

# Install Guide - Akraino Edge Stack Network Cloud Blueprint - Unicycle

PLEASE REFER TO R1 NETWORK CLOUD RELEASE DOCUMENTATION

[NC Family Documentation - Release 1](#)

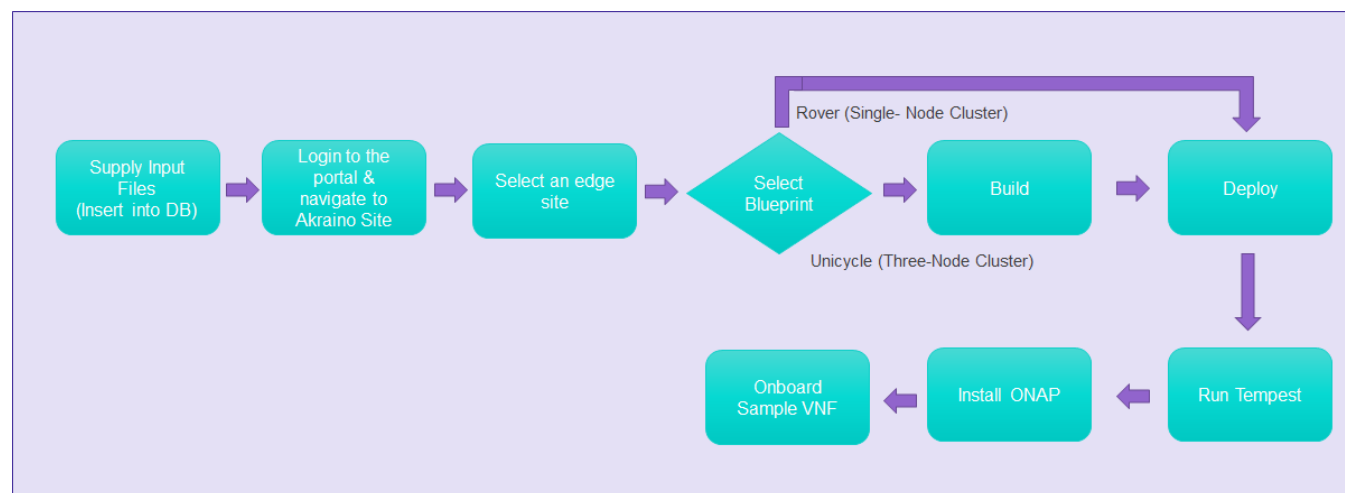
THIS DOCUMENTATION WILL BE ARCHIVED

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## Introduction

This document describes the steps to create a single and multi-node edge sites.



 Unicycle (Three-Node Cluster) - Supported in the future release

## Hardware Requirements for Test

Up to 7 servers (3 control plus 1 to 4 workers) x86 Dell R740 servers

Build Server

- Any server or VM with Ubuntu Release 16.04
- Packages: Latest versions of sshpass, xorriso, and python-requests
- Docker 1.13.1 or later

Bare Metal Server

- Dell PowerEdge R740 server with no installed OS [ Additional types of hardware will be supported in the future release]
- Two interfaces for primary network connectivity bonding with DPDK enabled NIC
- 802.1q VLAN tagging for primary network interfaces

# Akraino Portal Operations

## Login

Visit the portal URL [http://REGIONAL\\_NODE\\_IP:8080/AECPortalMgmt/](http://REGIONAL_NODE_IP:8080/AECPortalMgmt/) where REGIONAL\_NODE\_IP is the Portal IP.

