

Introduction to DevOps



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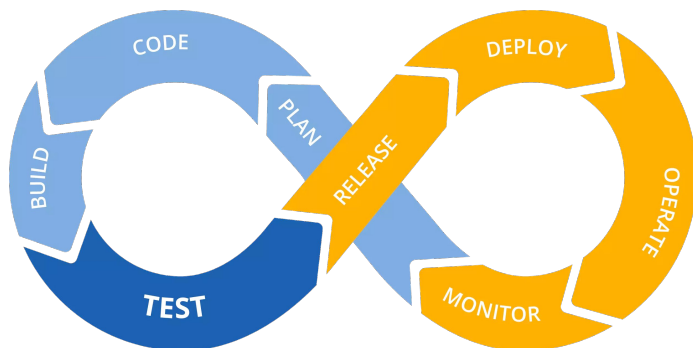
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DevOps Basics

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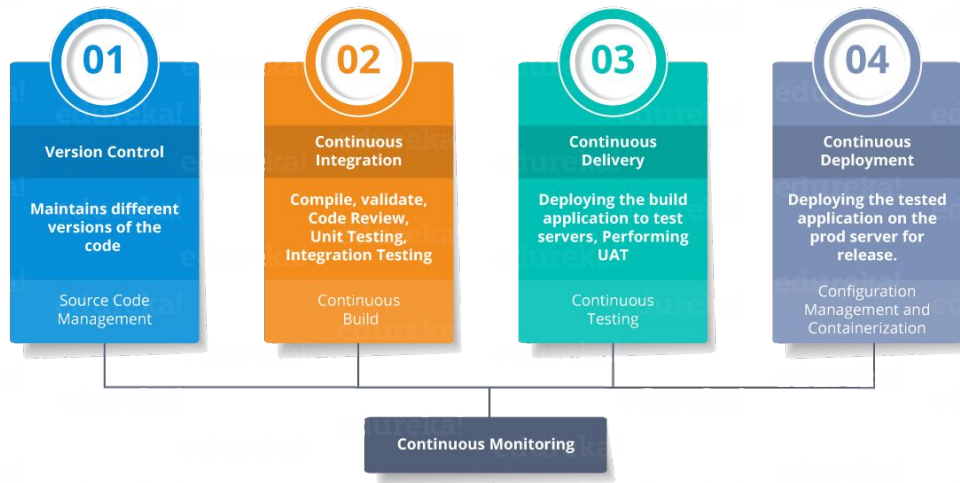
What is DevOps ?



DevOps is a software development approach which involves continuous development, continuous testing, continuous integration, continuous deployment, and continuous monitoring of the software throughout its development lifecycle

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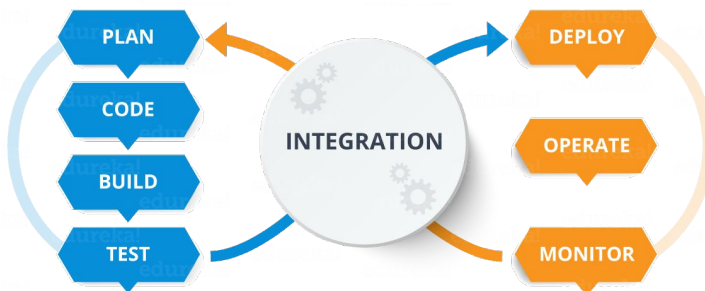
What is DevOps ?



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What is Continuous Integration ?



Continuous integration is a software development method where members of the team can integrate their work at least once a day. In this method, every integration is checked by an automated build to search the error.

