Project

Group-8, Topic-2

"Game of Thrones"

Chosen network address: 162.128.0.0/18(Class B)

Class B because class B supports 65536 host on each of 16334 networks which seems appropriate to us. As we need 15308 IP Addresses in total in this network. So, to avoid excessive waste of IP we choose Class-B IP address. At the same time, we assign IP assesses to each device and interfaces by following the VSLM process.

#	Host Name	Host	IP	Given IP	Host bit	Net bit	IP address
A	The White Walkers	5000	5002	8192	13	19	162.128.0.0/19
B	The Stormlands	2000	2002	2048	11	21	162.128.32.0/21
C	The North	1024	1026	2048	11	21	162.128.40.0/21
D	The Reach	1000	1002	1024	10	22	162.128.48.0/22
E	The Iron Island	800	802	1024	10	22	162.128.52.0/22
F	The Rocks	480	482	512	9	23	162.128.56.0/23
G	The Mountain Vale	250	252	256	8	24	162.128.58.0/24
H	The Drone	124	126	128	7	25	162.128.59.0/25
I	Walker Land & Mount Drone	2	4	4	2	30	162.128.59.192/30
J	NR way & R Land	2	4	4	2	30	162.128.59.196/30
K	R Land & Mount Drone	2	4	4	2	30	162.128.59.200/30
L	NR way & Mount Drone	2	4	4	2	30	162.128.59.204/30

#	Host Name	Host	IP	Given IP	Host bit	Net bit	IP address
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B	The Stormlands	2000	2002	2048	11	21	162.128.32.0/21
C	The North	1024	1026	2048	11	21	162.128.40.0/21
D	The Reach	1000	1002	1024	10	22	162.128.48.0/22
E	The Iron Island	800	802	1024	10	22	162.128.52.0/22
F	The Rocks	480	482	512	9	23	162.128.56.0/23
G	The Mountain Vale	250	252	256	8	24	162.128.58.0/24
H	The Drone	124	126	128	7	25	162.128.59.0/25
I	------------------------	3	5	8	3	29	162.128.59.128/29
J	------------------------	3	5	8	3	29	162.128.59.136/29
K	------------------------	3	5	8	3	29	162.128.59.144/29
L	------------------------	3	5	8	3	29	162.128.59.152/29
M	------------------------	3	5	8	3	29	162.128.59.160/29
N	------------------------	3	5	8	3	29	162.128.59.168/29
O	------------------------	3	5	8	3	29	162.128.59.176/29
P	------------------------	3	5	8	3	29	162.128.59.184/29
Q	Walker Land & Mount Drone	2	4	4	2	30	162.128.59.192/30
R	NR way & R Land	2	4	4	2	30	162.128.59.196/30
S	R Land & Mount Drone	2	4	4	2	30	162.128.59.200/30
T	NR way & Mount Drone	2	4	4	2	30	162.128.59.204/30

Device	Interface	IP Address	Subnet Mask	Default Gateway
Walker Land	FastEthernet0/0	162.128.0.5	255.255.224.0	N/A
	FastEthernet0/1	162.128.32.5	255.255.248.0	N/A
	Serial10/2	162.128.59.193	255.255.255.252	N/A
NR Way	FastEthernet0/0	162.128.40.5	255.255.248.0	N/A
	FastEthernet0/1	162.128.48.5	255.255.252.0	N/A
	Serial10/0	162.128.59.198	255.255.255.252	N/A
	Serial10/1	162.128.59.205	255.255.255.252	N/A
	FastEthernet0/0	162.128.52.5	255.255.252.0	N/A
	FastEthernet0/1	162.128.56.5	255.255.254.0	N/A
	Serial10/0	162.128.59.197	255.255.255.252	N/A
R Isand	Serial10/1	162.128.59.202	255.255.255.252	N/A
	FastEthernet0/0	162.128.58.5	255.255.255.0	N/A
	FastEthernet0/1	162.128.59.5	255.255.255.128	N/A
	Serial10/0	162.128.59.194	255.255.255.252	N/A
	Serial10/1	162.128.59.201	255.255.255.252	N/A
Mount drone	Serial0/2	162.128.59.206	255.255.255.252	N/A
Night King	NIC	162.128.0.1	255.255.224.0	162.128.0.5

Server of White Walkers	NIC	162.128.0.3	255.255.224.0	162.128.0.5
Robert	NIC	162.128.32.1	255.255.248.0	162.128.32.5
Renly	NIC	162.128.32.5	255.255.248.0	162.128.32.5
Eddard	NIC	162.128.40.1	255.255.248.0	162.128.40.5
Arya	NIC	162.128.48.1	255.255.248.0	162.128.40.5
Margaery	NIC	162.128.8.3	255.255.252.0	162.128.48.5
Olenna	NIC	162.128.59.1	255.255.252.0	162.128.48.5
Edruyn	NIC	162.128.52.1	255.255.252.0	162.128.52.5
Printer of Iron Island	NIC	162.128.52.3	255.255.252.0	162.128.52.5
Cersei	NIC	162.128.56.3	255.255.254.0	162.128.56.5
Server Of the rocks	NIC	162.128.56.1	255.255.254.0	162.128.56.2
Lysa	NIC	162.128.58.1	255.255.255.0	162.128.58.5
Robin	NIC	162.128.58.3	255.255.255.0	162.128.58.5
Oberyn	NIC	162.128.59.1	255.255.255.128	162.128.59.5
Doran	NIC	162.128.59.3	255.255.255.128	162.128.59.5

"Commands"

Walker Land:

