



# AWS Foundation

## Introduction



# Agenda



1

**Cloud Computing**

2

**Deployments & Models**

3

**Advantages**

4

**AWS Suite (with analogy)**

5

**Virtualization in AWS**

6

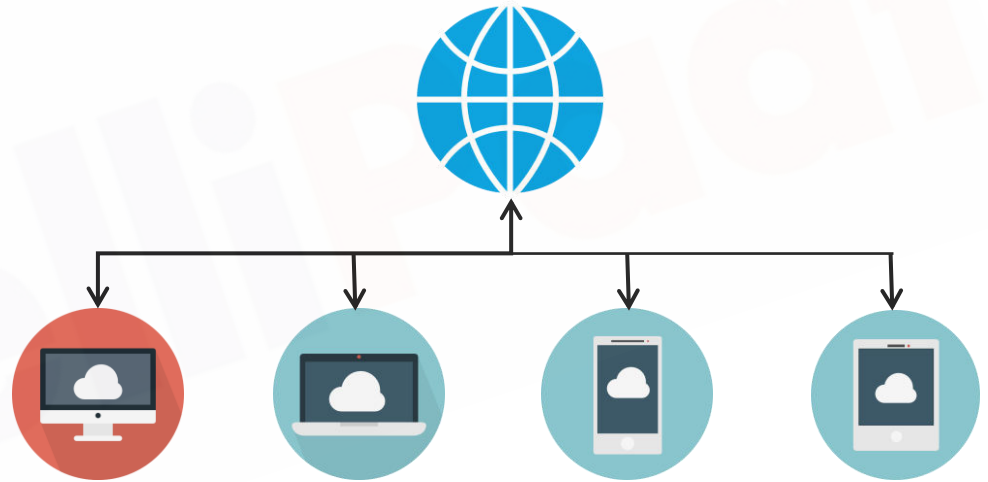
**XEN Hypervisor**

# Cloud Computing

# Cloud Computing

## The “NET”

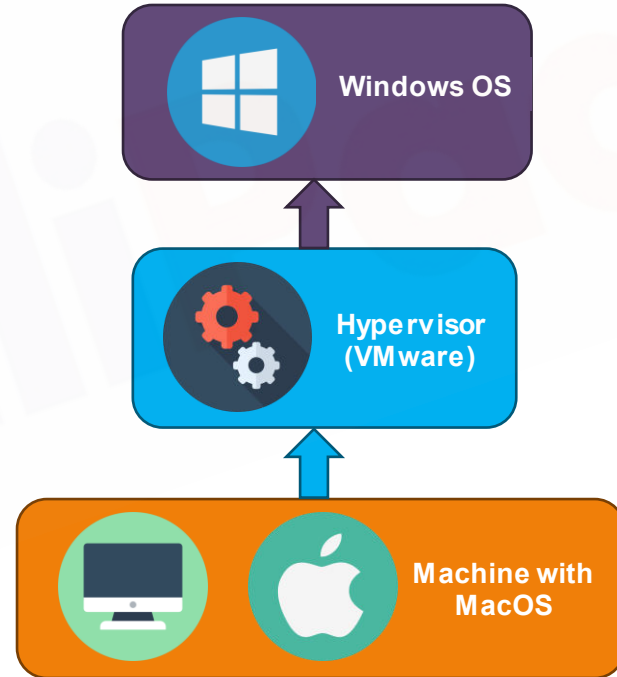
- What is Internet/Intranet
- A global computer network using standardized communication protocols (e.g. UDP, TCP/IP) providing information and communication facilities, consisting of interconnected networks .
- Intranet is a local private network created using World Wide Web.



