Contents

[Install Ansible on Amazon Linux 2](#_Toc15570888)

[Ansible ad-hoc Commands 2](#_Toc15570889)

[Inventory File 3](#_Toc15570890)

[SSH Key Gen configuration to avoid using key-pair for Ansible 4](#_Toc15570891)

# Install Ansible on Amazon Linux

1.Login to Ec2 instance on Amazon Linux

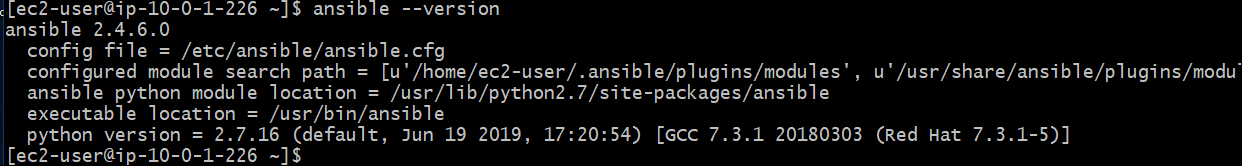
2. Run below commands to install Ansible

sudo amazon-linux-extras install ansible2

3. Verify Ansible is running/installed or not using below

ansible –version

You should see output similar to below



# Ansible ad-hoc Commands

Below are some common Ansible commands , which we covered as part of today’s session

|  |  |
| --- | --- |
| **command** | **purpose** |
| ansible localhost -m ping | Test SSH connectivity with the local machine |
| ansible localhost -m shell -a "touch inputfile.txt" | create a new file 'inputfile.txt' in the user home directory on local machine |
| ansible localhost -m shell -a "ls -ltr /home/ec2-user" | list contents of home directory on the local machine |
| ansible localhost -m shell -a "yum install wget" -b | Install wget on local machine using the shell module |
| ansible localhost -m yum -a "name=wget state=present" **-b** | Install wget on local machine using yum module (as root user) |
| ansible localhost -m yum -a "name=wget state=absent" -b | Uninstall wget from local machine, using yum module |

# Inventory File

Create an inventory file with 2 groups (local and server) each containing hosts

Contents of inventory file

|  |
| --- |
| [local]  Localhost  [server]  13.235.73.190 |

ansible.cfg - Contents of ansible.cfg to specify keypair to be used and disable host-key-checking

|  |
| --- |
| [defaults]  host\_key\_checking = False  remote\_user = ec2-user  private\_key\_file=bastion-key-pair.pem |

Ansible.cfg with above contents need to be present in the same directory from which below commands are run, to be able to run the Ansible commands successfully

Ansible commands which apply changes on the remote host ( from server group) of the inventory file

|  |
| --- |
| ansible server -m ping -i inventory  ansible server -i inventory -m shell -a "yum install git"  ansible server -i inventory -m yum -a "name=wget state=present" -b |

# SSH Key Gen configuration to avoid using key-pair for Ansible

1. Create a user on the Ansible control machine (on which Ansible is installed)

sudo adduser admin

sudo passwd admin

<somepassword>

1. Add the user to the sudoers file in /etc/sudoers, add the highlighted line

vi /etc/sudoers

root ALL=(ALL) ALL

admin ALL=(ALL) ALL

1. Edit the file /etc/ssh/sshd\_config to enable password authentication, as below

vi /etc/ssh/sshd\_config

ensure below lines are uncommented

PermitRootLogin yes

PasswordAuthentication yes

Ensure below line is commented

#PasswordAuthentication no

1. Restart sshd service

sudo service sshd restart

Repeat same 4 above steps on the remote machine (ip address in server group in inventory file) to create user with same name (admin) on the remote machine

Once above changes are done, login to the Ansible control machine with the admin user

ssh [admin@13.235.73.21](mailto:admin@13.235.73.21)

run below command

|  |
| --- |
| ssh-keygen -t rsa |

Do not provide any path for the key file when prompted, press Enter

Generating public/private rsa key pair.

Enter file in which to save the key (/root/.ssh/id\_rsa):

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /root/.ssh/id\_rsa.

Your public key has been saved in /root/.ssh/id\_rsa.pub.

The key fingerprint is:

SHA256:Yw1V7k7MYeUMh7OqkdpsaLH8oElq5FfRPBJFhW/PjE0 root@ip-10-0-1-226.ap-south-1.compute.internal

The key's randomart image is:

+---[RSA 2048]----+

| oooo.o.o |

| . .. .o\* |

| +.. +oo |

| o +oo=E. |

| oS+.O= |

| . o.o.oo= |

| o .o.B o . |

| oo.o\*.= |

| ...o. o. |

+----[SHA256]-----+

Assuming you are logged in as admin user, you should see 2 files in /home/admin/.ssh directory

root@ip-10-0-1-226 admin]# cd /home/admin/.ssh

[root@ip-10-0-1-226 .ssh]# ls -ltr

total 12

-rw-r--r-- 1 admin admin 429 Aug 1 08:19 id\_rsa.pub

-rw------- 1 admin admin 1679 Aug 1 08:19 id\_rsa

Run ssh-copy-id to copy the public key file to the remote machine, it will prompt for admin password only for this time

ssh-copy-id [admin@13.232.102.106](mailto:admin@13.232.102.106)

OR

ssh-copy-id 13.232.102.106

After executing above, it should show output saying 1 keypair created on remote hostNow, you should be able to login to remote host without specifying any key-pair or prompt for any password. Also, ansible.cfg is no more required for any key-pair specifications for Ansible modules to work.

ssh 13.232.102.106