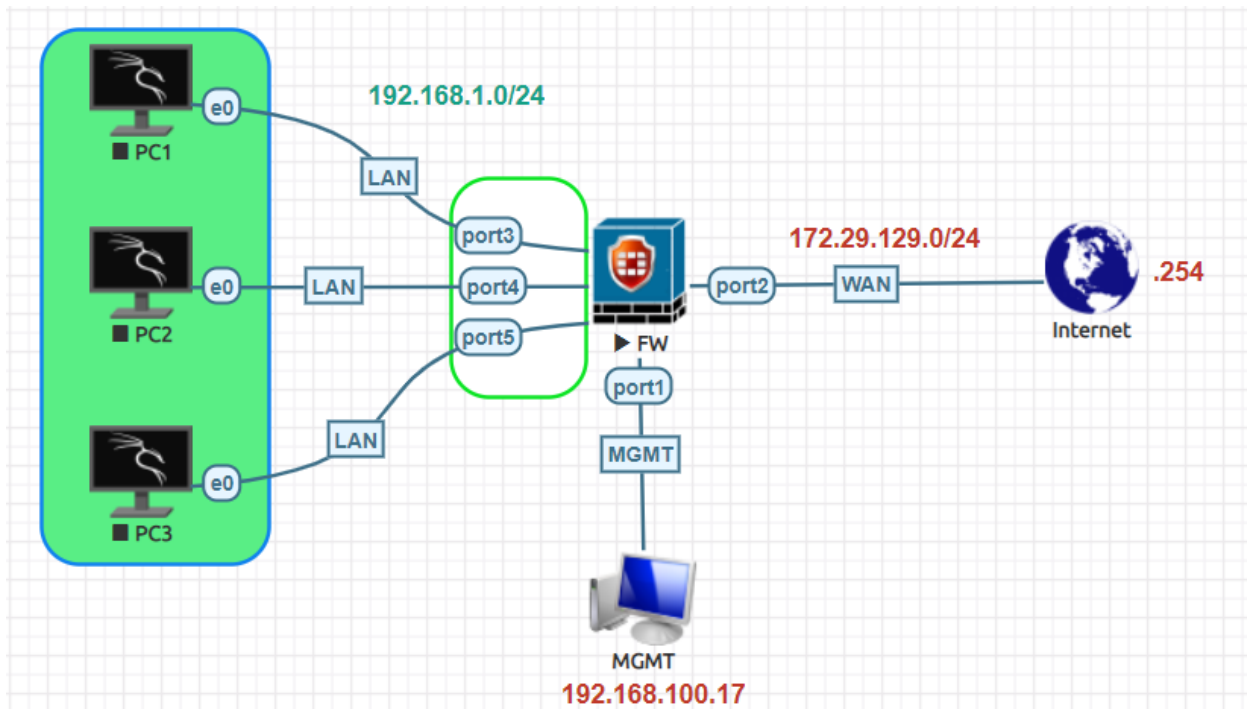


Software Switch Lab:



Let's login to Fortigate Firewall default username is admin and there is no password we need to set new password in this case the password is 123.

FortiGate-VM64-KVM login: admin

Password:

You are forced to change your password. Please input a new password.

New Password:

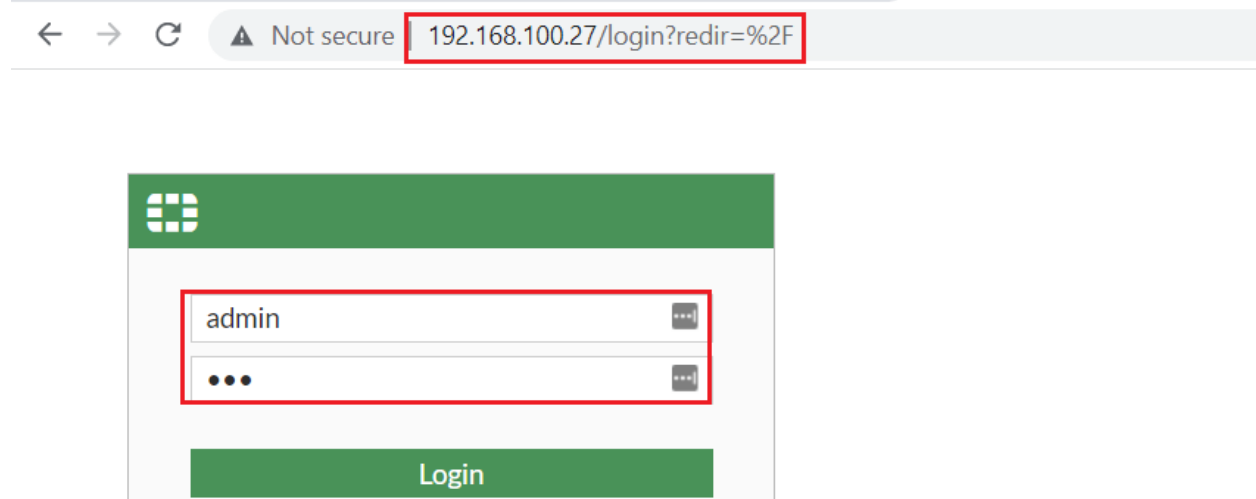
Confirm Password:

Welcome!

