

Kei

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OpenSwitch

+

Ansible

What?

```

      | 1
    +--+ +-----+
      | fab1 |
    +-+ +---+ +-+
      | 2 | 3
    +-----+ +-----+
      | 1 | 1
    +-----+ +-----+
      | spine1 | | spine2 |
    +-+ +---+ +-+
      | 2 | 3 | 2 | 3
    +-----+ ++ ++ +-----+
      | 1 | 1 | 1 | 1
    +-----+ +-----+ +-----+ +-----+
      | leaf1 | | leaf2 | | leaf3 | | leaf4 |
    +-+ +---+ +-+ +-+ +---+ +-+ +-+ +---+ +-+
      | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 3

```



How?

Inventory,
Variables,
&
Playbooks

Inventory

```
$ cat hosts
```

```
...
```

```
[switches:children]
```

```
fabrics
```

```
spines
```

```
leaves
```

```
...
```

```
[spines]
```

```
spine1 ansible_host=10.10.10.1
```

```
spine2 ansible_host=10.10.10.2
```

```
[leaves]
```

```
...
```

Variables

```
$ cat host_vars/fab1.yaml
```

```
---
```

```
ops_vrfs:
```

```
  - name: vrf_default
```

```
    ports: [1, 2, 3]
```

```
    bgp_routers:
```

```
      - as_number: 65000
```

```
        router_id: 172.16.0.1
```

```
        networks: [172.16.0.0/24, 172.16.2.0/24]
```

```
        neighbors:
```

```
          - address: 172.16.1.2
```

```
            remote_as: 65001
```

```
          - address: 172.16.2.2
```

```
            remote_as: 65002
```

```
...
```

```
$ cat group_vars/switches.yaml
```

```
---
```

```
# Every switch shares ops_bridge configuration.
```

```
ops_bridges:
```

- name: bridge_normal
 ports: [4, 5, 6, 7, 8]
 vlans:
 - name: VLAN10
 id: 10

```
# Only eight ports will be used in this environment.
```

```
ops_interfaces:
```

- name: 1
- name: 2
- name: 3
- name: 4
- name: 5
- name: 6
- name: 7

Playbooks

```
$ cat site.yaml
```

```
---
```

- name: fabric switch configuration
hosts: fabrics
roles:
 - role: [switch, bgp]

 - name: spine switch configuration
hosts: spines
roles:
 - role: [switch, bgp, ospf]

 - name: leaf switch configuration
hosts: leaves
roles:
 - role: [switch, ospf]
- ```
...
```

In action!



```
 },
 },
],
 "hostname": "leaf4",
 "version": "0.4.0 (Build: genericx86-64-ops-0.4.0-master+2016060112)"
"
 },
 "changed": false,
 "failed": false,
 "failed_when_result": false
}
}
```

PLAY [wait for BGP peering up] \*\*\*\*\*

TASK [pause] \*\*\*\*\*

Pausing for 90 seconds

(ctrl+C then 'C' = continue early, ctrl+C then 'A' = abort)

█

▶ 09:04

<https://asciinema.org/~kei>

[https://  
github.com/  
keinohguchi/  
dc-on-docker](https://github.com/keinohguchi/dc-on-docker)

kei

#openswitch

freenode.net

! Muchas  
Gracias!

:)