



CSE421 Lab Project

Fall-2021

Section: 6

TOPIC: 1

| Student ID | Student Name |
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VLSM TABLE

| <i>Networks</i> | <i>Host</i> | <i>IP</i> | <i>Give</i> | <i>Prefix</i> | <i>Network</i> | <i>Broadcast</i> | <i>Host IP Range</i> |
|-----------------|-------------|-----------|-------------|---------------|----------------|------------------|----------------------------------|
| Atlantis | 2048 | 2050 | 4096 | 20 | 192.168.0.0 | 192.168.15.255 | 192.168.0.1 - 192.168.15.254 |
| Amazonia | 1024 | 1026 | 2048 | 21 | 192.168.16.0 | 192.168.23.255 | 192.168.16.1 - 192.168.23.254 |
| Gotham | 512 | 514 | 1024 | 22 | 192.168.25.0 | 192.168.27.255 | 192.168.24.1 - 192.168.27.254 |
| Metropolis | 256 | 258 | 512 | 23 | 192.168.28.0 | 192.168.29.255 | 192.168.28.1 - 192.168.29.254 |
| Star City | 128 | 130 | 256 | 24 | 192.168.30.0 | 192.168.30.255 | 192.168.30.1 - 192.168.30.254 |
| Coast City | 64 | 66 | 128 | 25 | 192.168.31.0 | 192.168.31.127 | 192.168.31.1 - 192.168.31.126 |
| L_1 | 2 | 2 | 4 | 30 | 192.168.10.0 | 192.168.10.3 | 192.168.10.1 - 192.168.10.2 |
| L_2 | 2 | 2 | 4 | 30 | 192.168.20.0 | 192.168.20.3 | 192.168.20.1 - 192.168.20.2 |
| L_3 | 2 | 2 | 4 | 30 | 192.168.35.0 | 192.168.35.3 | 192.168.35.1 - 192.168.35.2 |
| L_4 | 2 | 2 | 4 | 30 | 192.168.34.0 | 192.168.34.3 | 192.168.34.1 - 192.168.34.2 |
| L_5 | 2 | 2 | 4 | 30 | 192.168.32.0 | 192.168.32.3 | 192.168.32.1 - 192.168.32.2 |
| L_6 | 2 | 2 | 4 | 30 | 192.168.33.0 | 192.168.33.3 | 192.168.33.1 - 192.168.33.2 |
| | | | | | | | |

End-devices configuration:

PC 0- 192.168.10.11

PC 1- 192.168.10.12

PC2- 192.168.32.2

PC3- 192.168.32.3

PC4- 192.168.33.2

Laptop0- 192.168.33.3

PC5- 192.168.34.2

PC6- 192.168.34.3

PC7- 192.168.20.11

PC8- 192.168.20.12

PC9- 192.168.30.2

PC10- 192.168.30.3

COMMANDS:

Atlantis>enable

Atlantis#

Atlantis#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Atlantis(config)#interface FastEthernet0/0

Atlantis(config-if)#

Atlantis(config-if)#exit

Atlantis(config)#interface FastEthernet0/1

Atlantis(config-if)#

Atlantis(config-if)#exit

Atlantis(config)#interface FastEthernet0/0

Atlantis(config-if)#

Atlantis(config-if)#exit

Atlantis(config)#interface FastEthernet0/1

Atlantis(config-if)#

Atlantis(config-if)#exit

Atlantis(config)#interface FastEthernet0/1

Atlantis(config-if)#ip address 192.168.1.1 255.255.255.0

Atlantis(config-if)#

```
Amazonia>enable
Amazonia#
Amazonia#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Amazonia(config)#interface FastEthernet0/1
Amazonia(config-if)# ip address 192.168.42.1 255.255.252.0
Amazonia(config-if)#
Amazonia(config-if)#exit
Amazonia(config)#
Amazonia(config)#
```

```
Gotham>enable
Gotham#
Gotham#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Gotham(config)#interface Serial0/0/0
Gotham(config-if)#
Gotham(config-if)#exit
Gotham(config)#interface Serial0/0/1
Gotham(config-if)#
Gotham(config-if)#exit
Gotham(config)#interface Serial0/0/0
Gotham(config-if)#
Gotham(config-if)#exit
Gotham(config)#interface Serial0/0/1
Gotham(config-if)#
```

```
Star_City>enable
Star_City#
Star_City#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Star_City(config)#interface FastEthernet0/0
Star_City(config-if)#
Star_City(config-if)#exit
Star_City(config)#interface FastEthernet0/1
Star_City(config-if)#
Star_City(config-if)#exit
Star_City(config)#interface Serial0/0/0
Star_City(config-if)#
Star_City(config-if)#exit
Star_City(config)#interface Serial0/0/1
Star_City(config-if)#
```

```
Metropolis>enable
Metropolis#
Metropolis#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
```

```
Metropolis(config)#interface FastEthernet0/1
Metropolis(config-if)#
Metropolis(config-if)#exit
Metropolis(config)#interface FastEthernet0/0
Metropolis(config-if)#
Metropolis(config-if)#exit
Metropolis(config)#interface FastEthernet0/1
Metropolis(config-if)#
Metropolis(config-if)#exit
Metropolis(config)#interface FastEthernet0/0
Metropolis(config-if)#
```

```
Coast_City>enable
Coast_City#
Coast_City#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Coast_City(config)#interface FastEthernet0/0
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface FastEthernet0/1
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface FastEthernet0/0
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface FastEthernet0/1
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface FastEthernet0/0
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface FastEthernet0/1
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface Serial0/0/1
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface Serial0/0/0
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface Serial0/0/1
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface Serial0/0/0
Coast_City(config-if)#
Coast_City(config-if)#exit
Coast_City(config)#interface Serial0/0/1
```

Coast_City(config-if)#

Assumptions:

Started the IP from 192.168.0.0/17

Considered 192.168.42.0 for establishing connect between Amazonia and Metropolis