



# UPI ARM Sprint Demo

DEMO 4

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# Changes

- In setup-manifests
  - Remove the dns zones
  - Preserve order of settings in json
  - Cleanup formatting of cloud provider json settings
  - Fix creation date time to be null in proper format.
  - Delete machinesets in gw/openshift
  - Update resource group name in gw/openshift
- In setup-variables – Automatically set the RHCOS image destination
- Added Standard\_D2s\_v3, Standard\_D4s\_v3, Standard\_D8s\_v3 as available vm types in template.

# Fixed Ingress Bug

- Explored various ingress strategies with edge team
- Changed Ingress to host-network to be compatible with Azure Load Balancer.
- Implemented in setup-host-network.sh
- Long term node-port may be a better alternative, but currently it appears to require more exploration.

# Fixed Image/Registry Bug

- The OpenShift Image Registry was failing.
- This was due to trying to use the wrong resource group.
- Did a cleanup of gw/openshift manifests
- Added update of gw/openshift/99\_cloud-creds-secret.yaml to make sure correct resource group is used.

# Bug Fixes

- Allow as little as 2 compute nodes (Limited by Ingress Operator)
- Fixed Standard\_DSx (DS3) storage type
- Added a abort of ARM Deployment failed (BZ Reported a failed on bootstrap, when the reality the deployment Failed)
- Added missing install-config.yaml.example

# New Tiny Deploy Tested

- 2 Compute Nodes
- Standard\_D2s\_v3 vm

```
arm — -bash — bash — 86x33
dhcp-64-251:arm gwest$ cat azuredeploy.parameters.json
{
  "$schema" : "https://schema.management.azure.com/schemas/2015-01-01/deploymentParameters.json#",
  "contentVersion" : "1.0.0.0",
  "parameters" : {
    "image" : {
      "value" : ""
    },
    "BootstrapIgnition" : {
      "value" : ""
    },
    "MasterIgnition" : {
      "value" : ""
    },
    "WorkerIgnition" : {
      "value" : ""
    },
    "numberOfNodes" : {
      "value" : 2
    },
    "sshKeyData" : {
      "value" : ""
    },
    "masterVMSize" : {
      "value" : "Standard_D2s_v3"
    },
    "nodeVMSize" : {
      "value" : "Standard_D2s_v3"
    }
  }
}
dhcp-64-251:arm gwest$
```



# Tiny Deploy - Success

```
arm — -bash — bash — 173x36
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 87% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 88% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 89% complete
DEBUG Still waiting for the cluster to initialize: Multiple errors are preventing progress:
* Could not update servicemonitor "openshift-apiserver-operator/openshift-apiserver-operator" (427 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-cluster-version/cluster-version-operator" (8 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-console-operator/console-operator" (406 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-controller-manager-operator/openshift-controller-manager-operator" (431 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-image-registry/image-registry" (395 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-kube-apiserver-operator/kube-apiserver-operator" (409 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-kube-controller-manager-operator/kube-controller-manager-operator" (413 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-machine-api/cluster-autoscaler-operator" (153 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-machine-api/machine-api-operator" (419 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-service-catalog-controller-manager-operator/openshift-service-catalog-controller-manager-operator" (401 of 432): the server does not recognize this resource, check extension API servers
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 97% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 98% complete, waiting on authentication, console, monitoring, openshift-samples
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 98% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 98% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 99% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 100% complete, waiting on authentication, console
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 100% complete
DEBUG Cluster is initialized
INFO Waiting up to 10m0s for the openshift-console route to be created...
DEBUG Route found in openshift-console namespace: console
DEBUG Route found in openshift-console namespace: downloads
DEBUG OpenShift console route is created
INFO Install complete!
INFO To access the cluster as the system:admin user when using 'oc', run 'export KUBECONFIG=/Users/gwest/ocpupi4azure/arm/gw/auth/kubeconfig'
INFO Access the OpenShift web-console here: https://console-openshift-console.apps.gw.ncc9.com
INFO Login to the console with user: kubeadmin, password: mucE4-mWlvj-LAJkn-Lkksv
dhcp-64-251:arm gwest$
```

