

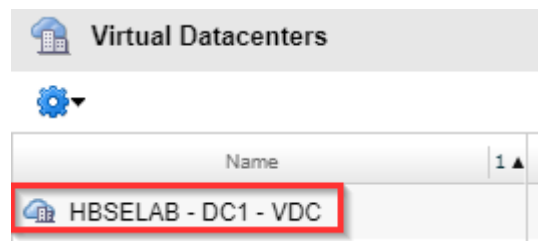
Setting Up IPSEC Site-to-Site VPN on NSX Edge Gateway

Accessing the NSX Edge Gateway

Login to vCloud and proceed to the “Administration” tab:



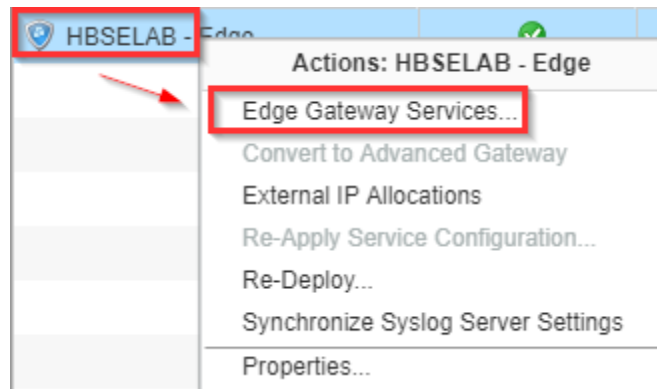
Select (left-click) your Organization’s Virtual Datacenter:



Select the “Edge Gateways” tab:



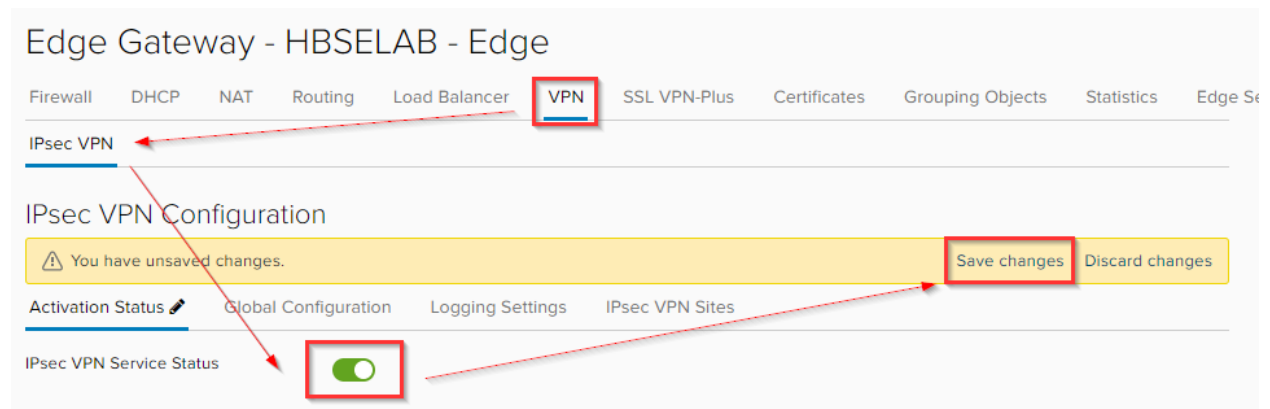
Right-click on your Edge Gateway and select “Edge Gateway Service...”



