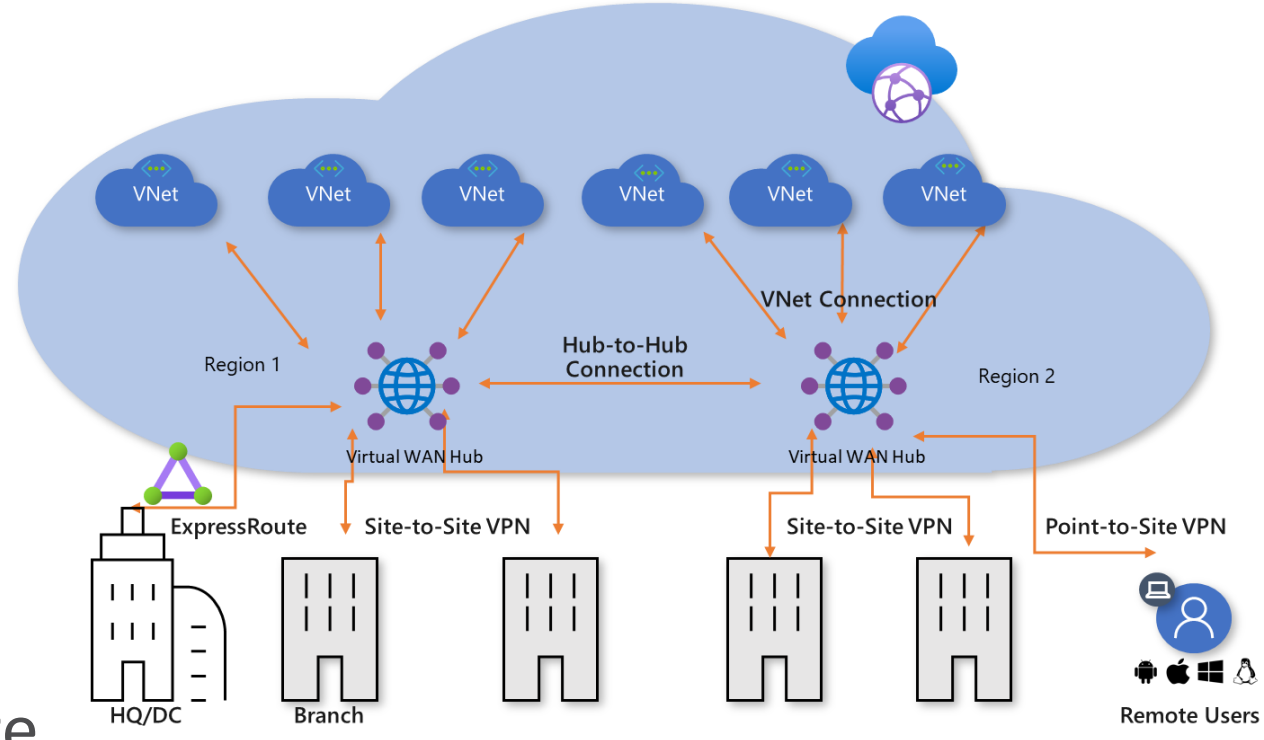
CHECK POINT™

YOU DESERVE THE BEST SECURITY

CGNS VWAN HUB INTEGRATION

Azure vWAN Overview

- Azure Virtual WAN(vWAN) is a networking service, that provides secure cloud transit and access to resources such as:
  - Customer on-premise branches
    - SD-WAN
    - Site-to-site VPN connectivity
    - Remote user VPN (Point-to-site) connectivity
    - ExpressRoute connectivity
  - Virtual networks (VNET)
  - Internet
- Hub and Spoke architecture
  The Hub managed and hosted by Azure.

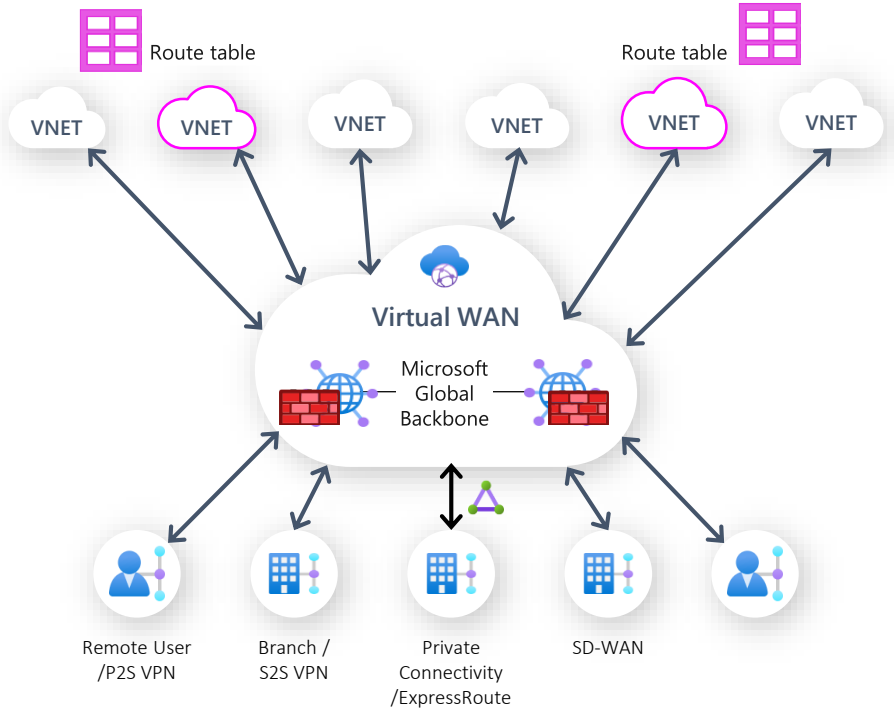


Virtual WAN

Network as a service

Unified hub and spoke architecture with NaaS services for Connectivity, Security and Routing using Microsoft Global Backbone

Virtual WAN is a managed wide area networking (WAN) service that makes it easy for you to build, manage, and monitor a global network that connects resources running across your cloud and on-premises environments



CONNECTIVITY

Branch VPN: Site to Site

- Scale and capacity
- SD-WAN Link connection
- CPE connectivity automation to vWAN VPN gateways
- NAT (Overlapping site IP)

Remote User VPN: Point to Site

- Scales up to 100K users
- Global Traffic Manager
- Azure Windows client
- Azure MacOS client

Private Connectivity: Express Route

- Scale and 20 Gbps agg
- ER Encryption (VPN over ER)

ROUTING / SECURITY

Virtual Hub Router

- VNET Transit
- Up to 50 Gbps throughput
- S2S VPN <-> ER Transit
- S2S <-> P2S VPN Transit

Advanced Routing

- Automatic meshed hubs
- Route Table (assoc., prop.)
- Routing Intent, Routing Policy
- BGP Peer

Managed NVA

- Integrated SD-WAN/ Connectivity Network Virtual Appliance (NVA)
- Managed Firewall Security NVA

