ROOMAN
INNOVATE INTEGRATE EMPOWER

Server Admin & Cloud Computing

100% Job Guaranteed Program

Average Salary **4.5 LPA**

Training Mode **Offline**

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- **Industry Relevant Course Curriculum**
- **Learn from Industry Experts**
- **500+ Hiring Companies**
- **100% Placement Assistance**

Learn with Industry Experts & Get your dream Job

About
Rooman Technologies

Rooman Technologies is India's leading training company with 23+ years of expertise in training delivery across government, private and corporate sectors. With a library of 100+ courses, we've trained more than a million students across the country since inception. We are a key National Skill Development Corporation (NSDC) partner and one of the largest training partners successfully implementing PMKVY, DDUGKY programs across India and other skilling initiatives like the UDAAN project. World class infrastructure and work facilities ensure the right environment for people to perform, engage customers and achieve business excellence. Rooman has over 1500 employees across its 100 plus branches in India.

23+
YEARS
of Excellence

10+
LAKH
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100+
Courses
Offered

100+
BRANCHES
World Wide

800+
TRAINERS
& Industry Experts

1500+
MOUs
for Placements

About
Course

Looking to master the core principles of operating a Microsoft Azure cloud infrastructure or Amazon AWS? This learning path is for any IT professional who wants to be involved in the operation and administration of Microsoft Azure and Amazon AWS Based solutions and infrastructure. You will learn the fundamentals of implementing, monitoring, and maintaining Microsoft Azure and Amazon AWS solutions, including major services related to Compute, Server and Storage. This course covers basics of Server Administration, starting with Microsoft Windows Server 2019 and Red Hat Enterprice Linux and also covers advanced Cloud Computing concepts including Microsoft Azure & Amozon AWS.

A cloud administrator is a IT professional who handles cloud computing services for their organization. As a cloud administrator, your job duties are to transition locally hosted infrastructure to the cloud, configure cloud environments to meet your company's needs, and architect systems for data management.

Cloud Computing is a Great Euphemism for Centralization of computer Services under one Server

Course
Curriculum

Windows Server Administration

Installation of Server 2019

- Windows Server 2019 Editions
- Hardware Requirements
- Installation of Windows Server 2019
- Understanding Windows Admin Centre

Windows Storage Basics

- Basic Storage devices, Partition Table, File System
- Dynamic Disk and Volumes

Active Directory

- Active Directory Overview
- Workgroup vs Domain Environments
- Active Directory Installation
- Active Directory Objects
- Organizational Units and Containers

Group policy

- Introduction to Group policy
- Implementing and administering GPOs
- Group Policy scope and Group policy processing
- Implementing administrative templates

DHCP Configuration

- DHCP Overview
- Install and Configure DHCP
- DHCP High Availability

DNS Integration

- Overview of DNS
- DNS Components
- DNS Records
- DNS Zones

NTFS Share Permission

- NTFS and Share Permissions
- Advanced Permissions

FSRM Management

- File Server Resource Manager (FSRM)
- FSRM Quota

Advance Storage

- Understanding Storage Pools
- Data Deduplication
- Planning and Deploying Data Deduplication
- Managing DFS Namespace and DFS Replication
- Understanding DFS Namespace
- Understanding DFS Replication

Working with Hyper-V

- Understanding Hyper-V
- Hyper-V Installation
- Hyper-V Manager
- Nested Virtualization
- Configuring Virtual Machines
- VM Operating System Installation
- Storage Options
- Virtual Switches
- VM State and Checkpoints

iSCSI Implementation

- iSCSI SAN Overview
- iSCSI SAN Implementation

Failover Clustering

- Understanding Failover Clustering
- Failover Cluster Components
- Configuring Failover Clustering

Windows Server Backups

- Overview of Windows Server Backup
- Hyper-V Backup
- Backup Demo

VPN Configuration

- VPN Scenarios
- Tunnelling Protocols
- Authentication Protocols
- Remote Access Configuration
- VPN Client

Monitoring Tools

- Monitoring Tools
- Resource Monitor
- Data Collector Sets
- Reliability Monitor
- Event Viewer
- Monitoring using Windows Admin Centre

