

**Universidad Autónoma de Centro América**

Telemática

**Proyecto Final:**

Documentación Routers y Switches

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# Configuración de Routers y Switches

## Router ISP

interface FastEthernet0/0

ip address 200.10.150.1 255.255.255.0

duplex auto

speed auto

!

interface Serial0/0/0

ip address 12.0.1.2 255.255.255.252

clock rate 2000000

!

router rip

version 2

network 12.0.0.0

network 200.10.150.0

no auto-summary

## Router Central

hostname Router

!

!

!

!

!

!

!

!

no ip cef

no ipv6 cef

!

!

!

!

!

!

!

!

!

!

!

!

spanning-tree mode pvst

!

!

!

!

!

!

interface FastEthernet0/0

no ip address

duplex auto

speed auto

shutdown

!

interface FastEthernet0/1

no ip address

duplex auto

speed auto

shutdown

!

interface Serial0/0/0

ip address 10.0.2.1 255.0.0.0

encapsulation frame-relay

!

interface Serial0/0/1

ip address 11.0.2.1 255.0.0.0

encapsulation frame-relay

!

interface Serial0/1/0

ip address 12.0.1.1 255.255.255.252

!

interface Serial0/1/1

no ip address

clock rate 2000000

shutdown

!

interface Vlan1

no ip address

shutdown

!

router eigrp 10

redistribute rip metric 10000 1 255 255 1500

redistribute ospf 100 metric 10000 100 255 1 1500

network 11.0.0.0

auto-summary

!

router ospf 100

log-adjacency-changes

redistribute rip subnets

redistribute eigrp 10 subnets

network 10.0.0.0 0.255.255.255 area 1

!

router rip

version 2

redistribute eigrp 10 metric 15

redistribute ospf 100 metric 15

network 12.0.0.0

no auto-summary

!

ip classless

!

ip flow-export version 9

!

!

!

!

!

!

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

!

!

end

# Edificio #1

## Router Edificio #1

hostname Router

!

!

!

!

!

!

!

!

no ip cef

no ipv6 cef

!

!

!

!

!

!

!

!

!

!

!

!

spanning-tree mode pvst

!

!

!

!

!

!

interface FastEthernet0/0

ip address 199.150.0.1 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/0.10

encapsulation dot1Q 10

ip address 199.150.10.1 255.255.255.0

!

interface FastEthernet0/0.20

encapsulation dot1Q 20

ip address 199.150.20.1 255.255.255.0

!

interface FastEthernet0/0.30

encapsulation dot1Q 30

ip address 199.150.30.1 255.255.255.0

!

interface FastEthernet0/0.40

encapsulation dot1Q 40

ip address 199.150.40.1 255.255.255.0

!

interface FastEthernet0/0.50

encapsulation dot1Q 50

ip address 199.150.50.1 255.255.255.0

!

interface FastEthernet0/1

no ip address

duplex auto

speed auto

shutdown

!

interface Serial0/0/0

ip address 10.0.1.1 255.0.0.0

encapsulation frame-relay

clock rate 2000000

!

interface Serial0/0/1

no ip address

clock rate 2000000

shutdown

!

interface Vlan1

no ip address

shutdown

!

router eigrp 10

redistribute rip metric 10000 0 255 255 1500

redistribute ospf 100 metric 10000 100 255 1 1500

network 199.150.10.0

network 199.150.30.0

no auto-summary

!

router ospf 100

log-adjacency-changes

redistribute rip subnets

redistribute eigrp 10 subnets

network 199.150.20.0 0.0.0.255 area 1

network 199.150.50.0 0.0.0.255 area 1

network 10.0.0.0 0.255.255.255 area 1

!

router rip

version 2

redistribute eigrp 10 metric 15

redistribute ospf 100 metric 15

network 199.150.40.0

no auto-summary

!

ip classless

!

ip flow-export version 9

!

!

!

!

!

!

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

!

!

end

## Switch Edificio #1

interface FastEthernet0/1

switchport mode trunk

!

interface FastEthernet0/2

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/3

switchport access vlan 20

switchport mode access

!

interface FastEthernet0/4

switchport access vlan 30

switchport mode access

!

interface FastEthernet0/5

switchport access vlan 40

switchport mode access

!

interface FastEthernet0/6

switchport access vlan 50

switchport mode Access

## Router Local #1 - Edificio #1

interface FastEthernet0/0

ip address 199.150.10.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

ip address 199.150.60.1 255.255.255.0

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router eigrp 10

network 199.150.60.0

network 199.150.10.0

no auto-summary

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!telephony-service

max-ephones 5

max-dn 5

ip source-address 199.150.60.1 port 2000

auto assign 4 to 6

auto assign 1 to 5

!

