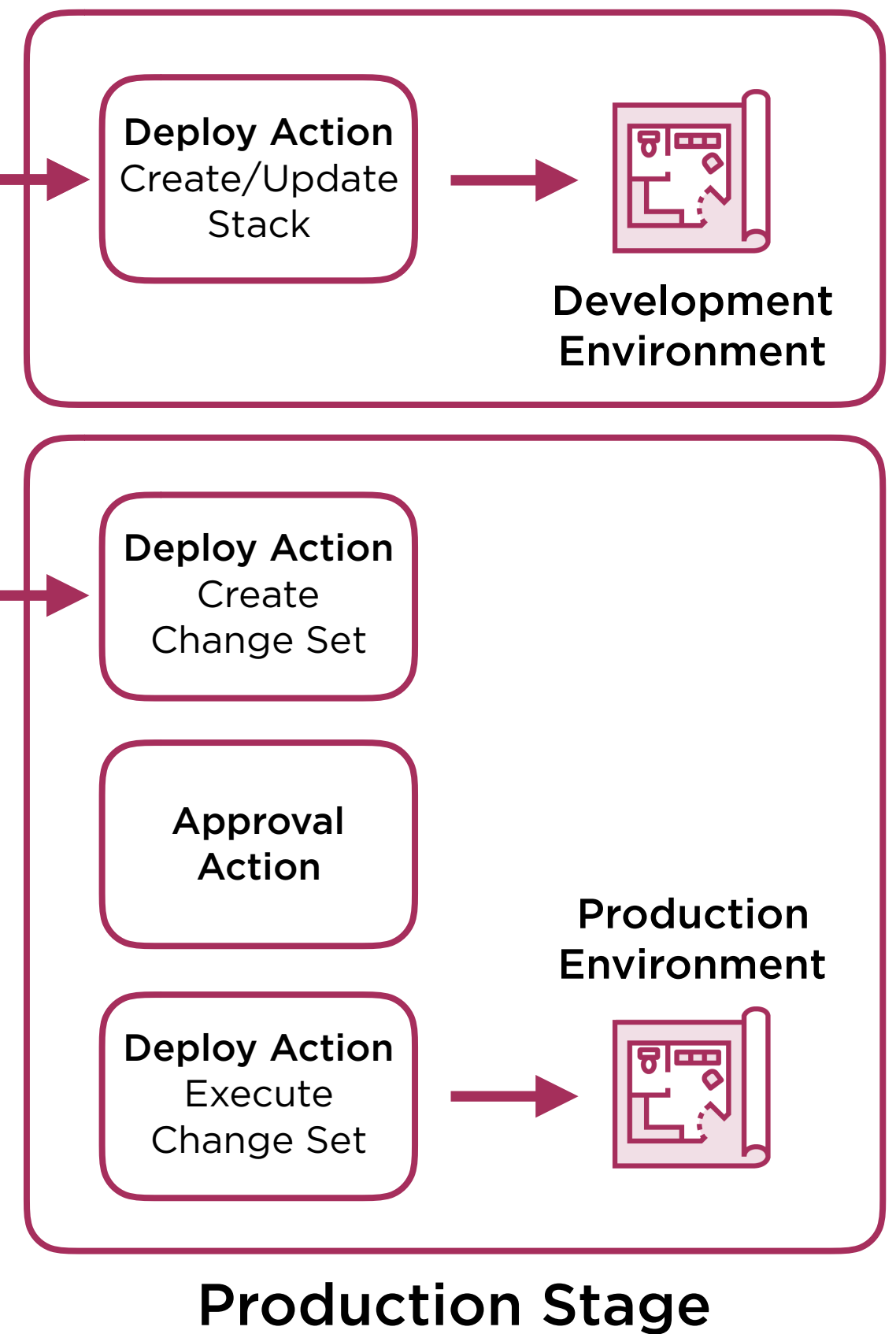
## Source Stage



## Build Stage



## Development Stage





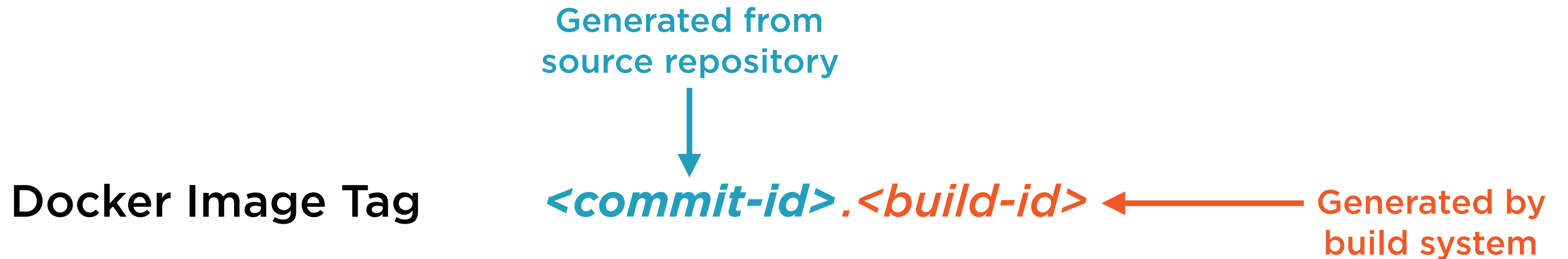
# Creating a Deployment Action

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# Ensuring Immutable Artifacts

