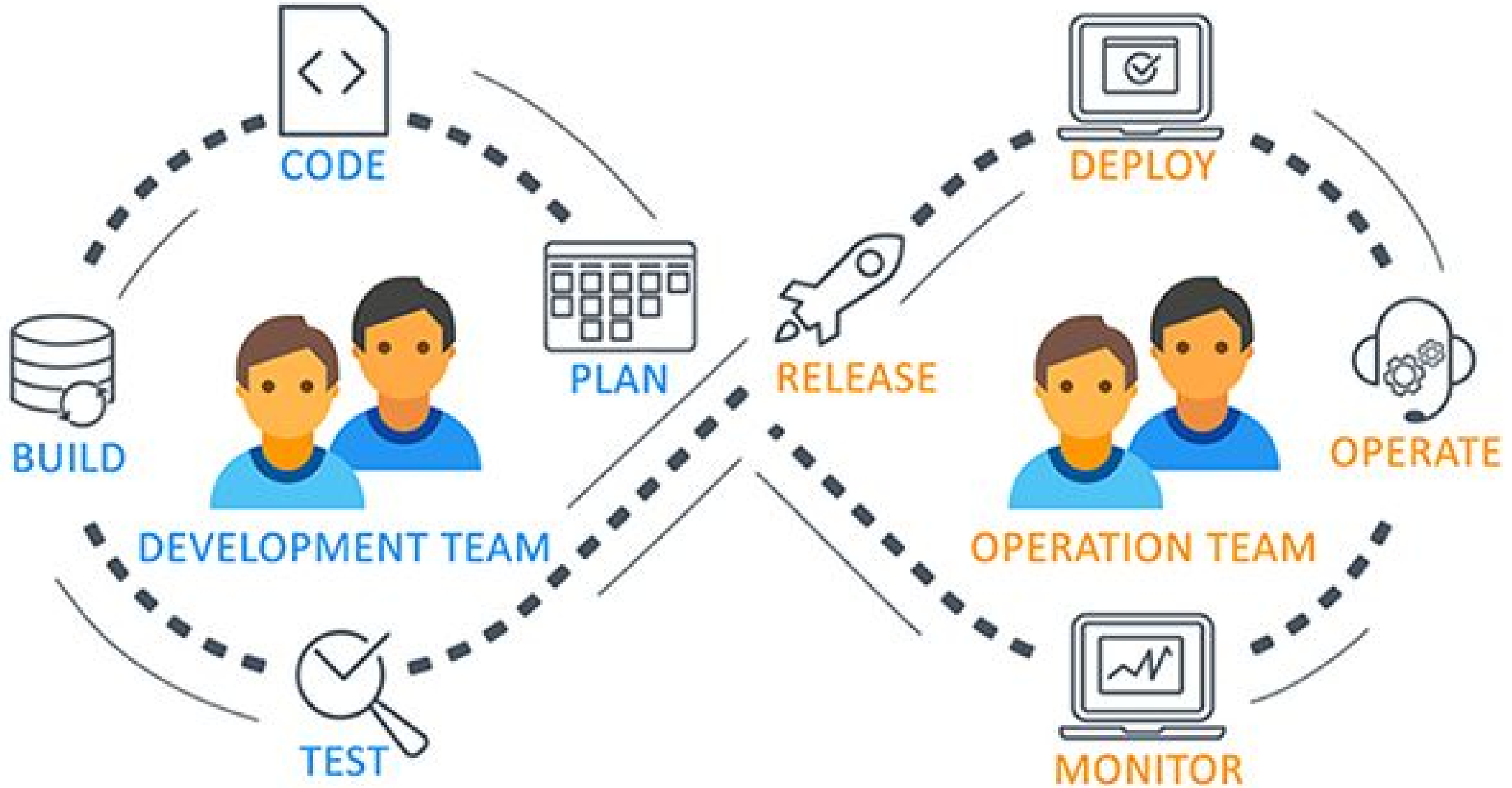