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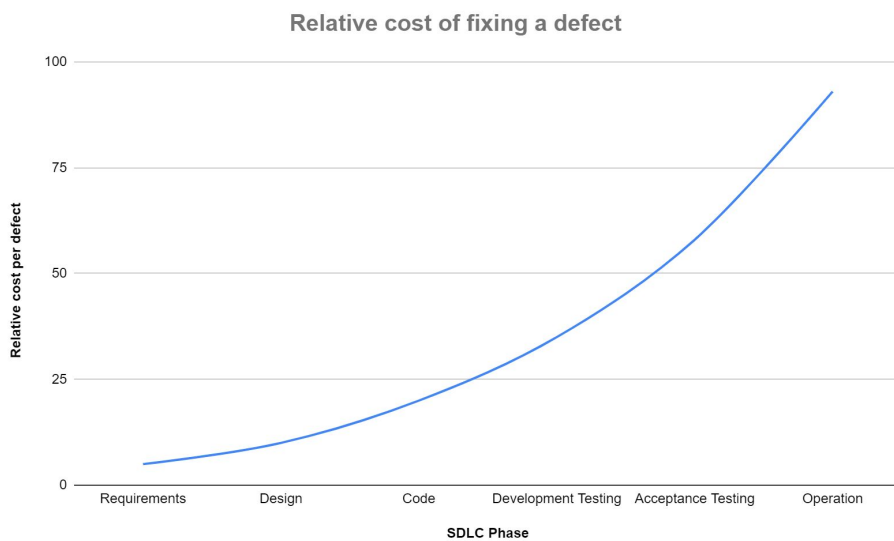
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With CI vs Without CI

Development without CI	Development with CI
Lots of Bugs	Fewer bugs
Infrequent and slow releases	Regular working releases
Difficult integration	Easy and Effective Integration
Late bug finding(days,weeks)	Early bug finding(minutes,hours)
Issue raised are harder to fix	Find and fix problems faster and more efficiently.
Poor project visibility	Better project visibility

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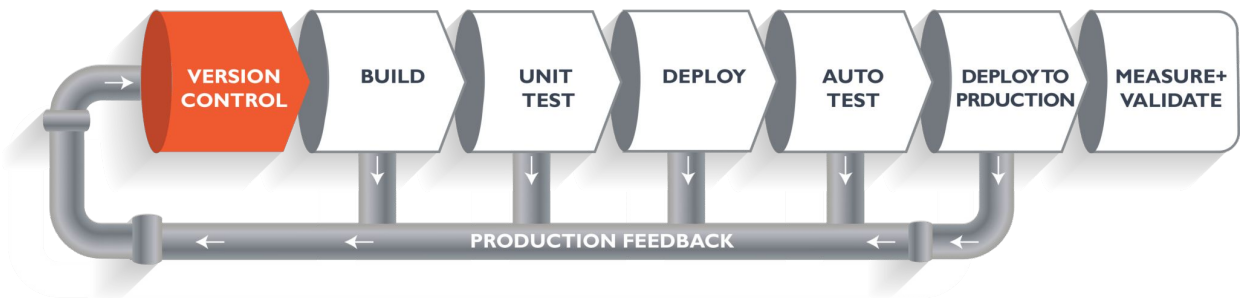
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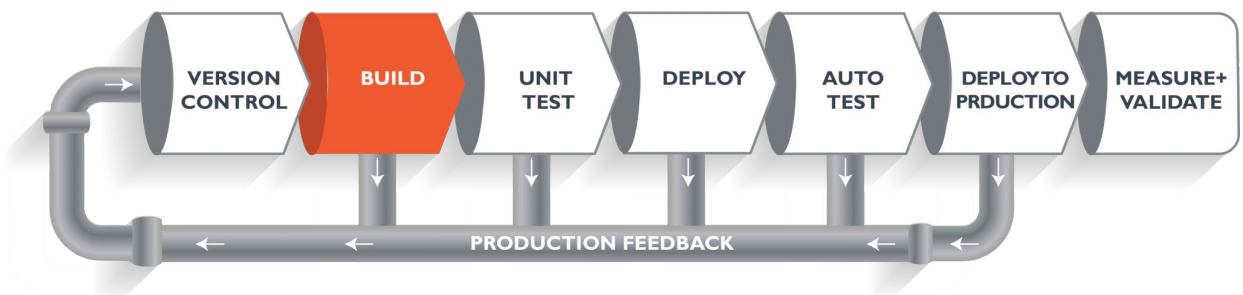
What is Continuous Integration ?