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# Immutable Artifacts using Build Identifiers



## Example

**7d76e68.1234** ← Build Job 1234

New build from same source → **7d76e68.1235** ← Build Job 1235

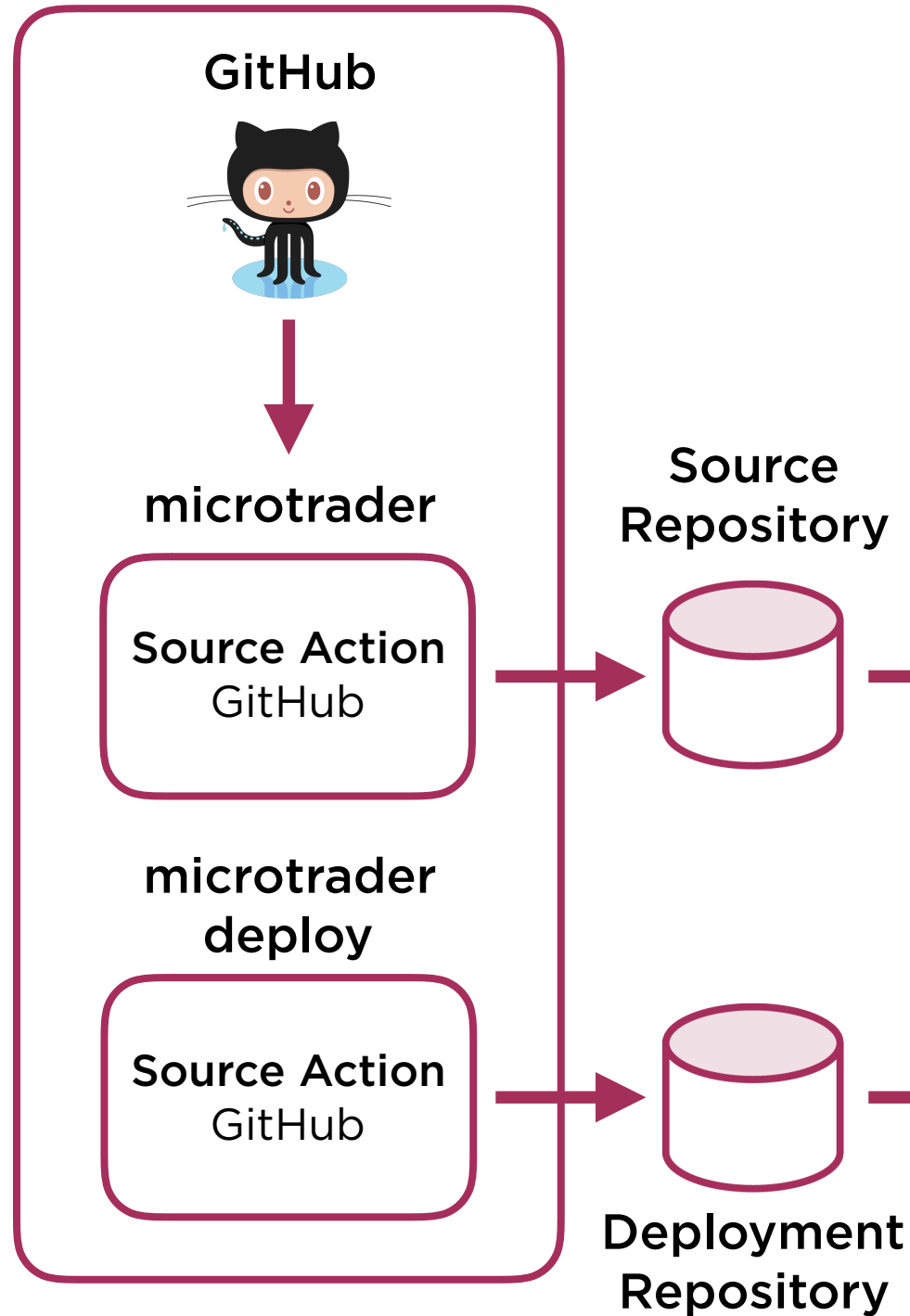
New build from same source → **7d76e68.1236** ← Build Job 1236

