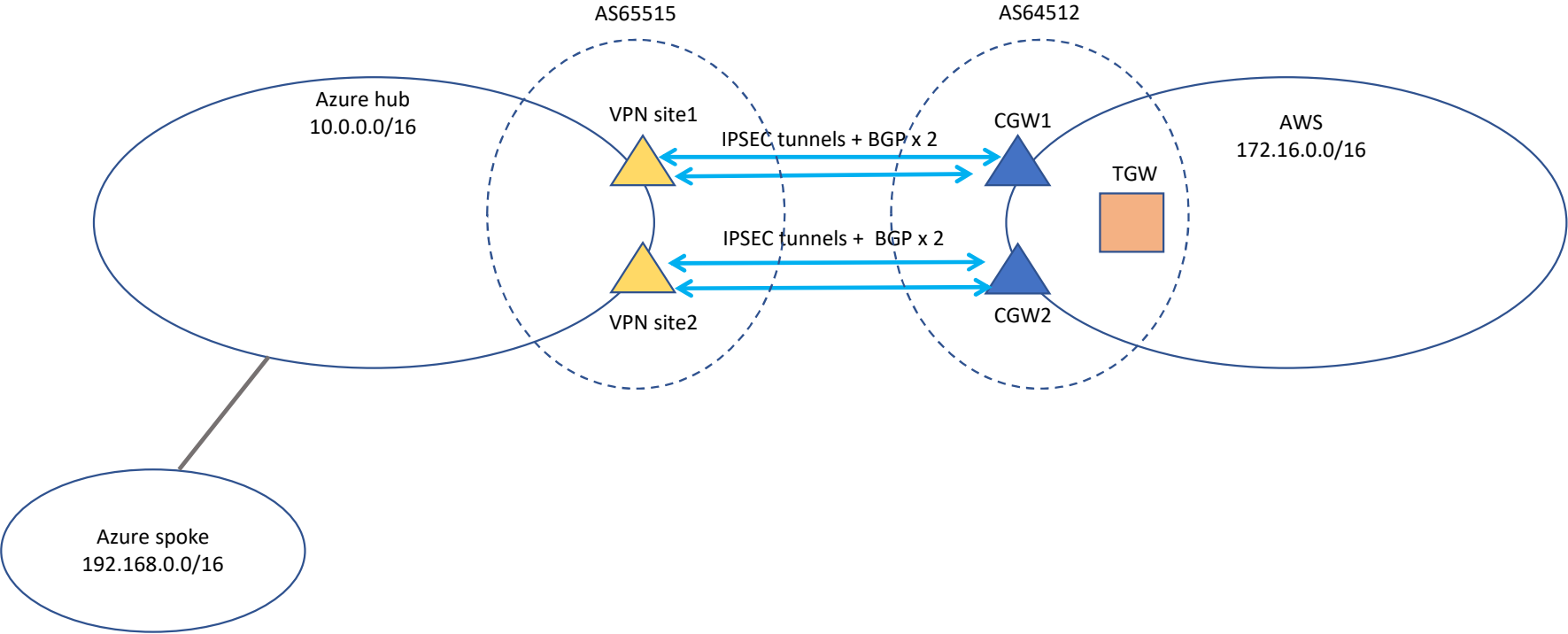


S2S VPN between Azure VWAN Hub and AWS TGW



# AWS configuration – VPC setup

vpc-0771488d3f21f37b7 / avwan-vpc

Actions ▼

Details Info

VPC ID

vpc-0771488d3f21f37b7

Tenancy

Default

Default VPC

No

Network Address Usage metrics

Disabled

State

Available

DHCP option set

dopt-054a01fd64d126800

IPv4 CIDR

172.16.0.0/16

Route 53 Resolver DNS Firewall rule groups

–

DNS hostnames

Disabled

Main route table

rtb-03b07d348906a2e12

IPv6 pool

–

Owner ID

995426084711

DNS resolution

Enabled

Main network ACL

acl-076da3a3f9cf0cee0

IPv6 CIDR

–

CIDRs

Flow logs

Tags

CIDRs Info

Address type	CIDR	Pool	Status
IPv4	172.16.0.0/16	–	Associated

# AWS configuration – TGW

Transit gateways (1/1) [Info](#)

