OSM Hackfest – Session 9.2
VNF Onboarding to vCD

Mark Beierl (VMware)
VNF Onboarding Overview

• Procedure remains the same
  • Define day 0, 1, 2
  • VDU characteristics
  • Network requirements

• VNFD, NSD for OpenStack is valid for vCD
So, What is Different?

- Cloud image format
- OpenStack based on KVM uses QCOW2 format
- vCD and VMware Integrated Openstack use VMDK format
- vCD does not have a Glance client
- Tools provided in devops repo:
  - ovf_converter
  - ovf_uploader
Welcome to vCD

- This is not OpenStack
  - No OpenStack APIs
  - Open source libraries for interaction
    - pyvcloud
    - vcd_cli

- Similar concepts:
  - Tenants and organizations
  - Datacenters to represent regions or availability zones
Tenant Portal

- Datacenters
- Catalogs – repository of vApp templates
- vApp Templates – similar to glance images
- vApps – instances of virtual machines and networks
Datacenters

Virtual Datacenters

Environment
- Sites: 1
- Organizations: 1
- Virtual Datacenters: 1

Running Applications
- VMs: 2
- vApps: 3

Applications

CPU
0 MHz

Memory
136 MB

Storage
178 GB

4 vApps

2 of 3 Running VMs

40 GHz reserved
200 GB reserved
0 MB allocated

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<table>
<thead>
<tr>
<th>Name</th>
<th>Version</th>
<th>Status</th>
<th>Shared</th>
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<td>-</td>
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<tr>
<td>CentOS-7</td>
<td>5</td>
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<td>ubuntu1604</td>
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### vApp Templates

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Catalog</th>
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<tbody>
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<tr>
<td>ubuntu1604</td>
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<td>ubuntu1804</td>
<td>Normal</td>
<td>ubuntu1804</td>
</tr>
</tbody>
</table>
Convert Images

• Installer available from devops
  • devops/tools/OVF_Converter/install.sh

• Conversion of .qcow2 to .vmdk
  • ovf_converter ubuntu1804.qcow2

• Upload to vCD
  • ovf_uploader -u etsi -p password -o etsi \\ -l https://172.21.6.23 ubuntu1804.ovf
osm ns-create --ns_name hf-basic
   --nsd_name hackfest_basic-ns
   --vim_account vCD
   --ssh_keys ~/.ssh/id_rsa.pub
   --config
   '{vld: [ {name: mgmtnet, vim-network-name: Org-Direct-Net} ] }'
View Deployed Service

Virtual Machine
ubuntu1804
Other (32-bit)
Powered on

- CPUs
  1

- Memory
  1024 MB

- Networks
  Org-Direct-Net

Lease
6 Days

VMware Tools

Snapshot
-