

All things Ansible for ACI

How to use Ansible with ACI, NAE and MSO

Lionel Hercot, Technical Marketing Engineer
@LHercot





Agenda

- What is Infrastructure as Code?
- Ansible & Collections
- Cisco DC Networking Collections
- How to get started?
 - Using the ACI Collection
 - Verifying changes with NAE
 - Creating a schema in MSO

Infrastructure as code – What/Why/How

- Automate the provisioning and management of the technology stack
- Translate manual tasks into reusable, robust, distributable code
- Rely on practices that have been successfully used for years in software development (version control, automated testing, release tagging, continuous delivery, etc.)
- Benefits: much higher delivery speed; significant reliability boost

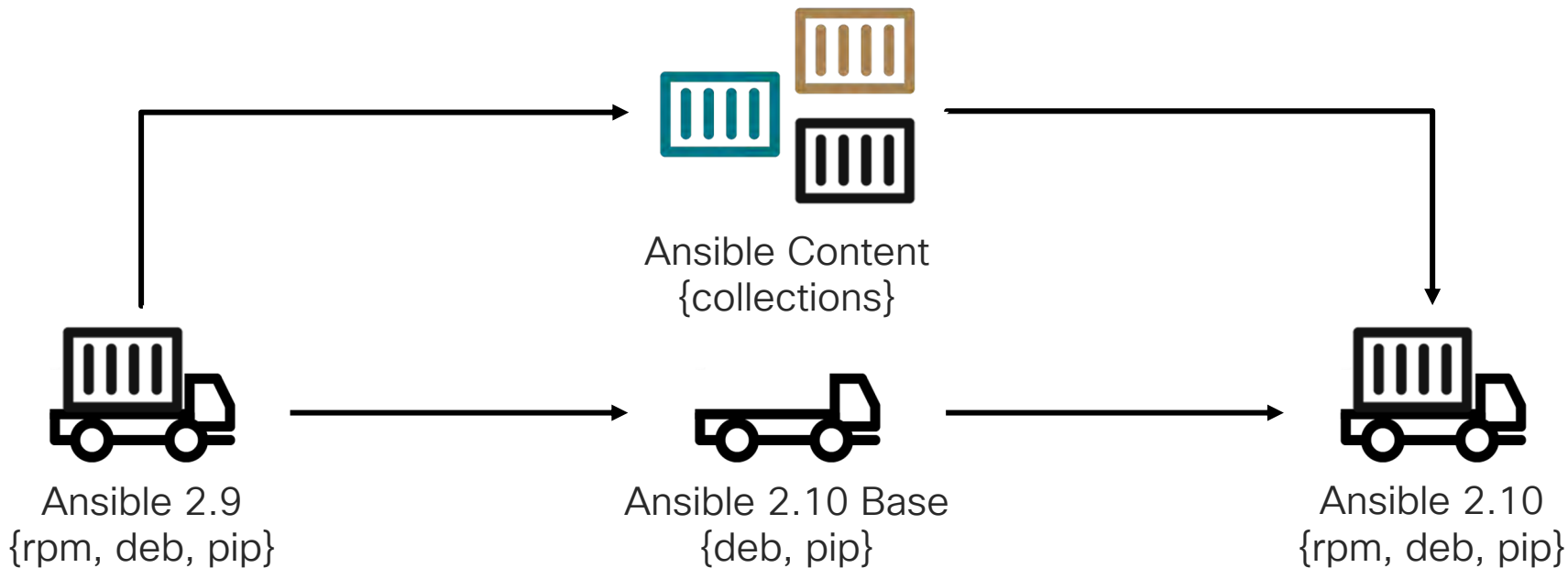
What is Ansible?



ANSIBLE

- Open-source configuration management tool
- Commercial support from RedHat
- Declarative (when possible) and idempotent
- Can manage a wide range of systems:
VMs, network devices, cloud instances, etc.
- Agentless

What are Ansible Collections?



What are Ansible Collections?



- A standardized way to organize and package Ansible content
- Include roles, modules, module utilities, plugins, documentation
- Semantic versioning
- Portable and flexible delivery

How to get started with Collections?

- Install Ansible (v2.9): `pip install ansible`
- Install ACI collection: `ansible-galaxy collection install cisco.aci`
- Run your playbook: `ansible-playbook my-aci-playbook.yml`

- Install Ansible (v2.10): `pip install ansible`
- Run your playbook: `ansible-playbook my-aci-playbook.yml`

Cisco Data Center Networking Collections

Cisco NXOS



80+ modules
in
cisco.nxos

APIC
Controller



65+ modules
in
cisco.aci

Multi Site
Orchestrator



30+ modules
in
cisco.mso

Network
Assurance
Engine



3+ modules
in
cisco.nae

Available Today

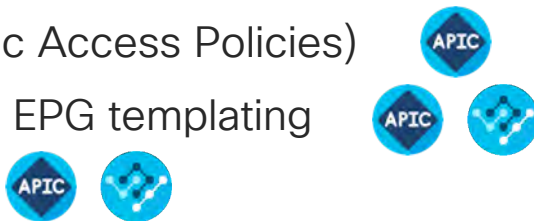
Data Center
Network
Manager



Coming Soon

How to start with the ACI Ansible Collections?

- Start simple
- Pick a task you want to automate
 - Interface Configuration (Fabric Access Policies)
 - Cookie-cutter Tenant / VRF / EPG templating
 - EPG to VLAN assignment
- Automate these tasks (individually)
- Build on it (stitch them together)
- Verify your changes with NAE





Let's do it!

Working with MSO

Using ACI and NAE together

What to do now?

- ACI Ansible Modules Documentation Guide
https://docs.ansible.com/ansible/latest/scenario_guides/guide_aci.html
- Cisco DevNet ACI and Ansible Learning Labs
<https://developer.cisco.com/learning/modules/ansible-aci-intro>
- Cisco DCN Collection GitHub Repos
<https://github.com/CiscoDevNet/ansible-aci>
<https://github.com/CiscoDevNet/ansible-mso>
<https://github.com/CiscoDevNet/ansible-nae>
- Cisco Collections on Ansible Galaxy
<https://galaxy.ansible.com/cisco>
- Demo Code GitHub Repository
<https://github.com/lhercot/ansible-aci-webinar>
- What's new and exciting on Cisco ACI with Red Hat Ansible Collections
<https://blogs.cisco.com/datacenter/whats-new-and-exciting-on-cisco-aci-with-red-hat-ansible-collections>

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Coming Soon

Thank you



Possibilities

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