Red Hat Enterprise Linux

Introduction to RHEL

- Introduction to Linux
- UNIX and Linux
- Open Source vs Closed Source
- Linux Distributions

Introduction to Command Line

- Linux Kernel, Shell and GUI
- Basic Commands

Understanding Linux File System Hierarchy

- File System Hierarchy
- Navigating Paths
- File Management
- Link Files
- Pattern Matching

Getting Help in Linux

- Getting Help
- man, info, pinfo
- Output Redirection
- Pipelines
- Tee
- Vim
- Environment Variables

Managing Users & Groups

- Users and Groups
- Switching Users
- Sudo
- Password Aging Policy

Configuring File Permissions

- File Permissions
- Special Permissions
- Default File Permissions

Managing Linux Processes

- Linux Process States
- Process Management
- Process Priority
- Controlling Jobs
- Logging Users Out
- Monitoring Process Activity

Configuring Services

- Service States
- Controlling Services and Daemons

Working with SSH

- Secure Shell
- SSH Key Management
- Access Control List

Working with Log Files

- Log Files
- Syslog Priorities
- Journalctl
- Network Time Protocol

Configuring Network Settings

- Network Manager
- IP Address Configuration
- Hostname Config

File compression & backup

- Tar and gzip
- Secure Copy
- SFTP
- RSYNC

Installing Packages in Linux

- Package Management
- Repository Config
- RPM, yum, dnf
- Red Hat Subscription Management

Managing File System

- Mount
- Df, du, fdisk
- Lsblk, blkid, lsof
- Locate and find

Shells Scripting

- Grep and Echo
- Wildcards and Multipliers
- Bash shell Scripting

Job Scheduling

- Job Scheduling
- At and Cron
- Systemd Timer

Security Enhanced Linux

- SELinux
- SELinux Booleans
- SELinux Port Labelling

Managing partitions

- Partition Table
- File System
- Partition Management
- Temporary and Permanent Mount
- Swap File System

Logical Volume Manager

- Introduction to LVM
- Create a new LVM
- Resize an existing LVM

Working with VDO

- Managing Thin-provisioned File system
- Virtual Data Optimizer (VDO)

Network File System

- NFS Client
- NFS Server
- Automounting

Configuring Linux Boot Process

- Boot Process
- Targets Management
- Reset Root Password
- Inspect Boot log
- Early Debug Shell

Managing Firewall

- Configuring firewalld
- Creating Firewall rules

Deploying RHEL

- Installing RHEL
- Troubleshooting Installation
- Installation using Kickstart

Managing Containers

- Introduction to Containers
- Running Containers Images Using Podman Command
- Auto Starting Container Images under Systemd Service
- Adding Persistent Storage to Containers Images

AWS Certified Solutions Architect Associate

AWS Global Infrastructure

- Introduction - AWS Certified Solutions Architect Associate
- Creating an AWS Account
- AWS Cloud Overview - Regions & AZ

AWS Identity & Access Management

- IAM Introduction: Users, Groups, Policies
- IAM MFA Overview
- AWS Access Keys, CLI and SDK
- AWS CloudShell
- IAM Roles for AWS Services
- IAM Security Tools
- IAM Best Practices
- IAM Roles and Policies Hands On
- AWS Policy Simulator

AWS Elastic Cloud Compute

- EC2 Instance Connect
- EC2 Instance Roles Demo
- EC2 Instance Purchasing Options
- Spot Instances & Spot Fleet
- Private vs Public vs Elastic IP
- EC2 Placement Groups
- Elastic Network Interfaces (ENI)
- EC2 Hibernate
- EC2 - Advanced Concepts (Nitro, vCPU, Capacity Reservations)

Working with Elastic Block Store

- EBS Overview
- EBS Snapshots
- AMI Overview
- EC2 Instance Store
- EBS Volume Types
- EBS Multi-Attach
- EBS Encryption
- Amazon EFS

AWS Elastic Load Balancer

- High Availability and Scalability
- Elastic Load Balancing (ELB) Overview
- Classic Load Balancer (CLB)
- Application Load Balancer (ALB)
- Network Load Balancer (NLB)
- Gateway Load Balancer (GWLB)
- Elastic Load Balancer - Sticky Sessions