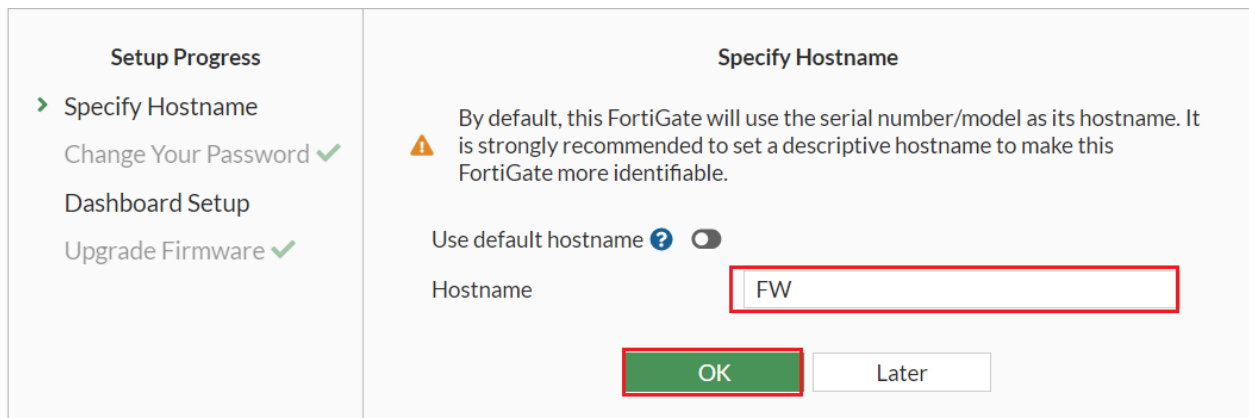
Fortigate Firewall get Management IP address through DHCP automatically.

```
FW
FortiGate-VM64-KVM # show system interface
name      Name.
fortilink static  0.0.0.0 0.0.0.0 10.255.1.1 255.255.255.0 up  disable  aggrega
te enable
l2t.root  static  0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 up  disable  tunnel  enable
naf.root  static  0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 up  disable  tunnel  disable
port1     dhcp   0.0.0.0 0.0.0.0 192.168.100.27 255.255.255.0 up  disable  physical
enable
port2     static 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 up  disable  physical  enable
port3     static 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 up  disable  physical  enable
port4     static 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 up  disable  physical  enable
```

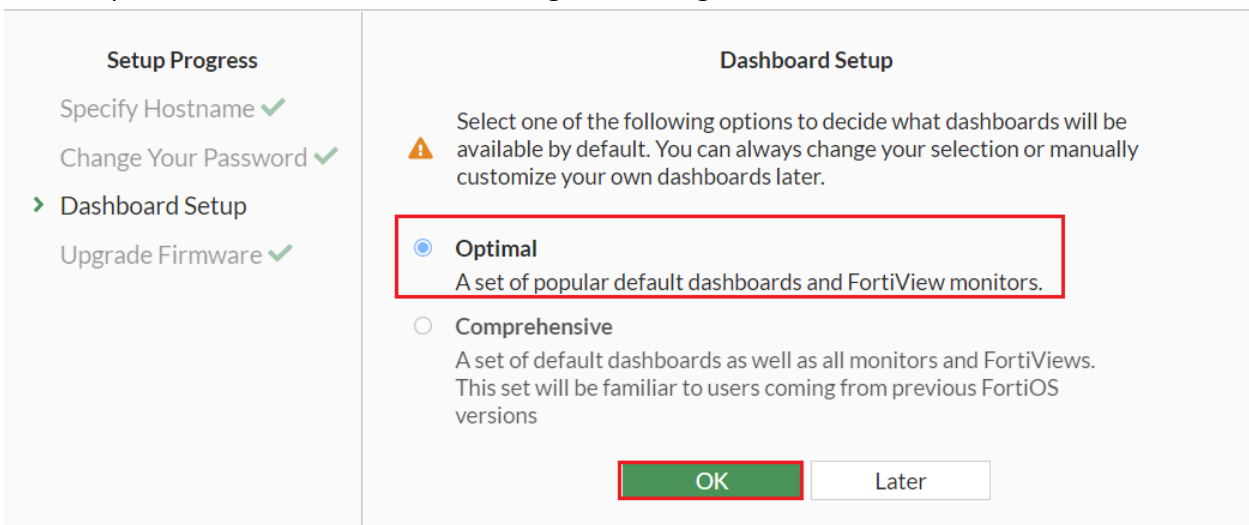
Let's browse Fortigate Firewall IP address in the browser <http://192.168.100.27> login with default username **admin** and password set initially which is **123**.



