Cognixia™

Cloud Computing with AWS Training

www.cognixia.com

About Cognixia

Cognixia- A Digital Workforce Solutions Company is dedicated to delivering exceptional trainings and certifications in digital technologies. Founded in 2014, we provide interactive, customized training courses to individuals and organizations alike, and have served more than 100,000 professionals across 37 countries worldwide.

Our team of more than 4,500 industry experts facilitate more than 400 comprehensive digital technologies courses, along with state-of-the-art infrastructure, to deliver the best learning experience for everyone. Our comprehensive series of instructor-led online trainings, classroom trainings and on-demand self-paced online trainings cover a wide array of specialty areas, including all of the following:

- IoT
- Big Data
- Cloud Computing
- Cyber Security
- Machine Learning
- AI & Deep Learning
- Blockchain Technologies
- DevOps

Cognixia is ranked amongst the top five emerging technologies training companies by various prestigious bodies. We're also an MAPR Advantage Partner, Hortonworks Community Partner, RedHat Enterprise Partner, Microsoft Silver Learning Partner and an authorized training partner for Dell EMC, Pivotal, VMware and RSA technologies.

OUR AWARDS & AFFILIATIONS

siliconindia BEST TRAINING PROVIDER BIG DATA HADOOP DEVELOPER OF THE YEAR 2016

Top 10 IoT Training Institutes – 2016 Analytics India MAGAZINE

Asian Training & Leadership Award, Dubai

TOP 5 Emerging Technologies TRAINING COMPANIES 2016 siliconindia

TOP 5 CLOUD TRAINING INSTITUTIONS INDIA 2016 HIGHER EDUCATION Review

TOP 5 Big Data TRAINING INSTITUTES 2017 siliconindia

TOP 10 PROMISING IoT TRAINING INSTITUTES IN INDIA 2017 HIGHER EDUCATION Review

Best Workplace Amongst Emerging Enterprises Awarded By **Great Indian Workplace Awards** – 2018 Mumbai, India

Top 10 IoT Training Companies for the **Second consecutive year.** 2017 IoT India MAGAZINE

Best Training Provider of the Year Awarded By **The Golden Globe Tiger Awards** – 2018 Kuala Lampur, Malaysia

World HRD Congress has awarded for Excellence in Training (Asia)

WORLD HRD CONGRESS Cognixia is awarded as Training Company of the Year, 2018

ISO 9001 2015 CERTIFIED ISO 9001:2015 Certified Quality Management System

ISO ISO/IEC 27001:2013 Certified Information Security Management System

AFRICA Best Emerging Technology Training Organization at the Middle East Training & Development Leadership Awards 2018

SOME FORMIDABLE NAMES AS

OUR TRAINING PARTNERS

THE WORLD OF CLOUD COMPUTING & AWS

Cloud computing enables a user to focus on their projects and customers, without worrying about infrastructure concerns. It not only saves time, money, and effort but also allows users to concentrate on the differentiating aspects of their business.

