```
servera login: root
Password:
Last login: Tue Dec  8 09:10:32 on tty1
[root@servera ~]# ifconfig  enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.0.155  netmask 255.255.255.0  broadcast 192.168.0.255
        inet6 fe80::a6cd:9c6a:76a0:bc62  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:08:6f:c4  txqueuelen 1000  (Ethernet)
        RX packets 205  bytes 16667 (16.2 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 148  bytes 11819 (11.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@servera ~]# ifconfig  enp0s3 192.168.1.2/30
[root@servera ~]# ifconfig  enp0s3
```

```
[root@servera ~]# ifconfig  enp0s3 192.168.1.2/30
[root@servera ~]# ifconfig  enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.1.2  netmask 255.255.255.252  broadcast 192.168.1.3
        inet6 fe80::a6cd:9c6a:76a0:bc62  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:08:6f:c4  txqueuelen 1000  (Ethernet)
        RX packets 210  bytes 17027 (16.6 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 152  bytes 12119 (11.8 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@servera ~]#
```

```
[root@servera ~]#
[root@servera ~]# ping  192.168.1.1
connect: Network is unreachable
[root@servera ~]# route add -net 192.168.1.0  netmask 255.255.255.252 enp0s3
[root@servera ~]#
[root@servera ~]#
[root@servera ~]#
```

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```
File  Edit  View  Search  Terminal  Help
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
8.8.8.0         0.0.0.0         255.255.255.0   U     0      0        0 enp0s3
172.17.0.0      0.0.0.0         255.255.0.0     U     0      0        0 docker0
192.168.0.0     0.0.0.0         255.255.255.0   U     100    0        0 enp0s3
192.168.122.0   0.0.0.0         255.255.255.0   U     0      0        0 virbr0
[root@localhost ~]# ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
^C
--- 8.8.8.8 ping statistics ---
1 packets transmitted, 0 received, 100% packet loss, time 0ms

[root@localhost ~]# route  add -net 8.8.8.0  netmask 255.255.255.0   gw
    192.168.0.1  enp0s3
[root@localhost ~]# route  -n
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
8.8.8.0         192.168.0.1     255.255.255.0   UG    0      0        0 enp0s3
8.8.8.0         0.0.0.0         255.255.255.0   U     0      0        0 enp0s3
172.17.0.0      0.0.0.0         255.255.0.0     U     0      0        0 docker0
192.168.0.0     0.0.0.0         255.255.255.0   U     100    0        0 enp0s3
192.168.122.0   0.0.0.0         255.255.255.0   U     0      0        0 virbr0
[root@localhost ~]# ping 8.8.8.8
                                                    Enterprise Linux
```

```
[root@localhost ~]# ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=112 time=64.3 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=112 time=42.10 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=112 time=40.3 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=112 time=50.7 ms
64 bytes from 8.8.8.8: icmp_seq=5 ttl=112 time=42.5 ms
64 bytes from 8.8.8.8: icmp_seq=6 ttl=112 time=48.10 ms
64 bytes from 8.8.8.8: icmp_seq=7 ttl=112 time=42.4 ms
64 bytes from 8.8.8.8: icmp_seq=8 ttl=112 time=44.7 ms
64 bytes from 8.8.8.8: icmp_seq=9 ttl=112 time=50.10 ms
^C
--- 8.8.8.8 ping statistics ---
9 packets transmitted, 9 received, 0% packet loss, time 22ms
rtt min/avg/max/mdev = 40.333/47.540/64.327/6.983 ms
```

```
--- 8.8.8.8 ping statistics ---
9 packets transmitted, 9 received, 0% packet loss, time 22ms
rtt min/avg/max/mdev = 40.333/47.540/64.327/6.983 ms
[root@localhost ~]# ping  www.facebook.com
connect: Network is unreachable
[root@localhost ~]#
```

bcoz: in my rt I customixed the network.

I am jst creatrig the pachet for the 8.8.8.0

So some of the parts I can reach to internet and some not.

Ansible 13

```
root@localhost:/ws10
File  Edit  View  Search  Terminal  Help
- hosts: myweb
  vars:
  - os_name:  ansible_facts[ansible_distribution]
  tasks:
  - package:
      name:  "httpd"
    when:  os_name == "redhat"
```

```
^C [ERROR]: User interrupted execution
[root@localhost ws10]# vim web.yml
[root@localhost ws10]# ansible-playbook  web.yml

PLAY [myweb] *******************************************************************

TASK [Gathering Facts] ********************************************************
ok: [192.168.0.155]

TASK [package] ****************************************************************
skipping: [192.168.0.155]

