

Always On VPN in Azure



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Overview



Always On VPN in Azure

Overview

- Azure VPN gateway
- Azure Virtual WAN
- Windows Server
- Virtual appliance



Point-to-site VPN



Azure VPN Gateway



Azure VPN Gateway

Advantages

**Fully managed VPN
infrastructure**

Disadvantages

**Limited support for
Always On VPN**





Device tunnel or user tunnel

- Single mode authentication

Limited support for SSTP

- 128 or 256 concurrent connections

One gateway per Vnet

No support for force tunnel

No support for geographic redundancy

Route-based gateway required

Demo



Configure Azure VPN gateway point-to-site



Azure PowerShell Management

`Install-Module Az`

`Connect-AzAccount`

`Get-AzSubscription`

`Select-AzSubscription -SubscriptionId '<id>'`



Configure IKEv2 Security Policy

```
$IPsecPolicy = New-AzVpnClientIpsecParameter -IpsecEncryption GCMAES128 -IpsecIntegrity  
GCMAES128 -SALifeTime 28800 -SADataSize 102400000 -IkeEncryption GCMAES128 -  
IkeIntegrity SHA256 -DhGroup DHGroup14 -PfsGroup ECP256
```

```
Set-AzVpnClientIpsecParameter -VirtualNetworkGatewayName <VPN gateway name> -  
ResourceGroupName <resource group name> -VpnClientIPsecParameter $IPsecPolicy
```



View IKEv2 Security Policy

```
Get-AzVpnClientIpsecParameter -Name <VPN gateway name> -ResourceGroupName <resource group name>
```



Azure Virtual WAN



Azure Virtual WAN

Advantages

**Greater scalability and
throughput**

Disadvantages

**Limited support for
Always On VPN**





IKEv2 only

Device tunnel or user tunnel

- Single mode authentication

No support for force tunnel

No support for geographic redundancy

Standard SKU required

Demo



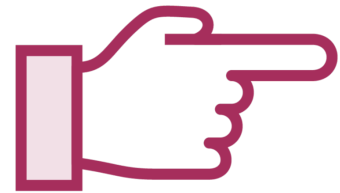
Configure Azure Virtual WAN point-to-site



Windows Server



Windows Server RRAS in Azure



Easy to deploy



Scales effectively



Device tunnel and user tunnel support



Supports geographic redundancy



RRAS on Windows Server not
supported in Azure



“Not supported is different than doesn’t work.”

Richard M. Hicks



Demo



Configure RRAS in Azure



Virtual Appliance



Virtual Appliances

Palo Alto

Cisco

Fortinet

Check Point



Summary



Always On VPN in Azure

Summary

- Cloud native
- Windows server
- Virtual appliance



Up Next:
Certificates and Intune