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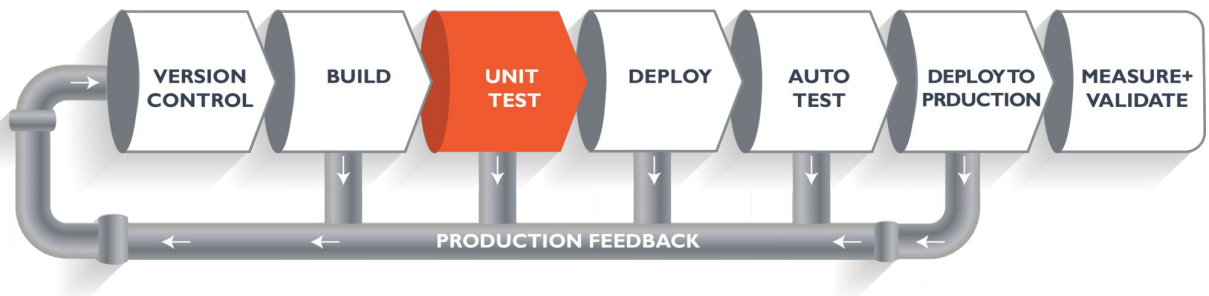
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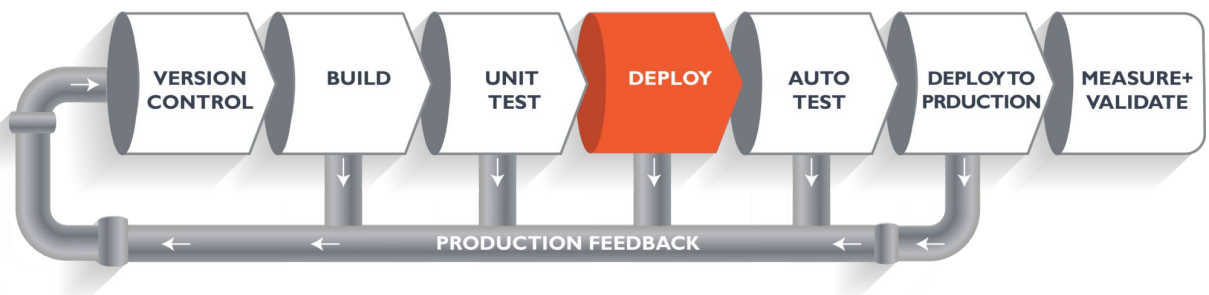
What is Continuous Integration ?



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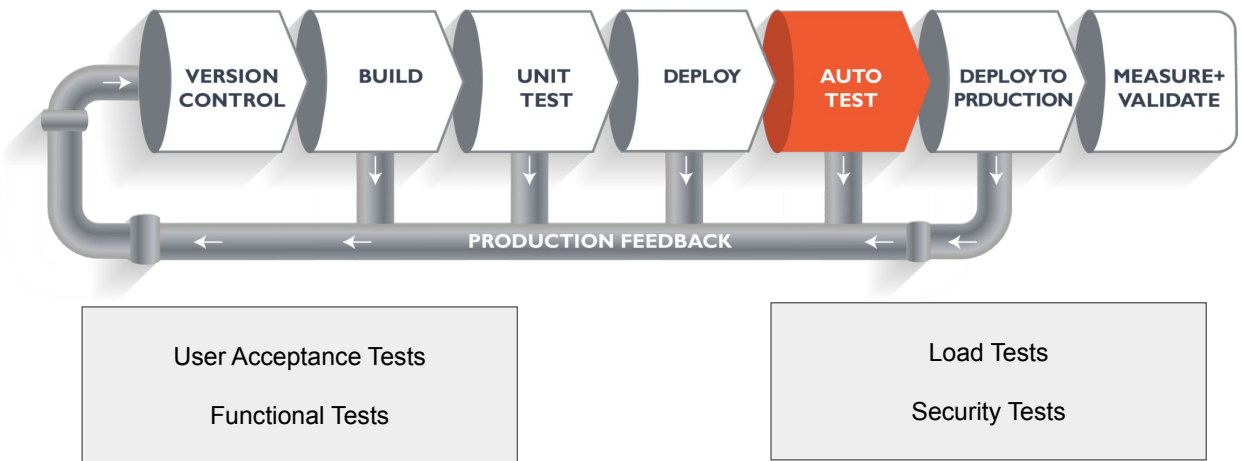
What is Continuous Integration ?



