

VNET - How to Connect from Azure VNET and Scale Set

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VNET - How to Connect from Azure VNET and Scale Set

Issue

Connecting from Azure Virtual network and create Virtual machine Scale Set

Steps

You CAN use public IP range in your VNets as you can see in the documentation. Vnet does not have public IP if you don't specify it.

What address ranges can I use in my VNets?

--You can use public IP address ranges and any IP address range defined in [RFC 1918](#).

Can I have public IP addresses in my VNets?

--Yes. For more information about public IP address ranges, see the [Public IP address space in a virtual network](#) article. Your public IP addresses will not be directly accessible from the Internet.

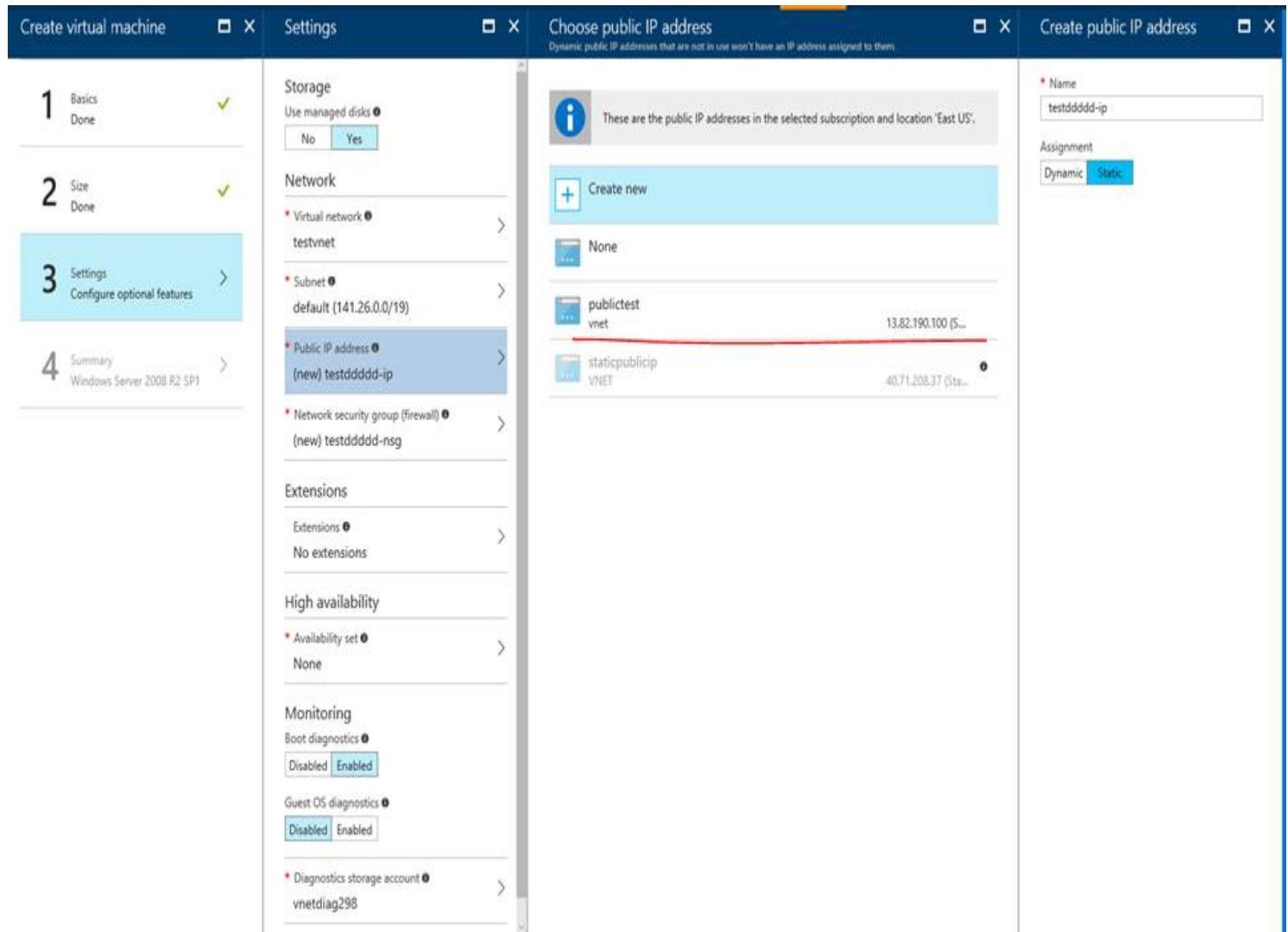
However, when you add a public IP address range, it will be treated as part of the private VNet IP address space that is only reachable within the VNet, interconnected VNets, and from your on-premises location.”
<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-public-ip-within-vnet> To double confirm this, I created a VNET using the public IP 141.26.0.0/16 and then created a VM to use this VNET. VM still use other public IP and treat my VNET IP as part of private IP.

