

Designing and Implementing Microsoft Azure Networking Solutions

1. You need to connect Vnet2 and Vnet3. The solution must meet the virtual networking requirements and the business requirements.

Which two actions should you include in the solution? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A. On the peering from Vnet1, select Allow for Traffic forwarded from remote virtual network.

B. On the peerings from Vnet2 and Vnet3, select Allow for Traffic forwarded from remote virtual network.

C. On the peering from Vnet1, select Use the remote virtual network's gateway or Route Server.

D. On the peering from Vnet1, select Allow for Traffic to remote virtual network.

E. On the peerings from Vnet2 and Vnet3, select Use the remote virtual network's gateway or Route Server.

Answer(s): A E

2. HOTSPOT (Drag and Drop is not supported)

You need to recommend a configuration for the ExpressRoute connection from the Boston datacenter. The solution must meet the hybrid networking requirements and business requirements. What should you recommend? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Set the ExpressRoute gateway type to:

	▼
High Performance (ERGW2AZ)	
Standard Performance (ERGW1AZ)	
Ultra Performance (ERGW3AZ)	

To minimize latency of traffic to Vnet2:

Create a dedicated ExpressRoute circuit for Vnet2
Connect Vnet2 directly to the ExpressRoute circuit
Configure gateway transit for the peering between Vne

A. See Explanation section for answer.

Answer(s): A

3. You need to configure GW1 to meet the network security requirements for the P2S VPN users.

Which Tunnel type should you select in the Point-to-site configuration settings of GW1?

A. IKEv2 and OpenVPN (SSL)

B. IKEv2

C. IKEv2 and SSTP (SSL)

D. OpenVPN (SSL)

E. SSTP (SSL)

Answer(s): D

4. You need to meet the network security requirements for the NSG flow logs.

Which type of resource do you need, and how many instances should you create? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Resource type:

- An Azure Monitor workbook
- An Azure Monitor data collection rule
- A Log Analytics workspace
- An NSG
- A storage account

Minimum number of instances:

- 0
- 1
- 2
- 3
- 4

A. See Explanation section for answer.

Answer(s): A

5. Your company has a single on-premises datacenter in Washington DC. The East US Azure region has a peering location in Washington DC.

The company only has Azure resources in the East US region.

You need to implement ExpressRoute to support up to 1 Gbps. You must use only ExpressRoute Unlimited data plans. The solution must minimize costs.

Which type of ExpressRoute circuits should you create?

A. ExpressRoute Local

B. ExpressRoute Direct

C. ExpressRoutePremium

D. ExpressRoute Standard

Answer(s): A

6. You are planning an Azure Point-to-Site (P2S) VPN that will use OpenVPN.

Users will authenticate by an on-premises Active Directory domain.

Which additional service should you deploy to support the VPN authentication?

A. an Azure key vault

B. a RADIUS server

C. a certification authority

D. Azure Active Directory (Azure AD) Application Proxy

Answer(s): B

7. You plan to configure BGP for a Site-to-Site VPN connection between a datacenter and Azure. Which two Azure resources should you configure? Each correct answer presents a part of the solution. (Choose two.)

NOTE: Each correct selection is worth one point.

A. a virtual network gateway

B. Azure Application Gateway

C. Azure Firewall

D. a local network gateway

E. Azure Front Door

Answer(s): A D

8. You fail to establish a Site-to-Site VPN connection between your company's main office and an Azure virtual network.

You need to troubleshoot what prevents you from establishing the IPsec tunnel.

Which diagnostic log should you review?

A. IKEDiagnosticLog

B. RouteDiagnosticLog

C. GatewayDiagnosticLog

D. TunnelDiagnosticLog

Answer(s): A

9. You have an Azure virtual network and an on-premises datacenter.

You are planning a Site-to-Site VPN connection between the datacenter and the virtual network.

Which two resources should you include in your plan? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A. a user-defined route

B. a virtual network gateway

C. Azure Firewall

D. Azure Web Application Firewall (WAF)

E. an on-premises data gateway

F. an Azure application gateway

G. a local network gateway

Answer(s): B G

10. HOTSPOT (Drag and Drop is not supported)

You need to connect an on-premises network and an Azure environment. The solution must use ExpressRoute and support failing over to a Site-to-Site VPN connection if there is an ExpressRoute failure. What should you configure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Routing type:

Policy-based

Route-based

Static routing

Number of virtual network gateways:

1

2

3

A. See Explanation section for answer.

Answer(s): A

11. Your company has an on-premises network and three Azure subscriptions named Subscription1, Subscription2, and Subscription3.

The departments at the company use the Azure subscriptions as shown in the following table.