Azure

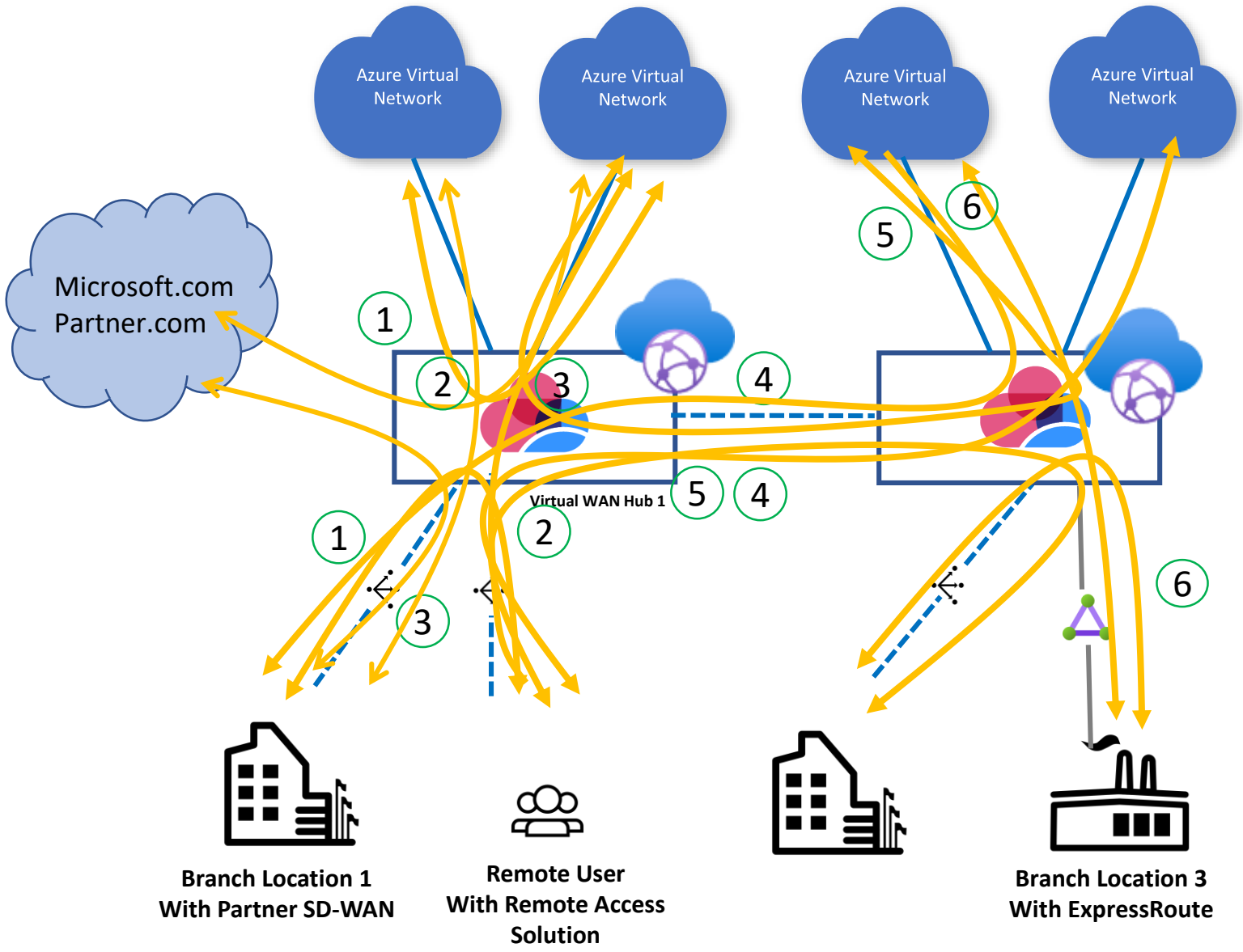
Use Cases

Single Virtual Hub

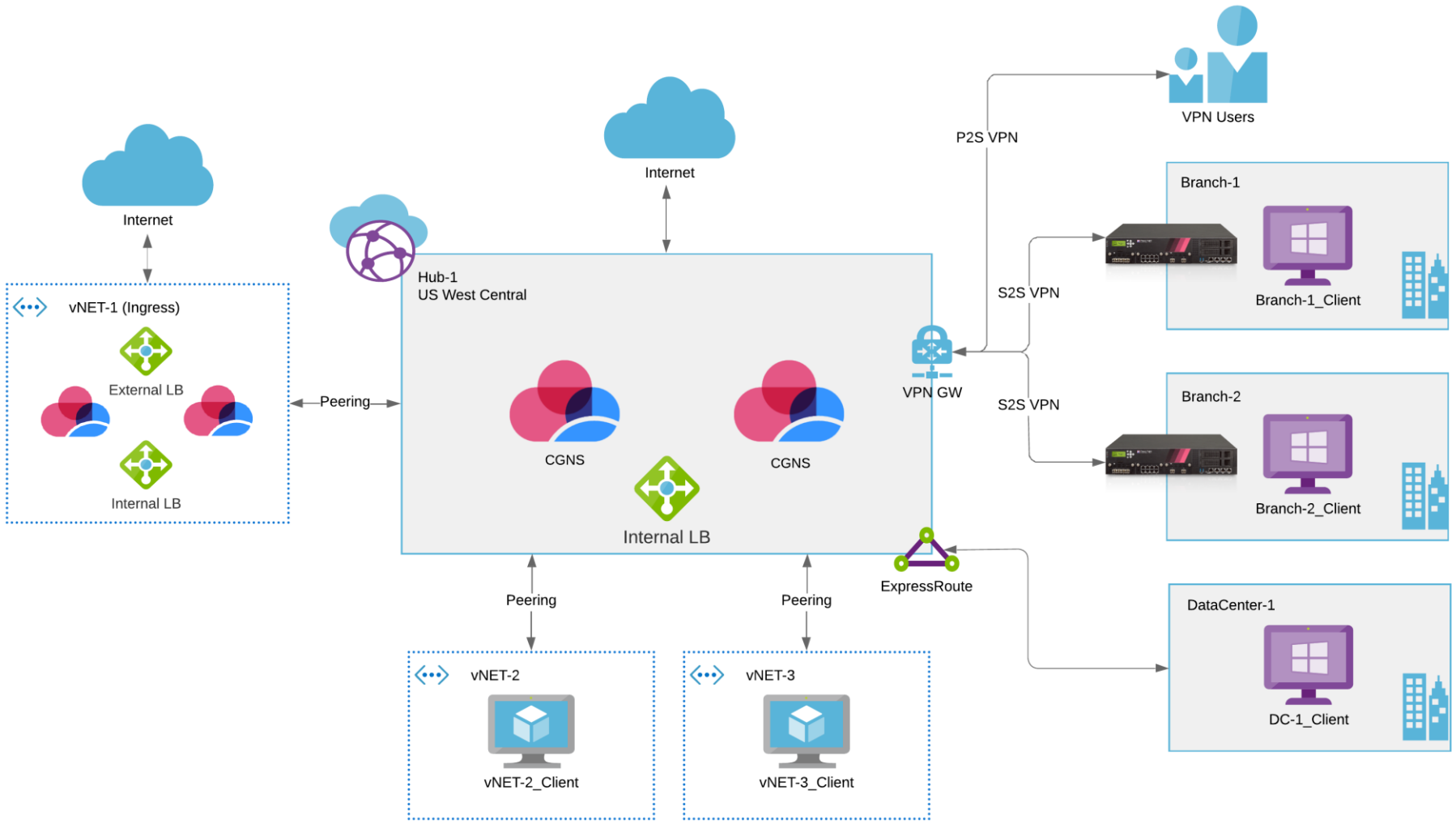
1. East-West Branch to Branch*
   East-West VNet to VNet
2. North-South Branch to VNET
   North-South VNET to Branch
3. North-South Branch to Internet
   North-South VNet to Internet

