

# Modify Load Balancer backend pool

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## Overview

<b>Platform:</b>	<b>Azure</b>
<b>Owner of this SOP:</b>	Fully Managed POD A
<b>Cloud Services:</b>	Instance Management

## Problem

When requesters are asking to add the additional VM on the backend pool.

tester	Reviewer
<div>@ Ramkumar Samudram (Deactivated) - Win</div> <div>@ Asif Patel (Deactivated) - Linux</div>	

## Solution

Cloud Services operators will perform basic health checks and update the associated record as required. In most cases, the record will be an Incident Task (which may be assigned or manually created).

## Pre-requisites

- The operator needs to have access to the **Cloud Factory ServiceNow Dashboard**. If this access is missing raise a request for [Access to ServiceNow](#) and request the group "Cloud Factory - Dashboard Access".
- Must be a member of the "Cloud Svcs- CloudOne" assignment group to work on ServiceNow tickets. As well access to the required report in this SOP. Use the same [Access to ServiceNow](#) request to gain this group if needed.
- The operator needs to be part of **OperationsCloudOneAccess** role in AWS & **CloudOne Operator** role in Azure . If this is missing raise a [Manage Cloud Access](#) request to get this custom role.

## Procedure

### Steps to create & manage Incident Task

#### Create Incident Task

Follow the below steps to create incident task. This step is required when the operator has received only an Incident.

On *Incident Tasks* Tab of the Incident ticket, click *New* and assign it to "CloudOne" team. Populate the Assignment group and Configuration item (CI). (Hint the CI is the VM on which the health check is being performed)

Task SLAs (6)
Calls
Alerts
Change Requests
Incident Tasks
Affected Locations
Incident Communication Plans
Outages
Child Incidents

SAP Notifications
SAP Work Orders
SAP Work Order Operations

Incident Tasks
New
Search
Number
Search

## Steps

- Logon to Azure Portal and check the number of VMs which are running on the backend pool

Windows:

[Home](#) > [Load balancing](#) > [aue1winvmlb01](#) >

## toolingdevbackendpool ...

aue1winvmlb01

Name

toolingdevbackendpool

Virtual network ⓘ

it-aue1-npe-vnt-10.125.121.0 (it-aue1-npe-arg-network)

Associated to ⓘ

Virtual machines

IP Version

☒ IPv4
☐ IPv6

### Virtual machines

You can only attach virtual machines in australiaeast that have a basic SKU public IP configuration or no public IP configuration. All virtual machines must be in the same availability set and all IP configurations must be on the same virtual network.

+ Add

✕ Remove

<input type="checkbox"/> Virtual machine ↑↓	IP Configuration ↑↓	Availability set ↑↓
<input type="checkbox"/> it-maue10etpod006	it-MAUE10ETPOD006-nic-internal-ip ...	it-aue1winvmavs01

### Used by

The list of load balancing rules and outbound rules using this backend pool

Save

Cancel

Give feedback

Linux:

Home > Load balancing > aue1linuxvmlb01

## Load balancing | Load Balancer

Search (Ctrl+/) « + Create Manage view ▾ ...

Overview

Load Balancing Services

- Application Gateway
- Front Door
- Load Balancer
- Traffic Manager

Name ↑↓

- linux
- aue1linuxvmlb01
- auselinuxvmlb01

« + Add Refresh Give feedback

Search (Ctrl+/) «

Filter by name...

Backend pool == all Resource Name == all Resource Status == all IP address == all

Network interface == all Availability zone == all

Group by Backend pool ▾

Backend pool	Resource Name	Resource Status	IP Address	Network interface
toolingdevbackendpool	MAUE10ETPOD007	Running	10.125.121.7	it-MAUE10ETPOD00

- Clone the respective repo and change the required variables into .tfvars file.