Filter transit gateways

< 1 >

Name

Transit gateway ID

Owner ID

State

avwan-tgw1

tgw-0288fcd656e792d

995426084711

Available

tgw-0288fcd656e792d / avwan-tgw1

Details

Flow logs

Sharing

Tags

Details

Transit gateway ID

tgw-0288fcd656e792d

Transit gateway ARN

arn:aws:ec2:ap-southeast-1:995426084711:transit-gateway/tgw-0288fcd656e792d

Owner ID

995426084711

Description

-

State

Available

Default association route table

Enable

Default propagation route table

Enable

Transit gateway CIDR blocks

-

Amazon ASN

64512

Association route table ID

tgw-rtb-0ab797588a2e8cbfa

Propagation route table ID

tgw-rtb-0ab797588a2e8cbfa

Multicast support

Disable

DNS support

Enable

Auto accept shared attachments

Disable

VPN ECMP support

Enable

Take note of the AWS ASN

Optional for TGW CIDR blocks

# AWS configuration – TGW attachment to VPC

Here you need to create TGW attachment to attach the TGW to the VPC

Transit gateway attachments (1/1) Info

Filter transit gateway attachments

Transit gateway attachment ID: tgw-attach-022ac715e958ef85f Clear filters

	Name	Transit gateway attachment ID	Transit gateway ID	Resource type	Resource ID	State	Association route table ID
<input checked="" type="checkbox"/>	avwan-tgw1-attach...	tgw-attach-022ac715e958ef85f	tgw-0288fcd6f656e792d	VPC	vpc-0771488d3f21f37b7	Available	tgw-rtb-0ab797588a2e8cbfa

tgw-attach-022ac715e958ef85f / avwan-tgw1-attachment

Details | Flow logs | Tags

Details

Transit gateway attachment ID

tgw-attach-022ac715e958ef85f

Transit gateway ID

tgw-0288fcd6f656e792d

Transit gateway owner ID

995426084711

State

Available

Resource owner ID

995426084711

DNS support

Enable

Resource type

VPC

Resource ID

vpc-0771488d3f21f37b7

IPv6 support

Disable

Association state

Associated

Association route table ID

tgw-rtb-0ab797588a2e8cbfa

Subnet IDs

subnet-0e9acb5b64051562c

VPC created earlier

Selected subnet from the VPC that will be advertised over S2S VPN to Azure

## AWS configuration – Modify VPC route table to route Azure subnets to TGW

On the VPC route table, route the Azure subnets of 10.0.0.0/16 and 192.168.0.0/16 to the TGW. This is done manually. TGW will learn of these prefixes via BGP later. This step is needed as VPC route table ≠ TGW route table

VPC > Route tables > rtb-03b07d348906a2e12

rtb-03b07d348906a2e12

Actions ▾

Details [Info](#)

Route table ID  
rtb-03b07d348906a2e12

VPC  
vpc-0771488d3f21f37b7 | avwan-vpc

Main  
Yes

Owner ID  
995426084711

Explicit subnet associations  
-

Edge associations  
-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (3)

Edit routes

Filter routes

Both ▾

< 1 > ⚙

Destination ▾	Target ▾	Status ▾	Propagated ▾
10.0.0.0/16	tgw-0288fcd6f656e792d	Active	No
172.16.0.0/16	local	Active	No
192.168.0.0/16	tgw-0288fcd6f656e792d	Active	No

## Azure configuration – Create new VPN Gateway under VWAN Hub

Assume VWAN and VWAN Hub are setup, create VPN gateway under VWAN Hub. Note the ASN and public IP of the Gateway Instance. Also provide APIP addresses in the range 169.254.21.0 to 169.254.22.255

The screenshot displays the Azure portal interface for configuring a VWAN Hub and its associated VPN Gateways. The main view shows the 'vwanhubtest' VWAN Hub with a 'VPN (Site to site)' configuration. A notification indicates the gateway is being updated. The 'Essentials' section shows the ASN as 65515 and the Gateway scale units as 1 scale unit - 500 Mbps x 2. The 'VPN Sites' table lists two active sites: 'to-aws' and 'to-aws2', both located in 'southeastasia'. A red text overlay states: 'There are 2 active-active VPN GW instances, each with own public IP Two AWS Customer GW will be needed to peer with these two'. A yellow text overlay states: 'These APIP addresses belong to Azure VPN GW, usually for each S2S tunnel a /30 is used, with AWS taking the 1st available IP and Azure taking 2nd one. Take addresses from 169.254.21.0 to 169.254.22.255 segment'. The 'Edit VPN Gateway' pane on the right shows the configuration for two instances. Instance 0 has a Public IP Address of 20.88.165.98 and Custom BGP IP Addresses of 169.254.21.2 and 169.254.21.6. Instance 1 has a Public IP Address of 20.88.165.110 and Custom BGP IP Addresses of 169.254.22.2 and 169.254.22.6. Red boxes highlight the AS Number, Public IP Address, and Custom BGP IP Address fields for both instances. Green boxes highlight the Custom BGP IP Address fields for both instances. Arrows point from the text overlays to the corresponding fields in the 'Edit VPN Gateway' pane.