Inter-hub and Hybrid Scenarios

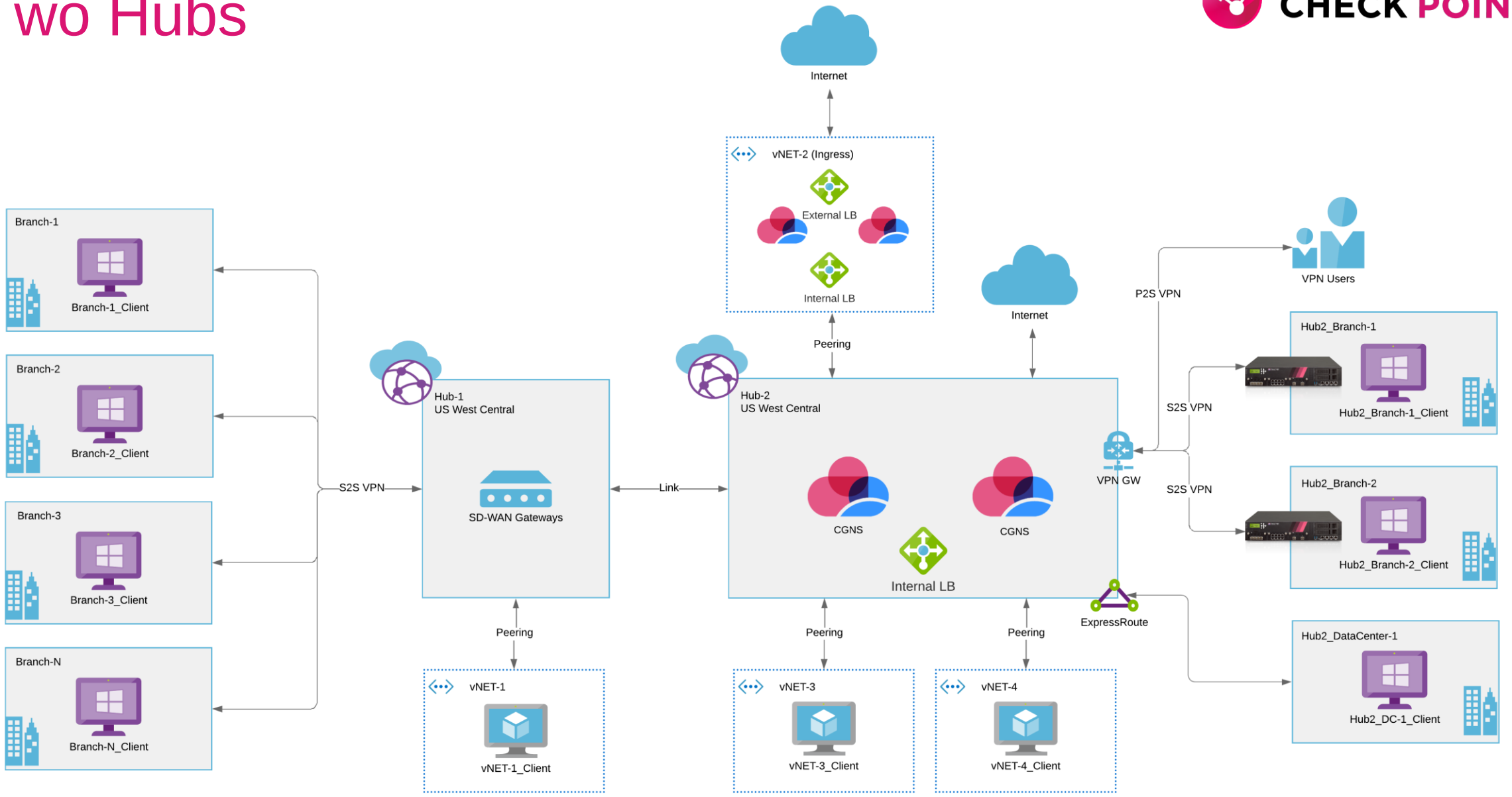
4. East-West Branch to Branch
   East-West VNet to VNet
5. North-South Branch to VNET
   North-South VNET to Branch
6. Azure ExpressRoute to VNET
   Azure ExpressRoute to SD-WAN