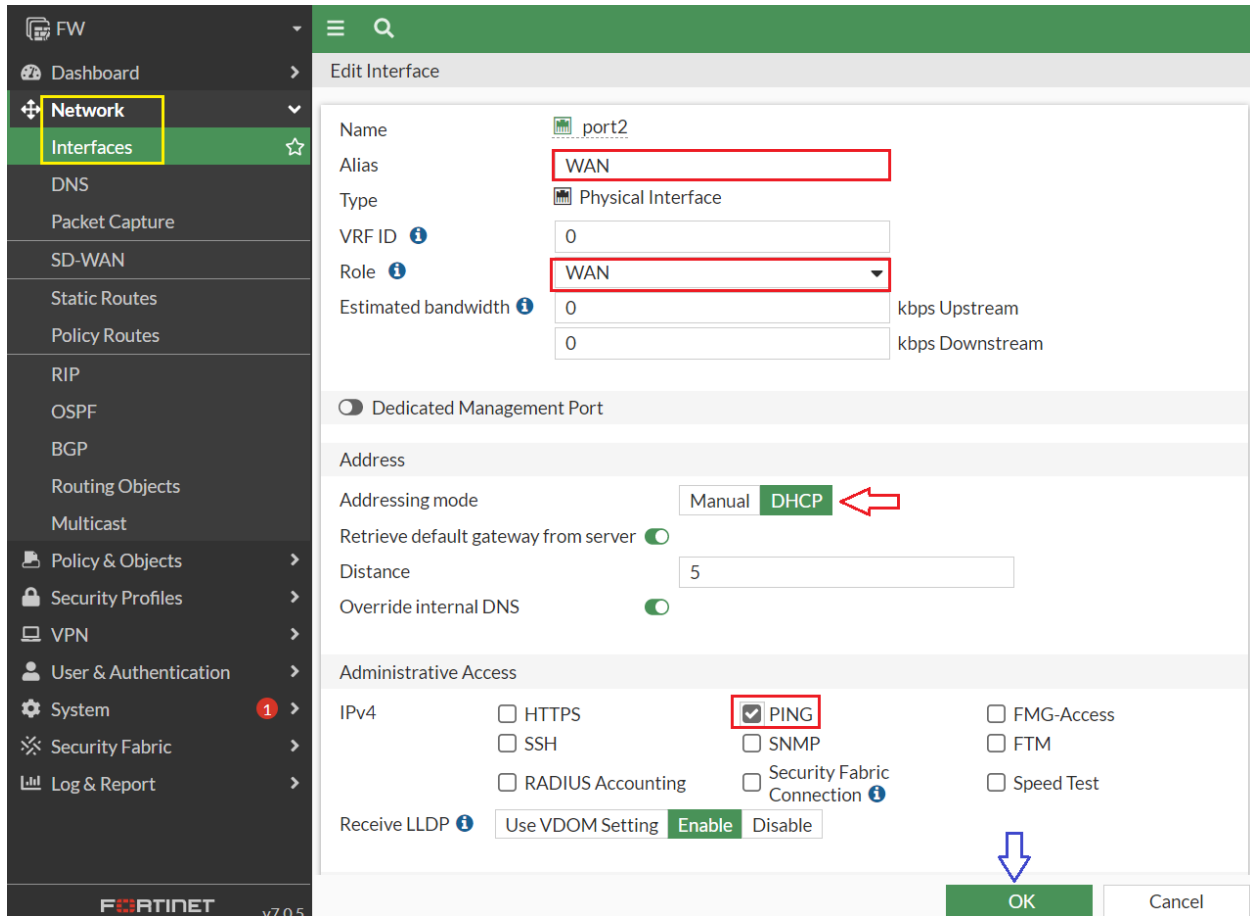
Set the hostname in this case FW and click OK to continue.



Select Optimal and click OK to continue log in to Fortigate Firewall dashboard.



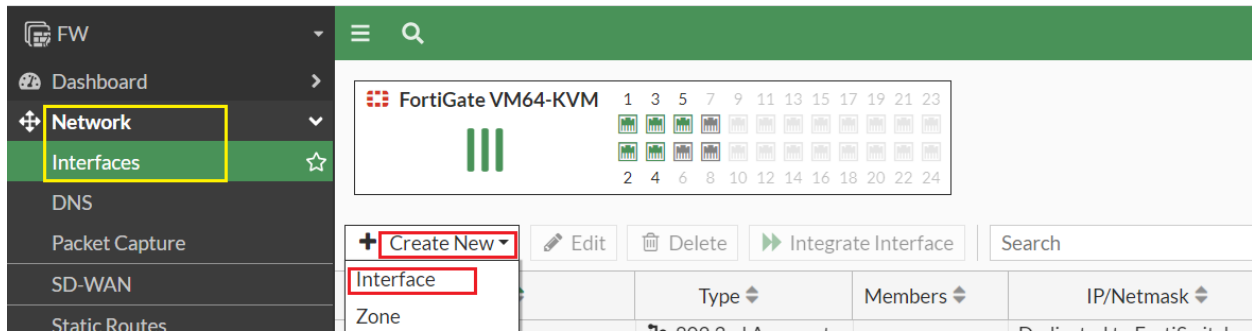
Navigate to **Network > Interfaces** double click on port2 to configure it as WAN interface type the Alias WAN, choose the Role WAN change the Addressing Mode to DHCP click OK.