Use the following credentials:

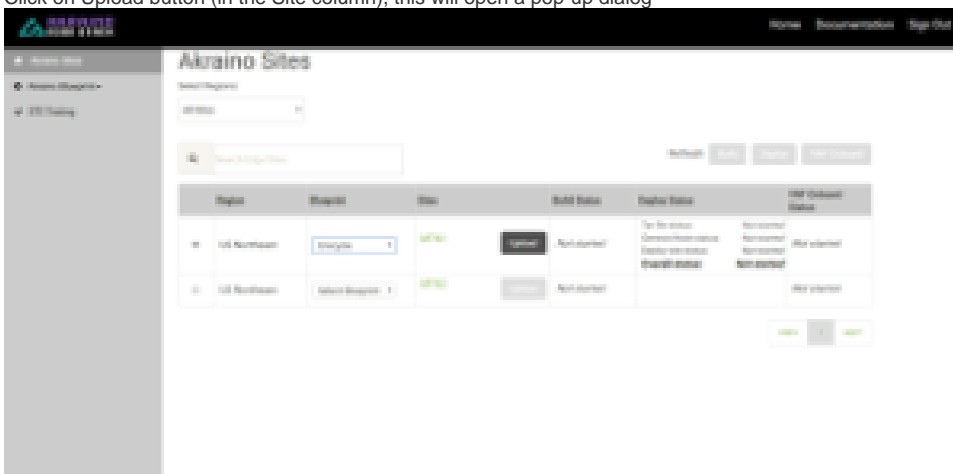
- Username: *akadmin*
- Password: *akraino*

Upon successful login, the Akraino Portal home page will appear.

## Deploy a Multi-Node Edge Site

From the Portal home page:

1. Select an Edge Site - MTN1 or MTN2 (these are the two default lab sites hosted in middle town NJ) by clicking on radio button provided in the first column of the table.
2. For the selected Edge Site, select the Unicycle Blueprint from the drop-down menu.
3. Click on Upload button (in the Site column), this will open a pop-up dialog



Provide the edge site-specific details such as:

1. Host IP address
2. Host username
3. Host password.

### Example: DELL Cluster:

- Host IP address: 192.168.2.40
- Host username: root
- Host password: XXXXXX

### Example: HP Cluster

- Host IP address: 192.168.2.30
- Host username: root
- Host password: XXXXXX

4. Click on Browse button, select the input file for Blueprint - Unicycle (Multi-Node Cluster).

The input file is a property file that stores information in `key-value` format. Sample input file used for 'Unicycle' deploy:



Copy and paste the below contents in to a file, and save it as unicycle.yaml. Use this file for uploading as mentioned in step 4.d above. If using Dell Gen10, use the sample YAML input file shown in #1 below. If using HP Gen10, use the sample YAML file in #2 below.

Verify the configuration details as applicable to your environment. For more details refer to Appendix - Edge Site Configuration

### Sample YAML Input File #1

```
---
#####
# Copyright (c) 2018 AT&T Intellectual Property. All rights reserved.      #
#                                                                           #
# Licensed under the Apache License, Version 2.0 (the "License"); you may  #
# not use this file except in compliance with the License.                 #
#                                                                           #
# You may obtain a copy of the License at                                 #
#   http://www.apache.org/licenses/LICENSE-2.0                             #
#                                                                           #
# Unless required by applicable law or agreed to in writing, software       #
# distributed under the License is distributed on an "AS IS" BASIS, WITHOUT #
# WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.        #
# See the License for the specific language governing permissions and      #
# limitations under the License.                                           #
#####
site_name: dellgen10
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
  dns:
    domain: lab.akraino.org
    servers: '192.168.2.85 8.8.8.8 8.8.4.4'
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
    dns:
        domain: lab.akraino.org
        servers: '192.168.2.85 8.8.8.8 8.8.4.4'
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
        - 8.8.8.8
    upstream_servers_joined: '192.168.2.85,8.8.8.8'
    ingress_domain: dellgen10.akraino.org
sriovnets:
- 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
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
hardware:
  vendor: DELL
  generation: '10'
  hw_version: '3'
  bios_version: '2.8'
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 AAAAB3NzaC1yc2EAAAADAQABAAQAC
/n4mNLAj3XKG2fcm+8eVe0NUlNH0g8DA8KJ53rSLKccm8gm4UgLmGOJyBfUloQZMuOpU6a+hexN4ECcliqI7+KUmJgsvLkJ3OUMNTEVu9tDX5md
XeffsufagFkAdmbJ/9PMPiPQ3
/UqbbtyEcqoZAwUWf4ggAWSp00SGE10kg+skPSbDzPVHb4810eXZT1yoIg29HAenJNNrsVxvnMT2kw2OYmLfxgEUh1Ev4c5LnUog4GXBDHQthAWa
IoTu9s/q8VivGav62RJVFfn3U1D0jkiwDLSIFn8ezORQ4YkSidwdSrtqsqa2TJ0E5w/n5h5IVG09neY8YlXrgynLd4Y+7 root@pocnjrsvl32"
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
...

