

Designing and Implementing Microsoft Azure Networking Solutions

Course Duration: 8 Hrs.

Course Code: AZ-700T00

Course Overview

The AZ-700T00: Designing and Implementing Microsoft Azure Networking Solutions Course equips IT professionals with the knowledge and experience on secure, scalable and reliable networking solutions in Microsoft Azure. Participants begin with the basic principles of the Azure Virtual Network, including IP addressing, subnets and routing.

Course Content

Module 01 Introduction to Azure Virtual Networks

In this module you will learn how to design and implement fundamental Azure Networking resources such as virtual networks, public and private IPs, DNS, virtual network peering, routing, and Azure Virtual NAT.

Explore Azure Virtual Networks
Configure public IP services

Exercise: design and implement a Virtual Network in Azure
Design name resolution for your Virtual Network
Exercise: configure DNS settings in Azure

Enable Cross-VNet connectivity with peering
Exercise: connect two Azure Virtual Networks using global virtual network peering

Implement virtual network traffic routing
Configure internet access with Azure Virtual NAT

Module 02 Design and implement Hybrid Networking

In this module you will learn how to design and implement hybrid networking solutions such as Site-to-Site VPN connections, Point-to-Site VPN connections, Azure Virtual WAN, and Virtual WAN hubs.

- Design and implement Azure VPN Gateway
- Exercise: create and configure a virtual network gateway
- Connect networks with Site-to-site VPN connections
- Connect devices to networks with Point-to-Site VPN connections
- Connect remote resources by using Azure Virtual WANs
- Exercise: create a Virtual WAN by using the Azure Portal
- Create a network virtual appliance (NVA) in a virtual hub

Module 03: Design and implement Azure ExpressRoute

In this module, you will learn how to design and implement Azure ExpressRoute, ExpressRoute Global Reach, ExpressRoute Fast Path and ExpressRoute Peering options.

- Explore Azure ExpressRoute
- Design an ExpressRoute deployment
- Exercise: Configure an ExpressRoute gateway
- Exercise: Provision an ExpressRoute circuit

Module 04: Load balance non-HTTP(S) traffic in Azure

In this module, you will learn how to design and implement load balancing solutions for non-HTTP(S) traffic in Azure with Azure Load Balancer and Traffic Manager.

- Explore load balancing
- Design and implement an Azure load balancer using the Azure portal
- Exercise: Create and configure an Azure load balancer
- Explore Azure Traffic Manager
- Exercise: Create a Traffic Manager profile using the Azure portal

Module 05 Load balance HTTP(S) traffic in Azure

In this module, you will learn how to design and implement load balancing solutions for HTTP(S) traffic in Azure with Azure Application Gateway and Azure Front Door.

- Design an Azure application gateway
- Configure the Azure application gateway
- Exercise: Deploy Azure application gateway
- Design and configure the Azure front door
- Exercise: create a front door for a highly available web application

Module 06 Design and implement Network security

In this module you will learn to design and implement network security solutions such as Azure DDoS, Azure Firewalls, Network Security Groups, and Web Application Firewall. Secure your virtual networks with Azure Security Benchmark

- Secure your virtual networks in the Azure portal
- Deploy Azure DDoS Protection by using the Azure portal
- Exercise: configure DDoS Protection on a virtual network using the Azure portal
- Deploy Network Security Groups by using the Azure portal
- Design and implement Azure Firewall
- Exercise: deploy and configure Azure Firewall using the Azure portal
- Working with Azure Firewall Manager
- Exercise: secure your virtual hub using Azure Firewall Manager
- Implement a Web Application Firewall on Azure Front Door

Module 07: Design and implement private access to Azure Services

In this module, you will learn to design and implement private access to Azure Services with Azure Private Endpoints and Service Endpoints.

- Explain virtual network service endpoints
- Define Private Link Service and private endpoint
- Integrate Private Link with DNS
- Exercise: restrict network access to PaaS resources with virtual network service endpoints
- Exercise: Create an Azure private endpoint using Azure PowerShell
- Integrate your App Service with Azure virtual networks

Module 08: Design and implement network monitoring

In this module, you will learn to design and implement network monitoring solutions such as Azure Monitor and Network watcher.

- Monitor your networks with Azure Monitor
- Exercise: Monitor a load balancer resource by using Azure Monitor
- Monitor your networks with Azure Network Watcher