Home > Virtual WANs > vwanhubtest | Hubs > vwanhubtest

vwanhubtest | VPN (Site to site)

Download VPN Config | Packet Capture | Delete gateway | Reset gateway

This gateway is being updated. It may take upto 30 minutes for the update.

Overview

Connectivity

- VPN (Site to site)
- ExpressRoute
- User VPN (Point to site)

Routing

- BGP Peers
- Route Tables
- Effective Routes

Security

- Azure Firewall and Firewall Manager

Third party providers

- Network Virtual Appliance

Search this page | Restore previous filters

Add filter

VPN Sites

Check active filters when searching for a VPN site. VPN connectivity status might take a few minutes to refresh.

Page: 1

Site name	Location	Connection
to-aws	southeastasia	Succeeded
to-aws2	southeastasia	Succeeded

Essentials

ASN: 65515

Gateway scale units: 1 scale unit - 500 Mbps x 2 (Edit)

NAT Rules: 0 NAT Rule(s) (Edit)

Edit VPN Gateway

A Site to site (VPN gateway) enables you to connect VPN sites to a hub.

AS Number: 65515

Gateway scale units: 1 scale unit - 500 Mbps x 2

Routing preference: Microsoft network (selected), Internet

VPN Gateway Instance 0

Public IP Address: 20.88.165.98

Private IP Address: 10.0.0.4

Default BGP IP Address: 10.0.0.12

Custom BGP IP Address: 169.254.21.2, 169.254.21.6

Peer Address

VPN Gateway Instance 1

Public IP Address: 20.88.165.110

Private IP Address: 10.0.0.5

Default BGP IP Address: 10.0.0.13

Custom BGP IP Address: 169.254.22.2, 169.254.22.6

Peer Address

Updating a hub can take 30 minutes or more. <a href="https://aka.ms/virtualwan" target="\_blank">Learn more.</a>

Edit | Cancel

## AWS configuration – Create two Customer Gateways each representing the VPN GW instances on Azure

Assume VWAN and VWAN Hub are setup, create VPN gateway under VWAN Hub. Note the ASN and public IP of the Gateway Instance. Also provide APIP addresses in the range 169.254.21.0 to 169.254.22.255

Customer gateways (1/2) [Info](#)

Actions

Create customer gateway

< 1 >

	Name	Customer gateway ID	State	BGP ASN	IP address	Type	Certificate ARN
<input type="radio"/>	to-avwan2	cgw-0ea42906dd4bb018c	Available	65515	20.88.165.110	ipsec.1	-
<input checked="" type="radio"/>	to-avwan1	cgw-0ecf6b105c3abd15f	Available	65515	20.88.165.98	ipsec.1	-

BGP ASN of Azure      Public IP of VPN GW instances in Azure

cgw-0ecf6b105c3abd15f / to-avwan1

Details

Tags

Details

Customer gateway ID

cgw-0ecf6b105c3abd15f

BGP ASN

65515

State

Available

Certificate ARN

-

Type

ipsec.1

Device

-

IP address

20.88.165.98

## AWS configuration – Create S2S VPN using the CGW and TGW

Assume VWAN and VWAN Hub are setup, create VPN gateway under VWAN Hub. Note the ASN and public IP of the Gateway Instance. Also provide APIP addresses in the range 169.254.21.0 to 169.254.22.255

The screenshot displays the AWS Management Console interface for VPN connections. At the top, there's a header for 'VPN connections (1/2)' with a search bar and buttons for 'Actions', 'Download configuration', and 'Create VPN connection'. Below this is a table listing two VPN connections:

Name	VPN ID	State	Virtual private gateway	Transit gateway	Customer gateway	Customer gateway address	Inside IP
to-avwan2	vpn-0187499b68e562348	Available	-	tgw-0288fcd6f656e792d	cgw-0ea42906dd4bb018c	20.88.165.110	IPv4
to-avwan1	vpn-09cdd82be36870190	Available	-	tgw-0288fcd6f656e792d	cgw-0ecf6b105c3abd15f	20.88.165.98	IPv4

Below the table, there are two red annotations: 'Transit GW created earlier' and 'Two Customer Gateways created earlier'.

