

OpenNebula Puppet Module

Norman Meßtorff, Operations Engineer @
Deutsche Post E-Post Development GmbH

- Develop & running our application
- Our deployment ecosystem: Puppet, Hiera & RPM
- started with different virtualization Tools on Dev & Prod
- 14 Teams, each ~70 VMs -> 980 VMs
- We have a „Wirtshaus“ 🍺 as virtualization tool (yet)
- No suitable Puppet Module

↑
not very DevOps
style :-)


Puppet Manifest:

```
1 onevnet { 'n-Public':
2   ensure      => present,
3   type        => 'ranged',
4   bridge      => 'vbr_n-public',
5   vlanid      => '42',
6   phydev      => 'bond0',
7   network_address => '10.1.2.0',
8   network_mask  => '255.255.255.0',
9   network_start => '10.1.2.50',
10  network_end   => '10.1.2.100',
11 }
```

Hiera YAML:

```
1 one::vnets:
2   n-Public:
3     type: RANGED
4     bridge: vbr_n-public
5     vlan: 'yes'
6     vlan_id: 42
7     phydev: bond0
8     net_address: 10.1.2.0
9     net_mask: 255.255.255.0
10    ip_start: 10.1.2.50
11    ip_end: 10.1.2.100
12    comment: Public network behind our externa'
```

Generate your environment (SDN)!



Hiera YAML:

```
1 one::head::hook_scripts:
2   VM:
3     dnsadd:
4       state: 'CREATE'
5       command: '/usr/share/one/hooks/on_prolog.py'
6       arguments: '-i $ID -a add -k /var/lib/one/etc/opennebula_dns.key'
7       remote: 'no'
8     dnsdelete:
9       state: 'DONE'
10      command: '/usr/share/one/hooks/dnshooks/dnshook.py'
11      arguments: '-i $ID -a delete -k /var/lib/one/etc/opennebula_dns.key'
12      remote: 'no'
```

Basics:

- Database configuration
- LDAP Authentication
- Passenger yes/no?
- Backup
- Hooks

Under the hood:

- providers using CLI tools
- supporting ONE 4.4

ONE resources:

- hosts, cluster
- datastores, images
- vnets, context files, vm's

The future:

- switch to real XML-RPC
- supporting ONE 4.10
- doing ONE upgrades
- Integrate: FW, LB, Storage

 @nmesstorff

Norman Meßtorff 

normes@normes.org