

AI/OPS & MULTI-CLOUD ENGINEERING

ABOUT US

CloudAge Global Services Private Limited is a growing technology training provider. CGS Pvt Ltd offers comprehensive corporate training programs in leading Cloud Data Centre Providers like AWS, CDP, GCP, Snowflake, Azure, and Oracle, etc.

Founded in the year 2013, the company is dedicated to providing high-quality and hands-on training to help individuals and businesses stay ahead of the curve in the rapidly evolving technology landscape.

With a team of experienced and certified trainers, CloudAge Global Services provides a wide range of training programs, including AWS certification training, Cloudera certification training, and other cloud-based technologies. The training programs are designed to equip participants with the skills and knowledge needed to excel in their respective fields and gain a competitive edge in the job market.

CloudAge Global Services has a unique way of providing a highly personalized and interactive learning experience to ensure that participants achieve their learning objectives. Our training programs are delivered through a variety of mediums, including instructor-led classroom sessions, online classes, and self-paced e-learning modules.

In summary, CloudAge Global Services Private Limited is a corporate technology training provider, committed to delivering world-class training programs on Data Management Systems, helping individuals and businesses to stay ahead in the competitive tech industry.

Key Factors

Max Salary Bracket

5 - 65 LPA

Median Salary Ranges

**8 To 24
LPA**

Online & InClass
Live Sessions

**50+ Live
Sessions**

Online & InClass
Lab Sessions

**150+ Lab
Sessions**

Course Duration

**4
Months**

CURRICULUM

Duration

Topics Covered

Week 1

Importance of Cloud, SSH Connection & AWS Account Creation

Aim - Understand why practicing in Datacenter is essential, how servers can handle multiple concurrent connections and serve requests, create an AWS account to be able to practice in a DC environment.

Essential Linux Commands

Aim - Navigate freely in a CLI environment, create & read bash scripts for simple task automations on cli.

Week 2

Evolution of Open Source with Linux Theory

Aim - Understanding what open source is, advantages, Software Release Lifecycle, Linux history, evolution and other Linux Theory Concepts

Understanding DataCenter & Cloud

Aim - Understanding what a Data center is, servers, racks, cabinets, redundant power supply, network and other components of Data Center, an Overview of AWS Global Infrastructure and Infrastructure as a Service delivery model

Week 3

Hardware for Datacenter

Aim - Understanding various hardware components in a server, evolution of hardware resources, SAN, NAS, DAS, NFS, RAID.

Duration

Topics Covered

Week 3

Linux Commands for Hardware

Aim - Understanding all the various commands used to monitor compute, memory and storage resources at a Linux level, concept and types of Linux Namespaces, creation of process, mount and user namespaces

Week 4

Networking for Datacenter

Aim - Understanding various network components in a datacenter and server racks, evolution of networking resources, OSI Model, network topologies

Linux Commands for Networking

Aim - Understanding all the various commands used to monitor network resources at a Linux level, creation of network namespaces

Week 5

VPC

Aim - Understand the concept of Virtual Private Cloud (VPC) within AWS, including subnets, route tables, internet gateways, and network ACLs to create isolated network environments.

EC2

Aim - Gain knowledge about Elastic Compute Cloud (EC2) instances, how to launch and configure instances, understand instance types, AMIs, key pairs, and security groups.

Week 6

S3

Aim - Learn about Amazon Simple Storage Service (S3), its use cases, how to create and manage S3 buckets, understand object storage concepts, and configure bucket policies, permissions, Data Lifecycle Policies & Cross Region Data Replication.

Duration

Topics Covered

Week 6

IAM

Aim - Understand Identity and Access Management (IAM) within AWS, including user management, roles, policies, groups, and managing permissions to ensure secure access control and principle of least privilege.

Week 7

Amazon RDS

Aim - Explore Amazon Relational Database Service (RDS), understand how to launch and manage database instances, learn about different database engines, backups, and scaling options.

Complete Integration

Aim - Understanding how an application deployed on AWS utilizes all the various services. EC2, VPC, S3, RDS & IAM

Includes - S3 Gateway Endpoint for understanding the concept of VPC Endpoints

Week 8

Project Management Fundamentals

Aim - Learn the basics of project management, including project lifecycle, planning, execution, monitoring, and closing. Understand key methodologies such as Agile, Scrum, etc..

Data Architectures & xOps

Aim - Understanding evolution of Enterprise Data Analytics, along with the current Modern Augmented Analytics stack including concepts of Data Warehouse, Data Marts, Data Lake, Data Lakehouse, Delta Lake, Data Mesh, Data Fabric and Various Ops Automations

Includes - Evolution of Hadoop

Duration

Topics Covered

Week 9

Single Node Cluster v1, v2, & v3

Aim - Understand the setup and configuration of a single node Hadoop cluster for versions 1, 2, and 3, exploring the differences in architecture and improvements over versions.

