

> 用户模式

特权模式

(config-if)# 接口配置模式

(config-line)# 线路配置模式

(config-router)# 路由配置模式

(config-vlan)#vlan 配置模式

模式	提示符	说明
User EXEC 用户模式	>	可用于查看系统基本信息和进行基本测试
Privileged EXEC 特权模式	#	查看、保存系统信息，该模式可使用密码保护
Global configuration 全局配置模式	(config)#	配置设备的全局参数
Interface configuration 接口配置模式	(config-if)#	配置设备的各种接口
Line configuration 线路配置模式	(config-line) #	配置控制台、远程登录等线路
Router configuration 路由配置模式	(config-router)#	配置路由协议
Config-vlan VLAN 配置模式	(config-vlan) #	配置 VLAN 参数

要求	命令举例	说明
进入用户模式		登录后就进入
进入特权模式	Ruijie> enable Ruijie#	在用户模式中输入 enable 命令
进入全局配置模式	Ruijie# configure terminal Ruijie(config)#	在特权模式中输入 conf t 命令
进入接口配置模式	Ruijie(config)# interface f0/1 Ruijie(config-if)#	在全局配置模式中输入 interface 命令，该命令可带不同参数
进入线路配置模式	Ruijie(config)# line console 0 Ruijie(config-line)#	在全局配置模式中输入 line 命令，该命令可带不同参数
进入路由配置模式	Ruijie(config)# router rip Ruijie(config-router)#	在全局配置模式中输入 router 命令，该命令可带不同参数
进入 VLAN 配置模式	Ruijie(config)# vlan 3 Ruijie(config-vlan)#	在全局配置模式中输入 vlan 命令，该命令可带不同参数
退回到上一层模式	Ruijie(config-if)# exit Ruijie(config)#	用 exit 命令可退回到上一层模式
退回到特权模式	Ruijie(config-if)# end Ruijie#	用 end 命令或 Ctrl+Z 可从各种配置模式中直接退回到特权模式
退回到用户模式	Ruijie# disable Ruijie>	从特权模式退回到用户模式

Configure Switch Management Interface

```
S1#conf t
```

```
S1(config)#interface vlan 99
```

```
S1(config-if)#ip address 172.17.99.11 255.255.255.0
```

```
S1(config-if)#no shutdown
```

```
S1(config-if)#end
```

```
S1#copy running-config startup-config
```

```
S1#
```

Assign a Default Gateway

```
S1(config)#ip default-gateway 172.17.99.1
```

```
S1(config)#end
```

```
S1#
```

Preparing for Basic Switch Management

```
S1#configure terminal
```

```
S1(config)#vlanvlan_id
```

```
S1(config-vlan)#name vlan_name
```

```
S1(config)#end
```

```
showint fa0/1
```

```
S1#configure terminal
```

```
S1(config)#interface interface_id
```

```
S1(config-if)#switchport mode access //creation of a VLAN
```

```
S1(config-if)#switchport access vlanvlan_id
```

```
S1(config-if)#end
```

```
ex.
```

```
S1#configure terminal
```

```
S1(config)#vlan 99
```

```
S1(config-vlan)#exit
```

```
S1(config)#interface vlan99
```

```
S1(config-if)#ip address 192.168.1.2 255.255.255.0
```

```
S1(config-if)#no shutdown
```

```
S1(config-if)#exit
```

```
S1(config)#int fa0/18
```

```
S1(config-if)#no switch access vlan //Port Fa0/18 will be returned to VLAN 1.
```

```
S1(config-if)#end
```

```
S1show vlan brief
```

Configure Duplex and Speed

```
S1(config)#interface fasththernet 0/1
```

```
S1(config-if)#speed ?
```

```
S1(config-if)#speed 100
```

```
S1(config-if)#duplex ?
```

```
S1(config-if)#duplex full
```

```
S1(config-if)#^z
```

```
S1#
```

```
S1(config)#interface fa0/1
```

```
S1(config-if)#speed auto
```

```
S1(config-if)#duplex auto
```

```
S1(config-if)#mdix auto
```

```
S1(config-if)#
```

Verifying Switch Port Configuration

```
S1#show interfaces [interface-id]
```

```
S1#show startup-config
```

```
S1#show running-config
```

```
S1#show flash
```

```
S1#show version
```

S1#show history

S1#show ip [interface-id]

