

1.0.0.0/15

1.0.64.0/18

1.0.0.0/18b

1.0.96.0/20

1.0.64.0/20 1.0.80.0/20

1.0.80.0/21

1.0.88.0/21

1.0.88.0/22

1.0.92.0/22

1.0.96.0/23 1.0.98.0/23

1.0.100.0/23

1.0.100.0/29

1.0.100.16/29

1.0.100.8/29

1.0.100.24/29

1.0.100.48/29

1.0.100.40/29

1.0.100.32/29

1.0.100.56/29

Name	Network Address	Usable Range	Broadcast Address
Crius	1.0.0.0/18	1.0.0.1 - 1.0.63.254	1.0.63.255
Coeus	1.0.64.0/20	1.0.64.1 - 1.0.79.254	1.0.79.255
Tethys	1.0.80.0/21	1.0.80.1 - 1.0.87.254	1.0.87.255
Oceanus	1.0.88.0/22	1.0.88.1 - 1.0.91.254	1.0.91.255
Thea	1.0.92.0/22	1.0.92.1 - 1.0.95.254	1.0.95.255
Rhea	1.0.96.0/23	1.0.96.1 - 1.0.97.254	1.0.97.255
Hyperion	1.0.98.0/23	1.0.98.1 - 1.0.99.254	1.0.99.255
R <sub>1</sub>	1.0.100.0/29	1.0.100.1 - 1.0.100.6	1.0.100.7
R <sub>2</sub>	1.0.100.8/29	1.0.100.9 - 1.0.100.14	1.0.100.15
R <sub>3</sub>	1.0.100.16/29	1.0.100.17 - 1.0.100.22	1.0.100.23
R <sub>4</sub>	1.0.100.24/29	1.0.100.25 - 1.0.100.30	1.0.100.31
R <sub>5</sub>	1.0.100.32/29	1.0.100.33 - 1.0.100.38	1.0.100.39
R <sub>6</sub>	1.0.100.40/29	1.0.100.41 - 1.0.100.46	1.0.100.47
R <sub>7</sub>	1.0.100.48/29	1.0.100.49 - 1.0.100.54	1.0.100.55
R <sub>8</sub>	1.0.100.56/29	1.0.100.57 - 1.0.100.62	1.0.100.63

Subnet Mask:

