DevOps

History

Patrick Debois start's assessing IT Value Chain

Agile System Administrators Group is launched on Google

Inaugural "DevOps Days" are held in Ghent, Belgium

Industry leading software vendors increase market presence with "Enterprise" class DevOps tools

devX is born and Xceed launches the "12 days of DevOps"
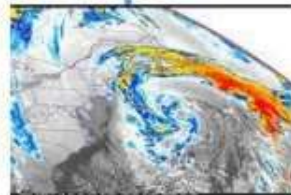
2007 — 2008 — 2009 — 2010 — 2011 — 2012 — 2013 — 2014 — 2015

Andrew Clay Shafer and Patrick Debois meet at Agile Conference 2008

John Allspaw and Paul Hammond present "10 Deploys per day" at Velocity

Open Source toolsets rip up the legacy playbook

The "Perfect Storm" of adjacent methodologies occurs

Cameron Haight predicts that DevOps will hit the big time in 2015 across Enterprise organisations

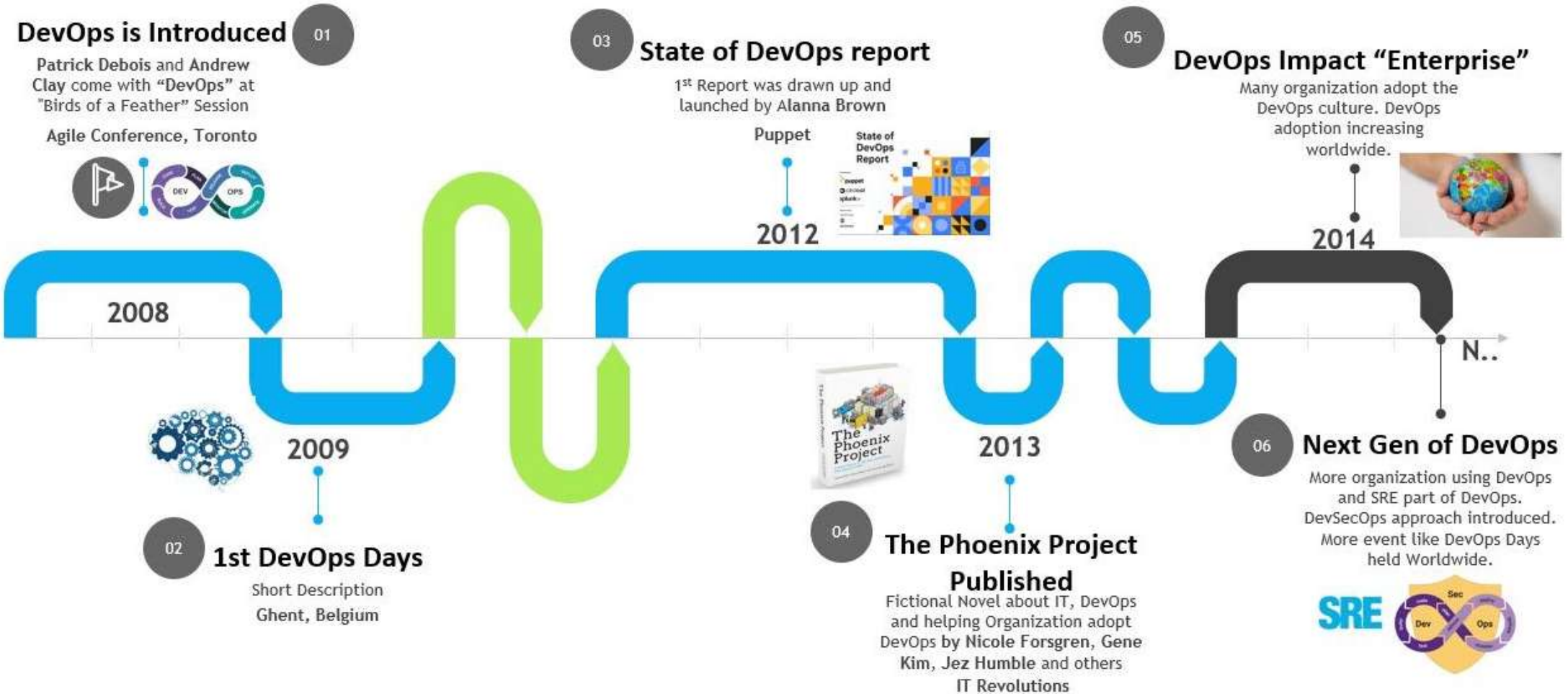Gene Kim releases "The Phoenix Project"

DevOps begins to provide positive impact to "Enterprise" IT and experiences seismic adoption rates

What does the future of DevOps hold for your organisation?

History

DevOps is Introduced 01

Patrick Debois and Andrew Clay come with "DevOps" at "Birds of a Feather" Session

Agile Conference, Toronto

State of DevOps report 03

1st Report was drawn up and launched by Alanna Brown

Puppet

State of DevOps Report

2012

DevOps Impact "Enterprise" 05

Many organization adopt the DevOps culture. DevOps adoption increasing worldwide.

2014

2008

2009

N..

02 **1st DevOps Days**

Short Description

Ghent, Belgium

The Phoenix Project

2013

04 **The Phoenix Project Published**

Fictional Novel about IT, DevOps and helping Organization adopt DevOps by Nicole Forsgren, Gene Kim, Jez Humble and others IT Revolutions

06 **Next Gen of DevOps**

More organization using DevOps and SRE part of DevOps. DevSecOps approach introduced. More event like DevOps Days held Worldwide.

