

Hardware:

Para la Red (Services,Harware,Acces) Subdivisiones se utilizó el siguiente equipo:

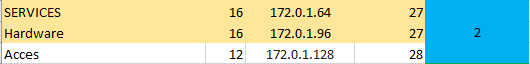
* 1 Router 2901 
* 2 Switches 2950-24 de 24 puertos 
* 2 Cables Directos 

Creación de Vlan:

Las Vlan Serán Creadas dentro de los Switches, con la finalidad de distribuir los sub departamentos.

Serán las siguientes con la siguiente distribución:

Son 44 host que se deben conectar.



|  |  |  |
| --- | --- | --- |
| Vlan | Switch 1 | Switch 2 |
| SER- 172.0.1.94/27 | 15-22 | 15-22 |
| HARD- 172.0.1.126/27 | 7-14 | 7-14 |
| ACCES-172.0.1.142/28 | 1-6 | 1-6 |

CONFIGURACIÓN SWITCH 4

Switch>enable

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#exit

Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Switch#vlan databbae

^

% Invalid input detected at '^' marker.

Switch#vlan database

% Warning: It is recommended to configure VLAN from config mode,

as VLAN database mode is being deprecated. Please consult user

documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#vlan 94 name SER

VLAN 94 added:

Name: SER

Switch(vlan)#vlan 126 name HARD

VLAN 126 added:

Name: HARD

Switch(vlan)#vlan 142 name ACCES

VLAN 142 added:

Name: ACCES

Switch(vlan)#exit

APPLY completed.

Exiting....

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#in fa ra 0/1-6

^

% Invalid input detected at '^' marker.

Switch(config)#in ra fa 0/1-6

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 142

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in ra fa 0/7-14

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 126

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in ra fa 0/15-22

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 94

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 94

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in fa 0/24

Switch(config-if)#sw mode tr

Switch(config-if)#no shu

Switch(config-if)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Switch#copy ru

Switch#copy running-config

% Incomplete command.

Switch#copy running-config star

Switch#copy running-config startup-config

Destination filename [startup-config]?

Building configuration...

[OK]

Switch#Switch(config-if-range)#in ra fa 0/15-22

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 94

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in fa 0/24

Switch(config-if)#sw mo tr

Switch(config-if)#sw tr na vlan 126

Switch(config-if)#sw tr all vlan 142

Switch(config-if)#sw tr all vlan 94

Switch(config-if)#no shu

Switch(config-if)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Switch#copy ru

Switch#copy running-config star

Switch#copy running-config startup-config

Destination filename [startup-config]?

Building configuration...

[OK]

Switch#

CONFIGURACIÓN SWITCH 5

Switch>enable

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#exit

Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Switch#vlan databbae

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Switch#vlan database

% Warning: It is recommended to configure VLAN from config mode,

as VLAN database mode is being deprecated. Please consult user

documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#vlan 94 name SER

VLAN 94 added:

Name: SER

Switch(vlan)#vlan 126 name HARD

VLAN 126 added:

Name: HARD

Switch(vlan)#vlan 142 name ACCES

VLAN 142 added:

Name: ACCES

Switch(vlan)#exit

APPLY completed.

Exiting....

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#in fa ra 0/1-6

^

% Invalid input detected at '^' marker.

Switch(config)#in ra fa 0/1-6

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 142

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in ra fa 0/7-14

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 126

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in ra fa 0/15-22

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 94

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 94

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in fa 0/24

Switch(config-if)#sw mode tr

Switch(config-if)#no shu

Switch(config-if)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Switch#copy ru

Switch#copy running-config

% Incomplete command.

Switch#copy running-config star

Switch#copy running-config startup-config

Destination filename [startup-config]?

Building configuration...