- Elastic Load Balancer - Cross Zone Load Balancing
- Elastic Load Balancer - SSL Certificates
- Elastic Load Balancer - Connection Draining
- Auto Scaling Groups (ASG) Overview
- High Availability & Scalability

AWS Database Services

- Amazon RDS Overview
- RDS Read Replicas vs Multi AZ
- RDS Encryption + Security
- Amazon Aurora
- ElastiCache
- Athena Overview
- Choosing the right database
- RDS, Aurora, ElastiCache
- DynamoDB, S3, Athena
- Redshift, Glue, Neptune
- Amazon ElasticSearch is now OpenSearch

Route 53

- DNS working
- Route 53 Overview
- Route 53 - Registering a domain
- Route 53 - Creating our first records
- Route 53 - EC2 Setup
- Route 53 - TTL
- Route 53 CNAME vs Alias
- Route 53 - Health Checks
- Routing Policy

Simple Storage Services

- Amazon S3
- S3 Buckets and Objects
- S3 Versioning
- S3 Encryption
- S3 Security & Bucket Policies
- S3 Websites
- S3 CORS
- S3 Consistency Model
- S3 MFA Delete
- S3 Default Encryption
- S3 Access Logs
- S3 Replication (Cross Region and Same Region)
- S3 Pre-signed URLs
- S3 Storage Classes + Glacier
- S3 Lifecycle Rules
- S3 Analytics
- S3 Performance
- S3 Select & Glacier Select
- S3 Event Notifications
- S3 Requester Pays

Elastic Beanstalk

- AWS EC2 Instance Metadata
- AWS SDK Overview
- Beanstalk Overview
- Classic Solutions Architecture Discussions

Monitoring Resources in AWS

- CloudFront Overview
- CloudFront with S3 - Hands On
- CloudFront Signed URL / Cookies
- CloudFront Advanced Concepts
- AWS Global Accelerator - Overview
- AWS Global Accelerator - Hands On
- AWS Monitoring
- CloudWatch Metrics
- CloudWatch Logs
- CloudWatch Agent & CloudWatch Logs Agent
- CloudWatch Alarms
- EC2 Instance Recovery with CloudWatch Alarms
- AWS CloudWatch Events
- Amazon EventBridge
- CloudTrail Overview
- AWS Config - Overview
- CloudTrail vs CloudWatch vs Config

AWS Snow Family

- AWS Snow Family Overview
- Architecture: Snowball into Glacier
- Amazon FSx
- Storage Gateway Overview
- Amazon FSx File Gateway
- AWS Transfer Family

Simple Queue Service

- Introduction to Messaging
- Amazon SQS - Standard Queues Overview
- SQS - Standard Queue
- Amazon Simple Notification Service (AWS SNS)
- Amazon Kinesis
- Data Ordering for Kinesis vs SQS FIFO
- SQS vs SNS vs Kinesis
- Amazon MQ

Amazon Elastic Container Service

- Docker Introduction
- Amazon ECS
- Amazon ECS - Auto Scaling
- Amazon ECS - Rolling Updates
- Amazon ECR
- EKS Overview

Amazon Serverless Services

- Serverless Introduction
- Lambda Overview
- Lambda Limits
- Amazon DynamoDB
- Amazon DynamoDB - Advanced Features
- API Gateway Overview
- API Gateway Security
- AWS Cognito Overview
- Serverless Application Model (SAM) Overview

Managing Security in AWS

- AWS Security
- Encryption 101
- KMS Overview
- KMS Key Rotation
- SSM Parameter Store
- AWS Secrets Manager
- CloudHSM
- Shield - DDoS Protection
- Web Application Firewall (WAF)
- Amazon GuardDuty
- Amazon Inspector
- Macie
- Shared Responsibility Model

Virtual Private Network

- CIDR, Private vs Public IP
- VPC Overview
- Subnet Overview
- Internet Gateways & Route Tables
- Bastion Hosts
- NAT Instances
- NAT Gateways
- DNS Resolution Options & Route 53 Private Zones
- NACL & Security Groups
- VPC Reachability Analyzer
- VPC Peering
- VPC Endpoints
- VPC Flow Logs

