

32 HORAS

AUDIENCIA

This course is for Azure Administrators. Azure Administrators manage the cloud services that span storage, networking, and compute cloud capabilities, with a deep understanding of each service across the full IT lifecycle. They take end-user requests for new cloud applications and make recommendations on services to use for optimal performance and scale, as well as provision, size, monitor and adjust as appropriate. This role requires communicating and coordinating with vendors. Azure Administrators use the Azure Portal and as they become more proficient they use PowerShell and the Command Line Interface.

PREREQUISITES

Successful Azure Administrators start this role with experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.

AZ-101T1-A: Migrate Servers to Azure

INTRODUCTION

This course teaches IT professionals how to discover, assess, plan and implement a migration of on-premises resources and infrastructure to Azure. Students will learn how to use Azure Migrate to perform the discovery and assessment phase that is critical to a successful migration. Students will also learn how to use Azure Site Recovery for performing the actual migration of workloads to Azure. The course focuses primarily on using ASR on a Hyper-V infrastructure to prepare and complete the migration process. Students will learn about using Azure Backup and Azure to Azure replication to ensure adequate disaster recovery mechanisms are in place. Finally, students will learn about using Azure Database Migration Service and the Azure Import/Export service for data migration scenarios.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Use Azure Migrate to discover and assess on-premises virtual machine migration to Azure.
- Use Azure Site Recovery to migrate Hyper-V infrastructures to Azure.
- Use Azure Database Migration service and Azure Import/Export service for data migration scenarios.

COURSE OUTLINE

Module 1: Azure Migrate

- Overview of Cloud Migration
- Azure Migrate: The Process

Module 2: Azure Site Recovery

- Overview of ASR
- Preparing the Infrastructure
- Completing the Migration Process

Module 3: Disaster Recovery

- Backup and Restore
- Azure to Azure Disaster Recovery

Module 4: Migrating Data

- Database Migration
- Import and Export Service

Module 5: Lab-Implement Azure Site Recovery Between Azure Regions

- Implement prerequisites for migration of Azure VMs by using Azure Site Recovery
- Migrate an Azure VM between Azure regions by using Azure Site Recovery

AZ-101T2-A: Implement and Manage Application Services

INTRODUCTION

This course teaches IT Professionals how to manage and maintain the infrastructure for the core web apps and services that developers build and deploy. Students will learn how Azure App Service is used as a Platform as a Service (PaaS) offering for deploying cloud apps for web and mobile environments. Students will learn how to use App Service Environments (ASE) to host a dedicated environment for securing and running App Service apps at scale. Students will also learn how to use deployment slots as staging environments for web apps, that can then be swapped into production when needed. This course also teaches students how to scale up and scale out to meet and adjust for demand, and how bandwidth for web traffic can be optimized using Application Gateways and Content Delivery Networks (CDN). Lastly, the course provides students with an overview of serverless computing solutions, including Azure Functions, Event Grid, Service Bus, and Logic Apps.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Implement use cases and configuration options for Azure App Services and App Service Environments.
- Manage and secure web apps with backup, restore, snapshot, and cloning.
- Optimize your web app performance with Scale Up, Scale Out, Autoscale, and Grow out strategies.
- Deploy serverless computing features like Azure Functions, Event Grid, and Service Bus.

COURSE OUTLINE

Module 1: Introducing the Azure App Service Platform

- Introducing Azure App Service
- App Service Environments

Module 2: Managing and Securing Web Apps

- Deploying Web Apps
- Managing Web Apps
- App Service Security

Module 3: Scaling and Performance

- Scale Up and Scale Out
- Autoscale and Grow out
- Optimizing Bandwidth and Web Traffic

Module 4: Deploying Serverless Computing Solutions

- Serverless Computing Concepts
- Managing Azure Functions
- Managing Event Grid
- Managing Service Bus
- Managing Logic App

Module 5: Lab-Implement and Manage Application Services

- Implement Azure web apps.
- Manage scalability and performance of Azure web apps.

AZ-101T03-A: Implement Advanced Virtual Networking

INTRODUCTION

This course teaches IT Professionals how to implement and configure different Azure networking traffic distribution mechanisms, including Azure Load Balancer, Azure Traffic Manager, and Azure Application Gateway. Students will also learn how to implement site connectivity for multiple scenarios including cross-premises and hybrid configurations, as well as extending on-premises networks into the Microsoft cloud over a dedicated private connection, using Azure ExpressRoute. Lastly, students will learn how to use Network Watcher to monitor and troubleshoot Azure virtual networks. They will also learn how to troubleshoot and remediate common errors in Azure Application Gateway and Azure Load Balancer.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Implement and configure Azure Load Balancer, Azure Traffic Manager, and Azure Application Gateway.
- Implement and configure Site-to-Site VPN connections and ExpressRoute.
- Implement and configure Network Watcher and troubleshooting common network issues.

COURSE OUTLINE

Module 1: Distributing Network Traffic

- Overview of Network Traffic Distribution Options
- Azure Load Balancer
- Azure Traffic Manager
- Azure Application Gateway

Module 2: Site Connectivity

- Site-to-Site VPN Connections
- ExpressRoute

Module 3: Monitoring and Troubleshooting Network Connectivity

- Introducing Network Watcher
- Implementing Network Watcher
- Network Troubleshooting Examples

Module 4: Lab-Implement Advanced Virtual Networking

- Deploy Azure VMs by using Azure Resource Manager templates.
- Implement Azure Load Balancing.
- Implement Azure Traffic Manager load balancing.

AZ-101T04-A: Secure Identities

INTRODUCTION

This course teaches IT Professionals to understand the challenges that organizations face in keeping modern IT environments secure, as the more distributed environments that are part of a cloud-first or hybrid world have rapidly created new security challenges for IT. The course focuses on three key areas in the defense against attackers who target security vulnerabilities, resulting particularly from credential theft and compromised identities: Role-Based Access Control (RBAC), Multi-Factor Authentication (MFA), and Azure Active Directory Privileged Identity Management (PIM). Students learn to implement two-step verification to secure the sign-in process, as well as how to use advanced features like trusted IPs and Fraud Alerts with MFA to customize their identity access strategy. Using Privileged Identity Management, students learn how to apply just the right amount of access rights for just the right amount of time to the various administrative roles as well as to resources.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Use Azure RBAC to grant a granular level of access based on an administrator's assigned tasks.
- Use Azure Multi-Factor Authentication to configure a strong authentication for users at sign-in.
- Use Azure AD Privileged Identity Management to configure access rights based on just-in-time administration.

COURSE OUTLINE

Module 1: Introduction to Identity Protection in Azure

- Role-Based Access Control
- Azure Active Directory (Refresher)
- Protecting Privileged Access in the Environment

Module 2: Using Multi-Factor Authentication for Secure Access

- Introducing Multi-Factor Authentication
- Implementing MFA

Module 3: Azure AD Privileged Identity Management

- Getting Started with PIM
- PIM Security Wizard
- PIM for Directory Roles
- PIM for Role Resources

Module 4: Lab-Secure Identities

- Deploy an Azure VM by using an Azure Resource Manager template.
- Create Azure AD users and groups.
- Delegate management of Azure resources by using custom Role-Based Access Control (RBAC) roles.
- Delegate management of Azure AD by using Privileged Identity Management directory roles.
- Delegate management of Azure resources by using Privileged Identity Management resource roles.