BATCH : Batch 107

LESSON : Jenkins

DATE :

SUBJECT : Jenkins Introduction-Installation

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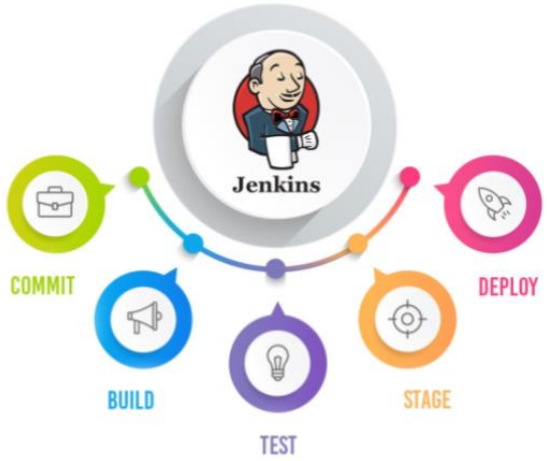
Table of Contents

- Introduction
- Continuous Integration
- Continuous Delivery
- Installation

Jenkins Introduction

What is Jenkins?



- Jenkins is a self-contained, open source automation server.
- Automates all sorts of tasks related to building, testing, and delivering or deploying software.

Jenkins History

Started to Hudson Project

Jenkins was originally developed as the Hudson project. Hudson's creation started in the summer of 2004 at Sun Microsystems

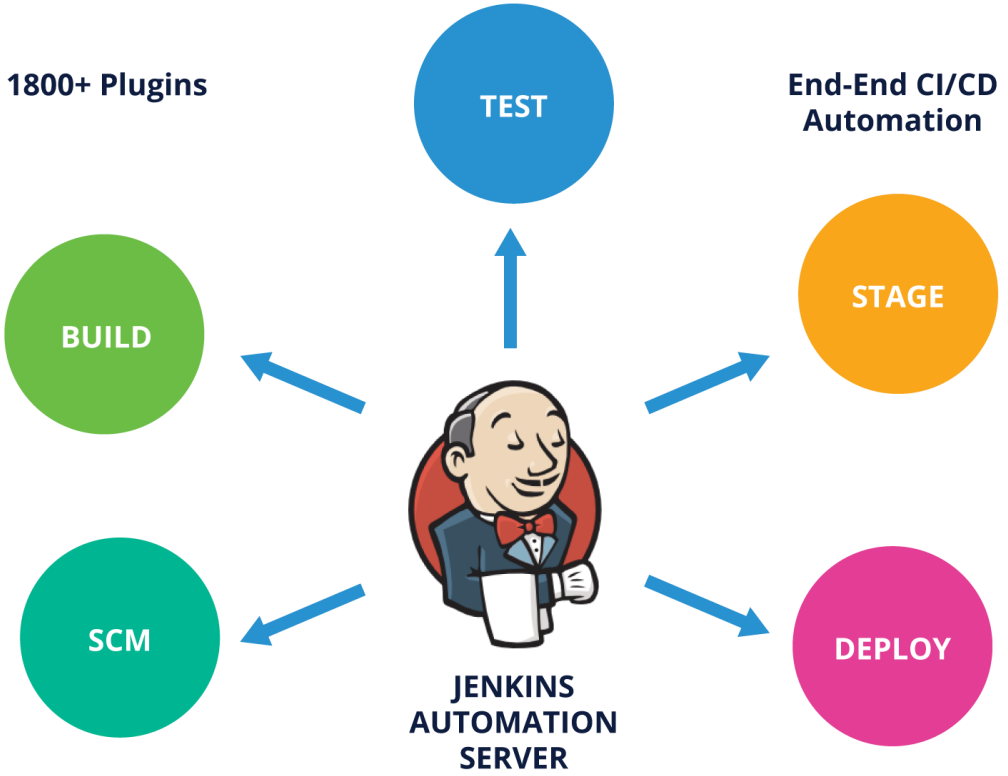
In 2011, after the acquisition of Sun Microsystems by **Oracle**, it is forked and renamed as **Jenkins**.

It was first released in **java.net** in Feb, 2005..