Multi Node Cluster v1, v2, & v3

Aim - Learn how to set up and configure a multi-node Hadoop cluster for versions 1, 2, and 3, understand cluster architecture, resource management, and data distribution.

Week 10

Hadoop Ecosystem - Part 1 (Sqoop, Hive, Impala)

Aim - Explore the Hadoop ecosystem focusing on Sqoop, Hive, and Impala, understanding their roles, functionalities, and how they integrate with Hadoop to facilitate data import, query, and analysis.

Hadoop Ecosystem - Part 2 (Kafka, Spark, HBase, Optional - Flink)

Aim - Dive into the advanced components of the Hadoop ecosystem including Kafka, Spark, HBase, and optionally Flink, to understand their roles in data streaming, processing, and storage.

Week 11

CDP Private Cloud Base Deployment

Aim - Learn about Cloudera Data Platform (CDP) Private Cloud Base, including deployment procedures, cluster management, and integration with on-premise infrastructure.

Includes - Information about other relevant Cloudera offerings

Duration

Topics Covered

Week 11

Amazon EMR

Aim - Understand Amazon Elastic MapReduce (EMR), including cluster creation and management, running big data frameworks like Hadoop, Spark, and Hive on EMR, and cost optimization strategies.

Week 12

Redshift

Aim - Gain knowledge about Amazon Redshift, its architecture, how to create and manage Redshift clusters, understand data warehousing concepts, and perform complex queries and analytics.

Glue

Aim - Learn about AWS Glue, its role in ETL (Extract, Transform, Load) processes, how to create and manage data catalogs, and automate data integration workflows.

Week 13

Athena

Aim - Understand the functionality of AWS Athena, and learn how to perform batch processing using PySpark on AWS EMR with data stored in AWS S3, including a practical demonstration of the entire workflow.

Including - Demo: Batch Processing with PySpark on AWS EMR, AWS S3, AWS Athena

Data Analytics Project

Aim - Learn to execute a comprehensive data analytics project using Python and various AWS services including AWS Lambda, AWS Glue, AWS S3, Amazon Redshift, Amazon EventBridge, and Amazon QuickSight, integrating these tools to analyze and visualize data effectively.

Duration

Topics Covered

Week 14

NASSCOM CERTIFICATION & ADVANCED TOPICS READINESS

Aim - Daily Test Series or Proof of Learnings to get the entire batch Nasscom certified within a week.

Week 15

Data Warehouse Basic Concepts & SQL - Part 1

Aim - Understand the fundamental concepts of data warehousing, including schema design, ETL processes, and the role of SQL in querying and managing data within a data warehouse environment.

Data Warehouse Basic Concepts & SQL - Part 2

Aim - Understand the fundamental concepts of data warehousing, including schema design, ETL processes, and the role of SQL in querying and managing data within a data warehouse environment.

Snowflake Data Cloud Features and Architecture

Aim - Understanding Snowflake's Architecture, Use Cases & Editions

Snowflake Management

Aim - Understand the functionality of Snowflake Virtual Warehouses, explore different pricing models, learn about connectivity options, and discover best practices for cost optimization within the Snowflake environment.

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Topics Covered

Week 15

Snowflake Admin Tasks

Aim - Understanding various job roles & responsibilities in the Snowflake Environment

Week 16

Snowflake Data Loading & Unloading

Aim - Understand the mechanisms of data loading in Snowflake, including the use of internal and external stages, performing bulk loading, and implementing continuous loading using Snowpipe for efficient data integration.

Data Transformation in Snowflake

Aim - Learn to apply transformation and estimation functions for processing structured, semi-structured, and unstructured data in Snowflake, enhancing your ability to manage and analyze diverse data formats effectively.

Snowflake Automation

Aim - Master the use of tasks, user-defined functions (UDFs), and stored procedures in Snowflake to automate workflows, extend SQL capabilities, and execute complex logic within the Snowflake environment.

Snowflake Performance Optimization Best Practices

Aim - Learn techniques for SQL tuning, virtual warehouse tuning, and clustering in Snowflake to improve query performance, resource efficiency, and data organization within the Snowflake environment.

Duration

Topics Covered

Week 16

Security - I

Aim - Gain an understanding of key security concepts including authentication, authorization, network isolation, encryption of data at rest and in transit, data masking, auditing, and data lineage, to ensure robust data security and compliance in a Data Platform Environment

Security - II

Aim - Understanding how access control (Authorization) works in Snowflake with DAC, RBAC & Role Hierarchy. Snowflake Organisations Hands-on

Week 17

Security - III

Aim - Understanding how Data Masking works in Snowflake using Dynamic Data Masking, External Tokenization & Tag Based Masking.

