IP Configuration

R-NCAMPUS

Router>enable
Router#
Router#configure terminal
Router(config)#

Router(config)#hostname R-NCAMPUS
R-NCAMPUS(config)#

R-NCAMPUS(config)#interface FastEthernet0/0
R-NCAMPUS(config-if)#ip address 192.128.0.1 255.255.248.0
R-NCAMPUS(config-if)#no shutdown

R-NCAMPUS(config-if)#interface serial 0/1/0
R-NCAMPUS(config-if)#ip address 192.128.14.129 255.255.255.252
R-NCAMPUS(config-if)#no shutdown
R-NCAMPUS(config-if)#

R-NCAMPUS(config-if)#end

R-NCAMPUS#copy run start

R-TARC

Router>enable
Router#
Router#configure terminal
Router(config)#

Router(config)#hostname R-TARC
R-TARC(config)#

R-TARC(config)#interface FastEthernet0/0
R-TARC(config-if)#ip address 192.128.8.1 255.255.254.0
R-TARC(config-if)#no shutdown

R-TARC(config-if)#interface serial 0/0/0
R-TARC(config-if)#ip address 192.128.14.137 255.255.255.252

R-TARC(config-if)#no shutdown
R-TARC(config-if)#

R-TARC(config-if)#interface serial 0/1/0
R-TARC(config-if)#ip address 192.128.14.130 255.255.255.252
R-TARC(config-if)#no shutdown
R-TARC(config-if)#

R-TARC(config-if)#interface serial 0/1/1
R-TARC(config-if)#ip address 192.128.14.133 255.255.255.252
R-TARC(config-if)#no shutdown
R-TARC(config-if)#

R-TARC(config-if)#end

R-TARC#copy run start

RBraculearningcenter

Router>enable
Router#
Router#configure terminal
Router(config)#

Router(config)#hostname RBraculearningcenter
RBraculearningcenter(config)#

RBraculearningcenter(config)#interface FastEthernet0/0
RBraculearningcenter(config-if)#ip address 192.128.14.1 255.255.255.128
RBraculearningcenter(config-if)#no shutdown

RBraculearningcenter(config-if)#interface serial 0/1/1
RBraculearningcenter(config-if)#ip address 192.128.14.134 255.255.255.252
RBraculearningcenter(config-if)#no shutdown
RBraculearningcenter(config-if)#

RBraculearningcenter(config-if)#end

RBraculearningcenter#copy run start

R-UB8

```
Router>enable
Router#
Router#configure terminal
Router(config)#

Router(config)#hostname R-UB8
R-UB8(config)#

R-UB8(config)#interface FastEthernet0/0
R-UB8(config-if)#ip address 192.128.13.1 255.255.255.0
R-UB8(config-if)#no shutdown

R-UB8(config-if)#interface serial 0/0/0
R-UB8(config-if)#ip address 192.128.14.138 255.255.255.252
R-UB8(config-if)#no shutdown
R-UB8(config-if)#

R-UB8(config-if)#interface serial 0/1/0
R-UB8(config-if)#ip address 192.128.14.142 255.255.255.252
R-UB8(config-if)#no shutdown
R-UB8(config-if)#

R-UB8(config-if)#interface serial 0/1/1
R-UB8(config-if)#ip address 192.128.14.146 255.255.255.252
R-UB8(config-if)#no shutdown
R-UB8(config-if)#

R-UB8(config-if)#end

R-UB8#copy run start
```

