

Ansible Integration Guide

Prerequisites

Before beginning, ensure the following:

- You have Ansible 2.9+ installed on your Linux/Mac system.
- You have SSH access to Linux target machines or WinRM access to Windows machines.
- Python and pip are installed on the control node.
- Ansible Vault password is known (for encrypted files).

Step-by-Step Guide

Step 1: Extract the Ansible. zip

- unzip Ansble.zip
- cd CLMAnsible

Step 2: Populate the Inventory File

- Edit the inventory/hosts file to define your targets.
- Linux example:

```
[linux]
192.168.1.101 ansible_ssh_user=root ansible_ssh_private_key_file=/root/.ssh/id_rsa
```

- Windows example:

```
[windows]
192.168.1.105 ansible_user=Administrator ansible_password=YourPassword ansible_connection=winrm ansible_winrm_transport=basic
```

Step 3: Encrypt the Inventory File and the API Credentials file(Optional but Recommended)

- ansible-vault encrypt inventory/hosts
- ansible-vault encrypt vars/api_credentials.yml

Step 4: Fill in Certificate Details

- Open vars/cert_config.yml and fill in required certificate attributes like Certificate template, common name, key length etc.

Step 5: Test Machine Connectivity

For Linux machines:

- `ansible linux -m ping -i inventory/hosts --ask-vault-pass`
- `sudo ssh -i /root/.ssh/id_rsa root@<IP>s`

For Windows machines:

- `ansible -i inventory/hosts windows -m win_ping`

Step 6: Run the Playbook (Interactive Prompt)

- `ansible-playbook -i inventory/hosts certificate_playbook.yml --ask-vault-pass`

This will ask what operation you want to perform: enroll, renew, view the status of the previously issued certificates, or download.

Step 7: Run Specific Operations**Enroll a new certificate:**

- `ansible-playbook -i inventory/hosts certificate_playbook.yml --ask-vault-pass -e "operation=generate"`

Renew a certificate using serial number:

- `ansible-playbook -i inventory/hosts certificate_playbook.yml --ask-vault-pass -e "operation=renew serial_number=<serial number of certificate>"`

View the certificate status:

- `ansible-playbook -i inventory/hosts certificate_playbook.yml --ask-vault-pass -e "operation=view"`

Download a certificate:

- `ansible-playbook -i inventory/hosts certificate_playbook.yml --ask-vault-pass -e "operation=download"`

Step 8: Customize Certificate Request (Optional)

You can override any field at runtime:

- `ansible-playbook -i inventory/hosts certificate_playbook.yml --ask-vault-pass -e "common_name=example.org organization='Example_Test'"`

Step 9: Check Logs

All logs will be saved to:

- `logs/ansible-execution.log`