# Cloud Computing

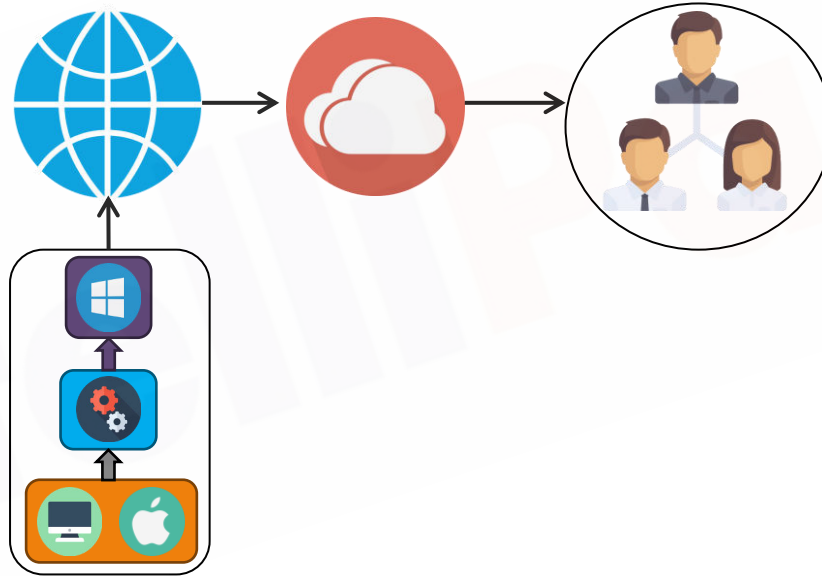
## Virtualization

Virtualization is the creation of a virtual version of something, such as operating system, server, storage device or network resources.



# Cloud Computing

Saying it now



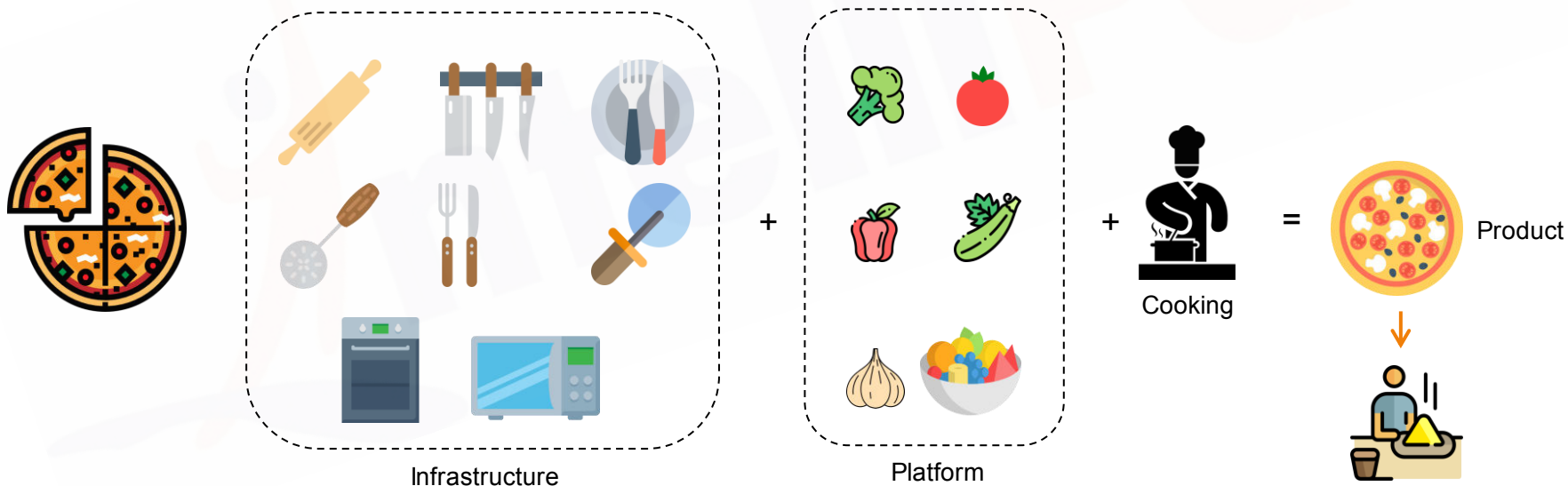
Virtualized Compute environment over internet/intranet.

Cloud Computing = Virtualization + Internet/Intranet.