R-UB2

```
Router>enable
Router#
Router#configure terminal
Router(config)#

Router(config)#hostname R-UB2
R-UB2(config)#
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R-UB2(config)#interface FastEthernet0/0
R-UB2(config-if)#ip address 192.128.10.1 255.255.254.0
R-UB2(config-if)#no shutdown

R-UB2(config-if)#interface serial 0/1/0
R-UB2(config-if)#ip address 192.128.14.141 255.255.255.252
R-UB2(config-if)#no shutdown
R-UB2(config-if)#

R-UB2(config-if)#interface serial 0/1/1
R-UB2(config-if)#ip address 192.128.14.149 255.255.255.252
R-UB2(config-if)#no shutdown
R-UB2(config-if)#

R-UB2(config-if)#end

R-UB2#copy run start

R-UB10

Router>enable
Router#
Router#configure terminal
Router(config)#

Router(config)#hostname R-UB10
R-UB10(config)#

R-UB10(config)#interface FastEthernet0/0
R-UB10(config-if)#ip address 192.128.12.1 255.255.255.0
R-UB10(config-if)#no shutdown

R-UB10(config-if)#interface serial 0/1/0
R-UB10(config-if)#ip address 192.128.14.150 255.255.255.252
R-UB10(config-if)#no shutdown
R-UB10(config-if)#

R-UB10(config-if)#interface serial 0/1/1
R-UB10(config-if)#ip address 192.128.14.145 255.255.255.252
R-UB10(config-if)#no shutdown
R-UB10(config-if)#

R-UB10(config-if)#end

R-UB10#copy run start

Static Routing:
R-UB8
R-UB8>enable
R-UB8#conf t
Enter configuration commands, one per line. End with CNTL/Z.
ip route 192.128.10.0 255.255.254.0 192.128.14.141
ip route 192.128.0.0 255.255.248.0 192.128.14.137
ip route 192.128.8.0 255.255.254.0 192.128.14.137
ip route 192.128.14.0 255.255.255.128 192.128.14.137
ip route 192.128.12.0 255.255.255.0 192.128.14.145

Dynamic Routing:

R- UB8

R-UB8>enable
R-UB8#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R-UB8(config)#router rip
R-UB8(config-router)#version 2
R-UB8(config-router)#no auto-summary
R-UB8(config-router)#network 192.128.14.144
R-UB8(config-router)#network 192.128.14.136
R-UB8(config-router)#redistribute static
R-UB8(config-router)#end
R-UB8#

R- UB10

R-UB10(config)#ip route 192.128.13.0 255.255.255.0 192.128.14.146

R-UB10>enable
R-UB10#conf t
Enter configuration commands, one per line. End with CNTL/Z.

R-UB10(config)#router rip
R-UB10(config-router)#version 2
R-UB10(config-router)#no auto-summary
R-UB10(config-router)#network 192.128.14.144
R-UB10(config-router)#network 192.128.12.0
R-UB10(config-router)#network 192.128.14.148

R-UB10(config-router)#end
R-UB10#

R- UB2

R-UB2(config)#ip route 192.128.13.0 255.255.255.0 192.128.14.142

R-UB2>enable
R-UB2#conf t
Enter configuration commands, one per line. End with CNTL/Z.

R-UB2(config)#router rip
R-UB2(config-router)#version 2
R-UB2(config-router)#no auto-summary
R-UB2(config-router)#network 192.128.14.140
R-UB2(config-router)#network 192.128.10.0
R-UB2(config-router)#network 192.128.14.148

R-UB2(config-router)#end
R-UB2#

R-NCAMPUS

ip route 192.128.13.0 255.255.255.0 192.128.14.130
R-NCAMPUS(config)#router rip
R-NCAMPUS(config-router)#exit
R-NCAMPUS(config)#router rip
R-NCAMPUS(config-router)#version 2
R-NCAMPUS(config-router)#no auto-summary
R-NCAMPUS(config-router)#network 192.128.0.0
R-NCAMPUS(config-router)#network 192.128.14.128
R-NCAMPUS(config-router)#end
R-NCAMPUS#

RBraculearningcenter:

RBraculearningcenter>enable

RBraculearningcenter#conf t
Enter configuration commands, one per line. End with CNTL/Z.
RBraculearningcenter(config)#router rip
