



Azure Administrator

Course AZ-104A

4 Days

Instructor-led, Hands on

Course Information

This four-day, instructor-led course teaches IT Professionals how to manage their Azure subscriptions, secure identities, administer the infrastructure, configure virtual networking, connect Azure and on-premises sites, manage network traffic, implement storage solutions, create and scale virtual machines, implement web apps and containers, back up and share data, and monitor your solution.

This course is for Azure Administrators. The Azure Administrator implements, manages, and monitors identity, governance, storage, compute, and virtual networks in a cloud environment. The Azure Administrator will provision, size, monitor, and adjust resources as appropriate

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Prerequisites

Successful Azure Administrators start this role with the following skills and knowledge:

- Experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.
- 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: Identity

In this module, you will learn how to secure identities with Azure Active Directory, and implement users and groups.

Lessons

Contact ISInc for more information at 916.920.1700 or by visiting our website at <http://www.isinc.com>



- Azure Active Directory
- Users and Groups
- Lab : Manage Azure Active Directory Identities

Module 2: Governance and Compliance

In this module, you will learn about managing your subscriptions and accounts, implementing Azure policies, and using Role-Based Access Control.

Lessons

- Subscriptions and Accounts
- Azure Policy
- Role-based Access Control (RBAC)
- Lab : Manage Subscriptions and RBAC
- Lab : Manage Governance via Azure Policy

Module 3: Azure Administration

In this module, you will learn about the tools an Azure Administrator uses to manage their infrastructure. This includes the Azure Portal, Cloud Shell, Azure PowerShell, CLI, and Resource Manager Templates. This module includes:

Lessons

- Azure Resource Manager
- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- ARM Templates
- Lab : Manage Azure resources by Using the Azure Portal
- Lab : Manage Azure resources by Using ARM Templates
- Lab : Manage Azure resources by Using Azure PowerShell
- Lab : Manage Azure resources by Using Azure CLI

Module 4: Virtual Networking

In this module, you will learn about basic virtual networking concepts like virtual networks and subnetting, IP addressing, network security groups, Azure Firewall, and Azure DNS,

Lessons

- Virtual Networks
- IP Addressing
- Network Security groups
- Azure Firewall
- Azure DNS
- Lab : Implement Virtual Networking

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Module 5: Intersite Connectivity

In this module, you will learn about intersite connectivity features including VNet Peering, Virtual Network Gateways, and Site-to-Site Connections.

Lessons

- VNet Peering
- VPN Gateway Connections
- ExpressRoute and Virtual WAN
- Lab : Implement Intersite Connectivity

Module 6: Network Traffic Management

In this module, you will learn about network traffic strategies including network routing and service endpoints, Azure Load Balancer, Azure Application Gateway, and Traffic Manager.

Lessons

- Network Routing and Endpoints
- Azure Load Balancer
- Azure Application Gateway
- Traffic Manager
- Lab : Implement Traffic Management

Module 7: Azure Storage

In this module, you will learn about basic storage features including storage accounts, blob storage, Azure files and File Sync, storage security, and storage tools.

Lessons

- Storage Accounts
- Blob Storage
- Storage Security
- Azure Files and File Sync
- Managing Storage
- Lab : Manage Azure storage

Module 8: Azure Virtual Machines

In this module, you will learn about Azure virtual machines including planning, creating, availability and extensions.

Lessons

- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability

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- Virtual Machine Extensions
- Lab : Manage virtual machines

Module 9: Serverless Computing

In this module, you will learn administer serverless computing features like Azure App Service, Azure Container Instances, and Kubernetes.

Lessons

- Azure App Service Plans
- Azure App Service
- Container Services
- Azure Kubernetes Service
- Lab : Implement Web Apps
- Lab : Implement Azure Container Instances
- Lab : Implement Azure Kubernetes Service

Module 10: Data Protection

In this module, you will learn about backing up files and folders, and virtual machine backups.

Lessons

- File and Folder Backups
- Virtual Machine Backups
- Lab : Implement Data Protection

Module 11: Monitoring

In this module, you will learn about monitoring your Azure infrastructure including Azure Monitor, alerting, and log analytics.

Lessons

- Azure Monitor
- Azure Alerts
- Log Analytics
- Network Watcher
- Lab : Implement Monitoring