

# Configuring ExpressRoute and Azure Virtual WAN

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# Overview



**Configure ExpressRoute**

**Configure Azure Virtual WAN**

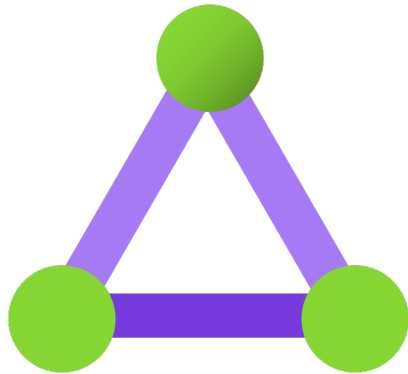


# Azure ExpressRoute

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# Azure ExpressRoute



Private, unencrypted connection to Microsoft cloud services that bypasses the public Internet

Link speeds from 50 Mbps to 10 Gbps  
- 100 Mbps for ER Direct

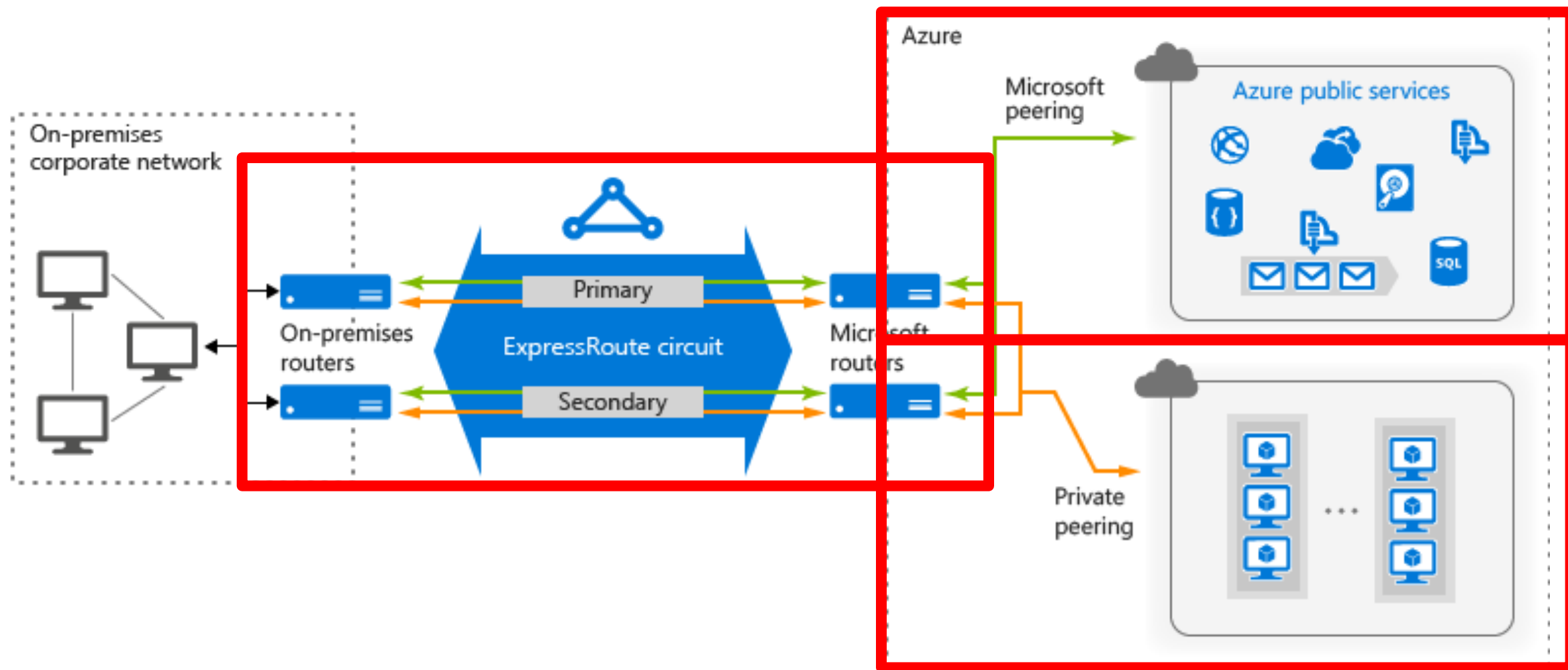
Dual routers required for HA SLA

Metered or unlimited data transfer

Premium add-on: Global connectivity

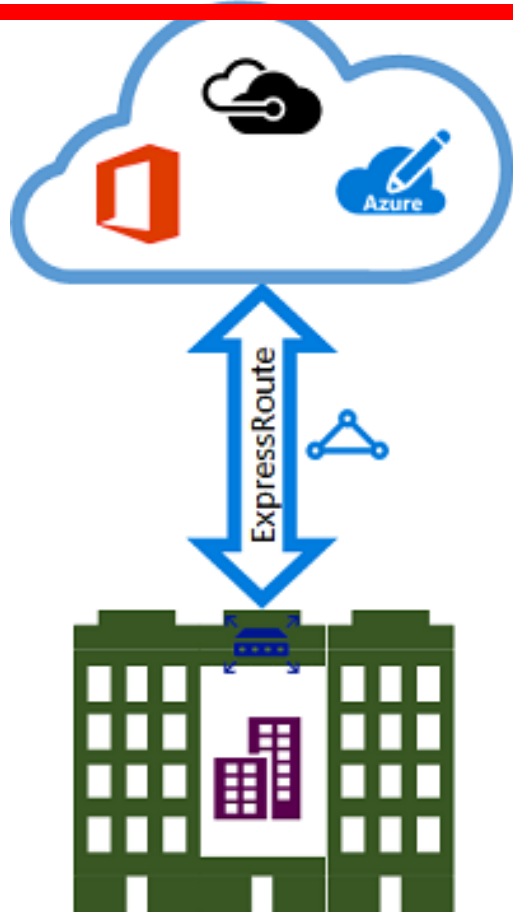


# ExpressRoute Architecture

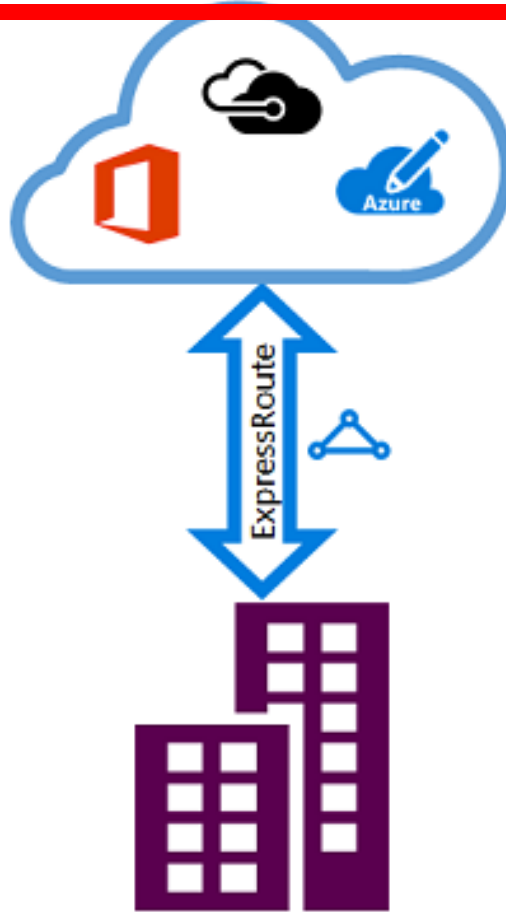


# ExpressRoute Connectivity Models

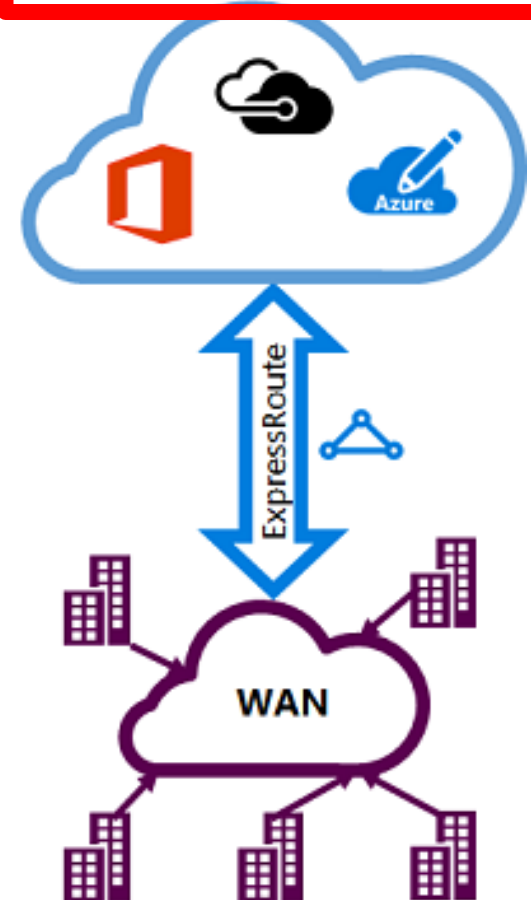
Cloud Exchange Co-  
location



Point-to-point  
Ethernet Connection



Any-to-any (IPVPN)  
Connection



# Azure Service Comparison

## S2S VPN

Encrypted channel

