



Network Automation with Ansible

by
Eric Chou

www.ine.com

Who Am I?

- » Network Engineer for 15+ years
- » Ex-CCIE 22460
- » Automation focused for the last 5 years



Why Network Automation?

- » Changes Faster, More Reliable, and Scalable
- » Network and Business Agility without vendor lock in
- » Way of the Future

Why Ansible?

» Commercial, Home Grown, Open Source

» Agentless

- Communicates over SSH / Installs Python script
- Local mode provides API integration

» Vendor Support

- <https://www.ansible.com/network-automation>

» Why not?

Ansible Limitations

- » No Windows Control Machine Support but can control Windows Machines thru PowerShell
- » Uneven Vendor Support
- » But... you have to get started somewhere

Lab Tools

- » GNS3 (IOS, JUNOS)
- » VIRL (IOS-XR, NX-OS, Linux Host)
- » Arista EOS Device

Course Structure

» Ansible

- Playbooks, Inventory, Variables and Facts

» Examples

- Cisco (IOS, IOS-XR, NX-OS)
- Arista, Juniper

Tools Needed

- » Ansible
- » Python 2.7 (for self-made modules)
- » VIRL, GNS3, Gears (strongly recommended)
- » Vagrant and VirtualBox (optional)
- » You!

Pre Requisites

- » Basic network configuration knowledge
- » Some YAML knowledge would be nice
- » Basic Python knowledge

Resources

- » <https://www.ansible.com/>
- » [http://docs.ansible.com/ansible/
list_of_network_modules.html](http://docs.ansible.com/ansible/list_of_network_modules.html)
- » <https://github.com/ansible/ansible>

Let's Go!