



# **IT3010**

## **Network Design & Management**

### **3<sup>rd</sup> Year, 1<sup>st</sup> Semester**

**<Assignment 01>**

**<Assignment Name/Lab Report Name>**

Submitted to

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## **Declaration**

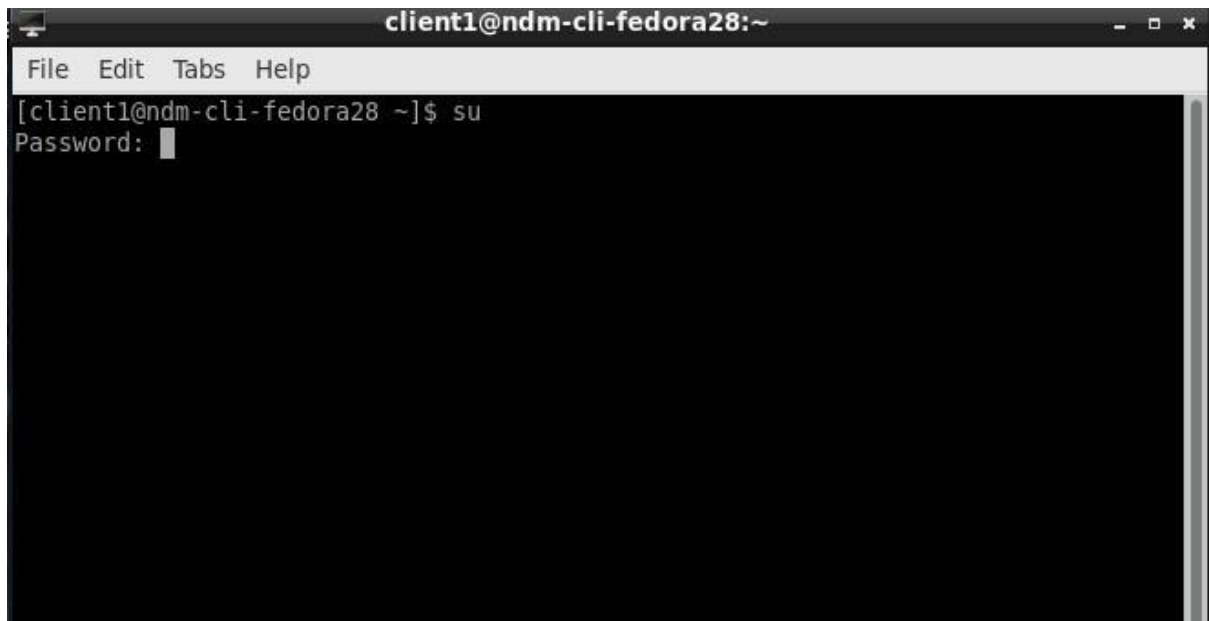
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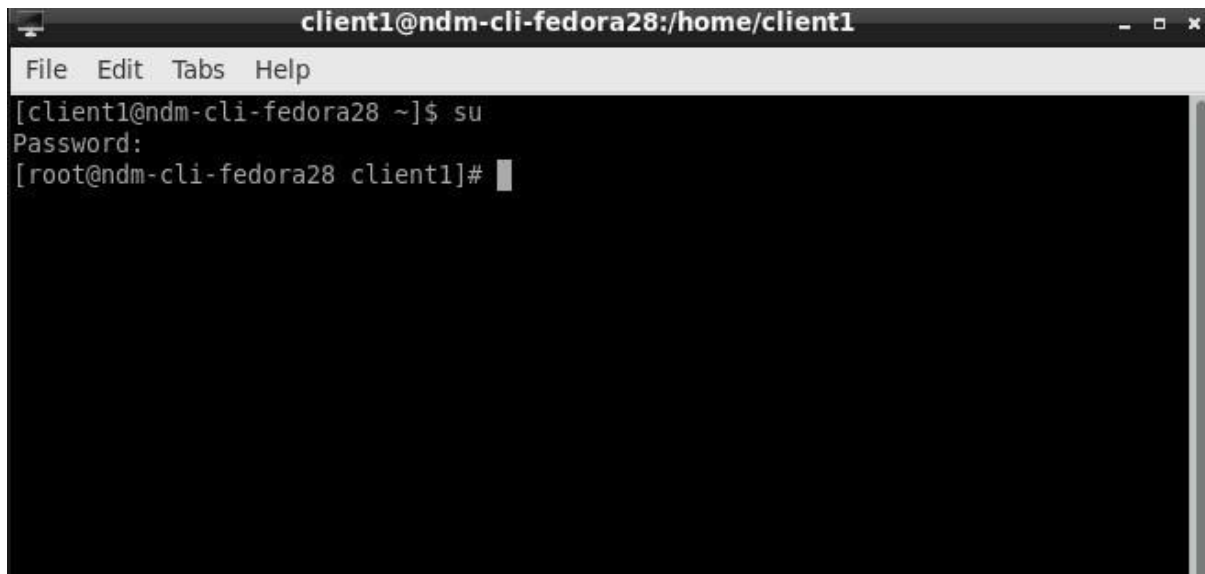
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*Figure 1.1: Login to configure mode*