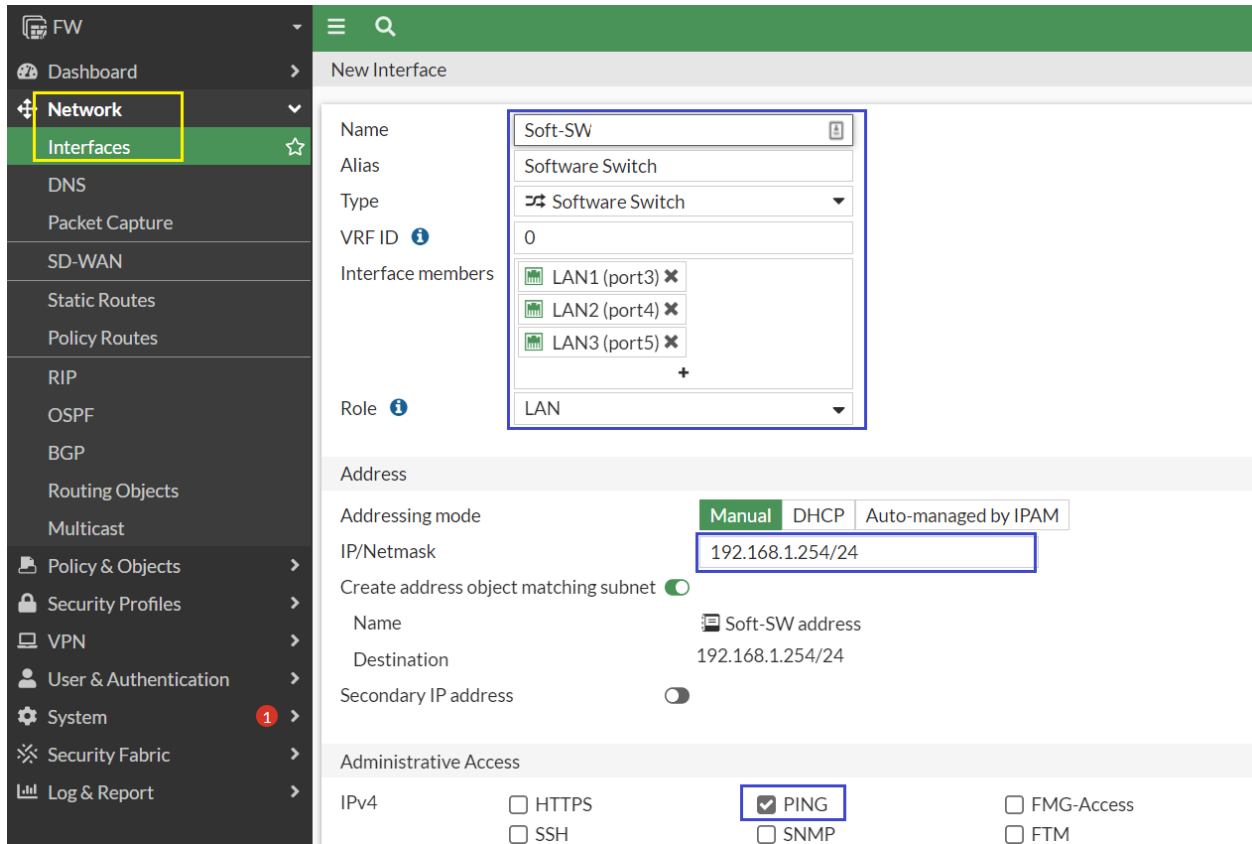
Change the other interfaces Alias names and Role set Port3 Alias to LAN1, Port4 to LAN2 and Port5 to LAN3 besides this set Alias for port1 MGMT.

Interface Name	Type	IP Address	Administrative Access
LAN1 (port3)	Physical Interface	0.0.0.0/0.0.0.0	PING
LAN2 (port4)	Physical Interface	0.0.0.0/0.0.0.0	PING
LAN3 (port5)	Physical Interface	0.0.0.0/0.0.0.0	PING
MGMT (port1)	Physical Interface	192.168.114.173/255.255.255.0	PING HTTPS SSH HTTP FMG-Access
NAT interface (naf.root)	Tunnel Interface	0.0.0.0/0.0.0.0	
WAN (port2)	Physical Interface	172.29.129.190/255.255.255.0	PING