S1#show mac-address-table or

S1#show mac address-table

Configure SSH

S1(config)#show ipssh

S1(config)#ip domain-name cisco.com

S1(config)#crypto key generate rsa

How many bits in the modulus[512]:1024

S1(config)#username admin secret class

S1(config)#line vty 0 15

S1(config-line)#transport input ssh -----enable he SSH

S1(config-line)#login local -----enable local login--to require local

authentication for SSH connections from local username database

S1(config-line)#exit

Disabling CDP

S1(config)#no cdp run

S1(config)#

S1(config)#interface range fa0/1-24

```
S1(config-if-range)#no cdp enable
```

```
S1(config-if-range)#exit
```

```
S1(config)#
```

Disable Unused Ports and Assign to an Unused(Garbage)VLAN

```
S1(config)#int range fa0/20-24
```

```
S1(config-if-range)#switchport access vlan 100
```

```
S1(config-if-range)#shutdown
```

```
S1(config-if-range)#
```

DHCP Snooping 侦听

```
S1(config)#ipdhcp snooping
```

```
S1(config)#ipdhcp snooping vlan 10,20
```

```
S1(config)#interface fastethernet 0/1
```

```
S1(config-if)#ipdhcp snooping trust
```

```
S1(config)#interface fastethernet 0/2
```

```
S1(config-if)#ipdhcp limit rate 5
```

Dynamic Secure MAC Address--only one

```
S1(config-if)#switchport mode access
```

```
S1(config-if)#switchport port-security
```

Static Secure MAC Address

S1(config-if)#switchport mode access

S1(config-if)#switchport port-security mac-address 000c.7259.0a63

Sticky Secure MAC Address

S1(config-if)#switchport mode access

S1(config-if)#switchport port-security mac-address sticky

Disable channeling and enable access/portfast

Switch(config-if)#switchport host

Ports in Error Disabled State

S1#show interface fa0/18 status

S1#show port-security interface fastethernet 0/18

re-enable the port

S1(config)#interface FastEthernet 0/18

S1(config-if)#shutdown ----- 关闭端口

S1(config-if)#no shutdown ----- 开启端口

Configuring the Router R1

Router>enable


```
Router#configure terminal
```

```
Router(config)#hostname R1
```

```
R1(config)#line console 0
```

```
R1(config-line)#logging synchronous
```

```
R1(config-line)#exec-time 0 0
```

```
R1(config-line)#password cisco
```

```
R1(config-line)#login
```

```
R1(config-line)#exit
```

```
R1(config)#no ip domain-lookup
```

```
R1(config)#interface fa0/1
```

```
R1(config-if)#ip address 172.16.99.1 255.255.255.0
```

```
R1(config-if)#no shutdown
```

```
R1(config-if)#exit
```

```
R1(config)#enable secret class
```

```
R1(config)#line vty 0 4
```

```
R1(config-line)#password cisco
```

```
R1(config-line)#login
```

```
R1(config-line)#exit
```

```
R1(config)#service password-encryption
```

```
R1(config)#end
```

```
R1#copy run start
```

```
R1#
```

Configuring the Switch S1

```
Switch>enable
```

```
Switch#configure terminal
```

```
Switch(config)#hostname S1
```

```
S1(config)#no ip domain-lookup
```

```
S1(config)#line console 0
```

```
S1(config-line)#logging synchronous
```

```
S1(config-line)#exec-time 0 0
```

```
S1(config-line)#password cisco
```

```
S1(config-line)#login
```

```
S1(config-line)#exit
```

```
S1(config)#line vty 0 15
```

```
S1(config-line)#pssword cisco
```

```
S1(config-line)#login
```

```
S1(config-line)#exit
```

```
S1(config)#ip default-gateway 172.16.99.1
```

```
S1(config)#service password-encryption
```

```
S1(config)#end
```

```
S1#copy running-config startup-config
```

```
S1#
```

```
S1#conf t

S1(config)#vlan 99

S1(config-vlan)#name Management

S1(config-vlan)#exit

S1(config)#interface vlan 99

S1(config-if)#ip address 172.16.99.11 255.255.255.0

S1(config-if)#no shut

S1(config-if)#exit

S1(config)#inter fa0/5

S1(config-if)#switchport mode access

S1(config-if)#switch access vlan 99

S1(config-if)#exit

S1(config)#inter fa0/6

S1(config-if)#switchport mode access

S1(config-if)#switchport access vlan 99

S1(config-if)#end

S1#copy running-config startup-config

S1#
```