```

## Sample YAML Input File #2

```

---
#####
# Copyright (c) 2018 AT&T Intellectual Property. All rights reserved.      #
#                                                                           #
# Licensed under the Apache License, Version 2.0 (the "License"); you may #
# not use this file except in compliance with the License.                #
#                                                                           #
# You may obtain a copy of the License at                                #
#   http://www.apache.org/licenses/LICENSE-2.0                           #
#                                                                           #
# Unless required by applicable law or agreed to in writing, software      #
# distributed under the License is distributed on an "AS IS" BASIS, WITHOUT #
# WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.        #
# See the License for the specific language governing permissions and      #
# limitations under the License.                                           #
#####
site_name: hpgen10
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
  subnet: 192.168.2.0
  netmask: 255.255.255.0
  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
  dns:
    domain: lab.akraino.org
    servers: '192.168.2.85 8.8.8.8 8.8.4.4'
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
  dns:
    domain: lab.akraino.org
    servers: '192.168.2.85 8.8.8.8 8.8.4.4'
  inf: net4
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
  upstream_servers_joined: '192.168.2.85,8.8.8.8'
  ingress_domain: hpgen10.akraino.org
sriovnets:
```



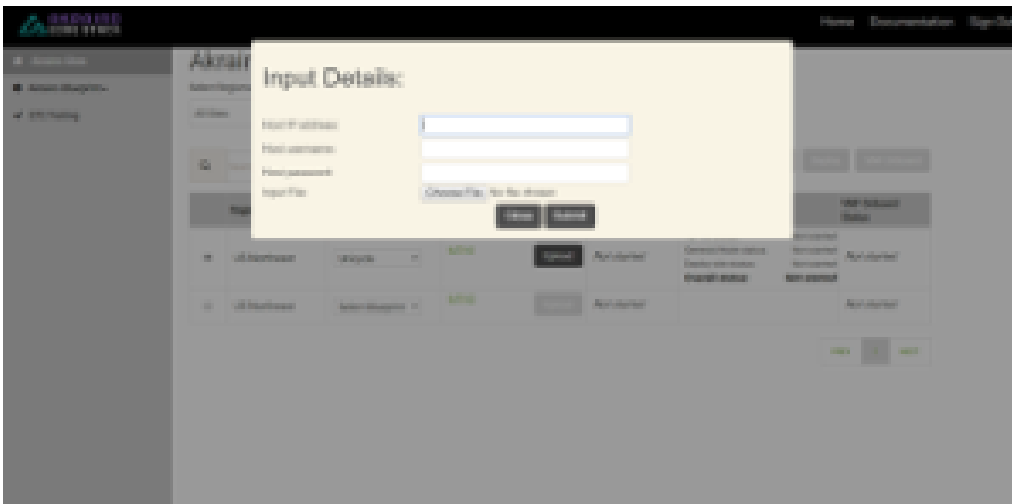
```
- physical: sriovnet1
  interface: ens6f0
  vlan_start: 2001
  vlan_end: 3000
  whitelists:
    - "address": "0000:af:02.0"
    - "address": "0000:af:02.1"
    - "address": "0000:af:02.2"
    - "address": "0000:af:02.3"
    - "address": "0000:af:02.4"
    - "address": "0000:af:02.5"
    - "address": "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
  oem: HPE
  mac_address: 3c:fd:fe:aa:90:b0
  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
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
  oob_user: Administrator
  oob_password: Admin123
- 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
  oob_user: Administrator
  oob_password: Admin123
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
  oob_user: Administrator
  oob_password: Admin123
# - name : aknode34
#   oob: 192.168.41.134
#   host: 192.168.2.34
#   storage: 172.31.1.34
#   pxe: 172.30.1.34