PLAY RECAP ********************************************************************
192.168.0.155              : ok=1      changed=0     unreachable=0     failed=0     s
kipped=1     rescued=0     ignored=0

[root@localhost ws10]# vim web.yml
```

****

```
Edit  View  Search  Terminal  Help
    "ansible_distribution": "RedHat",
    "ansible_distribution_file_parsed": true,
    "ansible_distribution_file_path": "/etc/redhat-release",
    "ansible_distribution_file_search_string": "Red Hat",
    "ansible_distribution_file_variety": "RedHat",
    "ansible_distribution_major_version": "8",
    "ansible_distribution_release": "Ootpa",
    "ansible_distribution_version": "8.0",
    "ansible_dns": {
        "nameservers": [
            "192.168.0.1"
        ],
        "search": [
```

Case- sensitive:

```
File  Edit  View  Search  Terminal  Help
  hosts: myweb
  vars:
  - os_name: ansible_facts[ansible_distribution]
  tasks:
  - package:
      name: "httpd"
    when: os_name == "RedHat"
```

Run now

```
[root@localhost ws10]# vim web.yml
[root@localhost ws10]# ansible  192.168.0.155 -m setup |  less
[root@localhost ws10]# ansible-playbook  web.yml

PLAY [myweb] ***************************************************************

TASK [Gathering Facts] ****************************************************
ok: [192.168.0.155]

TASK [package] ************************************************************
skipping: [192.168.0.155]

PLAY RECAP ****************************************************************
192.168.0.155              : ok=1    changed=0    unreachable=0    failed=0    s
kipped=1    rescued=0    ignored=0
```

Again skipped.

It shouldn't skip.

****

Best way of debug is to print it.

```
File  Edit  View  Search  Terminal  Help
- hosts: myweb
  vars:
  - os_name: ansible_facts[ansible_distribution]
  tasks:
  - package:
      name: "httpd"
    when: os_name == "RedHat"

  - debug:
      var: os_name

  - debug:
      msg: "hi hello {{ os_name  }}"
```

TWO WAY TO PRINT WITH DEBIG MODULE: Var v/s msg:

Msg takes only stirng. And u have to use jinga to use variable in msg : string interpolation.

```
- debug:
    msg: "hi hello {{ os_name  }}"
```

```
[root@localhost ws10]# ansible-playbook  web.yml

PLAY [myweb] *********************************************************************

TASK [Gathering Facts] **********************************************************
ok: [192.168.0.155]

TASK [package] ******************************************************************
skipping: [192.168.0.155]

TASK [debug] ********************************************************************
ok: [192.168.0.155] => {
    "os_name": "ansible_facts[ansible_distribution]"
}

PLAY RECAP **********************************************************************
192.168.0.155              : ok=2     changed=0     unreachable=0     failed=0
skipped=1     rescued=0     ignored=0

[root@localhost ws10]#
```

we were accepting Redhat but they print the variable.

****

Putting key in ' ' ansible_facts

```
File  Edit  View  Search  Terminal  Help
- hosts: myweb
  vars:
  - os_name: "{{ ansible_facts['ansible_distribution'] }}"
  - x: "jack"
  tasks:
  - package:
        name: "httpd"
    when: os_name == "RedHat"

  - debug:
        var: os_name
~
~
```

Again its error,

We have to use the full name

```
hosts: myweb
vars:
- os_name: "{{ ansible_facts['distribution'] }}"
- x: "jack"
tasks:
- package:
      name: "httpd"
  when: os_name == "RedHat"

- debug:
      var: os_name
```

```
[root@localhost ws10]# ansible-playbook  web.yml

PLAY [myweb] *********************************************************************

TASK [Gathering Facts] **********************************************************
ok: [192.168.0.155]

TASK [package] ******************************************************************
ok: [192.168.0.155]

TASK [debug] ********************************************************************
ok: [192.168.0.155] => {
    "os_name"  "RedHat"
}

PLAY RECAP **********************************************************************
192.168.0.155              : ok=3      changed=0     unreachable=0    failed=0      s
kipped=0     rescued=0     ignored=0
```

Yes, running well now…

∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗

Making the task the intelligent : skip the task if is not the desired OS.