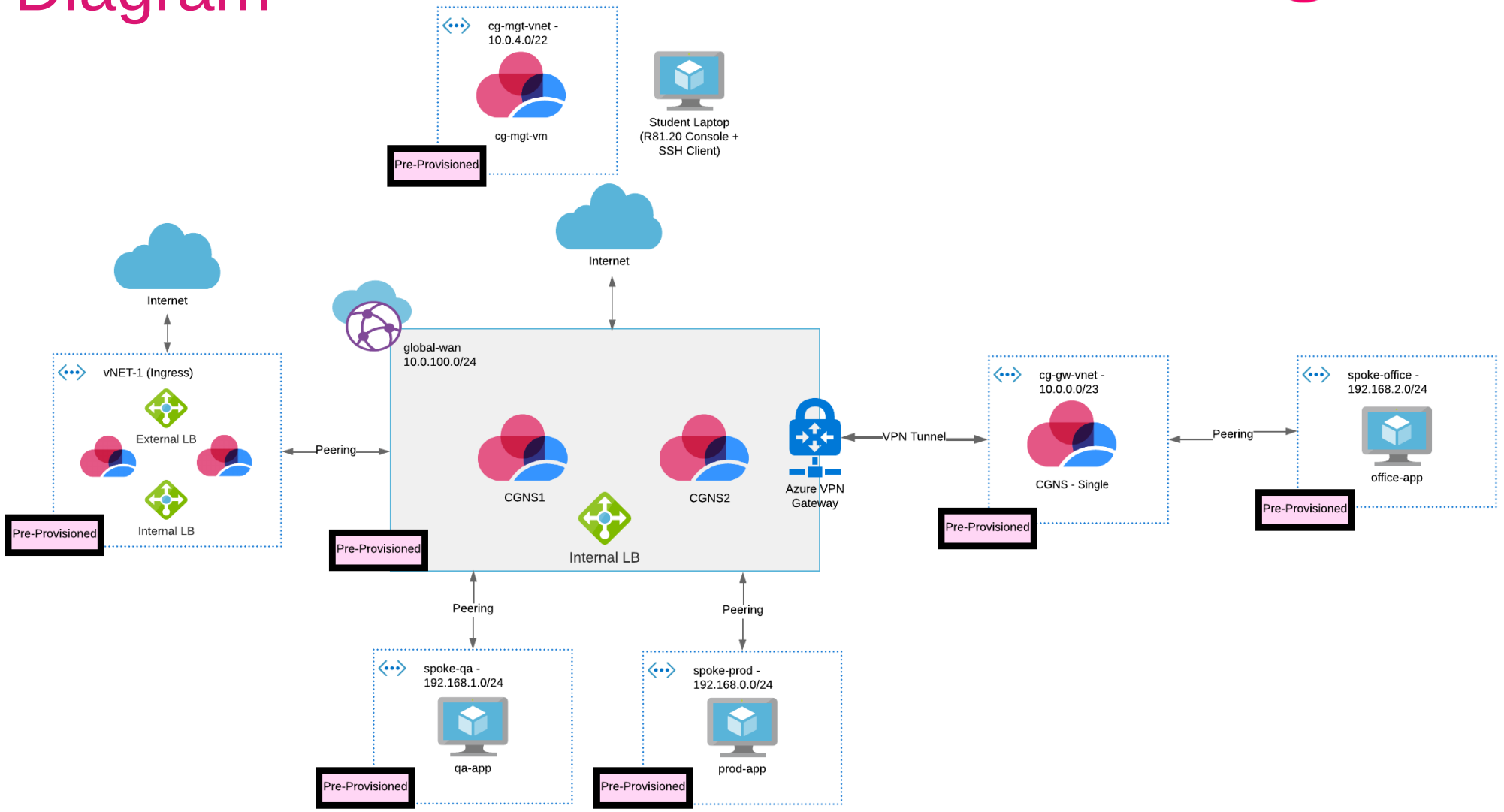
Single Hub



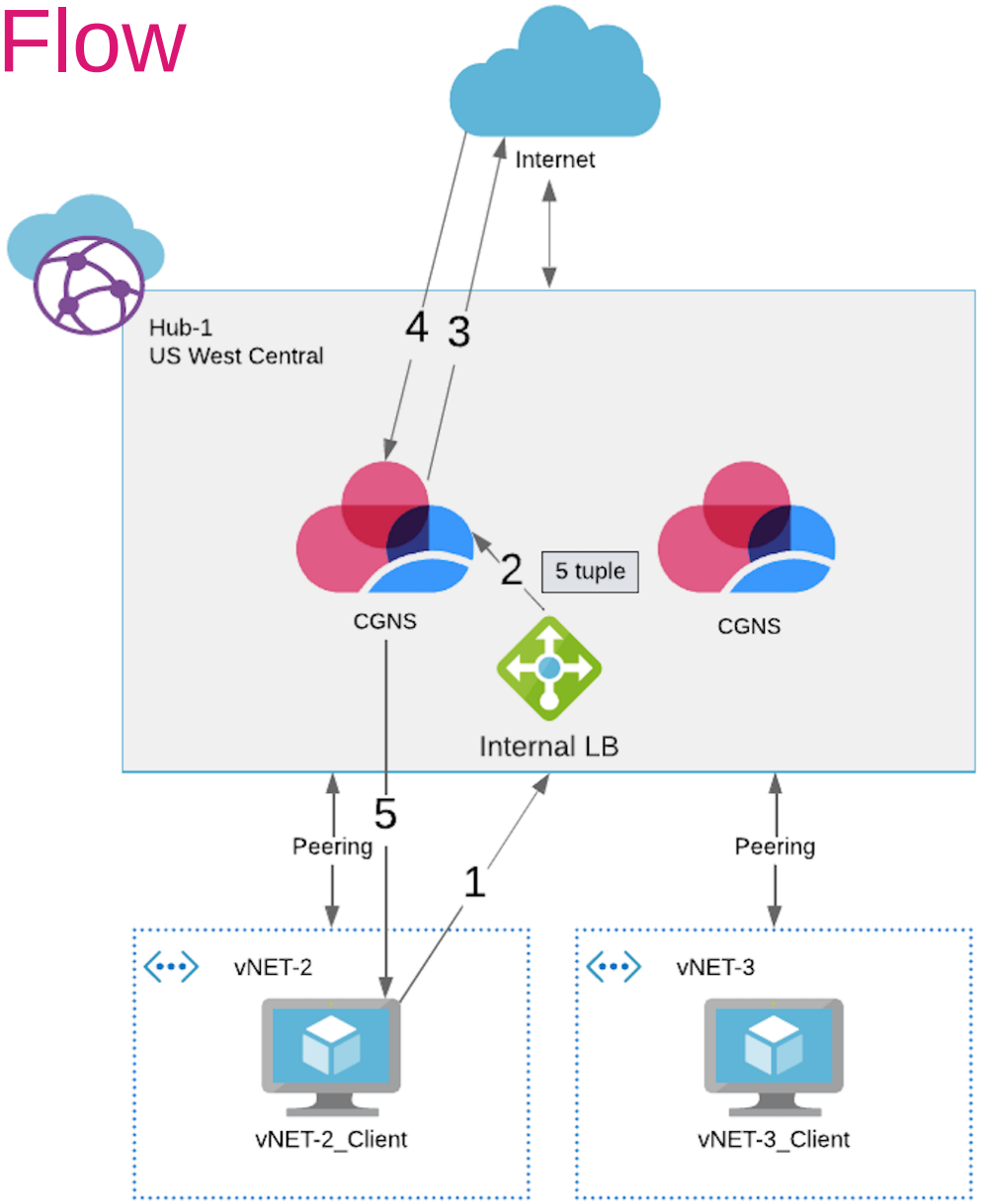
Two Hubs


Internet
vNET-2 (Ingress)
External LB
Internal LB
Peering
Internet
VPN Users
P2S VPN
Branch-1
Branch-1_Client
Branch-2
Branch-2_Client
Branch-3
Branch-3_Client
Branch-N
Branch-N_Client
S2S VPN
Hub-1
US West Central
SD-WAN Gateways
Link
Hub-2
US West Central
CGNS
CGNS
Internal LB
VPN GW
S2S VPN
S2S VPN
Hub2_Branch-1
Hub2_Branch-1_Client
Hub2_Branch-2
Hub2_Branch-2_Client
ExpressRoute
Hub2_DataCenter-1
Hub2_DC-1_Client
Peering
Peering
Peering
vNET-1
vNET-1_Client
vNET-3
vNET-3_Client
vNET-4
vNET-4_Client