New build from new source → **872e67d.1237** ← Build Job 1237

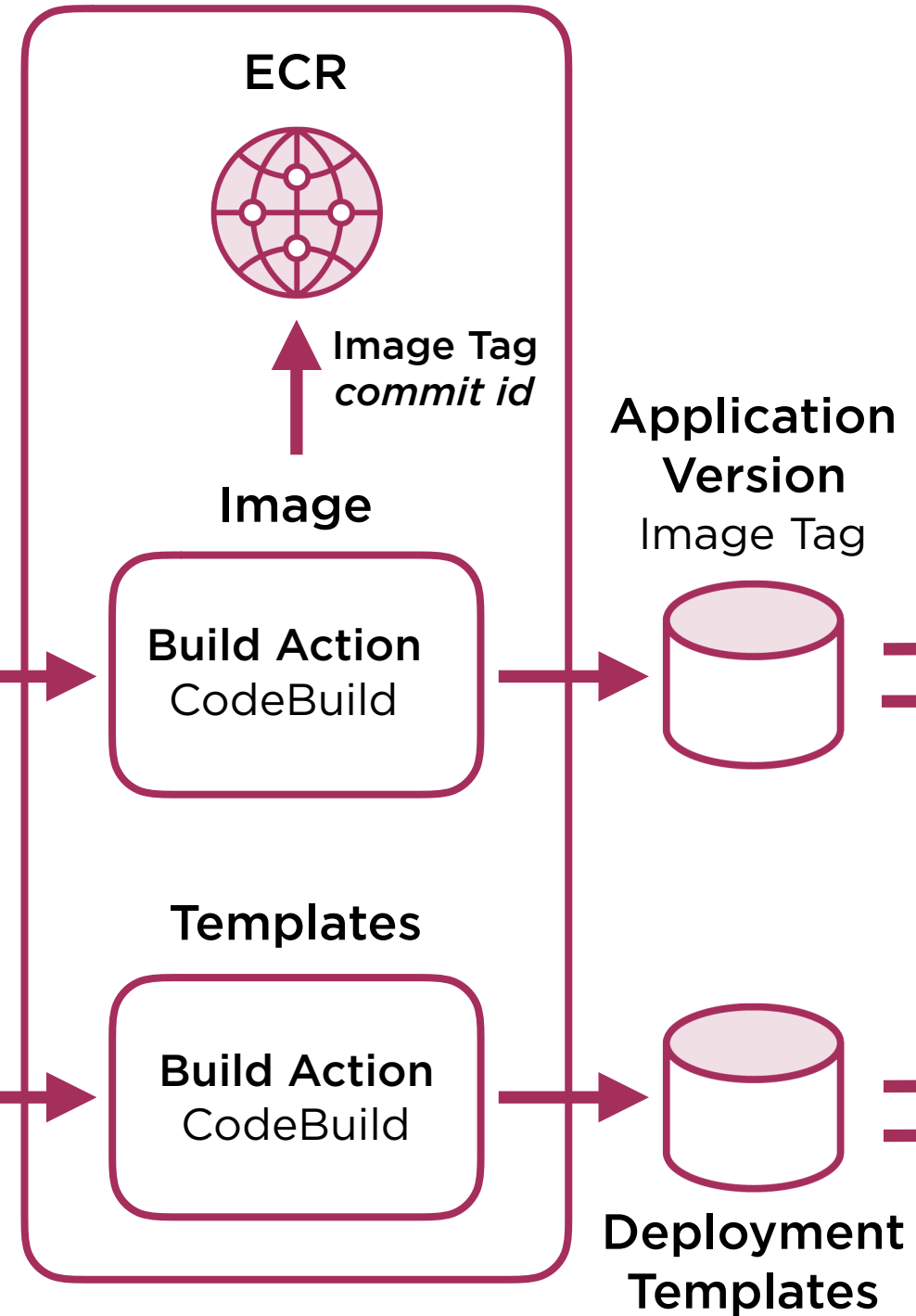
# Deploying to Production

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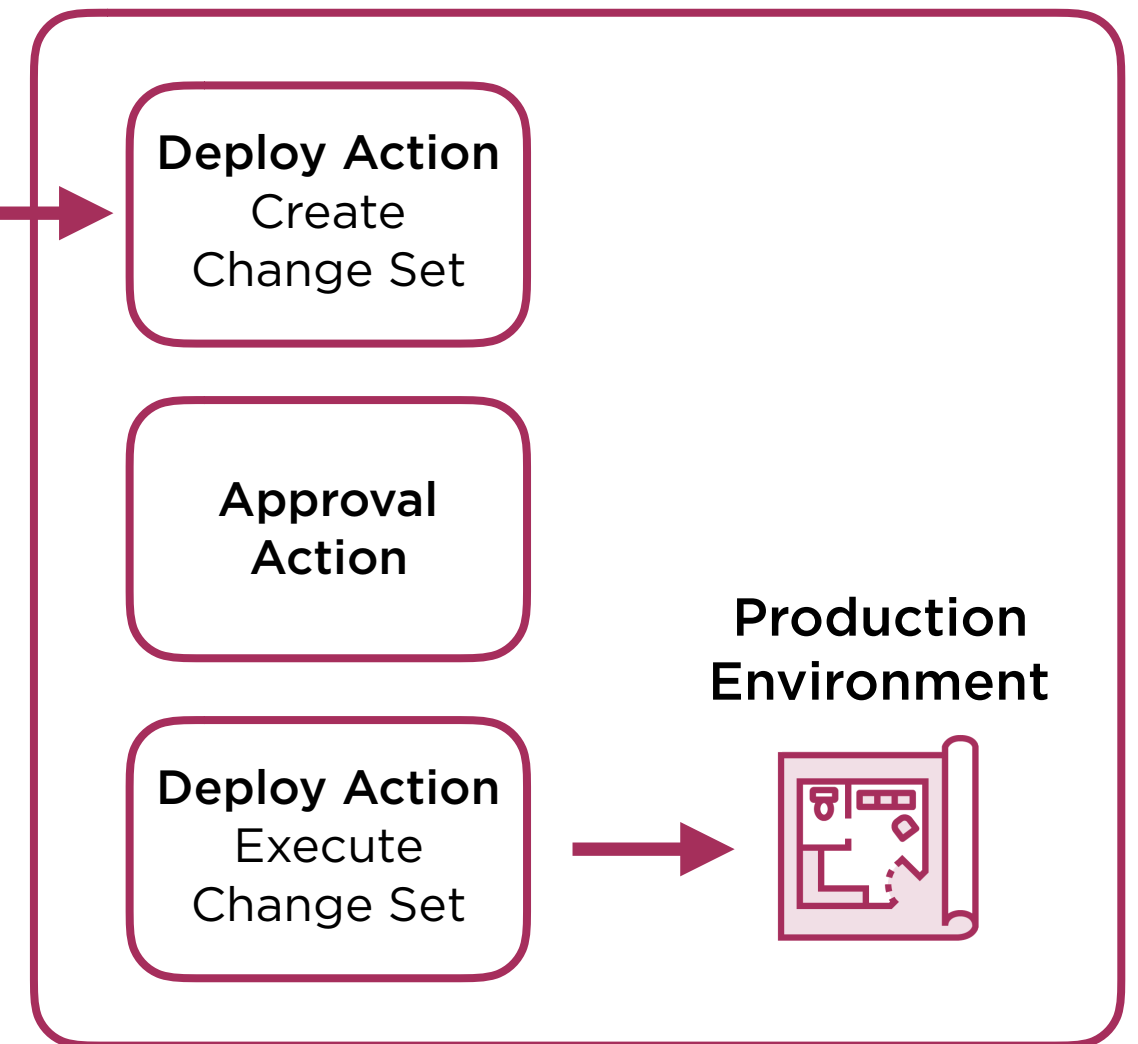
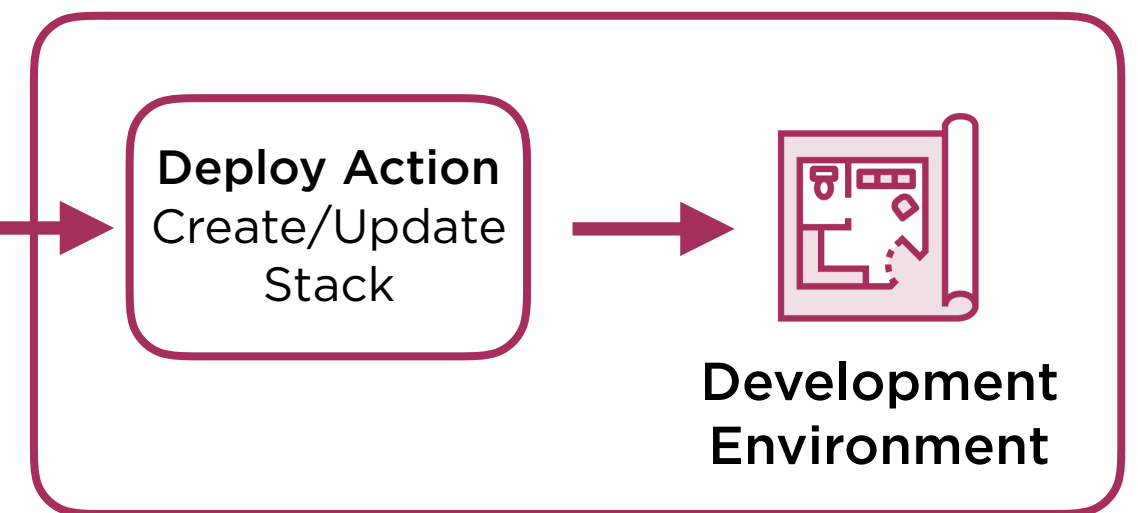
## Source Stage



## Build Stage



## Development Stage



## Production Stage

# Creating Pipelines in CloudFormation

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# Defining the Source Stage in CloudFormation

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# Defining the Build Stage in CloudFormation

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# Defining Deploy Stages in CloudFormation

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# Deploying a Pipeline Using CloudFormation