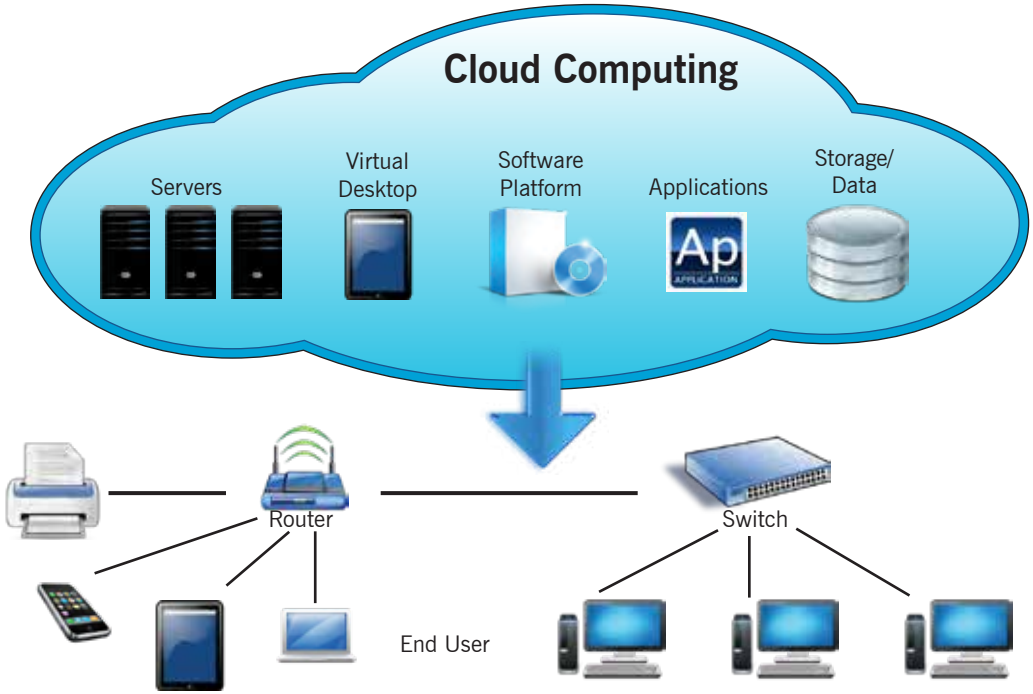
With an annual revenue of $25.65 billion in 2018, Amazon Web Services (AWS) is a leader in Infrastructure-as-a-Service (IaaS), supporting everything from Internet of Things and artificial intelligence to augmented reality and analytics. AWS grew by a whopping 45% in Q4 2018, and it is typically the first beachhead for enterprises before they take to a multi-cloud approach.

AWS offers every benefit that one expects from cloud. It is considerably superior to other cloud service providers in the market in many aspects such as data availability and high transfer stability.

Cognixia's Cloud Computing with AWS course begins by discussing the basics of AWS and Cloud Computing, then moves on to discussing intermediary level concepts such as service Models (IaaS, PaaS, SaaS) and Amazon Virtual Private Cloud (VPC) and ends with diving deep into the particular elements of the AWS platform in detail.

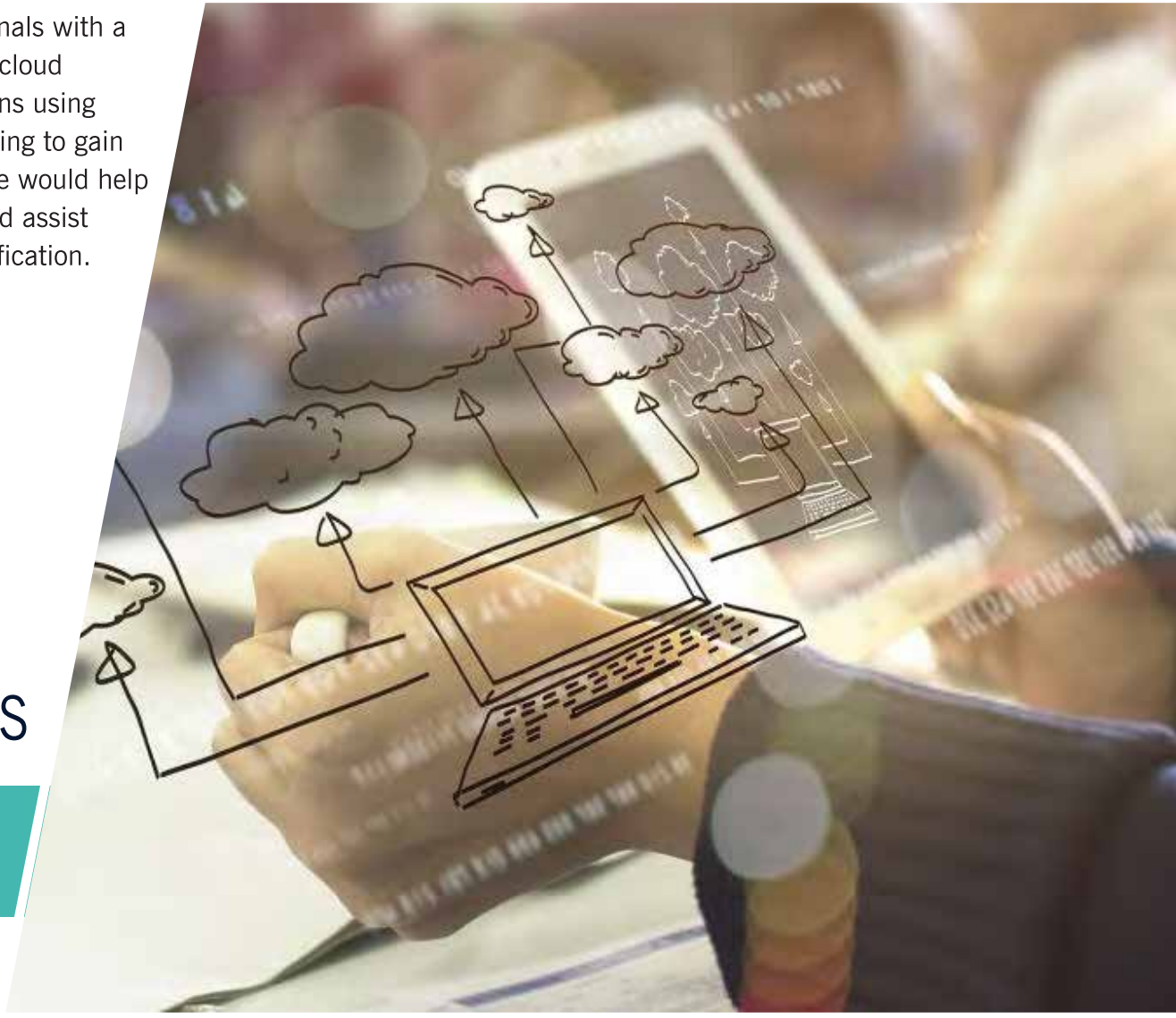
As part of the course participants get a chance to explore VPC, Route53, IAM, EC2, S3, Cloud Front, Autoscaling, Load Balancing, RDS, RedShift, CloudWatch, CloudFormation, Elastic Beanstalk, CloudTrail, SQS, SWF, Lambda, SNS, Glacier, EFS, Elastic Transcoder, Direct Connect, and API Gateway.

