# 路由器配置

## 静态路由配置

Router(config)#ip route <目的网络><子网掩码><下一跳路由IP地址>

## 默认路由配置

Router(config)#ip route 0.0.0.0 0.0.0.0 <下一跳路由IP地址>

## POS接口配置

Router ( config ) # Interface POS3/0

Router ( config-if ) # Description TO BELING

Router ( config-if ) # Bandwidth 2500000 //单位bps

Router ( config-if ) # Ip address 212.14.37.18 255.255.255.252 //IP地址 子网掩码

Router ( config-if ) # Crc 32 (可选的CRC校验位是32和16)

Router ( config-if ) # Pos framing sdh (可选帧格式是SDH和SONET )

Router ( config-if ) # No ip directed-broadcast

Router ( config-if ) # Pos flag s1s0 2 (SONET格式s1s0 = 1,SDH格式s1s0 = 2)

## 广域网同步串行接口配置

Router ( config ) # Interface s1/1

Router ( contig-it ) # Descnption TOBEDING

Router ( config-if ) # Bandwidth 2048 (带宽为2M )注意单位为Kbps

Router ( config-if ) # Ip address 212.112.41.81 255.255.255.252

Router ( config-if ) # Encapsulation hdlc (封装HDLC或PPP协议，注意encapsulation的拼写)

Router ( config if ) # No ip directed-broadcast

Router ( config-if ) # No ip proxy-arp

Router ( config-if ) # No shutdown

Router ( config-if ) # Exit

## OSPF配置

Router( config ) # router ospf <进程号> （宣告）

Router( config-router)# network 211.100.66.0 0.0.0.127 area 0

Router( config-router)# network <子网号><掩码反码> area <区域号>

Router( config-router)# redistribute connected metric-type 1 subnets

Router( config-router)# area 0 range 211.100.66.0 255.255.255.128

Router( config-router)# area <区域号> range <子网号><子网掩码>

## RIP配置

Router( config )# router rip //没有进程号

Router( config-router )# network 159.105.0.0 //IP地址

Router( config-router )# network 212.112.7.0 //不写掩码

## 路由器上DHCP配置

Router( config )# ip dhcp pool <name> //宣告地址池名称

Router( dhcp-config )# network 201.23.98.0 255.255.255.0

Router( dhcp-config )# network 201.23.98.0/24 //配置IP地址池的子网地址

Router( dhcp-config )# network<网络地址><子网掩码>//和掩码

Router( dhcp-config )# ip dhcp exciuded-address 201.23.98.2 201.23.98.10

//<开始地址><空格><结束地址>

Router( dhcp-config )# default-router 201.23.98.1//配置地址池缺省网关

Router( dhcp-config )# domain-name <name> //配置地址池域名系统

Router( dhcp-config )# dns-server address 212.105.129.27 212.105.129.26

Router( dhcp-config )# lease <day><hour><min>

# 交换机配置iOS

## 管理IP地址

Switch-3548( config )# int vlan1

Switch-3548( config-if )# ip address 10.10.10.2 255.255.255.0

Switch-3548( config )# ip default-gateway 203.105.1.1

## 建立vlan

Switch-3548 # vlan data

Switch-3548( vlan )# vlan 1000 name vlan1000

Switch-3548( vlan )# exit

## 端口分配到vlan

Switch-3548 # configure t

Switch-3548( config )# int f0/24

Switch-3548( config-if )# switchport access vlan 248

Switch-3548( config-if )# switchport access vlan <vlan-num>

## Trunk端口设置

Switch-3548 # configure t

Switch-3548( config )# int f0/24

Switch-3548( config-if )# switchport mode trunk

Switch-3548( config-if )# switchport trunk encapsulation dot1q //封装IEEE802.1Q

Switch-3548( config-if )# switchport trunk encapsulation isl //封装ISL

Switch-3548( config-if )# switchport trunk encapsulation negotiate//自动协商

## 允许中继的VLAN

Switch-3548( config-if )# switchport trunk allowed vlan 10,14

Switch-3548( config-if )# switchport trunk allowed vlan 10-14

Switch-3548( config-if )# switchport trunk allowed vlan except 100-1000

# DHCP报文分析

## DHCP客户端相关命令