

2. VMware AVI Global Server Load-Balancer

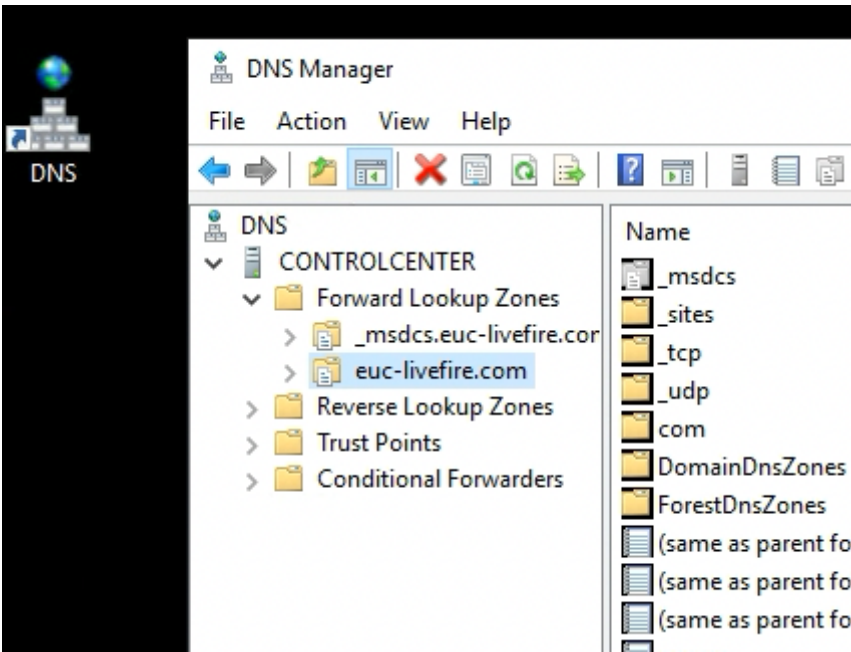
This is possibly one of the most undocumented integrations in our Horizon Stack. And we look forward to sharing this exciting lab with you.

Part 1 Setting up Global DNS

Adding DNS Entries.
In this section, we will create DNS Entries for both Site1 and Site2.
These DNS Entries will be used as VIP in AVI GSLB Configurations later.

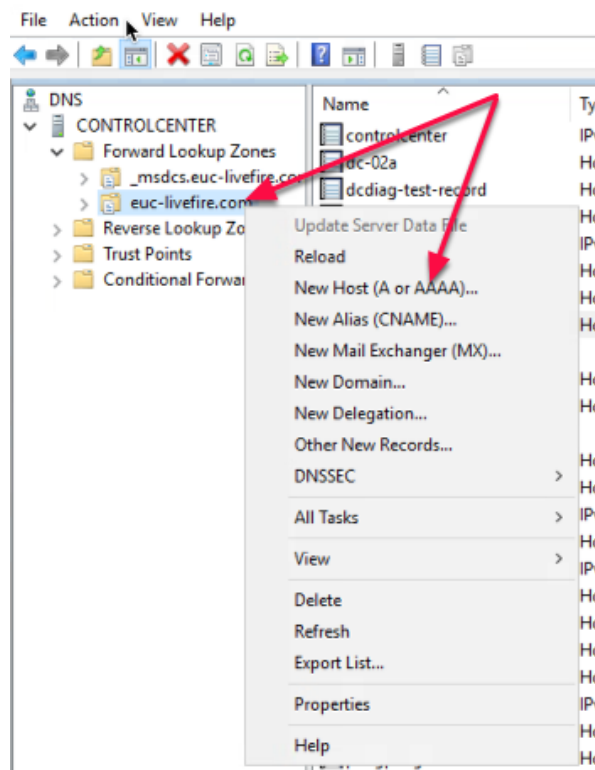
Part 1: Section 1: Setting up DNS Entries

Corp DNS Eritres	Entity Description	IP Address
dns-a.euc-livewire.com	Corp DNS for Site1	172.16.20.101
dns-b.euc-livewire.com	Corp DNS for Site2	172.16.50.101



1. On your ControlCenter server

- From the desktop Shortcut or TaskBar,
 - Launch **DNS**
 - From the **DNS Manager**
 - Expand **Forward Lookup Zones** on the left hand side of DNS Menu
 - Expand **euc-livefire.com**



2. In the DNS Manager Window

- **Right Click** on **euc-livefire.com**
 - Select **New Host (A or AAAA)...**

dns-a Properties

Host (A) Security

Host (uses parent domain if left blank):
dns-a

Fully qualified domain name (FQDN):
dns-a.euc-livefire.com

IP address:
172.16.20.101

☒ Update associated pointer (PTR) record

OK Cancel Apply

3. In the New Host Window

- In the **Name**
 - Type **dns-a**
 - In the IP address:
 - Type **172.16.20.101**
 - Click **Add Host**

New Host

Name (uses parent domain name if blank):
dns-b

Fully qualified domain name (FQDN):
dns-b.euc-livefire.com.

IP address:
172.16.50.101

☒ Create associated pointer (PTR) record

☐ Allow any authenticated user to update DNS records with the same owner name

Add Host Cancel

4. Repeat the steps to add **Worker Node** for **Site-1** in the DNS Record

- In the New Host Window
 - In the **Name**
 - Type **dns-b**

- In the IP address:
 - Type **172.16.50.101**
 - Click **Add Host**
 - Close the new host window.

dns-a	Host (A)	172.16.20.101
dns-b	Host (A)	172.16.50.101

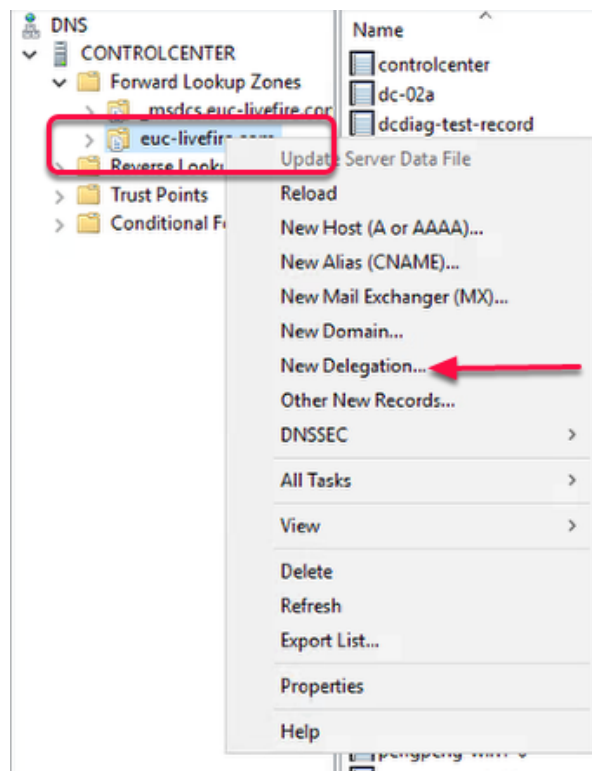
5. In the DNS Manager Console

- Verify the following
 - That all entries are added in the DNS record as shown in the image above.
 - That your entries are created in the **euc-livewire.com** Forward Lookup Zones

Creating Delegation.

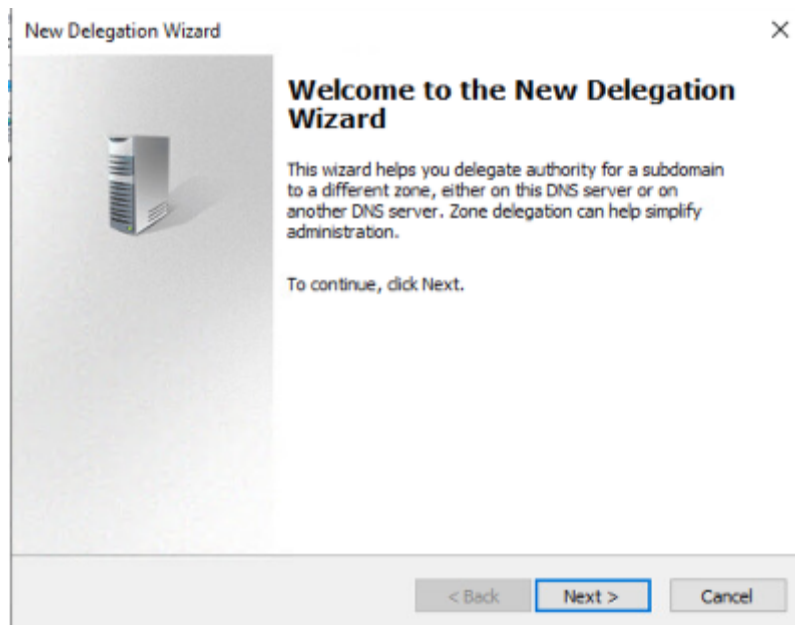
In this section, we will create Delegation using the DNS created in Section 1 for Site1 and Site2

