

Example Configuration Input File - Unicycle Pods with SR-IOV Dataplane on HP DL380 Gen10 servers

ATT Validation Labs

This section includes an example input file similar to that used during ATT Validation testing to deploy a Unicycle pod with an SR-IOV dataplane.

Please reference the following lab configuration [ATT Unicycle SR-IOV Validation HW, Networking and IP plan](#).

```
---
#####
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#####

site_name: hpgen10
site_type: sriov
ipmi_admin:
  username: Administrator
  password: Admin123
networks:
  bonded: yes
  primary: bond0
  slaves:
    - name: ens3f0
    - name: ens3f1
oob:
  vlan: 40
  interface:
  cidr: 192.168.41.0/24
  routes:
    gateway: 192.168.41.1
  ranges:
    reserved:
      start: 192.168.41.2
      end: 192.168.41.4
    static:
      start: 192.168.41.5
      end: 192.168.41.254
host:
  vlan: 41
  interface: bond0.41
  cidr: 192.168.2.0/24
  routes:
    gateway: 192.168.2.200
  ranges:
    reserved:
      start: 192.168.2.84
      end: 192.168.2.86
    static:
      start: 192.168.2.1
      end: 192.168.2.83
storage:
  vlan: 42
  interface: bond0.42
  cidr: 172.31.1.0/24
  ranges:
```

```
    static:
      start: 172.31.1.2
      end: 172.31.1.254
pxe:
  vlan:
  interface: eno1
  cidr: 172.30.1.0/24
  gateway: 172.30.1.1
  routes:
    gateway: 172.30.1.30
  ranges:
    reserved:
      start: 172.30.1.1
      end: 172.30.1.10
    static:
      start: 172.30.1.11
      end: 172.30.1.200
    dhcp:
      start: 172.30.1.201
      end: 172.30.1.254
ksn:
  vlan: 44
  interface: bond0.44
  cidr: 172.29.1.0/24
  local_asnumber: 65531
  ranges:
    static:
      start: 172.29.1.5
      end: 172.29.1.254
  additional_cidrs:
    - 172.29.1.136/29
  ingress_cidr: 172.29.1.137/32
  peers:
    - ip: 172.29.1.1
      scope: global
      asnumber: 65001
    vrrp_ip: 172.29.1.1 # keep peers ip address in case of only peer.
neutron:
  vlan: 45
  interface: bond0.45
  cidr: 10.0.101.0/24
  ranges:
    static:
      start: 10.0.101.2
      end: 10.0.101.254
dns:
  upstream_servers:
    - 192.168.2.85
    - 8.8.8.8
    - 8.8.8.8
  ingress_domain: hpgen10.akraino.org
  domain: lab.akraino.org
gpu:
  alias:
    - name: "P4"
      product_id: "1bb2"
      vendor_id: "10de"
    - name: "P40"
      product_id: "1b38"
      vendor_id: "10de"
    - name: "P100"
      product_id: "15f8"
      vendor_id: "10de"
    - name: "V100"
      product_id: "1db4"
      vendor_id: "10de"
sriov:
  alias:
    - name: "numa0"
      product_id: "158b"
      vendor_id: "8086"
```