SRE

Configuration management

- Process of maintaining systems, such as computer hardware and software, in a desired state

- Configuration Management (CM) is also a method of ensuring that systems perform in a manner consistent with expectations over time.
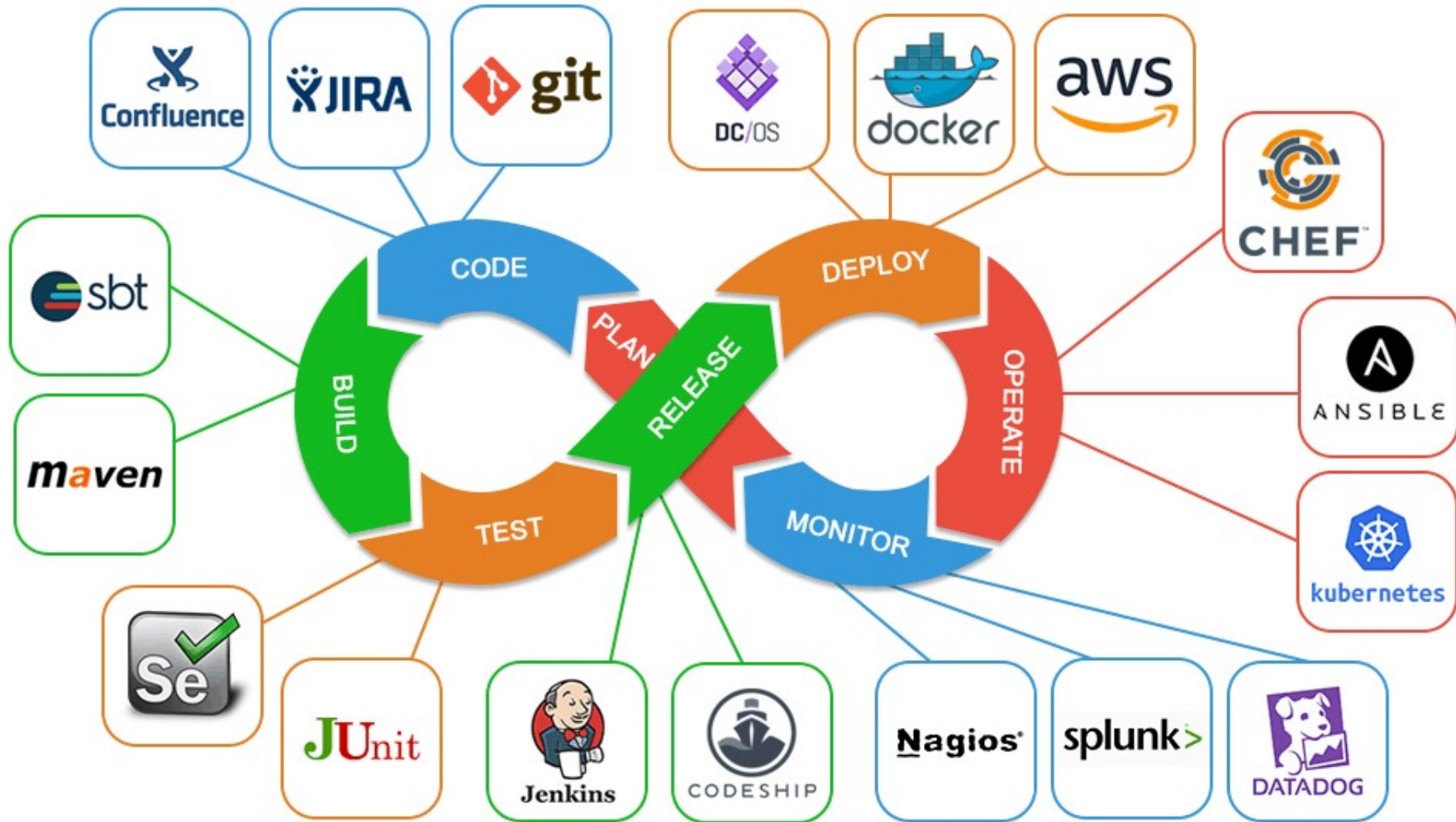
Benefits of Configuration Management

- Reduces risk of unpredictable system failures
  - because it offers perfect visibility and tracks every change made to test environments.
- Reduces costs
- Offers greater agility and better resolution of issues
- Implement faster restoration of services