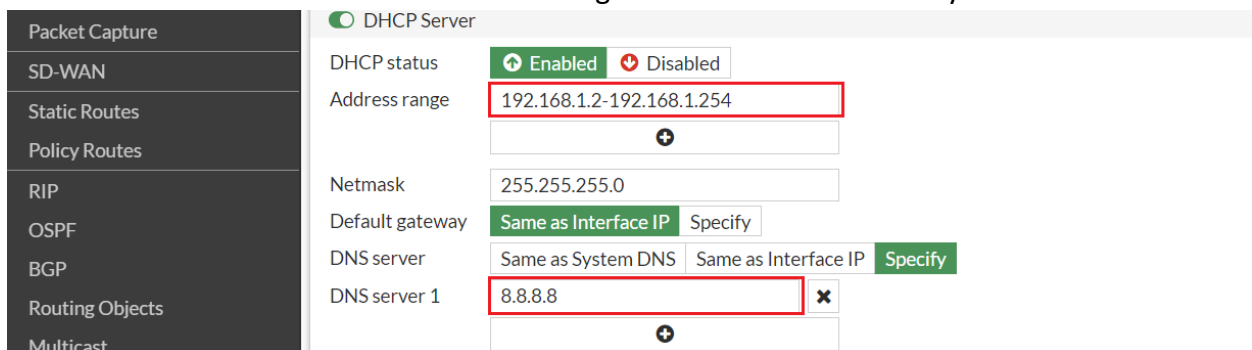
Navigate to **Network > Interfaces** click on Create New choose Interface.



Type Name, Alias, choose Type Software Switch add Port3, Port4 and Port5 interface members and IP.

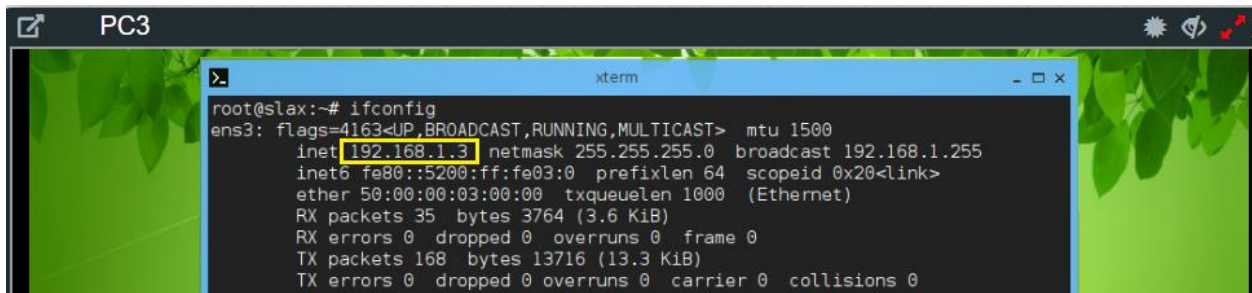
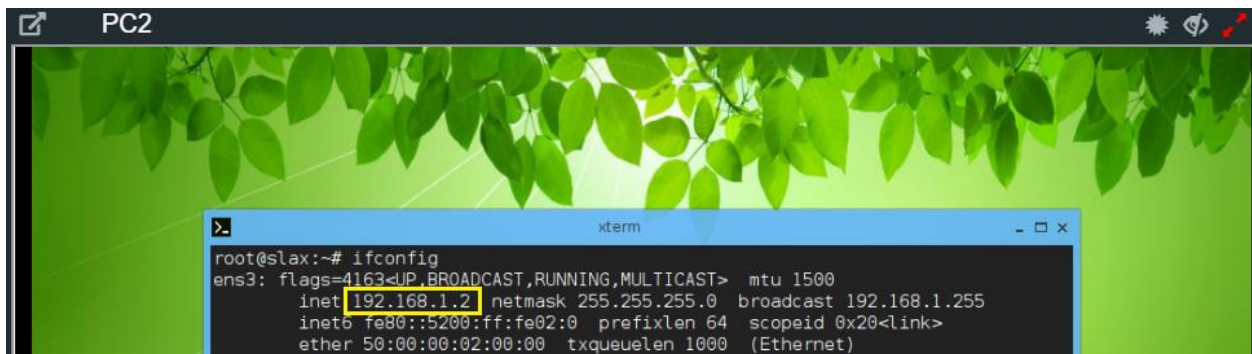
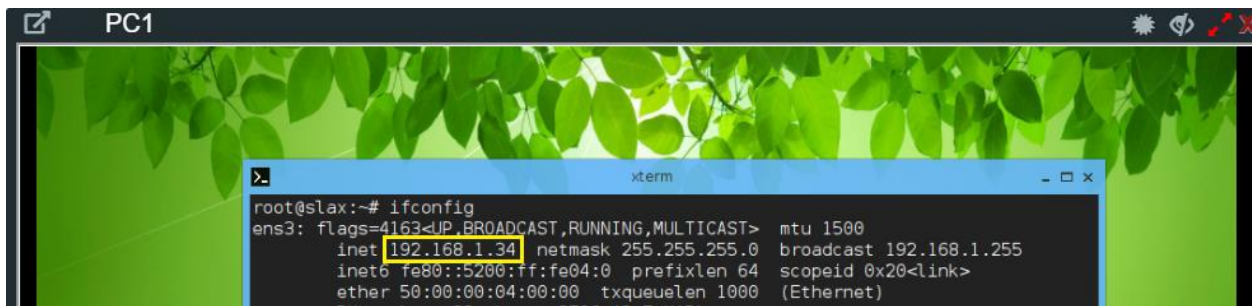
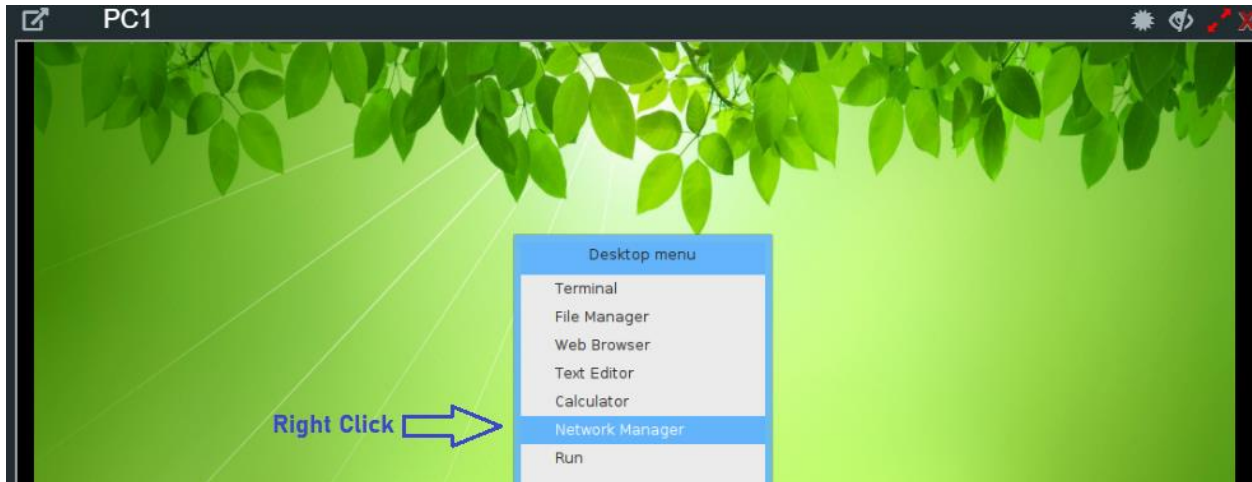