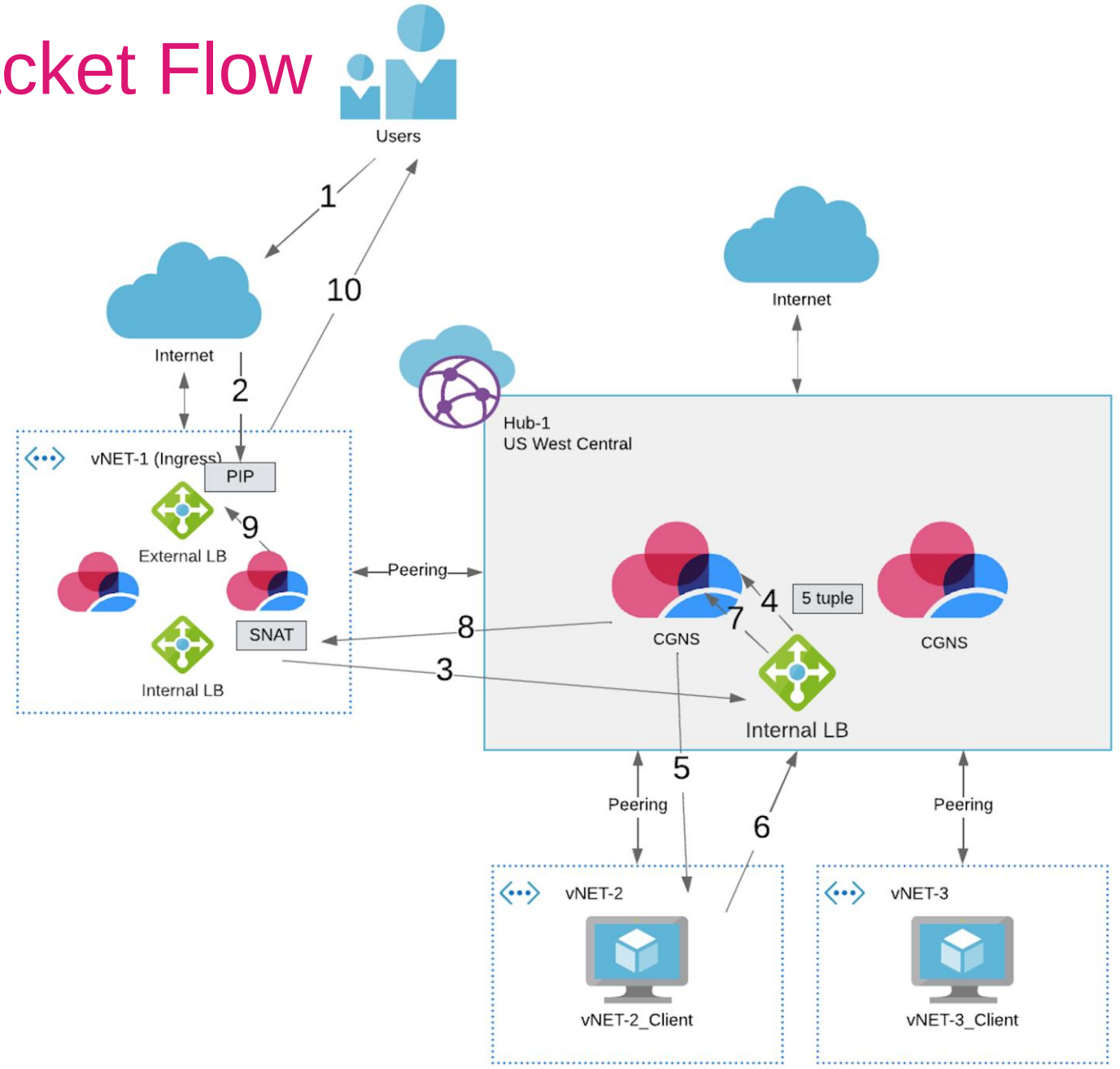
Lab Diagram



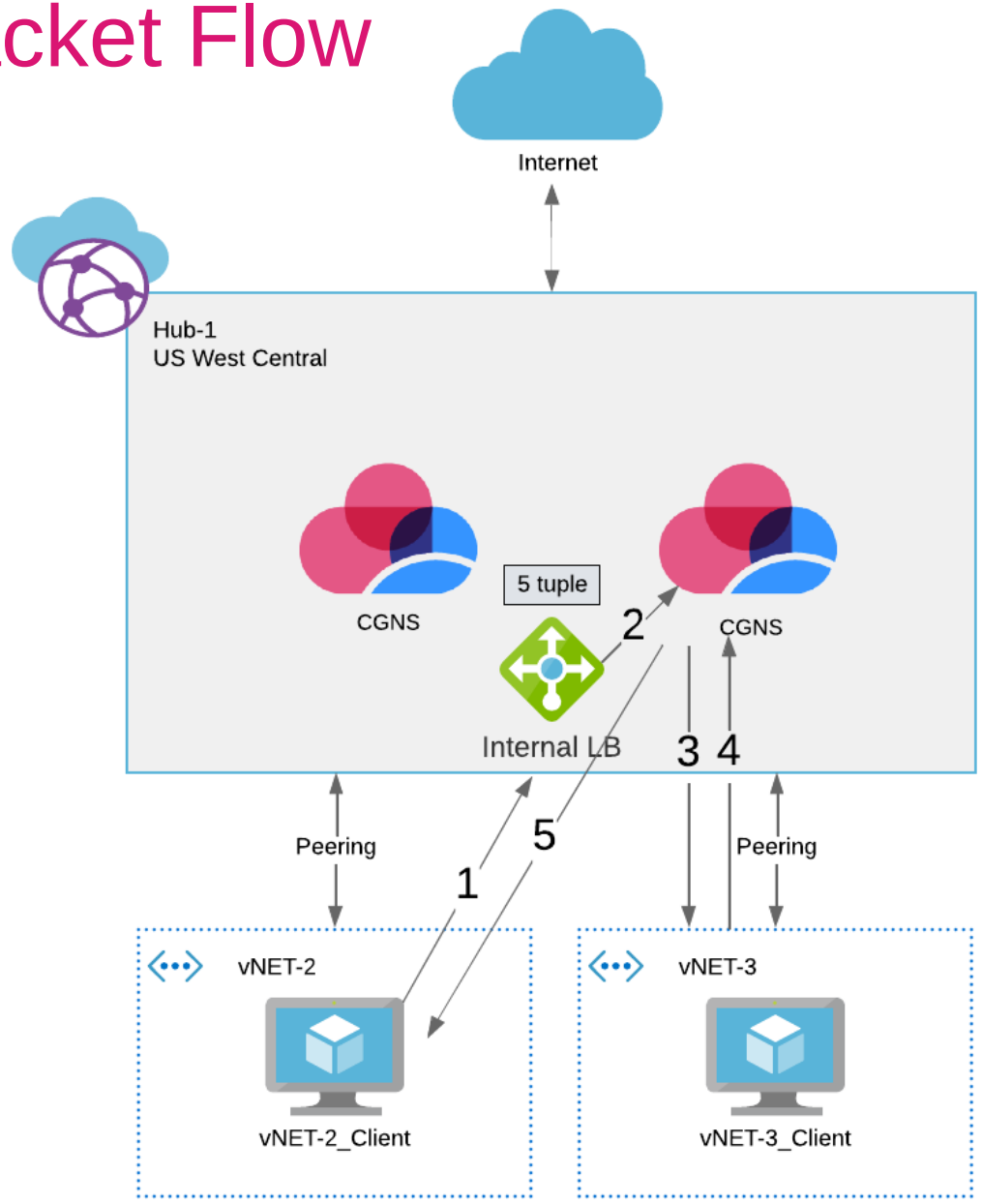
Egress Packet Flow



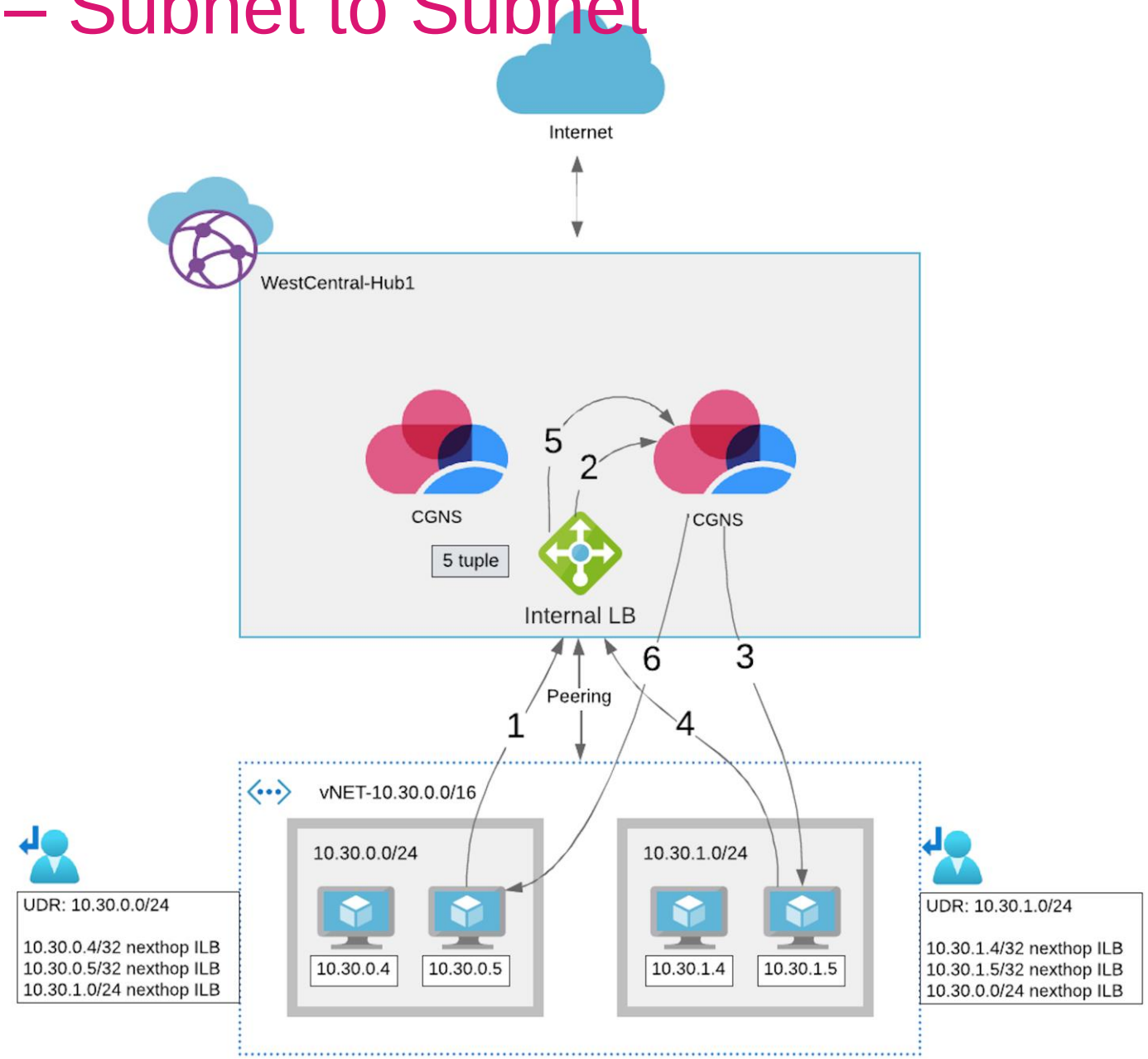
Ingress Packet Flow



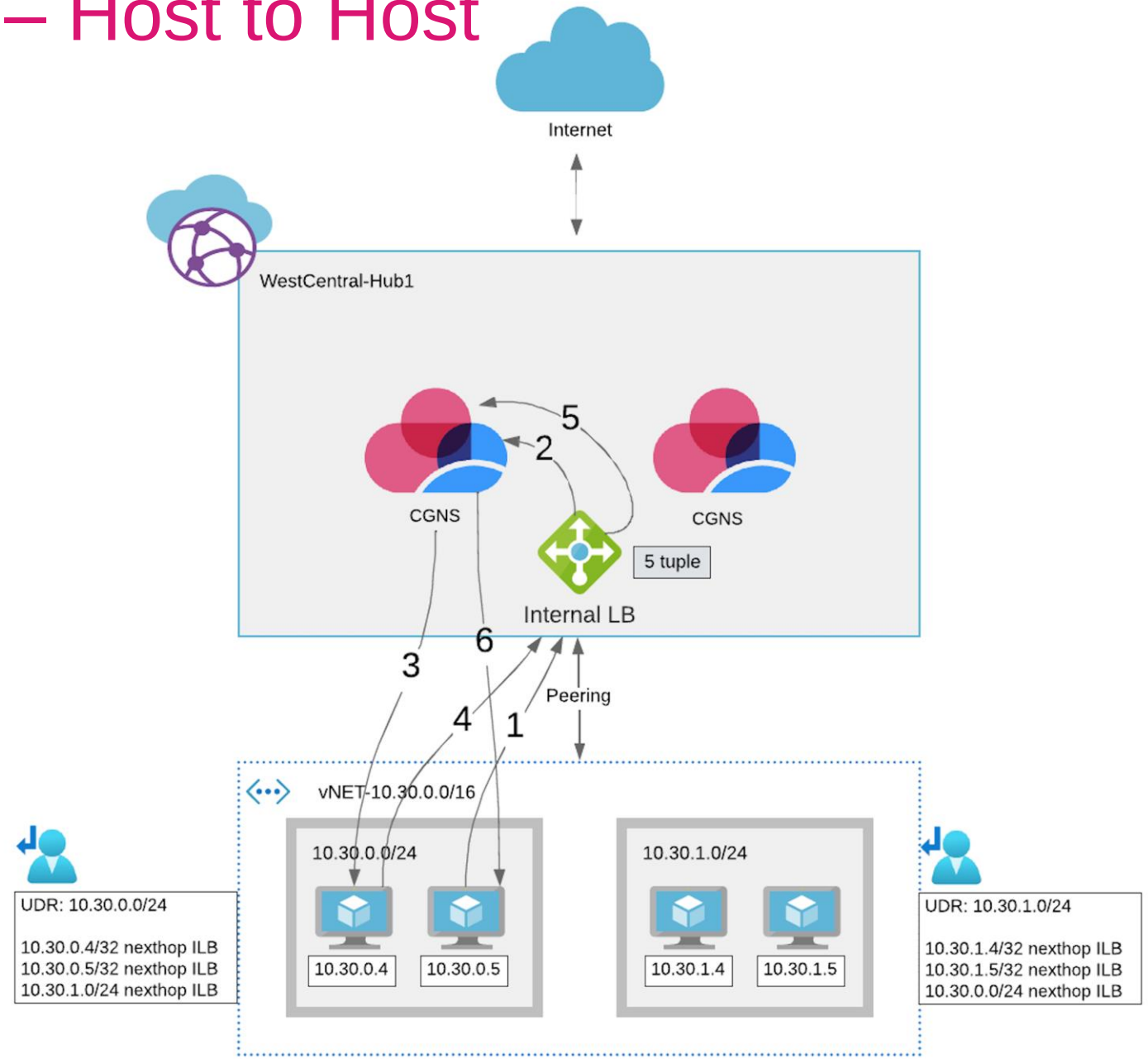
