Design and Implement Cross-VNet Connectivity

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Overview

Design for inter-VNet connectivity

VPN

Peering

Design for service chaining

Gateway transit

Relevant Exam AZ-700 Skills

Exam AZ-700: Designing and Implementing Microsoft Azure Networking Solutions – Skills Measured

Design and Implement Core Networking Infrastructure (20–25%)

Design and implement cross-VNet connectivity

- design service chaining, including gateway transit
- design VPN connectivity between VNets
- implement VNet peering

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Inter-VNet Connectivity

VNet Connectivity Options

VNet-to-VNet VPN

More expensive option

Secure IPSec/IKEv2 tunnel

More administration

Key business scenario: security & compliance

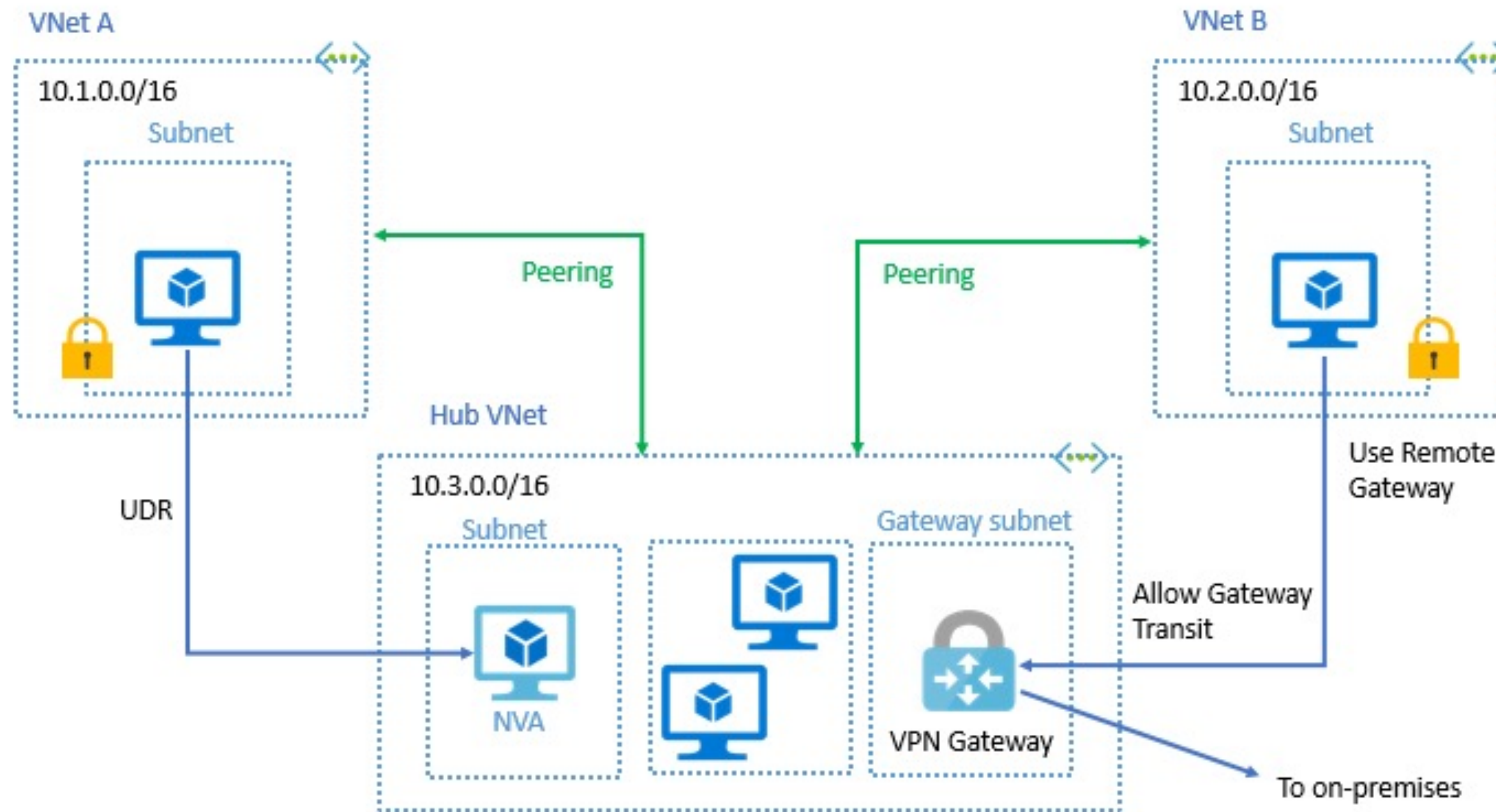**Global VNet Peering**

Less expensive option

Unencrypted routing path

Less administration

Key business scenario: cost savings and administrative flexibility

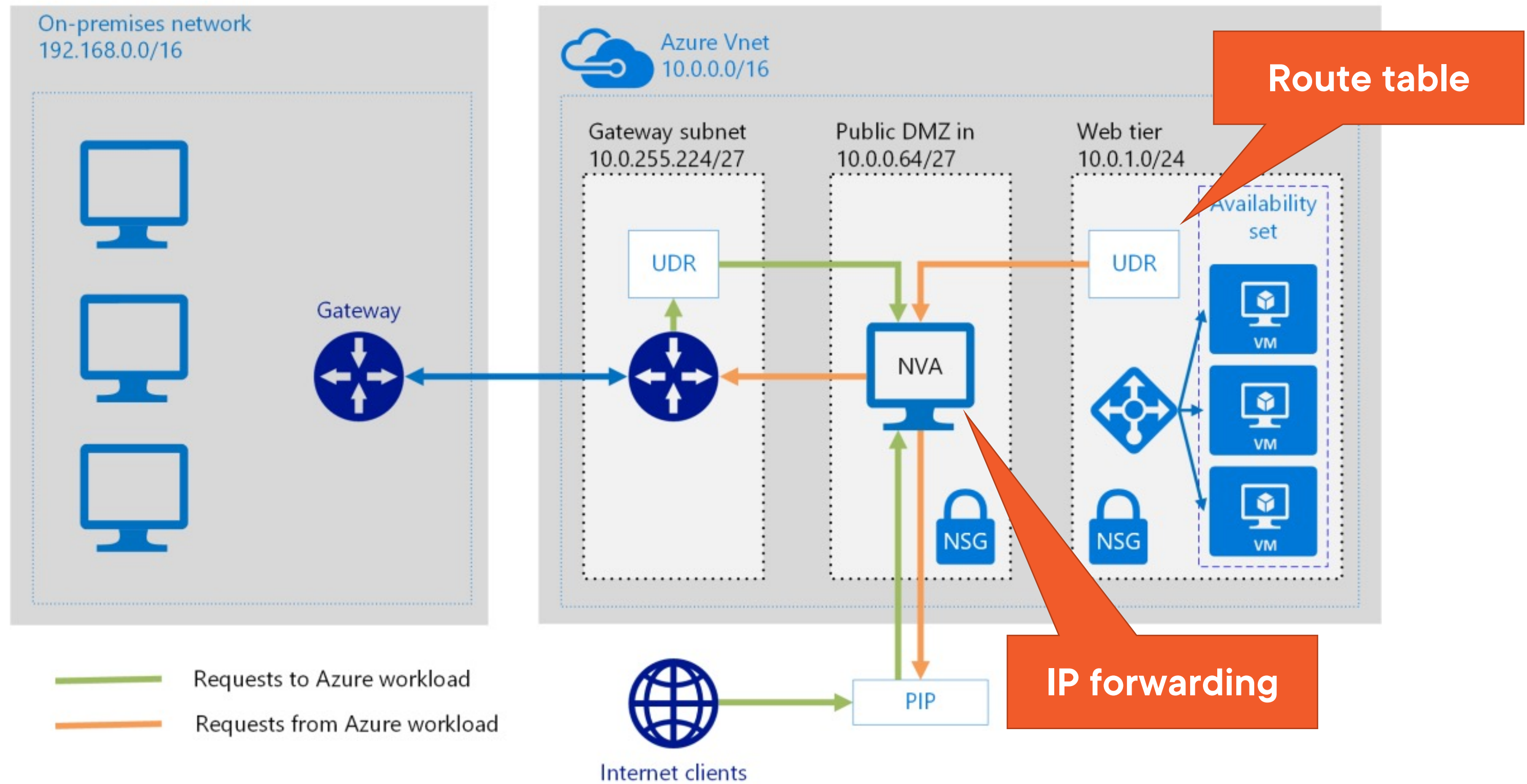timw.info

Global VNet Peering Default Behavior

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User-Defined Routing

On-premises network
192.168.0.0/16

Azure Vnet
10.0.0.0/16

Gateway subnet
10.0.255.224/27

Public DMZ in
10.0.0.64/27

Web tier
10.0.1.0/24

Route table

Availability set

UDR

UDR

Gateway

NVA

NSG

NSG

VM

VM

VM

IP forwarding

Requests to Azure workload

Requests from Azure workload

PIP

Internet clients

Network Virtual Appliance (NVA)

