

```
>enable
#configure terminal
(config)# hostname RA
#copy running-config startup-config
```

```
#show ip interface brief
#show running-config
#show ip route
```

=====

Configuring a Fast Ethernet

```
R1(config)#interface FastEthernet 0/1
R1(config-if)#ip address 172.16.2.129 255.255.255.224
R1(config-if)#no shutdown
```

Configuring a Serial interface

```
R1(config)#interface serial 0/0
R1(config-if)#ip address 172.16.2.1 255.255.255.0
R1(config-if)#clock rate 64000 ← (DCE only)
R1(config-if)#no shutdown
```

=====

Configuring a enable password "cisco"

```
RA# enable password cisco
```

Configuring a enable secret "cisco"

```
RA# enable password cisco
```

Configuring a console password "cisco"

```
RA(config)# line console 0
RA(config-line)# password cisco
RA(config-if)# login
```

Configuring a virtual terminal password "class"

```
RA(config)# line vty 0 4
RA(config-line)# password class
RA(config-if)# login
```

=====
Configuring RIPv2

先用 `show ip route`指令, 找出此router 有幾個直連(directly connected, C開頭)的網段,將直連網段以`network`指令加入`routing update` 中.

```
RA(config)# router rip
RA(config-router)# version 2 ← netmask 來自interface上的ip設定
RA(config-router)# no auto-summary
RA(config-router)# network 172.16.88.64
RA(config-router)# network 192.168.88.248
```

當2個以上routers啓動rip 後,再用 `show ip route`指令, 檢查是否有R開頭的routing記錄,此記錄即是由鄰居router告知的routing.

=====
Configuring EIGRP

先用 `show ip route`指令, 找出此router 有幾個直連(directly connected, C開頭)的網段,將直連網段以`network`指令加入`routing update` 中. 要加wildcard mask.

```
RA(config)# router eigrp 101 ← AS number 101
RA(config-router)# no auto-summary
RA(config-router)# network 172.16.88.64 0.0.0.63
RA(config-router)# network 192.168.88.248 0.0.0.3
```

當2個以上routers啓動eigrp 後,再用 `show ip route`指令, 檢查是否有D開頭的routing記錄,此記錄即是由鄰居router告知的routing.

=====
Configuring OSPF

先用 `show ip route`指令, 找出此router 有幾個直連(directly connected, C開頭)的網段,將直連網段以`network`指令加入`routing update` 中. 要加wildcard mask及area 0.

```
RA(config)# router ospf 1001 ← AS number 1001
RA(config-router)# no auto-summary
RA(config-router)# network 172.16.88.64 0.0.0.63 area 0
RA(config-router)# network 192.168.88.248 0.0.0.3 area 0
```

當2個以上routers啓動ospf後,再用 `show ip route`指令, 檢查是否有O開頭的routing記錄,此記錄即是由鄰居router告知的routing.