

Vnet-Vnet Between Different Region and Different Subscription

Overview:

This article helps you connect virtual networks (VNets) by using the VNet-to-VNet connection type. Virtual networks can be in different regions and from different subscriptions. When you connect VNets from different subscriptions, the subscriptions don't need to be associated with the same Active Directory tenant.

SetUp a xyz company network

Create a new Resource group :

«

Create a resource

Dashboard

All services

FAVORITES

All resources

Resource groups

App Services

Function Apps

SQL databases

Azure Cosmos DB

Virtual machines

Load balancers

Storage accounts

Virtual networks

Azure Active Directory

Monitor

Advisor

Security Center

Dashboard > Resource groups > Resource group

Resource groups

HCL Technologies Ltd.


+ Add

Edit columns

More

Filter by name...

NAME ↑↓



No resource groups to display

Try changing your filters if you don't see what you're looking for. [Learn more](#)

Create resource group

Resource group

Create an empty resource group

* Resource group name

xyz-resgroup

* Subscription

Free Trial

* Resource group location

West US 2

Create

Create a Virtual Network :

Create a resource

Dashboard

All services

FAVORITES

All resources

Resource groups

App Services

Function Apps

SQL databases

Azure Cosmos DB

Virtual machines

Load balancers

Storage accounts

Virtual networks

Azure Active Directory

Monitor

Advisor

Security Center

Dashboard > Virtual networks > Create virtual network

Virtual networks

HCL Technologies Ltd.

+ Add

Edit columns

More

Filter by name...

NAME

↑↓

<>

No virtual networks to display

Create a virtual network to securely connect your Azure resources to each other. Connect your virtual network to your on-premises network using an Azure VPN Gateway or ExpressRoute. [Learn more](#)

Create virtual network

Create virtual network

Name

xyz-vnet

Address space

10.0.0.0/16

10.0.0.0 - 10.0.255.255 (65536)

Subscription

Free Trial

Resource group

xyz-resgroup

Create new

Location

West US 2

Subnet

Name

default

Address range

10.0.0.0/24

10.0.0.0 - 10.0.0.255

DDoS protection

Create

Automation

Create a Gateway Subnet :

[Dashboard](#) > [All resources](#) > [xyz-vnet - Subnets](#) > Add subnet

Add subnet



xyz-vnet

* Name

GatewaySubnet

* Address range (CIDR block) ⓘ

10.0.1.0/24

10.0.1.0 - 10.0.1.255 (251 + 5 Azure reserved addresses)

Route table

None



Service endpoints

Services ⓘ

0 selected



Subnet delegation

Delegate subnet to a service ⓘ

None



OK

Create a VM in your Virtual Network .

Create a virtual machine

customization.
Looking for classic VMs? [Create VM from Azure Marketplace](#)

PROJECT DETAILS

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

* Subscription ⓘ

Free Trial

_____* Resource group ⓘ

xyz-resgroup

[Create new](#)

INSTANCE DETAILS

* Virtual machine name ⓘ

xyz-vm-dev01

* Region ⓘ

West US 2

Availability options ⓘ

No infrastructure redundancy required

* Image ⓘ

Windows Server 2016 Datacenter

[Browse all images and disks](#)

Create a virtual machine

* Size ⓘ

Standard A1

1 vcpu, 1.75 GB memory

[Change size](#)

ADMINISTRATOR ACCOUNT

* Username ⓘ

mohitkumargupta

* Password ⓘ

.....

* Confirm password ⓘ

.....

INBOUND PORT RULES

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

* Public inbound ports ⓘ

☐

None

☒

Allow selected ports

* Select inbound ports

RDP



These ports will be exposed to the internet. Use the Advanced controls to limit inbound traffic to known IP addresses. You can also update inbound traffic rules later.

Create a Virtual Network Gateway

Create virtual network gateway



Azure has provided a planning and design guide to help you configure the various VPN gateway options. [Learn more.](#)

* Name

xyz-vnet-gateway



Gateway type ⓘ



VPN



ExpressRoute

VPN type ⓘ



Route-based



Policy-based

* SKU ⓘ

VpnGw1



Enable active-active mode ⓘ

* Virtual network ⓘ

xyz-vnet



* Gateway subnet address range ⓘ

10.0.1.0/24



10.0.1.0 - 10.0.1.255 (256 addresses)

* Public IP address ⓘ

Create virtual network gateway

* Virtual network ⓘ

xyz-vnet

>

* Public IP address ⓘ

Create new

Use existing

xyz-vnet-gateway-ip

✓

^ Configure public IP address

SKU

Basic

* Assignment

Dynamic

Static

☐ Configure BGP ASN ⓘ

* Subscription

Free Trial

▼

Resource group ⓘ

xyz-resgroup

* Location ⓘ

Create

Automation options

SetUp a ABC Company network

Create New resource group for abc company

Resource groups

mohitguptaakgechotmail (Default Directory)

+ Add

≡ Edit columns

⋮ More

Filter by name...