Part 1: Section 2: Setting up Zone Delegation



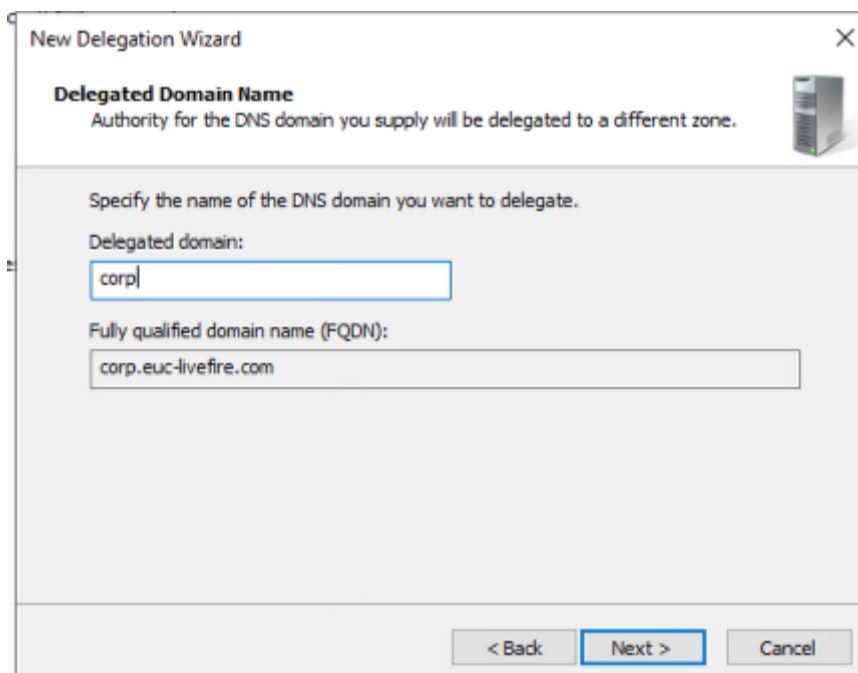
1. In the DNS Manager Window

- **Right Click** on **euc-livewire.com**
- Select **New Delegation...**



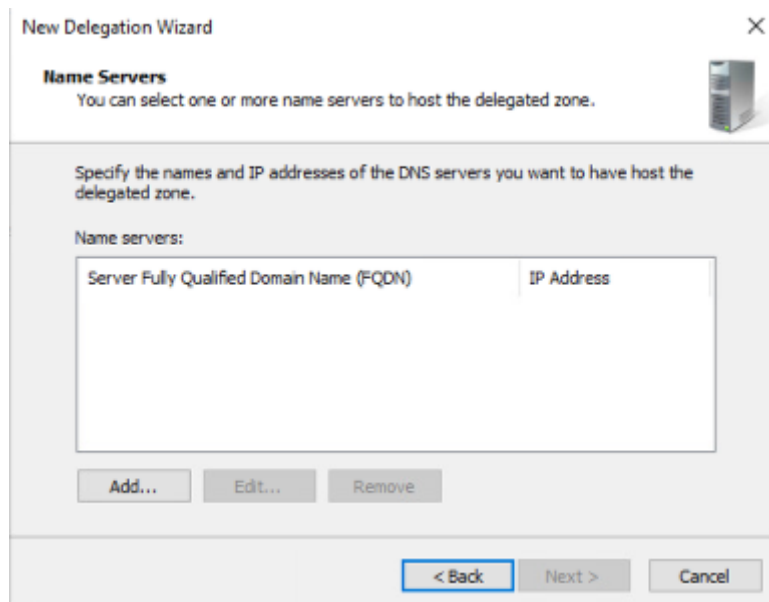
2. In the **New Delegation Wizard**

- Click **Next**



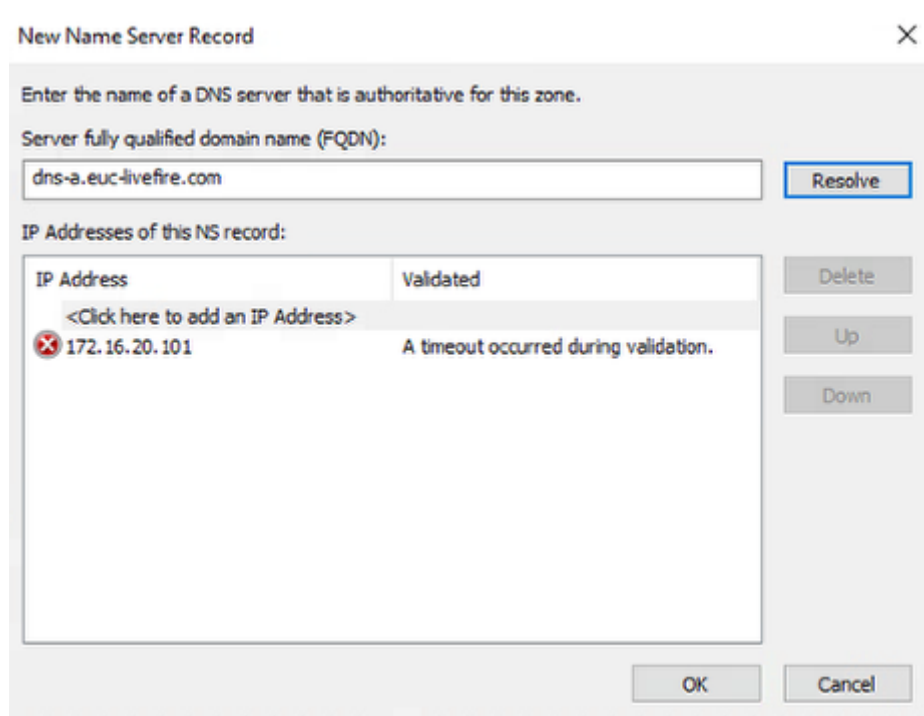
3. In the **New Delegation Wizard**

- Under Delegated domain
 - **Type**
 - **corp**
 - Fully qualified domain name (FQDN), should show:
 - **corp.euc-livefire.com**
 - Click **Next**



4. In the **Name Servers**

- Click **Add**



5. In Server fully qualified domain name (FQDN):

- Type
 - **dns-a.euc-livewire.com**
 - Click **Resolve**
 - **Note: It will NOT resolve unless we create the GSLB**
 - Click **OK**


New Name Server Record ✕

Enter the name of a DNS server that is authoritative for this zone.

Server fully qualified domain name (FQDN):

Resolve

IP Addresses of this NS record:

IP Address	Validated
<Click here to add an IP Address>	
 172.16.50.101	A timeout occurred during validation.

Delete Up Down

OK Cancel

6. In the **Name Servers**

- Click **Add Again**

- In Server fully qualified domain name (FQDN):

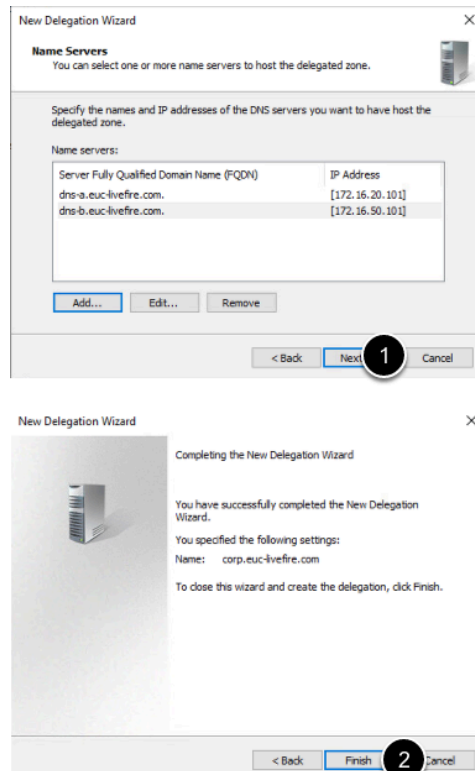
- Type

- **dns-b.euc-livefire.com**

- **Note: It will NOT resolve unless we create the GSLB**

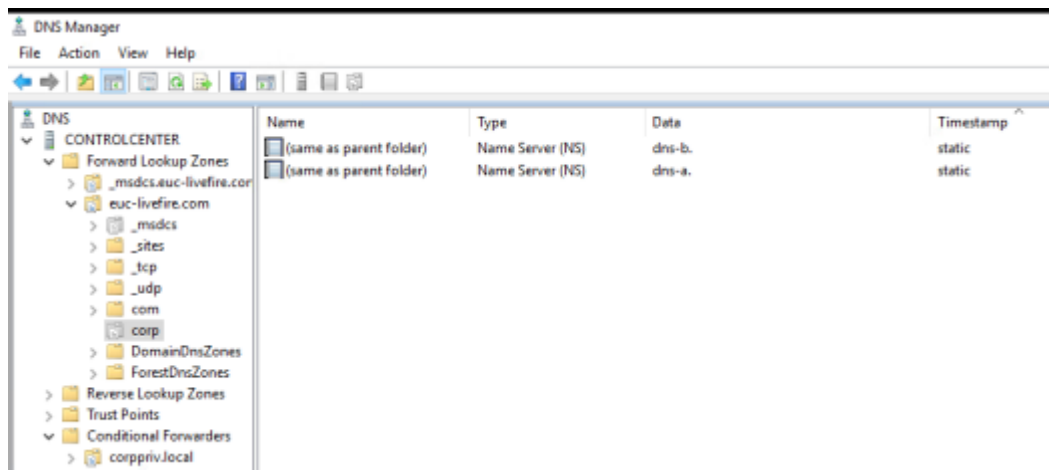
- Click **Resolve**

- Click **OK**



7. In New Delegation Wizard

- Click **Next**
- Click **Finish**



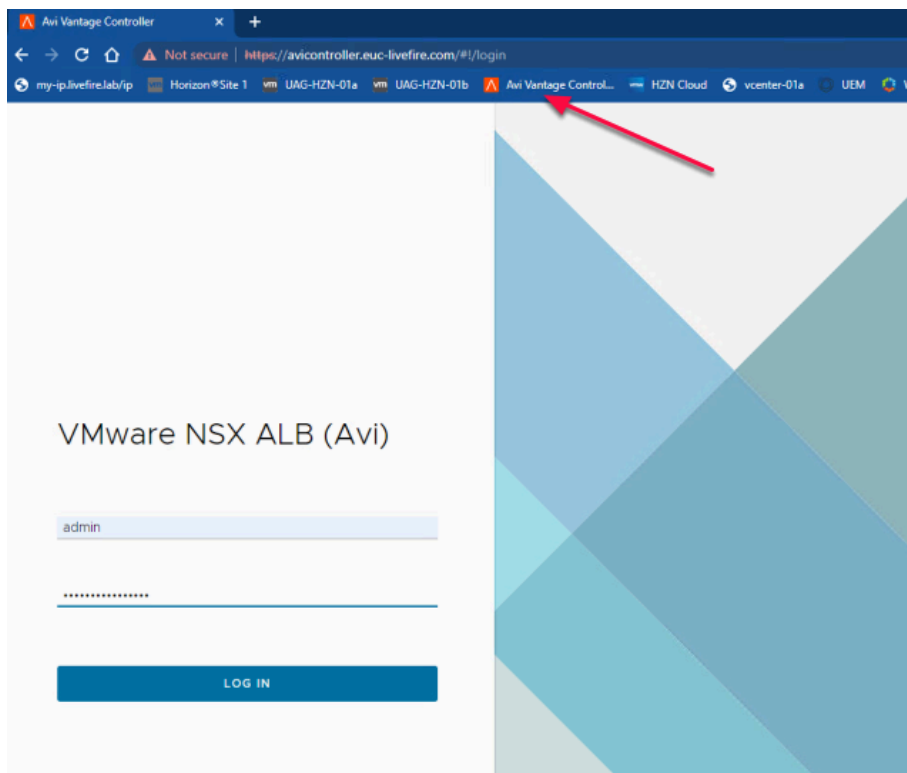
8. The **Corp Delegation** should look like shown in the picture above

Part 2 Setting Up AVI GSLB

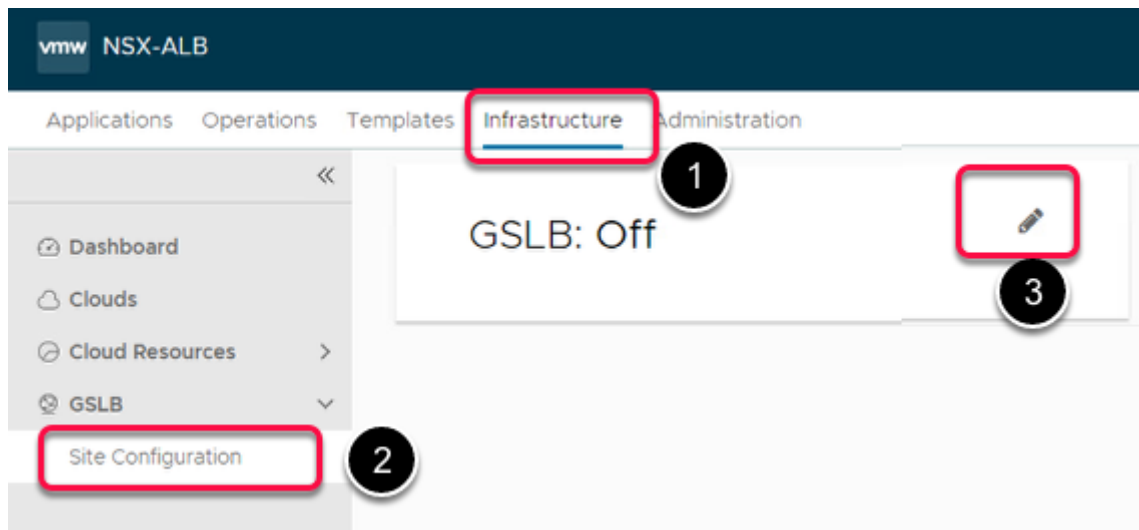
Site Configuration.

In this section, we do **Site Configuration** in AVI

Part 2: Section 1: Site Configuration on AVI Controller



1. On your ControlCenter Server
 - Open your **Chrome Browser for Site-1**
 - In the **Address bar**, Enter or browse from the bookmark
 - To <https://avicontroller.euc-livefire.com>
 - Under Username, enter **admin** and **VMware1!VMware1!** as the password
 - Click **Login**



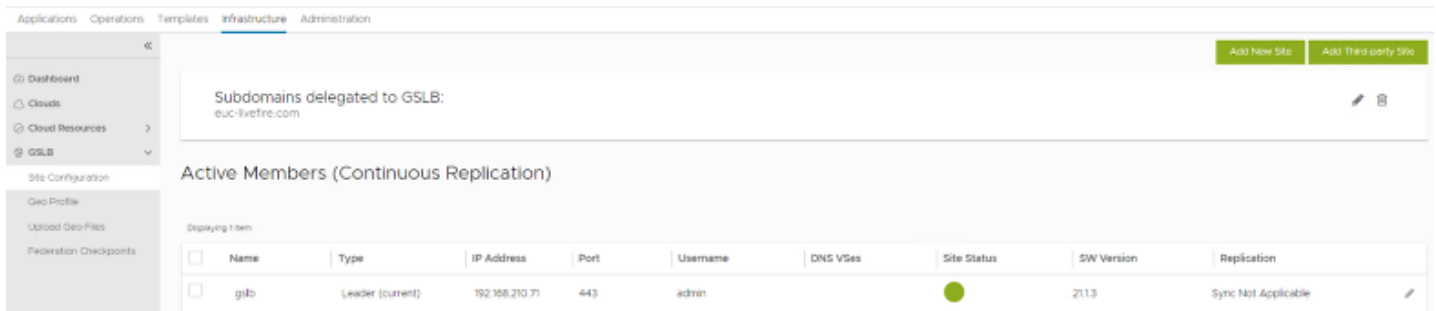
2. In the **NSX-ALB** Console

- Navigate to **Infrastructure** > **GSLB** > **Site Configuration**
- Click on the **Pen** symbol on the right to enable GSLB

4. In the **New GSLB Configuration** Window

- **Name:** **GSLB**
- **Username:** **admin**
- **Password:** **VMware1!VMware1!**
- **IP Address:** **192.168.210.71** (Default)
- **Port:** **443** (Default)
- **GSLB Subdomain:** **euc-livefire.com**
- **Client Group Ip Address Type :** **Public** (Default)

