

VPN Gateway overview & VPN connectivity topologies

VPN Gateway overview

A VPN gateway is a specific type of virtual network gateway that is used to send encrypted traffic between an Azure virtual network and an on-premises location over the public Internet.

Monitoring and Alerts

Monitor the key metrics and configure alerts.

Connection topologies

Site to Site, Multi-Site, Point to Site, Vnet-to-Vnet and express route.

Local network gateway

Local network gateway usually represents your on-premises location i.e. VPN device, and address prefixes.

Gateway subnet

Before you create a VPN gateway, you must create a gateway subnet with name 'GatewaySubnet' and do not deploy anything else into that subnet.

Gateway SKUs

Select the SKU that satisfies your requirements based on the types of workloads, throughputs, features, and SLAs.

Zone-redundant gateways

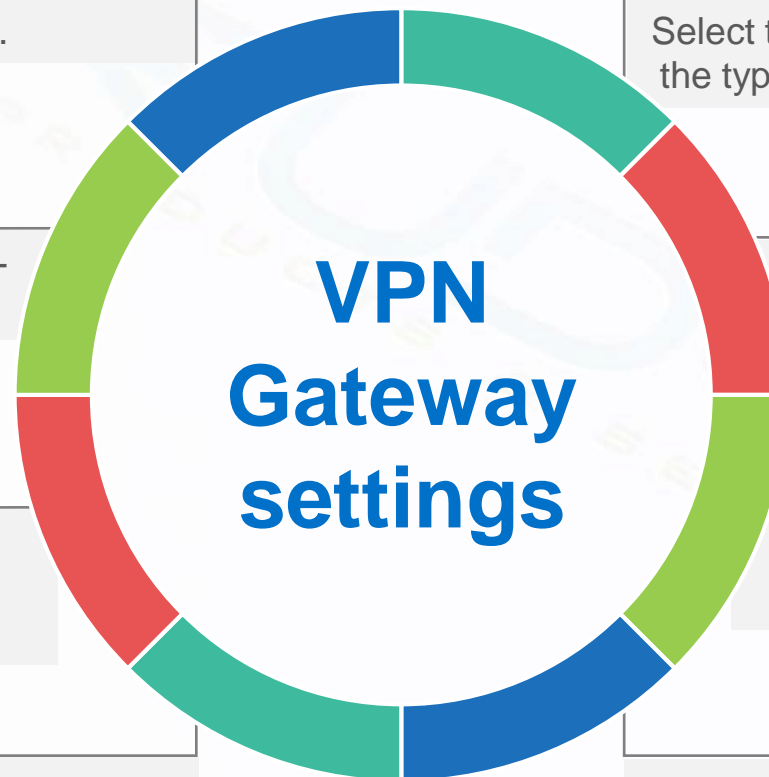
With zone-redundant gateways, you can benefit from zone-resiliency to access your mission-critical, scalable services on Azure

Connection types

Connection type can be IPsec, Vnet2Vnet, ExpressRoute, VPNClient .

VPN Types

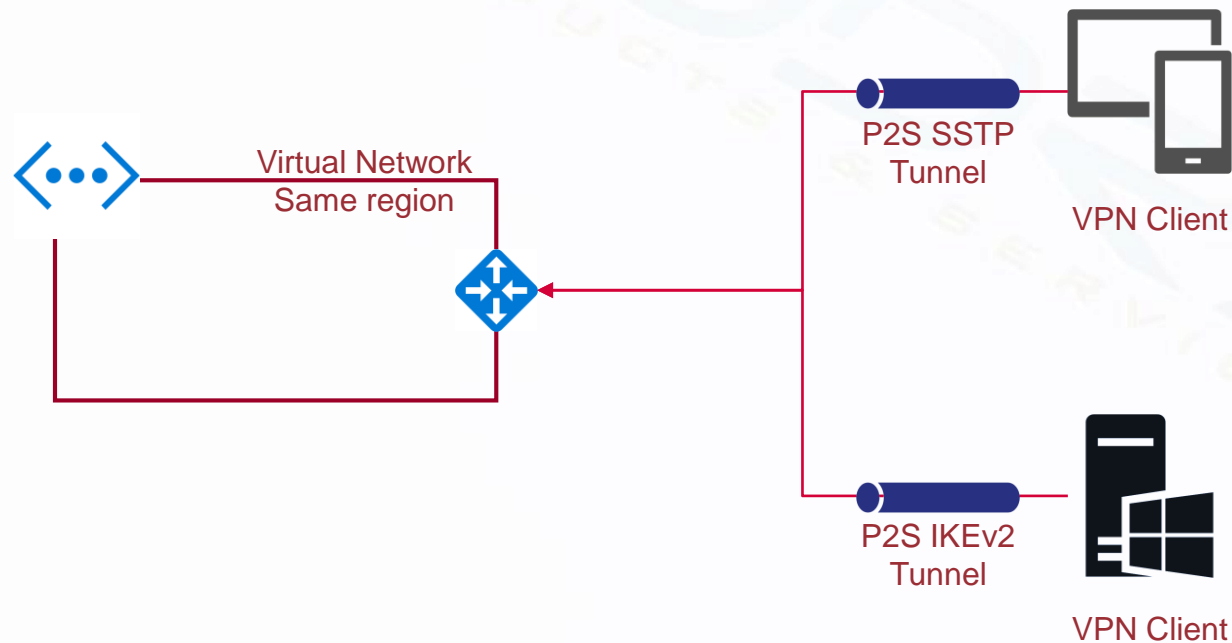
The VPN type that you choose depends on the connection topology that you want to create and VPN device. It can be Policy based VPN or Route based VPN.