Budget

Simpler deployment

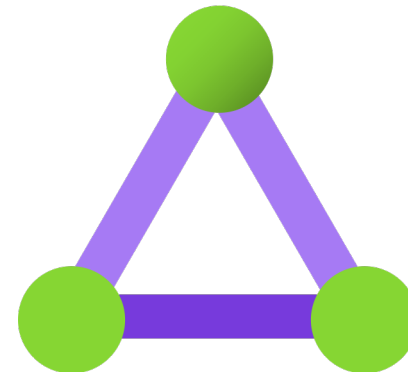


## ExpressRoute

Bypass the Internet

LAN speeds (although VpnGw5 is 10 Gbps)

More predictable network speeds



# Demo



# 1

Examine ExpressRoute pricing page

Search connectivity providers





# Azure Virtual WAN

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# Azure Virtual WAN



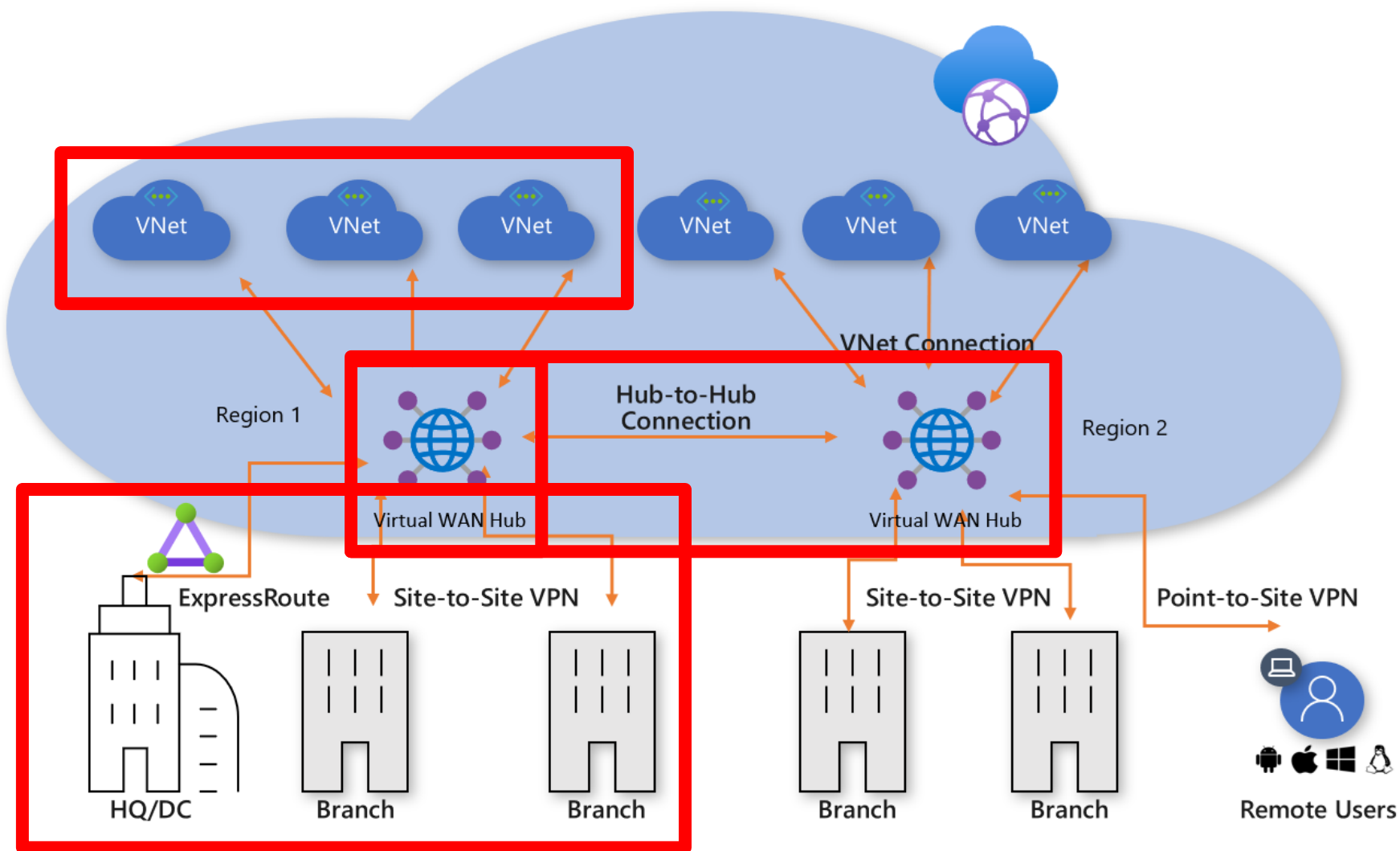
Microsoft-managed, transitive, routed VNet hub-and-spoke architecture