- Site to Site VPN, Virtual Private Gateway & Customer Gateway
- Direct Connect & Direct Connect Gateway
- AWS PrivateLink - VPC Endpoint Services
- AWS ClassicLink
- Transit Gateway
- VPC Traffic Mirroring
- IPv6 for VPC
- Egress Only Internet Gateway
- Networking Costs in AWS

Disaster Recovery

- Disaster Recovery in AWS
- Database Migration Service (DMS)
- On-Premises Strategies with AWS
- DataSync - Overview
- Transferring Large Datasets into AWS
- AWS Backup

AWS Infrastructure Management

- Other Services Section Introduction
- CICD Introduction
- CloudFormation Intro
- CloudFormation - Extras
- Step Functions & SWF
- EMR
- OpsWorks
- AWS Workspaces
- AppSync
- Cost Explorer

Microsoft Azure Administrator

Introduction to Microsoft Azure

- Overview of Azure
- Azure Free Account
- NEW - Creating an Azure Free Account

Understanding Azure Interface

- Concepts in Azure
- Tour of the Azure Portal
- Security Defaults

Managing Virtual Machines

- The Virtual Machine Service
- Deploying a virtual machine
- Building a Windows virtual machine
- Common issues when deploying a virtual machine
- Connecting to the Virtual Machine
- Installing Internet Information Services
- Costs Associated with the Virtual Machine
- State of the Virtual Machine
- Build a Linux Virtual Machine
- Deploying a web server on the Linux virtual machine
- Linux machine - SSH keys
- Adding data disks
- Linux Virtual Machines - Cloud init
- Virtual Machine - Boot Diagnostics
- Virtual Machine - Serial Console

- Virtual Machine - Run command
- Azure Bastion Service
- Redeploying a virtual machine
- Understanding virtual machine images
- Creating a specialized image
- Creating VM's out of the images
- Resizing a virtual machine

Managing Storage in Azure

- Server-side encryption - Azure Disk Storage
- Encryption with customer managed keys
- Creating a VM with Premium Disks
- Understanding IOPS and Throughput
- Data Disks Snapshot
- Azure Shared Disks
- Un-managed disks
- Custom Script Extensions

Understanding Availability Sets & Zones

- Availability Sets
- Availability Zones
- Azure Virtual Machine Scale Sets
- Azure Flexible Orchestration Mode

Azure Web App

- Proximity Placement Groups
- Azure Web App
- Azure App Service Plans
- Making simple changes to the Web App

- Azure Web App logging

- Azure Web Apps - Deployment Slots

- Azure Web Apps – Autoscaling

- Azure Web App - Virtual Network Integration

- Installing Visual Studio 2022

- Azure Web App - Custom Domains

- Azure Web App - SSL

- Azure App Service Backup

Managing Containers in Azure

- Introduction to Docker

- Deploying Docker on a virtual machine

- Running the NGINX container on the Linux VM

- The need for an image registry

- Publishing to the Azure Container Registry

- Azure Container Instances

- Primer on Azure Kubernetes

- Deploying an Azure Kubernetes cluster

- Primer on Azure Kubernetes

- Deploying an Azure Kubernetes cluster

Azure Virtual Networks

- Introduction to Virtual Networks in Azure

- The network interfaces

- The CIDR Notation

- Working with Azure virtual networks

- Attaching a secondary network interface

- Network Security Groups

- The Azure Load Balancer Service

- Virtual Network Peering

- Point-to-Site VPN Connections
- Site to Site VPN Connection
- Azure VPN Gateway - High Availability
- Azure Virtual WAN
- Creating the Azure virtual WAN resource
- Azure ExpressRoute

Azure Application Gateway

- Azure Application Gateway
- Open Systems Interconnection Model
- Azure Application Gateway

Network Watcher

- Network Watcher
- User Defined Routes
- Azure Firewall

Azure DNS

- What is the Domain Name System?
- Routing a domain to a virtual machine

Azure Storage

- Local DNS - Setting up the domain
- Azure Private DNS
- Azure Public DNS
- What are storage accounts
- Different types of storage accounts
- Creating an Azure storage account
- Azure Blob service
- Azure Storage Accounts - Different authorization techniques

