Training: Microsoft
AZ-700 Designing and Implementing Microsoft Azure Networking Solutions

TRAINING GOALS:

his course teaches Network Engineers how to design, implement, and maintain Azure networking solutions. This course covers the process of designing, implementing, and managing core Azure networking infrastructure, Hybrid Networking connections, load balancing traffic, network routing, private access to Azure services, network security and monitoring. Learn how to design and implement a secure, reliable, network infrastructure in Azure and how to establish hybrid connectivity, routing, private access to Azure services, and monitoring in Azure.

Skills gained:

- Design, implement and manage hybrid network connections

- Design and implement core Azure networking infrastructure
- Design and implement routing and load balancing in Azure
- Secure and monitor networks
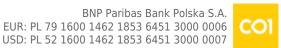- Design and implement private access to Azure Services

Audience profile:

This course is for Network Engineers looking to specialize in Azure networking solutions. An Azure Network engineer designs and implements core Azure networking infrastructure, hybrid networking connections, load balance traffic, network routing, private access to Azure services, network security and monitoring. The azure network engineer will manage networking solutions for optimal performance, resiliency, scale, and security.

CONSPECT:

- Introduction to Azure Virtual Networks
    - Explore Azure Virtual Networks
    - Configure public IP services
    - Design name resolution for your Virtual Network
    - Enable Cross-VNet connectivity with peering
    - Implement virtual network traffic routing
    - Configure internet access with Azure Virtual NAT

- Design and Implement Hybrid Networking
    - Design and implement Azure VPN 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
    - Create a network virtual appliance (NVA) in a virtual hub
- Design and implement Azure ExpressRoute
    - Explore Azure ExpressRoute
    - Design an ExpressRoute deployment
    - Configure peering for an ExpressRoute deployment
    - Connect an ExpressRoute circuit to a VNet
    - Connect geographically dispersed networks with ExpressRoute global reach
    - Improve data path performance between networks with ExpressRoute FastPath
    - Troubleshoot ExpressRoute connection issues
- Load balancing non-HTTP(S) traffic in Azure
    - Explore load balancing
    - Design and implement Azure load balancer using the Azure portal
    - Explore Azure Traffic Manager
- Load balancing HTTP(S) traffic in Azure<
    - Design Azure application gateway
    - Configure Azure application gateway
    - Design and configure Azure front door
- Design and implement network security
    - Secure your virtual networks in the Azure portal
    - Deploy Azure DDoS Protection by using the Azure portal
    - Deploy Network Security Groups by using the Azure portal
    - Design and implement Azure Firewall
    - Working with Azure Firewall Manager
    - Implement a Web Application Firewall on Azure Front Door
- Design and implement private access to Azure Service
    - Define Private Link Service and private endpoint
    - Explain virtual network service endpoints
    - Integrate Private Link with DNS
    - Integrate your App Service with Azure virtual networks
- Design and implement network monitoring<
    - Monitor your networks with Azure Monitor

○ Monitor your networks with Azure Network Watcher

REQUIREMENTS:

Successful Azure Network Engineers start this role with experience in enterprise networking, on-premises or cloud infrastructure and network security.

○ Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.

○ Understanding of network configurations, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.

○ Understanding of software defined networking.

○ Understanding hybrid network connectivity methods, such as VPN.

○ Understanding resilience and disaster recovery, including high availability and restore operations.

Difficulty level

CERTIFICATE:

Certificate of completing an authorized Microsoft training.

TRAINER:

Microsoft Certified Trainer.