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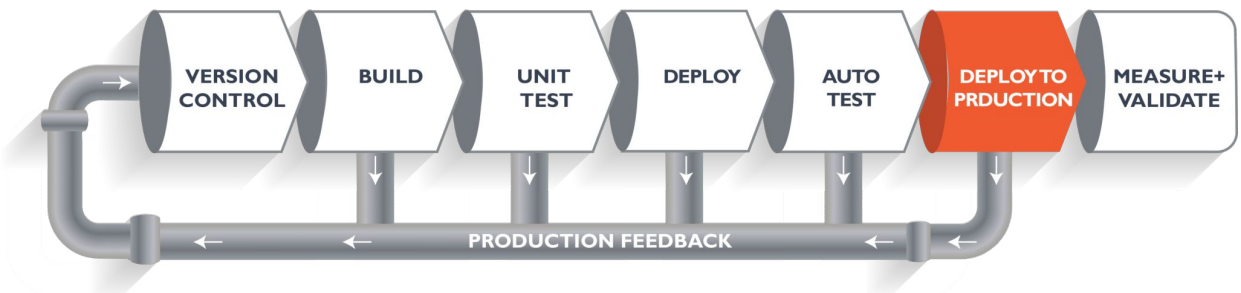
What is Continuous Integration ?



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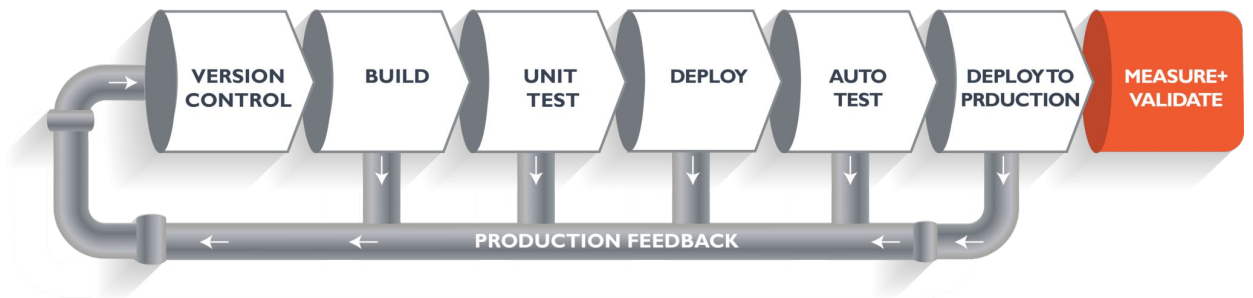
What is Continuous Delivery/Deployment ?



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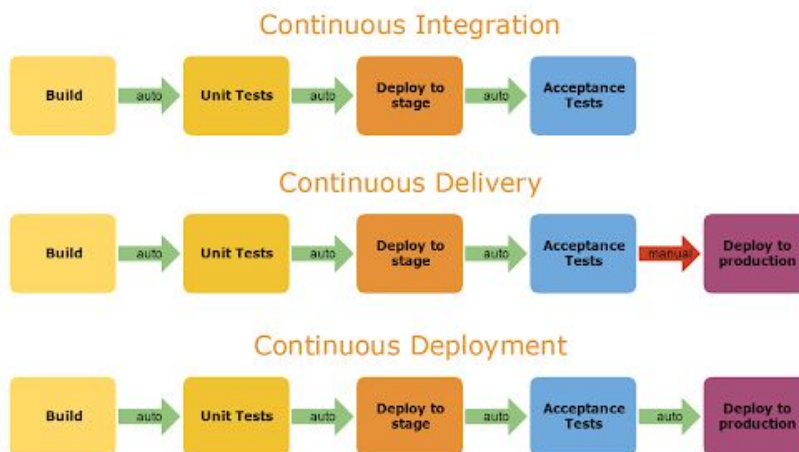
What is Continuous Delivery/Deployment ?



