

Create Linux VMs behind a load balancer

- [Overview](#)
- [Problem](#)
- [Solution](#)
- [Related articles](#)

Overview

Platform:	Azure
Owner of this SOP:	Fully Managed POD A
Cloud Services:	Instance Management

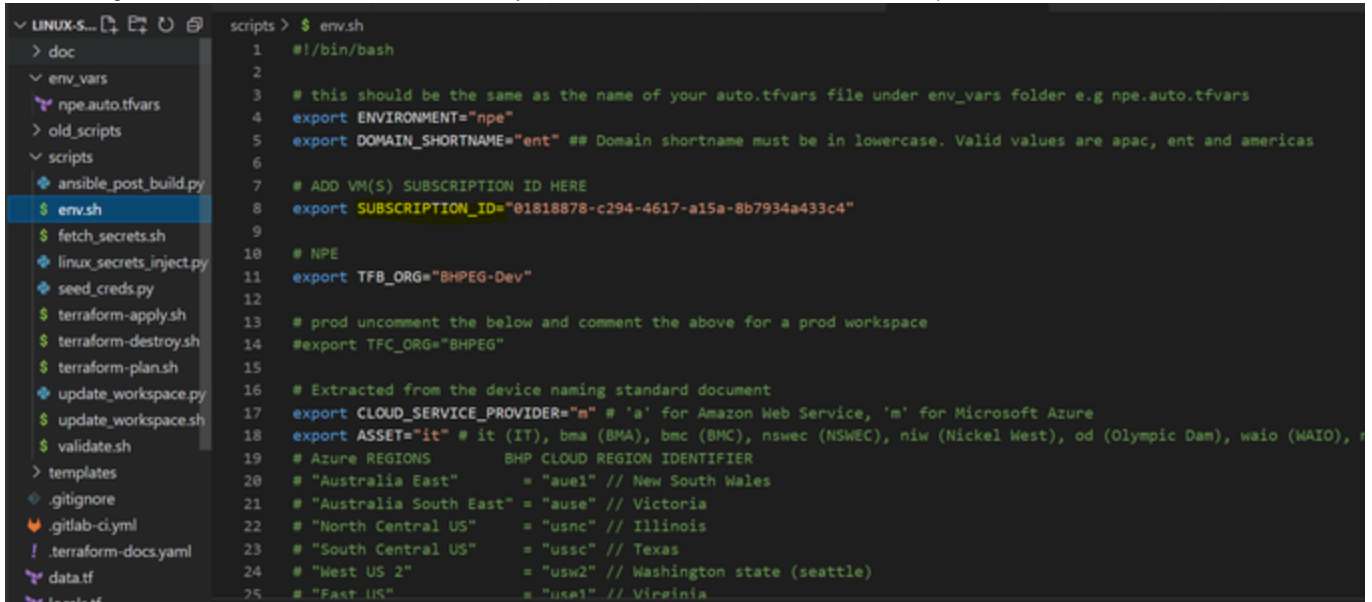
Problem

When requesters are asking for creating Windows VM behind the load balancer.

tester	Reviewer
@ Asif Patel (Deactivated)	

Solution

1. Clone the Blue Print 8 repo [bhp-cloudfactory / azure-blueprints / azr-linux-single-tier · GitLab](#) into your repository under new project e.g. [Files · feature-origin · bhp-cloudfactory / tooling-foundations / FM-Sops / linux-singletier-with-lb · GitLab](#)
2. Change all the variables in the .tfvars file as per your requirement. Please go through the blueprint Readme.md file for more details
3. Change the variables in the env.sh file to match your environment as shown in the below snap



```
scripts > $ env.sh
1  #!/bin/bash
2
3  # this should be the same as the name of your auto.tfvars file under env_vars folder e.g npe.auto.tfvars
4  export ENVIRONMENT="npe"
5  export DOMAIN_SHORTNAME="ent" ## Domain shortname must be in lowercase. Valid values are apac, ent and americas
6
7  # ADD VM(S) SUBSCRIPTION ID HERE
8  export SUBSCRIPTION_ID="01818878-c294-4617-a15a-8b7934a433c4"
9
10 # NPE
11 export TFB_ORG="BHPEG-Dev"
12
13 # prod uncomment the below and comment the above for a prod workspace
14 #export TFC_ORG="BHPEG"
15
16 # Extracted from the device naming standard document
17 export CLOUD_SERVICE_PROVIDER="m" # 'a' for Amazon Web Service, 'm' for Microsoft Azure
18 export ASSET="it" # it (IT), bma (BMA), bmc (BMC), nswec (NSWEC), niw (Nickel West), od (Olympic Dam), waio (WAIO),
19 # Azure REGIONS      BHP CLOUD REGION IDENTIFIER
20 # "Australia East"    = "aue1" // New South Wales
21 # "Australia South East" = "ause" // Victoria
22 # "North Central US"  = "usnc" // Illinois
23 # "South Central US"  = "ussc" // Texas
24 # "West US 2"         = "usw2" // Washington state (seattle)
25 # "East US"          = "use1" // Virginia
```