The details for the selected VPN connection 'vpn-09cdd82be36870190 / to-avwan1' are shown below. The 'Details' tab is active, displaying various configuration parameters:

- VPN ID: vpn-09cdd82be36870190
- State: Available
- Transit gateway: tgw-0288fcd6f656e792d
- Customer gateway address: 20.88.165.98
- Routing: Dynamic
- Local IPv4 network CIDR: 0.0.0.0/0
- Remote IPv4 network CIDR: 0.0.0.0/0
- Core network ARN: -
- Core network attachment ARN: -
- Virtual private gateway: -
- Type: ipsec.1
- Acceleration enabled: False
- Local IPv6 network CIDR: -
- Gateway association state: associated
- Customer gateway: cgw-0ecf6b105c3abd15f
- Category: VPN
- Authentication: Pre-shared key
- Remote IPv6 network CIDR: -
- Outside IP address type: PublicIPv4

Red annotations highlight specific configuration details:

- 'Use BGP dynamic routing over S2S IPSEC' points to the 'Routing: Dynamic' setting.
- 'No need to set local/remote prefixes as BGP takes care of route propagation' points to the 'Local IPv4 network CIDR' and 'Remote IPv4 network CIDR' fields.



## AWS configuration – Create S2S VPN using the CGW and TGW

Each S2S VPN has 2 tunnels – enter the details using the correct APIP addresses

VPN connections (1/2) [Info](#)

[Actions](#) [Download configuration](#) [Create VPN connection](#)

	Name	VPN ID	State	Virtual private gateway	Transit gateway	Customer gateway	Customer gateway ad...	Inside IP
<input type="radio"/>	to-avwan2	vpn-0187499b68e562348	Available	–	tgw-0288fcd8bf656e792d	cgw-0ea42906dd4bb018c	20.88.165.110	IPv4
<input checked="" type="radio"/>	to-avwan1	vpn-09cdd82be36870190	Available	–	tgw-0288fcd8bf656e792d	cgw-0ecf6b105c3abd15f	20.88.165.98	IPv4

vpn-09cdd82be36870190 / to-avwan1

[Details](#) [Tunnel details](#) [Tags](#)

Tunnel state

Tunnel number	Outside IP address	Inside IPv4 CIDR	Inside IPv6 CIDR	Status	Last status change	Details	Certificate ARN
Tunnel 1	52.76.133.105	169.254.21.0/30	–	Up	November 21, 2022, 13:38:45 (UTC+08:00)	2 BGP ROUTES	–
Tunnel 2	52.221.54.254	169.254.22.0/30	–	Up	November 21, 2022, 12:30:36 (UTC+08:00)	0 BGP ROUTES	–

► Tunnel 1 options [Info](#)

► Tunnel 2 options [Info](#)

Note that pre-shared-keys for IPSEC VPN is configured within the tunnels

Note down these public IP, to be used in Azure configuration later

Likely due to BGP routing, the Azure prefixes are preferred over one of the tunnels

Configure the APIP accordingly, AWS will take the first IP in the /30. For e.g. for 169.254.21.0/30 AWS will use 169.254.21.1 and Azure will need to use 169.254.21.2 . The Azure side is configured as per slide 6

## AWS configuration – Create S2S VPN using the CGW and TGW

Each S2S VPN has 2 tunnels – enter the details using the correct APIP addresses

VPN connections (1/2) [Info](#)

Filter VPN connections

Actions Download configuration Create VPN connection

Name	VPN ID	State	Virtual private gateway	Transit gateway	Customer gateway	Customer gateway ad...	Inside IP
to-avwan2	vpn-0187499b68e562348	Available	–	tgw-0288fcd6f656e792d	cgw-0ea42906dd4bb018c	20.88.165.110	IPv4
to-avwan1	vpn-09cdd82be36870190	Available	–	tgw-0288fcd6f656e792d	cgw-0ecf6b105c3abd15f	20.88.165.98	IPv4

vpn-0187499b68e562348 / to-avwan2

Details Tunnel details Tags

Note that pre-shared-keys for IPSEC VPN is configured within the tunnels

Note down these public IP, to be used in Azure configuration later

Tunnel number	Outside IP address	Inside IPv4 CIDR	Inside IPv6 CIDR	Status	Last status change	Details	Certificate ARN
Tunnel 1	18.138.138.115	169.254.21.4/30	–	Up	November 21, 2022, 13:35:44 (UTC+08:00)	0 BGP ROUTES	–
Tunnel 2	54.169.111.210	169.254.22.4/30	–	Up	November 21, 2022, 13:40:52 (UTC+08:00)	0 BGP ROUTES	–