Department	Subscription
IT	Subscription1
Research	Subscription1
Development	Subscription2
Testing	Subscription2
Distribution	Subscription3

All the resources in the subscriptions are in either the West US Azure region or the West US 2 Azure region. You plan to connect all the subscriptions to the on-premises network by using ExpressRoute. What is the minimum number of ExpressRoute circuits required?

A. 1

B. 2

C. 3

D. 4

E. 5

Answer(s): A

12. Your company has offices in New York and Amsterdam. The company has an Azure subscription. Both offices connect to Azure by using a Site-to-Site VPN connection. The office in Amsterdam uses resources in the North Europe Azure region. The office in New York uses resources in the East US Azure region. You need to implement ExpressRoute circuits to connect each office to the nearest peering location. Once the ExpressRoute circuits are connected, the on-premises computers in the Amsterdam office must be able to connect to the on-premises servers in the New York office by using the ExpressRoute circuits. Which ExpressRoute option should you use?

A. ExpressRoute FastPath

B. ExpressRoute Global Reach

C. ExpressRoute Direct

D. ExpressRoute Local

Answer(s): B

13. HOTSPOT (Drag and Drop is not supported)
You have an Azure subscription that contains a single virtual network and a virtual network gateway. You need to ensure that administrators can use Point-to-Site (P2S) VPN connections to access resources in the virtual network. The connections must be authenticated by Azure Active Directory (Azure AD). What should you configure? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Answer Area:

Azure AD configuration:

An access package
Conditional access policy
An enterprise application
A VPN certificate

P2S VPN tunnel type:

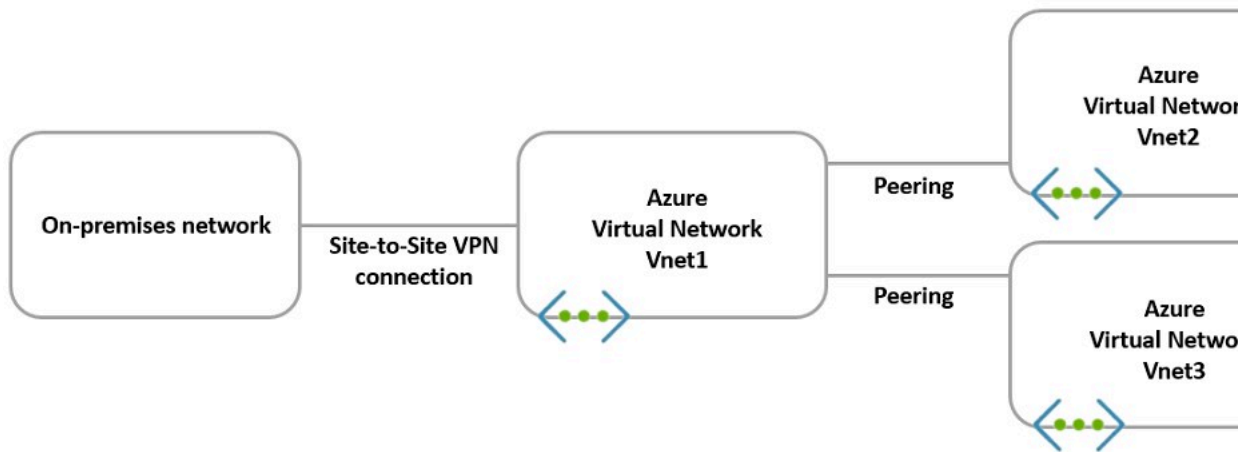
IKEv2
IKEv2 and SSTP (SSL)
OpenVPN (SSL)
SSTP (SSL)

A. See Explanation section for answer.

Answer(s): A

14. HOTSPOT (Drag and Drop is not supported)

You have the hybrid network shown in the Network Diagram exhibit.



You have a peering connection between Vnet1 and Vnet2 as shown in the Peering-Vnet1-Vnet2 exhibit.

Add peering ...

Vnet1

This virtual network

Peering link name *

Peering-Vnet1-Vnet2 ✓

Traffic to remote virtual network ⓘ

- Allow (default)
- Block all traffic to the remote virtual network

Traffic forwarded from remote virtual network ⓘ

- Allow (default)
- Block traffic that originates from outside this virtual network

Virtual network gateway or Route Server ⓘ

- Use this virtual network's gateway or Route Server
- Use the remote virtual network's gateway or Route Server
- None (default)

Remote virtual network

Peering link name *

Peering-Vnet1-Vnet2 ✓

Virtual network deployment model ⓘ

- Resource manager
- Classic

I know my resource ID ⓘ

Subscription* ⓘ

Subscription1 ✓

Virtual network

Vnet2 ✓

Traffic to remote virtual network ⓘ

- Allow (default)
- Block all traffic to the remote virtual network

Add

You have a peering connection between Vnet1 and Vnet3 as shown in the Peering-Vnet1-Vnet3 exhibit.