Login to configure mode to configuring the network setting



```
client1@ndm-cli-fedora28:/home/client1
File Edit Tabs Help
[client1@ndm-cli-fedora28 ~]$ su
Password:
[root@ndm-cli-fedora28 client1]#
```

Figure 2.1: configuration mode on

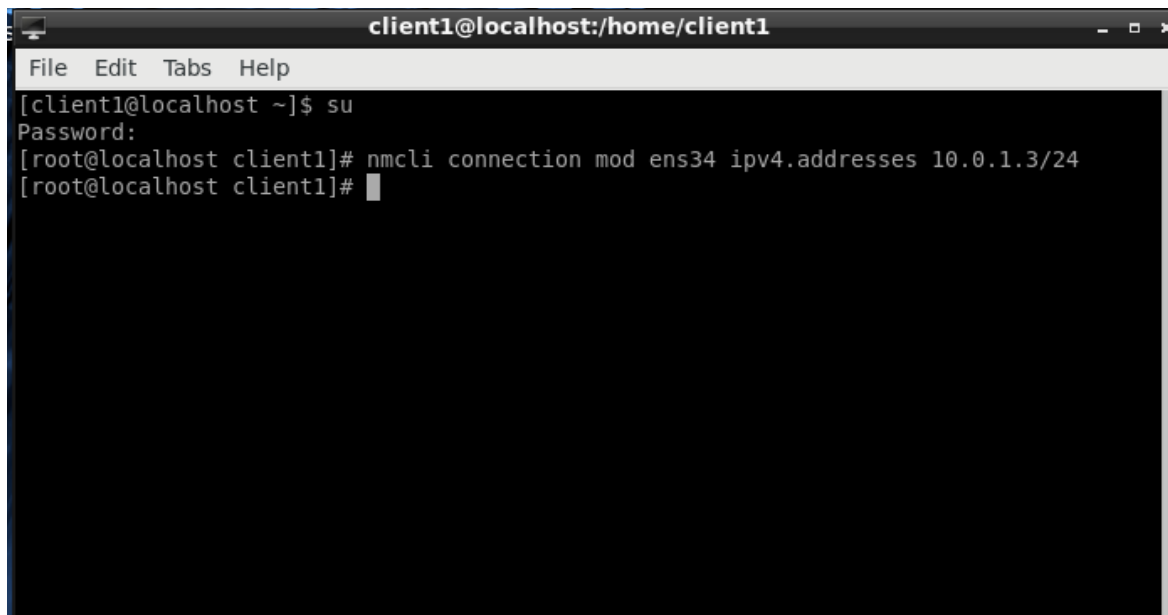


```
client1@ndm-cli-fedora28:/home/client1
File Edit Tabs Help
[client1@ndm-cli-fedora28 ~]$ su
Password:
[root@ndm-cli-fedora28 client1]# clear
[root@ndm-cli-fedora28 client1]# nmcli device
```

DEVICE	TYPE	STATE	CONNECTION
ens34	ethernet	connected	ens34
ens33	ethernet	connecting (getting IP configuration)	ens33
lo	loopback	unmanaged	--