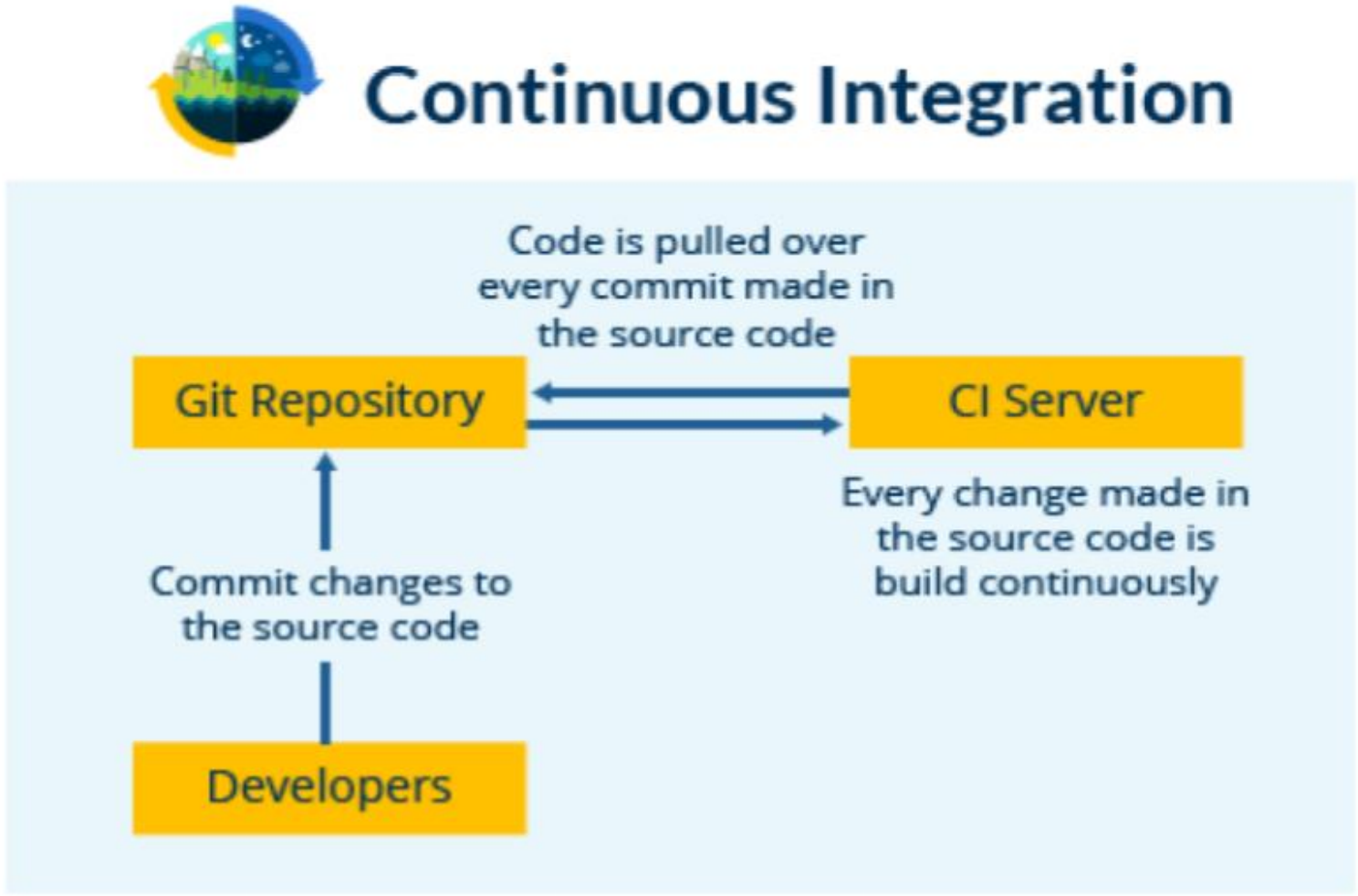
As of June 2019, the Jenkins organization on GitHub had 667 project members and around 2,200 public repositories