- Click **Save**

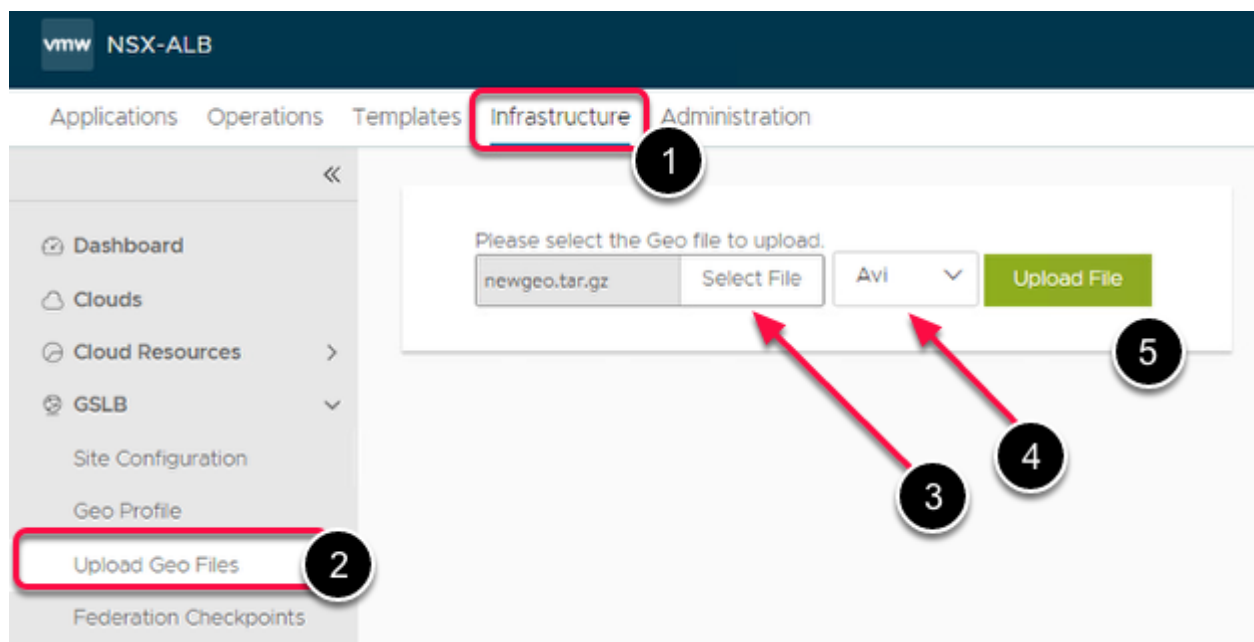


5. The **Site Configuration** should look as shown in the pic above.

Configure Geo Profile.

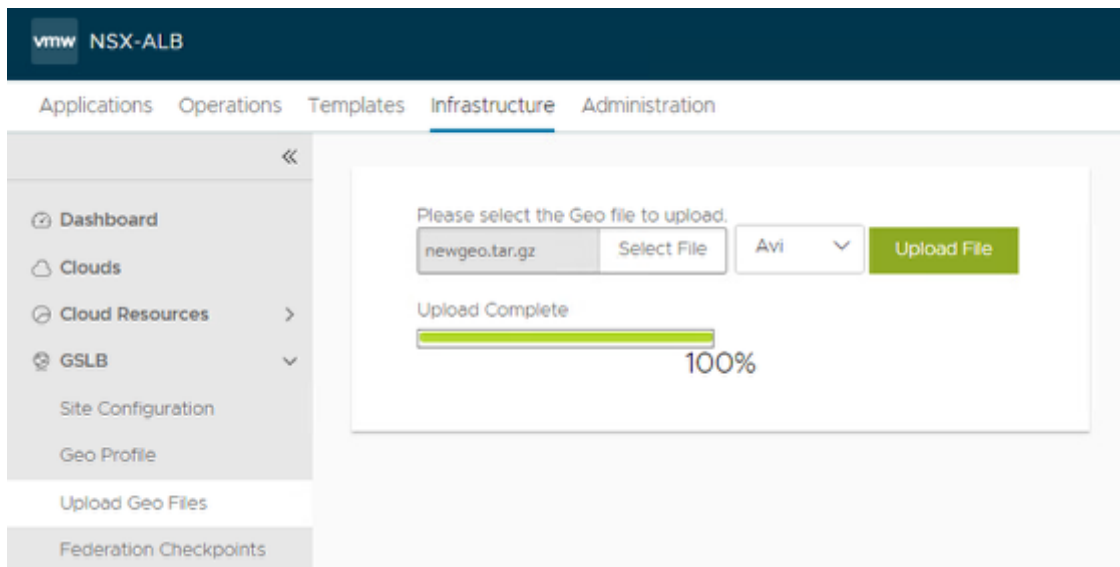
Since our Multi-Site lab is in same physical location, we need to update the AVI GEO DB with a custom configuration file so that client request coming from Site1 should be denoted as Bangalore and client request coming from Site 2 as Seattle.

Part 2: Section 2: Geo Profile configuration on AVI

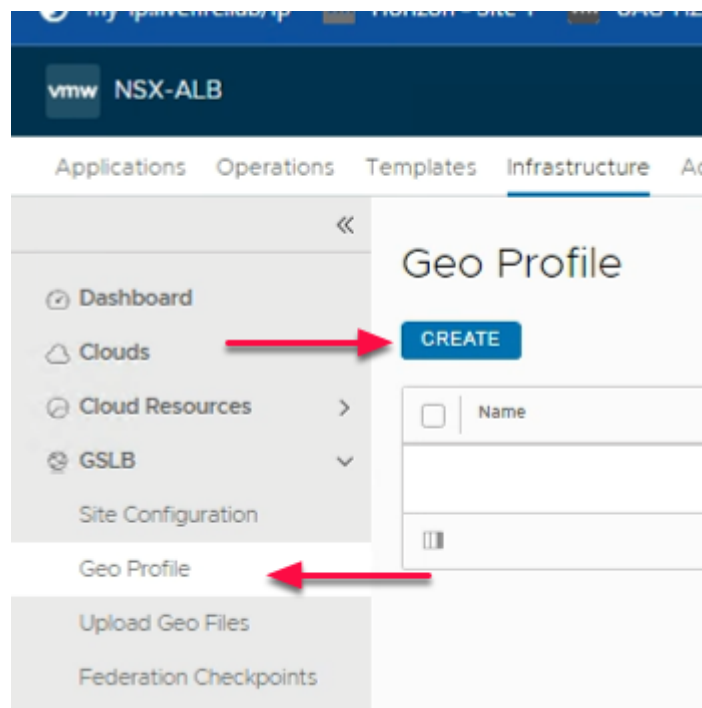


1. In the AVI admin page
 - Go to
 - **Infrastructure > Upload Geo Files**
 - Under **Please select the Geo files to upload**
 - Click **Select Files**
 - Navigate to **Desktop > Software > AVI**

- Select **newgeo.tar.gz** file
- Click **Open** to upload the file
- From the **dropdown** menu
- Select **AVI** as a format as shown in the **Button 4**
- Click **Upload File**



2. Once the upload is complete
 - It should denote as **Upload Complete 100%**



3. Under **Infrastructure**
 - Navigate to **Geo Profile**
 - In the **Geo Profile** tab
 - Click **CREATE**

New Geo Profile: NewGeo

General

Name* ?
NewGeo

Entries

GeoDB Entries (1)

ADD

<input type="checkbox"/>	File Name	Priority	Format
<input type="checkbox"/>	newgeo.tar.gz	10	Avi

Items per page 10

4. In **New Geo Profile** window

- Under **General**
 - Name : **NewGeo**
- Under **Entries**
 - From **File Name** Dropdown
 - **Select newgeo.tar.gz** file which we uploaded in Part 2: Section 2: Step 1
 - **Priority : 10 (Default)**
 - **Format: AVI (Default)**
 - **Click SAVE**

vmw NSX-ALB admin

Applications Operations Templates **Infrastructure** Administration

CREATE

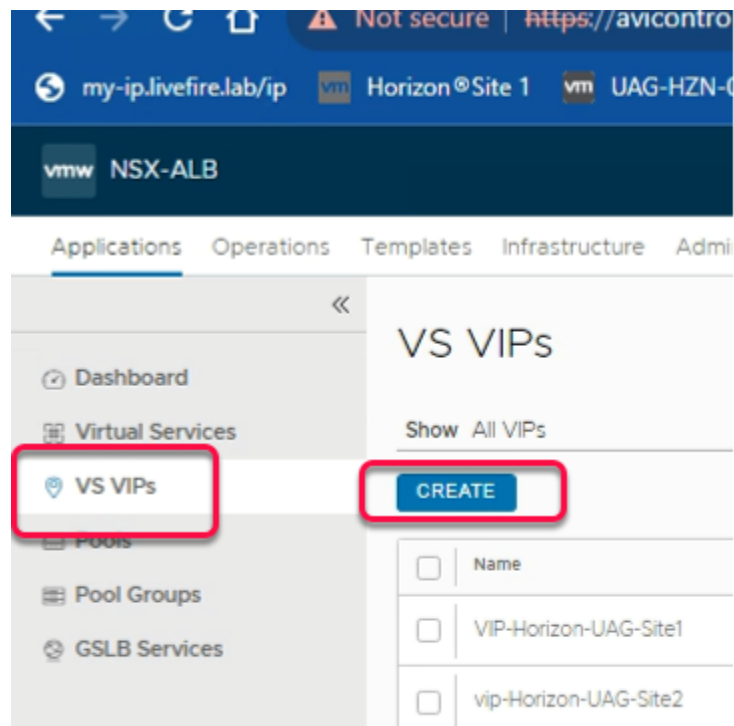
<input type="checkbox"/>	Name	Entries (priority)
<input type="checkbox"/>	NewGeo	newgeo.tar.gz(10)

Dashboard Clouds Cloud Resources GSLB Site Configuration Geo Profile Upload Geo Files Federation Checkpoints

5. Once the Geo Profile is saved
 - It should look as shown in the Pic Above

Create VIP using the IPs we configured in Part 1 for Site 1 and Site 2

Part 2: Section 3: Creating VIPs for GSLB



1. In the AVI Admin Page
 - Go to **Application > VS VIPs**
 - Click **CREATE** to create DNS VIP for Site1

Create VS VIP: DNS1-VIP1

General RBAC

General

Name* ⓘ
DNS1-VIP1

Cloud
Default-Cloud

VRF Context ⓘ
global

VIPs (0) ⓘ

ADD

2. In the **Create VS VIP** Page

- Under **General** type
 - **Name** : **DNS1-VIP1**
- Click **ADD**

Edit VIP: 1

General

General

☒ Enable VIP ⓘ

Private IP ⓘ

IPv4 Address* ⓘ
172.16.20.101

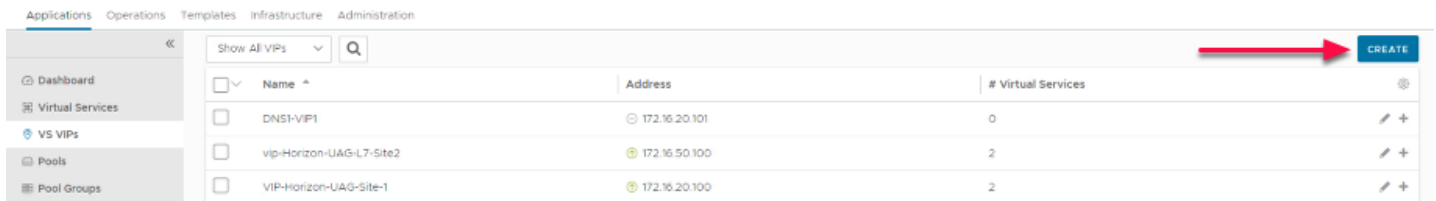
IPv6 Address ⓘ
Enter IPv6 Address

CANCEL SAVE

3. In Edit VIP: 1

- Under **General**
 - validate **Enable VIP** checkbox is **checked**
 - **Private IP** : **172.16.20.101**
 - Click **SAVE**