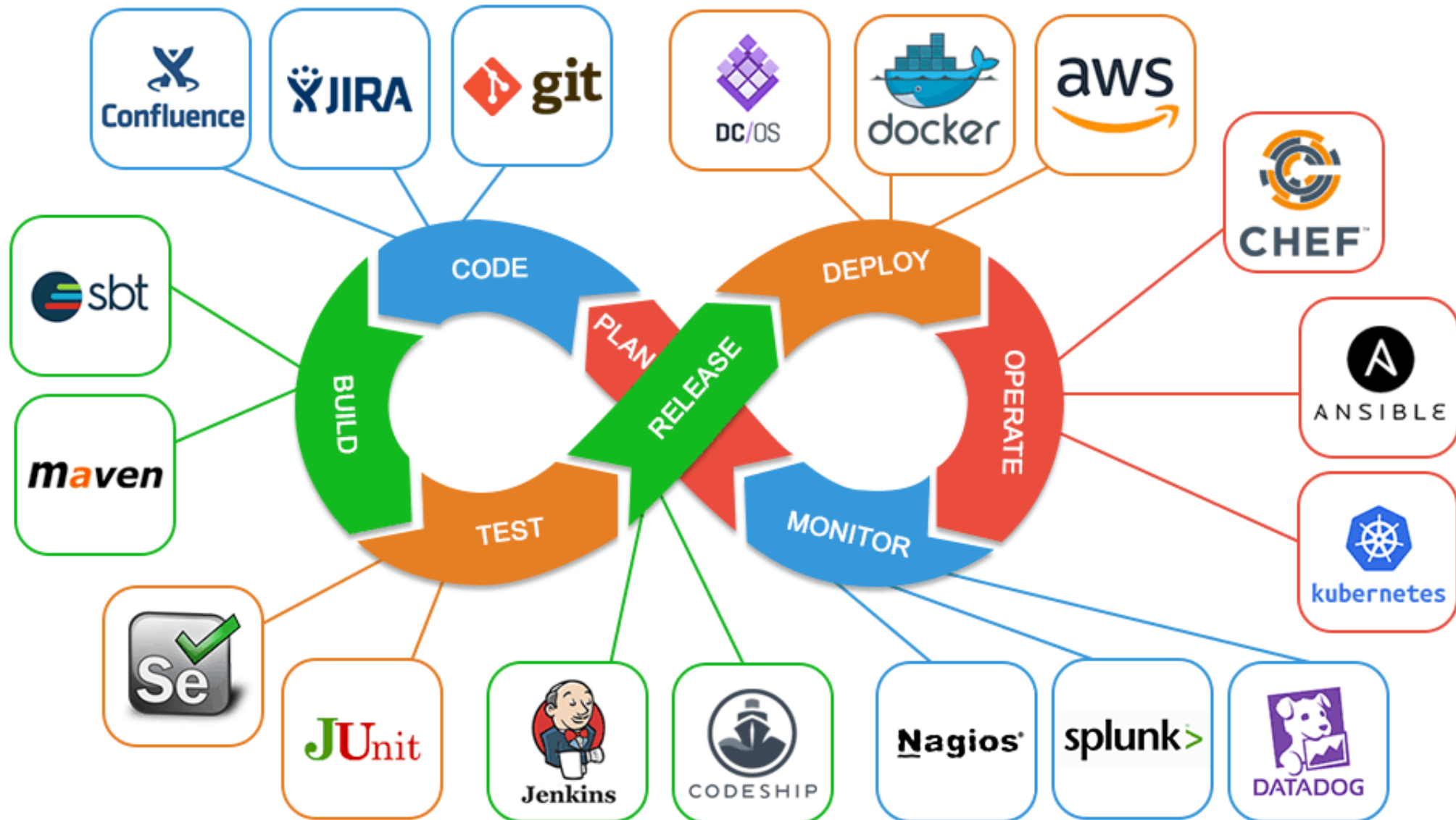