ephone-dn 1

number 1101

!

ephone-dn 2

number 1102

!

ephone 1

device-security-mode none

mac-address 0001.6396.3A9B

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 0000.0CE3.8114

type 7960

button 1:2

## Switch Local #1 – Edificio #1

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

interface FastEthernet0/3

!

interface FastEthernet0/4

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/11

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/12

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/13

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/14

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/15

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #2 – Edificio #1

interface FastEthernet0/0

ip address 199.150.20.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

no ip address

duplex auto

speed auto

!

interface FastEthernet0/1.10

encapsulation dot1Q 10

ip address 199.150.70.1 255.255.255.0

!

interface FastEthernet0/1.20

encapsulation dot1Q 20

ip address 199.150.71.1 255.255.255.0

ip helper-address 199.150.70.2

!

interface Vlan1

no ip address

shutdown

!

router ospf 100

log-adjacency-changes

network 199.150.70.0 0.0.0.255 area 1

network 199.150.20.0 0.0.0.255 area 1

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 199.150.71.1 port 2000

!

ephone-dn 1

number 1201

!

ephone-dn 2

number 1202

!

ephone-dn 3

number 1203

!

ephone 1

device-security-mode none

mac-address 0060.3E4D.2E22

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 0002.17CC.1BB8

type 7960

button 1:2

## Switch Local #2 – Edificio #1

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

switchport mode trunk

!

interface FastEthernet0/2

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/3

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/4

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/5

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/6

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/7

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/8

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/9

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/10

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/11

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/12

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/13

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/14

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/15

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/16

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/17

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/18

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/19

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/20

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/21

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/22

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/23

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/24

switchport access vlan 10

switchport mode access

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #3 – Edificio #1

ip dhcp pool voice

network 199.150.80.0 255.255.255.0

default-router 199.150.80.1

option 150 ip 199.150.80.1

dns-server 200.10.150.2

!

interface FastEthernet0/0

ip address 199.150.30.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

ip address 199.150.80.1 255.255.255.0

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router eigrp 10

network 199.150.80.0

network 199.150.30.0

no auto-summary

!

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 199.150.80.1 port 2000

auto assign 4 to 6

auto assign 1 to 5

!

ephone-dn 1

number 1301

!

ephone-dn 2

number 1302

!

ephone 1

device-security-mode none

mac-address 0005.5E95.8AC7

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 0001.C918.5482

type 7960

button 1:2

## Switch Local #3 – Edificio #1

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

interface FastEthernet0/3

!

interface FastEthernet0/4

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/11

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/12

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/13

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/14

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/15

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #4 – Edificio #1

ip dhcp pool voice

network 199.150.90.0 255.255.255.0

default-router 199.150.90.1

option 150 ip 199.150.90.1

dns-server 200.10.150.2

!

interface FastEthernet0/0

ip address 199.150.40.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

ip address 199.150.90.1 255.255.255.0

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router rip

version 2

network 199.150.40.0

network 199.150.90.0

no auto-summary

!

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 199.150.90.1 port 2000

auto assign 4 to 6

auto assign 1 to 5

!

ephone-dn 1

number 1401

!

ephone-dn 2

number 1402

!

ephone 1

device-security-mode none

mac-address 0001.64A1.B779

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 00E0.F726.2471

type 7960

button 1:2

## Switch Local #4 – Edificio #1

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

interface FastEthernet0/3

!

interface FastEthernet0/4

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/11

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/12

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/13

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/14

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/15

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #5 – Edificio #1

interface FastEthernet0/0

ip address 199.150.50.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

no ip address

duplex auto

speed auto

!

interface FastEthernet0/1.10

encapsulation dot1Q 10

ip address 199.150.100.1 255.255.255.0

!

interface FastEthernet0/1.20

encapsulation dot1Q 20

ip address 199.150.101.1 255.255.255.0

ip helper-address 199.150.100.2

!

interface Vlan1

no ip address

shutdown

!

router ospf 100

log-adjacency-changes

network 199.150.100.0 0.0.0.255 area 1

network 199.150.50.0 0.0.0.255 area 1

!

router rip

!

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 199.150.101.1 port 2000

!

ephone-dn 1

number 1501

!

ephone-dn 2

number 1502

!

ephone 1

device-security-mode none

mac-address 0009.7C04.DA52

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 0001.961C.3353

type 7960

button 1:2

## Switch Local #5 – Edificio #1

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

switchport mode trunk

!

interface FastEthernet0/2

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/3

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/4

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/5

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/6

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/7

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/8

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/9

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/10

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/11

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/12

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/13

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/14

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/15

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/16

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/17

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/18

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/19

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/20

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/21

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/22

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/23

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/24

switchport access vlan 10

switchport mode access

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

# Edificio #2

## Router Edificio #2

hostname Router

!