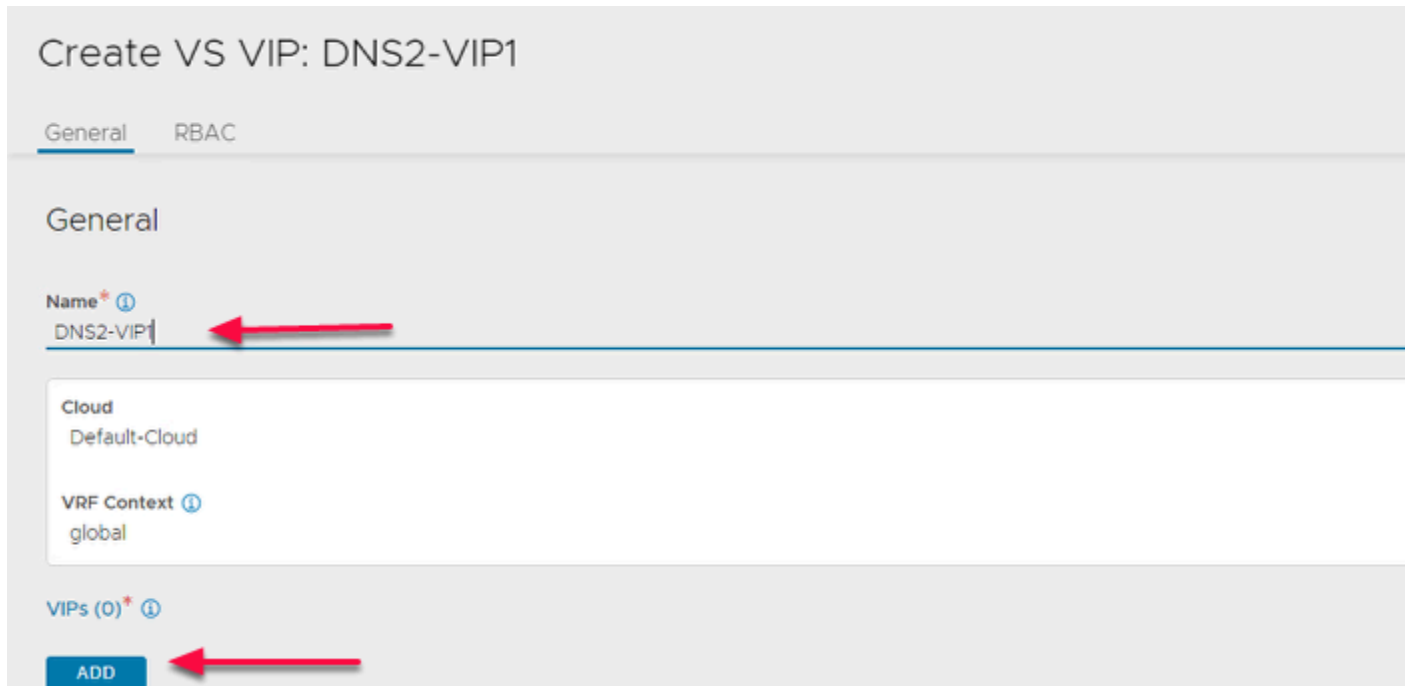
- Click **SAVE** again in the **Create VS VIP Page**



Name	Address	# Virtual Services
DNS1-VIP1	172.16.20.101	0
vip-Horizon-UAG-L7-Site2	172.16.50.100	2
VIP-Horizon-UAG-Site-1	172.16.20.100	2

4. In the VS VIPs, page

- Click **CREATE** to create DNS VIP for Site2



Create VS VIP: DNS2-VIP1

General | RBAC

Name* ?
DNS2-VIP1

Cloud
Default-Cloud

VRF Context ?
global

VIPs (0) ?

ADD

5. In the **Create VS VIP Page**

- Under **General type**
 - **Name** : **DNS2-VIP1**
- Click **ADD**

Edit VIP: 1

General

General

☒ Enable VIP ⓘ

Private IP ⓘ

IPv4 Address* ⓘ
172.16.50.101

IPv6 Address ⓘ
Enter IPv6 Address

CANCEL SAVE

6. In Edit VIP: 1
 - Under **General**
 - **Enable VIP** checkbox
 - **Private IP** : 172.16.50.101
 - Click **SAVE**
 - Click **SAVE** again in the **Create VS VIP Page**

Applications Operations Templates Infrastructure Administration

Dashboard

Virtual Services

VS VIPs

Pools

Pool Groups

GSLB Services

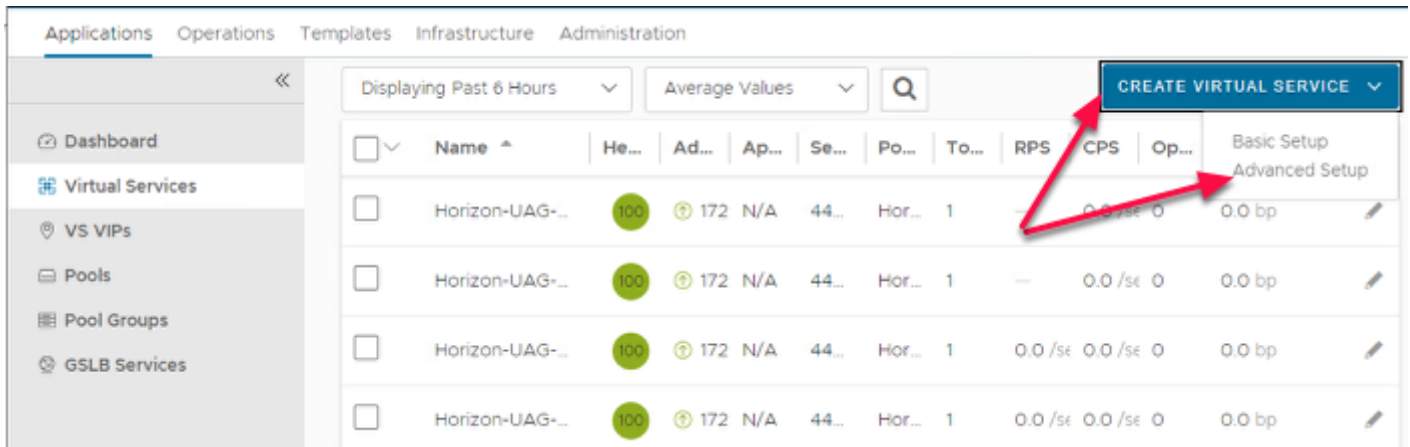
Show All VIPs

<div><div></div></div> Name	Address
<div><div></div></div> DNS1-VIP1	<div><div></div></div> 172.16.20.101
<div><div></div></div> DNS2-VIP1	<div><div></div></div> 172.16.50.101
<div><div></div></div> vip-Horizon-UAG-L7-Site2	<div><div></div></div> 172.16.50.100
<div><div></div></div> VIP-Horizon-UAG-Site-1	<div><div></div></div> 172.16.20.100

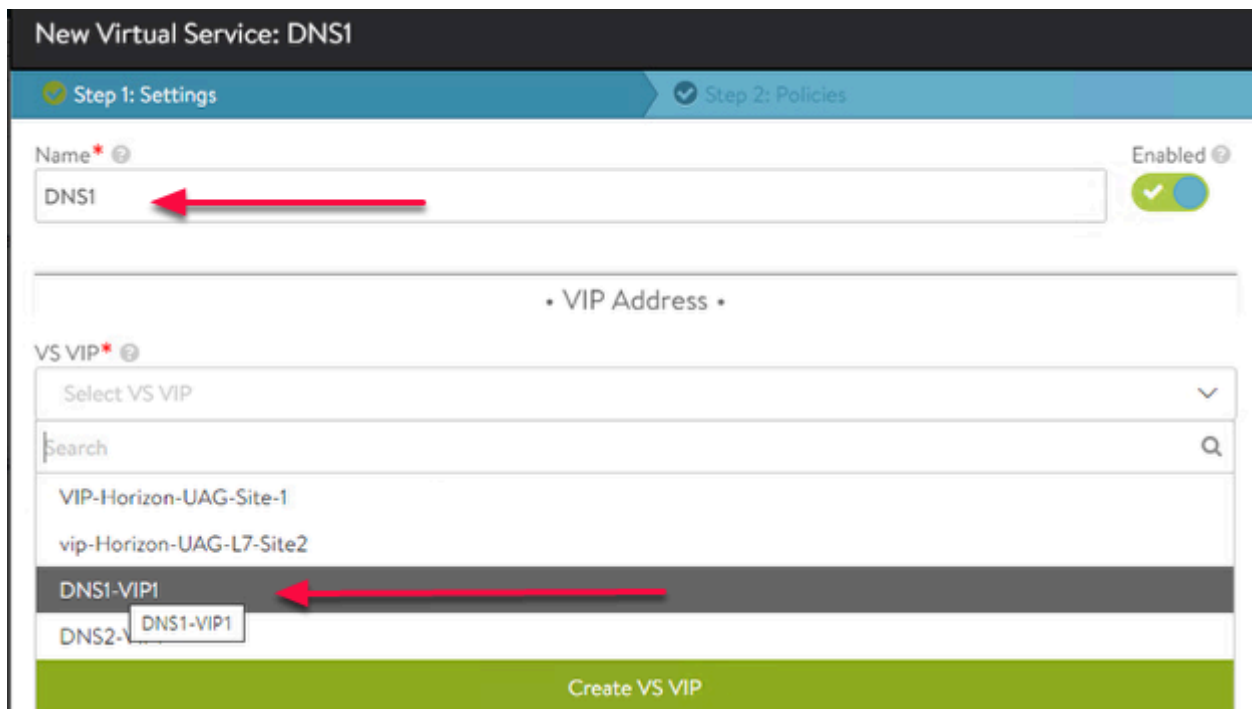
7. The **VS VIPs** Page should look as shown in the pic above

In this section we create Virtual Service for Site1

Part 2: Section 4: Creating Virtual Service for Site 1

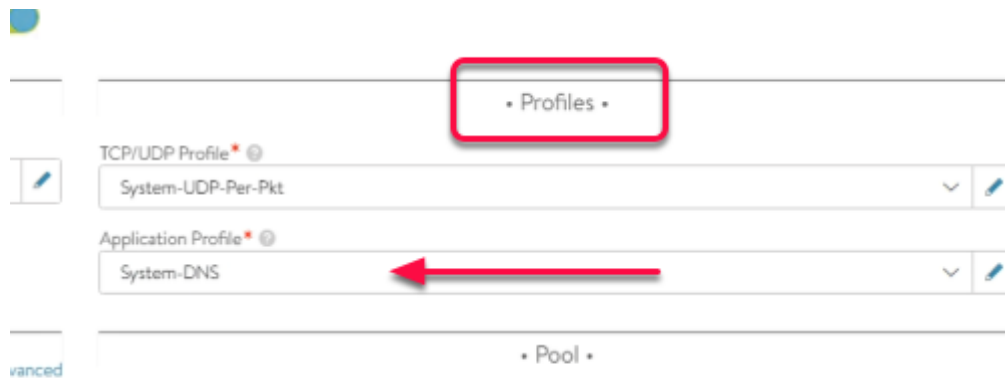


1. In the **NSX-ALB** Console
 - Navigate to **Applications** > **Virtual Services**
 - In the **Virtual Services** area
 - To the top right, select **CREATE VIRTUAL SERVICE**
 - Select **Advanced Setup**.



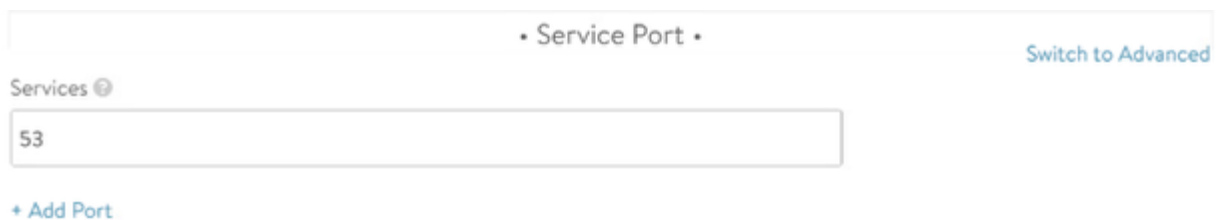
2. In the **New Virtual Service** wizard
 - **Step 1: Settings** area
 - Enter the following under:
 - **Name***
 - type **DNS1**