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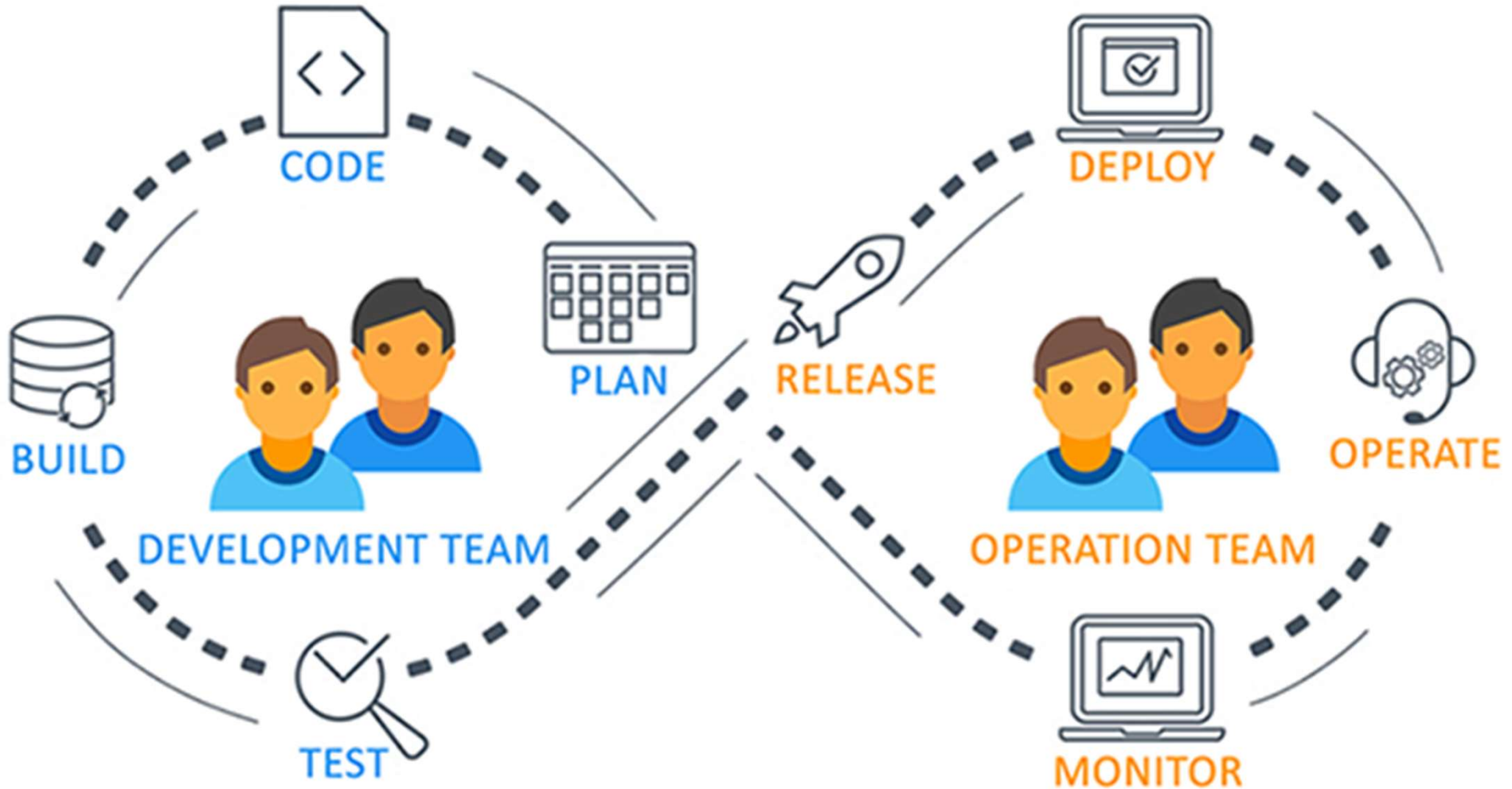
What and why of DevOps?