Add peering ...

Vnet3

This virtual network

Peering link name *

Peering-Vnet1-Vnet3 ✓

Traffic to remote virtual network ⓘ

- Allow (default)
- Block all traffic to the remote virtual network

Traffic forwarded from remote virtual network ⓘ

- Allow (default)
- Block traffic that originates from outside this virtual network

Virtual network gateway or Route Server ⓘ

- Use this virtual network's gateway or Route Server
- Use the remote virtual network's gateway or Route Server
- None (default)

Remote virtual network

Peering link name *

Peering-Vnet1-Vnet3 ✓

Virtual network deployment model ⓘ

- Resource manager
- Classic

I know my resource ID ⓘ

Subscription* ⓘ

Subscription1 ▾

Virtual network

Vnet1 ▾

Traffic to remote virtual network ⓘ

- Allow (default)
- Block all traffic to the remote virtual network

Traffic to remote virtual network

- Allow (default)
- Block all traffic to the remote virtual network

Traffic forwarded from remote virtual network

- Allow (default)
- Block traffic that originates from outside this virtual network

Virtual network gateway or Route Server

- Use this virtual network's gateway or Route Server
- Use the remote virtual network's gateway or Route Server
- None (default)

Add

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Answer Area:

Statements

The resources in Vnet2 can communicate with the resources in Vnet1.

The resources in Vnet2 can communicate with the resources in Vnet3.

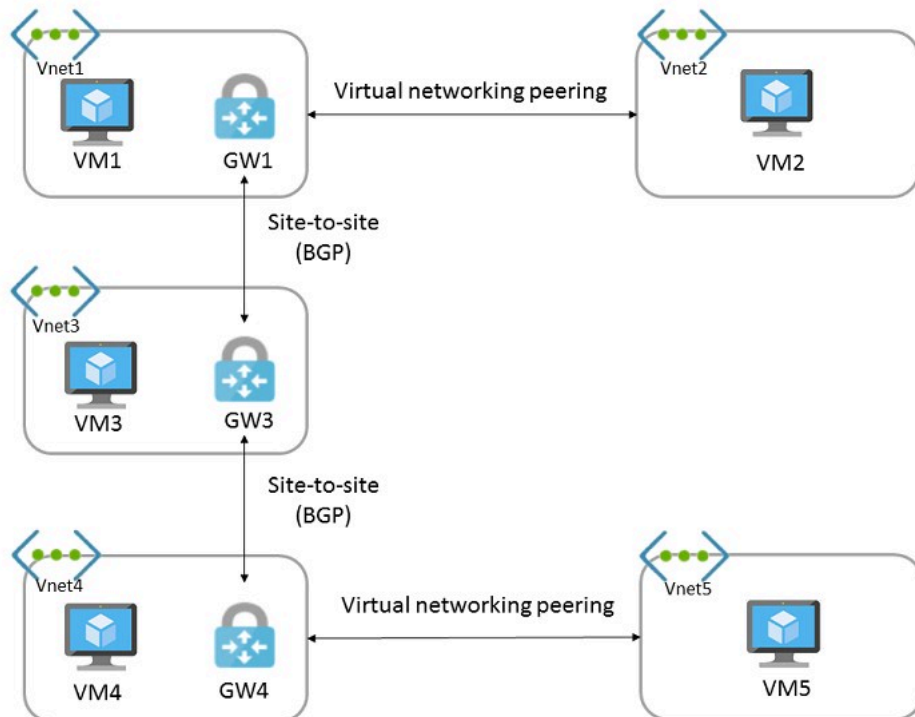
The resources in Vnet2 can communicate with the resources in the on-premises network.

A. See Explanation section for answer.

Answer(s): A

15. HOTSPOT (Drag and Drop is not supported)

You have the Azure environment shown in the exhibit.



You have virtual network peering between Vnet1 and Vnet2. You have virtual network peering between Vnet4 and Vnet5. The virtual network peering is configured as shown in the following table.

Virtual network	Traffic to remote virtual network	Use remote gateway	Allow gateway transit
Vnet1	Allow	None	Enabled
Vnet2	Allow	Enabled	None
Vnet4	Allow	None	Enabled
Vnet5	Block	Enabled	None

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Answer Area:

Statements	Yes	No
VM1 and VM4 can communicate.	<input type="radio"/>	<input type="radio"/>
VM2 and VM4 can communicate.	<input type="radio"/>	<input type="radio"/>
VM1 and VM5 can communicate.	<input type="radio"/>	<input type="radio"/>

A. See Explanation section for answer.

Answer(s): A

16. HOTSPOT (Drag and Drop is not supported)

You have on-premises datacenters in New York and Seattle.

