**Point to Site**

1. Create a vm window server 2019 (for example) as a part of Azure Virtual network. Open port 80, RDP/3389
2. Install IIS server on machine and create a demo page. Check if it is working
3. **Create Gateway Subnet** (named as GatewaySubnet **unique per virtual network**) in Azure network to host gateway VM and services. VM in this will be configured with required VPN gateway settings

No other VM can be configured in this subnet. Gateway subnet can be configured /29, but Microsoft recommends /27 or /26

1. Create virtual network gateway (say network-gateway, choose same region as virtual network) gateway type as VPN, vpn type -route based, SKU (leave default), newest generation. It will pick gateway subnet made above. Create new public ip address (say gateway-ip)

It will take time to get generated

1. Create self-signed root certificate and client certificate. Certs are installed on client machine to authenticate (in large org, they take certs from enterprise CA authority)

$cert = New-SelfSignedCertificate -Type Custom -KeySpec Signature `

-Subject "**CN=VPNRoot**" -KeyExportPolicy Exportable `

-HashAlgorithm sha256 -KeyLength 2048 `

-CertStoreLocation "Cert:\CurrentUser\My" -KeyUsageProperty Sign -KeyUsage CertSign

New-SelfSignedCertificate -Type Custom -DnsName **VPNCert** -KeySpec Signature `

-Subject "**CN=VPNCert**" -KeyExportPolicy Exportable `

-HashAlgorithm sha256 -KeyLength 2048 `

-CertStoreLocation "Cert:\CurrentUser\My" `

-Signer **$cert** -TextExtension @("2.5.29.37={text}1.3.6.1.5.5.7.3.2")

1. Search bar – manage user certs > u ca see VPNCert and VPNRoot

Graphical user interface, application

Description automatically generated

Right click on VPNRoot > All Task> Export

Follow the wizard

Graphical user interface, application, Word

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

After saving the file say root on desktop folder. Open it with notepad. Copy content and paste in below screen

1. Goto point to site config in gateway.

Graphical user interface, text, application

Description automatically generated

1. Download VPN Client

Graphical user interface, text, application, email

Description automatically generated

1. Download vpn client. Extract zip folder
2. Run as admin, install vpn client

Graphical user interface, text, application, email

Description automatically generated

1. Connect Azure Network

Graphical user interface, text, application, email, Teams

Description automatically generated

1. You will able to connect using private ip

Graphical user interface, application, Word

Description automatically generated

**Site to Site Network (using simulation of company network)**

Spin a vm (say company vm in companyNetwork) containing companyvm pubip, companyvm privateip address space

Install RemoteAccess (with option DirectAccess and VPN, Routing)

Create a local network gateway (contains information abt company network) in same resource group in which virtual network gateway is present

Graphical user interface, application

Description automatically generated

Connection in virtual network gateway

Graphical user interface, application

Description automatically generated

Goto rdp connection of companyvm, remote access is installed by now. Openup getting started wizard

Graphical user interface, text, application

Description automatically generated

Choose deploy VPN only, select below option and follow popups

Graphical user interface

Description automatically generated

Select custom config> Demand dial connection and Lan routing

Graphical user interface, application

Description automatically generated

Click on start service

Right click on network interface

Graphical user interface

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Click ok and hit next

Graphical user interface, text, application

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Graphical user interface, text, application

Description automatically generated

Right click and hit connect

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated