Melbourne Institute of Technology

Sydney

MN521

Network Automation

Lab 02

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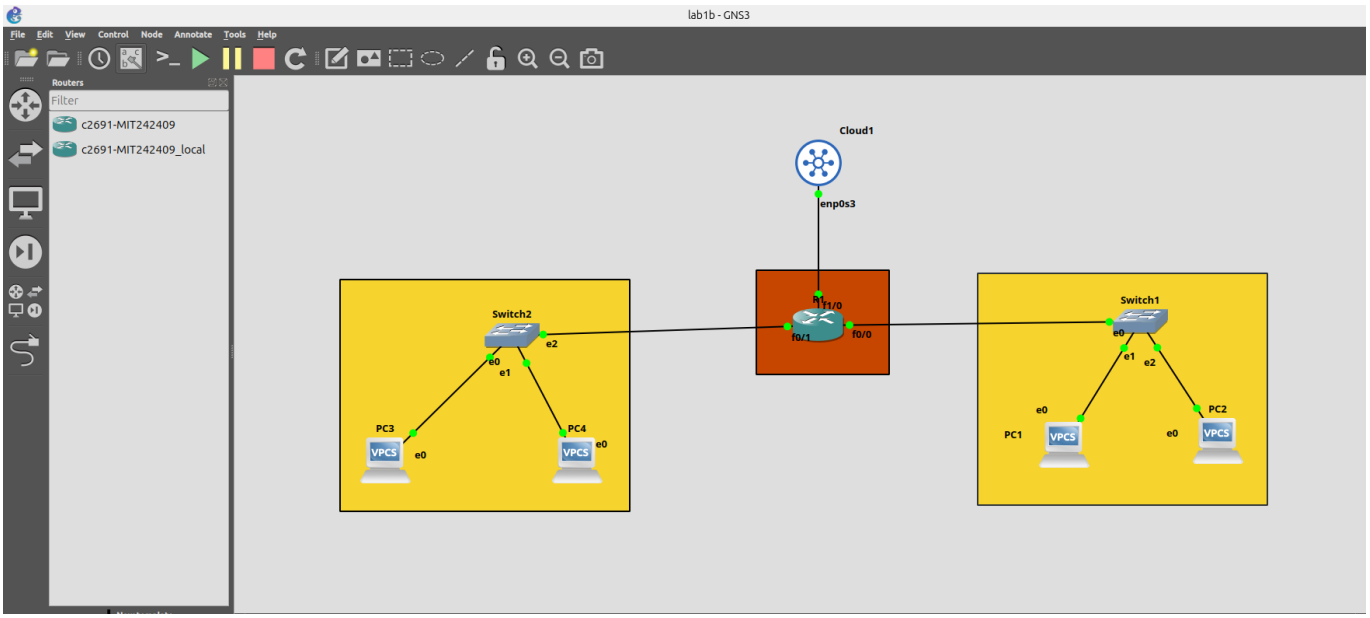
1. Creating the Network Topology in GNS3



2. Configuration of Router Interfaces

```
R1#
R1#sh ip int brief
Interface                  IP-Address      OK? Method Status                Prot
ocol
FastEthernet0/0            192.168.1.1     YES NVRAM  up                    up

FastEthernet0/1            192.168.2.1     YES NVRAM  up                    up

FastEthernet1/0            10.0.2.16       YES DHCP   up                    up
```

3. Configuring IP on PCs

```
PC1> ip 192.168.1.2/24 192.168.1.1
Checking for duplicate address...
PC1 : 192.168.1.2 255.255.255.0 gateway 192.168.1.1
```

