

**** ANSIBLE - BASIC COMMANDS ****

```
# Check Ansible version
ansible --version

# Display Ansible configuration
ansible-config view

# Test connectivity to hosts (ping module)
ansible all -m ping

# Test connectivity to a specific host
ansible webserver -m ping

# Run ad-hoc command on all hosts
ansible all -a "uptime"

# Run ad-hoc command on specific host
ansible webserver -a "uptime"

# Run command with become (sudo)
ansible all -a "apt update" -b

# List all hosts in inventory
ansible all --list-hosts
```

**** ANSIBLE - INVENTORY ****

```
# Specify inventory file for command
ansible all -i inventory.ini -m ping

# Dynamic inventory example (script or cloud)
ansible-inventory -i my_inventory_script.py --list

# List all groups and hosts in inventory
ansible-inventory -i inventory.ini --graph

# Dump inventory as JSON
ansible-inventory -i inventory.ini --list
```

**** ANSIBLE - PLAYBOOKS ****

```
# Run playbook
ansible-playbook site.yml

# Run playbook with specific inventory
ansible-playbook -i inventory.ini site.yml

# Run playbook with tags
ansible-playbook site.yml --tags "install"

# Run playbook skipping tags
ansible-playbook site.yml --skip-tags "remove"

# Run playbook in check (dry run) mode
ansible-playbook site.yml --check

# Run playbook with verbose output
ansible-playbook site.yml -v

# Run playbook with more verbose output
ansible-playbook site.yml -vv

# Run playbook and become sudo automatically
```

```
ansible-playbook site.yml -b
```

```
# Limit playbook run to specific host/group  
ansible-playbook site.yml --limit webservers
```

```
** ANSIBLE - MODULES **
```

```
# Gather facts about hosts  
ansible all -m setup
```

```
# Install package using apt  
ansible all -m apt -a "name=nginx state=present" -b
```

```
# Install package using yum  
ansible all -m yum -a "name=httpd state=latest" -b
```

```
# Copy file to remote host  
ansible all -m copy -a "src=/local/file dest=/remote/file" -b
```

```
# Fetch file from remote host  
ansible all -m fetch -a "src=/remote/file dest=./local/flat=yes"
```

```
# Create a directory  
ansible all -m file -a "path=/tmp/test state=directory mode=0755"
```

```
# Remove a file or directory  
ansible all -m file -a "path=/tmp/test state=absent"
```

```
# Template a file using Jinja2  
ansible all -m template -a "src=template.j2 dest=/etc/app/config.cfg"
```

```
# Restart service  
ansible all -m service -a "name=nginx state=restarted" -b
```

```
# Start service  
ansible all -m service -a "name=nginx state=started" -b
```

```
# Stop service  
ansible all -m service -a "name=nginx state=stopped" -b
```

```
# Enable service on boot  
ansible all -m service -a "name=nginx enabled=yes" -b
```

```
# Disable service on boot  
ansible all -m service -a "name=nginx enabled=no" -b
```

```
** ANSIBLE - ROLES & GALAXY **
```

```
# Create a new role  
ansible-galaxy init myrole
```

```
# Install role from Ansible Galaxy  
ansible-galaxy install geerlingguy.nginx
```

```
# List installed roles  
ansible-galaxy list
```

```
# Remove role  
ansible-galaxy remove geerlingguy.nginx
```

```
** ANSIBLE - VAULT / SECRETS **
```

```
# Encrypt file with Ansible Vault
```

```
ansible-vault encrypt secrets.yml

# Decrypt file with Ansible Vault
ansible-vault decrypt secrets.yml

# Edit file with Ansible Vault
ansible-vault edit secrets.yml

# Run playbook using Vault password file
ansible-playbook site.yml --vault-password-file ~/.vault_pass.txt

# Prompt for Vault password during playbook run
ansible-playbook site.yml --ask-vault-pass

** ANSIBLE - DEBUGGING & VERBOSE **

# Run command with verbose output
ansible all -a "uptime" -v

# Run playbook with verbose output
ansible-playbook site.yml -v

# Run playbook with increased verbosity
ansible-playbook site.yml -vv

# Maximum verbosity for debugging
ansible-playbook site.yml -vvv

# Print debug message inside playbook
debug: msg="Variable value is {{ myvar }}"

** ANSIBLE - TIPS / USAGE **

# Limit execution to a host or group
ansible-playbook site.yml --limit webservers

# Check syntax of a playbook
ansible-playbook site.yml --syntax-check

# Show variables for host
ansible all -m setup

# List facts for a single host
ansible webserver -m setup

# Run multiple ad-hoc commands sequentially
ansible all -a "uptime; who"
```