

IT 认证电子书



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Exam : **AZ-700**

Title : Designing and
Implementing Microsoft
Azure Networking Solutions

Version : DEMO

1. Topic 1, Litware. Inc Case Study 1

Overview

Litware. Inc. is a financial company that has a main datacenter in Boston and 20 branch offices across the United States. Users have Android, iOS, and Windows 10 devices.

Existing Environment:

Hybrid Environment

The on-premises network contains an Active Directory forest named litwareinc.com that syncs to an Azure Active Directory (Azure AD) tenant named litwareinc.com by using Azure AD Connect.

All the offices connect to a virtual network named Vnet1 by using a Site-to-Site VPN connection.

Azure Environment

Litware has an Azure subscription named Sub1 that is linked to the litwareinc.com Azure AD tenant.

Sub1 contains resources in the East US Azure region as shown in the following table.

Name	Type	Description
Vnet1	Virtual network	Uses an IP address space of 192.168.0.0/20
GatewaySubnet	Virtual network subnet	Located in Vnet1 and uses an IP address space of 192.168.15.128/29
VPNGW1	VPN gateway	Deployed to Vnet1
Vnet2	Virtual network	Uses an IP address space of 192.168.16.0/20
SubnetA	Virtual network subnet	Located in Vnet2 and uses an IP address space of 192.168.16.0/24
Vnet3	Virtual network	Uses an IP address space of 192.168.32.0/20
cloud.litwareinc.com	Private DNS zone	None
VMScaleSet1	Virtual machine scale set	Contains four virtual machines deployed to SubnetA
VMScaleSet2	Virtual machine scale set	Contains two virtual machines deployed to SubnetA
storage1	Storage account	Has the public endpoint blocked
storage2	Storage account	Has the public endpoint blocked

There is bidirectional peering between Vnet1 and Vnet2. There is bidirectional peering between Vnet1 and Vnet3. Currently, Vnet2 and Vnet3 cannot communicate directly.

Requirements:

Business Requirements

Litware wants to minimize costs whenever possible, as long as all other requirements are met.

Virtual Networking Requirements

Litware identifies the following virtual networking requirements:

* Direct the default route of 0.0.0.0/0 on Vnet2 and Vnet3 to the Boston datacenter over an ExpressRoute circuit.

- * Ensure that the records in the cloud.litwareinc.com zone can be resolved from the on-premises locations.
- * Automatically register the DNS names of Azure virtual machines to the cloud.litwareinc.com zone.
- * Minimize the size of the subnets allocated to platform-managed services.
- * Allow traffic from VMSSet1 to VMSSet2 on the TCP port 443 only.

Hybrid Networking Requirements

Litware identifies the following hybrid networking requirements:

- * Users must be able to connect to Vnet1 by using a Point-to-Site (P2S) VPN when working remotely. Connections must be authenticated by Azure AD.
- * Latency of the traffic between the Boston datacenter and all the virtual networks must be minimized.
- * The Boston datacenter must connect to the Azure virtual networks by using an ExpressRoute FastPath connection.
- * Traffic between Vnet2 and Vnet3 must be routed through Vnet1.

PaaS Networking Requirements

Litware identifies the following networking requirements for platform as a service (PaaS):

- * The storage1 account must be accessible from all on-premises locations without exposing the public endpoint of storage1.
- * The storage2 account must be accessible from Vnet2 and Vnet3 without exposing the public endpoint of storage2.

DRAG DROP

You need to implement outbound connectivity for VMSSet1. The solution must meet the virtual networking requirements and the business requirements.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Answer Area

- Create a health probe
- Create a public load balancer in the Standard SKU
- Create a public load balancer in the Basic SKU
- Create a backend pool that contains VMSSet1
- Create a NAT rule
- Create an outbound rule

Answer:

Actions

- Create a health probe
- Create a public load balancer in the Standard SKU
- Create a public load balancer in the Basic SKU
- Create a backend pool that contains VMSScaleSet1
- Create a NAT rule
- Create an outbound rule

Answer Area

- Create a public load balancer in the Standard SKU
- Create a backend pool that contains VMSScaleSet1
- Create an outbound rule

Explanation:

Graphical user interface, text, application
 Description automatically generated

2.HOTSPOT

You need to implement name resolution for the cloud.litwareinc.com. The solution must meet the networking requirements.

