Ansible for Network Automation
Gathering Information from Devices

Josh VanDeraa

vanderaaj　　　　　　　　　　　jvanderaa　　　　　　　　　　　jvanderaa

At the end of this session you will be able to:

Session Overview

At the end of this session you will be able to:

- Update an Ansible config file to manipulate folder wide playbook settings and behavior

Session Overview

At the end of this session you will be able to:

- Update an Ansible config file to manipulate folder wide playbook settings and behavior
- Gather data from various devices using command modules
  - IOS
  - NXOS
  - cli_command
  - Other network devices

Session Overview

At the end of this session you will be able to:

- Update an Ansible config file to manipulate folder wide playbook settings and behavior
- Gather data from various devices using command modules
    - IOS
    - NXOS
    - cli_command
    - Other network devices
- How to use ios_facts to gather IOS specific facts from a device

Gathering Data from Cisco IOS Devices

Today's demo: We are going to take a look at a couple of the modules used for gathering information from Cisco IOS devices.

Gathering Data from Cisco IOS Devices

Today's demo: We are going to take a look at a couple of the modules used for gathering information from Cisco IOS devices.

- **cli_command**

Gathering Data from Cisco IOS Devices

Today's demo: We are going to take a look at a couple of the modules used for gathering information from Cisco IOS devices.

- **cli_command**
- **ios_command**

ios_command

- This is used when working with Cisco IOS devices connecting with SSH

ios_command

- This is used when working with Cisco IOS devices connecting with SSH
- One of the original network modules introduced with Ansible for networking devices

ios_command

- This is used when working with Cisco IOS devices connecting with SSH
- One of the original network modules introduced with Ansible for networking devices
- Has evolved over time, original playbooks you will see a key **provider:** included, this is legacy

Let's take a look!

- cli_command
- ios_command

IOS Facts

Key	Returned	Description
ansible_net_all_ipv4_addresses list	when interfaces is configured	All IPv4 addresses configured on the device
ansible_net_all_ipv6_addresses list	when interfaces is configured	All IPv6 addresses configured on the device
ansible_net_api string	always	The name of the transport
ansible_net_config string	when config is configured	The current active config from the device
ansible_net_filesystems list	when hardware is configured	All file system names available on the device
ansible_net_filesystems_info dictionary	when hardware is configured	A hash of all file systems containing info about each file system (e.g. free and total space)
ansible_net_gather_subset list	always	The list of fact subsets collected from the device
ansible_net_hostname string	always	The configured hostname of the device
ansible_net_image string	always	The image file the device is running
ansible_net_interfaces dictionary	when interfaces is configured	A hash of all interfaces running on the system
ansible_net_iostype string	always	The operating system type (IOS or IOS-XE) running on the remote device
ansible_net_memfree_mb integer	when hardware is configured	The available free memory on the remote device in Mb
ansible_net_memtotal_mb integer	when hardware is configured	The total memory on the remote device in Mb
ansible_net_model string	always	The model name returned from the device
ansible_net_neighbors dictionary	when interfaces is configured	The list of CDP and LLDP neighbors from the remote device. If both, CDP and LLDP neighbor data is present on one port, CDP is preferred.

Summary

To review what we accomplished today:

Summary

To review what we accomplished today:

- Covered how to change settings within the Ansible configs, that are helpful for Network Engineers

Summary

To review what we accomplished today:

- Covered how to change settings within the Ansible configs, that are helpful for Network Engineers
- Gathered data from IOS and NXOS devices, using multiple methods

Summary

To review what we accomplished today:

- Covered how to change settings within the Ansible configs, that are helpful for Network Engineers
- Gathered data from IOS and NXOS devices, using multiple methods
- Gathering data and outputting the specifics via ios_facts

You can find me and more contacts on
the Packet Pushers Slack Channel.

✿ jvanderaa