# Models & Deployments

## Cloud Service Models

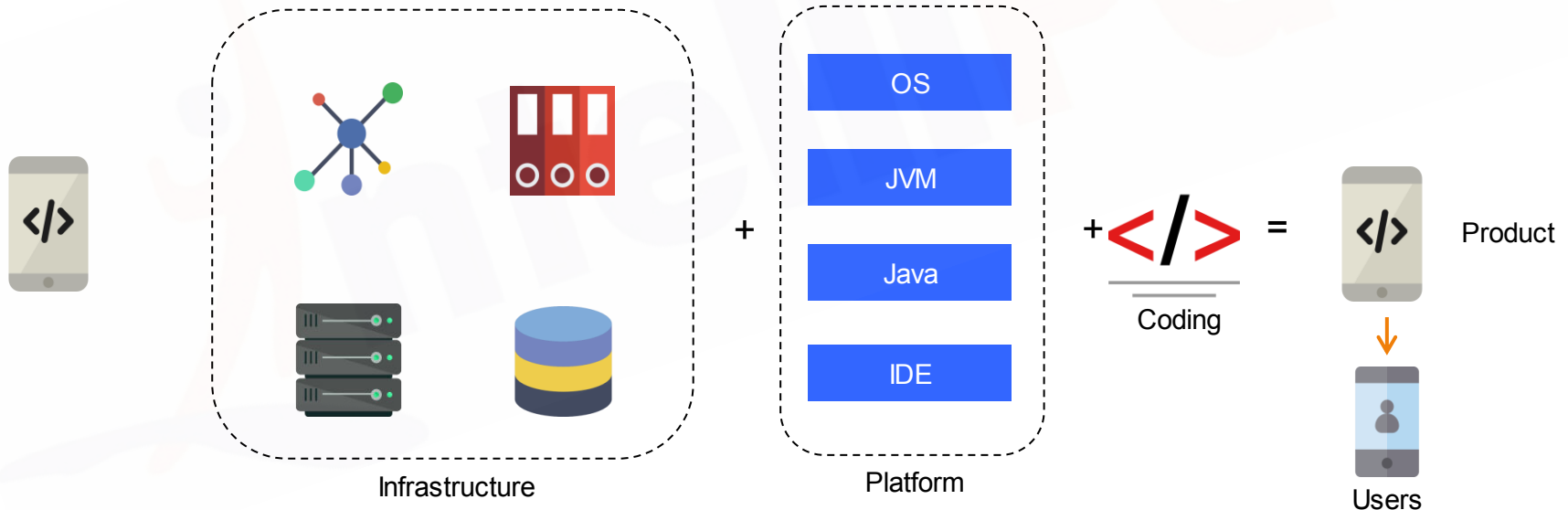
- ❑ IaaS (Infrastructure as a Service): AWS, Rackspace, MS Azure etc.
- ❑ PaaS (Platform as a Service): AWS Elastic Beanstalk, Heroku etc.
- ❑ SaaS (Software as a Service): Google drive, Google docs, MS Office 365 etc.



# Models & Deployments

## Cloud Service Models

- ❑ IaaS (Infrastructure as a Service): AWS, Rackspace, MS Azure etc.
- ❑ PaaS (Platform as a Service): AWS Elastic Beanstalk, Heroku etc.
- ❑ SaaS (Software as a Service): Google drive, Google docs, MS Office 365 etc.



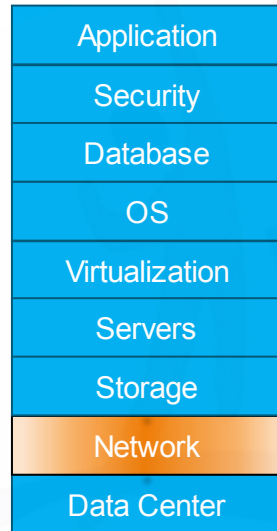


# Models & Deployments

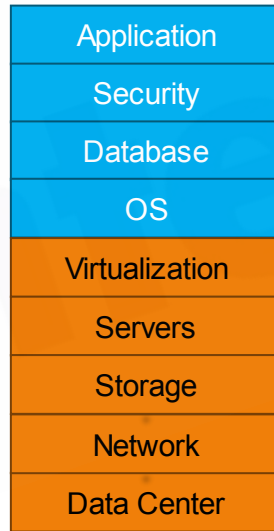


## Cloud Service Models

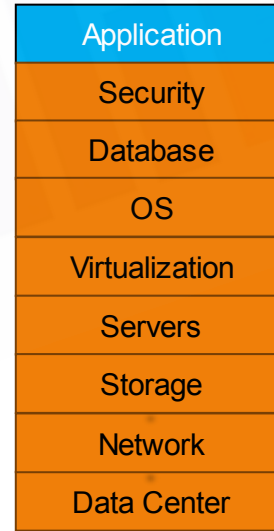
- ❑ IaaS (Infrastructure as a Service): AWS, Rackspace, MS Azure etc.
- ❑ PaaS (Platform as a Service): AWS Elastic Beanstalk, Heroku etc.
- ❑ SaaS (Software as a Service): Google drive, Google docs, MS Office 365 etc.



