



UPI ARM Sprint Demo

DEMO 2

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WIP

- ~~• Reconfigure internal load balancer to handle node boots - size 2~~
- Fix wildcard app load balancer - size 2
- ~~• Change scripts to parametrise resource group name - size 1~~
- ~~• Change to use 4.2 nightlies - size 2~~
- Add azure cloud provider - size 3
- Dns local or automation - size 2
- Add bastion for debug - size 1
- Work to support ci of azure arm upi - need help from someone who does ci
- Cleanup of scripts

Internal Load Balancer – Created

Showing 12 resources created

<input type="checkbox"/> Name ↑↓	Type ↑↓	Location ↑↓
<input type="checkbox"/>  masteravailabilityset	Availability set	East US
<input type="checkbox"/>  nodeavailabilityset	Availability set	East US
<input type="checkbox"/>  bastion_OsDisk_1_69cf9d779672457b87c7cc003cd69a18	Disk	East US
<input type="checkbox"/>  MasterLbgswx1	Load balancer	East US
<input type="checkbox"/>  gswx1intlb	Load balancer	East US
<input type="checkbox"/>  wildcardzone1b	Load balancer	East US
<input type="checkbox"/>  bastion869	Network interface	East US
<input type="checkbox"/>  bootstrap-0nic	Network interface	East US
<input type="checkbox"/>  master1nic	Network interface	East US
<input type="checkbox"/>  master2nic	Network interface	East US
<input type="checkbox"/>  master3nic	Network interface	East US
<input type="checkbox"/>  node01nic	Network interface	East US
<input type="checkbox"/>  node02nic	Network interface	East US
<input type="checkbox"/>  node03nic	Network interface	East US

Internal Load Balancer - Working

The screenshot displays the Azure portal interface for an Internal Load Balancer. The left-hand navigation pane includes sections for Overview, Settings, and Support + troubleshooting. The main content area shows the configuration details for the load balancer 'gswx1intlb'.

Navigation Pane:

- Overview (selected)
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Settings
 - Frontend IP configuration
 - Backend pools
 - Health probes
 - Load balancing rules
 - Inbound NAT rules
 - Properties
 - Locks
 - Export template
- Support + troubleshooting
 - New support request

Load Balancer Details:

Resource group (change) : gswx1

Location : East US

Subscription (change) : BorisB-External-Partner

Subscription ID : 27523af7-7c6e-4e06-9d6e-070881f968e8

SKU : Basic

Tags (change) : displayName : OpenShiftIntLB

Backend pool : masters (4 virtual machines)

Health probe : 2 probes

Load balancing rule : 2 rules

NAT rules : 0 inbound




Private IP address : 10.0.0.31

Internal Load Balancer – Backend Pool

[Home](#) > [gswx1](#) > [gswx1intlb - Backend pools](#) > [masters](#)


masters

gswx1intlb

 Save  Discard  Delete

Backend pool name

masters

IP version 





IPv4

Associated to

[masteravailabilityset \(availability set\)](#)

Target network IP configurations

Only VMs within the current availability set can be chosen. Once a VM is chosen, you can select a network IP configuration related to it.

Virtual machine: master3 Network IP configuration: master3nic/ipconfig1 (10.0.0.4)	
Virtual machine: master1 Network IP configuration: master1nic/ipconfig1 (10.0.0.5)	
Virtual machine: master2 Network IP configuration: master2nic/ipconfig1 (10.0.0.6)	
Virtual machine: bootstrap-0 Network IP configuration: bootstrap-0nic/ipconfig1 (10.0.0.7)	

+ Add a target network IP configuration

Associated load balancing rules

[lbrint](#)

[lb22623](#)