Router>en

Router#conf t

Router(config)#

Router(config)#interface serial 0/2

Router(config-if)#ip address 162.128.159.193 255.255.255.252

Router(config-if)# clock rate 6400

Router(config)#no shutdown

Router(config)#exit

Router(config-if)# interface f0/0

Router(config-ip)# ip address 162.128.32.1 255.255.224.0

Router(config-if)# no shutdown

Router(config-if)# interface f0/1

Router(config-if)# ip address 162.128.32.3 255.255.224.0

Router(config-if)# no shutdown

Router>en

Router#conf t

Router(config)#ip route 0.0.0.0 0.0.0.0 162.128.59.194

Router(config)#exit

```
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 0.0.0.0 0.0.0.0 162.128.59.206
Router(config)#ip route 0.0.0.0 0.0.0.0 162.128.59.197
Router(config)#ip route 162.128.52.0 255.255.252.0 162.128.59.194
Router(config)#ip route 162.128.56.0 255.255.254.0 162.128.59.194
Router(config)#ip route 162.128.58.0 255.255.255.0 162.128.59.194
Router(config)#ip route 162.128.59.0 255.255.255.128 162.128.59.194
Router(config)#exit
Router#

Router>enable
Router#conf t
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#no auto-summary
Router(config-router)#network 162.128.59.0
Router(config-router)#passive-interface f0/1
Router(config-router)#network 162.128.58.0
Router(config-router)#passive-interface f0/0
Router(config-router)#default-information originate
Router(config-router)#end
Router#copy run start
```

N R Way

Router>en

Router#conf t

Router(config)#

Router(config)#interface serial0/0

Router(config-if)#ip address162.128.59.198 255.255.255.252

Router(config-if)# clock rate 6400

Router(config)#no shutdown

Router(config)#exit

Router(config)#interface serial0/1

Router(config-if)#ip address162.128.59.205 255.255.255.252

Router(config-if)# clock rate 6400

Router(config)#no shutdown

Router(config)#exit

Router(config-if)# interface f0/0

Router(config-ip)# ip address 162.128.40.5 255.255.248.0

Router(config-if)# no shutdown

Router(config-if)# interface f0/1 162.128.40.3 255.255.248.0

Router(config-ip)# ip address 162.128.40.3 255.255.248.0

Router(config-if)# no shutdown

Router>en

Router#conf t

Router(config)#ip route 0.0.0.0 0.0.0.0 162.128.59.206

Router(config)#ip route 0.0.0.0 0.0.0.0 162.128.59.197

Router(config)#exit

Router#

Router>enable

Router#conf t

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#no auto-summary

Router(config-router)#network 162.128.52.0

Router(config-router)#passive-interface f0/0

Router(config-router)#network 162.128.56.0

Router(config-router)#passive-interface f0/1

Router(config-router)#network 162.128.58.0

Router(config-router)#passive-interface f0/0

Router(config-router)#network 162.128.59.0

Router(config-router)#passive-interface f0/1

Router(config-router)#default-information originate

Router(config-router)#end

Router#copy run start

R Island

Router>en

Router#conf t

Router(config)#

Router(config)#interface serial 0/0

Router(config-if)#ip address 162.128.59.197 255.255.255.252

Router(config)#no shutdown

Router(config)#exit

```
Router>en

Router#conf t

Router(config)#

Router(config)#interface serial 0/1

Router(config-if)#ip address 162.128.59.202 255.255.255.252

Router(config-if)# clock rate 6400

Router(config)#no shutdown

Router(config)#exit

Router(config-if)# interface f0/1

Router(config-ip)# ip address 162.128.52.5 255.255.248.0

Router(config-if)# no shutdown

Router(config-if)# interface f0/1

Router(config-ip)# ip address 162.128.56.5 255.255.254.0

Router(config-if)# no shutdown

Router>en

Router#conf t

Router(config)#ip route 0.0.0.0 0.0.0.0 162.128.59.201

Router(config)#ip route 0.0.0.0 0.0.0.0 162.128.59.198

Router(config)#exit

Router#

Router>enable

Router#conf t

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#no auto-summary

Router(config-router)#network 162.128.58.0
```

Router(config-router)#passive-interface f0/0

Router(config-router)#network 162.128.59.0

Router(config-router)#passive-interface f0/1

Router(config-router)#default-information originate

Router(config-router)#end

Router#copy run start

Mount Drone

Router>en

Router#conf t

Router(config)#

Router(config)#interface serial0/0

Router(config-if)#ip address 162.128.59.5 255.255.255.252

Router(config)#no shutdown

Router(config)#exit

Router>en

Router#conf t

Router(config)#

Router(config)#interface serial 0/1

Router(config-if)#ip address 162.128.59.202 255.255.255.252

Router(config)#no shutdown

Router(config)#exit

Router(config-if)# interface 0/0

Router(config-ip)# ip address 162.128.52.5 255.255.252.0

Router(config-if)# no shutdown

Router(config-if)# interface f 0/0

Router(config-ip)# ip address 162.128.56.5 255.255.254.0

Router(config-if)# no shutdown

Router>en

Router#conf t

Router(config)#ip route 0.0.0.0 0.0.0.0 168.128.59.193

Router(config)#ip route 0.0.0.0 0.0.0.0 168.128.59.205

Router(config)#ip route 0.0.0.0 0.0.0.0 168.128.59.202

Router(config)#ip route 162.128.32.0 255.255.255.248 162.128.59.193

Router(config)#exit

Router#

Router#

Router>enable

Router#conf t

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#no auto-summary

Router(config-router)#network 162.128.40.0

Router(config-router)#passive-interface f0/0

Router(config-router)#network 162.128.48.0

Router(config-router)#passive-interface f0/1

Router(config-router)#network 162.128.52.0

Router(config-router)#passive-interface f0/0

Router(config-router)#network 162.128.56.0

Router(config-router)#passive-interface f0/1

Router(config-router)#default-information originate

Router(config-router)#end

Router#copy run start