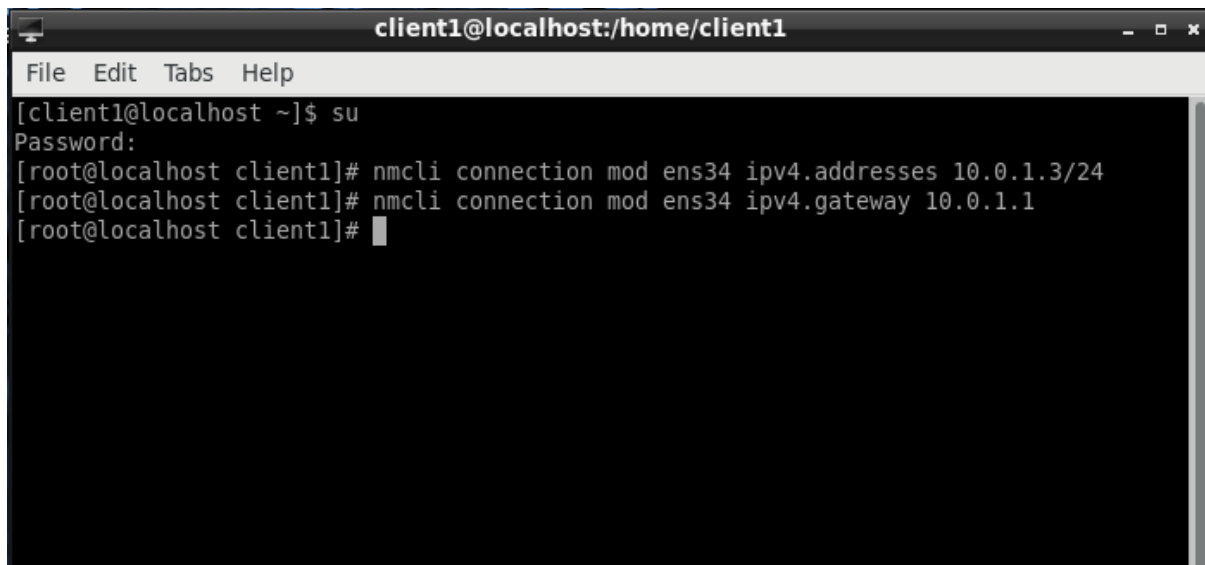
Figure 3.1: Check the connection

Check the connection using [ nmcli device] command. It was showing us to assigned ip address and gateways.



```
client1@localhost:/home/client1
File Edit Tabs Help
[client1@localhost ~]$ su
Password:
[root@localhost client1]# nmcli connection mod ens34 ipv4.addresses 10.0.1.3/24
[root@localhost client1]#
```

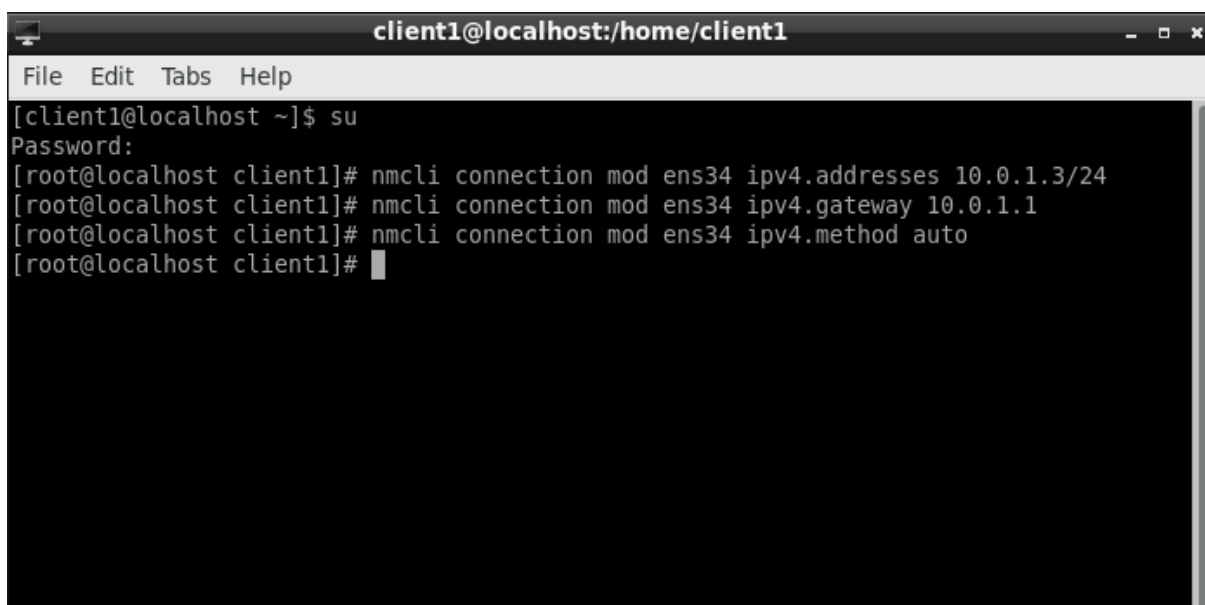
*Figure 4.1:Assign the ip address*

A terminal window titled 'client1@localhost:/home/client1' with a menu bar (File, Edit, Tabs, Help). The terminal shows a user switching to root and using nmcli to modify the ens34 connection. The commands are: 'nmcli connection mod ens34 ipv4.addresses 10.0.1.3/24' and 'nmcli connection mod ens34 ipv4.gateway 10.0.1.1'. The prompt returns to root@localhost client1# after each command.

```
client1@localhost:/home/client1
File Edit Tabs Help
[client1@localhost ~]$ su
Password:
[root@localhost client1]# nmcli connection mod ens34 ipv4.addresses 10.0.1.3/24
[root@localhost client1]# nmcli connection mod ens34 ipv4.gateway 10.0.1.1
[root@localhost client1]#
```