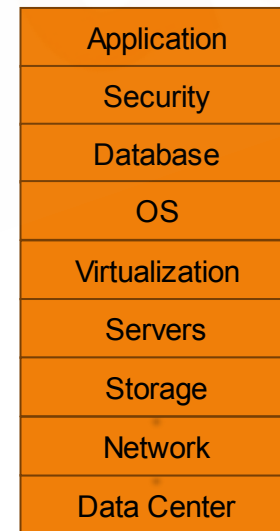
On-Premise



IaaS



PaaS



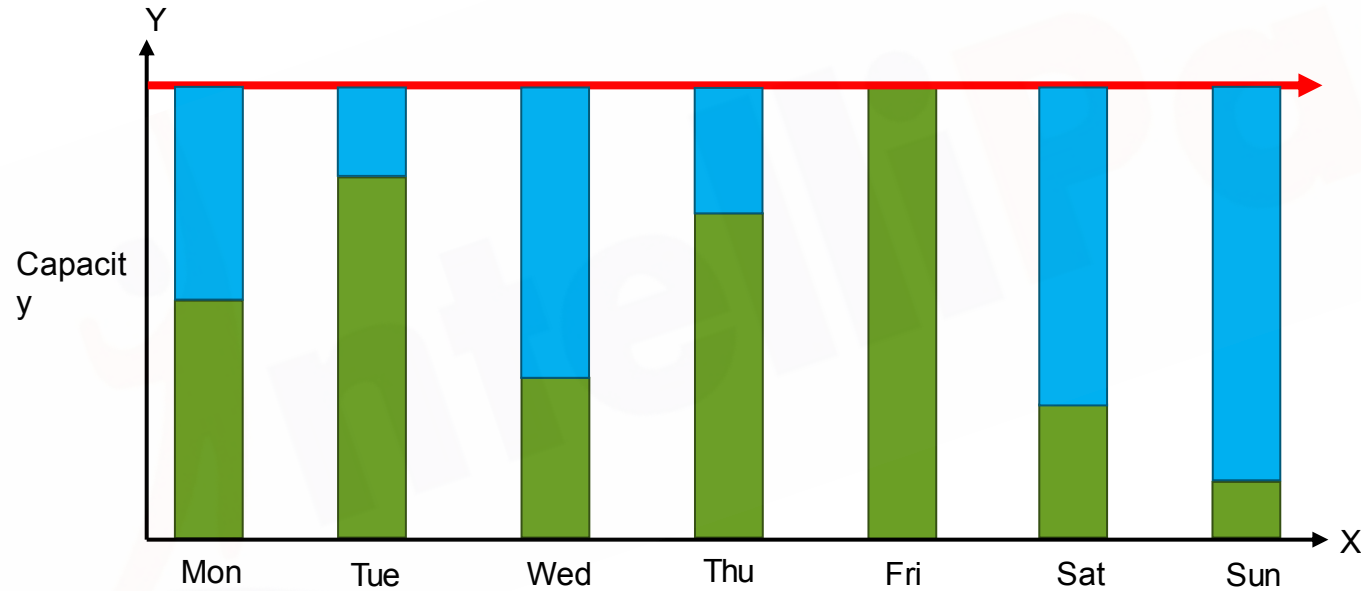
SaaS

# Models & Deployments

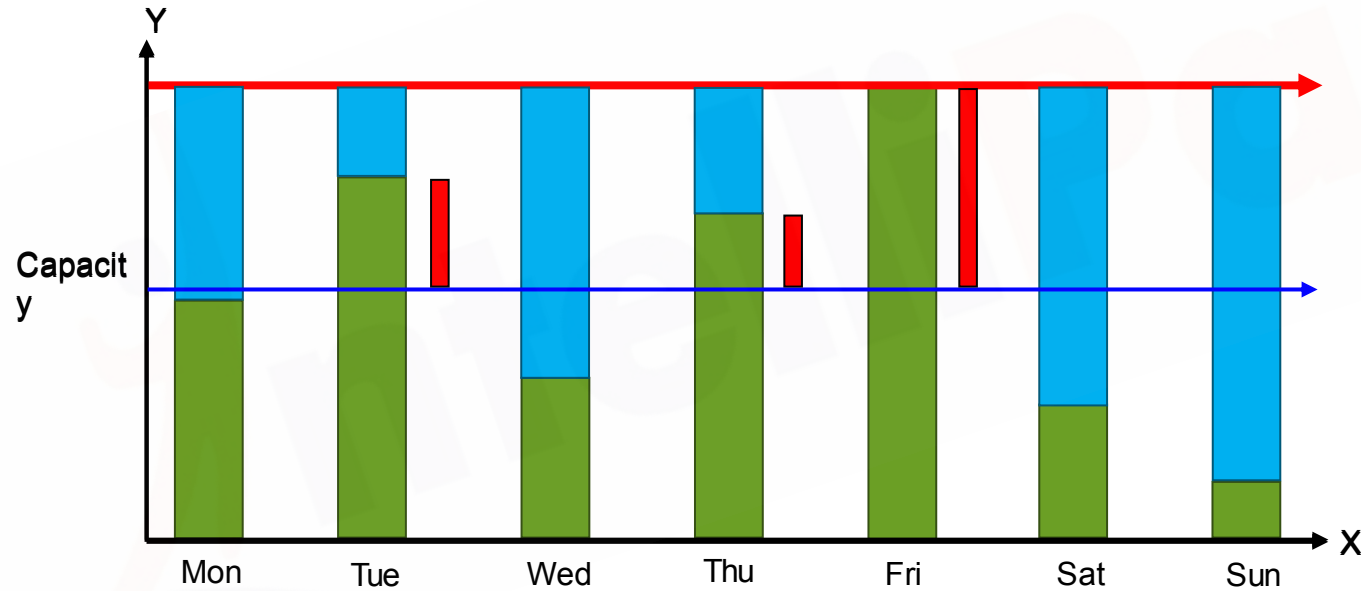


- Cloud Service Models
  - IaaS (Infrastructure as a Service): AWS, Rackspace, MS Azure etc.
  - PaaS (Platform as a Service): AWS Elastic Beanstalk, Heroku etc.
  - SaaS (Software as a Service): Google drive, Google docs, MS Office 365 etc.
- Cloud Deployment Models
  - Public Cloud (AWS, MS Azure, Google Platform, IBM Bluemix etc.)
  - Private Cloud (HPE, VMware, RedHat OpenStack, Dell EMC etc.)
  - Hybrid Cloud