- Using Azure Storage Explorer

- Using Access keys

- Shared Access Signatures - Blob Level

- Shared Access Signatures - At the Storage Account Level

- Azure Storage Accounts - Stored Access Policy

- Azure Storage Accounts - Active Directory Authentication

- Azure Storage Accounts - Data Redundancy

- Storage Accounts - Access Tiers

- Azure Storage Accounts - Lifecycle policies

- Azure Storage Accounts - Object Replication

- Azure File shares

- Azure File Sync

- AzCopy Tool

Azure Active Directry

- Azure Subscriptions

- What is Azure Active Directory

- Trust between Azure Subscription and Azure AD

- Introduction to Role Based Access Control

- Role-based assignments - Reader Role

- Role-based assignments - Resource group level

- Role-based assignments - Subscription level

- Role-based assignments - Contributor Role

- Role-based assignments - User Access Administrator Role

- Azure AD

- Dynamic Device Groups

- Self-service password reset

- Inviting guest users

- Users - Bulk create and delete

- Multi-Factor Authentication

Azure Access Policies

- Conditional Access Policies
- Administrative Units
- Resource tags
- Moving resources across resource groups
- Azure Policy service

Monitoring & Logs

- Quick look at Azure Monitor
- Azure Monitor - Alerts
- Log Analytics Workspace
- Connecting virtual machine to the workspace
- Log Analytics Queries
- Sending custom logs
- Application Insights

Azure Backups

- Azure Backup feature
- Azure Virtual Machine - Backup
- Deleting your recovery services vault
- Azure Backup retention
- Azure Backup - MARS agent – Backup
- Azure Backup reports
- Azure Site Recovery
- Azure File share backup - Enabling backup
- Azure File share backup - Trigger backup
- Azure File share backup - Restoring share

Working with Azure PowerShell

- Installing Azure PowerShell
- Quick look at a couple of commands
- Setting up Visual Studio Code
- Running PowerShell scripts in Azure Cloud Shell

Azure Resource Monitoring

- Azure Resource Manager templates
- ARM Template structure
- Azure Storage Account - Building the template
- Azure Storage Account - Deploying the template
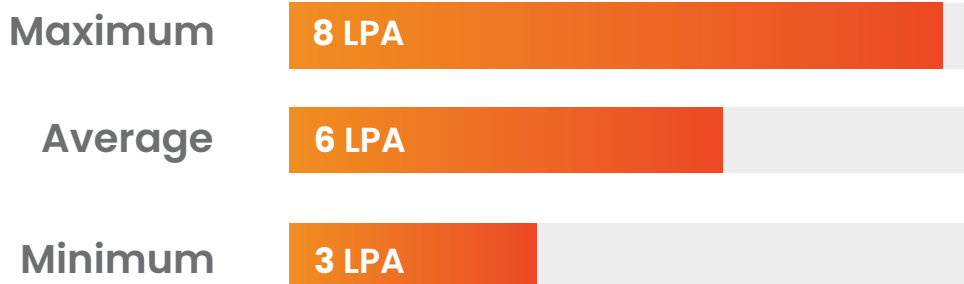- Multiple copies of a resource

Managing Security in Azure

- Attaching the Network Security Group
- Parameters - Secure String
- Secure string - Key vault
- Azure Availability Set
- Creating a data disk
- Attaching an existing data disk
- Azure VM - Azure AD Join

About
Placement Assistance

☑ **All eligible candidates will receive placement assistance after program completion**

☑ **Access to Opportunities with Leading Companies**

☑ **Workshops on Resume building & Interview Preparation**

☑ **Career Guidance & Mentorship by Industry Experts**

Salary Scale

Maximum	8 LPA
Average	6 LPA
Minimum	3 LPA

Job Roles
Offered

- Cloud Administrator
- Cloud Architect
- Cloud Network Engineer
- Cloud System Administrator
- System Administrator

- Cloud Consultant
- Cloud Specialist
- Cloud Solution Architect
- Cloud Engineer
- Cloud Infrastructure Engineer

Our
Alumni Work at

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