The course encompasses hands-on exercises and real-time use cases to ensure that participants develop a thorough practical understanding of the concepts.



WHO SHOULD STUDY CLOUD COMPUTING WITH AWS?

This course is specifically designed for tech savvy professionals with a keen interest in the subject, who aim to pursue a career in cloud computing or are looking to develop cloud-based applications using AWS. This course is also recommended for individuals looking to gain exposure to cloud computing and AWS. Pursuing the course would help learners get a better understanding of the AWS offerings and assist them in preparing for the examinations to get an AWS certification.



ELIGIBILITY / PRE-REQUISITES

An understanding of Linux would be beneficial, though, not mandatory

TRENDS IN THE AWS CLOUD COMPUTING + INDUSTRY VIEWS

"The demand for hybrid cloud has been gaining popularity, particularly among midsize enterprises, including manufacturing companies, regardless of their expensive nature." Technavio

"The public cloud services market will grow rapidly to $236 Billion in 2020" Forrester

"Cloud-based security services will be worth $9 billion in 2020" Gartner

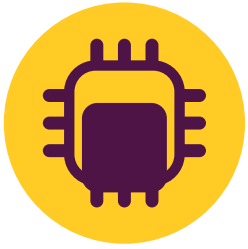
"Cloud computing is projected to increase from $67B in 2015 to $162B in 2020 attaining a compound annual growth rate (CAGR) of 19%" Forbes

"By 2020, a corporate 'no-cloud' policy will be as rare as a 'no-internet' policy is today" Gartner

PROGRAM STRUCTURE

36 hours live online training with an Industry Expert Instructor

POC support and multiple assignments to gain thorough understanding



Training within Amazon Webserver Ecosystem

AMAZON WEB SERVERS

Amazon EC2

Amazon Elastic Block Storage

Amazon Aurora

Amazon EFS

AWS Lambda

COURSE HIGHLIGHTS

1. Globally recognized & experienced instructors
2. Training ensures every learner has a thorough understanding of subject matter
3. Program includes 100% hands-on lab training with exposure to real AWS environment
4. Preparation assistance for the AWS Solution Architect (Associate) examination

DETAILED CURRICULUM : MODULES

1-Introduction to Cloud Computing

- Introduction to Cloud Computing
- Why Cloud Computing?
- Benefits of Cloud Computing
- Public Cloud, Private Cloud, Hybrid Cloud
- Service Models (IAAS, PAAS, SAAS)

2-Introduction to AWS

- Elastic computing.
- Introduction to the AWS products.
- Regions and Availability Zones.
- Signing up for AWS.
- AWS Free usage tier.
- Introduction AWS management console.
- Take a digital tour of an AWS Data Center.