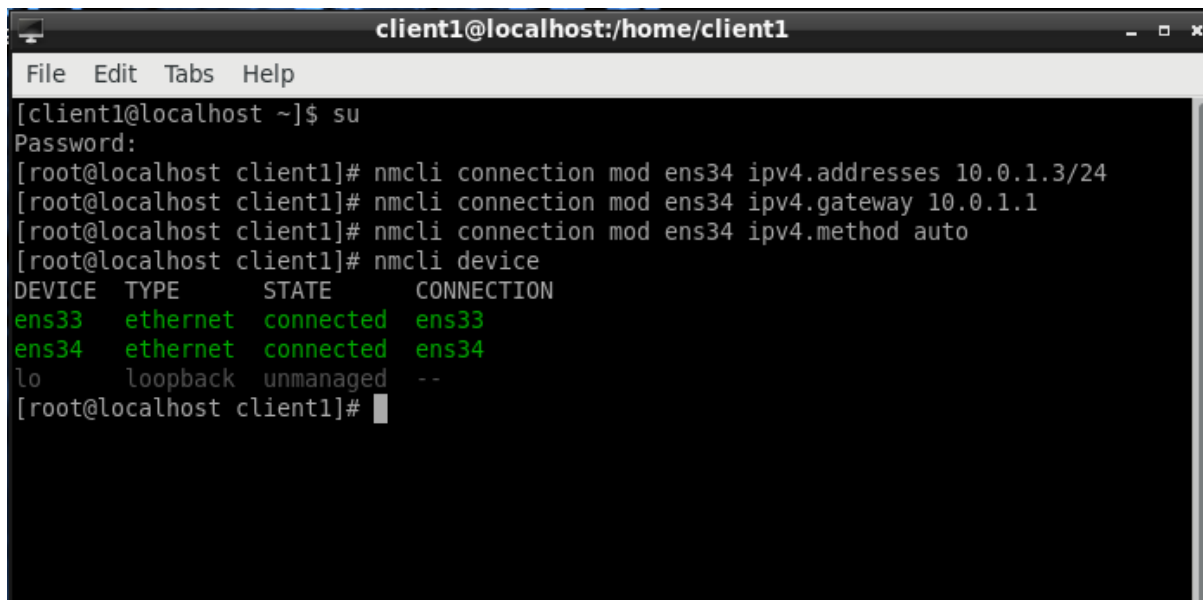
*Figure 5.1:Assign the gateway*

Controlling the network by assign the client ip address and gateway.

A terminal window titled 'client1@localhost:/home/client1' with a menu bar (File, Edit, Tabs, Help). The terminal shows a user switching to root and using nmcli to modify the ens34 connection. The commands are: 'nmcli connection mod ens34 ipv4.addresses 10.0.1.3/24', 'nmcli connection mod ens34 ipv4.gateway 10.0.1.1', and 'nmcli connection mod ens34 ipv4.method auto'. The prompt returns to root@localhost client1# after each command.

```
client1@localhost:/home/client1
File Edit Tabs Help
[client1@localhost ~]$ su
Password:
[root@localhost client1]# nmcli connection mod ens34 ipv4.addresses 10.0.1.3/24
[root@localhost client1]# nmcli connection mod ens34 ipv4.gateway 10.0.1.1
[root@localhost client1]# nmcli connection mod ens34 ipv4.method auto
[root@localhost client1]#
```

*Figure 6.1:Assign the client method-auto*



A terminal window titled "client1@localhost:/home/client1" with a menu bar (File, Edit, Tabs, Help). The terminal shows a user switching to root and configuring the network interface ens34. The configuration commands are: nmcli connection mod ens34 ipv4.addresses 10.0.1.3/24, nmcli connection mod ens34 ipv4.gateway 10.0.1.1, and nmcli connection mod ens34 ipv4.method auto. Finally, the user runs nmcli device, which displays a table of network devices.

```
[client1@localhost ~]$ su
Password:
[root@localhost client1]# nmcli connection mod ens34 ipv4.addresses 10.0.1.3/24
[root@localhost client1]# nmcli connection mod ens34 ipv4.gateway 10.0.1.1
[root@localhost client1]# nmcli connection mod ens34 ipv4.method auto
[root@localhost client1]# nmcli device
```

DEVICE	TYPE	STATE	CONNECTION
ens33	ethernet	connected	ens33
ens34	ethernet	connected	ens34
lo	loopback	unmanaged	--

```
[root@localhost client1]#
```

*Figure 7.1: Again check the connection*

Again, check the connection whether it was connected or not.