► Tunnel 1 options [Info](#)

► Tunnel 2 options [Info](#)

Configure the APIP accordingly, AWS will take the first IP in the /30. For e.g. for 169.254.21.0/30 AWS will use 169.254.21.1 and Azure will need to use 169.254.21.2 . The Azure side is configured as per slide 6

## Azure S2S VPN configuration under VPN GW of VWAN Hub

Here 2 S2S VPN objects are used, each with 2 tunnels. You can also choose to use 1 S2S VPN object with 4 tunnels

Home > Virtual WANs > vwantest | Hubs > vwanhubtest

**vwanhubtest** | VPN (Site to site) ✂ ...

Virtual HUB

Search « [Download VPN Config](#) [Packet Capture](#) [Delete gateway](#) [Reset gateway](#)

Overview

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- VPN (Site to site)
- ExpressRoute
- User VPN (Point to site)

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- BGP Peers
- Route Tables
- Effective Routes

Security

- Azure Firewall and Firewall Manager

Third party providers

- Network Virtual Appliance

Essentials

ASN : 65515

Gateway scale units : [1 scale unit - 500 Mbps x 2 \(Edit\)](#)

NAT Rules : [0 NAT Rule\(s\) \(Edit\)](#)

Bytes in/out : 0.62 MB / 0 GB

VPN Gateway : [3c1f3ee699f743eeb991ec2c7025bad7-eastus-gw](#)

Gateway configuration : [View/Configure](#)

Metrics : [View in Azure Monitor](#)

Logs : [View in Azure Monitor](#)

JSON View

Search this page [Clear all filters](#)

Hub association : **Connected to this hub** ✕

VPN Sites ⓘ

**i** Check active filters when searching for a VPN site. VPN connectivity status might take a few minutes to refresh.

[+ Create new VPN site](#) [✂ Connect VPN sites](#) [✂ Disconnect VPN sites](#) [Refresh](#)

Page: 1 ▼

<input type="checkbox"/>	Site name	↑↓ Location	↑↓ Connection Provisioning status	↑↓ Connectivity status	↑↓
<input type="checkbox"/>	to-aws	southeastasia	✓ Succeeded	✓ Connected	...
<input type="checkbox"/>	to-aws2	southeastasia	✓ Succeeded	✓ Connected	...

Two VPN “site” objects created each with 2 tunnels, you can also use 1 VPN site object with 4 tunnels

# Azure S2S VPN configuration under VPN GW of VWAN Hub

## Tunnel configuration for one of the VPN objects

Home > Virtual WANs > vwantest | Hubs > vwanhubtest | VPN (Site to site) >

**to-aws** Virtual HUB

Search Edit site Add Link Refresh

Overview

Connectivity

BGP Dashboard

**Essentials**

Name : to-aws Private address space : --

Location : southeastasia Device vendor : aws

Resource group : vwantest-rg

Subscription : MCAPS-Hybrid-REQ-41738-2022-chianwong

**Connected Hubs**

Hub name	Location	Connectivity status
vwanhubtest	East US	Connected

**Links**

Link name	Link provider name	Link speed	Link IP address / FQDN	Link BGP address	Link ASN
awstunnel0	awstunnel0	10000 Mbps	52.76.133.105	169.254.21.1	64512
awstunnel1	awstunnel1	10000 Mbps	52.221.54.254	169.254.22.1	64512

Public IP of AWS tunnels

APIP address of AWS tunnel,  
remember AWS always used  
1<sup>st</sup> available IP in the subnet

# Azure S2S VPN configuration under VPN GW of VWAN Hub

BGP peering status for one of the VPN objects

Home > Virtual WANs > vwantest | Hubs > vwanhubtest | VPN (Site to site) > to-aws >

BGP Peers

Refresh

Download BGP peers

Routes the site-to-site gateway is advertising

Routes the site-to-site gateway is learning

Search in grid

Clear all filters

Showing only top 50 BGP peers in the grid. Click Download BGP Peers above to see all.

