Example Configuration Input File - Unicycle Pods with SR-IOV Dataplane on Dell 740XD Servers

ATT Validation Labs

This section includes a example input file similar to that used during ATT validation testing to deploy a Unicycle pod with a 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: dellgen10
site_type: sriov
ipmi_admin:
  username: root
  password: calvin
networks:
  bonded: yes
  primary: bond0
  slaves:
    - name: enp94s0f0
    - name: enp94s0f1
  oob:
    vlan: 40
    interface:
    cidr: 192.168.41.0/24
    routes:
      gateway: 192.168.41.1
    ranges:
      reserved:
        start: 192.168.41.2
        end: 192.168.41.12
      static:
        start: 192.168.41.13
        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: 192.168.2.40
        end: 192.168.2.45
  storage:
    vlan: 42
    interface: bond0.42
    cidr: 172.31.2.0/24
    ranges:
```

```
      reserved:
        start: 172.31.2.1
        end: 172.31.2.10
      static:
        start: 172.31.2.11
        end: 172.31.2.254
  pxe:
    vlan: 43
    interface: eno3
    cidr: 172.30.2.0/24
    gateway: 172.30.2.1
    routes:
      gateway: 172.30.2.40
    ranges:
      reserved:
        start: 172.30.2.2
        end:  172.30.2.10
      static:
        start: 172.30.2.11
        end: 172.30.2.200
      dhcp:
        start: 172.30.2.201
        end: 172.30.2.254
  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:
      -  172.29.1.128/29
    ingress_cidr: 172.29.1.129/32
    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: 10.0.102.0/24
    ranges:
      reserved:
        start: 10.0.102.1
        end: 10.0.102.10
      static:
        start: 10.0.102.11
        end: 10.0.102.254
dns:
  upstream_servers:
    - 192.168.2.85
    - 8.8.8.8
    - 8.8.4.4
  ingress_domain: dellgen10.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: enp135s0f0
      vlan_start: 2001
      vlan_end: 3000
      whitelists:
      - "address": "0000:87:02.0"
      - "address": "0000:87:02.1"
      - "address": "0000:87:03.2"
      - "address": "0000:87:03.3"
      - "address": "0000:87:03.4"
      - "address": "0000:87:03.5"
      - "address": "0000:87:03.6"
      - "address": "0000:87:03.7"
      - "address": "0000:87:04.0"
      - "address": "0000:87:04.1"
      - "address": "0000:87:04.2"
      - "address": "0000:87:04.3"
      - "address": "0000:87:02.2"
      - "address": "0000:87:04.4"
      - "address": "0000:87:04.5"
      - "address": "0000:87:04.6"
      - "address": "0000:87:04.7"
      - "address": "0000:87:05.0"
      - "address": "0000:87:05.1"
      - "address": "0000:87:05.2"
      - "address": "0000:87:05.3"
      - "address": "0000:87:05.4"
      - "address": "0000:87:05.5"
      - "address": "0000:87:02.3"
      - "address": "0000:87:05.6"
      - "address": "0000:87:05.7"
      - "address": "0000:87:02.4"
      - "address": "0000:87:02.5"
      - "address": "0000:87:02.6"
      - "address": "0000:87:02.7"
      - "address": "0000:87:03.0"
      - "address": "0000:87:03.1"
    - physical: sriovnet2
      interface: enp135s0f1
      vlan_start: 2001
      vlan_end: 3000
      whitelists:
      - "address": "0000:87:0a.0"
      - "address": "0000:87:0a.1"
      - "address": "0000:87:0b.2"
      - "address": "0000:87:0b.3"
      - "address": "0000:87:0b.4"
      - "address": "0000:87:0b.5"
      - "address": "0000:87:0b.6"
      - "address": "0000:87:0b.7"
      - "address": "0000:87:0c.0"
      - "address": "0000:87:0c.1"
      - "address": "0000:87:0c.2"
      - "address": "0000:87:0c.3"
      - "address": "0000:87:0a.2"
      - "address": "0000:87:0c.4"
      - "address": "0000:87:0c.5"
      - "address": "0000:87:0c.6"
      - "address": "0000:87:0c.7"
      - "address": "0000:87:0d.0"
      - "address": "0000:87:0d.1"
      - "address": "0000:87:0d.2"
      - "address": "0000:87:0d.3"
      - "address": "0000:87:0d.4"
```