Let's enable DHCP Server on this interface to get IP address automatically on PCs.

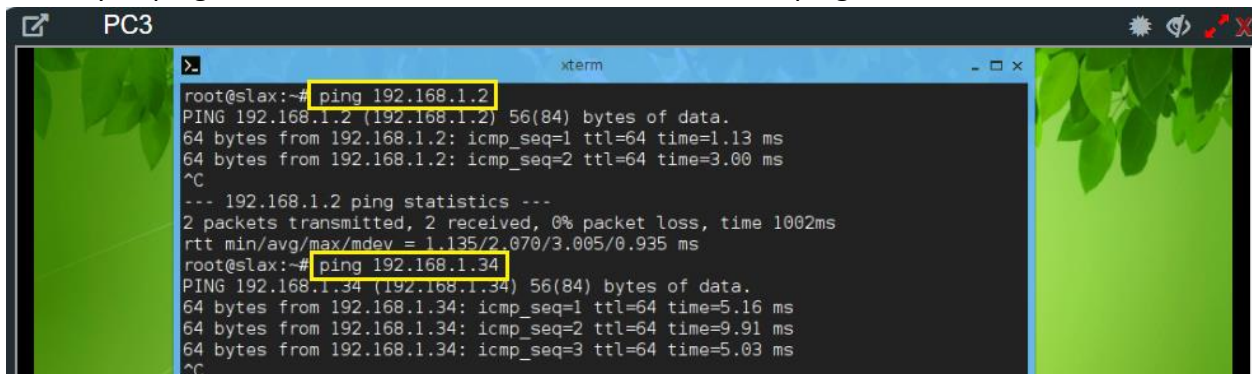


Testing and Verification:

Right click to get Desktop Menu click on Network Manager click refresh to get IP address.