~~255.255.255.192.0~~

255.255.240.0

255.255.248.0

255.255.252.0

255.255.252.0

255.255.254.0

255.255.254.0

255.255.255.248

255.255.255.248

255.255.255.248

255.255.255.248

255.255.255.248

255.255.255.248

255.255.255.248

255.255.255.248

Device	Interface	IP Address	Subnet mask	Default gateway
Crius	Se0/0/0	1.0.100.17	255.255.255.248	N/A
	Se0/1/0	1.0.100.10	255.255.255.248	N/A
	G0/0	1.0.0.1	255.255.192.0	N/A
Coeus	Se0/0/0	1.0.100.2	255.255.255.248	N/A
	Se0/0/1	1.0.100.9	255.255.255.248	N/A
	G0/0	1.0.64.1	255.255.240.0	N/A
Tethys	Se0/0/0	1.0.100.25	255.255.255.248	N/A
	Se0/0/1	1.0.100.49	255.255.255.248	N/A
	G0/0	1.0.80.1	255.255.248.0	N/A
Oceanus	Se0/0/0	1.0.100.57	255.255.255.248	N/A
	G0/0	1.0.88.1	255.255.252.0	N/A
Thea	Se0/0/0	1.0.100.42	255.255.255.248	N/A
	G0/0	1.0.92.1	255.255.252.0	N/A
Rhea	Se0/1/0	1.0.100.41	255.255.255.248	N/A
	Se0/0/1	1.0.100.18	255.255.255.248	N/A
	G0/0	1.0.96.1	255.255.254.0	N/A
	Se0/0/0	1.0.100.27	255.255.255.248	N/A
Hyperion	G0/0	1.0.98.1	255.255.254.0	N/A
	Se0/0/0	1.0.100.1	255.255.255.248	N/A
	Se0/0/1	1.0.100.50	255.255.255.248	N/A
PC0	NIC	1.0.88.2	255.255.252.0	1.0.88.1
PC1	NIC	1.0.88.4	255.255.252.0	1.0.88.1
Email Server	NIC	1.0.88.3	255.255.252.0	1.0.88.1
PC2	NIC	DHCP Assigned (1.0.64.11) / 1.0.64.2	DHCP Assigned (255.0.0.0)/ 255.255.240.0	DHCP Assigned/ 1.0.64.1
PC3	NIC	DHCP Assigned (1.0.64.12) / 1.0.64.3	DHCP Assigned (255.0.0.0)/ 255.255.240.0	DHCP Assigned/ 1.0.64.1
PC4	NIC	DHCP Assigned/ 1.0.0.3	DHCP Assigned/ 255.255.192.0	DHCP Assigned/ 1.0.0.1
PC5	NIC	DHCP Assigned/ 1.0.0.2	DHCP Assigned/ 255.255.192.0	DHCP Assigned/ 1.0.0.1
PC6	NIC	DHCP Assigned/ 1.0.98.2	DHCP Assigned/ 255.255.254.0	DHCP Assigned/ 1.0.98.1
PC7	NIC	DHCP Assigned/ 1.0.98.3	DHCP Assigned/ 255.255.254.0	DHCP Assigned/ 1.0.98.1

PC8	NIC	1.0.80.2	255.255.248.0	1.0.80.1
Laptop2	NIC	1.0.80.3	255.255.248.0	1.0.80.1
PC9	NIC	1.0.96.2	255.255.254.0	1.0.96.1
Laptop0	NIC	1.0.96.3	255.255.254.0	1.0.96.1
Web Server	NIC	1.0.96.4	255.255.254.0	1.0.96.1
PC10	NIC	1.0.92.2	255.255.252.0	1.0.92.1
Laptop1	NIC	1.0.92.3	255.255.252.0	1.0.92.1
Sister email server	NIC	1.0.96.5	255.255.255.254	1.0.96.1