```

```
# ksn: 172.29.1.34
# neutron: 10.0.101.34
hardware:
  vendor: HP
  generation: '10'
  hw_version: '3'
  bios_version: '2.8'
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: cephj
        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/n5h5IVG09neY8Y1XrgynLd4Y+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
...
```



5. Click on Submit. This will upload the input file and the site details into the portal.

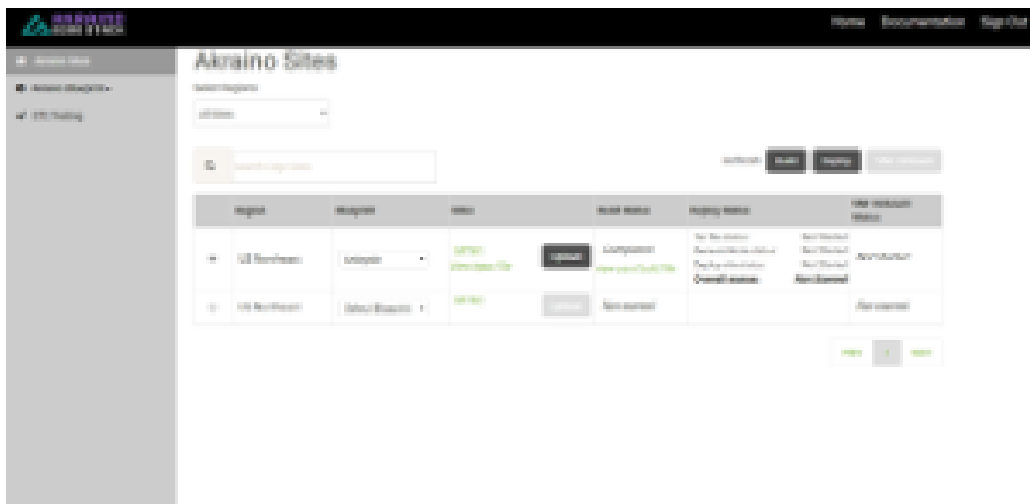
6. User will see the file uploaded successfully message in the sites column then **Build** button is enabled.

a. Click on **Build** to begin the build process.

b. User can click on Refresh (link) to update the status of the build on the portal.

c. The build status changes from 'Not started' to 'In progress' to 'Completed'.

d. The build process will generate all the required yaml files with site details. User can view the generated yaml files by clicking 'view yaml build file' provided in Build status column.



7. User will see the 'Completed' status in build status column then **Deploy** button is enabled.

a. Click on **Deploy** to begin the deploy process.

b. User can click on Refresh (link) to update the status of the build on the portal.

**Note:** In portal when the overall status of the Deploy is success, login to each node and check deploy site logs under `/var/log/deploy_site_yyyymmddhhmm.log` file by using the command `tail -f /var/log/deploy_site_yyyymmddhhmm.log` file

Check the deployment process logs under “`tail -f /var/log/scriptexecutor.log`” or “`/var/log/yaml_builds/`” on regional\_controller node.

- Once the deploy status got “completed” on the portal, then

This is to check the status of `deploy_site`.

