

### Comandos ingreso y basicos

```
Router>enable
```

```
Router#configure terminal
```

```
Switch(config)#do copy r s
```

Presionar tabulador completa la palabra

```
Router#configure "?" el signo de pregunta sirve para ayudar a saber que palabra viene despues
```

```
Router(config)#do ping * <ping destino>
```

```
Router(config)#do tracert o tracer <ip destino>
```

```
Router#show running-config
```

### Configuracion interfaces

```
Router(config)#interface <nombre interfaz> <numero de interfaz>
```

```
Router(config-if)#ip address <ip> < mascara>
```

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

```
Router(config-if)#clock rate 56000 <seriales con reloj>
```

```
Router(config-if)# ipv6 address <ipv6>
```

```
Router#show ip interface brief
```

```
Router(config-if)#ip address dhcp <la interfaz recibe ip por DHCP>
```

### Seguridad

```
Router(config)#enable password password
```

```
Router(config)#enable secret password
```

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

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

```
Router(config-line)#password password
```

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

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

```
Router(config-line)#password password
```

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

```
Router(config)#banner motd $ escribir mensaje y utilizar el $ para finalizar el mensaje
```

### Resetear router

!.Reinicar router 2. CTRL+B mientras cargan los asteriscos

```
Rommon 1>confreg 0x2142
```

```
Rommon 2>reset
```

### Enrutamiento estatico

```
Router(config)#ip route <red destino> < mascara destino> <salto o interfaz salida>
```

```
Router(config)#ip route 0.0.0.0 0.0.0.0 <salto> predeterminada
```

```
Router#show ip route
```



### Configuracion SSH

```
Router(config)#hostname name
```

```
Router(config)#ip domain-name nombre de dominio
```

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

```
Router(config)#1024
```

```
Router(config)#username username privilege 15 password password
```

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

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

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

```
Router(config)# ip ssh version 2
```

### SWITCH

```
Switch(config)#interface vlan 10
```

```
Switch(config-if)#ip address <> <>
```

```
Switch(config)#ip default-gateway <ip interfaz router>
```

### configuracion OSPF

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

```
Router(config-router)#network <ip red> <wildcard> area 0 "redes direct conect"
```

```
Router(config-router)#redistribute static subnets <inyecta rutas staticas>
```

```
Router(config-router)#default-information originate
```

```
Router#show ip ospf neighbor
```

```
Router#show ip protocols
```

### Configuracion OSPFv6

```
Router(config)#ipv6 router ospf 1
```

```
Router(config)#ipv6 unicast-routing
```

```
Router(config-rtr)#router-id "nombre"
```

```
Router(config-if)#ipv6 ospf 1 area 0
```

### Resetear switch

Reiniciar router presionar Boton del switch y esperar a que cargue switch:

```
switch: flash_init
```

```
switch: dir flash:
```

```
switch: delete vlan.dat.renamed
```

```
switch: delete config.text.renamed
```

```
switch: reset
```



## Configuracion VLAN router

### Router

```
Router(config)#interface g0/0.10
Router(config-subif)#encapsulation dot1Q 10
Router(config-subif)#ip address <> <>
Router(config)#interface g0/0
Router(config-if)#no shutdown
```

## Configuracion VLANSwitch

```
Switch(config)#vlan 10
Switch(config)#interface vlan 10
Switch(config-vlan)#name nombre
Switch(config)#interface range f0/1-24
Switch(config-if-range)#switchport access vlan 10
Switch(config)#interface range g0/1-2
Switch(config-if-range)#switchport mode trunk
Switch(config)#do show vlan brief
```

## Configuracion DHCP

```
Router(config)#ip dhcp pool name
Router(dhcp-config)#network <ip de la red> < mascara de la red>
Router(dhcp-config)#default-router ip interfaz de salida
Router(dhcp-config)#dns-server ip DNS
Router#show ip dhcp binding
Router#show ip dhcp pool name
```

## Configuracion DHCPV6

```
Router(config)#ipv6 dhcp pool "nombre"
Router(config-dhcpv6)#dns-server ip DNS
Router(config-if)#ipv6 dhcp server "nombre"
```

## ACL extendida

### CERCA DEL ORIGEN

```
Router(config)#access-list 101 permit tcp host 10.1.1.2 host 172.16.1.1 eq telnet
Router(config)#access-list 101 permit ip any any
Router(config-if)#ip access-group 101 in or out
```

### OTRA FORMA PARA CREAR ACL EXTENDIDA

```
Router(config)#ip access-list extended <nombre o numero 100-199>
Router(config-ext-nacl)#permit tcp host 10.1.1.2 host 172.16.1.1 eq telnet
Router(config-if)#ip access-group 101 in or out
```



### NAT dinamico

```
Router(config)#ip nat pool <nombre> <start ip address> <end ip address> " nstmask<mask>*
```

```
Router(config)#access-list 1 permit <ip red> <wildcard red>
```

```
Router(config)#ip nat inside source list 1 pool <nombre>
```

```
Router(config-if)#ip nat inside
```

```
Router(config-if)#ip nat outside
```

```
Router(config)#do show ip nat translation
```

### ACL estandar

CERCA DEL DESTINO

```
Router(config)#access-list 1 permit <red ip 1-99> <mask red>
```

```
Router(config)#access-list 1 permit ip any
```

Otra forma para crear una ACL Standar

```
Router(config)#ip access-list standard <nombre o numero 1-99>
```

```
Router(config-std-nacl)#permit <red> <wildcard>
```

```
Router(config-if)#ip access-group nombre o numero in or out
```

### NAT estatico

```
Router(config)#ip nat inside source static *<ip privada host> <ip public>
```

```
Router(config)#interface g0/0
```

```
Router(config-if)#ip nat outside
```

```
Router(config)#interface g0/1
```

```
Router(config-if)#ip nat inside
```

```
Router(config)#do show ip nat translation
```

### PAT

```
Router(config)#access-list 1 permit <ip de red> <wildcard>
```

```
Router(config)#ip nat inside source list 1 interface g0/0 overload
```

```
Router(config-if)#ip nat inside
```

```
Router(config-if)#ip nat outside
```

```
Router(config)#do show ip nat translation
```

### Spanning-tree

```
Switch(config)#do show spanning-tree
```

```
Switch(config)#spanning-tree vlan <id-vlan> root {primary | secondary}
```

```
Switch(config)#spanning-tree vlan <numero> priority <numero>
```

```
Switch(config)#no spanning-tree desactivar spanning-tree
```



### VTP Vlan Trunk Protocols

Primero crear las VLAN

```
Switch(config)#vtp domain <nombre cualquiera>
```

```
Switch(config)#vtp password <clave cualquiera>
```

```
Switch(config)#vtp mode client, server o transparent
```

```
Switch(config)#do show vtp status
```

### PORT-SECURITY

```
Switch01(config-if)# switchport mode access
```

```
Switch01(config-if)#switchport port-security
```

```
switchport port-security violation{ protect | restrict | shutdown }
```

MAC UNICA

```
Switch01(config-if)#switchport port-security maximum 1
```

```
Switch01(config-if)# switchport port-security violation shutdown
```

```
Switch01(config-if)# switchport port-security mac-address 0a04.aaf8.13ad
```

PORT STICKY

```
Switch01(config-if)# switchport mode access
```

```
Switch01(config-if)#switchport port-security
```

```
Switch01(config-if)#switchport port-security maximum 1
```

```
Switch01(config-if)# switchport port-security violation shutdown
```

```
Switch01(config-if)# switchport port-security mac-address sticky
```

```
show port-security interface <>
```