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Continuous Delivery vs Continuous Deployment



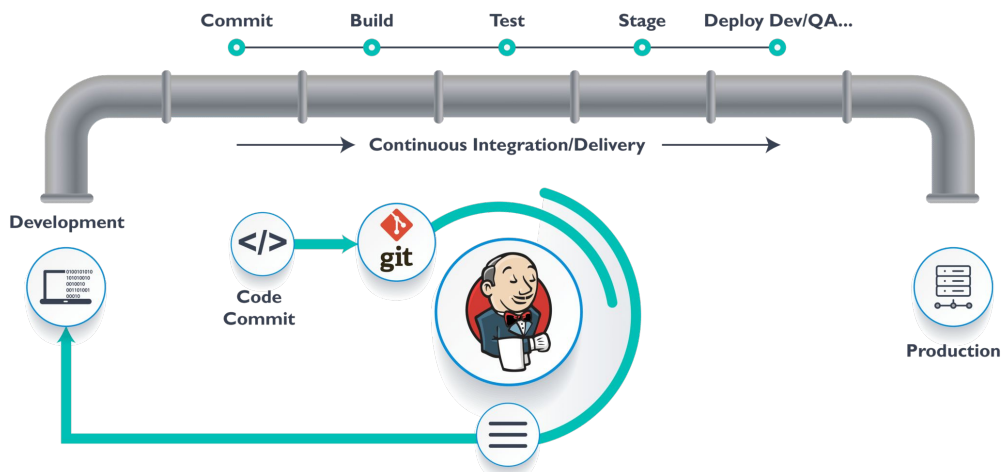
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DevOps Tools

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Continuous Integration Server

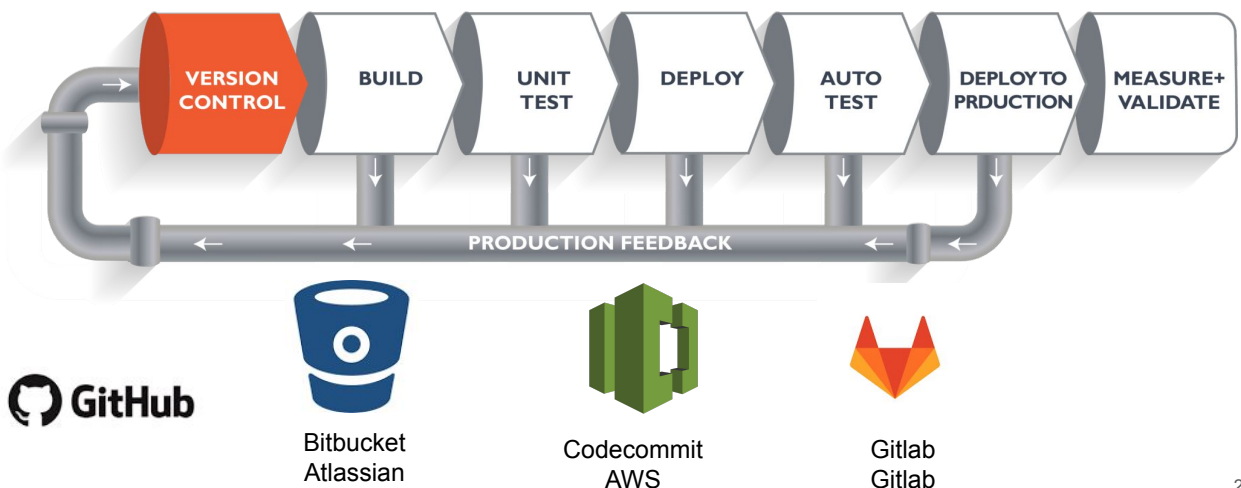


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Version Control Stage

EC2
CodeCommit

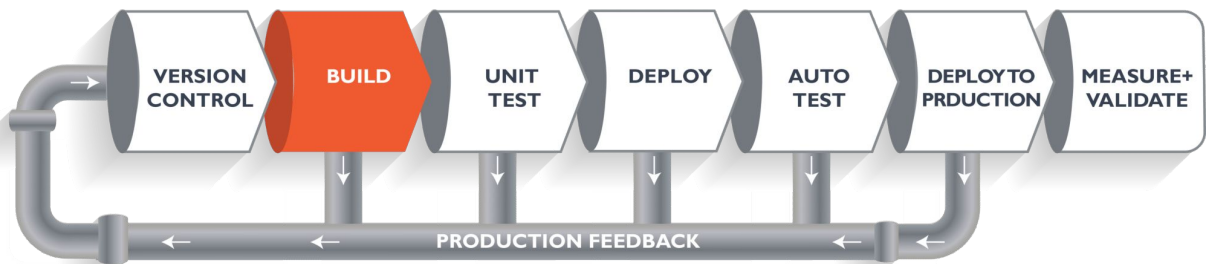


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What is Continuous Integration ?

