

Proiect Criptografie si securitate informationala

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244/1

Clasa de adresa aleasa : 192.168.2.x/24

RouterC se configureaza cu interfata
Loopback:64.100.0.131/27

Router A R7: conectare fast ethernet 4/0 192.168.2.130 /30 255.255.255.252

Router B R8: conectare fast ethernet 4/0 192.168.2.134 /30 255.255.255.252

Router C R8: conectare fast ethernet 4/0 192.168.2.129 /30 255.255.255.252

Router C R8: conectare fast ethernet 5/0 192.168.2.133 /30 255.255.255.252

Switch A: conectare fast ethernet 1/0 trunk(permite incapsularea cadrelor din VLAN-uri diferite)

VLAN1:Switch A: conectare fast ethernet 2/0 si 3/0 access si vlan 10 (pt executive)

VLAN2: Switch A: conectare fast ethernet 4/0 si 5/0 access si vlan 20 (pt Engineering)

VLAN3: Switch A: conectare fast ethernet 6/0 si 7/0 access si vlan 30 (pt Meeting A)

Switch A: conectare fast ethernet 8/0 access si vlan 10 (pt server)

Server: conectare fast ethernet 0/0 192.168.2.97 /28 configurat static)
255.255.255.240 gateway 192.168.2.97(

Schema de adresare :

X=131 => retea : 192.168.2.0 /24

R1 (10 utilizatori) : 192.168.2.96 – 192.168.2.111 /28

R2 (26 utilizatori) : 192.168.2.0 – 192.168.2.31 /27

R3 (12 utilizatori) : 192.168.2.64 – 192.168.2.79 /28

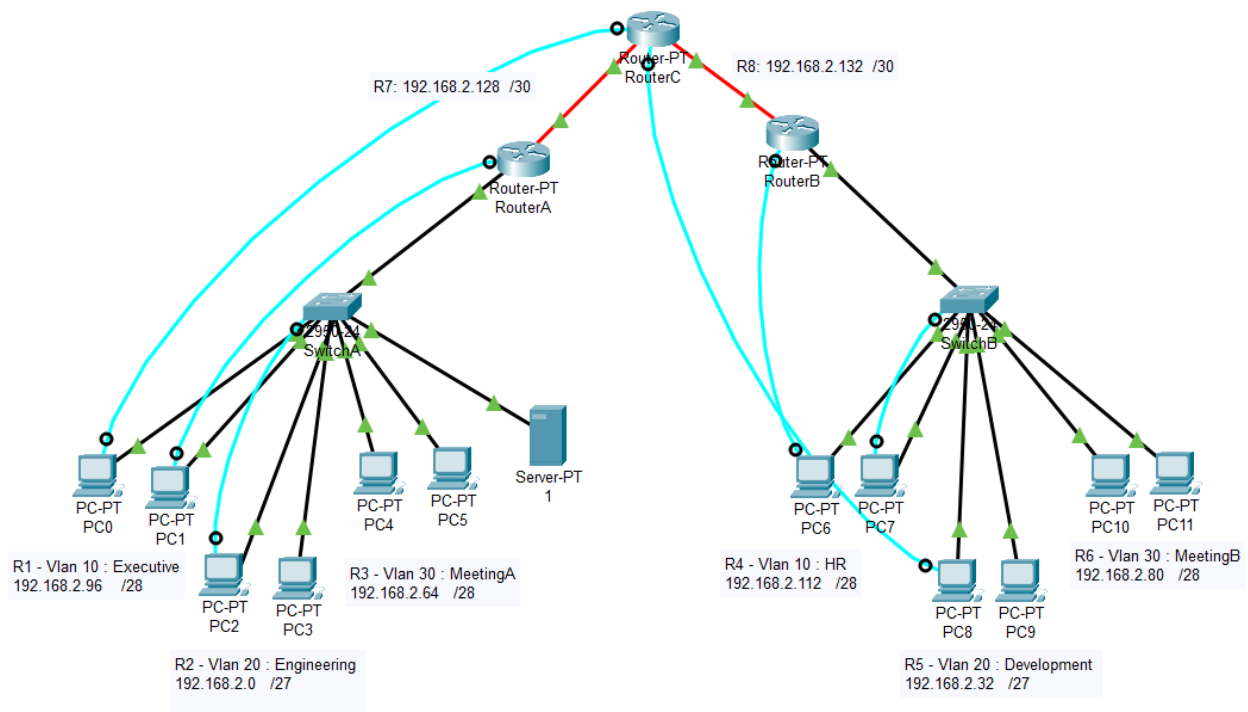
R4 (8 utilizatori + adresa de retea +adresa de broadcast => e nevoie de 10 adrese) : 192.168.2.112 – 192.168.2.127 /28