3-EC2 Compute Service

- EC2 Introduction
- Spinning Windows/Linux servers in EC2
- Connecting to Instances using RDP, MobaXTerm, Putty
- EC2 Vertical Scaling Overview and Scale UP and Scale Down Servers
- Security Group Basics and Implementing Security for Real Time Environments.
- Understanding Block Level Storage using EBS.
- Configuring SSD/HDD/Magnetic Storage for Windows and Linux Servers
- Implementing Scaling for EBS Storage.
- Configuring VOLUME-SNAPSHOT-VOLUME Process

DETAILED CURRICULUM : MODULES

4-AWS Cost Controlling Strategies

- Introduction to AWS Pricing.
- Understanding AWS Pricing Models (On Demand, Reserved, Spot).
- Best Practices for Cost Optimization.

5-Amazon Virtual Private Cloud (VPC)

- Networking Basics, IPv4 Addressing Scheme
- Introduction to VPC
- Public and Private IP's
- Understanding Subnetting
- Elastic IP's
- Basic VPC con guration
- Implementing Private/Public subnets in VPC
- VPC security
- Inbound and outbound ACL's
- Deep Dive in to VPC core concepts (Route Tables, Subnets, Internet Gateway)
- Building Custom VPC Network Topology for Real Time Environments
- Implementing NAT (Network Address Translation) in VPC

6-S3 (Simple Storage Service)

- Introduction to AWS Object Storage.
- Creating S3 Buckets and Uploading Data in to it.
- S3 durability and redundancy.
- Various S3 Storage Types (Standard, Infrequent, One Zone)
- Configuring S3 Versioning, Logging, Encryption.
- Hosting a Static Website on S3.
- Implementing Lifecycle and replication for S3 Buckets.
- Understanding S3 Analytics, Metrics and Inventory.

DETAILED CURRICULUM : MODULES

7-Glacier
- Introduction to Glacier Storage.
- Creating Vaults.
- Uploading data to Vaults.
- Key differences between S3 and Glacier.

8-Elastic File System
- Introduction to EFS.
- Creating EFS and mounting on Linux Servers.

9-Identity access management (IAM)
- Introduction of IAM Service.
- Creating Users and Groups.
- Grant Least Privilege.
- Configuring a Strong Password Policy for your Users.
- Enabling MFA for Privileged Users.
- Granting permissions using IAM Policies.
- Creating Custom Policies and Associating to Users and Groups.
- Understanding Roles.
- IAM Access Credentials and its usages.
- AWS CLI.

10-ELB (Elastic Load Balancer)
- Introduction to ELB.
- Implementing HA using Load Balancer for Websites.
- Understanding ELB Load Distribution using Round Robin Algorithm.
- Understanding Health Checks.
- Configuring Advanced VPC and Cross Zone Load Balancing
- Adding and removing instances on ELB

DETAILED CURRICULUM : MODULES

11-Auto scaling

- Understanding Horizontal vs. Vertical scaling.
- Understanding Auto Scaling.
- Create a launch configuration.
- Create an Auto Scaling group.
- Understanding Various Scaling Types (Dynamic, Scheduled, Step, Target Tracking Scaling Policies).
- Setting up an auto-scaled, load-balanced Application using Autoscaling.

12-Route53

- Introduction of Domain Name System.
- Buying Domain names at Domain Registrars.
- Creating Zones on Route53.
- Creating Route53 Records (Address, CNAME, Alias).
- Creating Health Checks in Route53.
- Understanding routing policies provided by AWS.
- Simple Routing Policy and its Implementation.
- Weighted Routing Policy and its Implementation.
- Latency Routing Policy and its Implementation.
- Failover Routing Policy and its Implementation.
- Geolocation Routing Policy and its Implementation.
- Routing Policies Use cases and When to use Which Policy.

13-Cloud Formation & Cloud Former

- Introduction to Cloud Formation
- Understanding Stacks and Cloud Former Tool.
- Automating a Ruby on Rails Application using Cloud Formation.
- Clean up of Cloud formation Environment.
- Creating custom Templates using Cloud Former Tool.