Security - IV

Aim - Understanding how Tag Based Masking & Row Level Filtering works in Snowflake

Security - V

Aim - Understanding the various Disaster Recovery, replication and failover options in Snowflake

Security - VI

Aim - Understanding the network policies, Authentication options and Alerts in Snowflake

Snowflake Data Sharing

Aim - Understand Snowflake's data sharing capabilities, including Data Sharing, Data Exchange, and the Snowflake Marketplace, to enable seamless and secure data collaboration and monetization.

Duration

Topics Covered

Week 17

Complete AI/ML Project using Snowflake & AWS Services

Aim - Understanding how Snowflake fits into the entire organizations Big Data Stack with a Project involving various Big Data analytics workloads.

KEY TRAINER PROFILES

**You Will Be Trained By Industry Experts,
Take A Sneak Peak Into The Trainer Profiles.**

- **Founder of Open Human Resource Community (OHRC)**
- **Co-founder & Director of Cloudage Global Services Pvt Ltd**
- **Chief Technology Officer & IT Consultant**

- **Solutions & Data Architect**
- **CDP & AWS Certified Lead Trainers.**
- **AWS, Data, security, Infrastructure, Private & Public cloud expert. Handled Multiple projects like Data Warehousing, Data Migration etc.**

- **Senior Program Manager & ITIL Expert**
- **PMP Certified.**
- **Expert Site Reliability Consultant, for Multi-Cloud.**

- **Google Certified GCP Expert**
- **CKA Certified Kubernetes Expert.**

LEARNING HOURS

Total Course Duration Project Preparation & Mock Calls Apprpx duration : as per Candidate	4 Months*
Live Online or InClass Session (Faculty-Led)	104 Hrs*
Live Online or InClass Labs (Faculty-Led)	288 Hrs*
Self-Work	288 Hrs*

TOTAL WEEKLY EFFORT 25-30 Hrs*

TOTAL DAILY EFFORT 4 Hrs*

TOTAL EFFORT 573Hrs*

*On Average

IMPORTANT NOTES

2 Sessions per Week
Saturday & Sunday



4 Labs per Week
Monday to Thursday

1. One Student shares the screen and fires commands. Other students practice along with the entire group by firing commands on their systems.
2. Lab director guides the students and resolves their queries. Any errors faced by any other student can also be entertained as long as the student is willing to share the screen.

Before NASSCOM certification: 2 days session and 4 days labs

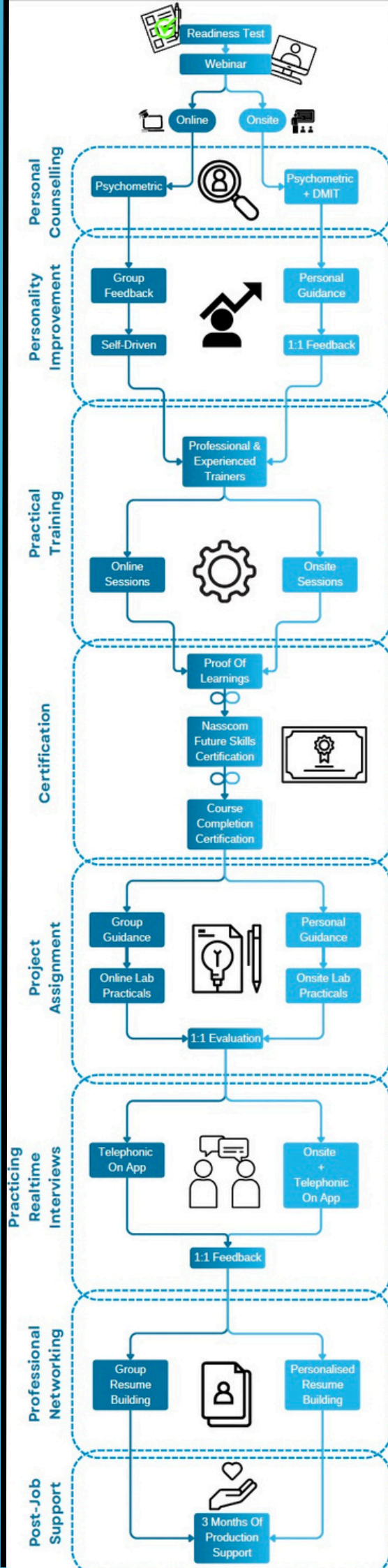
After NASSCOM certification: 4 days session 2 to 6 days labs



This is tentative schedule for reference and is subject to change

*On Average

YOUR



JOURNEY

CERTIFICATIONS

On successful completion of the program, you will be eligible for the certificate(s).*



OUR PARTNERS

nasscom

CERTIFIED MEMBER



CLOUDERA
Partner Network



Google Cloud
Partner

#startupindia





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