[OK]

Switch#

CONFIGURACIÓN ROUTER

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#in gi 0/0

Router(config-if)#no sh

Router(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

Router(config-if)#exit

Router(config)#in gi 0/0.94

Router(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.94, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.94, changed state to up

Router(config-subif)#enc

Router(config-subif)#encapsulation dot1

Router(config-subif)#encapsulation dot1Q 94

Router(config-subif)#ip add

Router(config-subif)#ip address 172.0.1.65 255.255.255.224

Router(config-subif)#exit

Router(config)#in gi 0/0.126

Router(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.126, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.126, changed state to up

Router(config-subif)#enc

Router(config-subif)#encapsulation dot1

Router(config-subif)#encapsulation dot1Q 126

Router(config-subif)#ip add

Router(config-subif)#ip address 172.0.1.97 255.255.255.224

Router(config-subif)#exit

Router(config)#in gi 0/0.142

Router(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.142, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.142, changed state to up

Router(config-subif)#enca

Router(config-subif)#encapsulation dot1

Router(config-subif)#encapsulation dot1Q 142

Router(config-subif)#ip add

Router(config-subif)#ip address 172.0.1.129 255.255.255.240

Router(config-subif)#exit

Router(config)#dhcp ex

Router(config)#ip dhcp exc

Router(config)#ip dhcp excluded-address 172.0.1.65

Router(config)#ip dhcp excluded-address 172.0.1.97

Router(config)#ip dhcp excluded-address 172.0.1.129

Router(config)#ip dhcp po

Router(config)#ip dhcp pool SER

Router(dhcp-config)#net

Router(dhcp-config)#network 172.0.1.65 255.255.255.224

Router(dhcp-config)#de

Router(dhcp-config)#default-router 172.0.1.64

Router(dhcp-config)#exit

Router(config)#ip pool

^

% Invalid input detected at '^' marker.

Router(config)#ip dh

Router(config)#ip dhcp pool HARD

Router(dhcp-config)#net

Router(dhcp-config)#network 172.0.1.97 255.255.255.224

Router(dhcp-config)#de

Router(dhcp-config)#default-router 172.0.1.96

Router(dhcp-config)#exit

Router(config)#ip dhcp poll ACCES

^

% Invalid input detected at '^' marker.

Router(config)#ip dhcp pool ACCES

Router(dhcp-config)#net

Router(dhcp-config)#network 172.0.1.129 255.255.255.240

Router(dhcp-config)#de

Router(dhcp-config)#default-router 172.0.1.128

Router(dhcp-config)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#copy run

Router#copy running-config star

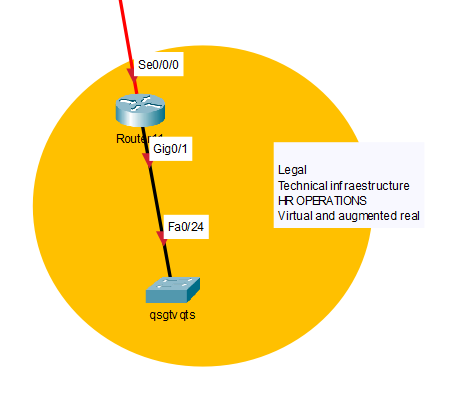
Router#copy running-config startup-config

Destination filename [startup-config]?

Building configuration...

[OK]

Router#



Hardware:

Para la Red (Services,Harware,Acces) Subdivisiones se utilizó el siguiente equipo:

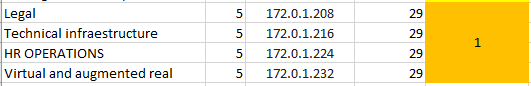
* 1 Router 2901 
* 1 Switches 2950-24 de 24 puertos 
* 1 Cables Directos 

Creación de Vlan:

Las Vlan Serán Creadas dentro de los Switches, con la finalidad de distribuir los sub departamentos.

Serán las siguientes con la siguiente distribución:

Son 20 host que se deben conectar.



|  |  |
| --- | --- |
| Vlan | Switch 1 |
| LEGAL- 172.0.1.214/29 | 18-23 |
| TEIN- 172.0.1.222/29 | 12-17 |
| HROPE-172.0.1.230/29 | 6-11 |
| VIAUG-172.0.1.238/29 | 1-5 |

CONFIGURACIÓN SWITCH 1

Switch>enable

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#exit

Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Switch#vlan database

% Warning: It is recommended to configure VLAN from config mode,

as VLAN database mode is being deprecated. Please consult user

documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#vlan 214 name LEGAL

VLAN 214 added:

Name: LEGAL

Switch(vlan)#vlan 222 name TEIN

VLAN 222 added:

Name: TEIN

Switch(vlan)#vlan 230 name HROPE

VLAN 230 added:

Name: HROPE

Switch(vlan)#vlan 238 namme VIAUG

^

% Invalid input detected at '^' marker.

