|  |  |  |  |
| --- | --- | --- | --- |
| Device | Interface | IP address | Default Gateway |
| Arkham Island | FA0/0 | 10.10.30.1/23 | N/A |
|  | SE0/0/0 | 10.10.32.26/29 | N/A |
|  | SE0/0/1 | 10.10.32.41/29 | N/A |
| City Hall | FA0/0 | 10.10.0.1/20 | N/A |
|  | SE0/0/0 | 10.10.32.42/29 | N/A |
|  | SE0/0/1 | 10.10.32.34/29 | N/A |
| East End | FA0/0 | 10.10.16.1/21 | N/A |
|  | SE0/0/0 | 10.10.32.25/29 | N/A |
|  | SE0/0/1 | 10.10.32.33/29 | N/A |
|  | SE0/1/0 | 10.10.32.10/29 | N/A |
|  | SE0/1/1 | 10.10.32.18/29 | N/A |
| Financial District | FA0/0 | 10.10.34.1/23 | N/A |
|  | SE0/0/0 | 10.10.32.17/29 | N/A |
| Crime Alley | FA0/0 | 10.10.24.1/22 | N/A |
|  | SE0/0/0 | 10.10.32.2/29 | N/A |
|  | SE0/0/1 | 10.10.32.9/29 | N/A |
| Diamond District | FA0/0 | 10.10.28.1/23 | N/A |
|  | SE0/0/0 | 10.10.32.1/29 | N/A |
| PC0 | N/A | 10.10.30.2/23 | 10.10.30.1 |
| PC1 | N/A | 10.10.30.3/23 | 10.10.30.1 |
| PC2 | N/A | 10.10.34.2/23 | 10.10.34.1 |
| PC3 | N/A | 10.10.34.3/23 | 10.10.34.1 |
| PC4 | NA | 10.10.24.2/22 | 10.10.24.1 |
| PC5 | NA | 10.10.24.3/22 | 10.10.24.1 |
| PC6 | N/A | 10.10.28.2/23 | 10.10.28.1 |
| PC7 | N/A | 10.10.28.3/23 | 10.10.28.1 |
| PC8 | N/A | 10.10.16.3/21 | 10.10.16.1 |
| PC9 | N/A | 10.10.16.2/21 | 10.10.16.1 |
| PC10 | N/A | 10.10.0.2/20 | 10.10.0.1 |
| PC11 | N/A | 10.10.0.3/20 | 10.10.0.1 |

City Hall District

Router>en

Router#config t

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

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.0.1 255.255.240.0

Router(config-if)#no shutdown

East End

Router>en

Router#config t

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

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.16.1 255.255.248.0

Router(config-if)#no shutdown

Crime Alley

Router>en

Router#config t

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

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.24.1 255.255.252.0

Router(config-if)#no shutdown

Diamond District

Router>en

Router#config t

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

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.28.1 255.255.254.0

Router(config-if)#no shutdown

Arkham Island

Router>en

Router#config t

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

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.30.1 255.255.254.0

Router(config-if)#no shutdown

Financial District

Router>en

Router#config t

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

Router(config)#interface fastethernet0/0

Router(config-if)#ip address 10.10.34.1 255.255.254.0

Router(config-if)#no shutdown

City Hall District

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.42 255.255.255.248

Router(config-if)#no shutdown

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.34 255.255.255.248

Router(config-if)#no shutdown

East End

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.25 255.255.255.248

Router(config-if)#no shutdown

Router>en

Router#config t

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

Router(config)#interface serial0/0/1

Router(config-if)#ip address 10.10.32.33 255.255.255.248

Router(config-if)#no shutdown

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.10 255.255.255.252

Router(config-if)#no shutdown

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.18 255.255.255.248

Router(config-if)#no shutdown

Crime Alley

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.2 255.255.255.248

Router(config-if)#no shutdown

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.9 255.255.255.248

Router(config-if)#no shutdown

Diamond District

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.1 255.255.255.248

Router(config-if)#no shutdown

Arkham Island

Router>en

Router#config t

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

Router(config)#interface serial0/0/0

Router(config-if)#ip address 10.10.32.26 255.255.254.248

Router(config-if)#no shutdown

Router>en

Router#config t

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

Router(config)#interface serial0/0/1

Router(config-if)#ip address 10.10.32.41 255.255.254.248

Router(config-if)#no shutdown

Financial District

Router>en

Router#config t

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

Router(config)#interface serial0/1/0

Router(config-if)#ip address 10.10.32.17 255.255.255.248

Router(config-if)#no shutdown

Static route

Arkham Island

Router(config)#ip route 10.10.16.0 255.255.255.248 serial0/0/0

Router(config)#ip route 10.10.0.0 255.255.255.240 serial0/0/0

City Hall District

Router(config)#ip route 10.10.30.0 255.255.255.254 serial0/0/1

Router(config)#ip route 10.10.16.0 255.255.255.248 serial0/0/1

East End

Router(config)#ip route 10.10.0.0 255.255.255.240 serial0/0/1

Router(config)#ip route 10.10.30.0 255.255.255.254 serial0/0/0

Dynamic route

Financial District

Router>en

Router #config t

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

Router(config)#router rip

Router(config-router)#version 2

Router (config-router)#no auto-summary

Router (config-router)#network 10.10.32.16

Router (config-router)#passive-interface Fa0/0

Router (config-router)#exit

Crime Alley

Router >en

Router #config t

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

Router (config)#router rip

Router (config-router)#version 2

Router (config-router)#no auto-summary

Router (config-router)#network 10.10.32.8

Router (config-router)#network 10.10.32.0

Router (config-router)#passive-interface Fa0/0

Router (config-router)#exit

Diamond District

Router>en

Route r#config t

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

Router (config)#router rip

Router (config-router)#version 2

Router (config-router)#no auto-summary

Router (config-router)#network 10.10.28.0

Router (config-router)#passive-interface Fa0/0

Router (config-router)#exit

**VLSM Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Host Name | Hosts No | Ip | Given | Host Bit | Network Bit |
| City Hall District (A) | 1024 | 1026 | 4096 | 12 | 20 |
| East End (B) | 522 | 524 | 2048 | 11 | 21 |
| Crime Alley (C) | 312 | 314 | 1024 | 10 | 22 |
| Diamond District (D) | 230 | 234 | 512 | 9 | 23 |
| Arkham Island (E) | 160 | 162 | 512 | 9 | 23 |
| Financial District (F) | 128 | 130 | 512 | 9 | 23 |
| WAN1 | 2 | 4 | 8 | 3 | 29 |
| WAN2 | 2 | 4 | 8 | 3 | 29 |
| WAN3 | 2 | 4 | 8 | 3 | 29 |
| WAN4 | 2 | 4 | 8 | 3 | 29 |
| WAN5 | 2 | 4 | 8 | 3 | 29 |
| WAN6 | 2 | 4 | 8 | 3 | 29 |

**VLSM Tree**

