# COURSEWARE

| Professional Skills       |                                 |  |
|---------------------------|---------------------------------|--|
| Agile Fundamentals        |                                 |  |
| Jira                      |                                 |  |
| Git                       |                                 |  |
| Databases Introduction    |                                 |  |
| Java Beginner             |                                 |  |
| Maven                     |                                 |  |
| Testing (Foundation)      |                                 |  |
| Java Intermediate         |                                 |  |
| HTML                      |                                 |  |
| CSS                       |                                 |  |
| Javascript                |                                 |  |
| Spring Boot               |                                 |  |
| Selenium                  |                                 |  |
| Sonarqube                 |                                 |  |
| Advanced Testing (Theory) |                                 |  |
| Cucumber                  |                                 |  |
| MongoDB                   |                                 |  |
| Express                   |                                 |  |
| NodeJS                    |                                 |  |
| React                     |                                 |  |
| Express-Testing           |                                 |  |
| Networking                |                                 |  |
| Security                  |                                 |  |
| Cloud Fundamentals        |                                 |  |
| 0                         | Cloud Concepts                  |  |
| 0                         | Cloud Benefits                  |  |
| 0                         | Cloud Enabling Technologies     |  |
| 0                         | Cloud Security                  |  |
| 0                         | Comparing Cloud service models: |  |

laaS, PaaS, SaaS

# **Public Cloud**

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### Overview

A **Public Cloud** is defined as computing services available to *anyone* that wants to purchase or use them *over the internet* provided by a third party.

The way you are charged may vary depending on what resources are being used - some resources may be free, while others may charge by CPU cycles, storage or bandwidth.

The main difference between a *Private Cloud* and a *Public Cloud* is that the latter may save companies money, as there is no upfront capital expenditure for things like:

- premises
- hardware
- software
- maintenance

| 0                    | Infrastructure-as-a-Service (IaaS) |  |
|----------------------|------------------------------------|--|
| 0                    | Platform-as-a-Service (PaaS)       |  |
| 0                    | Software-as-a-Service (SaaS)       |  |
| 0                    | Public Cloud                       |  |
| 0                    | Private Cloud                      |  |
| 0                    | Hybrid Cloud                       |  |
| 0                    | Regions and Availability zones     |  |
| AWS Foundations      |                                    |  |
| AWS Intermediate     |                                    |  |
| Linux                |                                    |  |
| DevOps               |                                    |  |
| Jenkins Introduction |                                    |  |
| Jenkins Pipeline     |                                    |  |
| Markdown             |                                    |  |
| IDE Cheatsheet       |                                    |  |



# **Public**

- Multi-tenant implementation
- Similar self-service and automation capabilities as Private Cloud
- Bound by multi-tenant data management policies
- Owned and operated by Service Provider

# Security

Public Clouds have come under scrutiny regarding their security measures.

However, provided that security measures are implemented correctly, usually *Public Cloud* security is just as effective as it would be within a *Private Cloud*.

Intrusion detection and prevention systems can be implemented and effective as long as they're done correctly.

## Advantages

The biggest advantages of using a *Public Cloud* are:

- no up-front capital expenditure
- no maintenance required
- highly reliable
- easily scalable

### Disadvantages

However, *Public Clouds* also have some disadvantages:

- less customizable
- potential latency
- potential governance issues

### **Business Case**

The best use cases for a *Public Cloud* are:

- transitioning to the Cloud
- new applications or systems
- standard workload
- systems that don't need much customization

## **Tutorial**

Try answering the following questions:

- ▶ To whom are *Public Cloud* services available?
- lacktriangle Try to list two advantages and two disadvantages of using a  $Public\ Cloud$

## **Exercises**

There are no exercises for this module.