NAME ↑↓



No resource groups to display

Try changing your filters if you don't see what you're looking for. [Learn more](#)

Create resource group

Resource group

Create an empty resource group

* Resource group name

abc-resgroup



* Subscription

Visual Studio Ultimate with MSDN



* Resource group location

East US 2



Create

Create a Virtual Network

Search resources, services, and docs

Dashboard > Virtual networks > Create virtual network

Virtual networks

mohitguptaakgechotmail (Default Directory)

+ Add

Edit columns

More

Filter by name...

NAME

↑↓

< . . >

No virtual networks to display

Create a virtual network to securely connect your Azure resources to each other. Connect your virtual network to your on-premises network using an Azure VPN Gateway or ExpressRoute. [Learn more](#)

Create virtual network

Create virtual network

* Name

abc-vnet

* Address space

20.0.0.0/16

20.0.0.0 - 20.0.255.255 (65536 addresses)

* Subscription

Visual Studio Ultimate with MSDN

* Resource group

abc-resgroup

Create new

* Location

East US 2

Subnet

* Name

default

* Address range

20.0.0.0/16

20.0.0.0 - 20.0.255.255 (65536 addresses)

DDoS protection

CreateAutomation options

Add SubNet

[Dashboard](#) > [All resources](#) > [abc-vnet - Subnets](#) > Add subnet

Add subnet

abc-vnet

*

Name

GatewaySubnet

*

Address range (CIDR block) ⓘ

20.0.1.0/24

20.0.1.0 - 20.0.1.255 (251 + 5 Azure reserved addresses)

Route table

None

>

Service endpoints

Services ⓘ

0 selected

▼

Subnet delegation

Delegate subnet to a service ⓘ


None

▼

OK

RESOURCES

* Subscription 

★ Resource group 

abc-resgroup

INSTANCE DETAILS

abc-vm-dev01

Central US

No infrastructure redundancy required

Windows Server 2016 Datacenter

* Size

1 vcpu, 3.5 GB memory

Change size

Create a virtual machine

Basics Disks **Networking** Management Guest config Tags Review + create

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution. [Learn more](#)

NETWORK INTERFACE

When creating a virtual machine, a network interface will be created for you.

CONFIGURE VIRTUAL NETWORKS

* Virtual network ⓘ

(new) abc-resgroup-vnet

[Create new](#)

* Subnet ⓘ

(new) default (10.0.0.0/24)

Public IP ⓘ

(new) abc-vm-dev01-ip

[Create new](#)

NIC network security group ⓘ

☐ None ☒ Basic ☐ Advanced

* Public inbound ports ⓘ

☐ None ☒ Allow selected ports

* Select inbound ports

RDP

Create a Virtual Network Gateway

Connect Abc and Xyz Virtual Network Gateway using Powershell CLI

```
az network vpn-connection create -n xyzvnet-abcvnet -g xyz-resgroup --vnet-gateway1  
/subscriptions/<SubId1>/resourceGroups/xyz-  
resgroup/providers/Microsoft.Network/virtualNetworkGateways/xyz-vnet-gateway -l "West US 2" --  
shared-key "eeffgg" --vnet-gateway2 /subscriptions/<SubId2>/resourceGroups/abc-  
resgroup/providers/Microsoft.Network/virtualNetworkGateways/abc-vnet-gateway
```

```
az network vpn-connection create -n abcvnet-xyzvnet -g abc-resgroup --vnet-gateway1  
/subscriptions/<SubId2>/resourceGroups/abc-  
resgroup/providers/Microsoft.Network/virtualNetworkGateways/abc-vnet-gateway -l "East US 2" --  
shared-key "eeffgg" --vnet-gateway2 /subscriptions/<SubId1>/resourceGroups/xyz-  
resgroup/providers/Microsoft.Network/virtualNetworkGateways/xyz-vnet-gateway
```

Test the connection :

Test the RDP using private IP from one machine to another machine.