### Windows:

```

winvmwithlb > env_vars > npe.auto.tfvars
70 zones = [] # A collection of availability zones to use for VM placement.
71 }
72 }
73 nsrg_rules = {} # Additional rules for subnet level access that the
74 zone = "" # availability zone for VM
75 }
76 "second" = {
77 name = "MAUE10ETPOD007" #VM name to be diplayed in azure
78 computer_name = "MAUE10ETPOD007" # VM hostname as per BHP naming convention
79 computer_description = "Test VM2 for VM with LB" # VM HOST COMPUTER DESCRIPTION
80 size = "Standard_DS1_v2" # The size/sku of the VM
81 disk_size_gb = 128 # The size of the data disk in GB
82 storage_account_type = "StandardSSD_LRS" # The type of storage to use for the managed disk.
83 storage_account_name = "bcpdiagaueavm" # The name of the storage account
84 storage_account_rg = "it-aeua-cor-logs" # The name of the resource group
85 custom_data = "" # The startup script
86 private_ip_address_allocation = "Static" # IP allocation method
87 private_ip_addresses = ["10.125.121.16"] # provide available IP addresses
88 data_disks = {
89 "Data" = {
90 name = "data" # Name of the Data disk
91 storage_account_type = "Premium_LRS" #The type of storage to use for the managed disk.
92 disk_size_gb = 128 # Specifies the size of the managed disk to create in GB
93 caching = "ReadOnly" # Specifies the caching requirements for this Data Disk
94 lun = 11 # The Logical Unit Number of the Data Disk, which needs to be unique
95 zones = [] # A collection containing the availability zone to use for VM placement
96 }
97 }
98 nsrg_rules = {} # Additional rules for subnet level access that the
99 zone = "" # availability zone for VM
100 }
101 }

```

### Linux:

```

EXPLORER  ...  .gitlab-ci.yml  fetch_secrets.sh  variables.tf  env.sh old_scripts  env.sh scripts  npe.auto.tfvars  primary_site

LINUX-S...  doc  env_vars  npe.auto.tfvars  old_scripts  scripts  ansible_post_build.py  env.sh  fetch_secrets.sh  linux_secrets_inject.py  seed_creds.py  terraform-apply.sh  terraform-destroy.sh  terraform-plan.sh  update_workspace.py  update_workspace.sh  validate.sh  templates  .gitignore  .gitlab-ci.yml  .terraform-docs.yaml  data.tf  locals.tf

env_vars > npe.auto.tfvars > 60 vm > 60 second > computer_name

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"second" = {
  base_name           = "it"           # Base name
  name                = "MAUE10ETPOD009" # VM name to be displayed in azure portal as per the
  computer_name       = "MAUE10ETPOD009" # VM hostname as per BHP naming convention
  computer_description = "Linux_Server with load balancer"
  resource_group_name = "it-ae1-npe-arg-fmpodalinux2019" # Resource group name
  location            = "Australia East" # Azure location to provision the VM into
  size               = "Standard_D4s_v3" # The size/sku of the virtual machine
  create_data_disk   = false            # Create data disk
  os_disk_name       = "osdisk"         # OS Disk Name
  os_disk_caching    = "ReadWrite"      # The Type of Caching which should be used for the Internal
  disk_size_gb       = 64               # The size of the OS Disk in GB.
  storage_account_type = "StandardSSD_LRS" # The type of the storage account for the OS Disk.
  custom_data        = ""               # The startup script to use for VM provisioning
  recovery_vault_name = "it-ae1-npe-rsv-grs" # Vault name
  rsv_resource_group_name = "it-ae1-npe-arg-backup" # Vault's resource group
  backup_policy_name  = "AU_Non-Production_VM" # Backup policy name
  identity_type       = "SystemAssigned"
  identity_ids        = [""]
  private_ip_address_allocation = "Dynamic" # IP allocation method "Static" or "Dynamic"
  private_ip_address  = ""                 # provide available ip from the subnet when using Static IP A
  nsg_rules           = {}                 # Additional rules for subnet level access that the customer
  zone               = null               # availability zone for VM
  data_disks = {

```

- commit and push your changes
- verify that the pipeline executes as expected and that a terraform workspace is created and run
- verify the terraform plan in your TF workspace

Policy checked

Queued from GitLab CI/CD Pipeline

CURRENT

API Integration triggered a run from API 2 minutes ago

Run Details

Plan finished 2 minutes ago

Resources: 14 to add, 0 to change, 2 to destroy

Started 2 minutes ago > Finished a minute ago

+ 14 to create

- 2 to destroy

Filter resources by address...

