



Azure Cluster VIP Configuration

Avi Technical Reference (v20.1)

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Overview

This document explains cluster virtual IP (VIP) configuration and management when a controller is deployed inside an Azure cloud. This involves the following two steps: 1. Initial Configuration 2. Handling Failover

Initial Configuration

The initial configuration is to be done manually. After configuring the [Avi Controller cluster VIP](#), follow the steps provided in the [Azure document](#) to configure a secondary IP for Azure virtual machine (VM).

Handling Failover

If the leader of the node changes, then the VIP should be moved to the appropriate node. This is implemented using specific scripts. Follow the steps given below to facilitate automatic movement of cluster VIP when the leader of the node changes:

1. Setup an Azure user credential with contributor privileges for controller VM.
On Avi UI, navigate to Infrastructure > User Credentials and click Create to create the user credential.

New SSH Credentials: Test ✕

User*

Credentials Type
 SSH Credentials Azure Credentials

SSH Credentials

Authentication
 SSH Key Password

Keys
 Generate SSH Key Value Pair Import Private Key

Public Key

2. Setup a control script.

On Avi UI, navigate to Templates > Scripts > ControlScripts and click Create. Enter the following text in the dialog box.

```
#!/usr/bin/python
import subprocess
import os
my_env = os.environ.copy()
my_env['PYTHONPATH'] = '/opt/avi/python/bin/cloud_connector:'+my_env['PYTHONPATH']
subprocess.Popen(['python', '/opt/avi/scripts/azure_cluster_vip.py', 'subscription_id', 'azure_credential_name'], env=my_env)
```

Replace the `subscription_id` with *Azure subscription_id* of the host controller VM, and `azure_credential_name` with the name of the credential object created in the above step.

Templates Profiles Groups Security **Scripts** AutoScale WAF

DataScripts Co

Q

Name

New ControlScript: Test

Name* ?
Test

ControlScript* ? Enter Text Upload File

```
import subprocess
import os
my_env = os.environ.copy()
my_env["PYTHONPATH"] = '/opt/avi/python/bin/cloud_connector:' + my_env["PYTHONPATH"]
subprocess.Popen(["python", "/opt/avi/scripts/azure_cluster_vip.py", "XXX", "azure_name"], env=my_env)
```

3. Create alert action and alert config.

On Avi UI, navigate to Operations > Alerts > Alert Actions and choose the script created in the above step for alert action.

Navigate to Alert Config tab and click Create to create a new alert config. Under Event Occurs tab choose the following events:

- Controller Leader Failover
- Controller Node Joined
- Controller Node Left

You can add a new event by clicking on + Add New Event.

New Alert Configuration: ✕

600 sec

Source
 Event Metrics

Object
 None Virtual Service Service Engine Pool

AutoScale Alert ?

Number of Occurrences ?
1

Category ?
 Real-time Rolling Window

Event Occurs ? ✕ ▼
Controller Leader Failover

And Or And not

Event Occurs ? ✕ ▼
Controller Node Joined

[+ Add New Event](#)