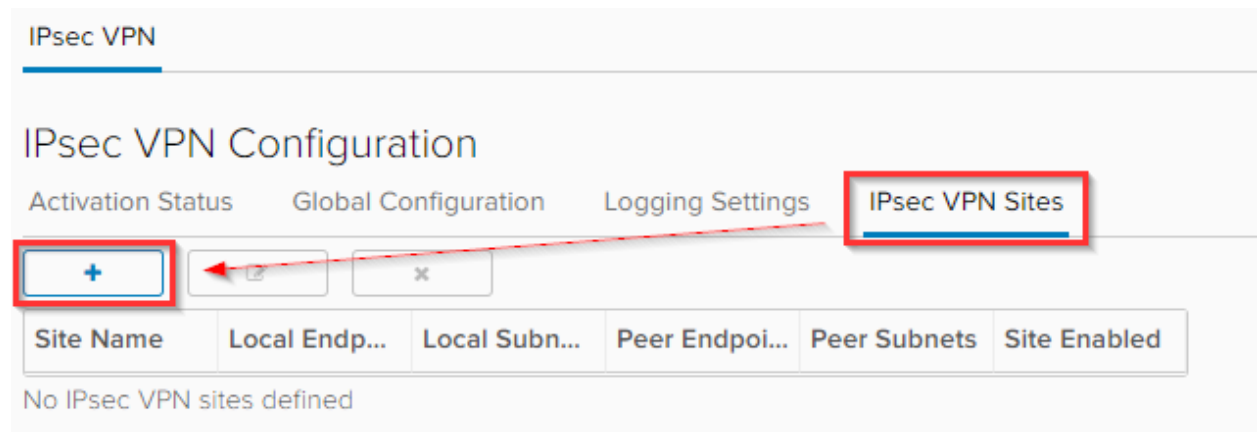
A new tab will open in your browser. You are now within the Advanced Edge Gateway.

Enabling Site-to-Site VPN

Within the Edge Gateway, select the “VPN” tab on the ribbon menu. Then within “IPsec VPN” toggle “IPsec VPN Service Status” to enable the service. Finally, save the changes:



Next, select the “IPsec VPN Sites” tab. Select the plus symbol (+) to add new IPsec Tunnel:



The “Add IPsec VPN” window should appear within your browser window, this is where all the tunnel details are filled:

Add IPsec VPN

Enabled

Enable perfect forward secrecy (PFS)

Name

Local Id *

Local Endpoint *

Local Subnets *

Subnets should be entered in CIDR format with comma as separator.

Peer Id *

Peer Endpoint *

Endpoint should be a valid IP, FQDN or any.

Peer Subnets *

DISCARD KEEP

Toggle the “Enabled” switch to activate the tunnel. At this point, we are ready to enter configuration details:

Add IPsec VPN

Enabled



Configuring Site-to-Site VPN

To setup the IPsec VPN some information will need to be gathered ahead of time. This includes:


- External IP of NSX Edge Gateway (Cloud public IP)
- Internal subnet of Org VDC Network (Cloud LAN)
- External IP of remote firewall (Remote site public IP)
- Internal subnet of remote site (Remote site LAN)

Once this information is gathered enter them into the corresponding boxes:

Add IPsec VPN

Enabled

Enable perfect forward secrecy (PFS)

Name	Tunnel Name
Local Id *	Cloud public IP
Local Endpoint *	Cloud public IP 
Local Subnets *	Cloud LAN Subnet
Subnets should be entered in CIDR format with comma as separator.	
Peer Id *	Remote site public IP
Peer Endpoint *	Remote site public IP
Endpoint should be a valid IP, FQDN or any.	
Peer Subnets *	Remote LAN Subnet
Subnets should be entered in CIDR format with comma as separator.	

DISCARD KEEP

Scrolling further down within the configuration window you will find the encryption settings. Choose one of the “Encryption Algorithm” settings from the dropdown. We recommend AES256 as it is the most widely used and supported. Select “Keep” to save the configuration.

Please note, If the KEEP button is greyed out it means either settings are missing or in the incorrect format.

Add IPsec VPN

Peer Endpoint: 8.8.4.4

Subnets should be entered in CIDR format with comma as separator.

