55372 - Microsoft Azure Advanced Administration

Duration: 5 Days

Course Description:

This five-day instructor-led course is designed primarily for Azure Administrators who have some experience with Azure and want a more in depth administrative knowledge of Azure services and how to architect a solution. Lessons include virtualisation, automation, networking, storage, identity, security, data platform, and application infrastructure. This course outlines how decisions in each of these areas affect an overall solution.

Intended Audience:

This course is for IT Professionals with expertise in designing and implementing solutions running on Microsoft Azure. They should have broad knowledge of IT operations, including networking, virtualisation, identity, security, business continuity, disaster recovery, data platform, budgeting, and governance. Azure Advanced Administrators use the Azure Portal and as they become more adept, they use the Command Line Interface. Candidates must have basic skills and knowledge of Azure administration. It is recommended that students have attended the AZ-104 – Microsoft Azure Administrator course prior to attending this course.

Course Outlines:

Module 1: Implement Azure Active Directory

- Overview of Azure Active Directory
- Users and Groups
  - Administrative Units
- Domains and Custom Domains
- Azure AD Identity Protection
- Implement Conditional Access
  - (Named locations in Conditional Access)
- Configure Guest Users (B2B) in Azure AD
- Manage Multiple Directories
- Azure AD Identity Governance
  - Access Reviews
  - Access Packages
  - Privileged Identity Management

Module 2: Implement and Manage Hybrid Identities

- Install and Configure Azure AD Connect & Cloud Sync
- Configure Password Sync and Password Writeback
- Configure Azure AD Connect Health

Module 3: Implement Virtual Networking

- Virtual Networking
- Virtual Network Peering
- VPNs
- Advanced Virtual Networking

Module 4: Implement VMs for Windows and Linux

- Select Virtual Machine Size
- Configure High Availability
  - Availability Sets
  - Availability Zones
  - Proximity Placement Groups
  - Implement Azure Dedicated Hosts
- Deploy and Configure Scale Sets
- Configure Azure Disk Encryption
- Advanced Azure Virtual Machine Administration
- o Virtual Machine Update Management Center
  - Virtual Machine Automanage
  - Virtual Machine Run Command
  - VM Inspector
  - Reset Password
  - Redeploy / Reapply
  - Serial Console

Module 5: Implement Load Balancing and Network Security

- Implement Azure Load Balancer
  - Global load balancers
- Implement an Application Gateway
  - Zone redundant GWs
- Understand Web Application Firewall
- Implement Azure Firewall
- Implement Azure Front Door
- Implementing Azure Traffic Manager
- Implement Network Security Groups and Application Security Groups
- Implement Azure Bastion

Module 6: Implement Storage Accounts

- Storage Accounts
- Blob Storage
- Storage Security
- Managing Storage
- Accessing Blobs and Queues using AAD

Module 7: Implement NoSQL Databases

- Configure Storage Account Tables
- Select Appropriate CosmosDB APIs

Module 8: Implement Azure SQL Databases

- Configure Azure SQL Database Settings
- Implement Azure SQL Database Managed Instances
- High-Availability and Azure SQL Database

Module 9: Automate Deployment and Configuration of Resources

- Azure Resource Manager Templates
- Save a Template for a VM
- Evaluate Location of New Resources
- Configure a Virtual Hard Disk Template
- Deploy from a template
- Create and deploy Bicep Templates
- Create and Execute an Automation Runbook

Module 10: Implement and Manage Azure Governance

- Create Management Groups, Subscriptions, and Resource Groups
- Overview of Role-Based Access Control (RBAC)
- Role-Based Access Control (RBAC) Roles
- Implement and Configure an Azure Policy
- Azure Blueprints

Module 11: Manage Security for Applications

- Azure Key Vault
- Azure Managed Identity

Module 12: Manage Workloads in Azure

- Migrate Workloads using Azure Migrate
- VMware – Agentless Migration
- VMware – Agent-Based Migration
- Implement Azure Backup
- Azure to Azure Site Recovery
- • Implement Azure Update Management