

€ TRAINING

Advanced Microsoft Azure Administrator and
Security Technologies





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Introduction:

This program is designed to prepare participants for the certification exam only.

This training program provides participants with advanced skills for managing and securing Microsoft Azure environments. It empowers them to optimize Azure administration, implement robust security measures, and address complex challenges in cloud infrastructure management.

Program Objectives:

At the end of this program, participants will be able to:

- Administer and optimize complex Azure environments.
- Implement advanced security technologies and practices in Azure.
- Manage and troubleshoot Azure resources and services effectively.
- Apply best practices for securing Azure infrastructure and data.
- Prepare for advanced Azure certification and real-world scenarios.

Targeted Audience:

- Azure Administrators.
- IT Security Professionals.
- Cloud Solutions Architects.
- IT Managers and Consultants.
- Personnel preparing for advanced Azure certifications.

Program Outline:

Unit 1:

Advanced Azure Administration:

- Advanced Azure Resource Manager ARM templates and deployments.
- Managing and optimizing Azure subscriptions and resource groups.

- Advanced Azure policy and governance practices.
- Implementing Azure Blueprints for compliance and management.
- Azure management tools and automation techniques.

Unit 2:

Azure Identity and Access Management:

- Advanced Azure Active Directory AD features and configurations.
- Managing Azure AD Connect and hybrid identities.
- Implementing Conditional Access policies and Multi-Factor Authentication MFA.
- Managing Privileged Identity Management PIM and Identity Protection.
- Integrating Azure AD with on-premises identity systems.

Unit 3:

Advanced Networking in Azure:

- Configuring and managing advanced networking features VNet peering, VPN Gateway.
- Implementing Azure Load Balancer and Azure Application Gateway.
- Managing and securing Azure Firewall and Azure Front Door.
- Advanced network security and monitoring with Network Watcher.
- Designing and optimizing network architectures for performance and security.

Unit 4:

Azure Security Technologies:

- Implementing Azure Security Center and Azure Sentinel.
- Configuring and managing Azure Key Vault for secrets and keys.
- Advanced threat protection using Azure Defender.
- Implementing Azure Security Best Practices and compliance requirements.
- Securing virtual machines, containers, and applications in Azure.

Unit 5:

Advanced Azure Storage Solutions:

- Managing and optimizing Azure Storage accounts and performance.
- Implementing Azure Blob Storage and Azure Files with advanced features.
- Securing and automating Azure Storage operations.
- Configuring and managing data replication and geo-redundancy.
- Integrating Azure Storage with other Azure services and applications.

Unit 6:

Advanced Azure Compute Solutions:

- Managing and optimizing Azure Virtual Machines VMs and Scale Sets.
- Implementing Azure Kubernetes Service AKS and container management.
- Advanced VM security and performance tuning.
- Configuring and managing Azure Functions and App Services.
- Designing and deploying serverless architectures.

Unit 7:

Azure Backup and Disaster Recovery:

- Implementing advanced Azure Backup strategies and configurations.
- Configuring Azure Site Recovery for business continuity and disaster recovery.
- Managing backup and recovery policies for Azure VMs and databases.
- Testing and validating disaster recovery plans.
- Implementing Azure Backup Vaults and recovery services.

Unit 8:

Monitoring and Performance Optimization:

- Advanced monitoring and logging with Azure Monitor and Log Analytics.
- Configuring application insights and performance tuning.

- Analyzing and interpreting Azure performance metrics.
- Implementing automated alerts and responses.
- Optimizing costs and resource usage in Azure environments.

Unit 9:

Governance and Compliance in Azure:

- Implementing and managing Azure Policy and Blueprints for compliance.
- Monitoring and enforcing compliance with Azure Compliance Manager.
- Managing data protection and privacy regulations in Azure.
- Implementing access controls and auditing in Azure.
- Preparing for and conducting compliance assessments.

Unit 10:

Preparing for Certification and Real-World Scenarios:

- Review of advanced Azure Administrator and security concepts.
- Exam preparation strategies and practice questions.
- Case studies and real-world scenarios for Azure administration and security.
- Best practices for Azure certification exams.

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