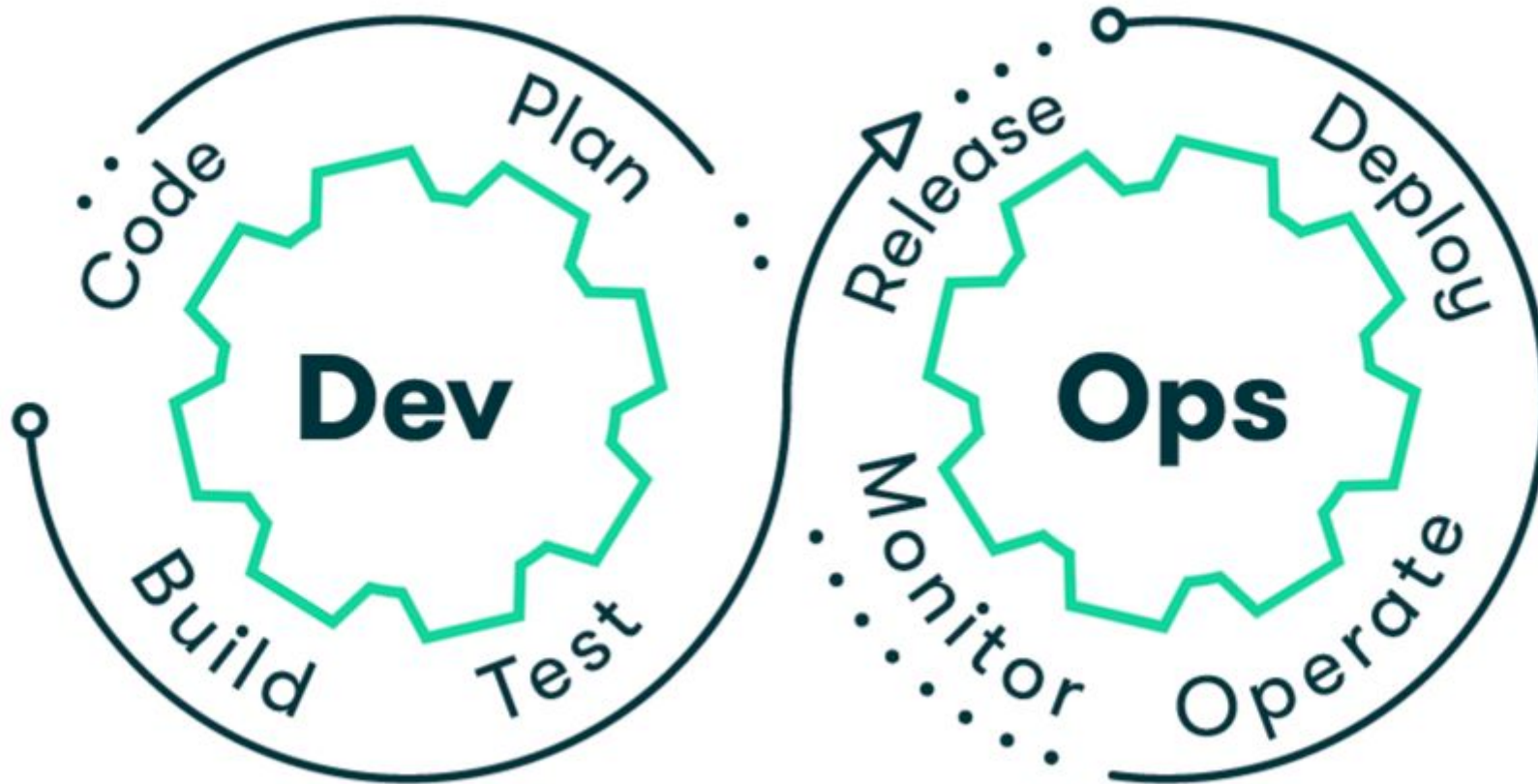# DevOps Big Picture

