Ansible for Network Automation

Gathering Information from Devices

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  - NXOS
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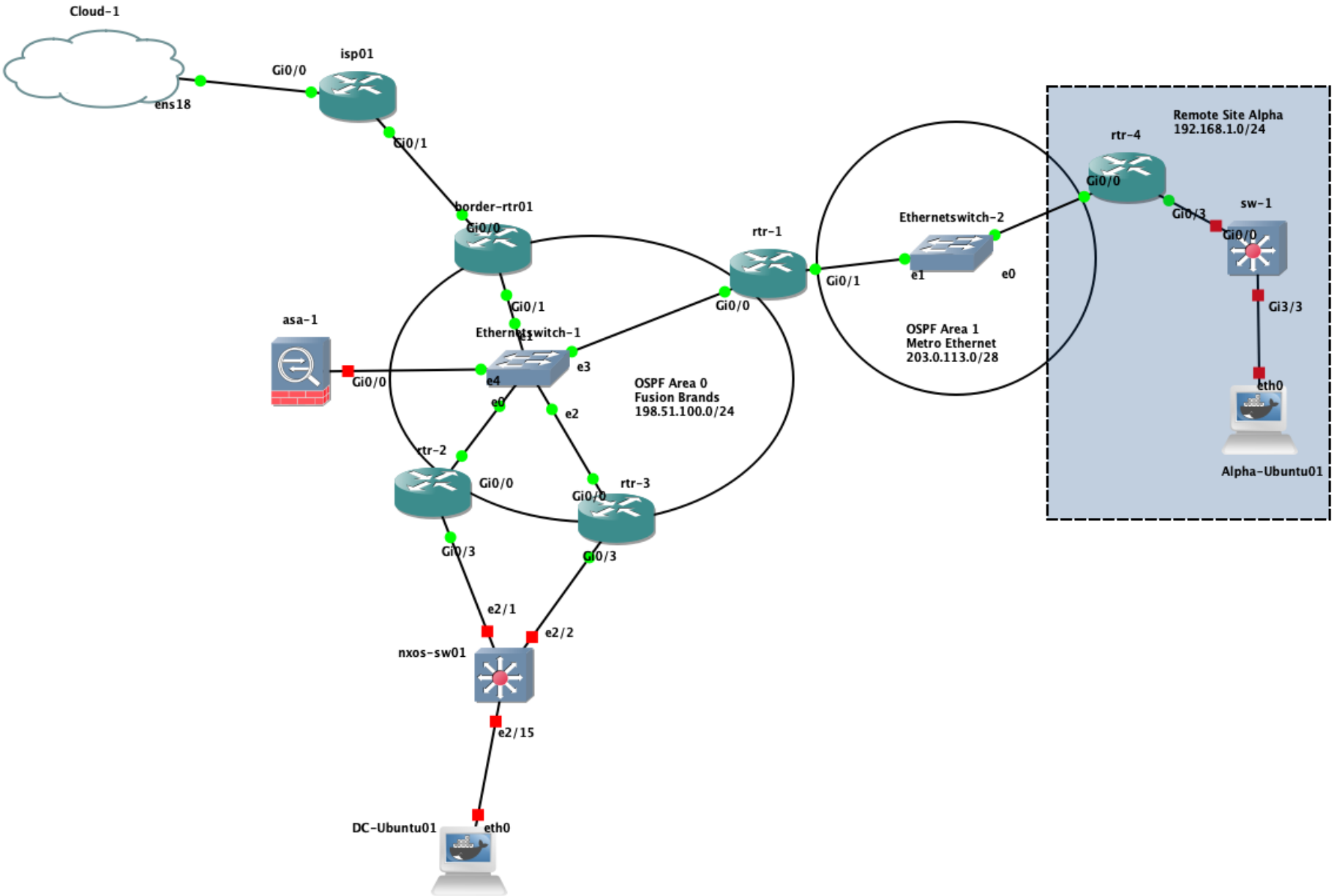
  - Other network devices
- How to use ios_facts to gather IOS specific facts from a device

Network Diagram



Ansible Network Modules

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The whole list of Network modules and their corresponding requirements can be found with your favorite search engine on term of "Ansible Network Modules" - which will take you to this link: https://docs.ansible.com/ansible/latest/modules/list_of_network_modules.html This will be included on the notes for this.

Ansible Network Modules Page

Let's take a look at those modules

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- Has evolved over time, original playbooks you will see a key **provider:** included, this is legacy

DEMO!

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.
ansible_net_python_version	always	The Python version Ansible controller is using

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- Gathered data from IOS and NXOS devices, using multiple methods
- Detailed where to get more information about network modules on the Ansible documentation pages
- Used regex to find the number of interfaces on a device

Contact

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

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