DETAILED CURRICULUM : MODULES

14-Simple Notification Service (SNS)

• Introduction to SNS.
• Creating topics and Evaluating ARNs.
• Subscribing using Various Protocols.
• Publishing Noti cations using SNS.
• Integrating SNS Topics with CloudWatch and Autoscaling Services.

15-CloudWatch

• Introduction of AWS Monitoring
• Understanding Virtualization
• Making a Status Check Failed Incident manually
• CloudWatch Basic and Detailed Monitoring and Its Features.
• Implementing Real Time monitoring by Integrating with SNS.
• Understanding CloudWatch Logs and Metrics.
• Creating Alarms and Its Actions.
• Configuring Dashboards for Organization Architectures.

16-Relational Database Service (RDS)

• Introduction to Relational Databases.
• Creating Relational Databases in RDS.
• Connecting to RDS Database Instances using SQLYog.
• Installing a WordPress APP using RDS Database.
• Automating Backups and Patching for Various Database Engines.
• Creating Redundant and Fault Tolerant Databases.
• Implementing Read Replicas for Read Heave databases.
• RDS Resilient Architecture using Point in Time Recovery.
• Configuring Event Noti cations for Database Instances.
• Understanding Parameter, Option, and Subnet Groups.

DETAILED CURRICULUM : MODULES

17-CloudFront
• Introduction to Content Delivery Network (CDNs).
• Understanding AWS EDGE Network Locations.
• Understanding CloudFront Distributions and Origins.
• Implementing CDN for Websites using CloudFront.
• Going through CloudFront Reports and Analytics.
• CloudFront Security for S3 buckets using OAI (Origin Access Identity).
• Configuring origins and behaviors.

18-Elastic Beanstalk
• Understanding DevOps tools of AWS.
• Automation by Elastic Beanstalk.
• Creating an Application Environment using EB.
• Application versioning and Deploying.
• Clean up of EB Environment.

19-CloudTrail
• Introduction to Audit logging by CloudTrail.
• Creating Trials.
• Storing Trial logs in S3 Buckets.

20-AWS Application Services for Certifcations
• SQS Overview and implementing polling messages.
• SWF Overview.
• Introduction to Elastic Transcoder.
• Introduction API Gateway.
• Introduction of Lambda.
• Implementing a sample script and executing by Lambda.
• AWS Direct Connect.
• Redshift Overview.

Project

COGNIXIA's KEY DIFFERENTIATORS

- LIFETIME LMS ACCESS
- 24 x 7 SUPPORT
- REAL-LIFE PROJECTS & CASE STUDIES
- INDUSTRY EXPERTS AS TRAINERS
- INDUSTRY STANDARD CERTIFICATE

EXIT PROFILE

AWS CLOUD SOLUTION ARCHITECT

AWS CLOUD OPERATION ENGINEER

AWS CLOUD ADMINISTRATOR

TESTIMONIALS

KRUNAL KOSHTI, JAIPUR, INDIA

"I enrolled for AWS Cloud Computing training with Cognixia,It was great experience for me."

SHRUTI SINHA, MUMBAI, INDIA

"Hi, I underwent the training in cloud computing & AWS by Cognixia. The training was really very good and the instructors were very knowledgeable. "

TRISHANT SHETTY, CHENNAI, INDIA

"The training by Cognixia helped me grow my career. They had the best training facilities and a great training team who helped me with all my queries"

DEMI SHANNON, EDINBURGH, UK

"I had always been inquisitive to learn cloud computing, and Cognixia taught me everything I needed to know. They have amazing infrastructure facilities and a very amiable support team. "

ANDREW SEBASTIAN, CALIFORNIA, USA

"I came across the training offerings of Cognixia and got in touch with them. They guided me to a take a leap ahead by learning emerging technologies. I chose to take up learning Cloud Computing and AWS. I was pleasantly surprised at how amazing the training was. After taking the training, I was able to grow significantly in my career and get an awesome pay hike too. Thanks to the Cognixia team for helping and guiding me."

SARAH, NOVENA, SINGAPORE

"It is the perfect time to get trained in cloud computing. Cognixia provided very well organized training sessions, and I even got the chance to review the sessions as many times as I needed to. Cognixia is indeed doing a brilliant job of helping people hone and enhance their skills. "

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To learn more visit
https://www.cognixia.com/