ANSIBLE AND CUMULUS LINUX

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ANSIBLE AND CUMULUS LINUX

The combination of Ansible and Cumulus Linux enables you to fully automate your datacenter infrastructure.

You only need three things to get started

- Ansible
- Cumulus Linux
- A supported network switch

As you all know Ansible by now, I'll talk about Cumulus Linux and the appropiate hardware. Ansible is "only" the tool to keep it all together.

CUMULUS LINUX OVERVIEW

WHAT IS CUMULUS LINUX?

Cumulus Linux

- is a generic Switch Operating System like IOS (Cisco), JunOS (Juniper) and others
- runs on industry standard hardware
- is based on Debian

Basically like a Linux server with many hardware-accelerated Ethernet ports provided by the high-performance switch silicon.

It provides bash, iproute2 and other well-known tools.

Licensed on a per instance basis with a very simple licensing model. Switches continue working after the license expires. Everything is kept on-site, no third party services are needed to use the switch with Cumulus Linux.

NETWORK HARDWARE

WHERE CAN I USE IT?

Cumulus Linux supports many 1G, 10G and 40G switches. Each switch is based on Broadcom Firebolt, Triumph, Apollo and Trident silicon.

DELL and Quanta are probably the most well-known vendors, but also Penguin Computing, Agema and Edge-corE are in the list.

The complete HCL is available at `cumulusnetworks.com/support/linux-hardware-compatibility-list/`

HOW DOES IT WORK?

How does it work?

ONIE (Open Network Installation Environment) is Bootloader which is iPXE on steroids. It was created by Cumulus Linux in 2012 and is part of the Open Compute Project since 2013.

It supports auto-discovery of installation servers by DHCP and HTTP, as well automatic image installation and provisioning. Other uses are diagnostics and rescue & recovery.

More info can be found at
`opencomputeproject.github.io/onie/docs/index.html`

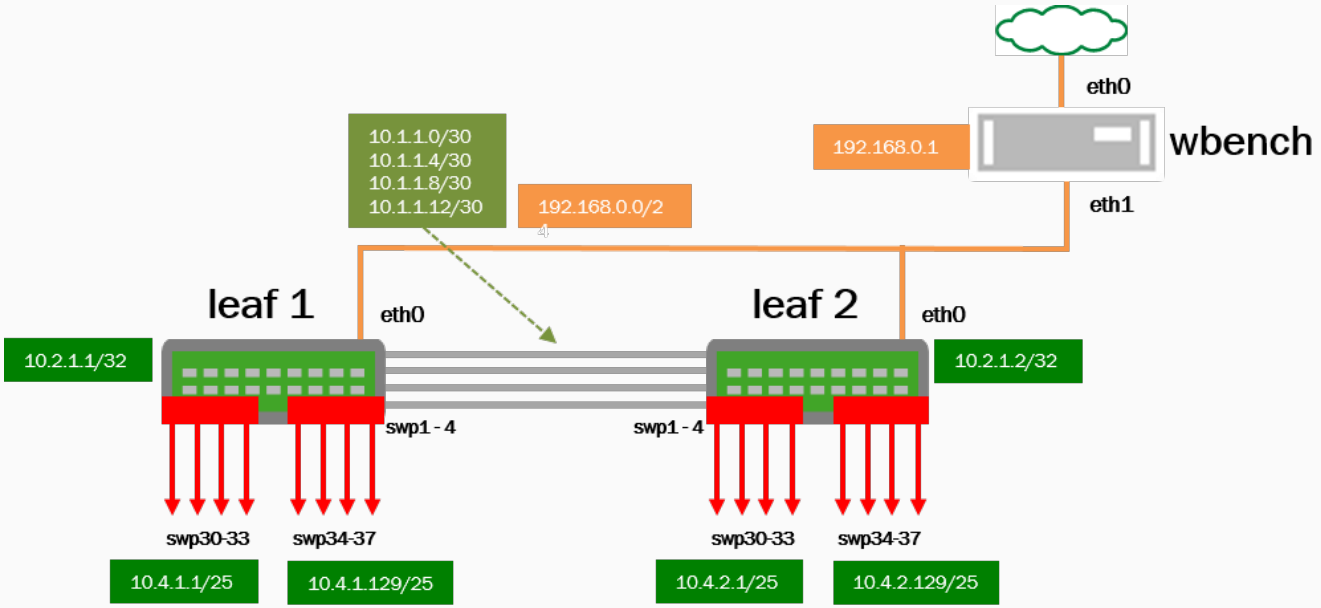
TOPOLOGY

WHAT DOES OUR TOPOLOGY LOOK LIKE?