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Demo

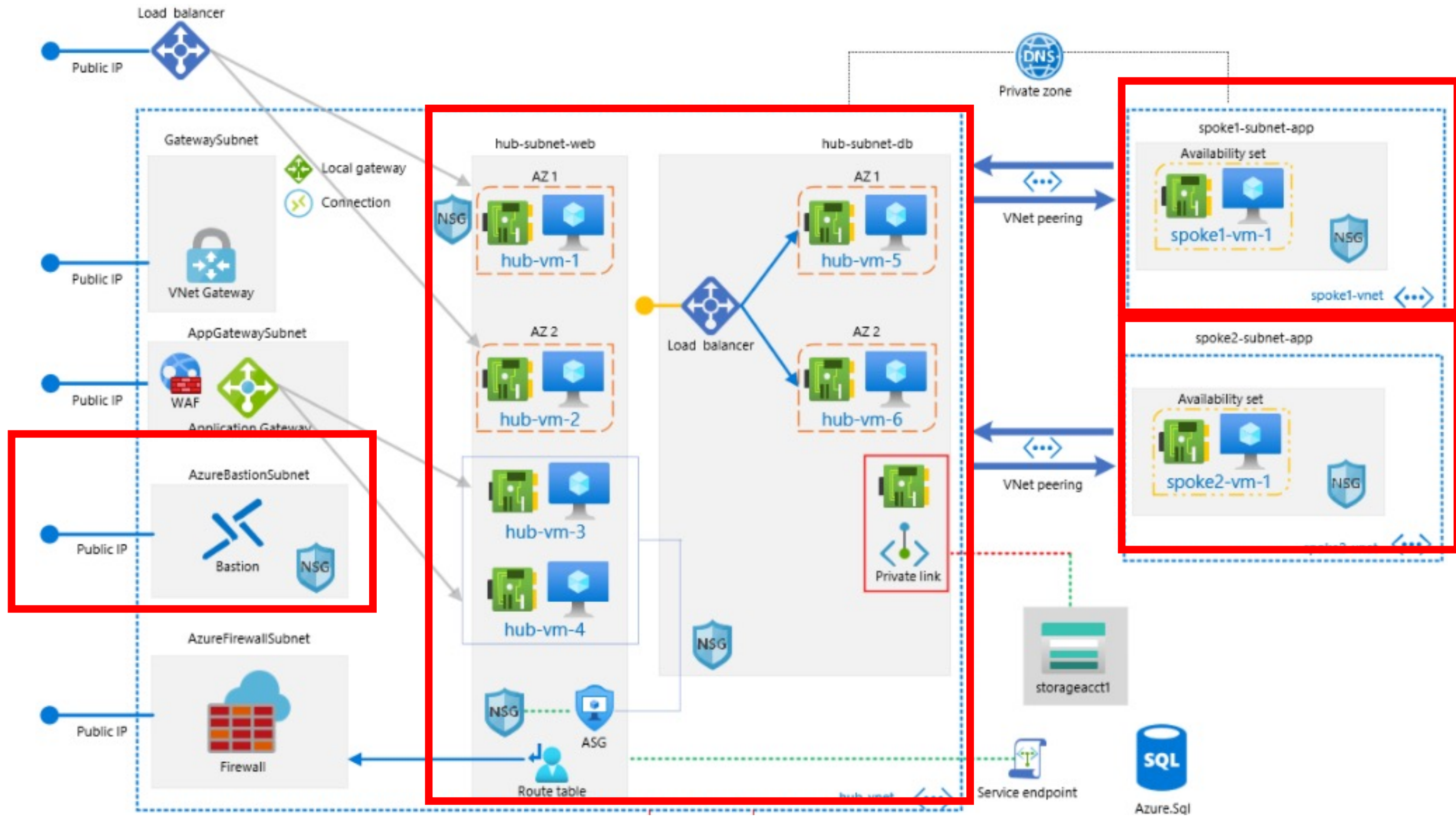**Show Azure Marketplace NVAs**

Deploy Azure Firewall

1

Service Chaining

Service Chaining

Demo

2

Deploy Bastion

Test chaining to from hub to spoke through Bastion host
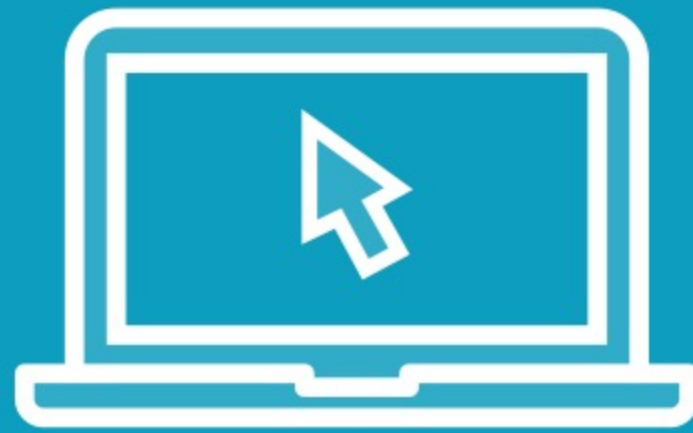
Summary

Check out Network Watcher for help with routing path testing

"But what if our staff isn't particularly strong on networking? We need a hub-spoke VNet architecture."

Next module: *Design and Implement an Azure Virtual WAN Architecture*

Demo

1

Deploy VNets with PowerShell and CLI

Demonstrate peering

Show Azure Marketplace NVAs

Deploy Azure Firewall

Demo

2

Deploy Bastion

Test chaining to from hub to spoke through Bastion host