!

!

!

!

!

!

!

no ip cef

no ipv6 cef

!

!

!

!

!

!

!

!

!

!

!

!

spanning-tree mode pvst

!

!

!

!

!

!

interface FastEthernet0/0

ip address 200.10.0.1 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/0.10

encapsulation dot1Q 10

ip address 200.10.10.1 255.255.255.0

!

interface FastEthernet0/0.20

encapsulation dot1Q 20

ip address 200.10.20.1 255.255.255.0

!

interface FastEthernet0/0.30

encapsulation dot1Q 30

ip address 200.10.30.1 255.255.255.0

!

interface FastEthernet0/0.40

encapsulation dot1Q 40

ip address 200.10.40.1 255.255.255.0

!

interface FastEthernet0/0.50

encapsulation dot1Q 50

ip address 200.10.50.1 255.255.255.0

!

interface FastEthernet0/1

no ip address

duplex auto

speed auto

shutdown

!

interface Serial0/0/0

ip address 11.0.1.1 255.0.0.0

encapsulation frame-relay

clock rate 2000000

!

interface Serial0/0/1

no ip address

clock rate 2000000

shutdown

!

interface Vlan1

no ip address

shutdown

!

router eigrp 10

redistribute rip metric 10000 0 255 255 1500

redistribute ospf 100 metric 10000 100 255 1 1500

network 200.10.30.0

network 200.10.50.0

network 11.0.0.0

no auto-summary

!

router ospf 100

log-adjacency-changes

redistribute rip subnets

redistribute eigrp 10 subnets

network 200.10.40.0 0.0.0.255 area 1

network 200.10.20.0 0.0.0.255 area 1

!

router rip

version 2

redistribute eigrp 10 metric 15

redistribute ospf 100 metric 15

network 200.10.10.0

no auto-summary

!

ip classless

!

ip flow-export version 9

!

!

!

!

!

!

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

!

!

end

## Switch Central – Edificio #2

interface FastEthernet0/1

switchport mode trunk

!

interface FastEthernet0/2

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/3

switchport access vlan 20

switchport mode access

!

interface FastEthernet0/4

switchport access vlan 30

switchport mode access

!

interface FastEthernet0/5

switchport access vlan 40

switchport mode access

!

interface FastEthernet0/6

switchport access vlan 50

switchport mode access

!

## Router Local #1 – Edificio #2

ip dhcp pool voice

network 200.10.60.0 255.255.255.0

default-router 200.10.60.1

option 150 ip 200.10.60.1

dns-server 200.10.150.2

!

interface FastEthernet0/0

ip address 200.10.10.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

ip address 200.10.60.1 255.255.255.0

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router rip

version 2

network 200.10.10.0

network 200.10.60.0

no auto-summary

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 200.10.60.1 port 2000

auto assign 4 to 6

auto assign 1 to 5

!

ephone-dn 1

number 2101

!

ephone-dn 2

number 2102

!

ephone 1

device-security-mode none

mac-address 0001.63B2.815A

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 0010.11B6.2DDB

type 7960

button 1:2

!

## Switch Local #1 – Edificio #2

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

interface FastEthernet0/3

!

interface FastEthernet0/4

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

switchport voice vlan 1

!

interface FastEthernet0/11

switchport voice vlan 1

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #2 – Edificio #2

ip dhcp pool voice

network 200.10.70.0 255.255.255.0

default-router 200.10.70.1

option 150 ip 200.10.70.1

dns-server 200.10.150.2

!

interface FastEthernet0/0

ip address 200.10.20.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

ip address 200.10.70.1 255.255.255.0

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router ospf 100

log-adjacency-changes

network 200.10.20.0 0.0.0.255 area 1

network 200.10.70.0 0.0.0.255 area 1

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 200.10.70.1 port 2000

auto assign 4 to 6

auto assign 1 to 5

!

ephone-dn 1

number 2201

!

ephone-dn 2

number 2202

!

ephone 1

device-security-mode none

mac-address 00D0.97CA.E504

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 00E0.A323.267E

type 7960

button 1:2

!

## Switch Local #2 – Edificio #2

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

interface FastEthernet0/3

!

interface FastEthernet0/4

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/11

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #3 – Edificio #2

interface FastEthernet0/0

ip address 200.10.30.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

no ip address

duplex auto

speed auto

!

interface FastEthernet0/1.10

encapsulation dot1Q 10

ip address 200.10.80.1 255.255.255.0

!

interface FastEthernet0/1.20

encapsulation dot1Q 20

ip address 200.10.81.1 255.255.255.0

ip helper-address 200.10.80.2

!

interface Vlan1

no ip address

shutdown

!

router eigrp 10

network 200.10.30.0

network 200.10.80.0

no auto-summary

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 200.10.81.1 port 2000

!

ephone-dn 1

number 2301

!

ephone-dn 2

number 2302

!

ephone 1

device-security-mode none

mac-address 000A.4153.6A7D

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 000A.F358.8C71

type 7960

button 1:2

!

