

ProLUG Automation

Unit 12 Worksheet

Instructions

Fill out this sheet as you progress through the lab and discussions. Hold your worksheets until the end to turn them in as a final submission packet.

Discussion Questions:

Unit 12 Discussion Post 1: You have a set of older routers that have been traditionally connected to and configured over ssh via the command line (CLI) in Cisco Internetwork Operating System (IOS). You decide to backup the current configs of all routers with ansible, how might you lay out the cisco.ios.ios_config module to backup up everything to a local folder on your jump server?

```
- name: Load new acl into device
  cisco.ios.ios_config:
    lines:
      - 10 permit ip host 192.0.2.1 any log
      - 20 permit ip host 192.0.2.2 any log
      - 30 permit ip host 192.0.2.3 any log
      - 40 permit ip host 192.0.2.4 any log
      - 50 permit ip host 192.0.2.5 any log
    parents: ip access-list extended test
    before: no ip access-list extended test
    match: exact

- name: Check the running-config against master config
  cisco.ios.ios_config:
    diff_against: intended
    intended_config: "{{ lookup('file', 'master.cfg') }}"

- name: Check the startup-config against the running-config
  cisco.ios.ios_config:
    diff_against: startup
    diff_ignore_lines:
      - ntp clock .*

- name: Save running to startup when modified
  cisco.ios.ios_config:
    save_when: modified
```

Unit 12 Discussion Post 2: You've read that software defined networking (SDN) is the new hotness in the network engineering world. Your organization mostly uses VPC's inside of AWS and you want to learn more about what SDN means in the cloud. Can you find some

good SDN configuration blogs about the topic and prepare a couple paragraphs for a memo to your other engineers on the team?

Definitions/Terminology

Notes During Lecture/Class:

Links:

- Ansible Cisco module for interacting with the IOS.
<https://docs.ansible.com/projects/ansible/latest/collections/cisco/ios/index.html>
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Terms:

- SDN – (any related terminology)
 - Control Plane

Useful tools:

Lab and Assignment

Unit 12 Newtork Automation - https://killercoda.com/het-tanis/course/Automation-Labs/Unit12_Networking_Devices

Digging Deeper

1. Read about a SDN tool that is useful in infrastructure
 1. <https://www.pulumi.com/guides/tags/networking/>

Reflection Questions

1. What questions do you still have about this week?
2. How are you going to use what you've learned in your current role?