Encryption Algorithm: AES256

Authentication: PSK

Change Shared Key:

Pre-Shared Key *: Enter a shared key

Display Shared Key:

Diffie-Hellman Group: DH5

Extension:

Extension could be passthroughSubnets=192.168.1.0/24, 192.168.2.0

DISCARD KEEP

Your configuration should look something like this. We used Google DNS IPs to illustrate where the public IPs would go. Don't forget to “Save changes”:

Edge Gateway - HBSELAB - Edge

Firewall DHCP NAT Routing Load Balancer **VPN** SSL VPN-Plus Certificates Grouping Objects Statistics Edge Settings

IPsec VPN

IPsec VPN Configuration

You have unsaved changes. Save changes Discard changes

Activation Status Global Configuration Logging Settings **IPsec VPN Sites**

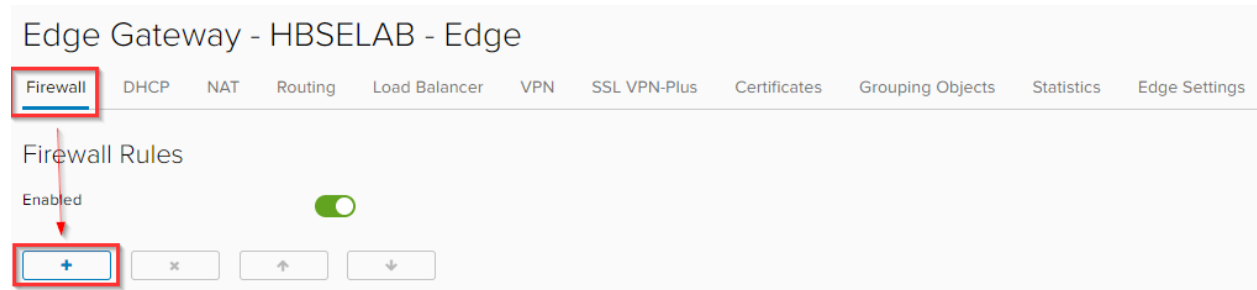
Site Name	Local Endpoint	Local Subnets	Peer Endpoint	Peer Subnets	Site Enabled
Tunnel name	8.8.8.8	192.168.0.0/24	8.8.4.4	192.168.1.0/24	<input checked="" type="checkbox"/>

Please note, you will need to use these settings at the remote site's firewall to establish the tunnel on that side also. Due to the complex nature of firewalls, we cannot show you the remote side configuration as it differs for every firewall.

Firewall Rules

Now that the IPsec VPN Tunnel is established firewall rules will need to be created to allow traffic to pass through the tunnel.

Navigate to the “Firewall” tab of the Edge Gateway, and select the “+” symbol to create a new rule:



Name the rule, and under “Source” select “IP”

No.	Name	Type	Source	Destination
2 ✓	IPSec VPN	User	Any	Any

Input your remote site IP range here, and select “Keep”:

Source IP Address

Value:

Valid values can be IP address, CIDR, IP range or the keyword any.

Repeat this step and add the Org VDC Network IP pool (Cloud LAN). It should look like the below (except for your IPs of course). Next do the same for “Destination”:

No.	Name	Type	Source	Destination
2 ✓	SSL VPN to Any	User	10.20.30.0/24 10.10.10.0/24	Any IP +

You can restrict the port to those on your cloud server, or leave it open so any port can be accessed by an SSL VPN user. In the below example, we’ve left it as “Any”. “Save changes” once your rule is complete.

Firewall Rules

⚠ This rule set has unsaved changes. Save to start deploying. Save changes Discard changes

Enabled

+ x ↑ ↓

Show only user-defined rules

No.	Name	Type	Source	Destination	Service	Action
2 ✓	SSL VPN to Any	User	10.20.30.0/24 10.10.10.0/24	10.10.10.0/24 10.20.30.0/24	Any	Accept

Save changes Discard changes

You now have established an IPsec VPN tunnel between the sites and have allowed all traffic to pass between the two sites.