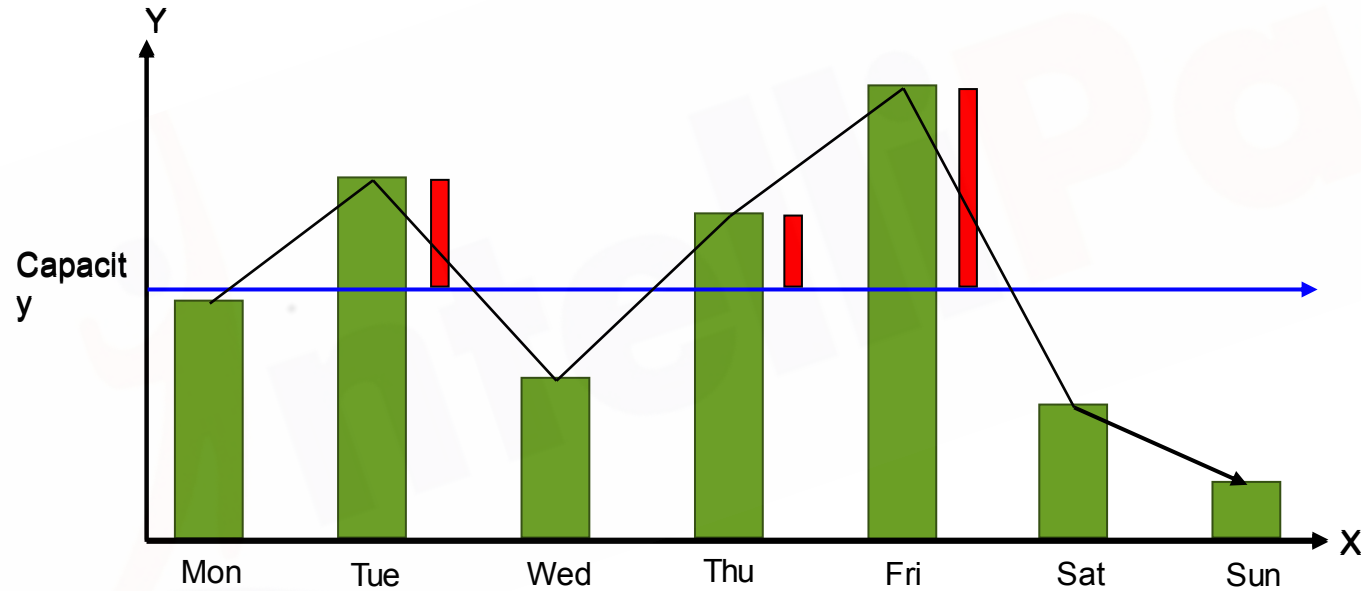
# Advantages over on-premise



# Advantages over on-premise



# Advantages over on-premise



# Advantages over on-premise



No Capital Expenditure, whatsoever



Everything is charged on per second/minute/hour basis and pay only if you use



Getting a new server is as easy as clicking some mouse buttons



Provides very high available solutions without any extra effort



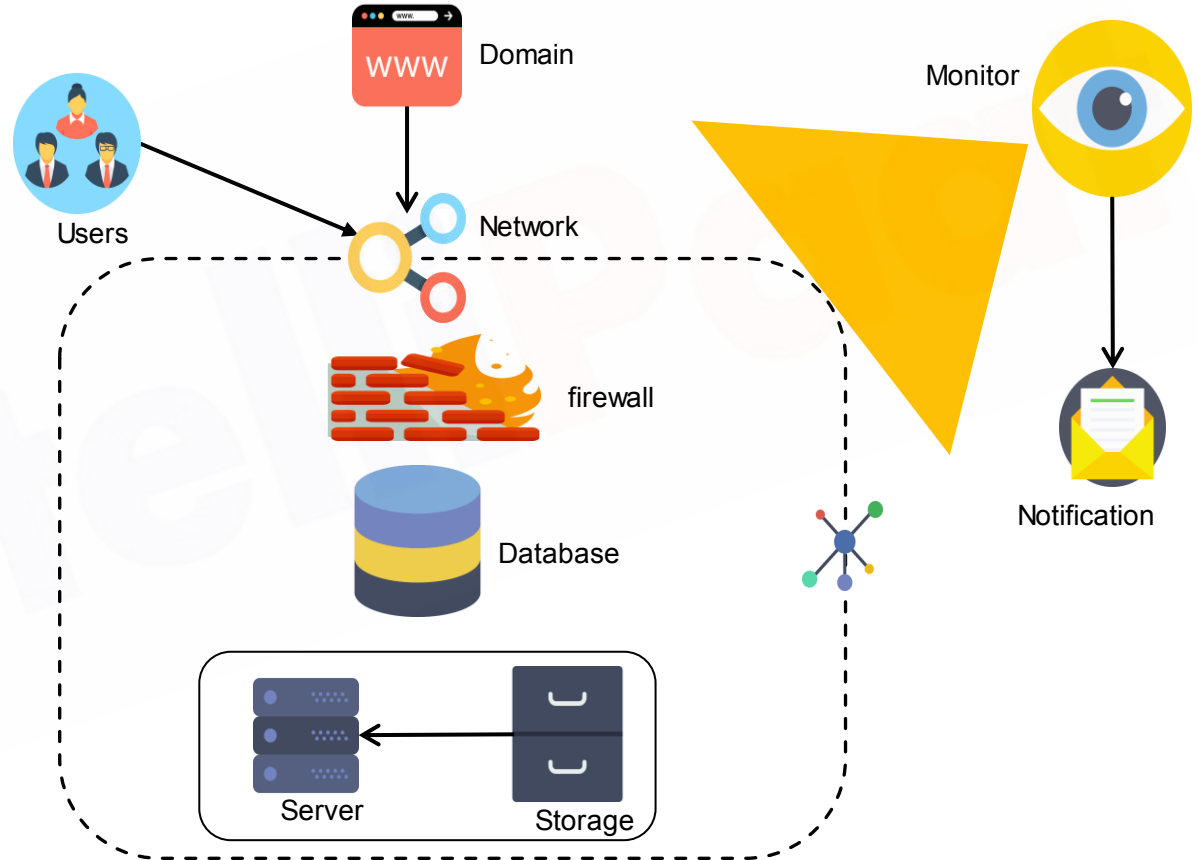
Security



Flexibility and Error shield

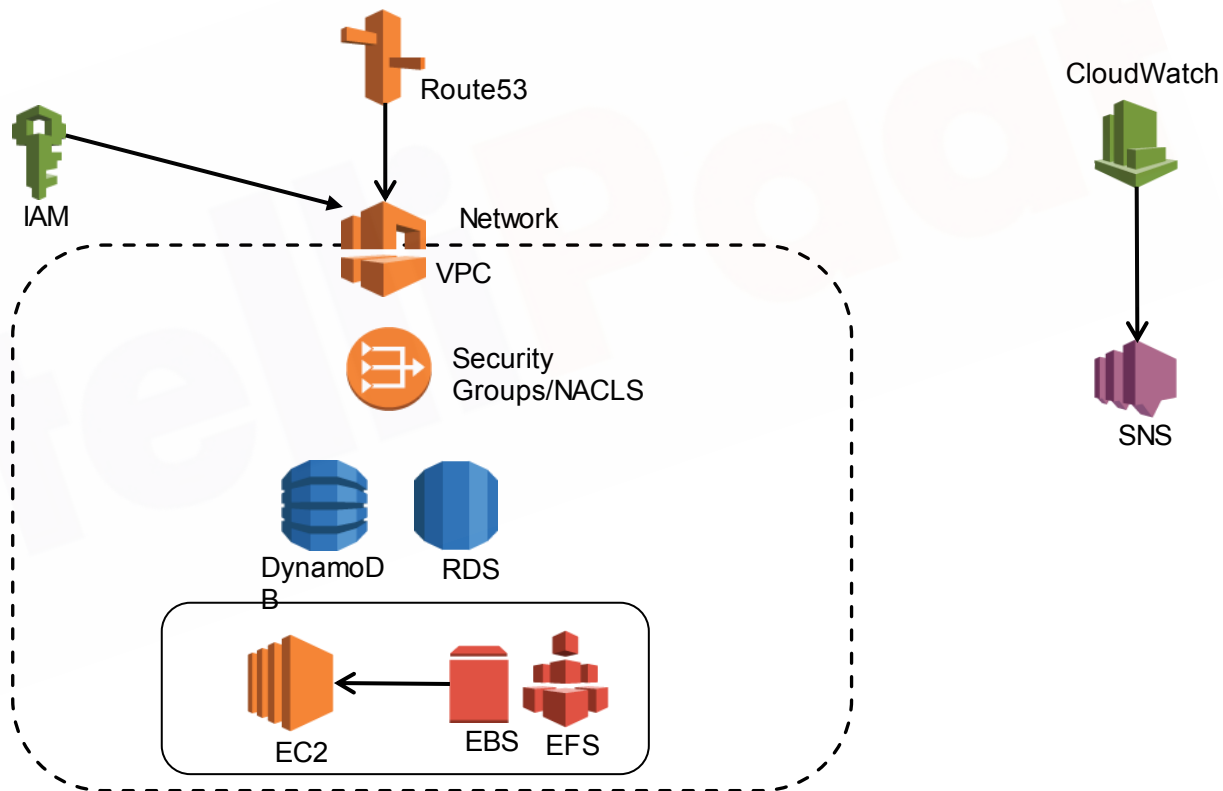
# AWS Suite

Corporate Data Center



# AWS Suite

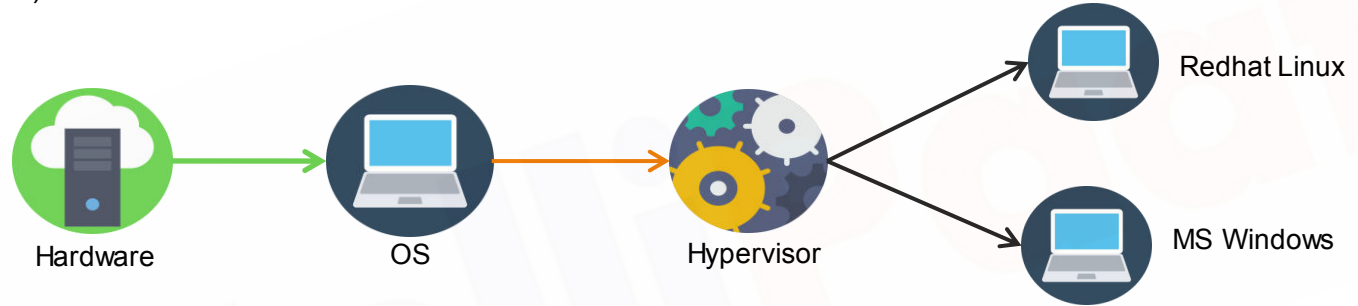
AWS



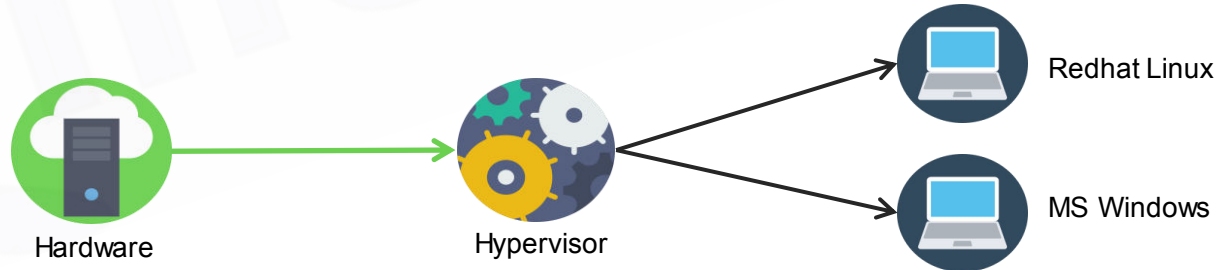


# Virtualization in AWS

- Types of Hypervisor
  - TYPE-2 (Hosted)