Terraform 1.1.2

Download raw log

module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-ae1-npe-arg-operations/providers/Microsoft.azurerm\_key\_vau

↕

module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-ae1-npe-arg-operations/providers/Microsoft.azurerm\_key\_vau

module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-ae1-npe-arg-operations/providers/Microsoft.azurerm\_key\_vau

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module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-ae1-npe-arg-operations/providers/Microsoft.azurerm\_key\_vau

module.load\_balancer.azure\_rm\_network\_interface\_backend\_address\_pool\_association.this[1]









- if you are satisfied with the plan output, Initiate the apply stage in the pipeline

 **Apply finished** a few seconds ago
 Resources: **14** added, **0** changed, **2** destroyed

Started a few seconds ago

+ 14 created
 - 2 destroyed

Filter resources by address... Terraform 1.1.2 [Download raw log](#)

- >   module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-aue1-npe-arg-operations/providers/Microsoft. ... .azurerm\_key\_vau
- >   module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-aue1-npe-arg-operations/providers/Microsoft. ... .data.azurem\_cli
- >   module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-aue1-npe-arg-operations/providers/Microsoft. ... .azurerm\_key\_vau
- >   module.key\_vault\_access["/subscriptions/01818878-c294-4617-a15a-8b7934a433c4/resourceGroups/it-aue1-npe-arg-operations/providers/Microsoft. ... .data.azurem\_cli




- Log on to the Azure portal and verify the backend pool and confirm that additional VM added as per requirement.

#### Windows:

Home > Load balancing > aue1winvmlb01 >






**toolingdevbackendpool** ...

aue1winvmlb01

Name	toolingdevbackendpool
Virtual network 	it-aue1-npe-vnt-10.125.121.0 (it-aue1-npe-arg-network)
Associated to 	Virtual machines 
IP Version	<input checked="" type="radio"/> IPv4 <input type="radio"/> IPv6

#### Virtual machines

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 Add	 Remove	
<input type="checkbox"/> Virtual machine 	IP Configuration 	Availability set 
<input type="checkbox"/> it-maue10etpod006	it-MAUE10ETPOD006-nic-internal-ip ...	it-aue1winvmavs01
<input checked="" type="checkbox"/> it-MAUE10ETPOD007	it-MAUE10ETPOD007-nic-internal-ip ...	it-aue1winvmavs01

Used by

[Give feedback](#)

#### Linux:

## Load balancing | Load Balancer

Search (Ctrl+/)

Overview

Load Balancing Services

- Application Gateway
- Front Door
- Load Balancer
- Traffic Manager

Filter for any field...

Name ↑

- aue1linuxvmlb01
- aue1winvmlb01
- auselinuxvmlb01
- ausewinvmlb01

### aue1linuxvmlb01 | Backend pools

Search (Ctrl+/)

+ Add Refresh Give feedback

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Backend pool	Resource Name	Resource Status	IP Address	Network interface
toolingdevbackendpool				
toolingdevbackendpool	MAUE10ETPOD007	Running	10.125.121.7	it-MAUE10ETPOD00
toolingdevbackendpool	MAUE10ETPOD009	Running	10.125.121.9	it-MAUE10ETPOD00

## Related articles

- [AWS VPC Endpoints configuration change](#)
- [Renewal / Upload SSL certificate for existing Application](#)
- [Monitoring GitLab Access Audit Report](#)
- [Azure Storage Account Blueprint SOP - BPAZR022](#)
- [Azure App Service FTP Credential Sharing and Reset Procedure](#)