nets:

```
- physical: sriovnet1
  interface: ens6f0
  vlan_start: 2001
  vlan_end: 3000
  whitelists:
    - "address": "0000:af:02.0"
    - "address": "0000:af:02.1"
    - "address": "0000:af:02.2"
    - "address": "0000:af:02.3"
    - "address": "0000:af:02.4"
    - "address": "0000:af:02.5"
    - "address": "0000:af:02.6"
    - "address": "0000:af:02.7"
    - "address": "0000:af:03.0"
    - "address": "0000:af:03.1"
    - "address": "0000:af:03.2"
    - "address": "0000:af:03.3"
    - "address": "0000:af:03.4"
    - "address": "0000:af:03.5"
    - "address": "0000:af:03.6"
    - "address": "0000:af:03.7"
    - "address": "0000:af:04.0"
    - "address": "0000:af:04.1"
    - "address": "0000:af:04.2"
    - "address": "0000:af:04.3"
    - "address": "0000:af:04.4"
    - "address": "0000:af:04.5"
    - "address": "0000:af:04.6"
    - "address": "0000:af:04.7"
    - "address": "0000:af:05.0"
    - "address": "0000:af:05.1"
    - "address": "0000:af:05.2"
    - "address": "0000:af:05.3"
    - "address": "0000:af:05.4"
    - "address": "0000:af:05.5"
    - "address": "0000:af:05.6"
    - "address": "0000:af:05.7"
- physical: sriovnet2
  interface: ens6f1
  vlan_start: 2001
  vlan_end: 3000
  whitelists:
    - "address": "0000:af:0a.0"
    - "address": "0000:af:0a.1"
    - "address": "0000:af:0a.2"
    - "address": "0000:af:0a.3"
    - "address": "0000:af:0a.4"
    - "address": "0000:af:0a.5"
    - "address": "0000:af:0a.6"
    - "address": "0000:af:0a.7"
    - "address": "0000:af:0b.0"
    - "address": "0000:af:0b.1"
    - "address": "0000:af:0b.2"
    - "address": "0000:af:0b.3"
    - "address": "0000:af:0b.4"
    - "address": "0000:af:0b.5"
    - "address": "0000:af:0b.6"
    - "address": "0000:af:0b.7"
    - "address": "0000:af:0c.0"
    - "address": "0000:af:0c.1"
    - "address": "0000:af:0c.2"
    - "address": "0000:af:0c.3"
    - "address": "0000:af:0c.4"
    - "address": "0000:af:0c.5"
    - "address": "0000:af:0c.6"
    - "address": "0000:af:0c.7"
    - "address": "0000:af:0d.0"
    - "address": "0000:af:0d.1"
    - "address": "0000:af:0d.2"
    - "address": "0000:af:0d.3"
```

```

- "address": "0000:af:0d.4"
- "address": "0000:af:0d.5"
- "address": "0000:af:0d.6"
- "address": "0000:af:0d.7"
storage:
  osds:
    - data: /dev/sdb
      journal: /var/lib/ceph/journal/journal-sdb
    - data: /dev/sdc
      journal: /var/lib/ceph/journal/journal-sdc
    - data: /dev/sdd
      journal: /var/lib/ceph/journal/journal-sdd
    - data: /dev/sde
      journal: /var/lib/ceph/journal/journal-sde
    - data: /dev/sdf
      journal: /var/lib/ceph/journal/journal-sdf
    - data: /dev/sdg
      journal: /var/lib/ceph/journal/journal-sdg
    - data: /dev/sdh
      journal: /var/lib/ceph/journal/journal-sdh
    - data: /dev/sdi
      journal: /var/lib/ceph/journal/journal-sdi
  osd_count: 8
  total_osd_count: 24
genesis:
  name: aknode30
  oob: 192.168.41.130
  host: 192.168.2.30
  storage: 172.31.1.30
  pxe: 172.30.1.30
  ksn: 172.29.1.30
  neutron: 10.0.101.30
  root_password: akraino,d
  mac_address: 3c:fd:fe:aa:90:b0
masters:
  - name : aknode31
    oob: 192.168.41.131
    host: 192.168.2.31
    storage: 172.31.1.31
    pxe: 172.30.1.31
    ksn: 172.29.1.31
    neutron: 10.0.101.31
  - name : aknode32
    oob: 192.168.41.132
    host: 192.168.2.32
    storage: 172.31.1.32
    pxe: 172.30.1.32
    ksn: 172.29.1.32
    neutron: 10.0.101.32
#workers:
# - name : aknode33
#   oob: 192.168.41.133
#   host: 192.168.2.33
#   storage: 172.31.1.33
#   pxe: 172.30.1.33
#   ksn: 172.29.1.33
#   neutron: 10.0.101.33
platform:
  vcpu_pin_set: "4-21,26-43,48-65,72-87"
  kernel_params:
    hugepagesz: '1G'
    hugepages: 32
#   default_hugepagesz: '1G'
  transparent_hugepage: 'never'
  iommu: 'pt'
  intel_iommu: 'on'
  amd_iommu: 'on'
#   console: 'ttyS1,115200n8'
hardware:
  vendor: HP
  generation: '10'

```

```
hw_version: '3'
bios_version: '2.8'
bios_template: hpe_dl380_g10_uefi_base.json.template
boot_template: hpe_dl380_g10_uefi_httpboot.json.template
http_boot_device: NIC.Slot.3-1-1
disks:
- name : sdj
  labels:
    bootdrive: 'true'
  partitions:
    - name: root
      size: 20g
      mountpoint: /
    - name: boot
      size: 1g
      mountpoint: /boot
    - name: var
      size: '>300g'
      mountpoint: /var
- name : sdk
  partitions:
    - name: ceph
      size: 300g
      mountpoint: /var/lib/ceph/journal
disks_compute:
- name : sdj
  labels:
    bootdrive: 'true'
  partitions:
    - name: root
      size: 20g
      mountpoint: /
    - name: boot
      size: 1g
      mountpoint: /boot
    - name: var
      size: '>300g'
      mountpoint: /var
- name : sdk
  partitions:
    - name: nova
      size: '99%'
      mountpoint: /var/lib/nova
genesis_ssh_public_key: "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQAC
/n4mNLAj3XKG2fcm+8eVe0NUlNH0g8DA8KJ53rSLKccm8gm4UgLmGOJyBfUloQZMuOpU6a+hexN4ECcliqI7+KUmgJgsvLkJ3OUMNTEVu9tDX5md
XeffsufaqFkAdmbJ/9PMPiPQ3
/UqbbtyEcqoZAwUWf4ggAWSp00SGE10kg+skPSbDzPVHb4810eXZTlyoIg29HAenJNNrsVxvnMT2kw2OYmLfxgEUh1Ev4c5LnUog4GXBDHQthAwa
IoTu9s/q8VIvGav62RJVFfn3U1D0jkiwDLSIFn8ezORQ4YkSidwdSrtqsga2TJ0E5w/n5h5IVGO9neY8YlXrgynLd4Y+7 root@pocnjrsv132"
kubernetes:
  api_service_ip: 10.96.0.1
  etcd_service_ip: 10.96.0.2
  pod_cidr: 10.99.0.0/16
  service_cidr: 10.96.0.0/14
regional_server:
  ip: 135.16.101.85
...
```