CI/CD Tools

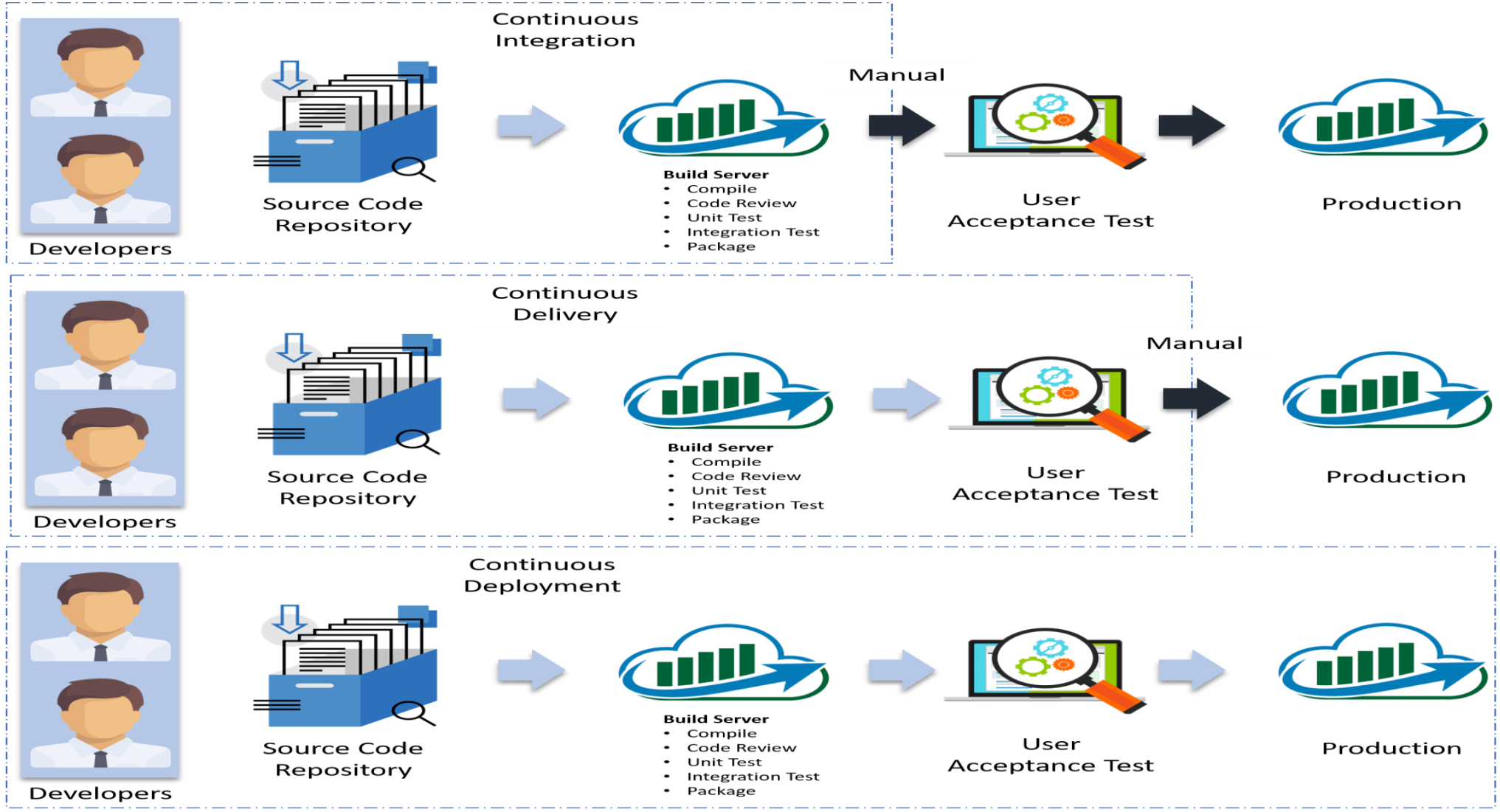
CI/CD Tools	Feature: Pricing	Feature: Licensing	Feature: Hosting	Feature: Extensions/ Plugins
Atlassian Bamboo	Paid	Closed	On-premises	**
Bitbucket Pipelines	Paid	Closed	Cloud/ On-premises	**
AWS CodePipeline	Paid	Closed	Cloud	*
Azure Pipelines	Paid	Closed	Cloud	**
Circle CI	Paid	Closed	On-premises/ Cloud	***
CloudBees Core	Paid	Closed	On-premises/ Cloud	*****
GitHub Actions	Paid	Closed	On-premises/ Cloud	***
GitLab CI/CD	Free/Paid	OSS/Closed	On-premises/ Cloud	*
Google Cloud Build	Paid	Closed	Cloud	**
Jenkins	Free	OSS	On-premises/ Cloud	*****
Travis CI	Paid	Closed	On-premises/ Cloud	***