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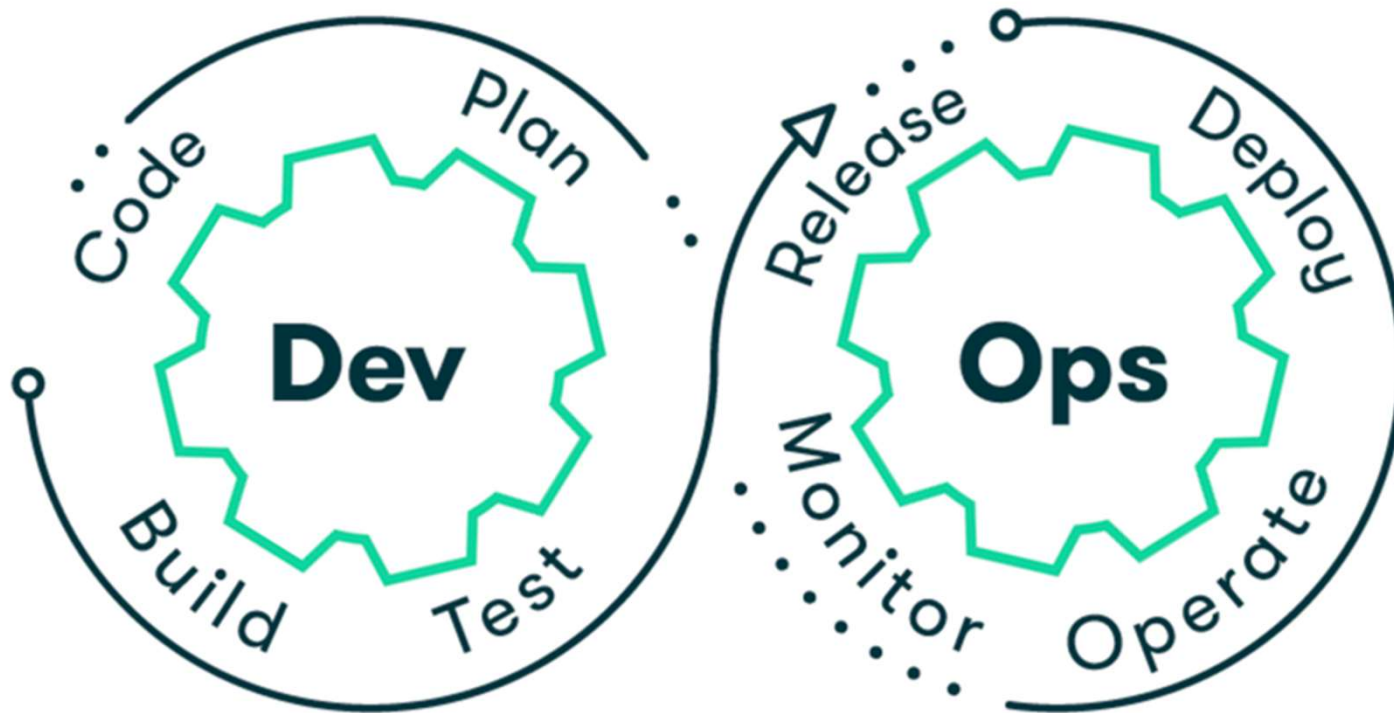
What and why of DevOps?
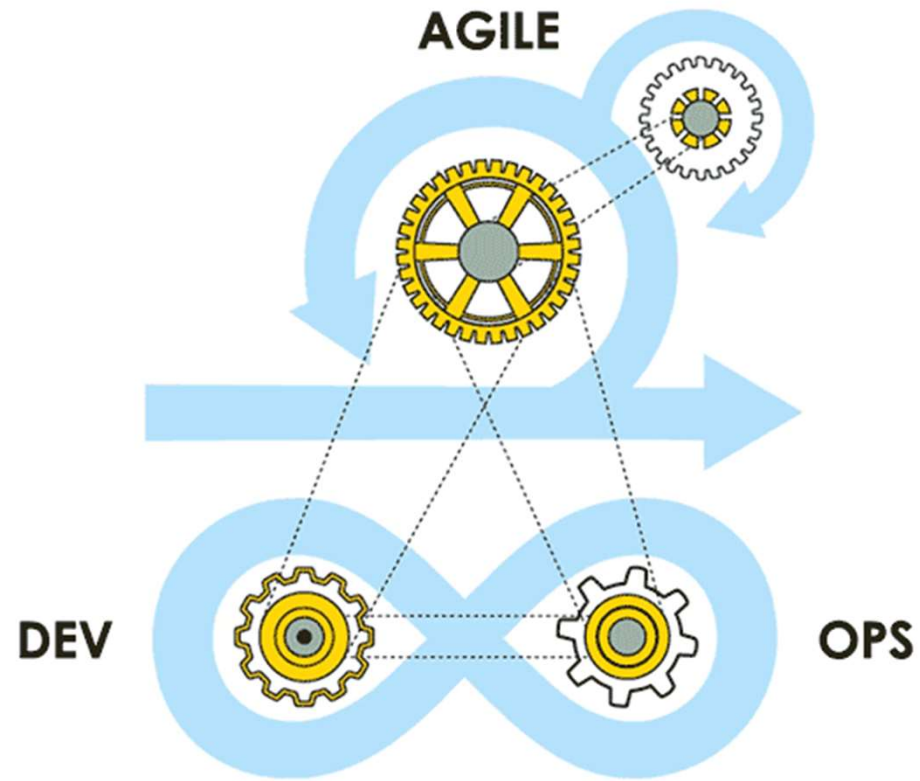
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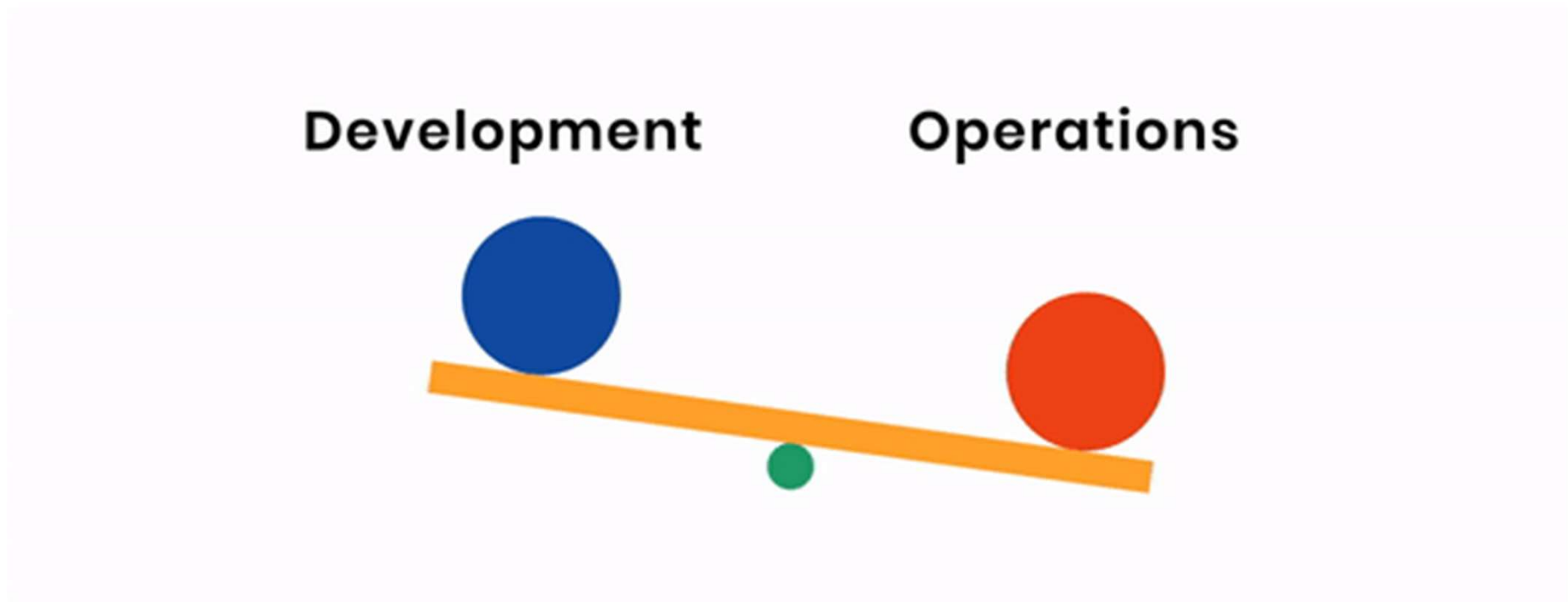
Early Defects vs Delayed Defects detection
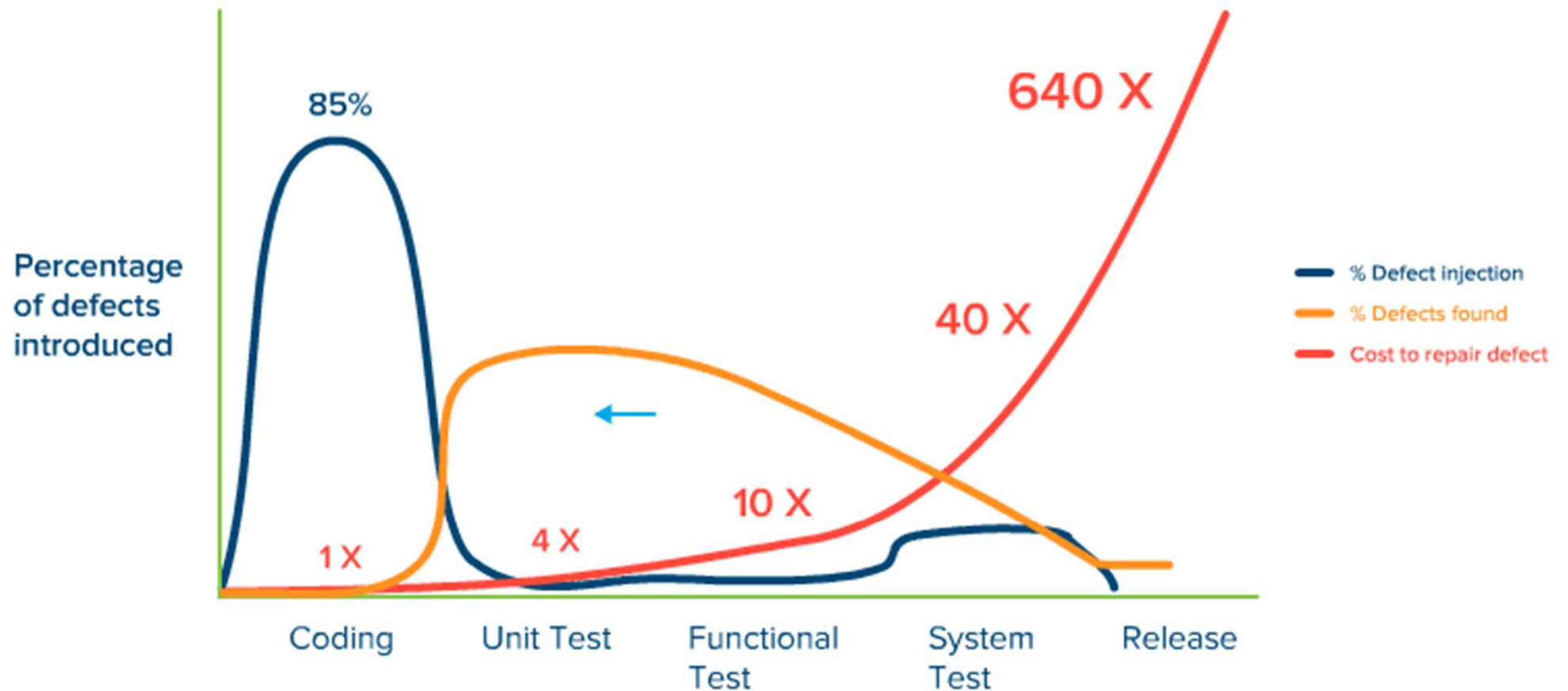
Jones, Capers. *Applied Software Measurement: Global Analysis of Productivity and Quality.*