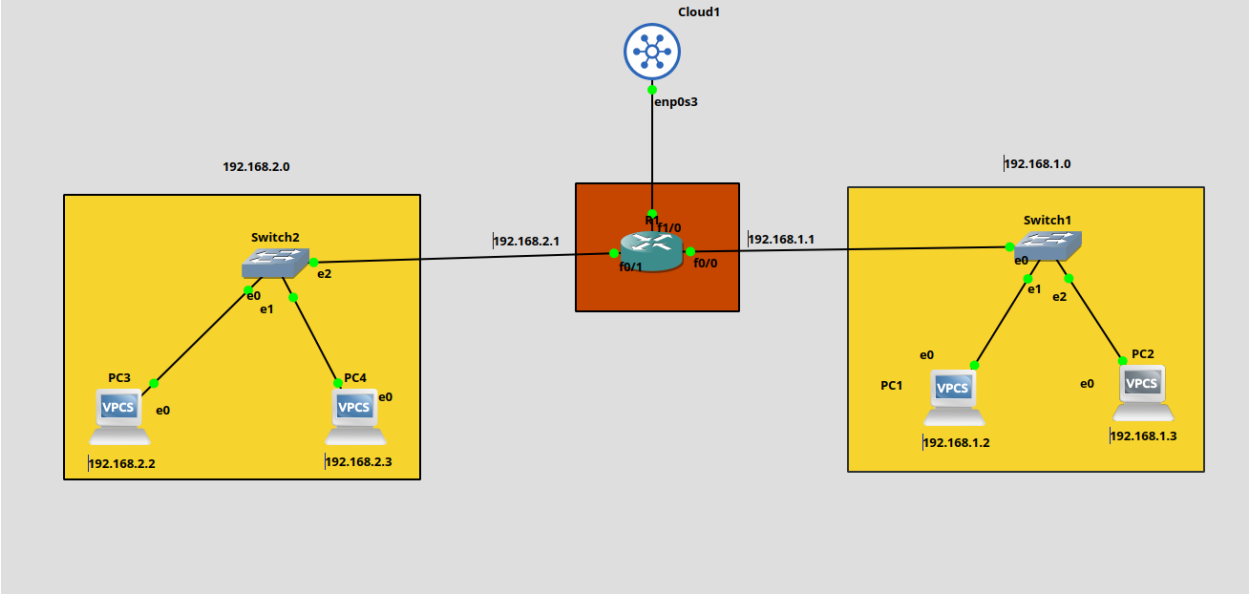
```
PC2> ip 192.168.1.3/24 192.168.1.1
Checking for duplicate address...
PC2 : 192.168.1.3 255.255.255.0 gateway 192.168.1.1
```

```
PC3> ip 192.168.2.2/24 192.168.2.1
Checking for duplicate address...
PC3 : 192.168.2.2 255.255.255.0 gateway 192.168.2.1
```

```
PC4> ip 192.168.2.3/24 192.168.2.1
Checking for duplicate address...
PC4 : 192.168.2.3 255.255.255.0 gateway 192.168.2.1
```

4. Pinging across PCs on Different Subnets

```
192.168.1.2 icmp_seq=1 timeout
84 bytes from 192.168.1.2 icmp_seq=2 ttl=63 time=26.008 ms
84 bytes from 192.168.1.2 icmp_seq=3 ttl=63 time=21.698 ms
84 bytes from 192.168.1.2 icmp_seq=4 ttl=63 time=25.520 ms
84 bytes from 192.168.1.2 icmp_seq=5 ttl=63 time=22.722 ms
```



Saved the configuration shell script to configure router remotely

ubuntu@ubuntu2204: ~

```
#!/bin/bash
# Variables
username="cisco"
password="cisco"
router_ip="10.0.60.8"
ssh_command="ssh -o KexAlgorithms=diffie-hellman-group1-sha1 -o HostKeyAlgorithms=ssh-rsa  -o StrictH

# SSH into the router and execute commands
sshpass -p $password $ssh_command $username@$router_ip << EOF
enable
configure terminal
EOF

echo "Configuration complete."

~
~
~
~
~
~
~
~
"configure_router.sh" 15L, 391B
```

Executing the configuration bash file