# Tiny Deploy - Max Out Utilization

The screenshot displays the Red Hat OpenShift Container Platform dashboard. The browser address bar shows the URL `console-openshift-console.apps.gw.ncc9.com/dashboards`. The dashboard header includes the Red Hat logo and the text "OpenShift Container Platform". A navigation sidebar on the left lists various sections: Administrator, Home, Dashboards (selected), Projects, Search, Explore, Events, Operators, Workloads, Networking, Storage, Builds, and Monitoring. The main content area features a blue notification banner stating: "You are logged in as a temporary administrative user. Update the [cluster OAuth configuration](#) to allow others to log in." Below this, the "Dashboards" section is active, showing an "Overview" tab. The "Cluster Health" section indicates "Cluster is healthy" with a green checkmark. The "Alerts" section lists two warnings: "etcd cluster 'etcd': members are down (1)" and "Cluster has overcommitted CPU resource requests for Pods and cannot tolerate node failure." The "Cluster Capacity" section is partially visible at the bottom, showing a table with columns for CPU, Memory, Storage, and Network.

CPU	Memory	Storage	Network
-----	--------	---------	---------



```
DEBUG OpenShift Installer v4.2.0
DEBUG Built from commit 90ccb37ac1f85ae811c50a29f9bb7e779c5045fb
INFO Waiting up to 30m0s for the Kubernetes API at https://api.gw.ncc9.com:6443...
INFO API v1.14.6+2e5ed54 up
INFO Waiting up to 30m0s for bootstrapping to complete...
DEBUG Bootstrap status: complete
INFO It is now safe to remove the bootstrap resources
About to power off the specified VM...
It will continue to be billed. To deallocate a VM, run: az vm deallocate.
DEBUG OpenShift Installer v4.2.0
DEBUG Built from commit 90ccb37ac1f85ae811c50a29f9bb7e779c5045fb
INFO Waiting up to 30m0s for the cluster at https://api.gw.ncc9.com:6443 to initialize...
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 66% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 78% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 79% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 81% complete
DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 82% complete
DEBUG Still waiting for the cluster to initialize: Multiple errors are preventing progress:
* Could not update role "openshift-console-operator/prometheus-k8s" (404 of 432): resource may
have been deleted
* Could not update servicemonitor "openshift-apiserver-operator/openshift-apiserver-operator" (
427 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-authentication-operator/authentication-operator" (
389 of 432): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-cluster-version/cluster-version-operator" (8 of 43
2): the server does not recognize this resource, check extension API servers
* Could not update servicemonitor "openshift-controller-manager-operator/openshift-controller-m
anager-operator" (431 of 432): the server does not recognize this resource, check extension API
servers
```

e server does not recognize this resource, check extension API servers

- \* Could not update servicemonitor "openshift-operator-lifecycle-manager/olm-operator" (421 of 432): the server does not recognize this resource, check extension API servers
- \* Could not update servicemonitor "openshift-service-catalog-apiserver-operator/openshift-service-catalog-apiserver-operator" (398 of 432): the server does not recognize this resource, check extension API servers
- \* Could not update servicemonitor "openshift-service-catalog-controller-manager-operator/openshift-service-catalog-controller-manager-operator" (401 of 432): the server does not recognize this resource, check extension API servers

DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 85% complete

DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 88% complete

DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 98% complete

DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 99% complete

DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 99% complete, waiting on authentication, console, monitoring

DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 100% complete, waiting on authentication

DEBUG Still waiting for the cluster to initialize: Working towards 4.2.0: 100% complete, waiting on authentication

DEBUG Cluster is initialized

INFO Waiting up to 10m0s for the openshift-console route to be created...

DEBUG Route found in openshift-console namespace: console

DEBUG Route found in openshift-console namespace: downloads

DEBUG OpenShift console route is created

INFO Install complete!

INFO To access the cluster as the system:admin user when using 'oc', run 'export KUBECONFIG=/Users/gwest/ocpupi4azure/arm/gw/auth/kubeconfig'