Point to Site VPN

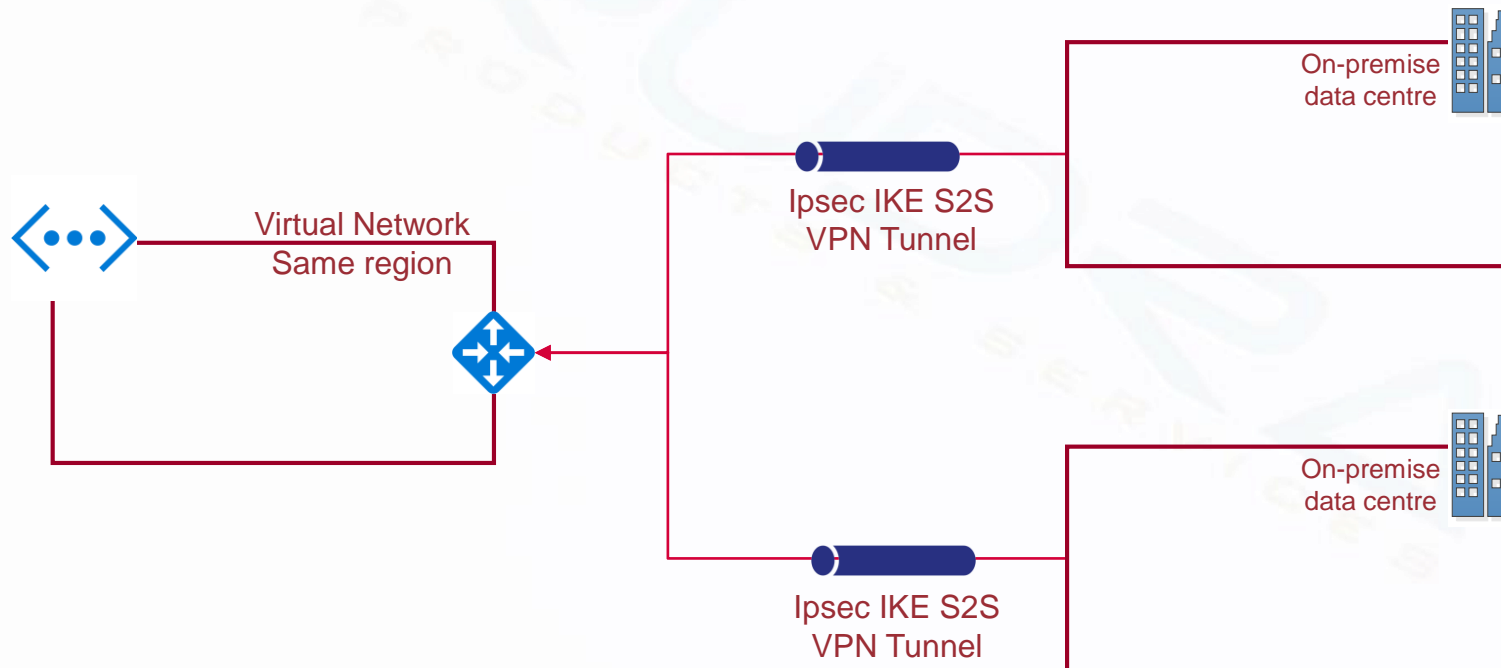
A Point-to-Site (P2S) VPN gateway connection lets you create a secure connection to your virtual network from an individual client computer.

This solution is useful for remote users who want to connect to Azure VNets from a remote location, such as from home or a conference.



Site to Site VPN

A Site-to-Site (S2S) VPN gateway connection is a connection over IPsec/IKE (IKEv1 or IKEv2) VPN tunnel. S2S connections can be used for cross-premises and hybrid configurations. A S2S connection requires a VPN device located on-premises that has a public IP address assigned to it and is not located behind a NAT.



VNet to VNet VPN

Connecting a virtual network to another virtual network (VNet-to-VNet) is similar to connecting a VNet to an on-premises site location. Both connectivity types use a VPN gateway to provide a secure tunnel using IPsec/IKE.