4. in fetch_secrets.sh update your key vault name in the required field

```

winvmwithlb > scripts > fetch_secrets.sh
1 #!/bin/bash
2
3 if [ "$client_id" == "" ]
4 then
5   az login --identity --allow-no-subscriptions -output none
6 else
7   az login --service-principal --username $client_id --password "$client_secret" --tenant $tenant_id --output
8 fi
9
10 export client_id=`az keyvault secret show --name sp-app-id --vault-name it-fmpoda | jq -r .value`
11 export client_secret=`az keyvault secret show --name sp-app-secret --vault-name it-fmpoda | jq -r .value`
12
13 export TFB_TOKEN=`az keyvault secret show --name tfb-token --vault-name it-fmpoda | jq -r .value`
14
15 export TFC_ADDR="app.terraform.io"
16
17 # These gitlab trigger tokens are shared between all spoke accounts for executing pipelines in azure-foundati
18 # Do not change the key vault references
19 export TFC_WSPACE_TOKEN=`az keyvault secret show --name TFC-WSPACE-TOKEN --vault-name it-akv-001 | jq -r .val
20
21 export winvm_secrets_inject_gl_token=`az keyvault secret show --name winvm-secrets-inject-token --vault-name
22
23
24 ##CyberArk token
25 export cyberark_token=`az keyvault secret show --name cyberark-token --vault-name it-akv-001 | jq -r .value`
26

```

- Commit and push your changes
- verify that the pipeline executes as expected and that a terraform workspace is created and run

bhp-cloudfactory > ... > FM-Sops > linux-singletier-with-lb > Pipelines

All 30 Finished Branches Tags

Clear runner caches CI lint Run pipeline

Filter pipelines

Status	Pipeline ID	Triggerer	Commit	Stages	Duration
blocked	#442385171 latest		feature-orig... 3aa5eeb9 changes secondary rsv	✓✓✓✓✓	00:09:31

- Verify the terraform plan in your TF workspace
- If you are satisfied with the plan output, Initiate the apply stage in pipeline

a_azr_toolingdev_npe_fmupdatestesting_01818878-c294-4617-a15a-8b7934a433c4

Resources: 47 Terraform version: 1.1.2 Updated: 3 hours ago

No workspace description available.

Overview **Runs** States Variables Settings

Unlocked Actions

Current Run

Queued from GitLab CI/CD Pipeline CURRENT

#run-csRBgyCAwNYpk7qs | API Integration triggered via API

✓ Applied 3 hours ago

Run List

Queued from GitLab CI/CD Pipeline CURRENT

#run-csRBgyCAwNYpk7qs | API Integration triggered via API

✓ Applied 3 hours ago

- Logon to the Azure portal and verify that whether the Load balancers are created as per requirement

Home > Load balancing

Load balancing | Load Balancer

Search (Ctrl+F) | Create | Manage view | Refresh | Export to CSV | Open query | Assign tags | Feedback

Overview

Load Balancing Services

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

linux | Subscription == it-npe-toolingdev | Resource group == all | Location == all | Add filter

Showing 1 to 2 of 2 records.

<input type="checkbox"/> Name ↑	Resource group ↑	Location ↑	Subscription ↑
<input type="checkbox"/> azurelinuxmb01	it-it-aur1-npe-arg-fmpodalinux2019	Australia East	it-npe-toolingdev
<input type="checkbox"/> azurelinuxmb01	it-it-aur1-npe-arg-fmpodalinux2019-sec-	Australia Southeast	it-npe-toolingdev

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](#)