Like Front Door, Virtual WAN is a roll-up/abstraction that consists of:

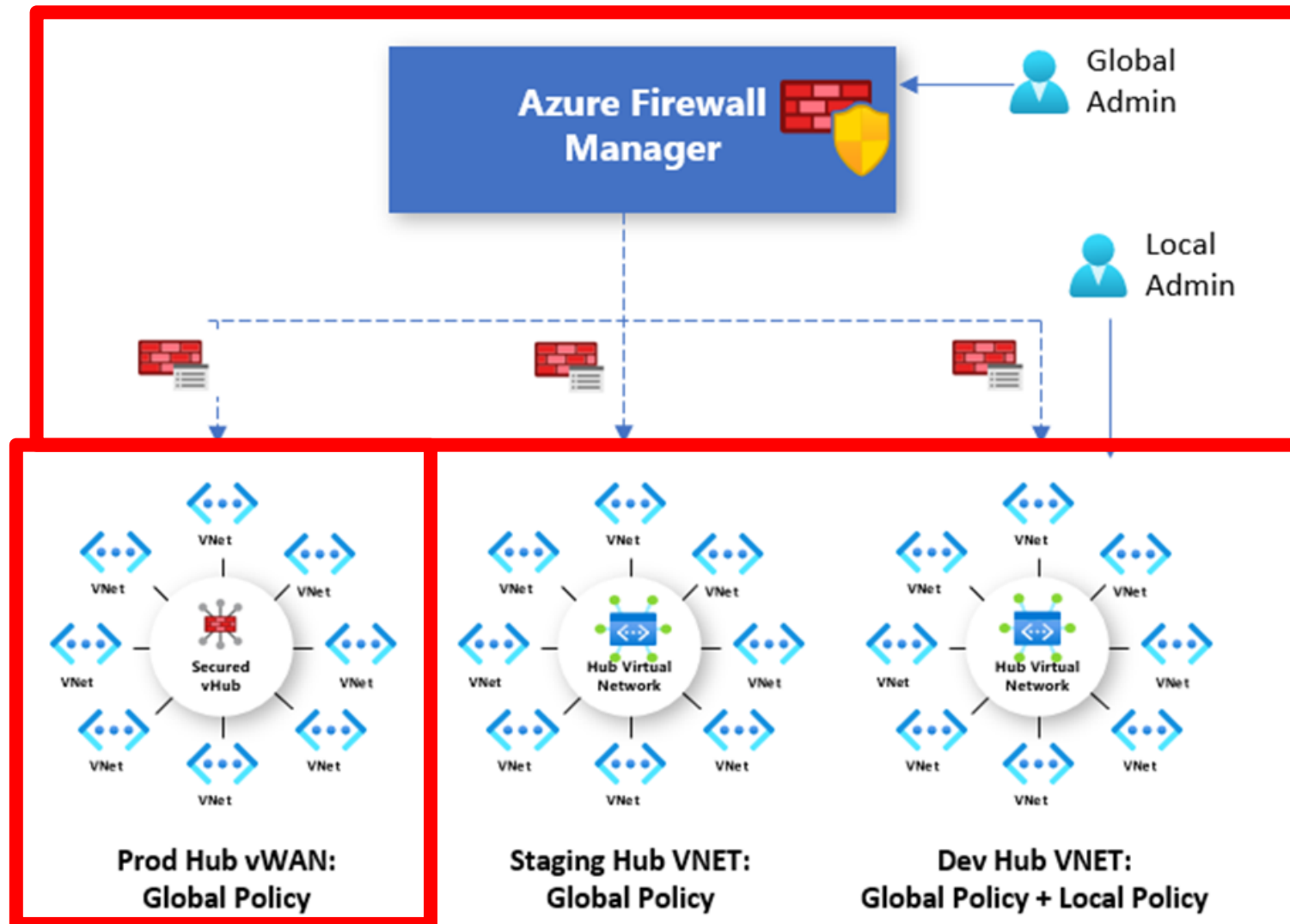
- VNet peering
- All Azure VPN types
- ExpressRoute
- Azure Firewall
- User-defined routing



# Azure Virtual WAN Architecture



# Secured Virtual Hub



# Demo



# 2

## Virtual WAN

- VPN gateway
- Vnet peering



# Summary



An Azure trend is this  
"rollup/abstraction" model to make  
networking easier for businesses

Shared responsibility model

Thanks!

Courses: [timw.info/ps](https://timw.info/ps)

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