
Ansible Roles for MCLAG on Junos Documentation

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Generate and Deploy Configuration

Multiple topologies are available as part of this project. - Sample Topology - Vagrant - Ravello (in progress)

1.1 Sample Topology

The main benefit of the sample-topology is that you can generate configuration even without devices. The generate configuration, you need to execute the following command

```
ansible-playbook -i sample-topology.yaml pb.conf.all.yaml
```

1.2 Vagrant

To be able to generate and deploy all configurations on Vagrant, you need first to start all VMs in vagrant.

```
vagrant up
```

Once all VMs are up and running, it's possible to use ansible directly without vagrant.

```
ansible-playbook -i .vagrant/provisioners/ansible/inventory/vagrant_ubuntu_12.04 pb.conf.all.conf
```

1.3 Ravello

1. Install the ravello-ansible roles
2. Make sure you have the right images in your Ravello library
3. Create a local *credential* file for Ravello.

Create the topology on Ravello

```
ansible-playbook -i ravello-inventory.ini pb.rav.create.yaml --forks=1
```

Deploy the application and start VMs

```
ansible-playbook -i ravello-inventory.ini pb.rav.deploy.yaml --forks=1
```

1.4 Auto-generate Vlans and IRB Ip addresses

```
ansible-playbook pb.gen.vlans.yaml
```

Ansible Roles

There are several roles provided as part of this project. Most are used to generate configurations.

2.1 config template - junos-mclag-icl

Generate the configuration for the ICL/ICCP link.

2.1.1 Default variables

```
# Automatically calculate an ID (0 or 1) for each device based on the variable "ID"
mclag_id: "{{ id - ((id//2)*2) }}"

mclag:
  mode: active-active
  iccp_interface: ae1
  icl_interface: ae0
  chassis_id: "{{ mclag_id }}"
  status_control: "{{ 'active' if mclag_id == '0' else 'standby' }}"
  iccp:
    local_ip: "{{ '1.1.1.2' if mclag_id == '0' else '1.1.1.1' }}"
    peer_ip: "{{ '1.1.1.1' if mclag_id == '0' else '1.1.1.2' }}"
  icl:
    description: ICL interface
```

2.2 config template - junos-mclag-qfx10k

Generate configuration for all MC-AE interfaces.

2.2.1 Default variables

```
mclag:
  has_l3: false
  iccp:
    minimum_receive_interval: 1000
    minimum_transmit_interval: 1000
    session_hold_time: 50
```

2.3 config template - junos-mclag-qfx5k (deprecated for now)

2.4 config template - junos-system

Generate configuration for all base junos configuration: - ntp - dns - login - etc

2.5 generate_vlans

Indices and tables

- `genindex`
- `modindex`
- `search`