East-West Packet Flow



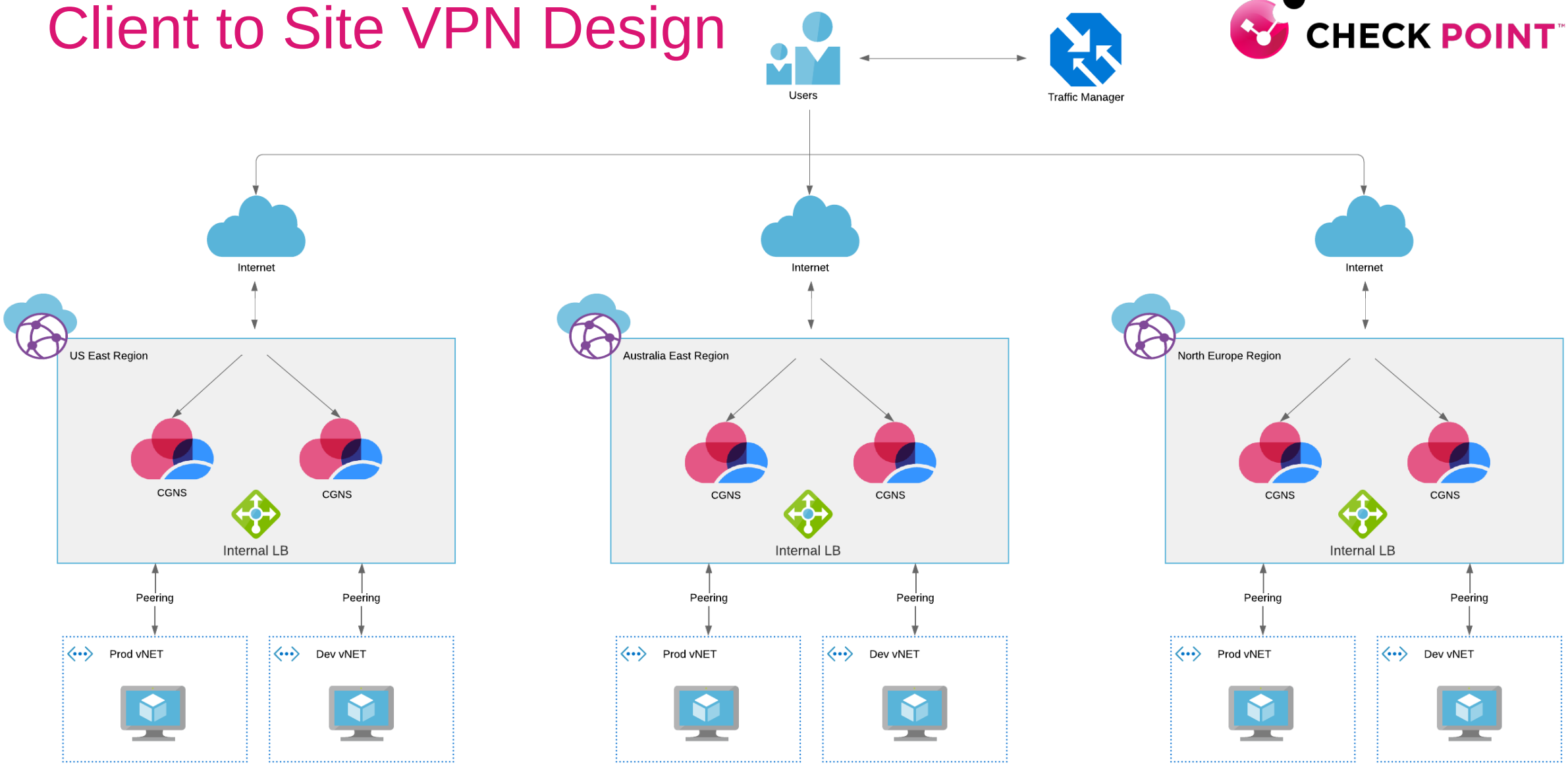
East-West – Subnet to Subnet



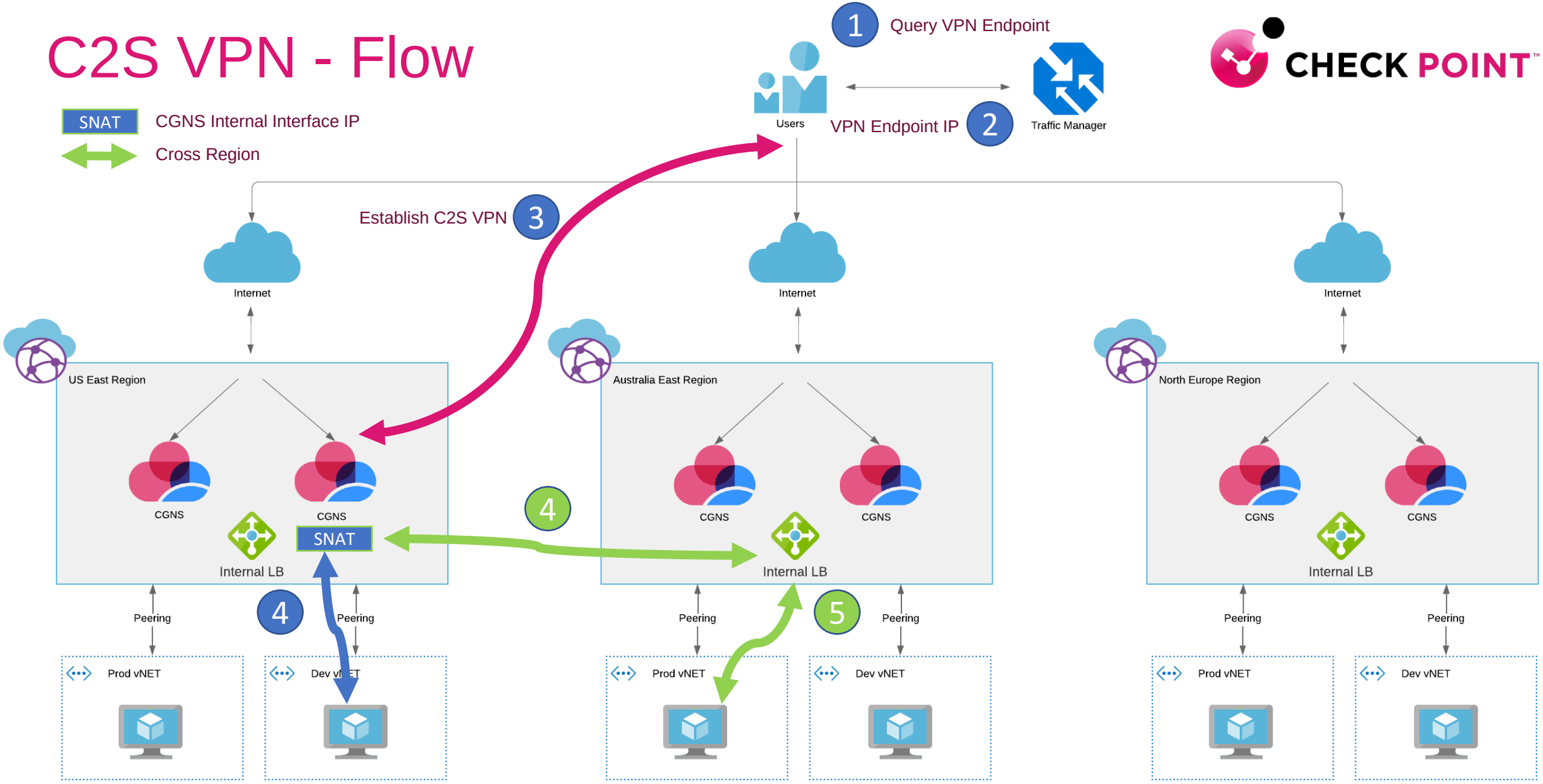
East-West – Host to Host



Client to Site VPN Design