What and why of DevOps?
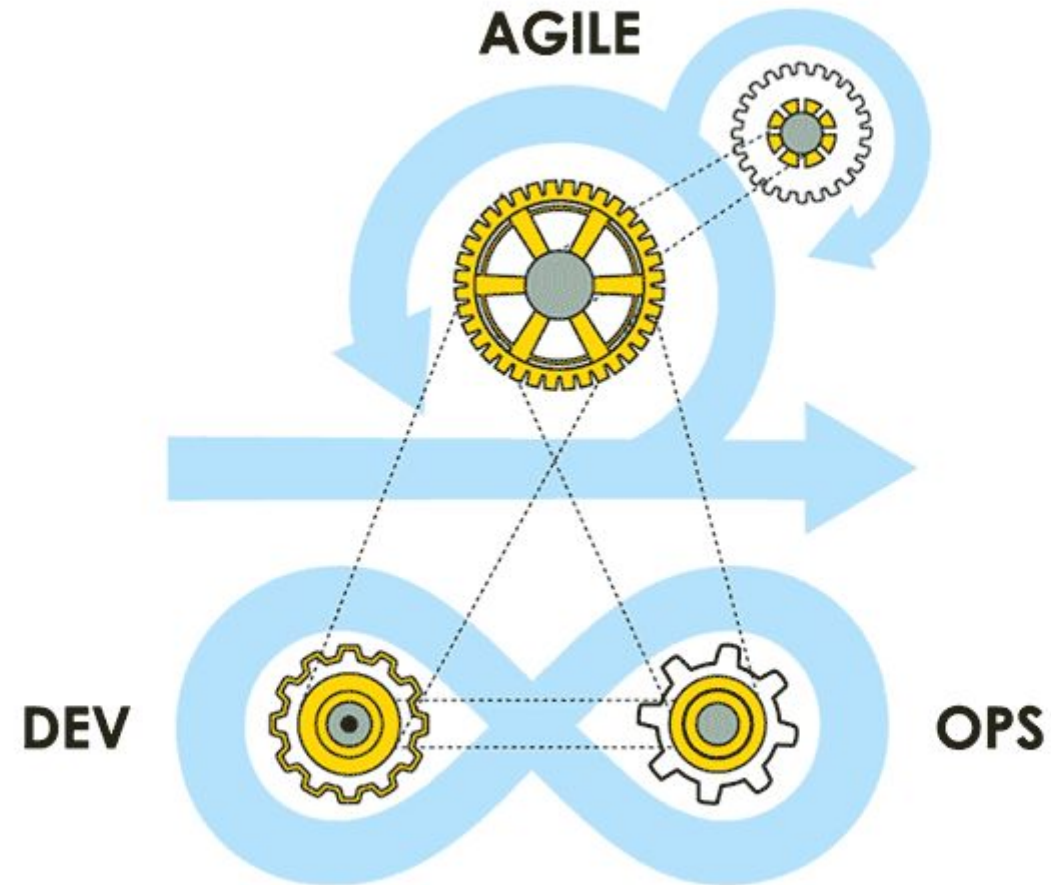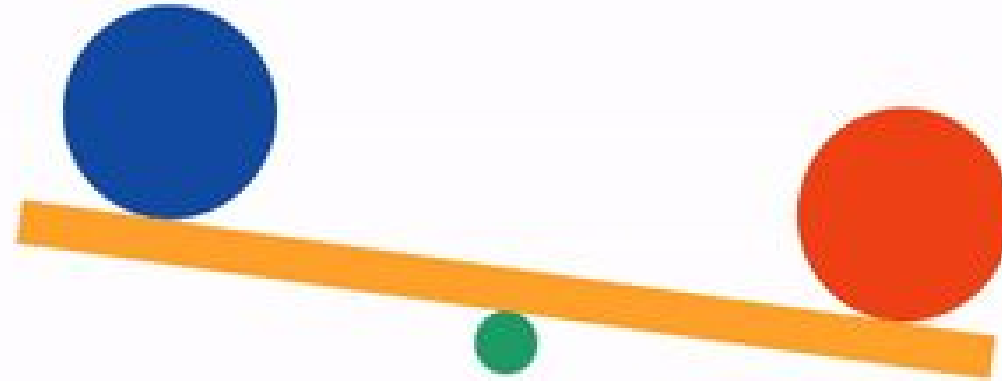
What and why of DevOps?