- **VS VIP ***
 - Select the **dropdown**,
 - Select **DNS1-VIP1**



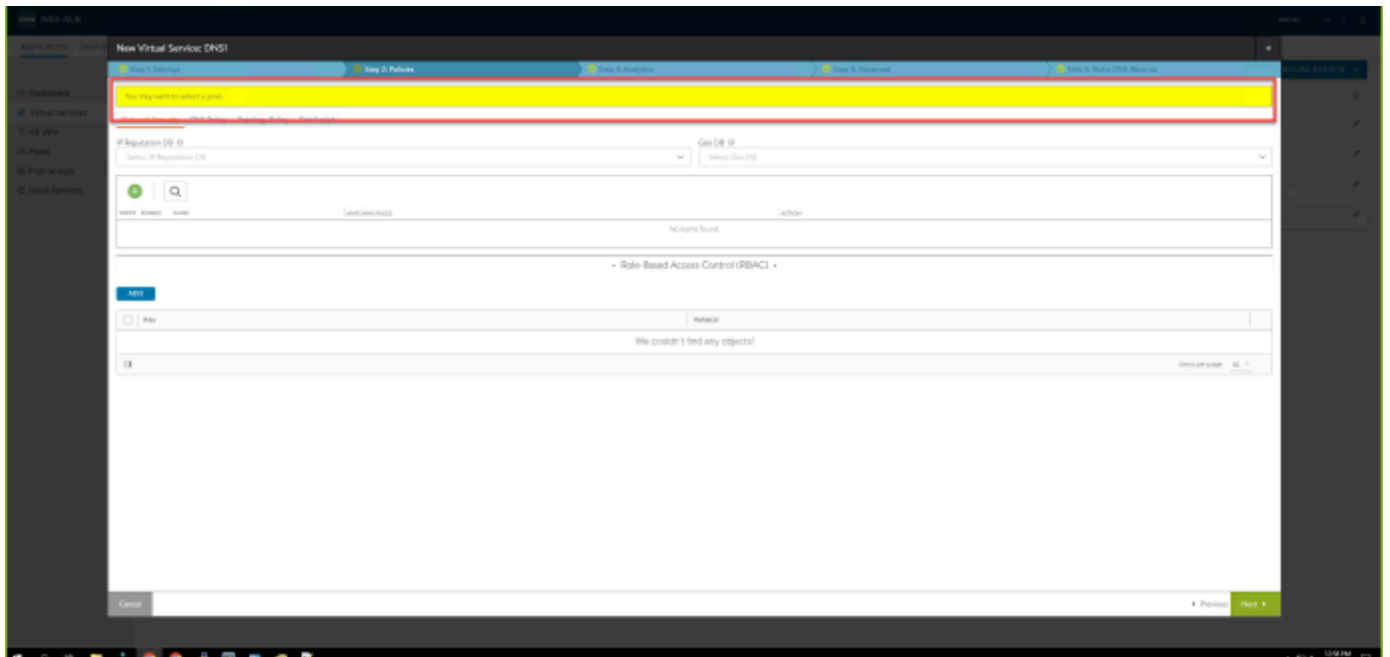
3. To the **Right** of VIP Address

- Under **Profile**
 - **Application Profile** : **System-DNS**
 - **Note:**
 - You will notice, **TCP/UDP Profile** automatically changes to **System-UDP-Per-pkt**



4. Under **Service Port**

- Confirm Services is set to **53**



5. In the Virtual Service

- The warning message shows as
 - You may want to select pool**
 - Ignore the message and proceed forward.

• Pool •

☒ Pool
 ☐ Pool Group

Pool ?

Select a Pool

☐ Ignore network reachability constraints for the server pool ?

Next ▶

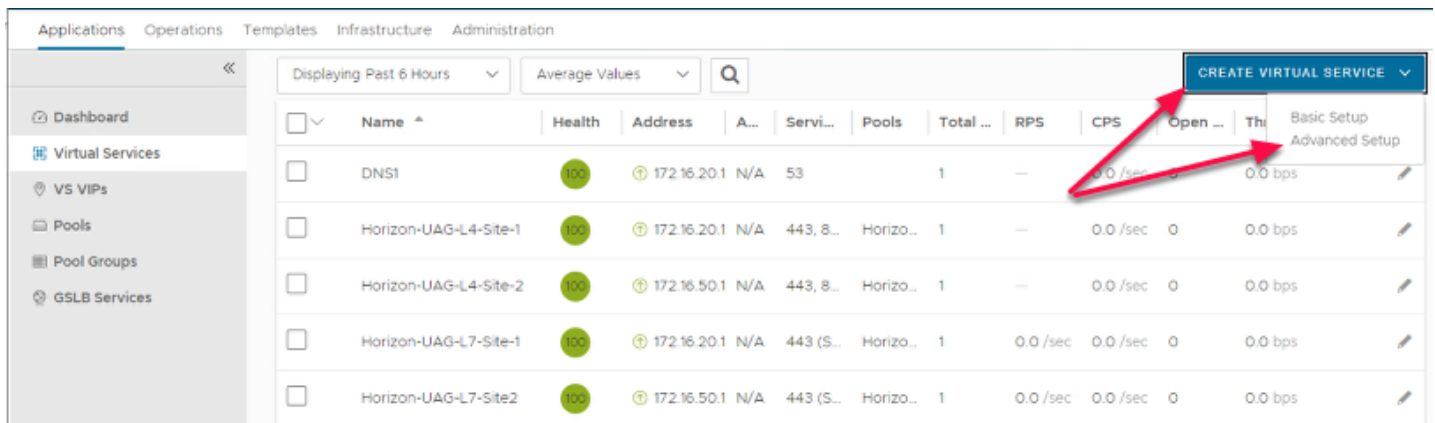
6. Leave the **Pool** Drop Down as Blank

- Click **Next**
- Under **Step 2: Policies**
 - Leave it **default** and Click **Next**
- Under Step 3 : Analytics
 - Leave it **default** and Click **Next**
- Under **Step 4: Advanced**

- Leave it **default** and **Click Next**
- Under **Step 5 : DNS Records**
 - Leave it **default** and **Click SAVE**

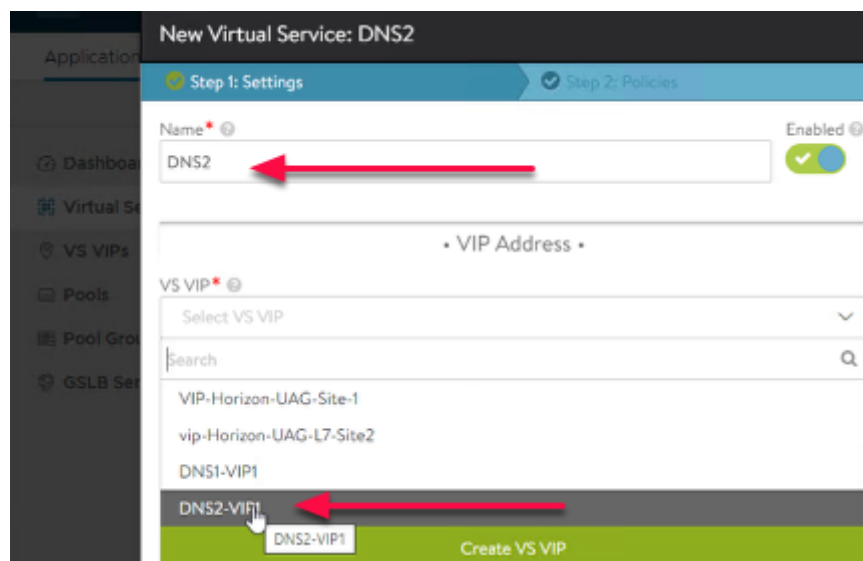
In this section we create Virtual Service for Site 2

Part 2: Section 5 : Creating Virtual Service for Site 2



	Name	Health	Address	A...	Servi...	Pools	Total ...	RPS	CPS	Open ...	Th...	
<input type="checkbox"/>	DNS1	100%	172.16.20.1	N/A	53		1	—	0.0 /sec	0	0.0 bps	Basic Setup Advanced Setup
<input type="checkbox"/>	Horizon-UAG-L4-Site-1	100%	172.16.20.1	N/A	443, 8...	Horizo...	1	—	0.0 /sec	0	0.0 bps	
<input type="checkbox"/>	Horizon-UAG-L4-Site-2	100%	172.16.50.1	N/A	443, 8...	Horizo...	1	—	0.0 /sec	0	0.0 bps	
<input type="checkbox"/>	Horizon-UAG-L7-Site-1	100%	172.16.20.1	N/A	443 (S...	Horizo...	1	0.0 /sec	0.0 /sec	0	0.0 bps	
<input type="checkbox"/>	Horizon-UAG-L7-Site2	100%	172.16.50.1	N/A	443 (S...	Horizo...	1	0.0 /sec	0.0 /sec	0	0.0 bps	

- In the **NSX-ALB** Console
 - Navigate to **Applications > Virtual Services**
 - In the **Virtual Services** area
 - To the top right, select **CREATE VIRTUAL SERVICE**
 - Select **Advanced Setup**.



New Virtual Service: DNS2

Step 1: Settings

Name: Enabled: ☒

VIP Address

VS VIP:

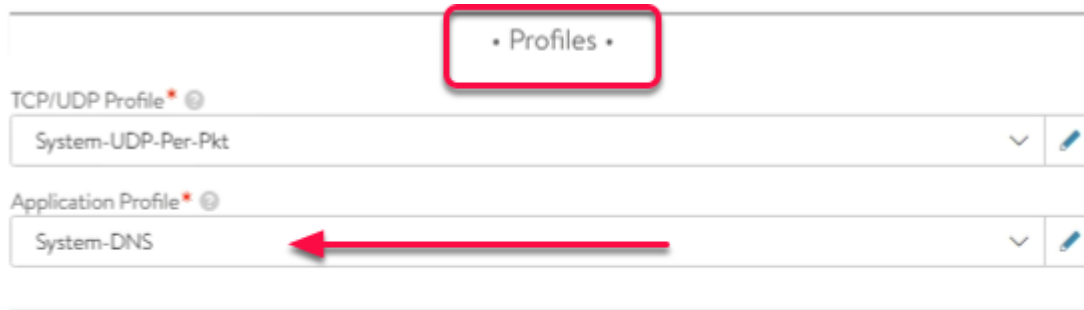
Search

- VIP-Horizon-UAG-Site-1
- vip-Horizon-UAG-L7-Site2
- DNS1-VIP1
- DNS2-VIP1**

Create VS VIP

- In the **New Virtual Service** wizard
 - **Step 1: Settings** area

- Enter the following under:
 - **Name***
 - type **DNS2**
 - **VS VIP ***
 - Select the **dropdown**,
 - Select **DNS2-VIP1**



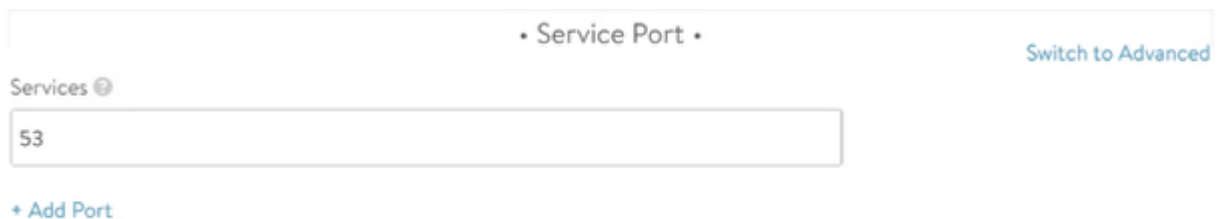
• Profiles •

TCP/UDP Profile ⓘ
System-UDP-Per-Pkt

Application Profile ⓘ
System-DNS

3. To the **Right** of VIP Address

- Under **Profile**
 - **Application Profile** : **System-DNS**
 - **Note:**
 - You will notice, **TCP/UDP Profile** automatically changes to **System-UDP-Per-pkt**



• Service Port • [Switch to Advanced](#)

Services ⓘ
53

[+ Add Port](#)

4. Under **Service Port**

- Confirm Services is set to **53**

• Pool •

☒ Pool ☐ Pool Group

Pool ⓘ

Select a Pool ▼

☐ Ignore network reachability constraints for the server pool ⓘ

Next ▶

5. Leave the **Pool** Drop Down as Blank

- Click **Next**
- Under **Step 2: Policies**
 - Leave it **default** and Click **Next**
- Under Step 3 : Analytics
 - Leave it **default** and Click **Next**
- Under **Step 4: Advanced**
 - Leave it **default** and Click **Next**
- Under **Step 5 : DNS Records**
 - Leave it **default** and Click **SAVE**

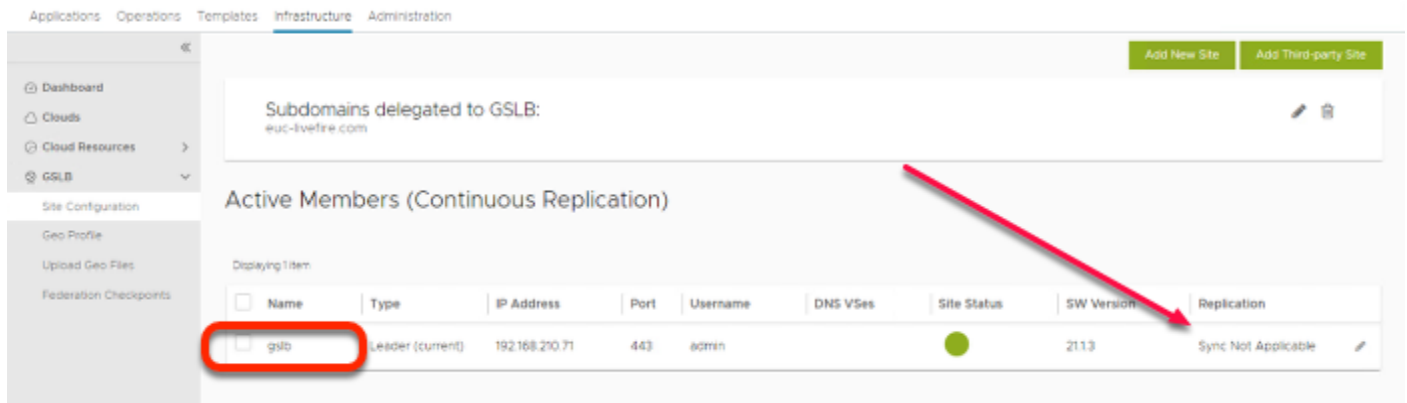
Displaying Past 6 Hours ▼		Average Values ▼		Q						
<input type="checkbox"/>	Name ^	Health	Address	App ...	Service P...	Pools	Total Serv...	RPS		
<input type="checkbox"/>	DNS1	100	172.16.20.101	N/A	53		1	—		
<input type="checkbox"/>	DNS2	100	172.16.50.101	N/A	53		1	—		
<input type="checkbox"/>	Horizon-UAG-L4-Site-1	100	172.16.20.100	N/A	443, 8443,...	Horizon-L4...	1	—		
<input type="checkbox"/>	Horizon-UAG-L4-Site-2	100	172.16.50.100	N/A	443, 8443,...	Horizon-L4...	1	—		
<input type="checkbox"/>	Horizon-UAG-L7-Site-1	100	172.16.20.100	N/A	443 (SSL)	Horizon-L7...	1	0.0 /sec		
<input type="checkbox"/>	Horizon-UAG-L7-Site2	100	172.16.50.100	N/A	443 (SSL)	Horizon-L7...	1	0.0 /sec		

