Network and Security Automation Workshop

This repository contains an entire class on creating network automation. It utilizes vSRX and the NetDevOps VM (an Ubuntu development environment). In the course of the lab you will build a multi-node vSRX topology connecting to a single headend.

Course Steps

The course is divided into multiple steps.

Complete PDF documentation

Overview

- 1. Getting a copy of the lab
- 2. Topology Overview
- 3. vSRX Topology
- 4. vSRX Headend Topology
- 5. Connecting to your VMs
- 6 Software Overview
- 7. Installing Software
- 8. Using Python and PyEZ Library
- 9. Using Ansible
- 10. Basic API Review
- 11. <u>NETCONF Magic</u>

Hands On Lab

- Configuring NAT
 - 1. Configuring NAT with NETCONF (Example)
 - 2. Configuring NAT with Ansible
- 2. Basic Firewall Policies
- 3. VPN connection to headend
- 4. Enabling Dynamic Routing

- 5. Creating VPN Firewall Policies
- 6. Automating Licenses (skip if you dont have licenses)
- 7. <u>Creating Application Policies</u> (skip if you dont have licenses)
- 8. Creating IPS Policies (skip if you dont have licenses)
- 9. <u>Disaster Strikes!</u> (add disaster creating steps)
- 10. Recovering the Lab
 - Recovering the lab with licenses
 - Recovering the lab without licenses
- 11. Reviewing the lab

VM Access Information

VM Host Passwords

Proctor Instructions

• Classroom Handout

TODO

- 1. Support VMware Workstation, Fusion, and Virtual Box
 - Add in VMware instructions