## Switch Local #3 – Edificio #2

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

switchport mode trunk

!

interface FastEthernet0/2

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/3

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/4

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/5

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/6

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/7

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/8

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/9

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/10

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/11

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/12

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/13

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/14

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/15

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/16

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/17

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/18

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/19

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/20

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/21

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/22

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/23

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/24

switchport access vlan 10

switchport mode access

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #4 – Edificio #2

ip dhcp pool voice

network 200.10.90.0 255.255.255.0

default-router 200.10.90.1

option 150 ip 200.10.90.1

dns-server 200.10.150.2

!

interface FastEthernet0/0

ip address 200.10.40.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

ip address 200.10.90.1 255.255.255.0

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router ospf 100

log-adjacency-changes

network 200.10.40.0 0.0.0.255 area 1

network 200.10.90.0 0.0.0.255 area 1

!

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2500 voip

destination-pattern 25..

session target ipv4:200.10.100.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 200.10.90.1 port 2000

auto assign 4 to 6

auto assign 1 to 5

!

ephone-dn 1

number 2401

!

ephone-dn 2

number 2402

!

ephone 1

device-security-mode none

mac-address 0003.E45A.D999

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 00E0.B07B.ADD1

type 7960

button 1:2

## Switch Local #4 – Edificio #2

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

interface FastEthernet0/3

!

interface FastEthernet0/4

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/11

switchport mode access

switchport voice vlan 1

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end

## Router Local #5 – Edificio #2

interface FastEthernet0/0

ip address 200.10.50.2 255.255.255.0

duplex auto

speed auto

!

interface FastEthernet0/1

no ip address

duplex auto

speed auto

!

interface FastEthernet0/1.10

encapsulation dot1Q 10

ip address 200.10.100.1 255.255.255.0

!

interface FastEthernet0/1.20

encapsulation dot1Q 20

ip address 200.10.101.1 255.255.255.0

ip helper-address 200.10.100.2

!

interface Vlan1

no ip address

shutdown

!

router eigrp 10

network 200.10.100.0

network 200.10.50.0

no auto-summary

!

!

dial-peer voice 1100 voip

destination-pattern 11..

session target ipv4:199.150.60.1

!

dial-peer voice 1200 voip

destination-pattern 12..

session target ipv4:199.150.70.1

!

dial-peer voice 1300 voip

destination-pattern 13..

session target ipv4:199.150.80.1

!

dial-peer voice 1400 voip

destination-pattern 14..

session target ipv4:199.150.90.1

!

dial-peer voice 1500 voip

destination-pattern 15..

session target ipv4:199.150.100.1

!

dial-peer voice 2100 voip

destination-pattern 21..

session target ipv4:200.10.60.1

!

dial-peer voice 2200 voip

destination-pattern 22..

session target ipv4:200.10.70.1

!

dial-peer voice 2300 voip

destination-pattern 23..

session target ipv4:200.10.80.1

!

dial-peer voice 2400 voip

destination-pattern 24..

session target ipv4:200.10.90.1

!

telephony-service

max-ephones 5

max-dn 5

ip source-address 200.10.101.1 port 2000

!

ephone-dn 1

number 2501

!

ephone-dn 2

number 2502

!

ephone 1

device-security-mode none

mac-address 0060.705D.5B9C

type 7960

button 1:1

!

ephone 2

device-security-mode none

mac-address 0090.0C53.EA78

type 7960

button 1:2

## Switch Local #5 – Edificio #2

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

switchport mode trunk

!

interface FastEthernet0/2

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/3

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/4

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/5

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/6

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/7

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/8

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/9

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/10

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/11

switchport access vlan 10

switchport mode access

switchport voice vlan 20

!

interface FastEthernet0/12

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/13

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/14

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/15

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/16

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/17

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/18

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/19

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/20

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/21

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/22

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/23

switchport access vlan 10

switchport mode access

!

interface FastEthernet0/24

switchport access vlan 10

switchport mode access

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

End

## Switch 2 Local #5 – Edificio #2

hostname Switch

!

!

!

spanning-tree mode pvst

!

interface FastEthernet0/1

!

interface FastEthernet0/2

!

interface FastEthernet0/3

!

interface FastEthernet0/4

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

!

interface FastEthernet0/11

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface Vlan1

no ip address

shutdown

!

!

!

!

line con 0

!

line vty 0 4

login

line vty 5 15

login

!

!

end