What and why of DevOps?

What and why of DevOps?

What and why of DevOps?

Development   Operations

Early Defects vs Delayed Defects detection

85%

640 X

40 X

10 X

1 X

4 X

Percentage
of defects
introduced

- % Defect injection
- % Defects found
- Cost to repair defect

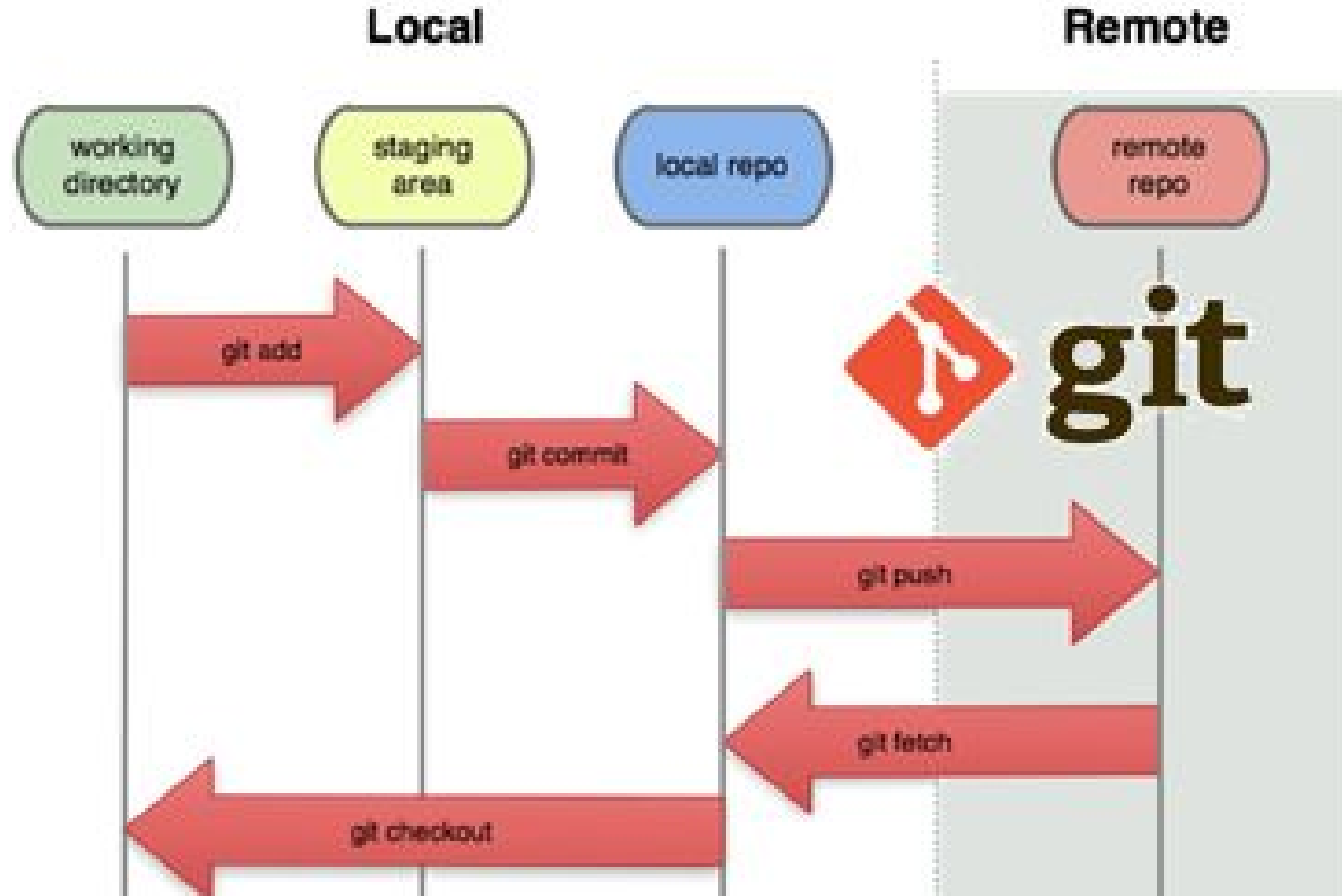Coding   Unit Test   Functional Test   System Test   Release
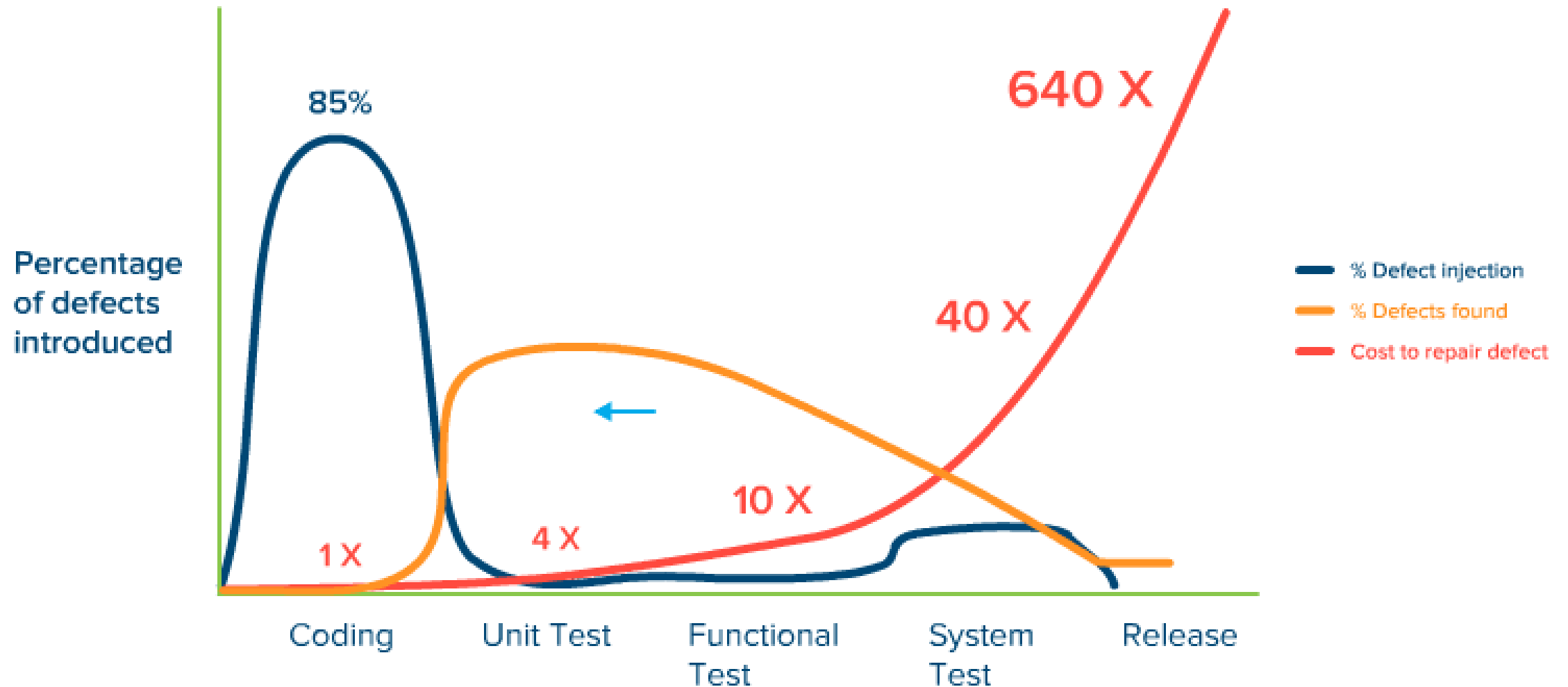
Jones, Capers. *Applied Software Measurement: Global Analysis of Productivity and Quality.*

