



## 1. Connectivity & Inventory

ansible all -m ping

– Tests connectivity to all hosts in the inventory.

ansible all --list-hosts

– Displays a list of all managed nodes.

ansible-inventory --graph

– Shows the inventory structure in a visual hierarchy.

ansible-config dump

– Shows the current active configuration settings.

## 2. Ad-Hoc Commands (Quick Tasks)

ansible <group> -m setup

– Gathers all "facts" (system info) from the target hosts.

ansible all -a "uptime"

– Executes a raw shell command (uptime) on all hosts.

ansible all -m apt -a "name=git state=present" -b

– Installs a package using sudo (-b).

ansible all -m service -a "name=ssh state=started"

– Ensures a service is running.

ansible all -m copy -a "src=file.txt dest=/tmp/"

– Copies a local file to remote nodes.

## 3. Playbook Execution & Debugging

ansible-playbook site.yml

– Runs the specified playbook.

ansible-playbook site.yml --check

– Dry Run: Predicts changes without applying them.

ansible-playbook site.yml --syntax-check

– Validates YAML syntax without running.

ansible-playbook site.yml --limit web

– Runs the playbook only on the "web" group.

ansible-playbook site.yml --step

– Prompts for confirmation before every single task.

ansible-playbook site.yml -vvv

– Enables maximum verbosity for deep troubleshooting.

## 4. Security (Ansible Vault)

ansible-vault create secret.yml

– Creates a new encrypted data file.

ansible-vault encrypt <file>

– Encrypts an existing plain-text file.

ansible-vault edit <file>

– Decrypts, opens for editing, and re-encrypts on save.

ansible-playbook site.yml --ask-vault-pass

– Runs a playbook that requires a vault password.



## 5. Role & Galaxy Management

- ansible-galaxy init <role\_name>
  - Creates the standard directory structure for a role.
- ansible-galaxy install <user.role>
  - Downloads a community role from Ansible Galaxy.
- ansible-galaxy list
  - Displays all roles currently installed on the local system.