SWITCH

Vlans

vlan *<num>*
(config-vlan)# name *<nombre vlan>*
interface *(range para rango de interfaces)* *<interface a seleccionar>*
(config-if-range)# switchport mode access
(config-if-range)# switchport access vlan *<num>*
do show vlan brief
do show running-config
do show mac address-table *<parametros>*
do show interfaces status
do show interfaces *<interfaz>*

Enlaces Troncales

interface *<interface a seleccionar>*
(config-if)# switchport mode *<trunk, dynamic desirable, dynamic auto>*
(config-if)# switchport trunk allowed vlan *<num>*
(config-if)# switchport nonegotiate
(config-if)# switchport trunk native vlan *<num>*
do show interfaces trunk

Spanning Tree

#spanning-tree mode <pvst, rapid-pvst, mst>
#spanning-tree vlan <num> priority <0-61440>
#spanning-tree vlan *<num>* root *<primary,secondary>*
*(*config-if)#spanning-tree [vlan <num>] cost <num>
#do show spanning-tree vlan *<num>*

EtherChannel

interface *(range para rango de interfaces)* *<interface a seleccionar>*
(config-if-range)# channel-group *<grupo;1>* mode *<active, passive>*
(config-if-range)# switchport mode *<trunk>*
do show etherchannel <num> summary

PortFast y BPDU Guard

interface *(range para rango de interfaces)* *<interface a seleccionar>*
(config-if-range)# spanning-tree portfast
(config-if-range)# spanning-tree bpduguard enable

ROAS

interface *<interface a seleccionar>*
(config-if)# switchport mode *<trunk>*

Security SSH

#line console 0
(config-line)#login local
(config-line)#exec-timeout *<time>*
(config-line)#logging synchronous
#ip domain-name *<dominio>*
#crypto key generate rsa
#ip ssh version 2
#line vty 0 4
(config-line*vty*)#login local
(config-line*vty*)#transport input ssh
(config-line*vty*)#exec-timeout 100

(config-line*vty*)#logging synchronous
#interface vlan *<num>*
(config-vlan)#ip address *<ip> <mascara>*
(config-vlan)#no shutdown
#ip default-gateway *<ip>*

Security Port

(config-if)# switchport port-security
(config-if)# switchport port-security maximum <num>
(config-if)# switchport port-security violation {protect | restrict | shutdown}
(config-if)# switchport port-security mac-address <mac>
(config-if)# switchport port-security mac-address sticky

ROUTER
ROAS
subinterfaz

interface *<interface a seleccionar>.<vlan-num>*
(config-subif)#encapsulation dot1Q *<vlan-num>*
(config-subif)#ip address *<ip> <mascara>*

global

interface *<interface a seleccionar>*
(config-if)#no shutdown
do show running-config

vlan nativa

interface *<interface a seleccionar>.<vlan-num>*
(config-subif)# encapsulation dot1q <vlan-num> native
(config-subif)#ip address *<ip> <mascara>*
do show ip route
do show ip interface brief

Static Routes

interface *<interface a seleccionar>*
(config-if)#ip address *<ip> <mascara>*
(config-if)#no shutdown

next hop

#ip route *<red busco ip> <mascara de esa> <interfaz a llegar por **ip**> (puras ips)*

interfaz

#ip route *<red busco ip> <mascara de esa> <interfaz de salida> (ultima es interfaz)*

OSPF

#router ospf *<num>*
(config-router)#router-id *<ip>*

—

network

(config-router)# network *<ip red> <wildcard>* area *<num>*

interfaz

#interface *<interfaz>.<vlan>*
(config-subif)#ip ospf *<num>* area *<num>*

Default Route

> #ip route *<red busco ip> <mascara de esa> <interfaz a llegar por **ip**> (puras ips;
puede ser 0.0.0.0 0.0.0.0)*
> (config-router)#default-information originate

Passive interfaces

> (config-router)#passive-interface default *(para todas)*
> (config-router)#no passive-interface *<interfaz>*
> *OR*
> (config-router)#passive-interface *<interfaz>*

Metric

> (config-if)# ip ospf cost <num>
> OR (config-if)# bandwidth <num>
> OR (config-router)# auto-cost reference-bandwidth <mbps>
>
> #interface *<interfaz>*
> (config-if)#ip ospf priority *<0-255>*
>
> *#show ip ospf neighbor*
> *#show ip ospf interfaces*

Security

> #line console 0
> (config-line)#logging synchronous *(no cortar inspo)*
> (config-line)#exec-timeout *<num min>*
> (config-line)#history size *<num>*

SSH

> #ip domain-name *<dns/dominio>*
> #crypto key generate rsa
> #ip ssh version 2 *(más segura)*
> #line vty 0 4 *(linea virtual*)
> (config-linevty)#login local
> (config-linevty)#transport input ssh
>
> #show ip ssh

DHCP

> #ip dhcp excluded-address *<ip baja> <ip alta>*
> #ip dhcp pool *<name>*
> (dhcp-config)# network *<ip> <mascara>*
> (dhcp-config)# default-router *<ruta default>*

ACL

#access-list <num 1-99> <permit|deny> {<*ip*> <*wildcard*> | *any* | *host* <*ip*> }
#access-list <num 100-199> <permit|deny> <*protocol*> { <source_ip> <*wildcard*> |
any | host <ip> } eq <port> <*protocol*> {<*destination_ip*> <*wildcard*> | any | host <ip> } eq
<*port*>

#ip access-list <standard|extended> <*name*>
(config-acl)#<*permit|deny*> <*protocol*> <*source_ip*> <*source_wildcard*>
<*destination_ip*> <*destination_wildcard*> eq <*port*>

#interface <*interface*>
(config-if)#ip access-group <*number|name*> <in|out>

show ip access-list

NAT

configuracion base
#interface <interfaz>
        ip nat inside
#interface <interfaz>
        #ip nat outside

Tipo 1: static NAT (1 a 1)
i#p nat inside source static <ip privada> <ip publica>

Tipo 2: Dynamic NAT (pool)
#ip nat pool <nombre pool> <inicio ip pública> <fin ip publica> netmask <máscara>
#ip nat inside source list <acl> pool <nombre pool>

Tipo 3: PAT (port address translation/ NAT overload)
ip nat inside source list <acl> interface <interfaz pública> overload

show ip nat translations