DevOps Tools – Overview and Use case

Source control

- To ensures for working on the right version

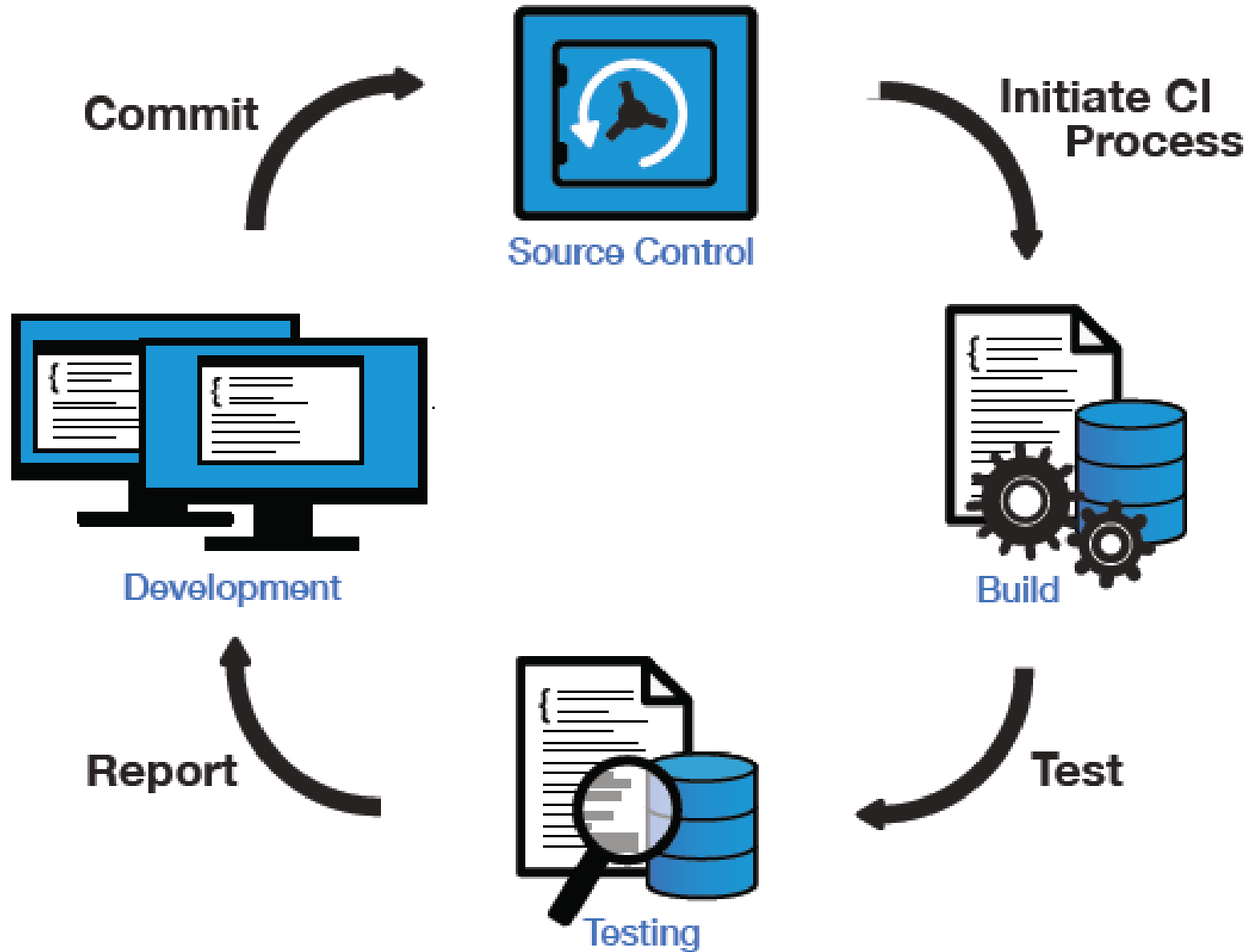- Important for maintaining a single source of truth
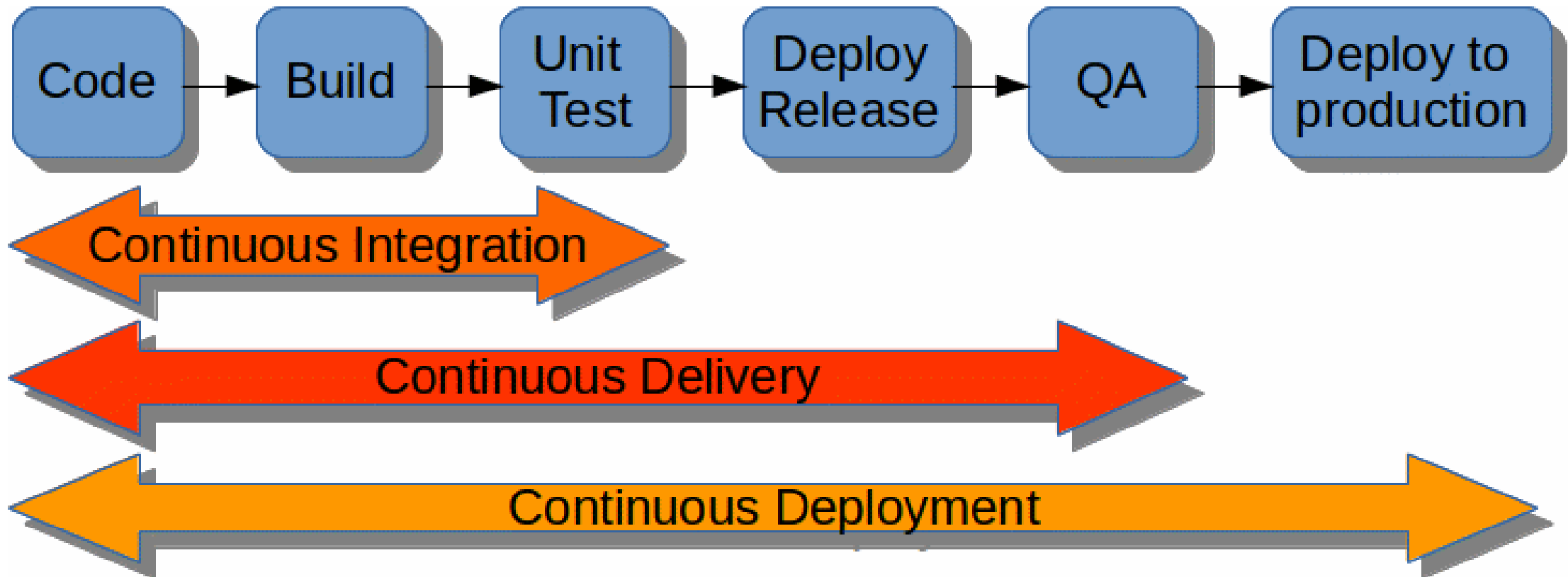
Source Control Management (SCM Tools)

- Help to keep track of code
- Complete history of changes.