BGP Peers

Peer address	Local address	Gateway instance	ASN	Status	Connected duration	Routes received	Messages sent	Messages received
169.254.22.1	10.0.0.12	Instance0	64512	Connected	01:41:54.0722281	1	845	625
169.254.22.1	10.0.0.13	Instance1	64512	Connecting	-	0	0	0
169.254.21.1	10.0.0.12	Instance0	64512	Connected	01:41:54.3524821	1	855	625
169.254.21.1	10.0.0.13	Instance1	64512	Connecting	-	0	0	0

AWS APIP addresses

Here you only see the BGP peering successful for instance0 as the successful BGP peering for instance1 is on the other VPN object. In other words, this VPN object peers with only 1 of the AWS CGW.

# Azure S2S VPN configuration under VPN GW of VWAN Hub

BGP peering status the other VPN object

Refresh

Download BGP peers

Routes the site-to-site gateway is advertising

Routes the site-to-site gateway is learning

Search in grid

Clear all filters

Showing only top 50 BGP peers in the grid. Click Download BGP Peers above to see all.

BGP Peers

Peer address	Local address	Gateway instance	ASN	Status	Connected duration	Routes received	Messages sent	Messages received
169.254.22.5	10.0.0.12	Instance0	64512	Connecting	-	0	0	0
169.254.22.5	10.0.0.13	Instance1	64512	Connected	00:36:32.7931268	1	286	225
169.254.21.5	10.0.0.12	Instance0	64512	Connecting	-	0	0	0
169.254.21.5	10.0.0.13	Instance1	64512	Connected	00:41:18.5068816	1	288	253

AWS APIP addresses

Here you only see the BGP peering successful for instance1 as the successful BGP peering for instance0 is on the other VPN object. In other words, this VPN object peers with only 1 of the AWS CGW.

# Azure Route Table on VWAN hub

The 172.16.0.0/16 AWS prefix is received via S2S VPN as confirmed

Home > Virtual WANs > vwanhubtest | Hubs > vwanhubtest

vwanhubtest | Effective Routes Virtual HUB

Search

Download

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Search in grid

Clear all filters

Effective Routes

Only the first 100 effective routes are displayed in the grid. Please download the routes to view them all.

Choose route tables

Route Tables

Route Table

Default

Prefix	Next Hop Type	Next Hop	Origin	AS path
172.16.0.0/16	VPN_S2S_Gateway	3c1f3ee699f743eeb991ec2c7025bad7-eastus-gw	3c1f3ee699f743eeb991ec2c7025bad7-eastus-gw	64512
192.168.0.0/16	Virtual Network Connection	vwanhubtest/to-spokeAvnet	vwanhubtest/to-spokeAvnet	

172.16.0.0/16 is the AWS VPC prefix

192.168.0.0/16 is from a connected spoke in the VWAN, this will auto-propagate to AWS

## AWS route table on TGW

Both 10.0.0.0/16 and 192.168.0.0/16 are received from Azure

Transit gateway route tables (1/1) Info

Filter transit gateway route tables

Actions Create transit gateway route table

Name	Transit gateway route table ID	Transit gateway ID	State	Default association route table	Default propagation route table
-	tgw-rtb-0ab797588a2e8cbfa	tgw-0288fcd6f656e792d	Available	Yes	Yes

Details Associations Propagations Prefix list references Routes Tags

Filter routes by CIDR (2)

Exact CIDR Select a valid IP4 or IPv6 CIDR. 0.0.0.0/0, ::/0

Longest prefix match Enter a valid IP4 or IPv6 and press enter. 0.0.0.0, ::

Supernet of match Select a valid IP4 or IPv6 CIDR. 0.0.0.0/0, ::/0

Subnet of match Select a valid IP4 or IPv6 CIDR. 0.0.0.0/0, ::/0

Routes (3)

Filter routes

CIDR	Attachment ID	Resource ID	Resource type	Route type	Route state	Prefix list ID
10.0.0.0/16	tgw-attach-0af0737804bbbaab8	vpn-09cdd82be36870190(...)	VPN	Propagated	Active	-
172.16.0.0/16	tgw-attach-022ac715e958ef85f	vpc-0771488d3f21f37b7	VPC	Propagated	Active	-
192.168.0.0/16	tgw-attach-0af0737804bbbaab8	vpn-09cdd82be36870190(...)	VPN	Propagated	Active	-