6. Once both **DNS1** and **DNS2** are configured

- The Virtual Services Should look as shown in the Pic above

Linking Virtual Service With GSLB Site Configuration

Part 2: Section 6: Integrating Virtual Service with GSLB Site



1. In the AVI-ALB Console

- Go to **Infrastructure** > **expand**
 - **select Site Configuration**
- Under **Active Members (Continuous Replication)**
 - Next to **gslb** we created earlier section
 - Click on **Pen Icon** to edit the **GSLB**

The screenshot shows the 'Edit GSLB Site' form. The form has the following fields and sections:

- Name:** gslb
- Username:** admin
- Password:** (masked with dots)
- IP Address:** 192.168.210.71
- Port:** 443
- Advanced Settings:**
 - Health Monitor Proxy:** (dropdown menu)
 - Geo Location Source:** (dropdown menu)

At the bottom of the form, there are two buttons: 'Save' and 'Save and Set DNS Virtual Services'. A red arrow points to the 'Save and Set DNS Virtual Services' button.

2. In the **Edit GSLB Site** Page
 - Click on **Save and Set DNS Virtual Services**
 - It will redirect you to **Edit GSLB Site** to link **DNS Virtual Service** to **Subdomains**

The screenshot shows the 'Edit GSLB Site' interface. At the top, there is a header with a back arrow and the title 'Edit GSLB Site', and a close button (X) on the right. Below the header, there are two dropdown menus. The first dropdown is labeled 'DNS Virtual Service' and has 'DNS1' selected. The second dropdown is labeled 'Subdomains' and has 'euc-livefire.com' selected. Below these dropdowns, there is a green '+ Add DNS VS' button and a checkbox labeled 'Health Monitor Sharding' which is currently unchecked.

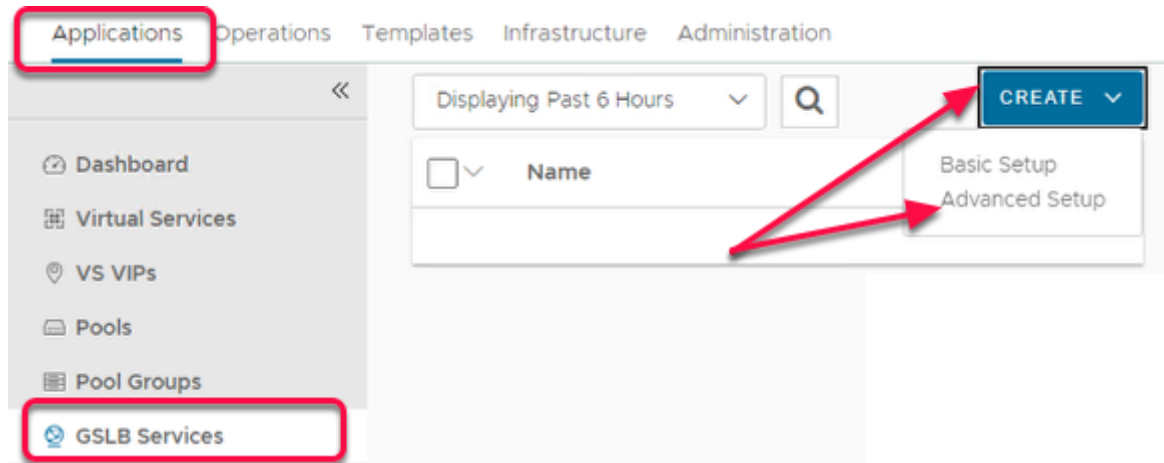
3. In the **Edit GSLB Site** Page
 - **DNS Virtual Service : DNS1**
 - **Subdomains : euc-livefire.com**
 - Click **+ Add DNS VS** to add Site2 DNS

This screenshot shows the 'Edit GSLB Site' page after adding a second DNS virtual service. It features two identical rows of configuration. The first row has 'DNS1' selected for 'DNS Virtual Service' and 'euc-livefire.com' for 'Subdomains'. The second row has 'DNS2' selected for 'DNS Virtual Service' and 'euc-livefire.com' for 'Subdomains'. Below the rows is a green '+ Add DNS VS' button and an unchecked 'Health Monitor Sharding' checkbox. At the bottom center of the page is a green 'Save' button.

4. In the **Edit GSLB Site** Page
 - **DNS Virtual Service : DNS2**
 - **Subdomains : euc-livefire.com**
 - Click **Save**

In this section we create GSLB Services

Part 2: Section 7: Creating GSLB Services

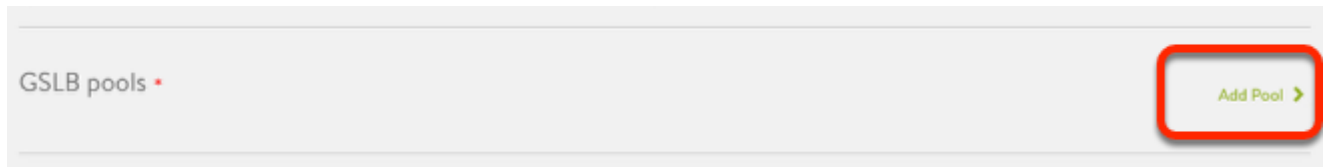


1. In the **NSX-ALB** Console
 - Navigate to **Applications** > **GSLB Services**
 - In the **GSLB Services** area
 - To the top right, select **CREATE**
 - Select **Advanced Setup**.

A screenshot of the 'New GSLB Service' configuration form. The form has a title bar 'New GSLB Service' with a close button. The fields are as follows: 'Name' with the value 'gslb-service'; 'Application Name' with the value 'corp' and a '+ Add Application Name' link; 'Subdomain' with the value '.euc-livfire.com'; 'Health Monitor' with a dropdown menu; 'Health Monitor Scope' with radio buttons for 'All Members' (selected) and 'Only Non Avi Members'; a checked checkbox for 'Controller Health Status'; 'Groups Load Balancing Algorithm' with a dropdown menu showing 'Geo location-based'; a checkbox for 'Site Persistence'; and 'Minimum number of Servers' with a value of '0'.

2. In the **New GSLB Service** area configure
 - **Name** : **gslb-service**
 - **Application Name** : **corp**
 - **Subdomain** : **.euc-livfire.com** (default)

- **Groups Load Balancing Algorithm : Geo location-based**



3. In the **New GSLB Service** Page
 - Scroll down to **GSLB Pools**
 - **To the right**
 - Click **Add Pool >**
 - It opens **New GSLB Pool** window

← New GSLB Pool

Name* ⓘ
GSLb-Service-Pool

Priority ⓘ
10

Pool Members Load Balancing Algorithm* ⓘ
Geo

Pool Members Fallback Load Balancing Algorithm ⓘ
Consistent Hash

Pool Members Fallback Load Balancing Algorithm Mask ⓘ

Min. Health Monitors to consider server 'up' ⓘ

Description

4. In the **New GSLB Pool** Window
 - **Enter the follow**
 - **Name : GSLb-Service-Pool**
 - **Priority : 10 (default)**
 - **Pool Members Load Balancing Algorithm : Geo**
 - **Pool Members Fallback Load Balancing Algorithm : Consistent Hash**
 - Leave everything else as **default**
 - **scroll down** to **Pool Member**

← New GSLB Pool

Pool Members

☐ IP Address ☒ Virtual Service

Site Cluster Controller: gslb Virtual Service: Horizon-UAG-L7-Site-1

Public IP(v4/v6) Address:

Ratio: 1

Geo Location Source: User Configured

Name: Bangalore Tag: Tag

Latitude: 12 Longitude: 77

Description:

Enabled

Add GSLB Pool Member

5. In the **New GSLB Pool** Window

- Under **Pool Member**
 - Ensure **Virtual Service** radio button is **selected**
 - **Site Cluster Controller** : **gslb**
 - **Virtual Service** : **Horizon-UAG-L7-Site-1**
 - **Ratio**: **1** (default)
 - **Geo Location Source** : **User Configured**
 - **Name** : **Bangalore**
 - **Latitude** **12**
 - **Longitude** : **77**
 - Leave everything else as Default
 - Ensure the settings matches as per screenshot above
- To add **Site2**
 - Click **Add GSLB Pool Member**

6. In the **New GSLB Pool** Window

- Under **Pool Member**
 - Ensure **Virtual Service** checkbox is **selected**
 - **Site Cluster Controller** : **gslb**
 - **Virtual Service** : **Horizon-UAG-L7-Site-2**
 - **Ratio**: 1 (default)
 - **Geo Location Source** : **User Configured**
 - **Name** : **Seattle**
 - **Latitude** : **47**
 - **Longitude** : **-122**
 - Leave everything else as **Default**
 - Ensure the settings matches as per screenshot above
 - Click **Done**

New GSLB Service

Name

Application Name Subdomain

[+ Add Application Name](#)

Health Monitor

Health Monitor Scope ☒ All Members ☐ Only Non Avi Members ☒ Controller Health Status

Groups Load Balancing Algorithm

☐ Site Persistence

Minimum number of Servers

GSLB pool [Add Pool](#)

Displaying 1 item

Name	Priority	Algorithm	Description
GSLB-Service-Pool		Geo	

[Save](#)

7. Ensure All the settings matches as per the screenshot above

- Click **Save**

Applications Operations Templates Infrastructure Administration

Displaying Past 6 Hours

Name	App Domain Name	Enable State	Status
gslb-service	corp.euc-livefire.com	Enabled	●

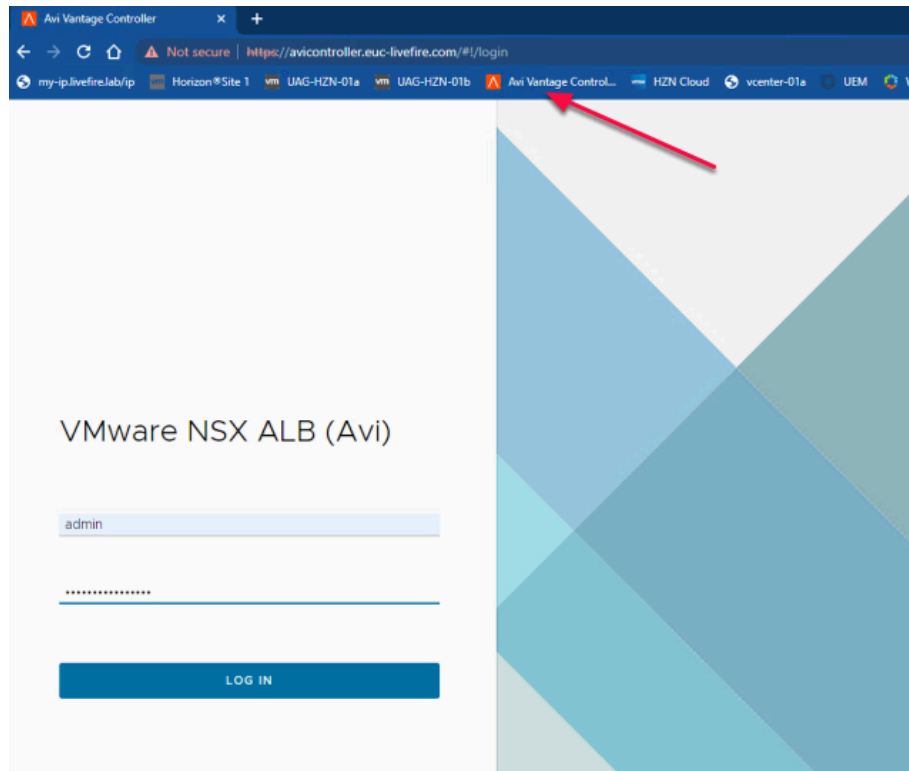
8. Settings should match as per the screenshot above