What should you do? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

To implement automatic DNS name registration in cloud.litwareinc.com:

- Create virtual network links
- Configure conditional forwarding
- Create an SOA record in cloud.litwareinc.com

To implement name resolution of the cloud.litwareinc.com DNS records from the on-premises locations:

- Enable the Azure Firewall DNS proxy
- Create SRV records in cloud.litwareinc.com
- Deploy an Azure virtual machine configured as a DNS server to Vnet1

Answer:

To implement automatic DNS name registration in cloud.litwareinc.com:

▼
Create virtual network links
Configure conditional forwarding
Create an SOA record in cloud.litwareinc.com

To implement name resolution of the cloud.litwareinc.com DNS records from the on-premises locations:

▼
Enable the Azure Firewall DNS proxy
Create SRV records in cloud.litwareinc.com
Deploy an Azure virtual machine configured as a DNS server to Vnet1

Explanation:

Graphical user interface, text, application
Description automatically generated

3.HOTSPOT

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.

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 Vnet1 and Vnet2

Answer:

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 Vnet1 and Vnet2

Explanation:

Graphical user interface, text, application
Description automatically generated

For the first question, only ExpressRoute GW SKU Ultra Performance support FastPath feature. For the second question, vnet1 will connect to ExpressRoute gw, once Vnet1 peers with Vnet2, the traffic

from on-premise network will bypass GW and Vnet1, directly goes to Vnet2, while this feature is under public preview.

====Reference

ExpressRoute virtual network gateway is designed to exchange network routes and route network traffic. FastPath is designed to improve the data path performance between your on-premises network and your virtual network. When enabled, FastPath sends network traffic directly to virtual machines in the virtual network, bypassing the gateway.

To configure FastPath, the virtual network gateway must be either:

Ultra Performance

ErGw3AZ

VNet Peering - FastPath will send traffic directly to any VM deployed in a virtual network peered to the one connected to ExpressRoute, bypassing the ExpressRoute virtual network gateway.

<https://docs.microsoft.com/en-us/azure/expressroute/about-fastpathGateway SKU>

<https://docs.microsoft.com/en-us/azure/expressroute/expressroute-about-virtual-network-gateways>

4.You need to configure the default route on Vnet2 and Vnet3. The solution must meet the virtual networking requirements.

What should you use to configure the default route?

- A. route filters
- B. BGP route exchange
- C. a user-defined route assigned to GatewaySubnet in Vnet1
- D. a user-defined route assigned to GatewaySubnet in Vnet2 and Vnet3

Answer: B

Explanation:

Reference: <https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-udr-overview>

5.DRAG DROP

You need to prepare Vnet1 for the deployment of an ExpressRoute gateway. The solution must meet the hybrid connectivity requirements and the business requirements.

Which three actions should you perform in sequence for Vnet1? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Create a VPN gateway by using the VPNGW1 SKU.	
Assign a user-defined route to GatewaySubnet.	
Set the subnet mask of GatewaySubnet to /27.	
Delete VPNGW1.	
Create a VPN gateway by using the Basic SKU.	

Answer:

Actions

Create a VPN gateway by using the VPNGW1 SKU.

Assign a user-defined route to GatewaySubnet.

Set the subnet mask of GatewaySubnet to /27.

Delete VPNGW1.

Create a VPN gateway by using the Basic SKU.

Answer Area

Set the subnet mask of GatewaySubnet to /27.

Assign a user-defined route to GatewaySubnet.

Create a VPN gateway by using the Basic SKU.