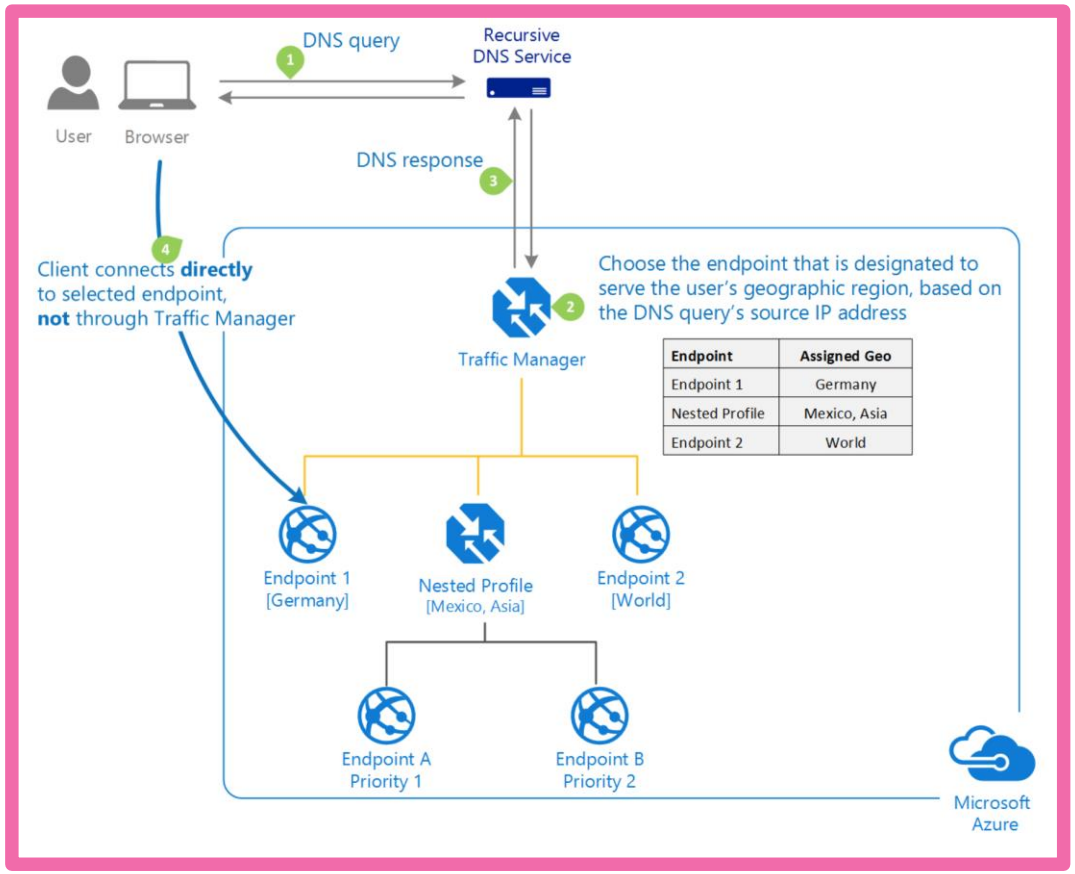


C2S VPN - Flow

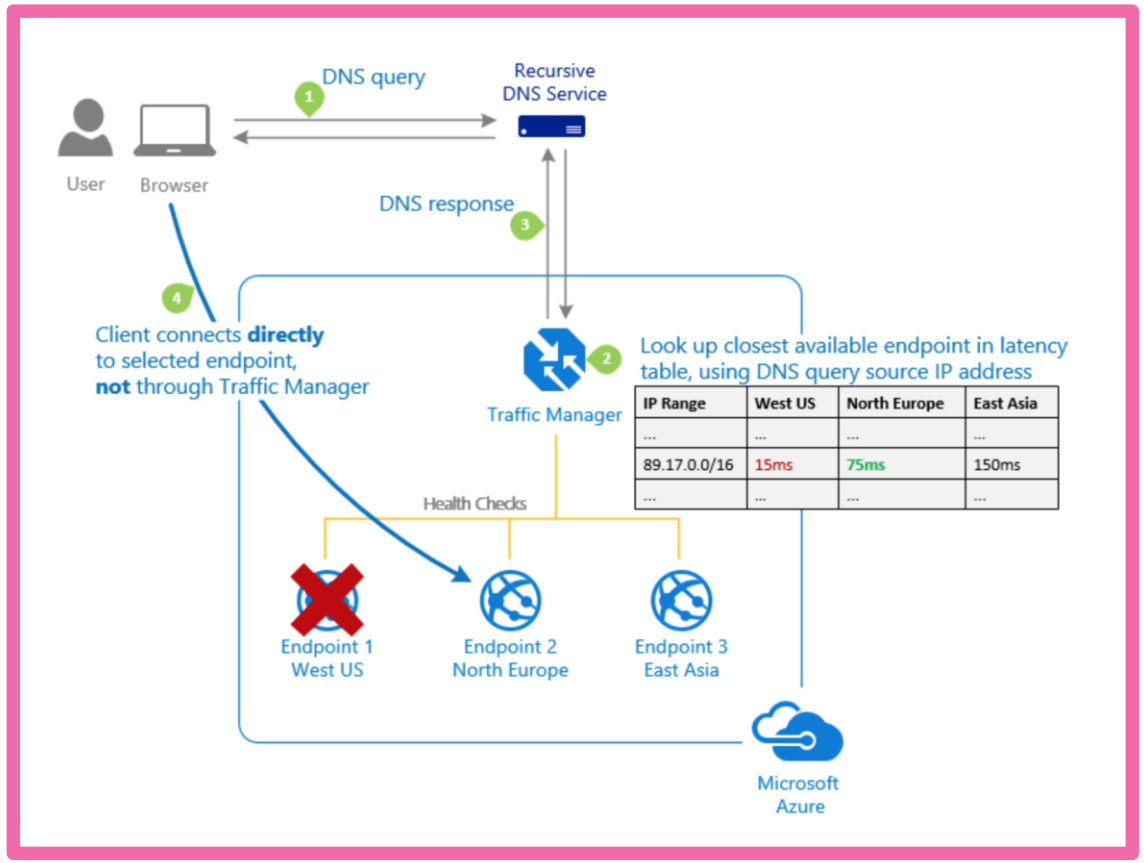


Traffic Manager Load Distribution Methods

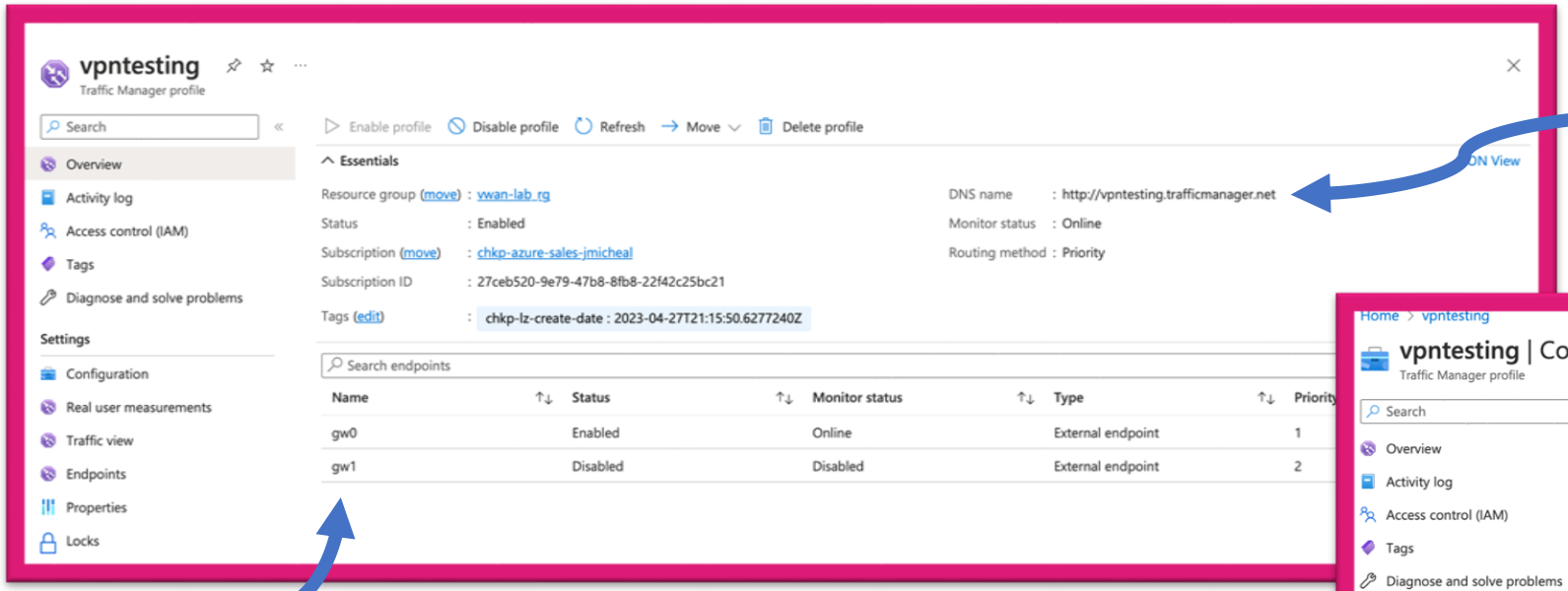
Geographic



Latency Based



