* **Needs to install ansible colletion for aws**

ansible-galaxy collection install amazon.aws

* **need to configure with aws**

**aws configure**

* **install pip**

sudo yum install python3-pip -y

* **install boto3 botocore**

sudo pip3 install boto3 botocore

**Step 1: Create the Role Using ansible-galaxy**

Run the following command to create the aws\_autoscaling role:

ansible-galaxy role init aws\_autoscaling

This will create a directory structure like this:

drwxr-xr-x. 2 ec2-user ec2-user 6 Feb 8 23:08 **templates**

drwxr-xr-x. 2 ec2-user ec2-user 6 Feb 8 23:08 **files**

-rw-r--r--. 1 ec2-user ec2-user 1328 Feb 8 23:08 README.md

drwxr-xr-x. 2 ec2-user ec2-user 22 Feb 8 23:08 **handlers**

drwxr-xr-x. 2 ec2-user ec2-user 22 Feb 8 23:08 **defaults**

drwxr-xr-x. 2 ec2-user ec2-user 22 Feb 8 23:08 **vars**

drwxr-xr-x. 2 ec2-user ec2-user 39 Feb 8 23:08 **tests**

drwxr-xr-x. 2 ec2-user ec2-user 22 Feb 8 23:08 **tasks**

drwxr-xr-x. 2 ec2-user ec2-user 22 Feb 8 23:08 **meta**

**Step 3: Create the Playbook**

**touch ansible.yml**

Add the following content to the ansible.yml file:

---

- name: Create Auto Scaling Group for EC2 Instances

hosts: localhost

roles:

- aws\_autoscaling

**Step 4: Update the Role Files**

vi aws\_autoscaling/vars/main.yml

**---**

**# Launch Template Variables**

**launch\_template\_name: "my-launch-template"**

**image\_id: "ami-0c55b159cbfafe1f0" # Replace with your Amazon Linux 2 AMI ID**

**instance\_type: "t2.micro"**

**security\_group\_ids: "sg-xxxxxxxx" # Replace with your security group ID**

**key\_name: "aws-key" # Replace with your key pair name**

**region: "us-east-1" # Replace with your region**

**# Auto Scaling Group Variables**

**asg\_name: "my-auto-scaling-group"**

**min\_size: 1**

**max\_size: 2**

**desired\_capacity: 1**

**subnet\_id: "subnet-xxxxxxxx" # Replace with your subnet ID**

1. **vars/main.yml**

vi aws\_autoscaling/tasks/main.yml

**---**

**- name: Create Launch Template**

**amazon.aws.ec2\_launch\_template:**

**name: "{{ launch\_template\_name }}"**

**image\_id: "{{ image\_id }}"**

**instance\_type: "{{ instance\_type }}"**

**security\_group\_ids: "{{ security\_group\_ids }}"**

**key\_name: "{{ key\_name }}"**

**region: "{{ region }}"**

**state: present**

**register: launch\_template**

**- name: Create Auto Scaling Group using Launch Template**

**amazon.aws.autoscaling\_group:**

**name: "{{ asg\_name }}"**

**launch\_template:**

**launch\_template\_name: "{{ launch\_template\_name }}"**

**version: "1"**

**min\_size: "{{ min\_size }}"**

**max\_size: "{{ max\_size }}"**

**desired\_capacity: "{{ desired\_capacity }}"**

**vpc\_zone\_identifier: "{{ subnet\_id }}"**

**region: "{{ region }}"**

**state: present**

**register: asg**

**- name: Debug Auto Scaling Group Output**

**debug:**

**var: asg**

**Step 5: Run the Playbook**

Run the playbook to create the Auto Scaling Group:

ansible-playbook ansible.yml