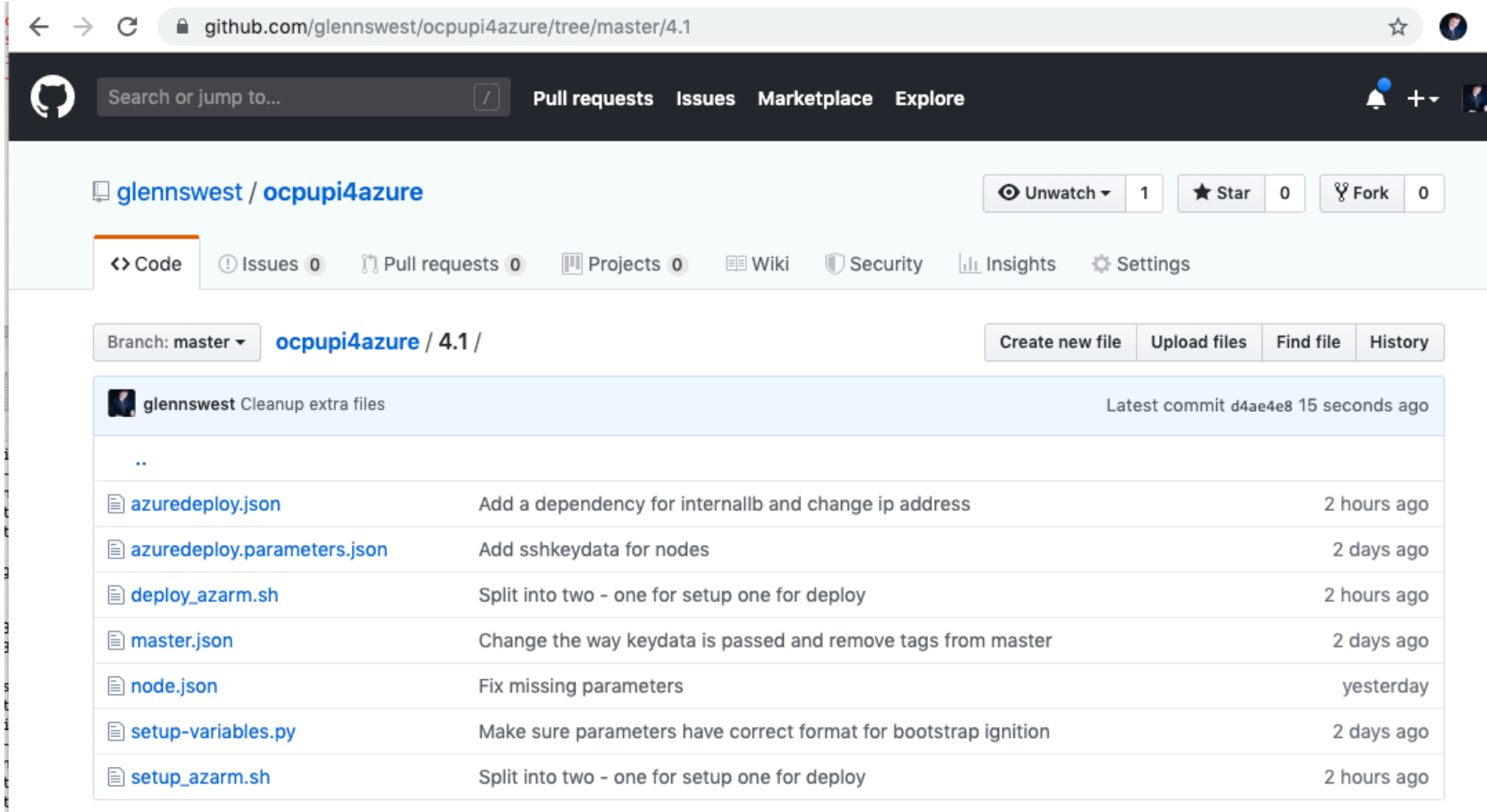
INFO Access the OpenShift web-console here: <https://console-openshift-console.apps.gw.ncc9.com>

INFO Login to the console with user: kubeadmin, password: uSdJu-aN3yD-btmqd-wzRvt

# Current Status

- Completed
  - Ingress Bug – Working
  - Identity and Access – Working
  - Registry – Working
  - Automated changes for resource group name - Working
- WIP
  - Stress test installation – 5 Successful deployments so far)
  - Identify Flakeys
  - Look at PR comments and work to resolve
  - Merge enhance sanity PR
  - Work on Bug Reports

# Where's it at:



The screenshot shows the GitHub repository page for `glennswest/ocpupi4azure`. The browser address bar displays `github.com/glennswest/ocpupi4azure/tree/master/4.1`. The repository name is `glennswest / ocpupi4azure`, with 1 Unwatch, 0 Stars, and 0 Forks. The navigation bar includes links for Code, Issues (0), Pull requests (0), Projects (0), Wiki, Security, Insights, and Settings. The current branch is `master`, and the selected file is `ocpupi4azure / 4.1 /`. The commit history shows a recent commit by `glennswest` titled "Cleanup extra files" with the latest commit hash `d4ae4e8` 15 seconds ago. The file list includes:

File	Description	Time
..		
<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/arm>