```
File  Edit  View  Search  Terminal  Help
- hosts: myweb
  vars:
  - os_name: "{{ ansible_facts['distribution'] }}"
  - x: "jack"
  tasks:
  - package:
      name: "httpd"
    when: os_name == "RedHat"

  - package:
      name: "apache2"
    when: os_name == "Debian"

  - debug:
      var: os_name
```

```
[root@localhost ws10]# ansible-playbook  web.yml

PLAY [myweb] *********************************************************************

TASK [Gathering Facts] **********************************************************
ok: [192.168.0.155]

TASK [package] ******************************************************************
ok: [192.168.0.155]

TASK [package] ******************************************************************
skipping: [192.168.0.155]

TASK [debug] ********************************************************************
ok: [192.168.0.155] => {
    "os_name": "RedHat"
}

PLAY RECAP **********************************************************************
192.168.0.155              : ok=3      changed=0     unreachable=0    failed=0      s
kipped=1     rescued=0     ignored=0
```

∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗∗

Adhoc runs in MN and print o/p in CN : playbook only shows colour

```
[root@localhost ws10]# vim web.yml
[root@localhost ws10]# ansible 192.168.0.155 -m command -a  date
192.168.0.155 | CHANGED | rc=0 >>
Thu Dec 10 11:25:45 EST 2020
[root@localhost ws10]# ansible 192.168.0.155 -m command -a  cal
192.168.0.155 | CHANGED | rc=0 >>
    December 2020
Su Mo Tu We Th Fr Sa
       1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31

[root@localhost ws10]# vim c.yml
```

```
TASK [Gathering Facts] ************************************************************
ok: [192.168.0.155]                    d-tr

TASK [command] ********************************************************************
changed: [192.168.0.155] => {"changed": true, "cmd": ["date"], "delta": "0:00:00
.003512", "end": "2020-12-10 11:28:40.116016", rc: 0, "start": "2020-12-10 11:
28:40.112504", "stderr": "", "stderr_lines": [], stdout "Thu Dec 10 11:28:40
EST 2020", "stdout_lines": ["Thu Dec 10 11:28:40 EST 2020"]}

PLAY RECAP ***********************************************************************
192.168.0.155              : ok=2    changed=1    unreachable=0    failed=0    s
kipped=0    rescued=0    ignored=0

[root@localhost ws10]#                          Enterprise Linux
```

Verbose

```
[root@localhost ws10]# ansible-playbook  -v  web.yml
Using /etc/ansible/ansible.cfg as config file

PLAY [myweb] *********************************************************************

TASK [Gathering Facts] **********************************************************
ok: [192.168.0.155]

TASK [package] ******************************************************************
ok: [192.168.0.155] => {"changed": false, "msg": "Nothing to do", "rc": 0, "resu
lts": []}

TASK [package] ******************************************************************
skipping: [192.168.0.155] => {"changed": false, "skip_reason": "Conditional resu
lt was False"}

TASK [debug] ********************************************************************
ok: [192.168.0.155] => {
    "os_name": "RedHat"
}

PLAY RECAP ***********************************************************************
192.168.0.155              : ok=3    changed=0    unreachable=0    failed=0    s
```

False: I see , s/w is already installed, so I didn't do it again

Rc" : 0 success….

```
- hosts: 192.168.0.155
  tasks:
  - command: date
    register: x

  - debug:
      msg: "hi test !!"
#    when: x.rc == 0

  - debug:
      var: x.rc
~
~
~
```

Run


```
File  Edit  View  Search  Terminal  Help

PLAY [192.168.0.155] ***********************************************************

TASK [Gathering Facts] *********************************************************
ok: [192.168.0.155]

TASK [command] *****************************************************************
changed: [192.168.0.155]

TASK [debug] *******************************************************************
ok: [192.168.0.155] => {
    "msg": "hi test !!"
}

TASK [debug] *******************************************************************
ok: [192.168.0.155] => {
    "x.rc": "0"
}

PLAY RECAP *********************************************************************
192.168.0.155              : ok=4    changed=1    unreachable=0    failed=0    s
kipped=0    rescued=0    ignored=0

[root@localhost ws10]#
```

When rc!=0


```
- hosts: 192.168.0.155
  tasks:
  - command: date
    register: x

  - debug:
      msg: "hi test !!"
    when: x.rc != 0

  - debug:
      var: x.rc
~
~
~
```

Run


```
[root@localhost ws10]# ansible-playbook  c.yml

PLAY [192.168.0.155] ***********************************************************

TASK [Gathering Facts] *********************************************************
ok: [192.168.0.155]

TASK [command] *****************************************************************
changed: [192.168.0.155]

TASK [debug] *******************************************************************
skipping: [192.168.0.155]

TASK [debug] *******************************************************************
ok: [192.168.0.155] => {
    "x.rc": "0"
}

PLAY RECAP *********************************************************************
192.168.0.155              : ok=3    changed=1    unreachable=0    failed=0    s
kipped=1    rescued=0    ignored=0
```

Every module does not have rc as key.

Run

There are lots of keys.

Instead of rc here one of the key is 'failed' – false

Two conditions "and" keyword……… and "or" keyword

Failed =="false" will not work : error: comparing Boolean to str.

Run

o/p for or keyword