You have an Azure subscription that contains the ExpressRoute circuits shown in the following table.

Name	Azure region	Datacenter
ERC1	East US	New York
ERC2	West US2	Seattle

You need to ensure that all the data sent between the datacenters is routed via the ExpressRoute circuits.

The solution must minimize costs.

How should you configure the network? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

ExpressRoute configuration:

Direct
FastPath
Global Reach
Premium

Peering:

Microsoft
Private
Public

A. See Explanation section for answer.

Answer(s): A

17. You have an Azure virtual network named Vnet1 and an on-premises network. The on-premises network has policy-based VPN devices.

In Vnet1, you deploy a virtual network gateway named GW1 that uses a SKU of VpnGw1 and is route-based.

You have a Site-to-Site VPN connection for GW1 as shown in the following exhibit.

Save Discard

Use Azure Private IP Address ⓘ
 Disabled Enabled

BGP ⓘ
 Disabled Enabled

IPsec / IKE policy ⓘ
 Default Custom

Use policy based traffic selector ⓘ
 Enable Disable

DPD timeout in seconds * ⓘ
45

Connection Mode ⓘ
 Default InitiatorOnly ResponderOnly

IKE Protocol ⓘ
IKEv2

You need to ensure that the on-premises network can connect to the route-based GW1.
What should you do before you create the connection?

- A. Set Connection Mode to ResponderOnly.
- B. Set BGP to Enabled.
- C. Set Use Azure Private IP Address to Enabled.
- D. Set IPsec / IKE policy to Custom.

Answer(s): D

18. HOTSPOT (Drag and Drop is not supported)

Your on-premises network contains a VPN device.

You have an Azure subscription that contains a virtual network and a virtual network gateway.

You need to create a Site-to-Site VPN connection that has a custom cryptographic policy.

How should you complete the PowerShell script? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
...  
$policy = 

|                                   |
|-----------------------------------|
| New-AzIpssecPolicy                |
| New-AzIpssecTrafficSelectorPolicy |
| New-AzServiceEndpointPolicy       |
| New-AzVpnClientIpssecPolicy       |

 -IkeEncryption AES256 -IkeInt  
  
-IpssecIntegrity SHA256 -PfsGroup None -SALifeTimeSeconds 14400 -SADa  
  
...  


|                                       |
|---------------------------------------|
| New-AzVirtualHub                      |
| New-AzVirtualNetworkGateway           |
| New-AzVirtualNetworkGatewayConnection |
| New-AzVirtualNetworkGatewayNatRule    |

 -Name $Connection16 -ResourceGrou  
  
-LocalNetworkGateway2 $lng6 -Location $Location1 -ConnectionType IPS
```

A. See Explanation section for answer.

Answer(s): A

19. HOTSPOT (Drag and Drop is not supported)

You have an Azure virtual network and an on-premises datacenter that connect by using a Site-to-Site VPN tunnel.

You need to ensure that all traffic from the virtual network to the internet is routed through the datacenter. How should you complete the PowerShell script to configure forced tunneling? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
$force1 = 

|                               |
|-------------------------------|
| Get-AzLocalNetworkGateway     |
| Get-AzNatGateway              |
| Get-AzNetworkVirtualAppliance |
| Get-AzVirtualNetworkGateway   |

 -Name "HQ" -ResourceGroupName "I  
  
$force2 = Get-AzVirtualNetworkGateway -Name "Gateway1" -ResourceGroupName  


|                                        |
|----------------------------------------|
| Set-AzVirtualNetworkGatewayConnection  |
| Set-AzVirtualNetworkGatewayDefaultSite |
| Set-AzVirtualNetworkPeering            |
| Set-AzVirtualNetworkSubnetConfig       |

 -GatewayDefaultSite $force1 -Virtu
```

A. See Explanation section for answer.

Answer(s): A

20. You are planning an Azure deployment that will contain three virtual networks in the East US Azure region as shown in the following table.

Name	Description
Vnet1	Hub virtual network for shared services
Vnet2	Virtual machines for the IT department
Vnet3	Virtual machines for the research department

A Site-to-Site VPN will connect Vnet1 to your company's on-premises network.

You need to recommend a solution that ensures that the virtual machines on all the virtual networks can communicate with the on-premises network. The solution must minimize costs.

What should you recommend for Vnet2 and Vnet3?

A. VNet-to-VNet VPN connections

B. peering

C. service endpoints

D. route tables

Answer(s): B