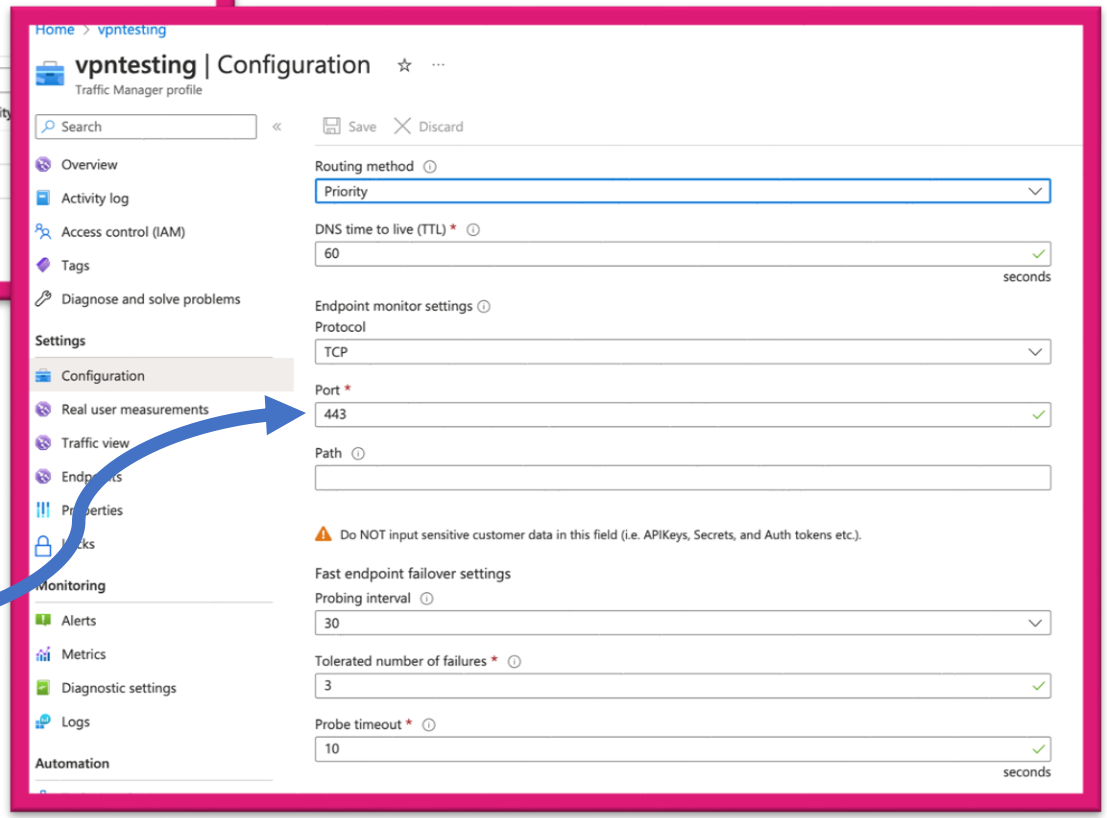
Traffic Manager Monitoring - Profiles



FQDN for VPN Endpoint

vWAN CGNS Gateways

CGNS Monitoring Port



THANK YOU

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