

Microsoft Azure Architect Technologies

Duration: 5 Day(s)

Course Overview

This course teaches Solutions Architects how to translate business requirements into secure, scalable, and reliable solutions. Lessons include virtualization, automation, networking, storage, identity, security, data platform, and application infrastructure. This course outlines how decisions in each of these areas affects an overall solution.

Review this course online at <https://www.alta3.com/courses/AZ-303T00>

Objectives

- Implement identity solutions and secure Azure infrastructures.
- Apply and manage Azure virtual networks, storage, and compute resources.
- Configure and monitor Azure services for optimized performance.
- Develop app, data, and governance solutions using Azure tools.

Who Should Attend

- IT Professionals
- Azure Solution Architects
- Cloud Administrators
- DevOps Engineers

Prerequisites

- Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding of network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of Active Directory concepts, including domains, forests, domain controllers, replication, Kerberos protocol, and Lightweight Directory Access Protocol (LDAP).
- Understanding of resilience and disaster recovery, including backup and restore operations.

Course Outline

Module 1: Implement VMs for Windows and Linux

1. Select Virtual Machine Size
2. Configure High Availability
3. Implement Azure Dedicated Hosts
4. Deploy and Configure Scale Sets
5. Configure Azure Disk Encryption

Module 2: Automate Deployment and Configuration of Resources

6. Azure Resource Manager Templates
7. Save a Template for a VM
8. Evaluate Location of New Resources
9. Configure a Virtual Hard Disk Template
10. Deploy from a Template
11. Create and Execute an Automation Runbook

Module 3: Implement Virtual Networking

12. Virtual Network Peering
13. Implement VNet Peering

Module 4: Implement Load Balancing and Network Security

14. Implement Azure Load Balancer
15. Implement an Application Gateway
16. Understand Web Application Firewall
17. Implement Azure Firewall
18. Implement Azure Front Door
19. Implement Azure Traffic Manager
20. Implement Network Security Groups and Application Security Groups
21. Implement Azure Bastion

Module 5: Implement Storage Accounts

22. Storage Accounts
23. Blob Storage
24. Storage Security
25. Managing Storage
26. Accessing Blobs and Queues using AAD
27. Configure Azure Storage Firewalls and Virtual Networks

Module 6: Implement Azure Active Directory

28. Overview of Azure Active Directory
29. Users and Groups
30. Domains and Custom Domains
31. Azure AD Identity Protection
32. Implement Conditional Access
33. Configure Fraud Alerts for MFA
34. Implement Bypass Options
35. Configure Trusted IPs
36. Configure Guest Users in Azure AD

37. Manage Multiple Directories

Module 7: Implement and Manage Azure Governance

38. Create Management Groups, Subscriptions, and Resource Groups

39. Overview of Role-Based Access Control (RBAC)

40. Role-Based Access Control (RBAC) Roles

41. Azure AD Access Reviews

42. Implement and Configure an Azure Policy

43. Azure Blueprints

Module 8: Implement and Manage Hybrid Identities

44. Install and Configure Azure AD Connect

45. Configure Password Sync and Password Writeback

46. Configure Azure AD Connect Health

Module 9: Manage Workloads in Azure

47. Migrate Workloads using Azure Migrate

48. VMware - Agentless Migration

49. VMware - Agent-Based Migration

50. Implement Azure Backup

51. Azure to Azure Site Recovery

52. Implement Azure Update Management

Module 10: Implement Cloud Infrastructure Monitoring

53. Azure Infrastructure Security Monitoring

54. Azure Monitor

55. Azure Workbooks

56. Azure Alerts

57. Log Analytics

58. Network Watcher

59. Azure Service Health

60. Monitor Azure Costs

61. Azure Application Insights

62. Unified Monitoring in Azure

Module 11: Manage Security for Applications

63. Azure Key Vault

64. Azure Managed Identity

Module 12: Implement an Application Infrastructure

- 65. Create and Configure Azure App Service
- 66. Create an App Service Web App for Containers
- 67. Create and Configure an App Service Plan
- 68. Configure Networking for an App Service
- 69. Create and Manage Deployment Slots
- 70. Implement Logic Apps
- 71. Implement Azure Functions

Module 13: Implement Container-Based Applications

- 72. Azure Container Instances
- 73. Configure Azure Kubernetes Service

Module 14: Implement NoSQL Databases

- 74. Configure Storage Account Tables
- 75. Select Appropriate CosmosDB APIs

Module 15: Implement Azure SQL Databases

- 76. Configure Azure SQL Database Settings
- 77. Implement Azure SQL Database Managed Instances
- 78. High-Availability and Azure SQL Database