**Using Ansible to provision AWS EC2 instances.**

The **[Ansible](https://docs.ansible.com/ansible/latest/index.html" \t "_blank)** is a configuration management tool widely used to provision IT environments, deploy software or be integrated to CI/CD pipelines. There are lots of Ansible [**modules**](https://docs.ansible.com/ansible/latest/modules/list_of_cloud_modules.html#amazon) developed to ease tasks related to AWS cloud management.

The following steps will be performed along the article to demonstrate the power around the integration of Ansible and AWS Cloud:

* Create AWS user
* Install Ansible and Ansible EC2 module dependencies
* Create Ansible structure
* Run Ansible to provision the EC2 instance
* Connect to the EC2 instance via SSH

## Install Ansible and the EC2 module dependencies

This article was written with Ansible version 2.8.0 and Python version 2.7

* sudo apt install python
* sudo apt install python-pip
* pip install boto boto3 ansible

## Directory structure

➜ AWS\_Ansible tree  
.  
├── group\_vars  
│ └── all  
│ └── pass.yml  
└── Web.yml 🡪2 directories, 2 files

## Ansible Vault file to store the AWS Access and Secret keys.

We have hard codded the access key and secret key using vault-pass.

The password provided here will be asked every time the playbook is executed or when editing the pass.yml file.

**ansible-vault create** **group\_vars/all**/**pass.yml**  
New Vault password:  
Confirm New Vault password:

Adding Variables:

**ansible-vault edit** group\_vars/all/**pass.yml**   
Vault password:  
ec2\_access\_key:   
ec2\_secret\_key:

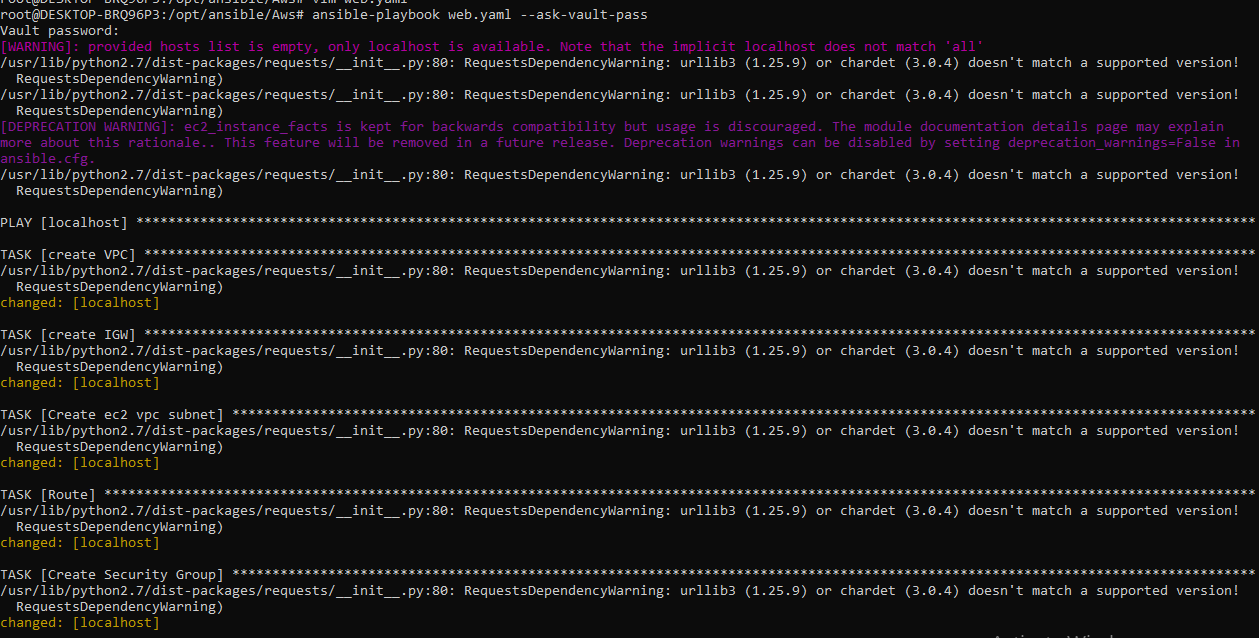
## Running Ansible to provision instances

Playbook will execute by default just the tasks to collect information on AWS. The tasks responsible for provisioning the instance will be performed.

The below Ansible Playbook performs the following:

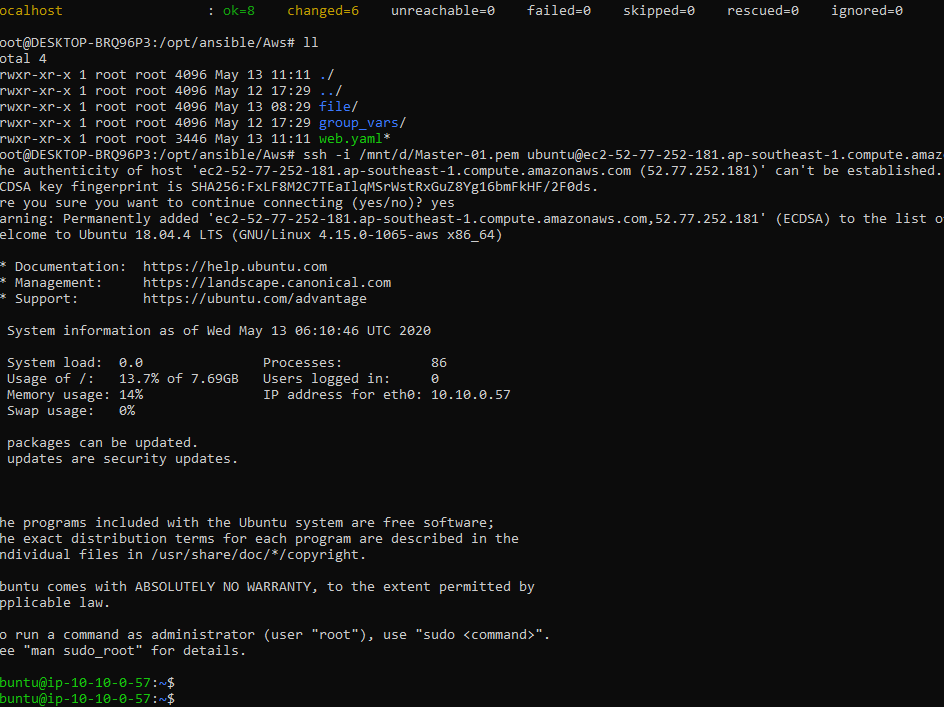
1. adds a new VPC
2. creates an internet gateway
3. creates the subnet
4. creates the security group for the subnet
5. creates the route table with public access to the subnet
6. creates the route table with public access to the subnet
7. Create Ec2 Instance

ansible-playbook web.yaml --ask-vault-pass



## Get the public DNS





Thank you for reading! Questions, feedback and suggestions are welcome