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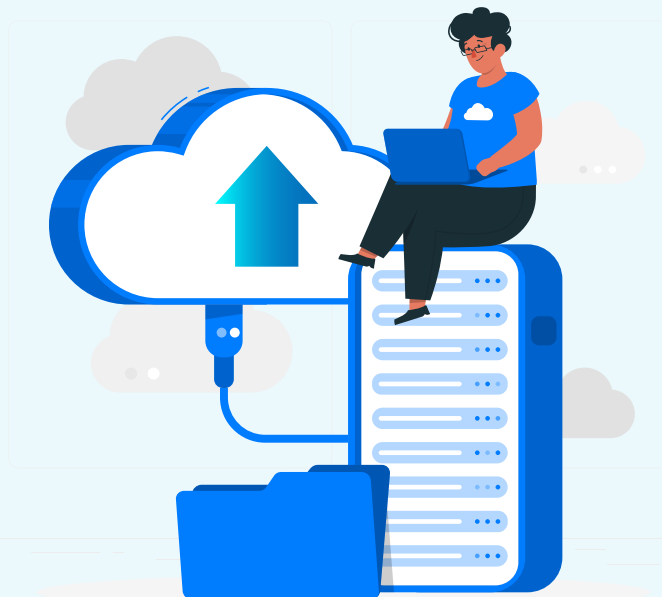
CLOUD SECURITY

PRACTITIONER TRAINING COURSE

Why Cloud Security Practitioner Training Program with InfoSecTrain?

InfosecTrain is a proficient technology and security training and consulting organization across the globe, specializing in various IT security courses and services. You can leverage the following benefits with InfosecTrain:

- We provide hands-on experience with our lab sessions.
- We can help you present your qualifications and work experience for the designated profile.
- We offer a flexible training schedule.
- We provide recorded videos after the session to each participant.
- We provide post-training assistance.
- We also deliver a certificate of participation to each candidate.



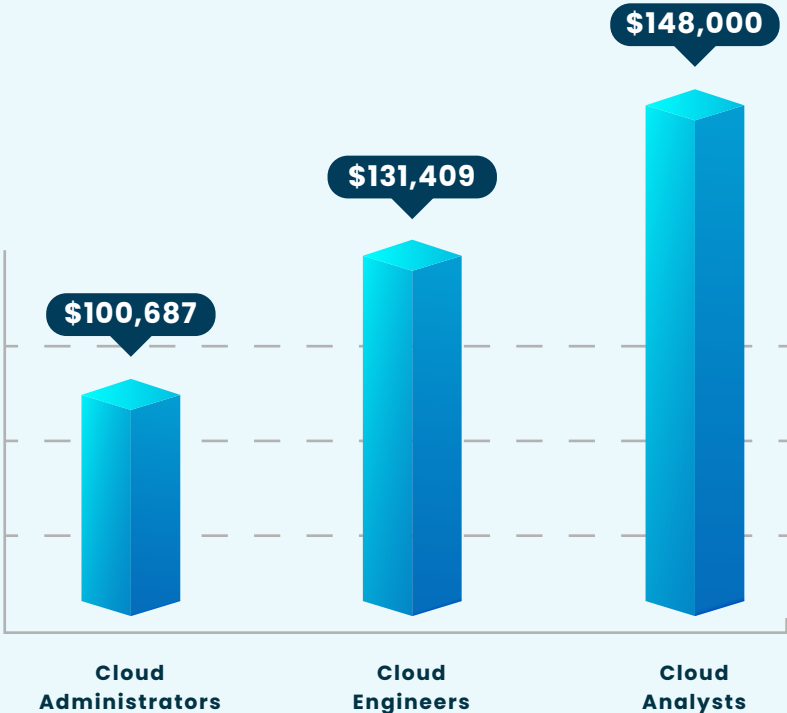
Target Audience

- Any IT professional who wants to start exploring what's cloud? And how to securely configure it?
- Security professionals wanting to explore the security features of cloud
- IT professionals intending to excel in their career opportunities with cloud security skills.

Pre-Requisites

- Knowledge of IT infrastructure (Network, Endpoint, Appliances, etc.)
- Understanding of Basic Security
- Basic knowledge of why Risk, Compliance, and Governance are needed?
- Basic Understanding BCP/DR

CAREER BENEFITS OF CLOUD SECURITY PRACTITIONER



HIRING COMPANIES

"Source: Glassdoor"

Course Objectives

- Evaluating cloud storage methods
- Developing and implementing a GRC framework
- Implementing and maintaining cloud security on different cloud platforms
- Exploring various cloud security concepts and components in-depth
- Understanding cloud security threats, Incident Response, risk management in the cloud, application security and secure deployment
- Learning cloud security audit management and its various components
- Comprehending cloud computing architectural framework
- Apprehending information management and data security
- Understanding governance and enterprise risk management