DevOps as a solution and Advantages
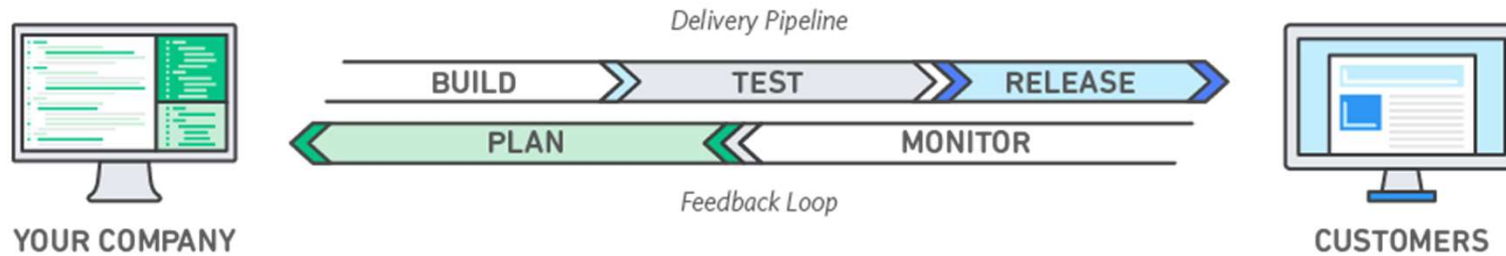
DevOps Tools – Overview and Use case

