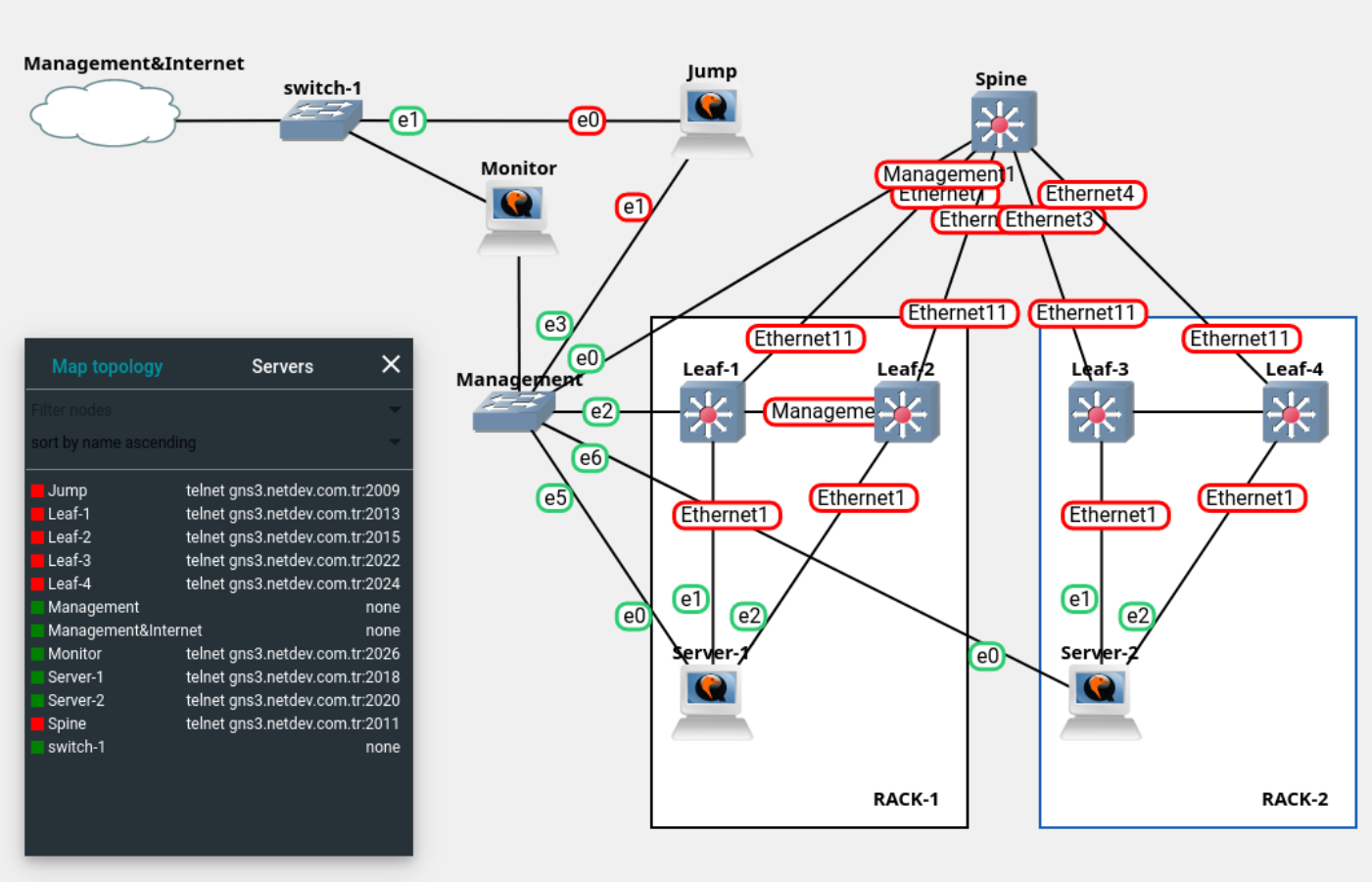
Bgp Evpn vxlan Case Documentation

This is a lab to test your bgp/evpn/vxlan skills, You have 15 business days to finish this.

The case will be reviewed at a remote meeting session upon your declaration about golden tickets. No manual config is allowed, everything should be deployed using ansible-playbooks



You can access the lab at:

```
http://gns3.eclit.cloud:3080
```

You have to inform Eclit network team using e-mail opr-network@eclit.com before you start working, lab will be ready approximately 30 minuters after receving a confirmation e-mail from eclit.

There are other labs available, you will use the one with the name **"your_name_network_case_eclit"**

Facts

- Accessing the jump and monitor,
  Warning !!! Internet facing instances, please do not forget to change password of ubuntu user

```
Jump server:
  ssh: gns3.eclit.cloud:2222 user pass ubuntu:ubuntu
  https: gns3.eclit.cloud:2443
  http: gns3.eclit.cloud:2080
Monitor :
  ssh: gns3.eclit.cloud:3222 user pass ubuntu:ubuntu
  https: gns3.eclit.cloud:3443
  http: gns3.eclit.cloud:3080
  Monitor management ip address : 192.168.10.250
```

- All ports except the managements ones are shut, be carefull, you can loop and loose the lab access
- Network devices addressing

```
- Spine management address : 192.168.10.11
- Leaf-1 management address : 192.168.10.21
- Leaf-2 management address : 192.168.10.22
- Leaf-3 management address : 192.168.10.23
- Leaf-4 management address : 192.168.10.24
```

- Leaf pairs are paired with dual links
- switch username, password : admin:admin
- Lab switches are Model Arista 4.26.0F vm instances
- Ansible galaxy collection for arista documentation
  https://galaxy.ansible.com/ui/repo/published/arista/eos/
- installation ansible-galaxy collection install arista.eos

Scenario

You will need to deliver the requirements listed below

- Create a public github repository and by using branches develop the following task entries/features
- Create a README.MD file with your details and some explanation about this lab
- Push

Using ansible playbooks:

- branch clos: Define a bgp/evpn clos topology
  you are free to chose between unnumbered/static addressing
- branch mlag: Define MLAG/ESI.
  you are free to chose static or dynamic configuration and opting between ESI/MLAG
- branch vlan: Define a vlan
- branch userports: set ethernet1 ports as access members of defined vlan
- branch telemetry: set monitoring details, credentials, descriptions

Monitoring:

- Create a monitoring solution for this structure on jump server. Snmp is good, other solutions are preferred.

Golden tickets:

1. vcs machines should be able to ping each other on same vlan between racks.
2. A monitoring solution, it must update the operator about thresolds and outages. These updates must happen less than a minute when any sensor triggers.
3. A solution brief, one pager.

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