Kubelet Issue – 4.1 Flake?

```
[ OK ] Started Network Manager Script Dispatcher Service.
[ 12.648964] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
[ 12.654665] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
[ 12.658697] IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready
[ OK ] Started Log RPM-OSTree Booted Deployment Status To Journal.
[ OK ] Started Network Manager Wait Online.
[ OK ] Reached target Network is Online.
        Starting NFS status monitor for NFSv2/3 locking....
        Starting Generate /run/issue.d/console-login-helper-messages.issue...
        Starting Open Container Initiative Daemon...
        Starting RPC Bind...
[ OK ] Started RPC Bind.
[ OK ] Started Generate /run/issue.d/console-login-helper-messages.issue.
        Starting Permit User Sessions...
[ OK ] Started NFS status monitor for NFSv2/3 locking..
[ OK ] Started Permit User Sessions.
[ OK ] Started Getty on tty1.
[ OK ] Started Serial Getty on ttyS0.
[ OK ] Reached target Login Prompts.
[ OK ] Started Kubernetes systemd probe.
[FAILED] Failed to start Kubernetes Kubelet.
See 'systemctl status kubelet.service' for details.
[ OK ] Started Open Container Initiative Daemon.
[ OK ] Reached target Multi-User System.
        Starting Update UTMP about System Runlevel Changes...
[ OK ] Started Update UTMP about System Runlevel Changes.

Red Hat Enterprise Linux CoreOS 410.8.20190920.2 (Ootpa) 4.1
SSH host key: SHA256:nBTcD4gu/o0czzqkox+PpaHWQA3cS2p0krpCciUH/9Q (ECDSA)
SSH host key: SHA256:SWHc5KCBsCMBulC96+dQ0dnWGyDPHAWBxAm+3EC/Tmk (ED25519)
SSH host key: SHA256:Nbg7YVoDcoMRJuepJqzbzlcOL5TlQ7cKQdtxkxPWsCMY (RSA)
eth0: 10.0.0.6 fe80::f502:d712:5d10:cbb3

master2 login: [ 34.488691] SELinux: mount invalid. Same superblock, different security settings for (dev mqueue, type mqueue)
[ 35.866457] SELinux: mount invalid. Same superblock, different security settings for (dev mqueue, type mqueue)
[ 52.132882] SELinux: mount invalid. Same superblock, different security settings for (dev mqueue, type mqueue)
[ 58.964035] hv_balloon: Max. dynamic memory size: 28672 MB

This session was closed due to inactivity. To reconnect, press "Enter".
```

Other masters seem ok

```
Starting Network Manager Wait Online...
Starting RPM-OSTree System Management Daemon...
[ OK ] Started OpenSSH server daemon.
Starting Authorization Manager...
[ OK ] Started Hostname Service.
Starting Network Manager Script Dispatcher Service...
[ OK ] Started Network Manager Script Dispatcher Service.
[ OK ] Started Authorization Manager.
[ 13.919601] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
[ 13.925729] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready
[ 13.929997] IPv6: ADDRCONF(NETDEV_CHANGE): eth0: link becomes ready
[ OK ] Started RPM-OSTree System Management Daemon.
[ OK ] Started Log RPM-OSTree Booted Deployment Status To Journal.
[ OK ] Started Network Manager Wait Online.
[ OK ] Reached target Network is Online.
Starting Open Container Initiative Daemon...
Starting NFS status monitor for NFSv2/3 locking...
Starting Generate /run/issue.d/console-login-helper-messages.issue...
Starting RPC Bind...
[ OK ] Started RPC Bind.
[ OK ] Started Generate /run/issue.d/console-login-helper-messages.issue.
[ OK ] Started NFS status monitor for NFSv2/3 locking..
Starting Permit User Sessions...
[ OK ] Started Permit User Sessions.
[ OK ] Started Getty on tty1.
[ OK ] Started Serial Getty on ttyS0.
[ OK ] Reached target Login Prompts.
[ OK ] Started Open Container Initiative Daemon.

Red Hat Enterprise Linux CoreOS 410.8.20190920.2 (Ootpa) 4.1
SSH host key: SHA256:4UmG+vlqMnhcYsZGDshyC88YP+0s4/as3Covl4n9SpQ (ECDSA)
SSH host key: SHA256:ETUFxJGfXTVCloK9Wn5H8XVn04qINjQhCg76V2JY3gE (ED25519)
SSH host key: SHA256:6TOSL/AT05DSNfAmSllXb6dK/pLxP/605kWLhvb/7YI (RSA)
eth0: 10.0.0.5 fe80::106c:6fcd:590d:5f84

master1 login: [ 29.596913] SELinux: mount invalid. Same superblock, different security settings for (dev m
queue, type mqueue)
[ 31.121252] SELinux: mount invalid. Same superblock, different security settings for (dev mqueue, type mqu
eue)
[ 35.358897] SELinux: mount invalid. Same superblock, different security settings for (dev mqueue, type mqu
eue)
[ 60.220496] hv_balloon: Max. dynamic memory size: 28672 MB
```

Azure VHD

- Currently Azure (VHD) VM Images are just stored in a storage account
- Every time you run the ARM template due to this we must “copy” the image into the resource group used by the ARM template
- Note that a normal “RHEL” Image has a different mechanism, that effectively includes distribution of images to all av zones, and speeds up the vm spin up. (10-20 minutes of extra time for storage account)