Switch(vlan)#vlan 238 name VIAUG

VLAN 238 added:

Name: VIAUG

Switch(vlan)#exit

APPLY completed.

Exiting....

Switch#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#in ra fa 0/1-5

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 238

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in ra fa 0/6-11

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 230

Switch(config-if-range)#no sh

Switch(config-if-range)#exit

Switch(config)#in ra fa 0/12-17

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 222

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in ra fa 0/18-23

Switch(config-if-range)#sw mo acc

Switch(config-if-range)#sw acc vlan 214

Switch(config-if-range)#no shu

Switch(config-if-range)#exit

Switch(config)#in fa 0/24

Switch(config-if)#sw mo tr

Switch(config-if)#exit

Switch(config)#exit

Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Switch#copy ru

Switch#copy running-config star

Switch#copy running-config startup-config

Destination filename [startup-config]?

Building configuration...

[OK]

Switch#

CONFIGURACIÓN ROUTER

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#in gi 0/0

Router(config-if)#no shu

Router(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

Router(config-if)#exit

Router(config)#in gi 0/0.214

Router(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.214, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.214, changed state to up

Router(config-subif)#enca

Router(config-subif)#encapsulation dot1

Router(config-subif)#encapsulation dot1Q 214

Router(config-subif)#ip add

Router(config-subif)#ip address 172.0.1.209 255.255.255.248

Router(config-subif)#exit

Router(config)#in gi 0/0.222

Router(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.222, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.222, changed state to up

Router(config-subif)#enc

Router(config-subif)#encapsulation dot1

Router(config-subif)#encapsulation dot1Q 222

Router(config-subif)#ip add

Router(config-subif)#ip address 172.0.1.217 255.255.255.248

Router(config-subif)#exit

Router(config)#in gi 0/0.230

Router(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.230, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.230, changed state to up

Router(config-subif)#enca

Router(config-subif)#encapsulation dot1

Router(config-subif)#encapsulation dot1Q 230

Router(config-subif)#ip add

Router(config-subif)#ip address 172.0.1.225 255.255.255.248

Router(config-subif)#exit

Router(config)#in gi 0/0.238

Router(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.238, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.238, changed state to up

Router(config-subif)#enc

Router(config-subif)#encapsulation dot1

Router(config-subif)#encapsulation dot1Q 238

Router(config-subif)#ip add

Router(config-subif)#ip address 172.0.1.233 255.255.255.248

Router(config-subif)#exit

Router(config)#ip dhcp exc

Router(config)#ip dhcp excluded-address 172.0.1.209

Router(config)#ip dhcp excluded-address 172.0.1.217

Router(config)#ip dhcp excluded-address 172.0.1.225

Router(config)#ip dhcp excluded-address 172.0.1.233

Router(config)#ip dhcp pool LEGAL

Router(dhcp-config)#net

Router(dhcp-config)#network 172.0.1.209

% Incomplete command.

Router(dhcp-config)#network 172.0.1.209 255.255.255.248

Router(dhcp-config)#defa

Router(dhcp-config)#default-router 172.0.1.208

Router(dhcp-config)#exit

Router(config)#ip dhcp pool TEIN

Router(dhcp-config)#net

Router(dhcp-config)#network 172.0.1.217 255.255.255.248

Router(dhcp-config)#def

Router(dhcp-config)#default-router 172.0.1.216

Router(dhcp-config)#exit

Router(config)#ip dhcp pool HROPE

Router(dhcp-config)#net

Router(dhcp-config)#network 172.0.1.225 255.255.255.248

Router(dhcp-config)#defa

Router(dhcp-config)#default-router 172.0.1.224

Router(dhcp-config)#exit

Router(config)#ip dhcp pool VIAUG

Router(dhcp-config)#net

Router(dhcp-config)#network 172.0.1.233 255.255.255.248

Router(dhcp-config)#defa

Router(dhcp-config)#default-router 172.0.1.232

Router(dhcp-config)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#copy ru

Router#copy running-config star

Router#copy running-config startup-config

Destination filename [startup-config]?

Building configuration...

[OK]

Router#