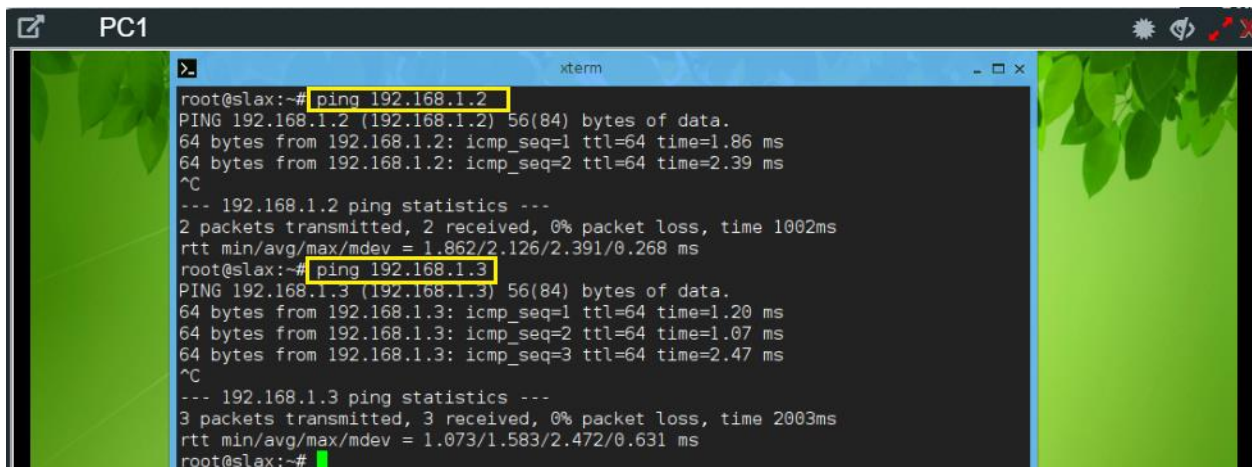


Let's try to ping each PC from another PC the result show its ping each other.



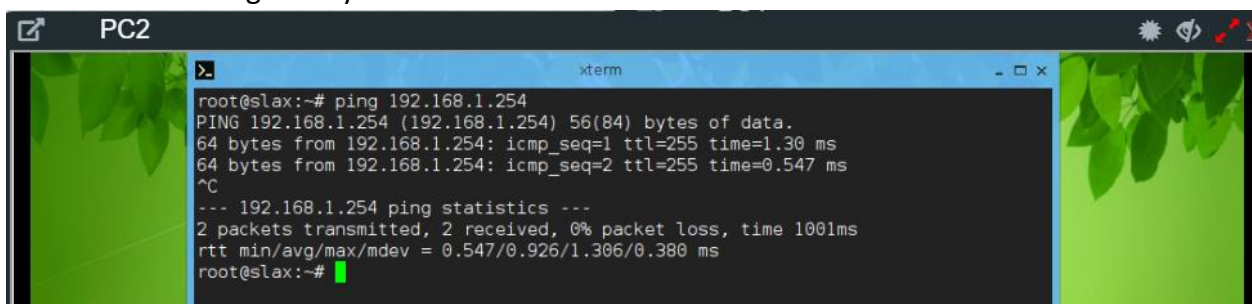
```
PC3
root@slax:~# ping 192.168.1.2
PING 192.168.1.2 (192.168.1.2) 56(84) bytes of data.
64 bytes from 192.168.1.2: icmp_seq=1 ttl=64 time=1.13 ms
64 bytes from 192.168.1.2: icmp_seq=2 ttl=64 time=3.00 ms
^C
--- 192.168.1.2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1002ms
rtt min/avg/max/mdev = 1.135/2.070/3.005/0.935 ms
root@slax:~# ping 192.168.1.34
PING 192.168.1.34 (192.168.1.34) 56(84) bytes of data.
64 bytes from 192.168.1.34: icmp_seq=1 ttl=64 time=5.16 ms
64 bytes from 192.168.1.34: icmp_seq=2 ttl=64 time=9.91 ms
64 bytes from 192.168.1.34: icmp_seq=3 ttl=64 time=5.03 ms
^C
```

Every PC belong to different Interface of Fortigate Firewall however they are reachable to each other like the connected to switch in the same subnet.



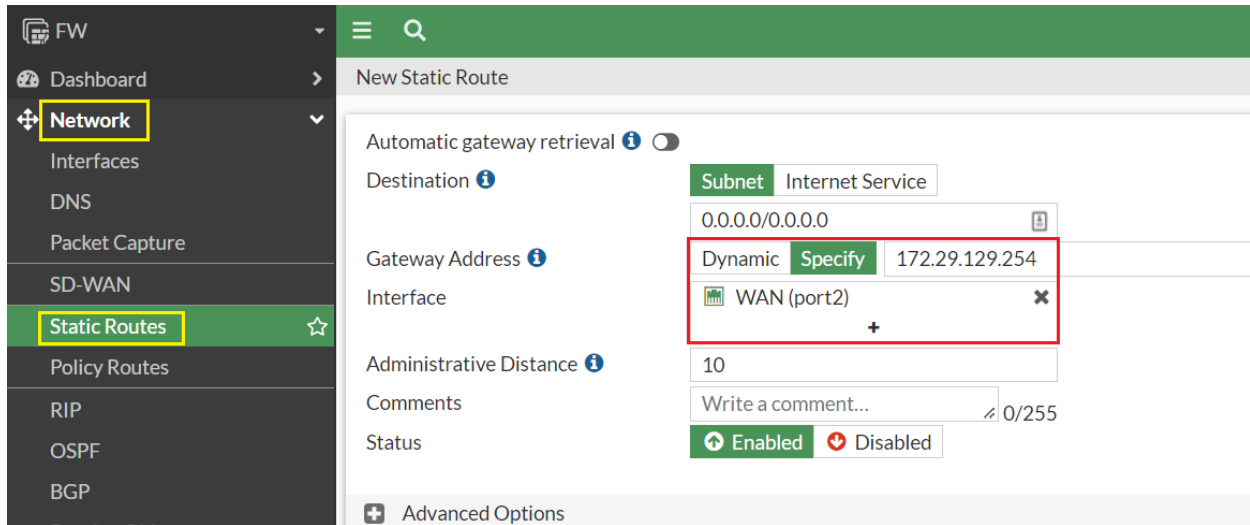
```
PC1
root@slax:~# ping 192.168.1.2
PING 192.168.1.2 (192.168.1.2) 56(84) bytes of data.
64 bytes from 192.168.1.2: icmp_seq=1 ttl=64 time=1.86 ms
64 bytes from 192.168.1.2: icmp_seq=2 ttl=64 time=2.39 ms
^C
--- 192.168.1.2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1002ms
rtt min/avg/max/mdev = 1.862/2.126/2.391/0.268 ms
root@slax:~# ping 192.168.1.3
PING 192.168.1.3 (192.168.1.3) 56(84) bytes of data.
64 bytes from 192.168.1.3: icmp_seq=1 ttl=64 time=1.20 ms
64 bytes from 192.168.1.3: icmp_seq=2 ttl=64 time=1.07 ms
64 bytes from 192.168.1.3: icmp_seq=3 ttl=64 time=2.47 ms
^C
--- 192.168.1.3 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 1.073/1.583/2.472/0.631 ms
root@slax:~#
```