Source control

- To ensures for working on the right version
- Important for maintaining a single source of truth
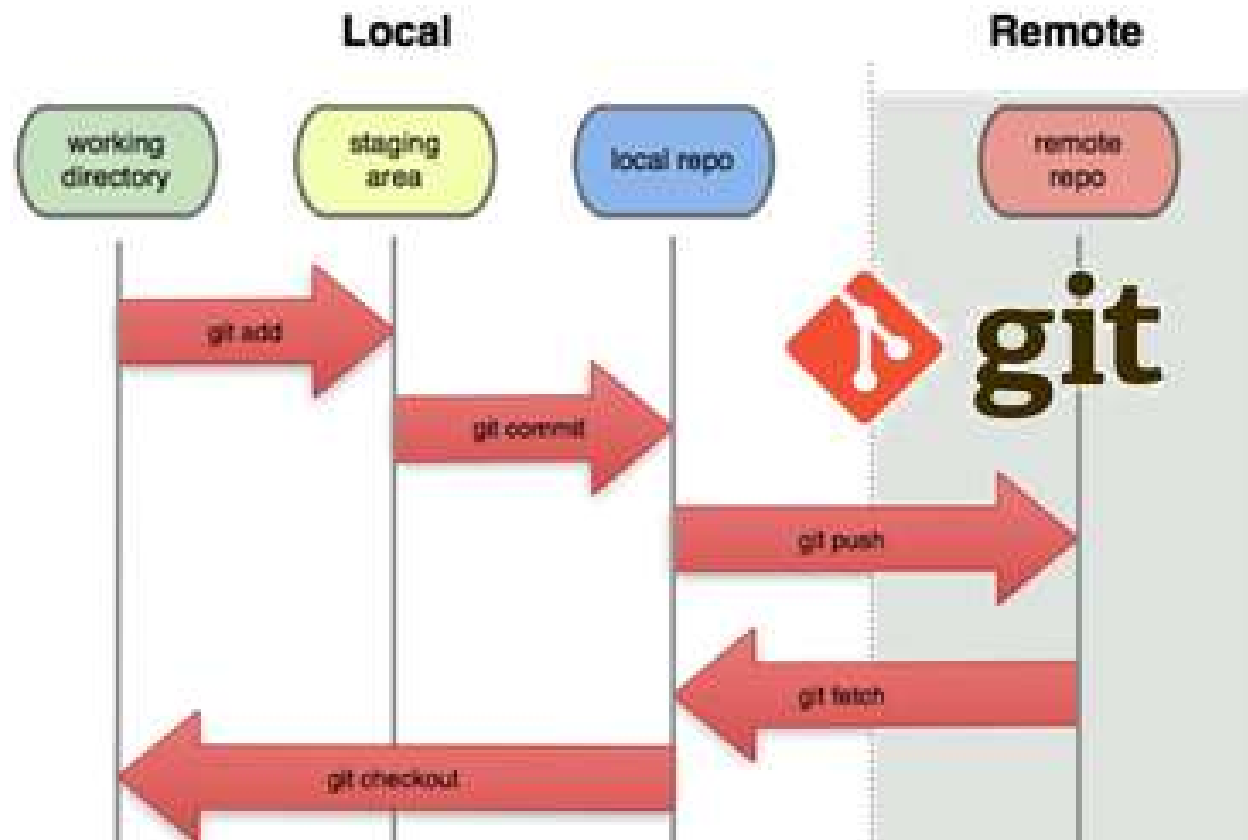
Source Code Management (SCM Tools)

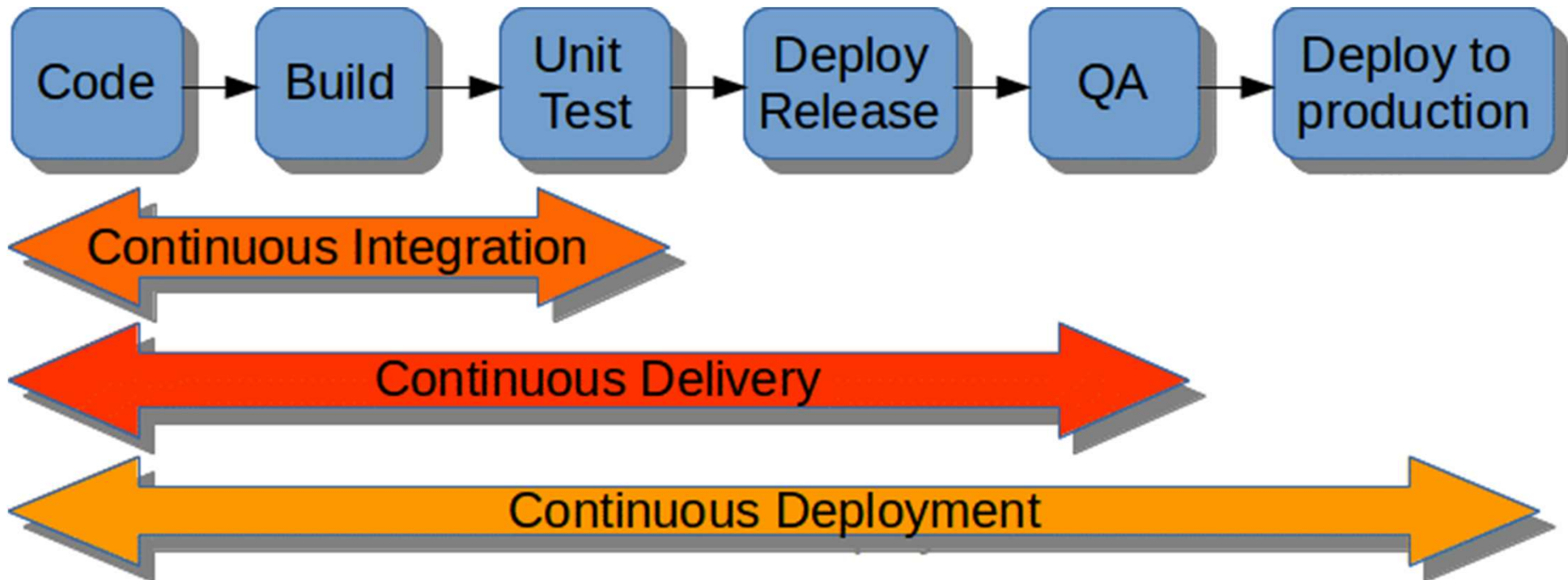- Help to keep track of code
- Complete history of changes.