10.0.0.0/16 is the Azure VWAN hub subnet

192.168.0.0/16 is the Azure spoke subnet that's connected to VWAN hub



# Other points to note – how to key in PSK in Azure

In Azure, after you create the S2S VPN, you have to “connect VPN site” first before the option to enter PSK shows

Home > Virtual WANs > vwantest | Hubs > vwanhubtest

vwanhubtest | VPN (Site to site)

Virtual HUB

Search

Download VPN ConfigPacket CaptureDelete gatewayReset gateway

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This gateway is being updated. It may take upto 30 minutes for the update

Essentials

ASN : 65515

Gateway scale units : 1 scale unit - 500 Mbps x 2 (Edit)

NAT Rules : 0 NAT Rule(s) (Edit)

Search this page

Restore previous filters

Add filter

VPN Sites

Check active filters when searching for a VPN site. VPN connectivity status might take a few minutes to refresh.

Create new VPN site

Connect VPN sites

Disconnect VPN sites

Refresh

Page: 1

Site name

Location

to-aws

southeastasia

to-aws2

southeastasia

Connect sites

Virtual HUB

Security settings

Pre-shared key (PSK)

VMware1SDDC

Protocol

IKEv2IKEv1

IPsec

DefaultCustom

Propagate Default Route

EnableDisable

Use policy based traffic selector

EnableDisable

Configure traffic selector?

YesNo

Connection Mode

DefaultInitiator OnlyResponder Only

These sites will be connected to the [vwanhubtest] hub.

Site name

Region

to-aws2

southeastasia

Connect

**Other points to note – create a single VPN site in Azure with 4 tunnels – 2 to each AWS CGW**

Home > vwanhubtest | VPN (Site to site) >

Create VPN site ...

Basics

Links

Review + create

Link Details ⓘ

Link name	Link speed	Link provider name	Link IP address / FQDN	Link BGP address	Link ASN	
awstunnel0	10000	awstunnel0	52.76.133.105	169.254.21.1	64512	...
awstunnel1	10000	awstunnel1	52.221.54.254	169.254.22.1	64512	...
awstunnel2	10000	awstunnel2	18.138.138.115	169.254.21.5	64512	...
awstunnel3 ✓	10000 ✓	awstunnel3 ✓	54.169.111.210 ✓	169.254.22.5 ✓	64512 ✓	...

ⓘ You can also work with a Virtual WAN partner to create multiple sites simultaneously. <a href='https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-locations-partners' target='\_blank'>Learn more.</a></div>

Previous

Next : Review + create >

Other points to note – create a single VPN site in Azure with 4 tunnels – 2 to each AWS CGW

Virtual HUB

VPN (Site to site)

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Network Virtual Appliance

Search

Download VPN Config

Packet Capture

Delete gateway

Reset gateway

Essentials

ASN : 65515

Gateway scale units : 1 scale unit - 500 Mbps x 2 (Edit)

NAT Rules : 0 NAT Rule(s) (Edit)

Bytes in/out : 0.03 MB / 0 GB

VPN Gateway : 3c1f3ee699f743eeb991ec2c7025bad7-eastus-gw

Gateway configuration : View/Configure

Metrics : View in Azure Monitor

Logs : View in Azure Monitor

Search this page

Restore previous filters

Add filter

VPN Sites

Check active filters when searching for a VPN site. VPN connectivity status might take a few minutes to refresh.

Create new VPN site

Connect VPN sites

Disconnect VPN sites

Refresh

Page: 1

Site name	Location	Connection Provisioning status	Connectivity status
to-aws	southeastasia	Succeeded	Connected

Other points to note – create a single VPN site in Azure with 4 tunnels – 2 to each AWS CGW

Home > Virtual WANs > vwantest > vwanhubtest | VPN (Site to site) > to-aws

to-aws | BGP Dashboard

Virtual HUB

Search

Refresh

Download BGP peers

Routes the site-to-site gateway is advertising

Routes the site-to-site gateway is learning

Overview

Search in grid

Clear all filters

Connectivity

BGP Dashboard

Showing only top 50 BGP peers in the grid. Click Download BGP Peers above to see all.