For the demo we have two switches available. Those are DELL S6000-ON with 32 x 40G-QSFP+ ports.

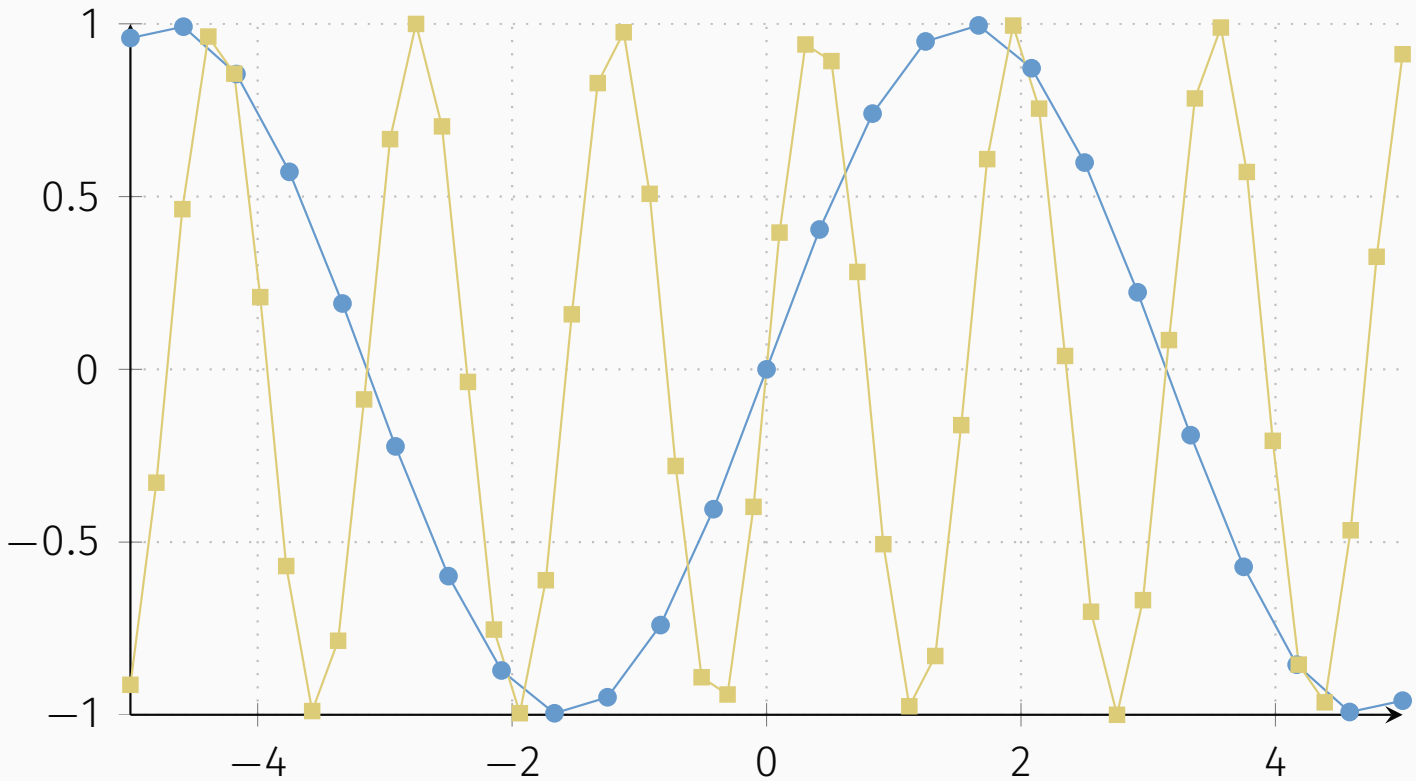
We're going to

- install the switches via Zero Touch Provisioning in the lab
- run a playbook to configure the Prescriptive Topology Manager
- setup iBGP between the switches



DEMO

SUPER FANCY DEMO



Questions?

SUMMARY

Get the playbooks I used and the slides at

`github.com/eimann/ansible-cl-dus`

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