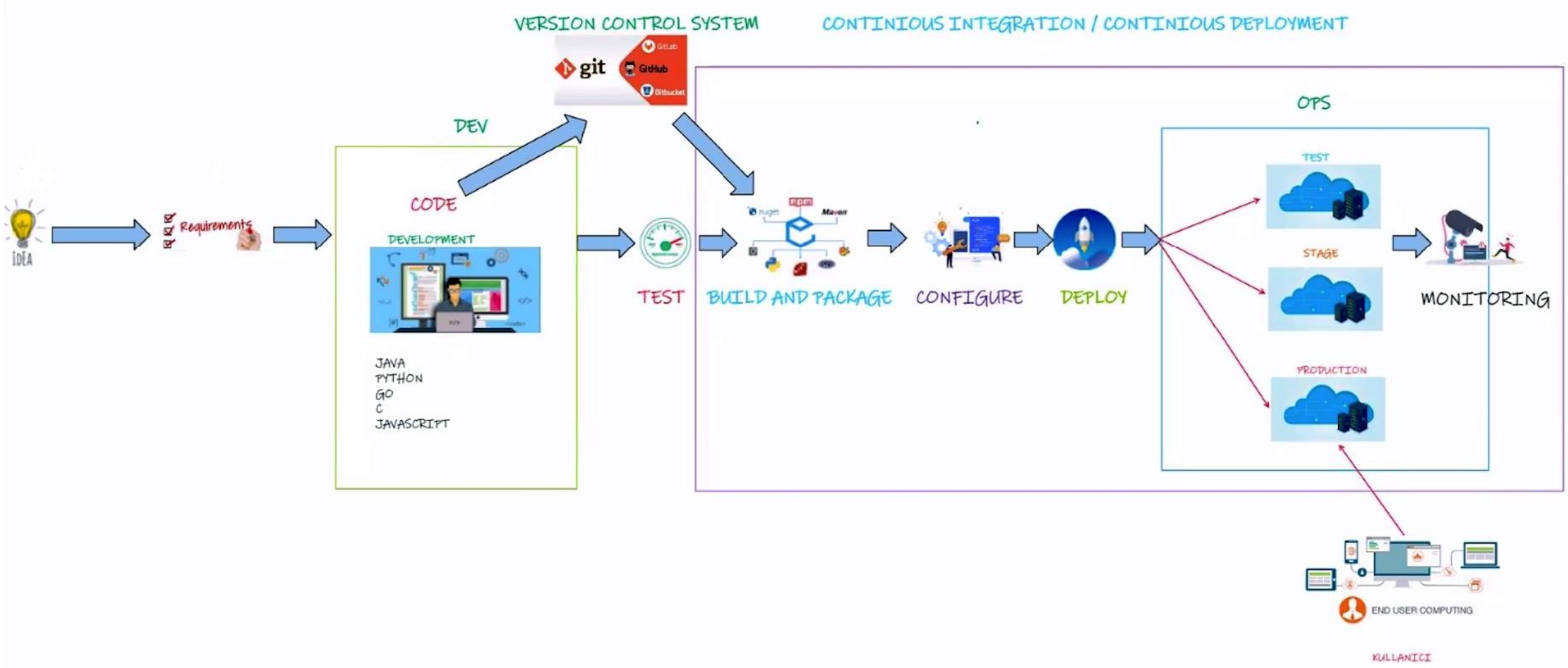
Continuous Integration



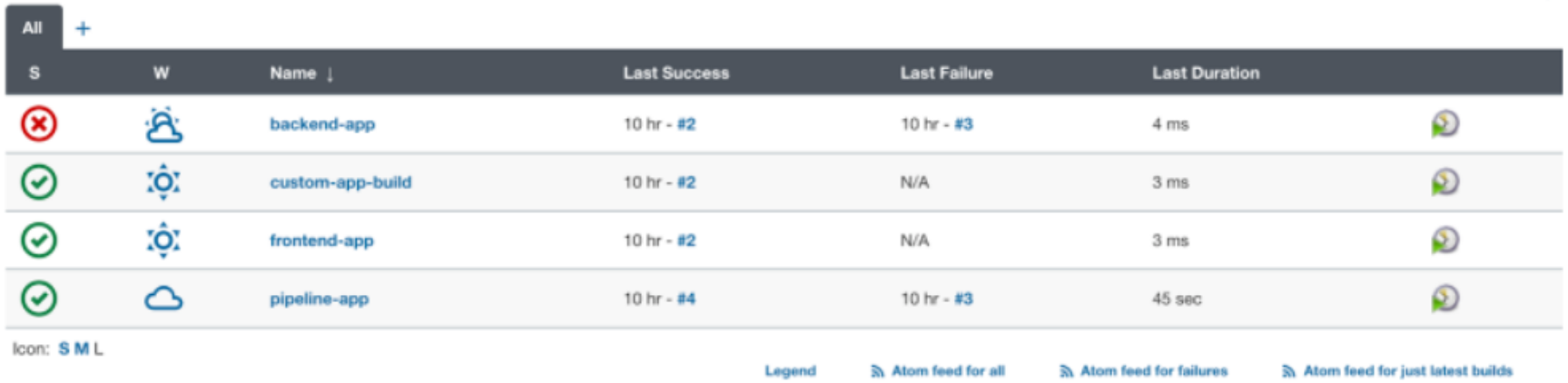
Continuous Delivery and Continuous Deployment