RBraculearningcenter(config-router)#version 2
RBraculearningcenter(config-router)#no auto-summary
RBraculearningcenter(config-router)#network 192.128.14.0
RBraculearningcenter(config-router)#network 192.128.14.132
RBraculearningcenter(config-router)#end
RBraculearningcenter#

R-TARC>
enable
R-TARC#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R-TARC(config)#ip route 192.128.13.0 255.255.255.0 192.128.14.138
R-TARC(config)#router rip
R-TARC(config-router)#version 2
R-TARC(config-router)#no auto-summary
R-TARC(config-router)#network 192.128.14.136
R-TARC(config-router)#network 192.128.14.128
R-TARC(config-router)#network 192.128.14.132
R-TARC(config-router)#network 192.128.8.0
R-TARC(config-router)#end

Floating Point:
Primary Route
R-UB8

R-UB8#conf t
Enter configuration commands, one per line. End with CNTL/Z.

R-UB8(config)#ip route 192.128.10.0 255.255.254.0 Serial0/1/0
R-UB8(config)#exit
R-UB8#
%SYS-5-CONFIG_I: Configured from console by console

R-UB8#show ip route static
S 192.128.0.0/21 [1/0] via 192.128.14.137
S 192.128.8.0/23 [1/0] via 192.128.14.137
S 192.128.10.0/23 [1/0] via 192.128.14.141
S 192.128.12.0/24 [1/0] via 192.128.14.145
192.128.14.0/24 is variably subnetted, 7 subnets, 2 masks
S 192.128.14.0/25 [1/0] via 192.128.14.137
S* 0.0.0.0/0 is directly connected, Serial0/1/0

Backup Route:

R-UB8#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R-UB8(config)#ip route 192.128.10.0 255.255.254.0 Serial0/1/1 5
R-UB8(config)#exit
R-UB8#
%SYS-5-CONFIG_I: Configured from console by console

R-UB8#show ip route
R-UB8#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set

S 192.128.0.0/21 [1/0] via 192.128.14.137
S 192.128.8.0/23 [1/0] via 192.128.14.137
S 192.128.10.0/23 [1/0] via 192.128.14.141
is directly connected, Serial0/1/0
S 192.128.12.0/24 [1/0] via 192.128.14.145
C 192.128.13.0/24 is directly connected, FastEthernet0/0
192.128.14.0/24 is variably subnetted, 7 subnets, 2 masks
S 192.128.14.0/25 [1/0] via 192.128.14.137
R 192.128.14.128/30 [120/1] via 192.128.14.137, 00:00:01, Serial0/0/0
R 192.128.14.132/30 [120/1] via 192.128.14.137, 00:00:01, Serial0/0/0
C 192.128.14.136/30 is directly connected, Serial0/0/0
C 192.128.14.140/30 is directly connected, Serial0/1/0
C 192.128.14.144/30 is directly connected, Serial0/1/1
R 192.128.14.148/30 [120/1] via 192.128.14.141, 00:00:09, Serial0/1/0
[120/1] via 192.128.14.145, 00:00:29, Serial0/1/1

Shutdown:

R-UB8>enable
R-UB8#conf t
Enter configuration commands, one per line. End with CNTL/Z.

```
R-UB8(config)#interface Serial0/1/0
R-UB8(config-if)#shut
R-UB8#
R-UB8#show ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set

S    192.128.0.0/21 [1/0] via 192.128.14.137
S    192.128.8.0/23 [1/0] via 192.128.14.137
S    192.128.10.0/23 is directly connected, Serial0/1/1
S    192.128.12.0/24 [1/0] via 192.128.14.145
C    192.128.13.0/24 is directly connected, FastEthernet0/0
     192.128.14.0/24 is variably subnetted, 6 subnets, 2 masks
S    192.128.14.0/25 [1/0] via 192.128.14.137
R    192.128.14.128/30 [120/1] via 192.128.14.137, 00:00:14, Serial0/0/0
R    192.128.14.132/30 [120/1] via 192.128.14.137, 00:00:14, Serial0/0/0
C    192.128.14.136/30 is directly connected, Serial0/0/0
C    192.128.14.144/30 is directly connected, Serial0/1/1
R    192.128.14.148/30 [120/1] via 192.128.14.145, 00:00:06, Serial0/1/1
```