- TYPE-1 (Native/Bare Metal)



# XEN Hypervisor



- Xen Project is a hypervisor using microkernel design
- Was launched in October 2003 by University of Cambridge Computer Laboratory
- Leading open source virtualization platform which is powering the biggest players in cloud today
- AWS, RackSpace, OpenStack, Verizon Cloud etc. use Xen
- For more information visit – <https://www.xenproject.org>
- KVM is also used in some places

# Amazon Web Services



A screenshot of the AWS Management Console home page. The browser address bar shows "https://console.aws.amazon.com/console/home?region=us-east-1". The page has a dark navigation bar with "Services" and "Resource Groups" tabs. The main content area is titled "AWS services" and includes a search bar. Below the search bar, there are sections for "Recently visited services" (listing EC2, IAM, VPC, Simple Notification Service, and CloudWatch) and "All services" (categorized into Compute, Storage, Database, Developer Tools, Management Tools, Security, Identity &amp; Compliance, Networking &amp; Content, Internet of Things, Contact Center, Game Development, Mobile Services, and Application Services). On the right side, there are "Helpful tips" (Manage your costs, Create an organization) and "Explore AWS" (New Product Announcements, Migrate from Oracle to Amazon Aurora, Introducing Amazon Kinesis Analytics, AWS Marketplace).



**India : +91-7847955955**

**US : 1-800-216-8930 (TOLL FREE)**



**[sales@intellipaat.com](mailto:sales@intellipaat.com)**



**24X7 Chat with our Course Advisor**