- To Show the status as **Green**, it would take 2 to 3 minutes

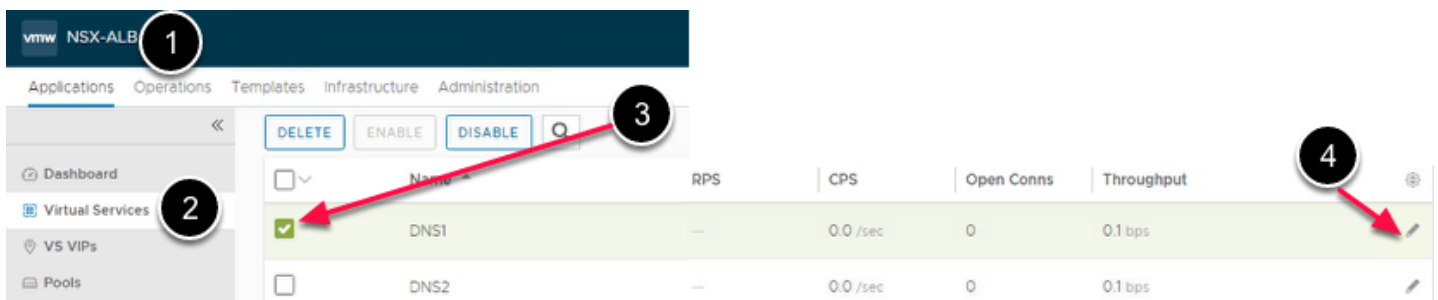
Part 3 Testing the GSLB

Validate the configurations by enabling advance logging in AVI

Part 3: Section 1: Enabling advance logging in AVI



1. If required login to NSX-ALB Console
 - On your ControlCenter Server
 - Open your **Chrome Browser for Site-1**
 - In the **Address bar**, Enter or browse from the bookmark
 - To <https://avicontroller.euc-livefire.com>
 - Under Username, enter **admin** and **VMware1!VMware1!** as the password
 - Click **Login**



2. In the NSX-ALB Console
 - Navigate to **Applications > Virtual Services**
 - To the left of **DNS1**, select the **checkbox**.
 - On the right hand side of **DNS1**.
 - Click the **pencil** icon to edit the **DNS1**.

Edit Virtual Service: DNS1

Settings Policies **Analytics** Advanced Static DNS Records

Analytics Profile System-Analytics-Profile

Significant log throttle 10 logs/sec

User defined filters log throttle 10 logs/sec

☒ Non-significant logs

Non-significant log throttle 10 logs/sec Non-significant log duration 0 min

Displaying 0 items

☐ Enabled No items

3. In **Edit Virtual Service: DNS1**

- Go to **Analytics**
 - **Enable Non-significant logs**
 - Click **Save**

vmw NSX-ALB admin

Applications Operations Templates Infrastructure Administration

Dashboard Virtual Services VS VIPs Pools

DELETE ENABLE DISABLE

CREATE VIRTUAL SERVICE

<input type="checkbox"/>	Name	Health	Address	A...	Serv...	Pools	Tota...	RPS	CPS	Ope...	Thro...	
<input type="checkbox"/>	DNS1		172.16.2(N...	53		1		0.0/sec	0	0.1bps		
<input checked="" type="checkbox"/>	DNS2		172.16.5(N...	53		1		0.0/sec	0	0.1bps		

4. In the NSX-ALB Console

- Navigate to **Applications > Virtual Services**
 - To the left of **DNS2**, select the **checkbox**.
 - On the right hand side of **DNS2**.
 - Click the **pencil** icon to edit the **DNS2**.

vmw NSX-ALB

Applications Operations

Edit Virtual Service: DNS2

Settings Policies Analytics Advanced Static DNS Records

Analytics Profile ⓘ

System-Analytics-Profile

Significant log throttle ⓘ

10 logs/sec

User defined filters log throttle ⓘ

10 logs/sec

☒ Non-significant logs ⓘ

Non-significant log throttle ⓘ

10 logs/sec

Non-significant log duration ⓘ

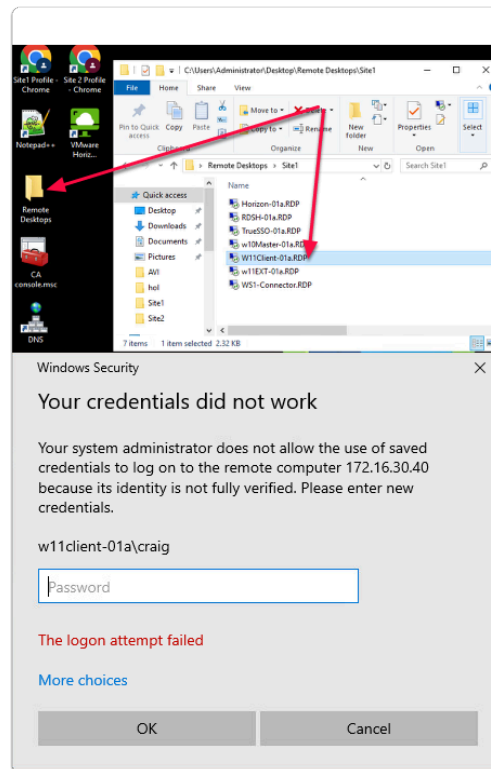
0

5. In **Edit Virtual Service: DNS2**

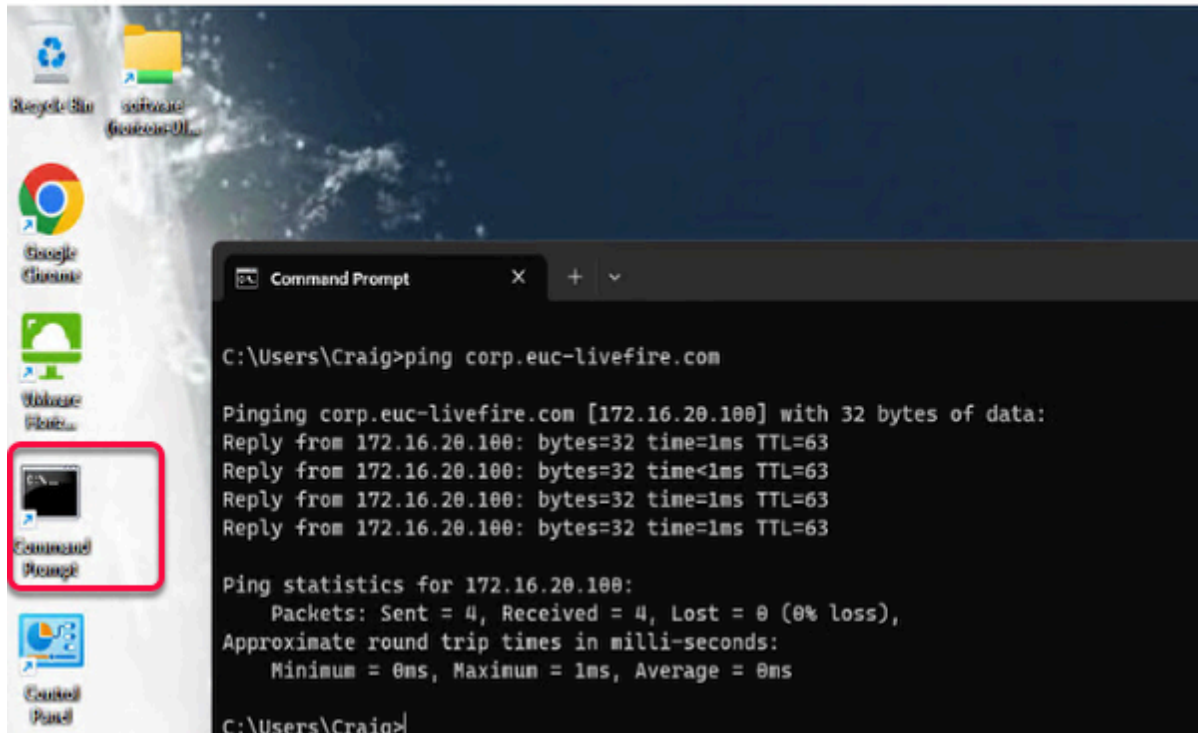
- Go to **Analytics**
 - **Enable Non-significant logs**
 - **Click Save**

In the lab environment you have two sites. Each site has 3 separate vlans. There is an Internal, DMZ and External VLAN for each site. In Site 1, Windows 11 Client Desktop are configured with 192.168.110.10 DNS server address.

Part 3: Section 2: Testing GSLB

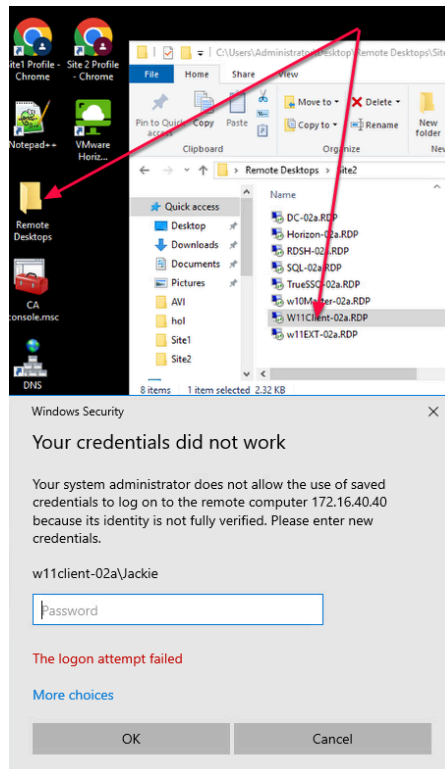


1. On your **ControlCenter** server
 - On the Desktop
 - Open the **Remote Desktops** Folder
 - Open **Site1**
 - Launch **W11Client-01a.rdp**
 - Login as **craig**
 - With the password **VMware1!**



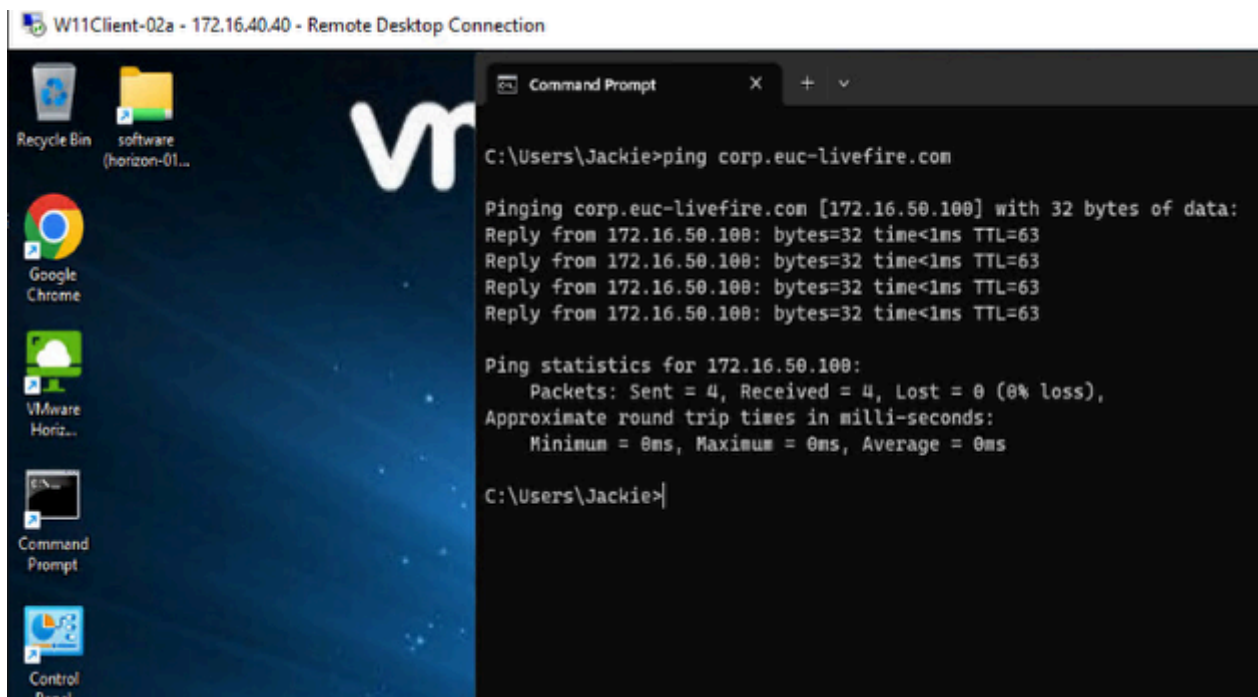
2. In W11Client-01a

- Open **Command Prompt** from desktop
 - In the Command Prompt, type
 - **ping corp.euc-liveware.com** and press enter
 - You would notice the response from **172.16.20.100**
 - The above IP is the VIP for Site-1
- Once the ping is complete, minimize **W11Client-01a** RDP Session
- Return to **Control Center** Desktop