BGP Peers

4 tunnels in one VPN site – 2 to each AWS CGW

Peer address	Local address	Gateway instance	ASN	Status	Connected duration	Routes received	Messages sent	Messages received
169.254.22.1	10.0.0.12	Instance0	64512	Connected	00:11:08.9636558	1	88	73
169.254.22.5	10.0.0.13	Instance1	64512	Connected	00:08:37.9100720	1	66	56
169.254.21.5	10.0.0.13	Instance1	64512	Connected	00:09:33.0464553	1	78	63
169.254.21.1	10.0.0.12	Instance0	64512	Connected	00:12:19.7718045	1	98	81
169.254.22.1	10.0.0.13	Instance1	64512	Connecting	-	0	0	0
169.254.22.5	10.0.0.12	Instance0	64512	Connecting	-	0	0	0
169.254.21.5	10.0.0.12	Instance0	64512	Connecting	-	0	0	0
169.254.21.1	10.0.0.13	Instance1	64512	Connecting	-	0	0	0

Azure seems to expect the below BGP peering  
VPN GW instance0 --2tunnels-- CGW1  
VPN GW instance0 --2tunnels-- CGW2  
VPN GW instance1 --2tunnels-- CGW1  
VPN GW instance1--2tunnels-- CGW2

But AWS only expects the below  
VPN GW instance0 --2tunnels-- CGW1  
VPN GW instance1--2tunnels-- CGW2

Hence the discrepancy

Other points to note – create a single VPN site in Azure with 4 tunnels – 2 to each AWS CGW

VPN connections (1/2) [Info](#)

🔄

Actions ▾

Download configuration

Create VPN connection

🔍 Filter VPN connections

< 1 > ⚙️

	Name ▾	VPN ID ▾	State ▾	Virtual private gateway ▾	Transit gateway ▾	Customer gateway ▾	Customer gateway ad... ▾	Inside IP
<input type="radio"/>	to-avwan2	vpn-0187499b68e562348	🟢 Available	–	tgw-0288fcd8bf656e792d	cgw-0ea42906dd4bb018c	20.88.165.110	IPv4
<input checked="" type="radio"/>	to-avwan1	vpn-09cdd82be36870190	🟢 Available	–	tgw-0288fcd8bf656e792d	cgw-0ecf6b105c3abd15f	20.88.165.98	IPv4

vpn-09cdd82be36870190 / to-avwan1

Details

Tunnel details

Tags

Tunnel state

Tunnel number ▾	Outside IP address ▾	Inside IPv4 CIDR ▾	Inside IPv6 CIDR ▾	Status ▾	Last status change ▾	Details ▾	Certificate ARN ▾
Tunnel 1	52.76.133.105	169.254.21.0/30	–	🟢 Up	November 21, 2022, 15:01:14 (UTC+08:00)	2 BGP ROUTES	–
Tunnel 2	52.221.54.254	169.254.22.0/30	–	🟢 Up	November 21, 2022, 15:02:31 (UTC+08:00)	0 BGP ROUTES	–

▶ Tunnel 1 options [Info](#)

▶ Tunnel 2 options [Info](#)

Other points to note – create a single VPN site in Azure with 4 tunnels – 2 to each AWS CGW

VPN connections (1/2) [Info](#)

Filter VPN connections

< 1 > ⚙

	Name ▾	VPN ID ▾	State ▾	Virtual private gateway ▾	Transit gateway ▾	Customer gateway ▾	Customer gateway ad... ▾	Inside IP
●	to-avwan2	vpn-0187499b68e562348	✔ Available	–	tgw-0288fcd6f656e792d	cgw-0ea42906dd4bb018c	20.88.165.110	IPv4
○	to-avwan1	vpn-09cdd82be36870190	✔ Available	–	tgw-0288fcd6f656e792d	cgw-0ecf6b105c3abd15f	20.88.165.98	IPv4

vpn-0187499b68e562348 / to-avwan2

Details

Tunnel details

Tags

Tunnel state

Tunnel number ▾	Outside IP address ▾	Inside IPv4 CIDR ▾	Inside IPv6 CIDR ▾	Status ▾	Last status change ▾	Details ▾	Certificate ARN ▾
Tunnel 1	18.138.138.115	169.254.21.4/30	–	✔ Up	November 21, 2022, 15:04:09 (UTC+08:00)	0 BGP ROUTES	–
Tunnel 2	54.169.111.210	169.254.22.4/30	–	✔ Up	November 21, 2022, 15:05:22 (UTC+08:00)	0 BGP ROUTES	–

▶ Tunnel 1 options [Info](#)

▶ Tunnel 2 options [Info](#)