NAME	PUBLIC IP ADDRESS	PRIVATE IP ADDRESS	SECURITY GROUP
vnettestserver205	40.71.208.37	141.26.0.4	Vnettestserver-nsg

So we shall assign the public IP on the VM level instead of the VNET level in order to communicate with database.

We can assign public IP when creating the VM. We can also change the public IP after VM creation.

- When you create the VM, you can choose "create new" or choose from existing public IP address where you know the exact ip address if you choose static ip.



You can create public IP. Once you choose static, it will give you a static IP when it is completed.

Create public IP address

*

Name

*

IP address assignment

Dynamic

Static

*

Idle timeout (minutes)

4

*

DNS name label

.eastus.cloudapp.azure.com

*

Subscription

Microsoft Azure Internal Consumption

*

Resource group

Create new

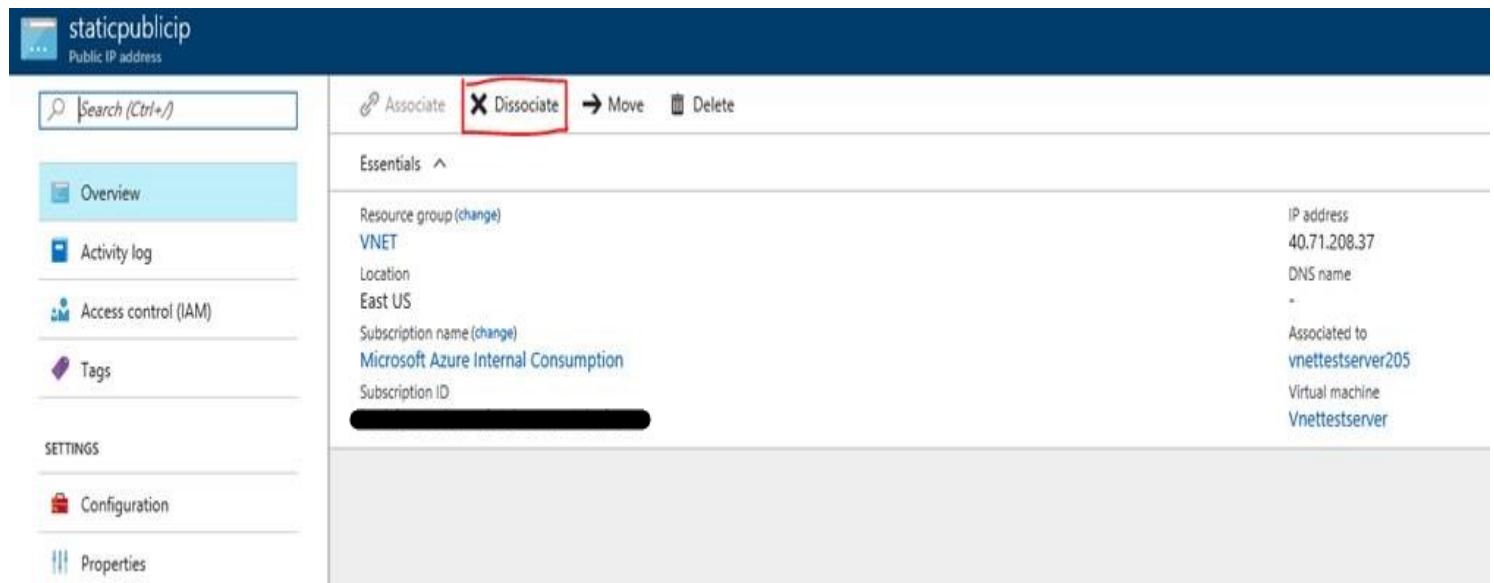
Use existing

*

Location

East US

- If the VM already created, you can change public ip address using the following dissociate and associate to assign public IP to the VM.



staticpublicip
Public IP address

Search (Ctrl+/)

Overview
Activity log
Access control (IAM)
Tags

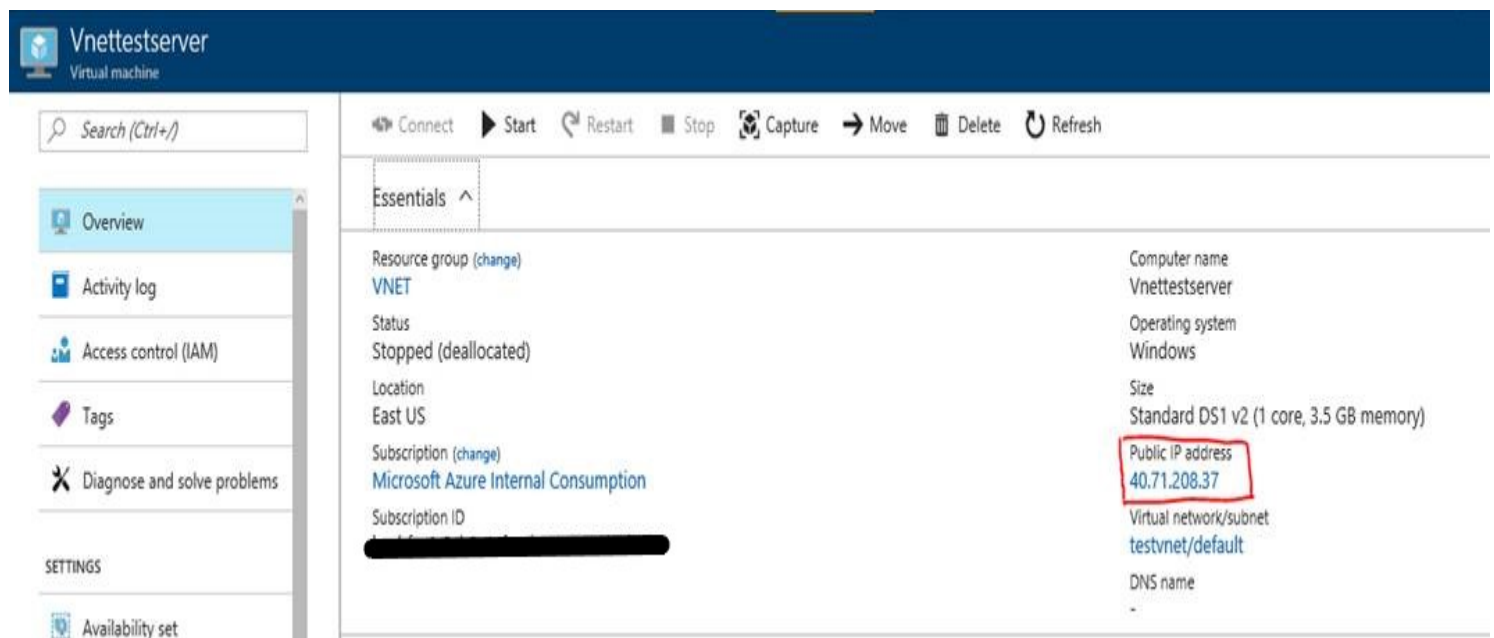
SETTINGS
Configuration
Properties

Associate **Dissociate** → Move Delete

Essentials ^

Resource group (change)	IP address
VNET	40.71.208.37
Location	DNS name
East US	-
Subscription name (change)	Associated to
Microsoft Azure Internal Consumption	vnettestserver205
Subscription ID	Virtual machine
	Vnettestserver

You can find your static public Ip address in your VM and add it to database firewall settings.



