

Section 4: Configure and Manage Virtual Networking
Preparation Course for Exam AZ-104
Microsoft Azure Administrator

Configure and Manage Virtual Networking (30-35%)

Implement and manage virtual networking

Create and configure VNET peering • configure private and public IP addresses, network routes, network interface, subnets, and virtual network

- [Virtual network peering](#)
- [Create, change, or delete virtual network peering](#)
- [Tutorial: Connect virtual networks with virtual network peering using the Azure portal](#)
- [Configure private IP addresses for a virtual machine using the Azure portal](#)
- [Quickstart: Create a virtual network using the Azure portal](#)
- [Create, change, or delete a network interface](#)
- [Add, change, or delete a virtual network subnet](#)
- [Create, change, or delete a virtual network](#)

Configure name resolution

Configure Azure DNS • configure custom DNS settings • configure a private or public DNS zone

- [Create, change, or delete a virtual network peering](#)
- [Name resolution for resources in Azure virtual networks](#)
- [Use Azure DNS to provide custom domain settings for an Azure service](#)
- [How to manage DNS Zones in the Azure portal](#)
- [Quickstart: Configure Azure DNS for name resolution using the Azure Portal](#)
- [Tutorial: Host your domain in Azure DNS](#)
- [Quickstart: Create an Azure private DNS zone using the Azure portal](#)

Secure access to virtual networks

Create security rules • associate an NSG to a subnet or network interface • evaluate effective security rules • deploy and configure Azure Firewall • deploy and configure Azure Bastion Service

- [Work with security roles](#)
- [Create, change, or delete a network security group](#)
- [Tutorial: Deploy and configure Azure Firewall using the Azure portal](#)
- [Create an Azure Bastion host](#)

Configure load balancing

Configure Application Gateway • configure an internal load balancer • configure load balancing rules • configure a public load balancer • troubleshoot load balancing

- [Application Gateway configuration overview](#)
- [Quickstart: Direct web traffic with Azure Application Gateway using Azure PowerShell](#)
- [Tutorial: Balance internal traffic load with a Basic load balancer in the Azure portal](#)
- [Create an internal load balancer by using the Azure PowerShell module](#)
- [Quickstart: Create a Load Balancer to load balance VMs using the Azure portal](#)
- [Troubleshoot Azure Load Balancer](#)

Monitor and troubleshoot virtual networking

Monitor on-premises connectivity • use Network Performance Monitor • use Network Watcher • troubleshoot external networking • troubleshoot virtual network connectivity

- [Step-By-Step: Monitoring On-Premise Active Directory via Azure AD Connect Health](#)
- [Diagnose on-premises connectivity via VPN gateways](#)
- [Network Performance Monitor solution: Performance monitoring](#)
- [What is Azure Network Watcher?](#)
- [Create an Azure Network Watcher instance](#)
- [Troubleshoot Virtual Network Gateway and Connections using Azure Network Watcher Azure CLI](#)

- [Troubleshoot connections with Azure Network Watcher using the Azure portal](#)

Integrate an on-premises network with an Azure virtual network

Create and configure Azure VPN Gateway • create and configure VPNs • configure ExpressRoute • configure Azure Virtual WAN

- [Tutorial: Create and manage a VPN gateway using PowerShell](#)
- [Create a route-based VPN gateway using the Azure portal](#)
- [Create a Site-to-Site connection in the Azure portal](#)
- [ExpressRoute overview](#)
- [Tutorial: Create and modify an ExpressRoute circuit](#)
- [About Azure Virtual WAN](#)
- [Tutorial: Create a Site-to-Site connection using Azure Virtual WAN](#)
- [Connect a VPN Gateway \(virtual network gateway\) to Virtual WAN](#)