

////////Change hostname

Router(config)#hostname IT

////////Save running configuration

IT#copy run start

Router#copy running-config startup-config

////////To restart

IT#reload

///Create enable password

Router(config)#enable password it

////////To remove enable secret password

Router(config)#no enable password

////////To enable secret password

Router(config)#enable secret cs

////////Protect console port

Router(config)#line console 0

Router(config-line)#password csit

Router(config-line)#login

////////Interface configuration

R1(config)#interface fastethernet 0/0

R1(config-if)#ip address 192.168.1.1 255.255.255.0

R1(config-if)#no shutdown

////////Serial interface configuration

Router(config)#int se0/0/0

Router(config-if)#ip address 10.10.10.2 255.0.0.0

Router(config-if)#clock rate 64000

Router(config-if)#no sh

//////// DHCP configuration

Router(config)#ip dhcp pool it

Router(dhcp-config)#network 192.168.10.0 255.255.255.0

Router(dhcp-config)#default-router 192.168.10.1

////////Exclud IP

Router(config)#ip dhcp excluded-address 192.168.10.2 192.168.10.5

////////Static route

router1(config)#ip route 192.168.20.0 255.255.255.0 10.10.10.2

or

Router(config)#ip route 192.168.10.0 255.255.255.0 se0/0/0 ---current router interface

////////Remove static route config

Router(config)#no ip route 192.168.10.0 255.255.255.0 se0/0/0

or

```
Router(config)#no ip route 192.168.20.0 255.255.255.0 10.10.10.2
```

////////Default route

```
Router(config)#ip route 0.0.0.0 0.0.0.0 10.10.10.1
```

or

```
Router(config)#ip route 0.0.0.0 0.0.0.0 se0/0/0
```

////////Telnet

```
router1(config)#enable secret 123
```

```
router1(config)#line vty 0 4
```

```
router1(config-line)#password 111
```

```
router1(config-line)#login
```

////////ssh

```
Router(config)# hostname it
```

```
Router(config)#ip domain-name it.com
```

```
Router(config)#username it password it.com
```

```
Router(config)#crypto key generate rsa
```

```
it(config)#crypto key generate rsa
```

```
it(config)#line vty 0 10
```

```
it(config-line)#login local
```

```
it(config-line)#transport input ssh
```

```
pc: ssh -l username ip
```

////////RIP configuration

```
router1(config)#router rip
```

```
router1(config-router)#network 192.168.10.0
```

```
router1(config-router)#network 10.0.0.0
```

////////RIP V2

```
Router(config)#router rip
```

```
Router(config-router)#version 2
```

```
Router(config-router)#network 192.168.30.0
```

```
Router(config-router)#network 20.0.0.0
```

///remove rip

```
router1(config)#no route rip
```

or

```
router1(config)#no route rip 192.168.10.0
```

////////EIGRP configuration////////

```
Router(config)#router eigrp 1
```

```
Router(config-router)#network 192.168.10.0 0.0.0.255
```

```
Router(config-router)#network 10.0.0.0 0.255.255.255
```

```
Router(config-router)#no auto-summary
```

```
Router(config-router)#redistribute eigrp 1
```

```
Router(config)#ip route 0.0.0.0 0.0.0.0 se0/0/1
```

////////To remove EIGRP routing

```
Router(config)#router eigrp 1
```

```
Router(config-router)#no route eigrp 1
```

/////////OSPF configuration

```
Router(config)#router ospf 1
```

```
Router(config-router)#network 30.0.0.0 0.255.255.255 area 0
```

```
Router(config-router)#network 30.0.0.0 0.255.255.255 area 0
```

```
Router(config-router)#network 192.168.40.0 0.0.0.255 area 0
```

/////////vlan ceration

```
Switch(config)#vlan 2
```

```
Switch(config-vlan)#name it
```

```
/////////join intrface to vlan
```

```
Switch(config)#int fa0/2
```

```
Switch(config-if)#switchport access vlan 2
```

```
Switch(config)#interface range fa0/5-fa0/10
```

/////////remove intrface from vlan

```
Switch(config)#int fa0/2
```

```
Switch(config-if)#no switchport access vlan 2
```

/////////remove vlan

```
Switch(config)#no vlan 2
```

/////////router intface configuration and dhcp

```
Router(config)#int fa0/0
```

```
Router(config-if)#ip address 192.168.20.1 255.255.255.0
```

```
Router(config-if)#no sh
```

```
Router(config)#int fa0/0
```

```
Router(config-if)#ip address 192.168.10.1 255.255.255.0
```

Router(config)#ip dhcp pool it

Router(dhcp-config)#network 192.168.20.0 255.255.255.0

Router(dhcp-config)#default-router 192.168.20.1

Router(config)#ip dhcp pool cs

Router(dhcp-config)#network 192.168.10.0 255.255.255.0

Router(dhcp-config)#default-router 192.168.10.1

////////switch config access port

Switch(config-vlan)#int fa0/4...to computer

Switch(config-if)#switchport access vlan 2

Switch(config-vlan)#int fa0/3...to router

Switch(config-if)#switchport access vlan 2

Switch(config)#vlan 3

Switch(config-vlan)#int fa0/5...to computer

Switch(config-if)#switchport access vlan 3

Switch(config)#int fa0/2----to router

Switch(config-if)#switchport access vlan 3

//////// Trunk port

Switch(config-if)#switchport mode trunk

Router(config)#int fa0/0

Router(config-if)#no ip address

```
Router(config-if)#no sh
```

```
Router(config)#int fa0/0.10
```

```
Router(config-subif)#encapsulation dot1q 10
```

```
Router(config-subif)#ip address 192.168.10.1 255.255.255.0
```

```
Router(config)#int fa0/0.20
```

```
Router(config-subif)#encapsulation dot1q 20
```

```
Router(config-subif)#ip address 192.168.20.1 255.255.255.0
```