

AZ-100T04-A: Configuring and Managing Virtual Networks

Module 1: Azure Virtual Networks

In this module, you'll be introduced to Azure virtual networks. What are virtual networks and how are they organized? How do you create and configure virtual networks with templates, PowerShell, CLI, or the Azure portal? What is the difference between public, private, static, and dynamic IP addressing? How are system routes, routing tables, and routing algorithms used?

Lessons

- Introducing Virtual Networks
- Creating Azure Virtual Networks
- Review of IP Addressing
- Network Routing

After completing this module, students will be able to:

- Understand virtual networking components, IP addressing, and network routing options.

Module 2: Azure DNS

In this module, you will learn about DNS basics and specifically implementing Azure DNS. In the DNS Basics lesson you will review DNS domains, zones, record types, and resolution methods. In the Azure DNS lesson, we will cover delegation, metrics, alerts, and DNS hosting schemes.

Lessons

- Azure DNS Basics
- Implementing Azure DNS

After completing this module, students will be able to:

- Implement Azure DNS domains, zones, record types, and resolution methods.

Module 3: Securing Virtual Network Resources

In this module, you will learn primarily about Network Security Groups (NSGs) including NSG rules and NSG scenarios. You will also learn how to implement NSGs considering service endpoints, logging, troubleshooting, and other network traffic.

Lessons

- Introduction to Network Security Groups
- Implementing Network Security Groups and Service Endpoints

After completing this module, students will be able to:

- Configure network security groups, service endpoints, logging, and network troubleshooting.

Module 4: Connecting Virtual Networks

In this module, you will learn about two specific types of intersite connectivity: VNet-to-VNet connections and VNet Peering. In both cases, you will learn when to choose which connectivity method, and how to implement and configure the method.

Lessons

- Intersite Connectivity (VNet-to-VNet Connections)
- Virtual Network Peering

After completing this module, students will be able to:

- Implement site connectivity schemas including VNet-to-VNet connections and virtual network peering.