**POC: This document gives you - How to install Ansible? How to configure Ansible ? How to connect remote PC? How to run 1st playbook?**

**1) How to install Ansible?**

- For Debian

1) sudo apt-get install ansible

(It also sownloads dependencies like paramiko PyYAML Jinja2 httplib2. No need to download separately)

- For RedHat

1) sudo yum install ansible

(It also sownloads dependencies like paramiko PyYAML Jinja2 httplib2. No need to download separately)

**2) How to configure Ansible?**

1) Install ssh (Note: ssh is mandatory for ansible. You should run this cmd on all maching for which you are using ansible)

**sudo apt-get install ssh**

2) Setup public key and private key for ssh connection. For that open command prompt and type following commands

a) **ssh keygen** => It creates publuc key and private key. This cmd will ask for password for private key

b) **ssh-copy-id -i username@ip\_addr** => where username and ip address is of remote PC to which you want to connect. This command is use copy public key at remote PC.

3) Now create working directory and setup environmentfor ansible. Use following commands

a) crete one directory using mkdir, say--> **mkdir ansible\_test**

b) **cd ansible\_test**

c) **git clone git://github.com/ansible/ansible.git --recursive**  => this will clone ansible reop from git to your ansible\_test dir.

d) **cd ansible**  => change directory to cloned repo

e) **source ./hacking/env-setup** => this will activate ansible environment for for running ansible commands

f) come out of repo (**cd ..**), create another folder (**mkdir test**), inside this folder you can write your playbook.

***Note:*** *Every time you open new terminal, you have to repeate steps b, d and e*

***Note:*** *You can also connect to remote PC without using public-key, private-key (2nd step). for that you have to give -k or --ask-pass paramater while running each ansible command (ex.* ***ansible-playbook test.yml -k****)*

**3) How to test connection with remote PC?**

1) Run following cmd-

**ansible 172.27.59.17 -m ping -u cybage** =>(where 172.27.59.17 is ip\_addr of remote PC and 'cybage' is its username)

***Note:*** *Before conecting make sure that ssh is installed on remote machine*

If this commands give following output, then connection is successfull

**172.27.59.17 | success >> {**

**"changed": false,**

**"ping": "pong"**

**}**

***Note:*** *Using Ansible you can run any linux command. Above mode is called add-hoc execution and another mode of execution is playbook mode*.

4) How to run your first playbook (on Ubuntu)?

- create sample.yml file

- write following code in it.

**- - - This line indicates starting of yml doc**

**- hosts: 172.27.59.17 remote host to which you have to connect**

**remote\_user: cybage remote host username**

**sudo: yes to enable sudo access**

**tasks: task to perform on remote host**

**- name: Install apache**

**apt: name=apache2 state=present**

**- name: start Apache**

**service: name=apache2 state=running enabled=yes**

- before running this playbook you must make entry of remote\_ip in /etc/ansible/hosts file

- to run this playbook, type following command

**ansible-playbook sample.yml - -ask-sudo-pass** **** This is required for sudo password of remote user. Not required if you are accessing root account.

***Note:*** *For running playbook it’s not necessary to be root user. You can also use other user which have sudo access.*

**Points to note:**

1) Any remote pc to which you have to configure through ansible , it’s ip entry must present in /etc/ansible/hosts file and must have ssh installed.

2) /etc/ansible/hosts is default inventory file. However you can create your own inventory file at any location. But if you do that don’t forget to update new location in /etc/ansible/ansible.cfg file (i.e. hostfile = new\_location )

3) You can also use inventory at any location dynamically using –i parameter while running ansible playbook.

Ex. **anisble-playbook –i /newpath sample.yml**