

# CLOUD COMPUTING

# 60 Days Training Program



Unleash the Power of the Cloud: Transforming the Way We Connect and Innovate



IIHT Jaipur believe that upskilling is mightier than massive layoffs. And not just us, but countless companies attest to it and have adopted this approach in their businesses as well. The domain expertise these upskilled individuals bring in is what sets them apart. We focus on nurturing these aspects. So, whether you are a student in college or a fresh graduate entering corporate, we have something for you to offer. We are an online and offline training institution that provides students and professionals with courses in high demand. We provide training in a vast array of technologies, including Cloud Computing, DevOps, Cyber Security, Full stack development, Data Science, Digital Marketing, and Web Development, among others.

To address any issues with corporate infrastructure, you will have a thorough grasp of cloud hosting service providers and their design, deployment, services, and more. Our cloud training programmes are designed to assist you in passing the certification exams offered by the relevant vendors, including AWS, Microsoft Azure, and Google Cloud.

## **Become a Cloud Developer**

From backup and storage to PaaS, SaaS, microservices, and web services, this collection of courses teaches novice cloud developers the fundamentals they need to know.

#### **Become a Cloud Administrator**

While developers create and deliver new applications and services, administrators must make decisions regarding cloud computing platforms and tools.

### **Digital Transformation for Tech Leaders**

Cloud computing is a significant driver of digital transformation initiatives, according to this guide for tech leaders. IT leaders must comprehend not only the granular concepts of cloud computing, but also how this technology works into the enterprise as a whole.



## **Networking Concepts:-**

- Introduction of networks with their different types.
- Explain the purposes and uses of ports and protocols.
- Explain devices, applications, protocols and services at their appropriate
  OSI layers.
- Explain the concepts and characteristics of routing and switching.
- Given a scenario, configure the appropriate IP addressing components.
- Explain the purpose of VLSM subnetting in IPV4.
- Compare and contrast the characteristics of network topologies, types and technologies.
- Given a scenario, implement the appropriate wireless technologies and configurations.

#### **Network Transmission:-**

- Given a scenario, deploy the appropriate cabling solution.
- Explain the purposes of different types of cables used in the network.
- Difference b/w STP & UTP cables in detail.
- Explain the purpose of TX and RX in different devices.
- Given a scenario, determine the appropriate placement of networking devices on a network and install/configure them.
- Explain the purposes and use cases for advanced networking devices.
- Explain the purposes of virtualization and network storage technologies.

#### Virtualization: -

- Explain the concept of virtualization in detail.
- Explain and discuss the concept of open-source, installation of the Linux operating system in Virtual machines.
- Explain and discuss the concept of Microsoft servers with basic roles and features like (DHCP, WDS/AD etc.), and installation of windows server 2016 in Virtual machines.

### \*\*\*Understand and use essential tools

- Access a shell prompt and issue commands with correct syntax
- Use grep and regular expressions to analyze text and filtering
- Access remote systems using SSH protocol
- Create and edit text files
- Create, delete, copy, and move files and directories
- Archive, compress, unpack, and uncompress files using tar, star, gzip, and bzip2
- List, set, and change standard ugo/rwx permissions

Locate, read, and use system documentation including man, info, and files in /usr/share/doc.

Use input-output redirection (>, >>, |, 2>, etc.)

# \*\*\*Operate running systems

- Boot, reboot, and shut down a system normally

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- Identify CPU/memory intensive processes and kill processes
- Preserve system journals
- Start, stop, and check the status of network services
- Securely transfer files between systems

## \*\*\*Configure local storage

- List, create, delete partitions on MBR and GPT disks
- Create and remove physical volumes
- Assign physical volumes to volume groups
- Create and delete logical volumes
- Configure systems to mount file systems at boot by universally unique ID (UUID) or label
- Add new partitions and logical volumes, and swap to a system non-destructively

## \*\*\*Create and configure file systems

- Create, mount, unmount, and use vfat, ext4, and xfs file systems
- Mount and unmount network file systems using NFS
- Extend existing logical volumes

## \*\*\*\*Deploy, configure, and maintain systems

- Schedule tasks using at and cron
- Start and stop services and configure services to start automatically at boot
- Configure systems to boot into a specific target automatically
- Configure time service clients
- Install and update software packages from Red Hat Network, a remote repository, or from the - local file system
- Work with package module streams
- Modify the system bootloader

#### \*\*\*Manage basic networking

- Configure IPv4 and IPv6 addresses
- Configure hostname resolution
- Configure network services to start automatically at boot
- Restrict network access using firewall-cmd/firewall
  - CLOUD AWS
    - What is Cloud and types of Cloud and its working model?
    - What is Cloud Computing?
    - Explaination of AWS CLOUD and there services?
    - Deployment of LINUX Server on AWS using EC2 Service?
    - Installation of redhat and amazon linux on the EC2 service of AWS Public Cloud.
    - How to made connectivity through VM.
    - Services:

- Installation of WebService.
- Installation of RemoteService.
- Installation of DatabaseService.

## **Topics**

- Cloud Computing
- Cloud deployment and service models
- AWS Global Infrastructure and its benefits
- AWS Regions, Availability Zones, and Edge Locations
- AWS Services
- Ways to access AWS Services: AWS CLI, AWS SDK, AWS Management Cons
- User management through Identity Access Management (IAM)
- Various access policies across AWS Services
- AWS Directory Service
- AWS Single Sign-On
- AWS Security & Encryption: KMS, CloudHSM, Sheild, and WAF
- API keys service access
- Best practices for IAM
- Access billing and create alerts on billing
- S3
  - S3 bucket
  - Storage classes in S3
  - Glacier Deep Archive
  - Life cycle policy in S3
  - S3 Lock Policies
  - S3 Performance Optimization
  - Cost optimization for S3
  - Difference between S3, EBS and EFS Talent to Opportunity
  - Glacier: Glacier Vault Policies
  - AWS Global Accelerator
  - Amazon FSx
  - Storage Gateway and its types
- EC2
  - Start, stop and terminate an EC2 Instance
  - Security Groups
  - AMI VPC, ENI, Public, and Private IP
  - Storage services
  - Instance Store
  - EBS and its types SSDs and Provisioned IOPS
  - Hard Disk
  - Drives
  - EFS
  - EBS vs EFS
  - AWS Parallel Cluster Cost optimization
- Load Balancing, Auto-Scaling, and Route 53
  - Elastic Load Balancer and its types
  - Advanced features of ELB
  - Launch Templates
  - Launch Configurations

- Comparison of Classic, Network and Application Load Balancer
- Auto-Scaling
- Components of Auto-Scaling
- Lifecycle of Auto-Scaling
- Auto-Scaling policy
- Working of Route 53
- Various Routing Policies

#### Database

- Amazon RDS and its benefits
- Read Replica
- RDS IAM Authentication
- Aurora: Aurora Serverless & Global Databases
- DynamoDB
- ElastiCache: Working, Redis vs Memcached
- Amazon RedShift: Redshift Spectrum
- Kinesis: AWS Kinesis Data Streams, AWS Kinesis Data FirehouseAWS Lake Formation
- AWS Athena
- AWS QLDB

Connecting Talent to Opportunity

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