Azure

VHD Image blob URL

<https://rhcos.blob.core.windows.net/imagebucket/rhcos-42.80.20191010.0.vhd>

Card – Parametertised scripts

- Scripts have been changed to support giving the resource group on command line

```
./setup_azarm.sh gswx1  
read -p "Press [Enter] to start deploy"  
./deploy_azarm.sh      gswx1
```

Card – Move to 4.2

- Changed Folder structure to be version independent
- Added nightly build “Internal” script to pull installer
- Changed rhcos version and storage account source
- Change scripts to reflect above

```
[Glenns-MacBook-Pro-2:ocpupi4azure gwest$ pwd  
/Users/gwest/ocpupi4azure  
[Glenns-MacBook-Pro-2:ocpupi4azure gwest$ ls  
README.md      images          ssh_mac.md      wip  
arm            ssh_linux.md    ssh_windows.md
```

Change version of OpenShift for ARM UPI

- Change the RHCOS Image name in azuredeploy.parameters.json

```
Glenns-MacBook-Pro-2:arm gwest$ cat azuredeploy.parameters.json
{
  "$schema" : "https://schema.management.azure.com/schemas/2015-01-01/deploymentParameters.json#",
  "contentVersion" : "1.0.0.0",
  "parameters" : {
    "image" : {
      "value" : "https://sagswx1.blob.core.windows.net/vhd/rhcos-42.80.20191010.0.vhd"
    },
    "rhcos_image" : {
      "value" : "rhcos-42.80.20191010.0.vhd"
    }
  }
}
```

- Change image variable in set_azarm.sh

```
#export VHD_NAME=rhcos-410.8.20190504.0-azure.vhd
export VHD_URL=https://rhcos.blob.core.windows.net/imagebucket/
export VHD_NAME=rhcos-42.80.20191010.0.vhd
```

First 4.2 Nightly Deployment Success

Filter by deployment name or resources in the deployment...			
<input type="checkbox"/> Deployment name	Status	Last modified	Duration
<input type="checkbox"/> master3	✔ Succeeded	10/16/2019, 11:09:04 AM	1 minute 41 seconds
<input type="checkbox"/> bootstrap	✔ Succeeded	10/16/2019, 11:08:53 AM	1 minute 29 seconds
<input type="checkbox"/> node2	✔ Succeeded	10/16/2019, 11:08:48 AM	1 minute 24 seconds
<input type="checkbox"/> master1	✔ Succeeded	10/16/2019, 11:08:46 AM	1 minute 23 seconds
<input type="checkbox"/> master2	✔ Succeeded	10/16/2019, 11:08:47 AM	1 minute 23 seconds
<input type="checkbox"/> node1	✔ Succeeded	10/16/2019, 11:08:40 AM	1 minute 16 seconds
<input type="checkbox"/> node0	✔ Succeeded	10/16/2019, 11:08:45 AM	1 minute 21 seconds
<input type="checkbox"/> gswx1	✔ Succeeded	10/16/2019, 11:09:13 AM	1 minute 54 seconds

Current Status

- Working:
 - Internal Load Balancer is Fixed and Working
- Not Done/Not Working:
 - Ssh not working to masters/nodes

Where's it at:

The screenshot shows the GitHub interface for the repository `glennswest / ocpupi4azure`. The browser address bar displays `github.com/glennswest/ocpupi4azure/tree/master/4.1`. The repository page includes a search bar, navigation links for Pull requests, Issues, Marketplace, and Explore, and a header with repository statistics: 1 Unwatch, 0 Stars, and 0 Forks. Below the header, a tabbed interface shows the 'Code' tab selected. The main content area displays the file tree for the `4.1` branch, listing files such as `azuredeploy.json`, `azuredeploy.parameters.json`, `deploy_azarm.sh`, `master.json`, `node.json`, `setup-variables.py`, and `setup_azarm.sh`, each with a brief description and a commit timestamp.

Branch: master `ocpupi4azure / 4.1 /` Create new file Upload files Find file History

glennswest Cleanup extra files Latest commit d4ae4e8 15 seconds ago

..		
<code>azuredeploy.json</code>	Add a dependency for internallb and change ip address	2 hours ago
<code>azuredeploy.parameters.json</code>	Add sshkeydata for nodes	2 days ago
<code>deploy_azarm.sh</code>	Split into two - one for setup one for deploy	2 hours ago
<code>master.json</code>	Change the way keydata is passed and remove tags from master	2 days ago
<code>node.json</code>	Fix missing parameters	yesterday
<code>setup-variables.py</code>	Make sure parameters have correct format for bootstrap ignition	2 days ago
<code>setup_azarm.sh</code>	Split into two - one for setup one for deploy	2 hours ago

<https://github.com/glennswest/ocpupi4azure/tree/master/4.1>