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

Continuous Integration
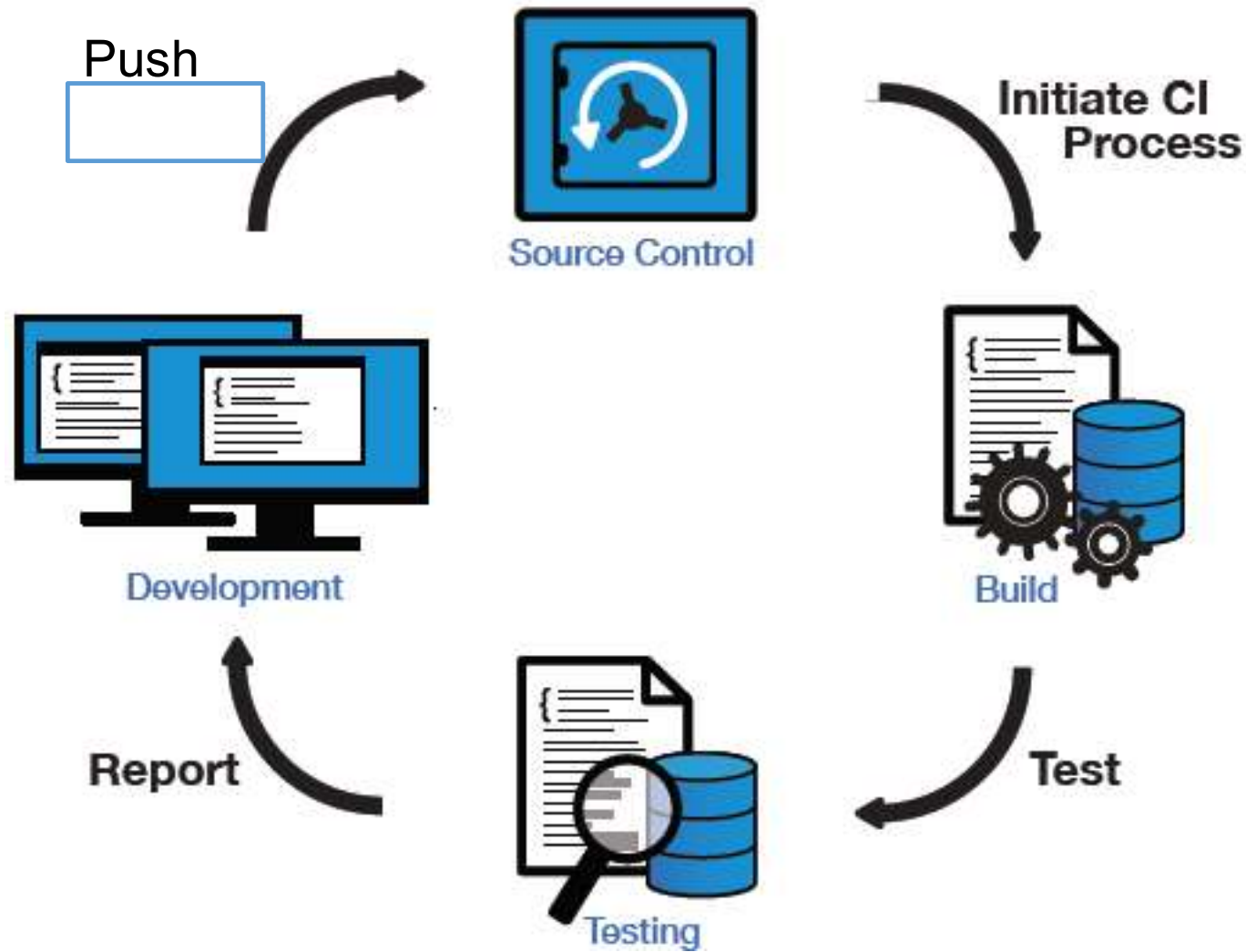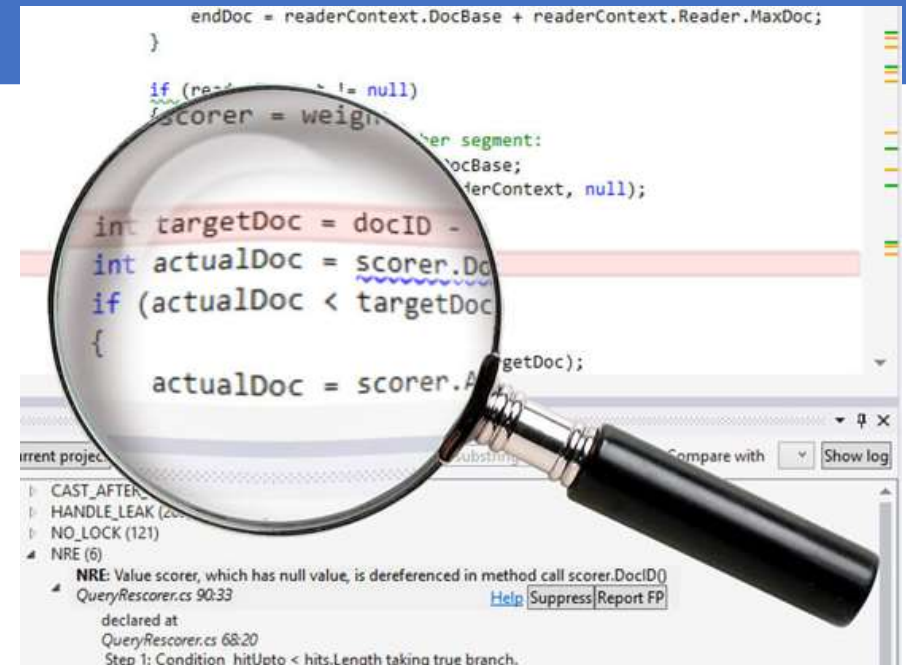
Continuous Delivery and Deployment