Continuous Delivery and Continuous Deployment



Jenkins Concepts



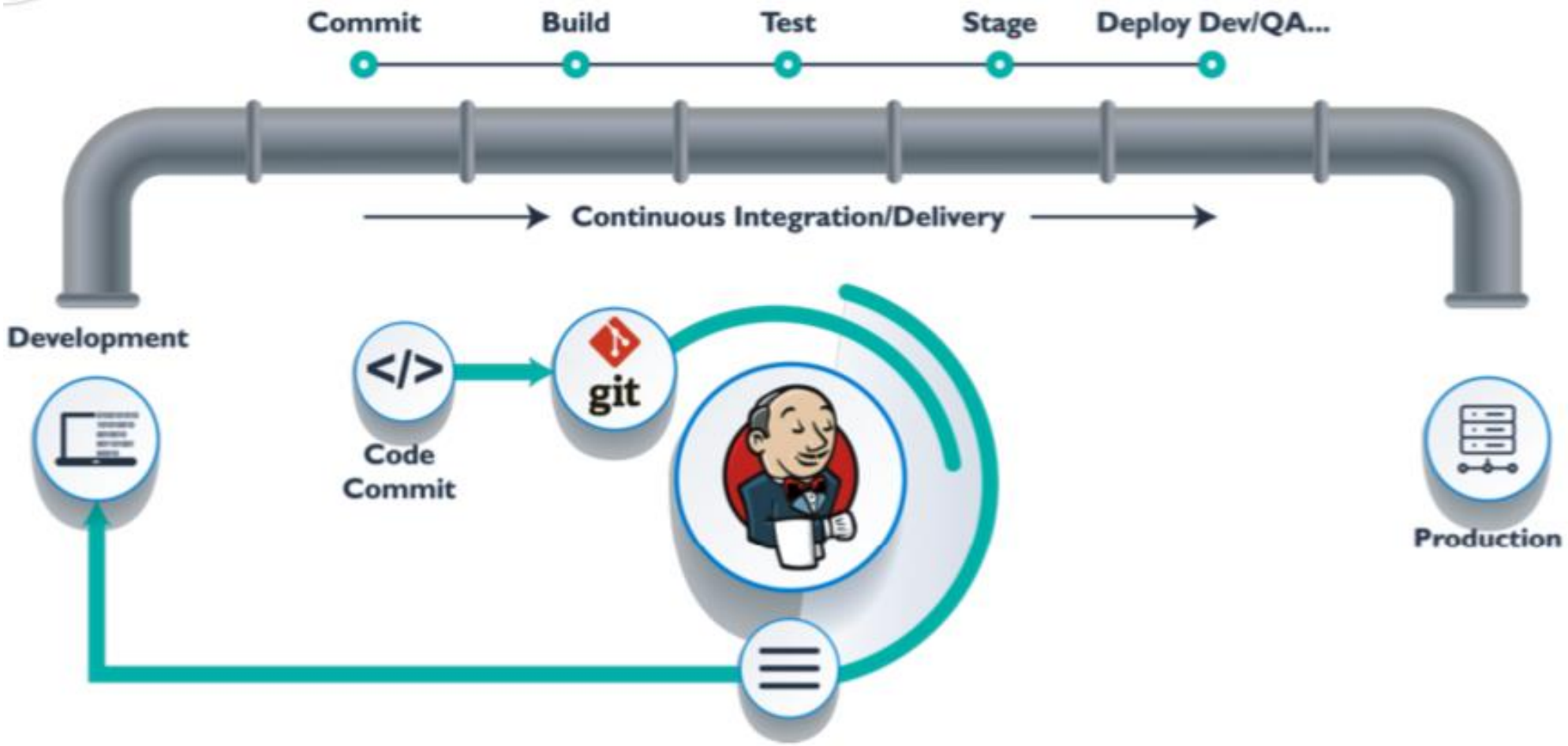
Build Status

Build Status	Color Code
Build is currently in progress	
Build is successful	
Aborted build	
Failed build	
Unstable build	

Health/Build Stability

Health/Build Stability	Weather Icon
If > 80% of the build runs are successful	
If 61% - 80% of the build runs are successful	
If 41% - 60% of the build runs are successful	
If 21% to 40% of the build runs are successful	
If < 21% of the build runs are successfully	

Jenkins Concepts: Pipelines