EC2
CodeCommit,CodeBuild
ECS(Elastic Container Service)



Maven



nuget



BASH
THE BOURNE-AGAIN SHELL



Xcode

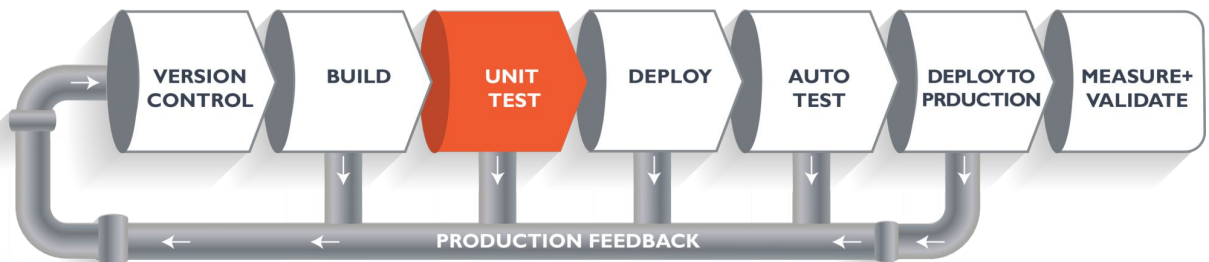


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What is Continuous Integration ?

EC2
CodeCommit,CodeBuild
ECS(Elastic Container Service)



JUnit

JACOCO
java Code Coverage

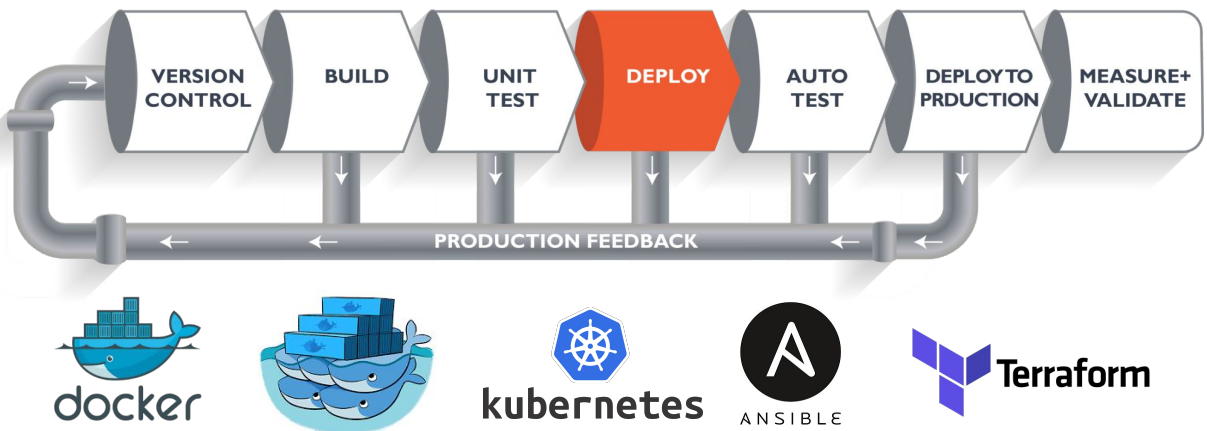
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What is Continuous Integration ?