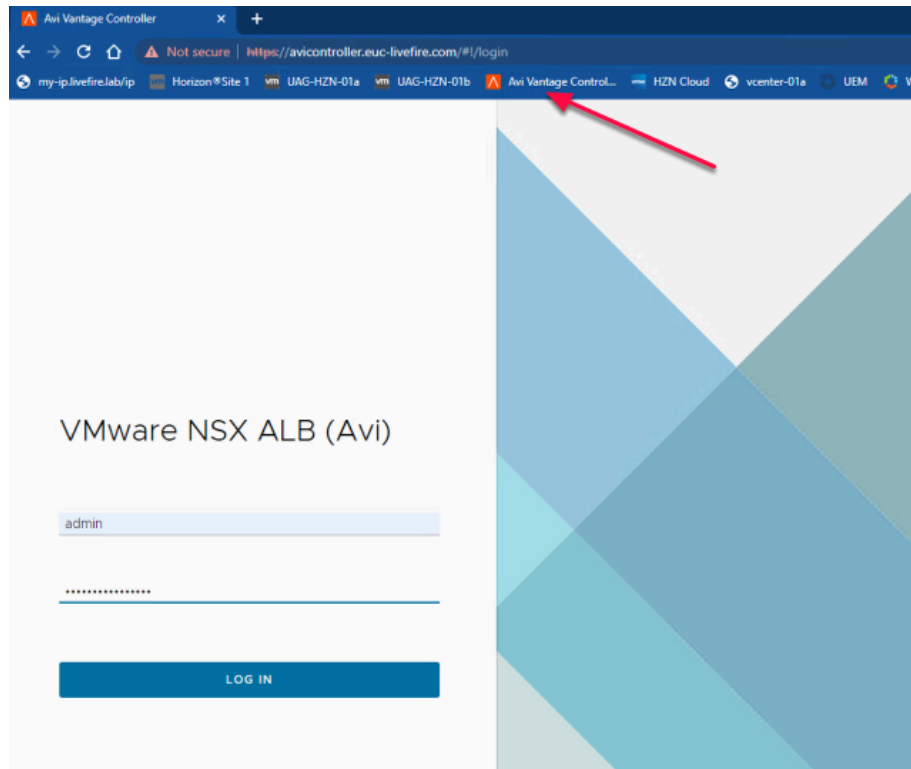
2. On your **ControlCenter** server

- On the Desktop
 - Open the **Remote Desktops** Folder
 - Open **Site2**
 - Launch **W11Client-02a.RDP**
 - Login as **Jackie**
 - With the password **VMware1!**



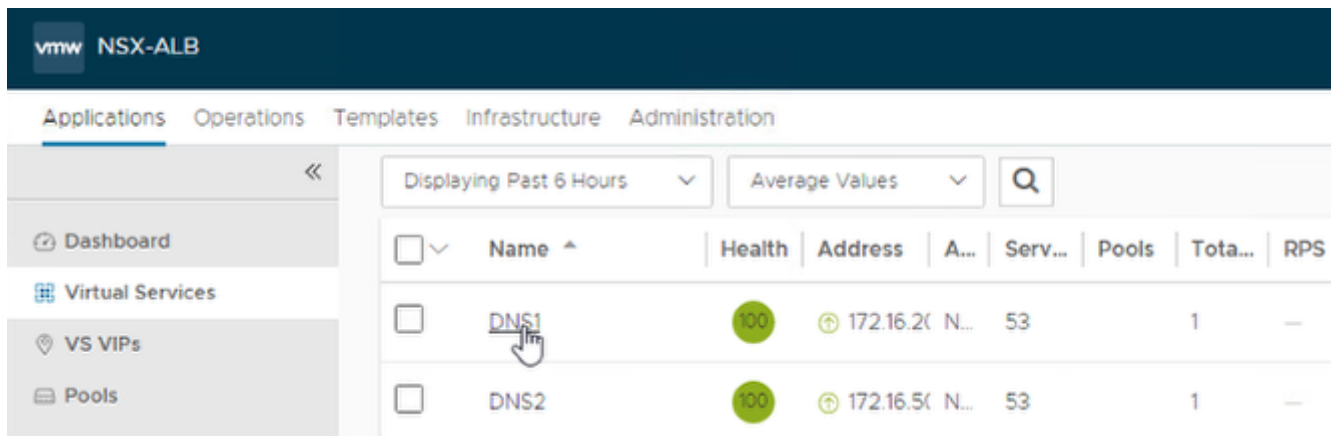
3. In **W11Client-02a**

- **Open Command Prompt from desktop**
 - In the Command Prompt, type
 - **ping corp.euc-livewire.com** and press enter
 - You would notice the response from **172.16.50.100**
 - The above IP is the VIP for Site-2
- Once the ping is complete, minimize **W11Client-02a** RDP Session
- Return to **Control Center** Desktop



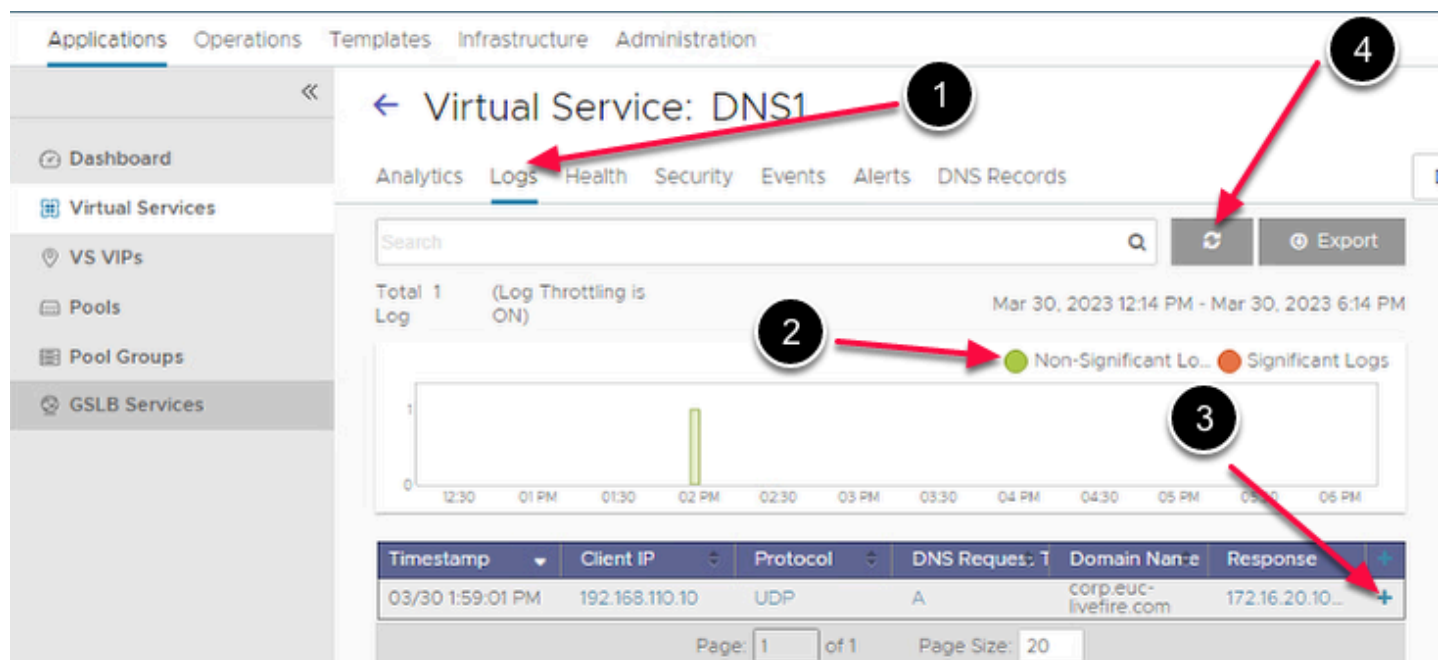
4. If required, login to **NSX-ALB** Console

- On your ControlCenter Server
 - Open your **Chrome Browser for Site-1**
 - In the **Address bar**, Enter or browse from the bookmark
 - To **https://avicontroller.euc-livewire.com**
 - Under Username, enter **admin** and **VMware1!VMware1!** as the password
 - Click **Login**



5. In the NSX-ALB Console

- Navigate to **Applications > Virtual Services**
- Click on **DNS1**



6. In Virtual Service: DNS1 window

- Go to **Logs** tab
 - Click on **Non-Significant Logs** as shows in 2
 - **Note:** If the logs are not seen, Click the **refresh** button as shown in 4
 - Verify the Client IP
 - It should match the DNS Server IP of **Site 1**
 - **192.168.110.10**
 - Expand the **+** (Plus) Symbol as shown in 3

Timestamp	Client IP	Protocol	DNS Request Type	Domain Name	Response
03/30 1:59:01 PM	192.168.110.10	UDP	A	corp.euc-livewire.com	172.16.20.100

Client

LB

Client IP: 192.168.110.10 : 55573

Location: India/Bangalore/- (12°N, 77°E)

DNS Query Type: A

Domain Name: corp.euc-livewire.com

ID: 4923

RX Bytes: 92 B

TX Bytes: 108 B

Start time: 2023-03-30, 1:59:01:85 pm

Virtual Service IP: 172.16.20.101 : 53

GSLB Service Name: gslb-service

GSLB Pool Name: GSLB-Service-Pool

Service Engine: 192-168-110-73 (vcpu 0)

Record Source: GSLB

Opcode: QUERY

Records:

Type: A, IP Address: 172.16.20.100 (gslb:Horizon-UAG-L7-Site-1) TTL: 30

Location: BLRTTest (12°N, 77°E)

Response Code: NOERROR

Authoritative: True

Truncated: False

Recursion Available: False

Recursion Desired: False

Question Count: 1

Answer Record Count: 1

Nameserver Records Count: 0

Additional Records Count: 0

Query: False

Wildcard: False

Page: 1 of 1
Page Size: 20

7. Notice the following:

- **Client IP**
- **Location**
- **Virtual Service IP**
- **GSLB Pool Name**
- **Service Engine**

vmw NSX-ALB

Applications Operations Templates Infrastructure Administration

Virtual Service: DNS1

Analytics Logs Health Security Events Alerts DNS Records

Search

Q

Export

Total: 2 Logs (Log Throttling is ON)

Apr 3, 2023 12:21 AM - Apr 3, 2023 6:21 AM

Non-Significant Logs

Significant Logs

Timestamp	Client IP	Protocol	DNS Request Type	Domain Name	Response
04/03 6:20:02 AM	192.168.210.10	UDP	A	corp.euc-livewire.com	172.16.50.100
04/03 6:18:46 AM	192.168.210.10	UDP	A	corp.euc-livewire.com	172.16.50.100


Page: 1 of 1 Page Size: 20

8. Look the IP of DNS Server for **Site2**


- **192.168.210.10**
- **Note:** If the logs are not seen, Click the **refresh** button.

- Expand the **+ (Plus)** Symbol to the extreme right

Timestamp	Client IP	Protocol	DNS Request Type	Domain Name	Response	
04/03 6:20:02 AM	192.168.210.10	UDP	A	corp.euc-livefire.com	172.16.50.100	+
04/03 6:18:46 AM	192.168.210.10	UDP	A	corp.euc-livefire.com	172.16.50.100	-



Client



LB

Client IP: 192.168.210.10 : 56606

Location: USA/Seattle/- (47°N, 122°W)

DNS Query Type: A

Domain Name: corp.euc-livefire.com

ID: 2665

RX Bytes: 92 B

TX Bytes: 108 B

Start time: 2023-04-03, 6:18:46:17 am

Virtual Service IP: 172.16.20.101 : 53

GSLB Service Name: gslb-service

GSLB Pool Name: GSLB-Service-Pool

Service Engine: 192-168-110-73 (vcpu 0)

Record Source: GSLB

Opcode: QUERY

Records:

Type: A, IP Address: 172.16.50.100 (gslbHorizon-UAG-L7-Site2) TTL: 30

Location: SEATest (47°N, 122°W)

Response Code: NOERROR

Authoritative: True

Truncated: False

Recursion Available: False

Recursion Desired: False

Question Count: 1

Answer Record Count: 1

Nameserver Records Count: 0

Additional Records Count: 0

Query: False

Wildcard: False

Page: 1 of 1

Page Size: 20

9. Notice the following:

- **Client IP**
- **Location**
- **Virtual Service IP**
- **GSLB Pool Name**
- **Service Engine**

This is the end of the GSLB Lab. Hope it helpful.