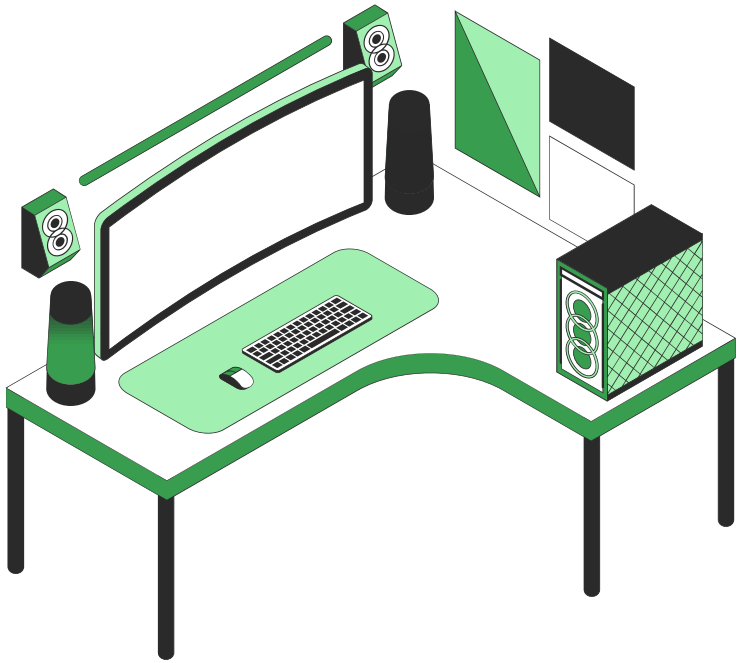
Jenkins Concepts

- Pipeline :
  - A Pipeline is a user-defined model of a CD pipeline.
- Node :
  - A node is a machine that is part of the jenkins environment and is capable of executing a Pipeline.
- Stage :
  - A stage block defines a completely distinct subset of tasks performed through the entire Pipeline
- Step :
  - Single task

Jenkins Documentation

https://www.jenkins.io

https://www.jenkins.io/download/



Do you have any questions?

Send it to us! We hope you learned something new.