```
      - "address": "0000:87:0d.5"
      - "address": "0000:87:0a.3"
      - "address": "0000:87:0d.6"
      - "address": "0000:87:0d.7"
      - "address": "0000:87:0a.4"
      - "address": "0000:87:0a.5"
      - "address": "0000:87:0a.6"
      - "address": "0000:87:0a.7"
      - "address": "0000:87:0b.0"
      - "address": "0000:87:0b.1"
storage:
  osds:
    - data: /dev/sda
      journal: /var/lib/ceph/journal/journal-sda
    - 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
  osd_count: 6
  total_osd_count: 18
genesis:
  name: aknode40
  oob: 192.168.41.40
  host: 192.168.2.40
  storage: 172.31.2.40
  pxe: 172.30.2.40
  ksn: 172.29.1.40
  neutron: 10.0.102.40
  root_password: akraino,d
masters:
  - name : aknode41
    oob: 192.168.41.41
    host: 192.168.2.41
    storage: 172.31.2.41
    pxe: 172.30.2.41
    ksn: 172.29.1.41
    neutron: 10.0.102.41
  - name : aknode42
    oob: 192.168.41.42
    host: 192.168.2.42
    storage: 172.31.2.42
    pxe: 172.30.2.42
    ksn: 172.29.1.42
    neutron: 10.0.102.42
#workers:
#  - name : aknode43
#    oob: 192.168.41.43
#    host: 192.168.2.43
#    storage: 172.31.2.43
#    pxe: 172.30.2.43
#    ksn: 172.29.1.43
#    neutron: 10.0.102.43
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: DELL
```

```
  generation: '10'
  hw_version: '3'
  bios_version: '2.8'
  bios_template: dell_r740_g14_uefi_base.xml.template
  boot_template: dell_r740_g14_uefi_httpboot.xml.template
  http_boot_device: NIC.Slot.2-1-1
disks:
  - name : sdg
    labels:
      bootdrive: 'true'
    partitions:
      - name: root
        size: 20g
        mountpoint: /
      - name: boot
        size: 1g
        mountpoint: /boot
      - name: var
        size: 100g
        mountpoint: /var
  - name : sdh
    partitions:
      - name: ceph
        size: 300g
        mountpoint: /var/lib/ceph/journal
disks_compute:
  - name : sdg
    labels:
      bootdrive: 'true'
    partitions:
      - name: root
        size: 20g
        mountpoint: /
      - name: boot
        size: 1g
        mountpoint: /boot
      - name: var
        size: '>300g'
        mountpoint: /var
  - name : sdh
    partitions:
      - name: nova
        size: '99%'
        mountpoint: /var/lib/nova
genesis_ssh_public_key: "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQC
/n4mNLAj3XKG2fcm+8eVe0NUlNH0g8DA8KJ53rSLKccm8gm4UgLmGOJyBfUloQZMuOpU6a+hexN4ECCliqI7+KUmgJgsvLkJ3OUMNTEVu9tDX5md
XeffsufaqFkAdmbJ/9PMPiPQ3
/UqbbtyEcqoZAwUWf4ggAWSp00SGE1Okg+skPSbDzPVHb4810eXZT1yoIg29HAenJNNrsVxvnMT2kw2OYmLfxgEUh1Ev4c5LnUog4GXBDHQtHAwa
IoTu9s/q8VIvGav62RJVFn3U1D0jkiwDLSIFn8ezORQ4YkSidwdSrtqsqa2TJ0E5w/n5h5IVGO9neY8YlXrgynLd4Y+7 root@pocnjrsv132"
kubernetes:
  api_service_ip: 10.96.0.1
  etcd_service_ip: 10.96.0.2
  pod_cidr: 10.98.0.0/16
  service_cidr: 10.96.0.0/15
regional_server:
  ip: 135.16.101.85
...
```


Ericsson Validation Labs

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

Please reference the following lab configuration Ericsson Unicycle SR-IOV Validation HW, Networking and IP plan.

<INSERT INPUT FILE>