Git	Mercurial	AccuRev	Rational Team Concert
Sonatype Nexus Repository	Kallithea	Perforce	Deveo

Continuous Integration

Commit

Source Control

Initiate CI Process

Development

Build

Report

Test

Testing

DevOps
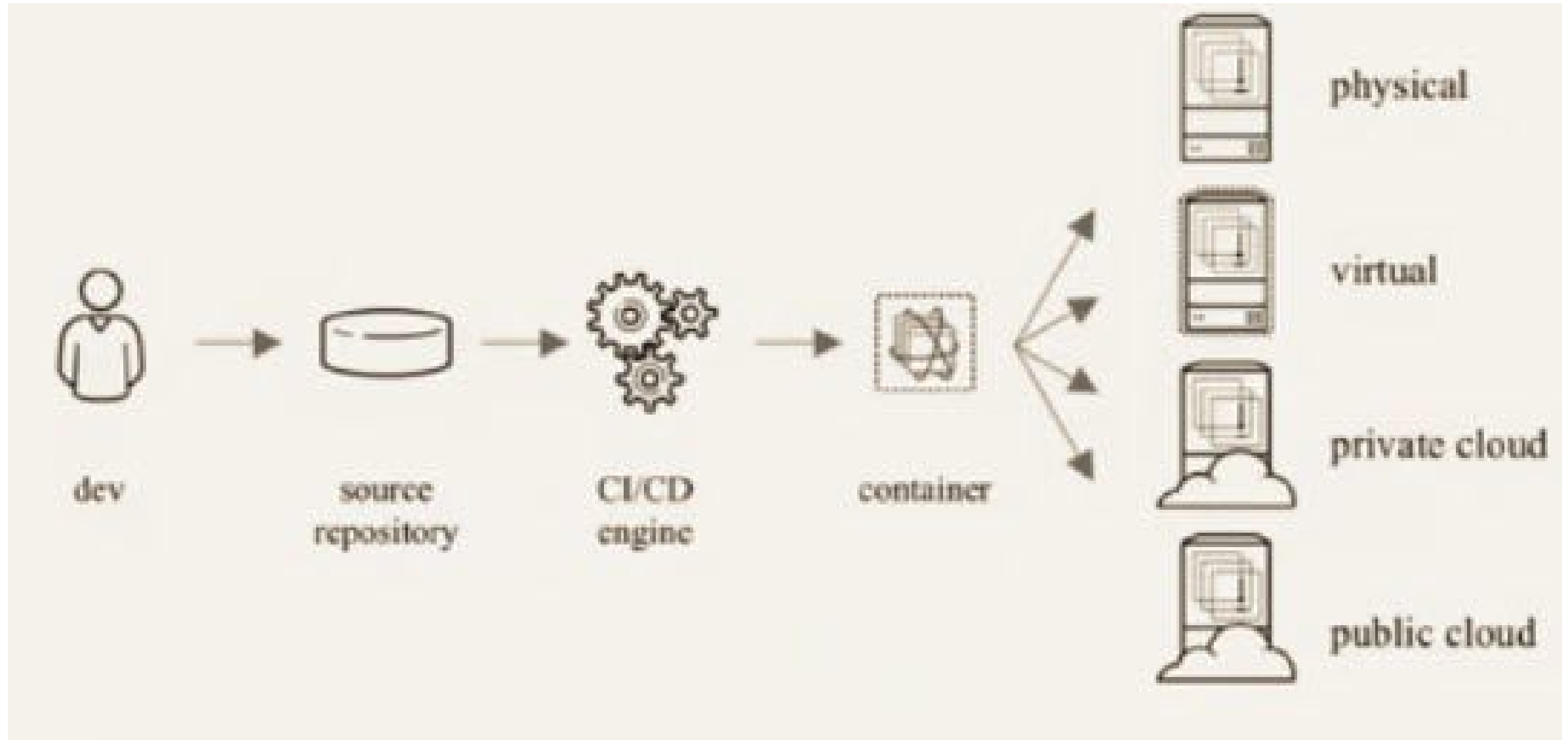
Continuous Delivery and Deployment

Containerization

Configuration Management

- A process for maintaining
    - Computer systems
    - Servers, and
    - Software in a desired, consistent state

Benefits of Configuration Management for Servers

Quick Provisioning of New Servers

Quick Recovery from Critical Events

Version Control for the Server Environment

Replicated Environments

Configuration Management Tools

Thanks