What Is Static Code Analysis?

A method of debugging

Examine source code before a program is run

Done by analyzing a set of code against a set of coding rules.

Performed early in development

Static Code Analysis Tool
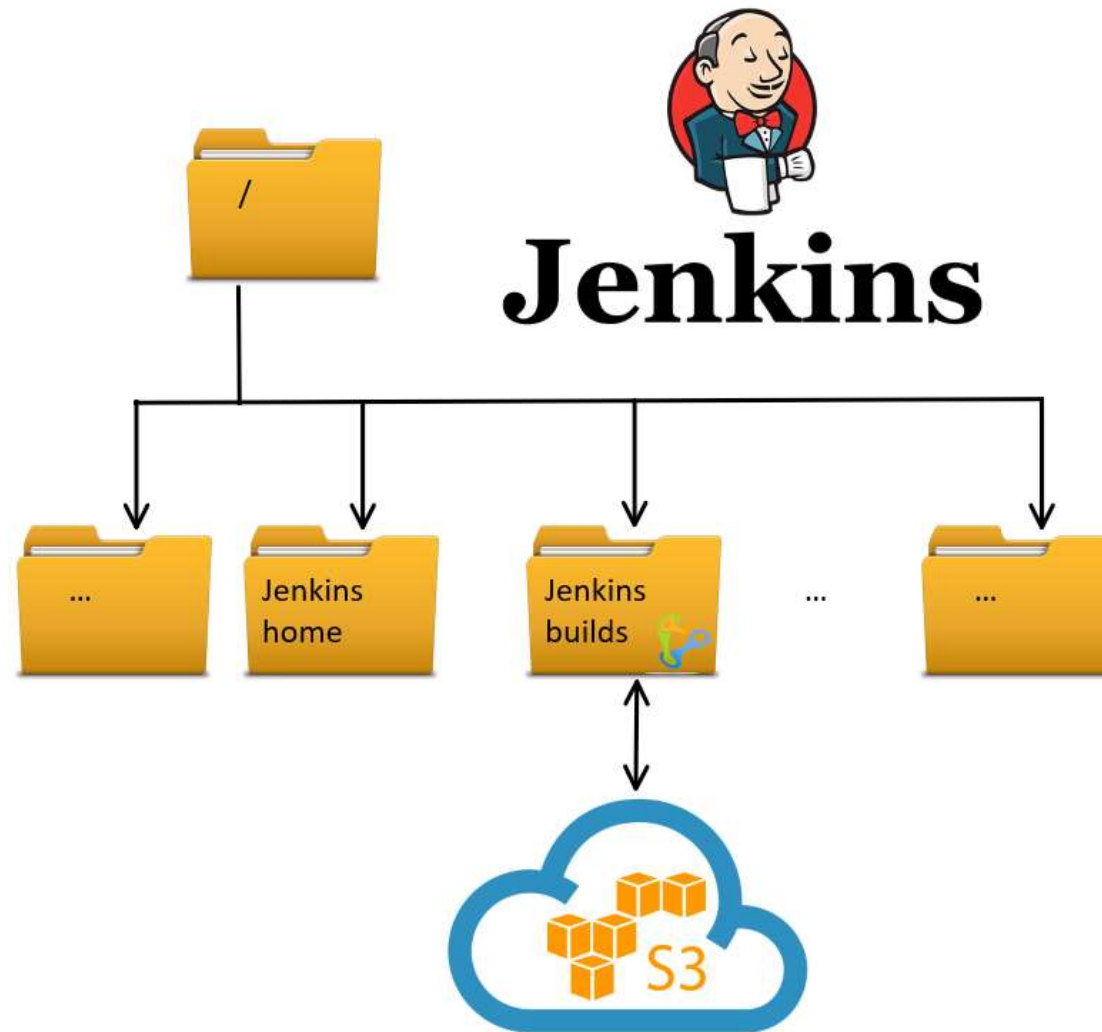
Development teams are under pressure

Quality releases needed to be delivered on time

Coding and compliance standards need to be met

And mistakes are not an option.

That's why development teams are using static analysis tools.

Storage Artifacts

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