All PCs have same gateway in this case 192.168.1.254.

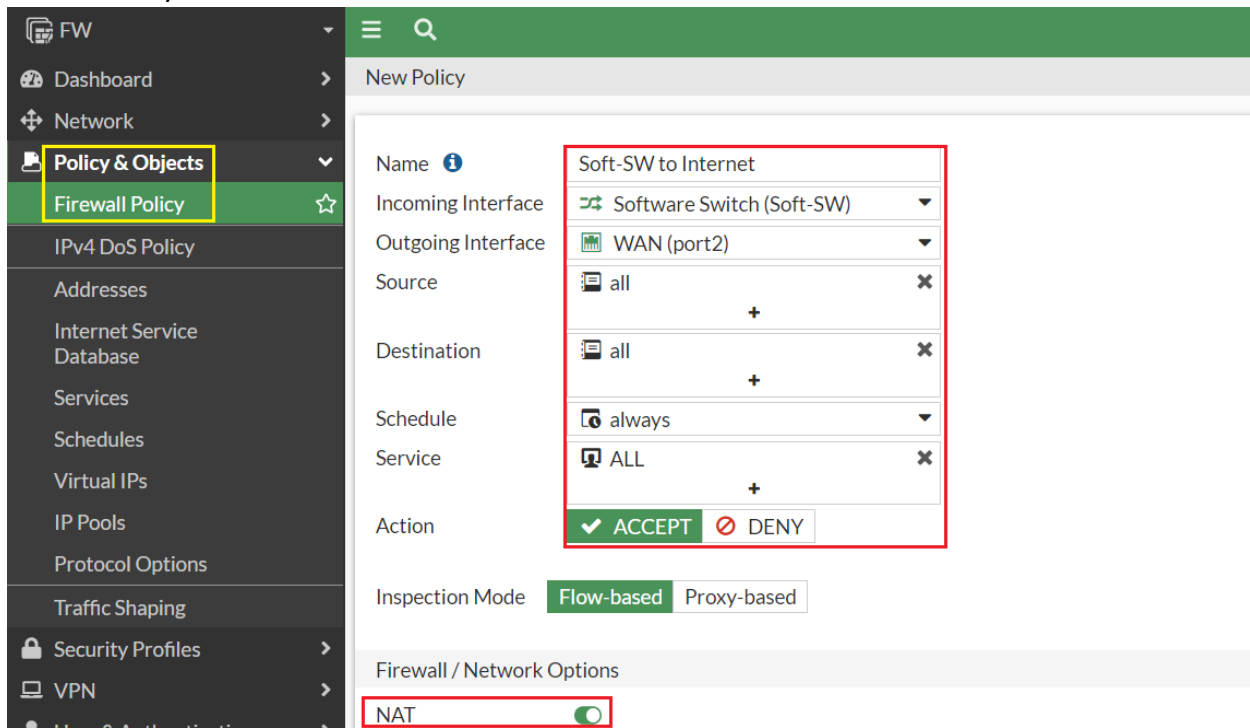


```
PC2
root@slax:~# ping 192.168.1.254
PING 192.168.1.254 (192.168.1.254) 56(84) bytes of data.
64 bytes from 192.168.1.254: icmp_seq=1 ttl=255 time=1.30 ms
64 bytes from 192.168.1.254: icmp_seq=2 ttl=255 time=0.547 ms
^C
--- 192.168.1.254 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.547/0.926/1.306/0.380 ms
root@slax:~#
```

If you want to allow Software switch to access internet let's create a default route first.



Create Policy to allow Software Switch to WAN internet enable NAT click OK.



Try to access any website or Ping from internal PC1, PC2 or PC3 it will work.