

# Integration with AWS

## Section 6

## What you will learn in this section

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## Theory:

- Introduction to Amazon Web Services (AWS)

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## Theory:

- Introduction to Amazon Web Services (AWS)
- Master/slave architecture in Jenkins

## Practice:

- Install Jenkins on AWS
- Set up a Jenkins build farm on AWS

# Overview

Video 6.1

## What you will learn in this video

- Introduction to AWS



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- Introduction to AWS
- Master/slave architecture in Jenkins

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- Introduction to AWS
- Master/slave architecture in Jenkins
- What we are going to build in the next videos

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- Cloud computing allows to **spin up a new server within minutes** and decommission it when it's not needed any more
- Computing resources are **billed by usage** (no upfront costs)
- AWS is currently the **market leader in cloud computing**



## Prerequisite



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- Sign up for an AWS account at <https://portal.aws.amazon.com/billing/signup>
- Read the AWS Free Tier at <https://aws.amazon.com/free/>

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- You can monitor billing costs in AWS via the **Billing Console**
- **Stop/terminate the AWS resources** when you don't use them to avoid costs
- You undertake the practical part entirely **at your own risk**

# Master/Slave Architecture in Jenkins

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## Jenkins Master



# Master/Slave Architecture in Jenkins

## Jenkins Master



Jenkins Slave 1



Jenkins Slave 2

CC BY-SA 3.0



Jenkins Slave 3

# Master/Slave Architecture in Jenkins

Jenkins Master



Job 1



Jenkins Slave 1

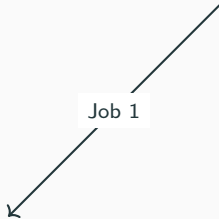


Jenkins Slave 2

CC BY-SA 3.0

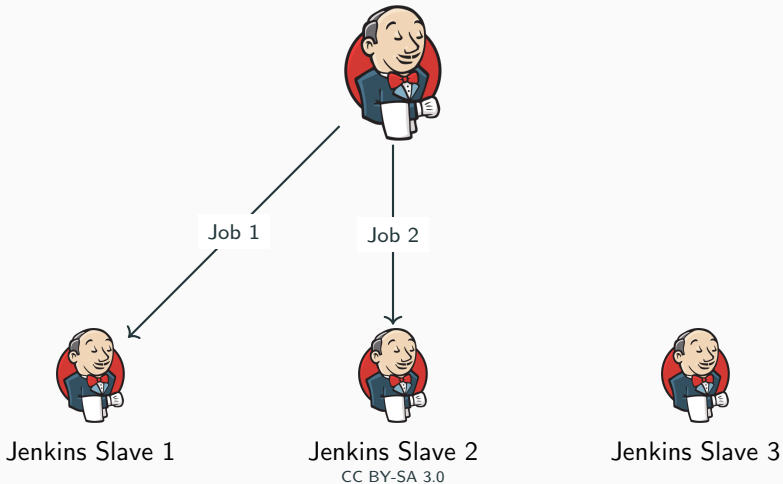


Jenkins Slave 3



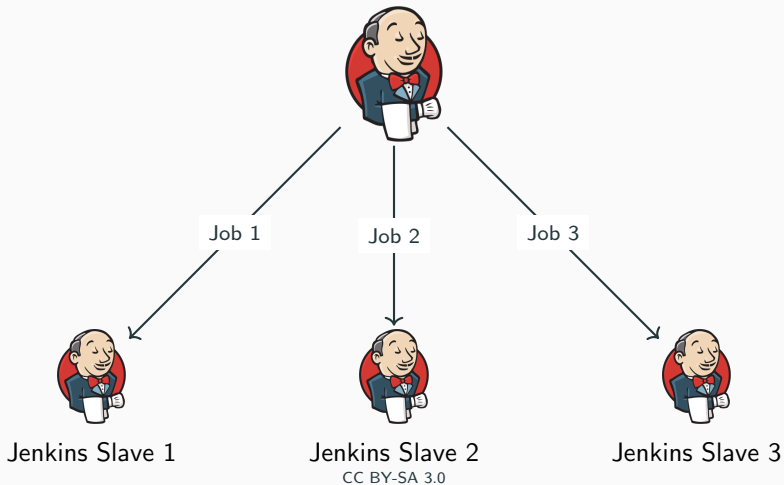
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  - Share the load
  - Scale up resources at peak times and scale down at low activity times



# Deployment Strategies

## Single Master vs Multi Master

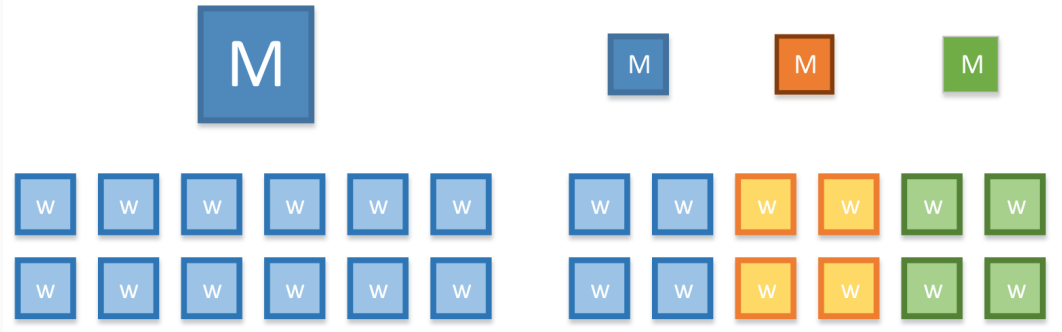


Image: <https://docs.aws.amazon.com/aws-technical-content/latest/jenkins-on-aws/jenkins-on-aws.pdf> © Amazon Web Services, Inc.

# Jenkins Build Farm

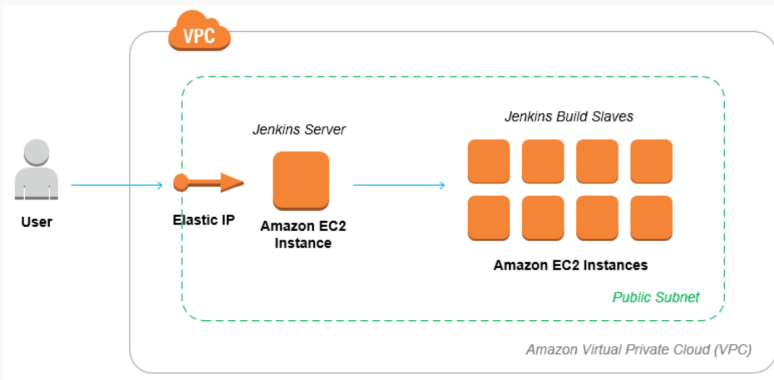


Image: <https://aws.amazon.com/getting-started/projects/setup-jenkins-build-server> ©Amazon Web Services, Inc.

# Next Video

Video 6.2 Create Resources on AWS

