IIHT

Connecting Talent to Opportunity

INTEGRATED INSTITUTE OF HARDWARE TECHNOLOGY

www.iiht.org.in

AWS

60 Days
Training Program

Elevate Your Cloud Journey: Unleash the Potential of AWS

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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.

Amazon Web Services is widely regarded as one of the most reliable cloud service providers, and the rapidly developing cloud computing platforms that are made available by both Amazon and AWS make for an exciting range of job opportunities.

What is AWS

IIHT Jaipur offers industry-expert AWS certification training. AWS training matches the AWS Certified Solutions Architect test

Why AWS?

Amazon Web Services may help a company grow. AWS's cost-effective plans are its biggest draw. The platform's unique characteristics make it popular, and many IT hubs and other organisations start their pre-work immediately after AWS hosted execution.

Cloud Computing and AWS 101

Cloud Computing, AWS's leadership in the cloud, and AWS's cloud offerings introduction to S3, EC2, VPC, EBS, ELB, AMI, understanding the AWS architecture and the AWS Management Console, introducing AWS EC2, comparing Public IP and Elastic IP, launching an EC2 instance, auto-scaling, best practises, and cost, and understanding AWS backup services.

Security Management in AWS

Topics:
- User management through Identity Access Management
- 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

Hands On/Demo:
- Create new users who can login to AWS console
- Create role for an application to access S3
- Create policies for new user to have either admin or limited
  privileges Credential rotation for IAM users
- Login to AWS console via MFA
- Create API keys for accessing AWS Services
- Create Budget

Object Storage Options

Topics:
- 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
- Glacier: Glacier Vault Policies
- AWS Global Accelerator
- Amazon FSx
- Storage Gateway and its types

Hands On/Demo:
- Hosting a Static Website on Amazon S3
- Versioning in AWS S3
- Replicating data across regions
- S3 Transfer acceleration
- Transfer and retrieve data from Glacier through lifecycle policy
- Upload a file to AWS S3 through a Website
- Accessing a static website through Cloud Front
- Mount FSx into windows servers and share same file

Amazon EC2

Topics
- 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

Hands On/Demo
- Host your website inside EC2
- Create an AMI
- Create an Elastic IP
- Attaching an EBS volume externally
- To create a snapshot Mount EFS volumes

Load Balancing, Auto-Scaling, and Route 53
Topics:
- 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

Hand-onds
- Create a Classic Load Balancer
- Create a Network Load Balancer
- Work with Application Load Balancer and Auto-Scaling
- Auto-Scaling and Scaling policy
- Point a sub-domain to EC2 box in Route 53

Database Services and Analytics
Topics
- 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

Hands On/Demo:
- Storing an application data in MySQL DB using Relational Database Service (RDS)
- Creating Tables, loading sample data and running queries
- Redis Cache
- Visualize the web traffic using Kinesis Data Stream
- Analyse csv data in S3 with Athena

Networking and Monitoring Services

Topics
- VPC – Benefits and Components
- CIDR Notations
- Network Access Control List v/s Security Groups
- NAT (Network Address Translation): NAT Devices, NAT Gateway and NAT instance
- VPC peering
- Direct Connect
- Private Link
- Classic Link
- AWS Cloud Watch
- AWS CloudTrail
- AWS Config
- Trusted Advisor

Hands On/Demo:
- Create a Non-default VPC and attach it to an EC2 instance
- Accessing Internet inside Private Subnet using NAT Gateway
- Connect two instances in different VPC's using VPC peering
- Monitoring an EC2 instance using CloudWatch
- Enable CloudTrail and Store Logs in S3
- Explore Trusted Advisor

Applications Services and AWS Lambda

Topics
- AWS Simple Email Service (SES)
- Implement SES
- Demonstrate the working of SNS
- SQS: Work with SQS, ASG with SQS
- Amazon MQ
- Amazon Event Bridge
- AWS Simple Notification Service (SNS)
- AWS Simple Work Flow (SWF)
- AWS Lambda AWS Serverless Application Model

Hands On/Demo:
- Send an email through AWS SES
- Send notification through SNS
- Send an e-mail through Lambda when an object is added to S3
- Send notification through Lambda when a message is sent to SQS

Security Practices for optimum Cloud Deployment

Topics
- AWS Responsibilities and Security Attributes
- Knowledge Check
- AWS Cloud
- Formation and Design patterns
- Practice Assignment AWS CloudWatch
- Quiz
- Key Takeaways

Disaster Recovery & Troubleshooting

Topics
- Overview and Products for Disaster Recovery & Troubleshooting and Support
- Practice Assignment Disaster Recovery

AWS Certified Solutions Architect Certification Exam Questionnaires (Self-Paced)

Topics
- AWS Solution Architect Certification Exam Guide
- Certification Exam Questionnaires

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