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# Summary

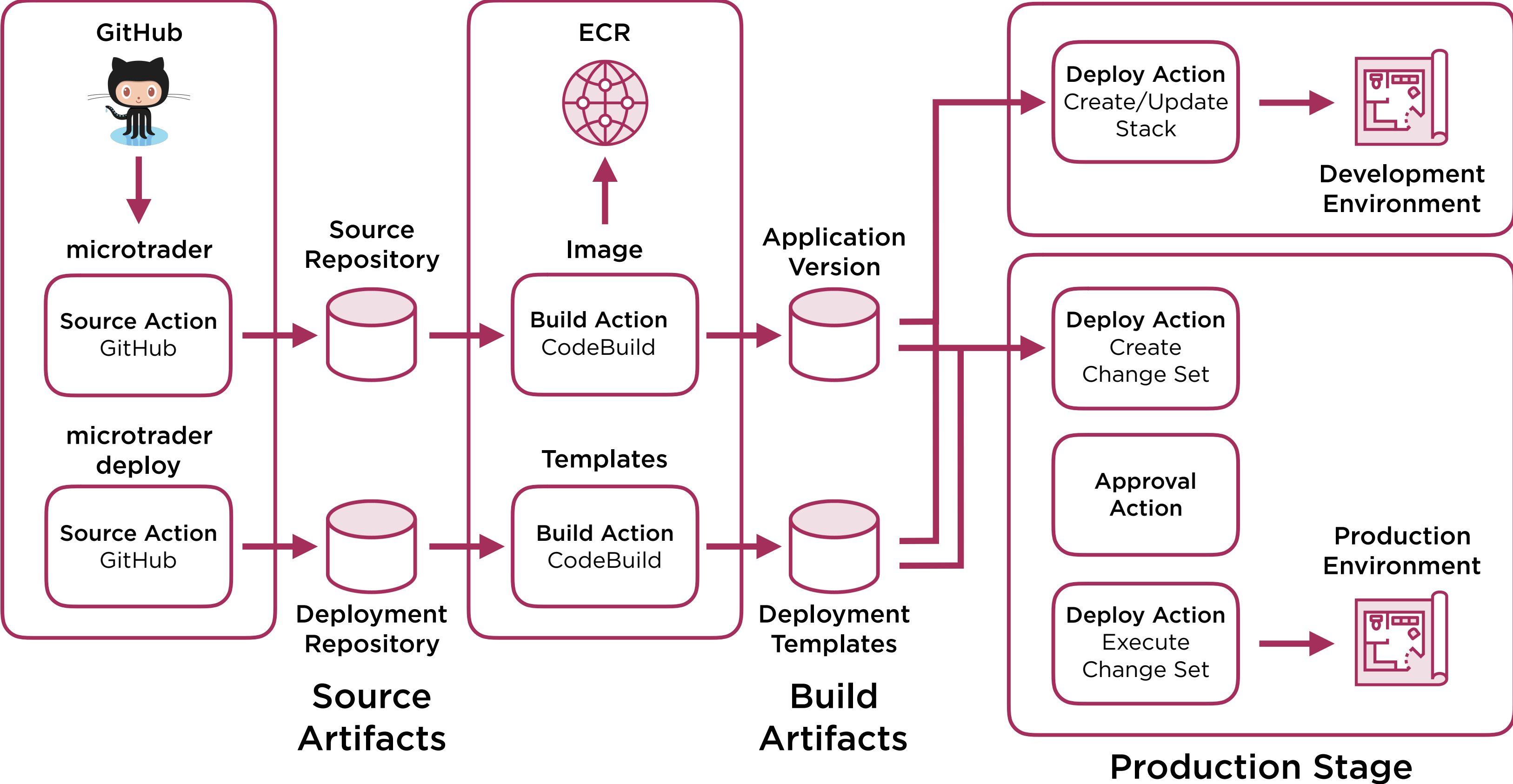
## **Continuous Delivery using CodePipeline**

- CodePipeline
- CodeBuild
- CloudFormation
- Pipeline Components
  - Stages
  - Actions

Source Stage

Build Stage

Development Stage



Thank You!