EC2
CodeCommit, CodeBuild, CodeDeploy
ECS(Elastic Container Service)
ECR, S3, RDS, DynamoDB
Cloudformation, Beanstalk
ELB, AutoScaling

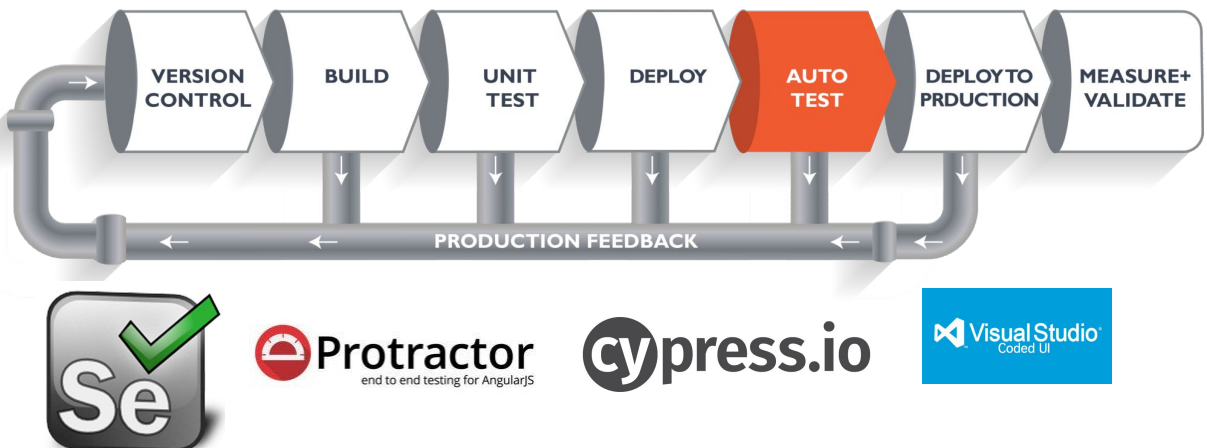


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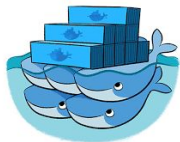
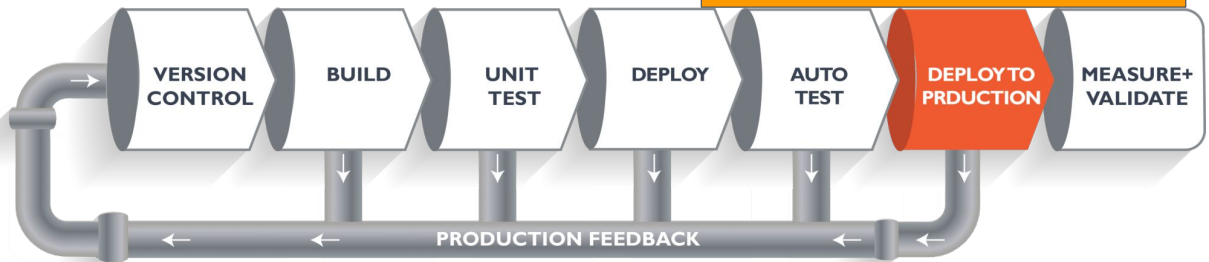


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Continuous Delivery/Deployment ?

EC2
CodeCommit, CodeBuild, CodeDeploy
ECS(Elastic Container Service)
ECR, S3, RDS, DynamoDB
Cloudformation, Beanstalk
ELB, AutoScaling
Cloudfront, Route53

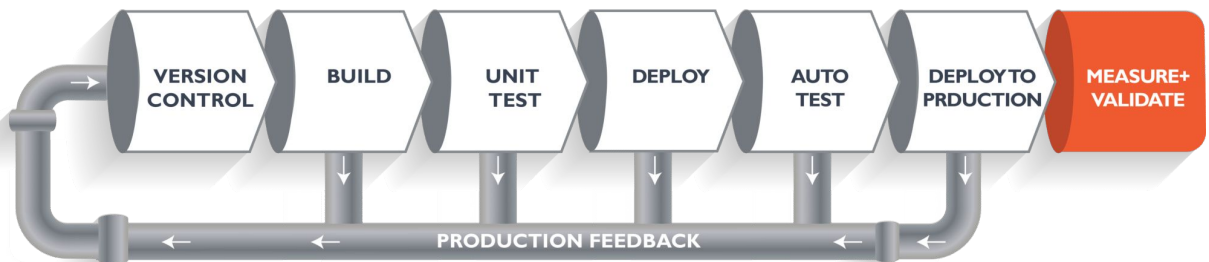


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Continuous Delivery/Deployment ?

Cloudwatch
SNS
SQS
SES



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