Router>enable

Router#conf t

Router(config)#hostname Hyperion

Hyperion (config)#no ip domain-lookup

Hyperion (config)#interface gigabitethernet 0/0

Hyperion (config-if)#ip address 1.0.98.1 255.255.254.0

Hyperion (config-if)#no shut

Hyperion (config-if)#interface serial 0/0/0

Hyperion (config-if)#ip address 1.0.100.1 255.255.255.248

Hyperion (config-if)#clock rate 64000

Hyperion (config-if)#no shut

Router>enable

Router#conf t

Router(config)#hostname Coeus

Coeus(config)#no ip domain-lookup

Coeus(config)#interface serial 0/0/0

Coeus(config-if)#ip address 1.0.100.2 255.255.255.248

Coeus(config-if)#no shut

Coeus (config)#interface gigabitethernet 0/0/

Coeus (config-if)#ip address 1.0.64.1 255.255.240.0

Coeus (config-if)#no shut

Coeus(config-if)#interface serial 0/0/1

Coeus(config-if)#ip address 1.0.100.9 255.255.255.248

Coeus(config-if)#no shut

Router>enable

Router#conf t

Router(config)#hostname Crius

Crius(config)#no ip domain-lookup

Crius(config)#interface serial 0/1/0

Crius(config-if)#ip address 1.0.100.10 255.255.255.248

Crius(config-if)#no shut

Crius(config-if)#interface gigabitethernet 0/0

Crius(config-if)#ip address 1.0.0.1 255.255.192.0

Crius(config-if)#no shut

Crius(config-if)#interface serial 0/0/0

Crius(config-if)#ip address 1.0.100.17 255.255.255.248

Crius(config-if)#no shut

Router>enable

Router#conf t

Router(config)#hostname Rhea

Rhea(config)#no ip domain-lookup

Rhea(config)#interface serial 0/0/1

Rhea(config-if)#ip address 1.0.100.18 255.255.255.248

Rhea(config-if)#no shut

Rhea(config-if)#interface gigabitethernet 0/0

Rhea(config-if)#ip address 1.0.96.1 255.255.254.0

Rhea(config-if)#no shut

Rhea(config)#interface serial 0/1/0

Rhea(config-if)#ip address 1.0.100.41 255.255.255.248

Rhea(config-if)#no shut

Router>enable

Router#conf t

Router(config)#hostname Tethys

Tethys(config)#no ip domain-lookup

Tethys(config)#interface gigabitethernet 0/0

Tethys(config-if)#ip address 1.0.80.1 255.255.248.0

Tethys(config-if)#no shut

Tethys(config-if)#interface serial 0/0/0

Tethys(config-if)#ip address 1.0.100.25 255.255.255.248

Tethys(config-if)#no shut

Tethys(config-if)#interface serial 0/0/0

Tethys(config-if)#ip address 1.0.100.26 255.255.255.248

Tethys(config-if)#no shut

Router>enable

Router#conf t

Router(config)#hostname Thea

Thea(config)#no ip domain-lookup

Thea(config-if)#interface gigabitethernet 0/0

Thea(config-if)#ip address 1.0.92.1 255.255.252.0

Thea(config-if)#no shut

Thea(config)#interface serial 0/0/0

Thea(config-if)#ip address 1.0.100.42 255.255.255.248

Thea(config-if)#no shut

Floating route

Hyperion>en

Hyperion#conf t

Hyperion(config)#interface serial 0/0/1

Hyperion(config-if)#ip address 1.0.100.50 255.255.255.248

Hyperion(config-if)#no shut

Tethys>en

Tethys#conf t

Tethys(config)#interface serial 0/0/1

Tethys(config-if)#ip address 1.0.100.49 255.255.255.248

Tethys(config-if)#no shut

Routing:

Tethys>enable

Tethys#conf t

Tethys(config)#router rip

Tethys(config-router)#version 2

Tethys(config-router)#no auto-summary

Tethys(config-router)#network 1.0.80.0

Tethys(config-router)#network 1.0.92.0

Tethys(config-router)#passive-interface gig0/0

Tethys(config-router)#end

Thea>enable

Thea#conf t

```
Thea(config)#router rip
Thea(config-router)#version 2
Thea(config-router)#no auto-summary
Thea(config-router)#network 1.0.92.0
Thea(config-router)#network 1.0.80.0
Thea(config-router)#passive-interface gig0/0
Thea(config-router)#end
```

Rhea>enable

```
Rhea#conf t
Rhea(config)#router rip
Rhea(config-router)#version 2
Rhea(config-router)#no auto-summary
Rhea(config-router)#network 1.0.96.0
Rhea(config-router)#network 1.0.80.0
Rhea(config-router)#passive-interface gig0/0
Rhea(config-router)#end
```

Thea>enable

```
Thea#conf t
Thea(config)#router rip
Thea(config-router)#version 2
Thea(config-router)#no auto-summary
Thea(config-router)#network 1.0.92.0
Thea(config-router)#network 1.0.96.0
Thea(config-router)#passive-interface gig0/0
Thea(config-router)#end
```

Default route:

```
Thea(config)#ip route 0.0.0.0 0.0.0.0 1.0.96.0
Hyperion(config)#ip route 0.0.0.0 0.0.0.0 1.0.96.0
Crius(config)#ip route 0.0.0.0 0.0.0.0 1.0.96.0
Coeus(config)#ip route 0.0.0.0 0.0.0.0 1.0.96.0
Tethys(config)#ip route 0.0.0.0 0.0.0.0 1.0.96.0
```

Floating route:

```
Hyperion(config)#ip route 1.0.96.0 255.255.254.0 1.0.100.2 10
Rhea(config)#ip route 1.0.98.0 255.255.254.0 1.0.100.17 10
```



