

Configuring ANSIBLE

First OS IP <Control Node>

```
[root@localhost ~]# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.43.61 netmask 255.255.255.0 broadcast 192.168.43.255
    inet6 2401:4900:36ba:894f:c6f8:147b:42de:aa58 prefixlen 64 scopeid 0x0<global>
    >
    inet6 fe80::fcf5:4772:682c:ed20 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:43:c7:d9 txqueuelen 1000 (Ethernet)
    RX packets 62 bytes 19948 (19.4 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 97 bytes 11670 (11.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Now second IP<TARGET SYSTEM>

```
[root@localhost ~]# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.43.216 netmask 255.255.255.0 broadcast 192.168.43.255
    inet6 fe80::3e26:9443:6fb:7a71 prefixlen 64 scopeid 0x20<link>
    inet6 2401:4900:36ba:894f:e801:3e60:f17b:6431 prefixlen 64 scopeid 0x0<global>
    >
    ether 08:00:27:af:f1:28 txqueuelen 1000 (Ethernet)
    RX packets 810 bytes 456651 (445.9 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 254 bytes 30456 (29.7 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
```

1.Pip3 install ansible

```
[root@localhost ~]# pip3 install ansible
WARNING: Running pip install with root privileges is generally not a good idea.
pip3 install --user` instead.
Collecting ansible
  Downloading https://files.pythonhosted.org/packages/f2/8f/09054d2e2bf4eaa17549faelb0e51089e620e50438e501d83eda1/ansible-2.10.2.tar.gz (40.6MB)
    100% |████████████████████████████████████████| 40.6MB 31kB/s
Collecting ansible-base<2.11,>=2.10.3 (from ansible)
  Downloading https://files.pythonhosted.org/packages/2e/d1/92422f8f53ae2d4e75eb86a9ca2796b5d9679f20ed0239e86d8cf/ansible-base-2.10.3.tar.gz (5.8MB)
    100% |████████████████████████████████████████| 5.8MB 150kB/s
Collecting jinja2 (from ansible-base<2.11,>=2.10.3->ansible)
  Downloading https://files.pythonhosted.org/packages/30/9e/f663a2aa66a09d838042659828bb9b41ea3a6efa20a20fd92b121/Jinja2-2.11.2-py2.py3-none-any.whl (125kB)
    100% |████████████████████████████████████████| 133kB 721kB/s
Requirement already satisfied: PyYAML in /usr/lib64/python3.6/site-packages (from ansible-base<2.11,>=2.10.3->ansible)
```

2.Vim ip.txt

>> Target OS IP

3.ansible all --list-hosts

4.ansible --version

```
some modules do not make sense in ad-hoc (include, meta, etc)
[root@localhost ~]# ansible all --list-hosts
[WARNING]: No inventory was parsed, only implicit localhost is available
[WARNING]: provided hosts list is empty, only localhost is available. Note that
the implicit localhost does not match 'all'
  hosts (0):
[root@localhost ~]# ansible --version
ansible 2.10.3
  config file = None
  configured module search path = ['/root/.ansible/plugins/modules', '/usr/share/
e/plugins/modules']
  ansible python module location = /usr/local/lib/python3.6/site-packages/ansible
  executable location = /usr/local/bin/ansible
  python version = 3.6.8 (default, Jan 11 2019, 02:17:16) [GCC 8.2.1 20180905 (Re
8.2.1-3)]
[root@localhost ~]# mkdir /etc/ansible
[root@localhost ~]# vim /etc/ansible/ansible.cfg
```

```
[root@localhost ~]# ansible all --list-hosts
[WARNING]: No inventory was parsed, only implicit localhost is available
[WARNING]: provided hosts list is empty, only localhost is available. Note that the
implicit localhost does not match 'all'
  hosts (0):
[root@localhost ~]# vim /etc/ansible/ansible.cfg
[root@localhost ~]# ansible all --list-hosts
  hosts (1):
    192.168.43.216
[root@localhost ~]# vim /root/ip.txt
[root@localhost ~]# ansible all -m service -a "name=httpd state=started"
192.168.43.216 | FAILED! => {
  "msg": "to use the 'ssh' connection type with passwords, you must install the s
ss program"
```

5.Vim /etc/ansible/ansible.cfg

```
File Edit View Search Terminal Help
[defaults]
inventory=/root/ip.txt
~
~
~
```

6.Vim /root/ip.txt

```
root@localhost:~
File Edit View Search Terminal Help
192.168.43.216 ansible_user=root ansible_ssh_pass=Abhishek
~
~
~
~
```

7.dnf install <https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm>

```
[root@localhost ~]# dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.
Repository 'docker' is missing name in configuration, using id.
Repository 'dvd1' is missing name in configuration, using id.
Repository 'dvd2' is missing name in configuration, using id.
Docker CE Stable - x86_64                262 B/s | 381 B      00:01
Failed to synchronize cache for repo 'docker-ce-stable', ignoring this repo.
Last metadata expiration check: 0:03:15 ago on Thu 05 Nov 2020 12:15:13 AM IST.
epel-release-latest-8.noarch.rpm          10 kB/s | 22 kB      00:02
Dependencies resolved.
=====
Package                                Arch      Version      Repository      Size
=====
Installing:
epel-release                            noarch    8-8.el8      @commandline    22 k
Transaction Summary
=====
Install 1 Package
Total size: 22 k
```

9.Dnf install sshpass

```
10.ansible all -m service -a "name=httpd state=started"
```

```
}
[root@localhost ~]# dnf install sshpass
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.
Repository 'docker' is missing name in configuration, using id.
Repository 'dvd1' is missing name in configuration, using id.
Repository 'dvd2' is missing name in configuration, using id.
Docker CE Stable - x86_64                233 B/s | 381 B    00:01
Failed to synchronize cache for repo 'docker-ce-stable', ignoring this repo.
Last metadata expiration check: 0:14:06 ago on Thu 05 Nov 2020 12:20:01 AM IST.
Package sshpass-1.06-9.el8.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@localhost ~]# ansible all -m service -a "name=httpd state=started"
192.168.43.216 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/libexec/platform-python"
  },
  "changed": true,
  "name": "httpd",
  "state": "started",
  "status": {
    "ActiveEnterTimestampMonotonic": "0",
    "ActiveExitTimestampMonotonic": "0",
```

Final Result

The final result will be obtained from the status command checking in the Target OS that weather the Status is updated Automatically or not.

This Automatic word carries a very high concept.

Which we will se in other repos.

```
[root@localhost ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor preset: disabled)
   Active: inactive (dead)
     Docs: man:httpd.service(8)

[root@localhost ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor preset: disabled)
   Active: active (running) since Thu 2020-11-05 00:48:39 IST; 35s ago
     Docs: man:httpd.service(8)
 Main PID: 14104 (httpd)
   Status: "Running, listening on: port 80"
    Tasks: 213 (limit: 11511)
  Memory: 17.2M
   CGroup: /system.slice/httpd.service
           └─14104 /usr/sbin/httpd -DFOREGROUND
             └─14105 /usr/sbin/httpd -DFOREGROUND
               └─14106 /usr/sbin/httpd -DFOREGROUND
                 └─14107 /usr/sbin/httpd -DFOREGROUND
                   └─14108 /usr/sbin/httpd -DFOREGROUND

Nov 05 00:48:39 localhost.localdomain systemd[1]: Starting The Apache HTTP Server...
Nov 05 00:48:39 localhost.localdomain httpd[14104]: AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using 127.0.0.1 instead. See the documentation for more details.
Nov 05 00:48:39 localhost.localdomain httpd[14104]: Server configured, listening on: port 80
```