Following is the snippet from `root@aknode44:/var/log# vi scriptexecutor.log`

```
2018-10-02 17:28:58.464 DEBUG 12751 --- [SimpleAsyncTaskExecutor-2] a.b.s.i.  
RemoteScriptExecutionServiceImpl : + deploy_site
```

```
2018-10-02 17:28:58.464 DEBUG 12751 --- [SimpleAsyncTaskExecutor-2] a.b.s.i.  
RemoteScriptExecutionServiceImpl : + sudo docker run -e OS_AUTH_URL=http://keystone-api.ucp.svc.  
cluster.local:80/v3 -e OS_PASSWORD=86db58e20de93ef55477 -e  
OS_PROJECT_DOMAIN_NAME=default -e OS_PROJECT_NAME=service -e  
OS_USERNAME=shipyard -e OS_USER_DOMAIN_NAME=default -e  
OS_IDENTITY_API_VERSION=3 --rm --net=host quay.io/airshipit/shipyard:  
165c845e3e7459d2a4892ed4ca910b00675e7561 create action deploy_site
```

```
2018-10-02 17:29:02.273 DEBUG 12751 --- [SimpleAsyncTaskExecutor-2] a.b.s.i.  
RemoteScriptExecutionServiceImpl : Name          Action          Lifecycle      Execution  
Time          Step Succ/Fail/Oth
```

```
2018-10-02 17:29:02.274 DEBUG 12751 --- [SimpleAsyncTaskExecutor-2] a.b.s.i.  
RemoteScriptExecutionServiceImpl : deploy_site    action/01CRTX8CTJ8VHMSNVC2NHGWKCY  
None          2018-10-02T17:29:53    0/0/0
```


```
2018-10-02 17:29:02.546 DEBUG 12751 --- [SimpleAsyncTaskExecutor-2] a.b.s.i.  
RemoteScriptExecutionServiceImpl : Script exit code :0
```

Based on the above snippet you can frame a command like following(**just concatenate highlighted partes and add describe in the middle**) and run it on `aknode40` to see the status `deploy_site`,

```
root@aknode40:~# docker run -e OS_AUTH_URL=http://keystone-api.ucp.svc.cluster.local:80/v3 -e
OS_PASSWORD=86db58e20de93ef55477 -e OS_PROJECT_DOMAIN_NAME=default -e
OS_PROJECT_NAME=service -e OS_USERNAME=shipyard -e OS_USER_DOMAIN_NAME=default
-e OS_IDENTITY_API_VERSION=3 --rm --net=host quay.io/airshipit/shipyard:
165c845e3e7459d2a4892ed4ca910b00675e7561 describe action
/01CRTX8CTJ8VHMSNVC2NHGWKCY
```

## Appendix


### Create New Edge Site locations

 The Akraino seed code comes with default two sites: MTN1, MTN2 representing two lab sites in Middletown, NJ. This step of connecting to the database and creating edge\_site records are only required if the user wishes to deploy on other sites.

To deploy a Unicycle (Multi-Node Cluster) Edge Node, perform the following steps:

- Check if the Akraino (Docker Containers) packages are stood up.
- Connect to PostgreSQL database providing the host IP (name).

```
jdbc:postgresql://<IP-address-of-DB-host>:6432/postgres
user name = admin
password = abc123
```

 use 'pgAdmin |||' Postgres client tool or connect to Postgres DB using SQL interface

- Execute the following SQL insert, bearing in mind these value substitutions:
  - edge\_site\_id: Any unique increment value. This is usually 1 but does not have to be.
  - edge\_site\_name: Human-readable Edge Node name.
  - region\_id: Edge Node region number. Use `select * from akraino.Region;` to determine the appropriate value. Observe the region number associations returned from the query: Use 1 for *US East*, 2 for *US West*, and so on.

```
> insert into akraino.edge_site(edge_site_id, edge_site_name, crt_login_id, crt_dt, upd_login_id, upd_dt,
region_id)
values( 1, 'Atlanta', user, now(), user, now(),1);
```