Course Content

Module 1: Cloud Basics and Models

TOPICS

- 1 Evolution of infrastructure technology
- 2 Virtualization and Hypervisor
- 3 Introduction and Benefits of the cloud
- 4 Shared model of cloud
- 5 Service provided by cloud
- 6 Challenges in cloud

EXERCISE

- Create Azure Free Account
- Create AWS Account

Module 2:

Deploy and Understand Compute and Configuration

TOPICS

- 1 Secure Instance / Virtual Machine Deployment
- 2 Host Configuration Management
- 3 Manage Host Configuration
- 4 Type of Cloud Storage: Disk for Compute
- 5 Application Security
- 6 Threat Modelling overview
- 5 Platform as a Service (PaaS)
- 6 Container and Kubernetes

EXERCISE

- Deploy a Virtual Machine.
- Discuss disk option, image option
- Snapshot of Disk
- Deploy Web App
- Deploy the Container

Module 3:

Control Your Identity and Access Management

TOPICS

- 1 Lifecycle for Identity and Access Management
- 2 Concept of Cloud Account and Least privileges: Policies and Permissions, Groups and Roles, Temporary Credentials
- 3 Secrets Management
- 4 Customer Account Management and External Access

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Security Loopholes in Cloud IAM Services

6

More IAM Best Practices

EXERCISE

- Create a cloud-based identity
- Apply roles to the account
- Create group
- Assign role
- Enable MFA
- Different Security option and Service
- Identity Audit with Identity governance feature in Azure

Module 4:

Deploy and Monitor Network Resources

TOPICS

- 1 Cloud Virtual Networking
- 2 Network Segmentation
- 3 Log Collection and Analysis
- 4 Traffic Analysis of Cloud network
- 5 Restricting Access to Network via JIT
- 6 Cloud Logging Services
- 7 Infrastructure as Code
- 8 Network Protection Services: Service Endpoints and Private Endpoints

EXERCISE

- Deploy Virtual Network
- Allow Administrative Access
- Jump Server and Bastion Host
- VPN
- Troubleshoot the virtual Network.
- Enable logging option
- Deploy Network and VM using json.

Module 5:

Encrypt and Protect Data

TOPICS

- 1 Lifecycle Management
- 2 Storage Account
- 3 Data Identification and Classification

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Cloud Access Security Brokers (CASB)

5

Data Asset Management

6

Cloud Service Encryption: Data at Rest Encryption, Data in Transit Encryption, Disk Level Encryption

EXERCISE

- Deploy storage account with availability option
- Encryption option
- Encryption option for disk storage
- Deploy SQL Server
- Data classification and Identification
- Data Masking
- Data Encryption option

Module 6:

Detecting and Handling Cloud Incidents with Security Operation

TOPICS

- 1 Cloud Based SIEM Models
- 2 Security As a Service
- 3 Understand How SOAR Accelerates Incident Response
- 4 Understand Cloud Incident Response Lifecycle: Discuss Each Phase

EXERCISE

- Creating alert using azure monitor service.
- Microsoft Defender for Cloud
- AWS Cloud Trail
- AWS Cloud Watch and SNS
- Microsoft Sentinel

Module 7:

Basics of Penetration Testing and Forensic in Cloud

TOPICS

- 1 Pen Testing in Cloud
- 2 Scope of Cloud Pen Test
- 3 Common Steps of Pen Testing
- 4 Cloud Forensics
- 5 Cloud Forensics Challenges

EXERCISE

- Examine Logs on Cloud
- Identify Misconfigured S3 Bucket and Publicly accessible data

Module 8:

Manage Business Continuity and Disaster Recovery

TOPICS

- 1 Discuss Cloud Disaster Recovery and Business Continuity
- 2 Main Element of BC/DR in cloud
- 3 Learn to Design Disaster Recovery and Business Continuity in Cloud

EXERCISE

- Implementing Backup for VM
- Implementing DR for storage account

Module 9:

Handling Legal Issue and Policy in Cloud

TOPICS

- 1 Understand the laws impacting cloud computing
- 2 Learn the cloud computing standards
- 3 Describe the legal frameworks for data protection and privacy
- 4 Learn audit planning and reporting in the cloud
- 5 Describe outsourcing and vendor management

EXERCISE

- Conducting Security Audit in AWS with AWS Trusted Advisor
- Auditing Compliance of Azure Resources by creating Policy Assignments with Azure Policy

Module 10:

Manage GRC for the cloud

TOPICS

- 1 Understand GRC in the cloud
- 2 Discuss cloud governance
- 3 Learn to implement and maintain governance for cloud computing
- 4 Discuss risk management in the cloud
- 5 Understand cloud compliance
- 6 Learn to implement GRC in the cloud
- 7 Understand risk management framework and process in the cloud

EXERCISE

- Deploying Policy for the restriction of deployment
- Enforce Compliance by Assigning In-built Policy and Creating Custom Policy in Azure



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