Vnettestserver
Virtual machine

Search (Ctrl+/)

Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems

SETTINGS
Availability set

Connect Start Restart Stop Capture → Move Delete Refresh

Essentials ^

Resource group (change)	Computer name
VNET	Vnettestserver
Status	Operating system
Stopped (deallocated)	Windows
Location	Size
East US	Standard DS1 v2 (1 core, 3.5 GB memory)
Subscription (change)	Public IP address
Microsoft Azure Internal Consumption	40.71.208.37
Subscription ID	Virtual network/subnet
	testvnet/default
	DNS name
	-

You mentioned you are using load balancer. We can also assign static public IP that we already created to the load balancer.

<https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-overview>

Create load balancer

* Name

* Type [?]

Public Internal

* Public IP address

Choose a public IP address

* Subscription

Microsoft Azure Internal Consumption

* Resource group [?]

☒ Create new ☐ Use existing

* Location

East US

Choose public IP address

Dynamic public IP addresses that are not in use won't have an IP address assigned to them.

These are the public IP addresses in the selected subscription and location 'East US'.

Create new

publictest vnet	13.82.190.100 (S...
staticpublicip VNET	40.71.208.37 (Sta...

When load balancer is used, it seems sql still see VM's public IP, instead of the load balancer's IP.

However, it looks like when VM scale set is used, VM scale set IP is the same as its load balancer IP. Underlying VM also has the same IP, just different port for different instances.

datasetest

Virtual machine scale set

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

SETTINGS

Start Restart Deallocate Move Delete

Essentials ^

Resource group (change)	Public IP address
test	<u>52.168.86.191</u>
Status	Virtual network/subnet
Succeeded	datasetestVnet/default
Location	Operating system
East US	Windows
Subscription name (change)	Size
Microsoft Azure Internal Consumption	Standard_D1_v2 (1 instance)
Subscription ID	Autoscaling
	On

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

SETTINGS

Move Delete

Essentials ^

Resource group (change)
test

Location
East US

Subscription name (change)
Microsoft Azure Internal Consumption

Subscription ID
[REDACTED]

Backend pool
bepool (1 virtual machine)

Health probe
-

Load balancing rule
-

NAT rules
1 inbound

Public IP address
52.168.86.191 (scaleset)

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

+ Add

Search inbound NAT rules

NAME	IP VERSION	DESTINATION	TARGET	SERVICE
natpool.0	IPv4	<u>52.168.86.191</u>	databasetest (instance 0)	<u>Custom (TCP/50000)</u>

I can use 52.168.86.191:50000 to RDP into this VM.

However, this IP address cannot be dissociated. It makes sense since this is one of the required fields when I create the VM scale set.

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

Tags

Associate X Dissociate Move Delete

Essentials ^

Resource group (change)
test

Location
East US

Subscription name (change)
Microsoft Azure Internal Consumption

Subscription ID
[REDACTED]

IP address
52.168.86.191

DNS name
domainnametest.eastus.cloudapp.azure.com

Associated to
databasetestLb

Create Virtual machine scal...

Virtual machine scale set se...

Create public IP address

1 Basics

2 Virtual machine scale set servic...
Configure the scale set

3 Summary
Virtual machine scale set

Public IP address
(new) ip01

Domain name label
southcentralus.cloudapp.azure.com

Operating system disk image
2016-Datacenter

Instance count

Scale set virtual machine size
nullx Standard D1 v2

Disk Type
Managed Unmanaged

Autoscale
Enabled Disabled

Name
ip01

Assignment
Dynamic Static

How good have you found this content?