R5 (18 utilizatori) : 192.168.2.32 – 192.168.2.63 /27

R6 (12 utilizatori) : 192.168.2.80 – 192.168.2.95 /28

R7 (RouterA-RouterC) : 192.168.2.128 – 192.168.2.131 /30

R8 (RouterB-RouterC) : 192.168.2.132 – 192.168.2.135 /30



Interfata routerC

RouterC>enable

RouterC#show run

Building configuration...

Current configuration : 982 bytes

!

version 12.2

no service timestamps log datetime msec

no service timestamps debug datetime msec

no service password-encryption

!

hostname RouterC

!

```
!  
ip cef  
no ipv6 cef  
!  
!  
interface Loopback1  
ip address 64.100.0.131 255.255.255.224  
!  
interface FastEthernet0/0  
no ip address  
duplex auto  
speed auto  
shutdown  
!  
interface FastEthernet1/0  
no ip address  
duplex auto  
speed auto  
shutdown  
!  
interface Serial2/0  
no ip address  
clock rate 2000000  
shutdown  
!  
interface Serial3/0  
no ip address
```

```
clock rate 2000000
shutdown
!
interface FastEthernet4/0
ip address 192.168.2.131 255.255.255.0
!
interface FastEthernet5/0
no ip address
!
router ospf 10
log-adjacency-changes
network 192.168.131.128 0.0.0.3 area 0
network 192.168.131.132 0.0.0.3 area 0
default-information originate
!
ip classless
ip route 0.0.0.0 0.0.0.0 Loopback1
!
ip flow-export version 9
!
!
line con 0
!
line aux 0
!
line vty 0 4
login
```

end

Router A

hostname RouterA

!

!

ip dhcp excluded-address 192.168.131.97 192.168.131.98

ip dhcp excluded-address 192.168.131.1

ip dhcp excluded-address 192.168.131.65

ip dhcp excluded-address 192.168.2.97 192.168.2.98

ip dhcp excluded-address 192.168.2.1

ip dhcp excluded-address 192.168.2.65

!

ip dhcp pool 10

network 192.168.2.96 255.255.255.240

default-router 192.168.2.97

ip dhcp pool 20

network 192.168.2.0 255.255.255.224

default-router 192.168.2.1

ip dhcp pool 30

network 192.168.131.64 255.255.255.240

default-router 192.168.2.65

!

!

ip cef

no ipv6 cef

!

interface FastEthernet0/0

no ip address

duplex auto

speed auto

!

interface FastEthernet0/0.10

encapsulation dot1Q 10

ip address 192.168.2.97 255.255.255.240

!

interface FastEthernet0/0.20

encapsulation dot1Q 20

ip address 192.168.2.1 255.255.255.224

!

interface FastEthernet0/0.30

encapsulation dot1Q 40

ip address 192.168.2.65 255.255.255.240

ip access-group 110 in

!

interface FastEthernet1/0

no ip address

duplex auto

speed auto

shutdown

!

interface Serial2/0


```
no ip address
clock rate 2000000
shutdown
!
interface Serial3/0
no ip address
clock rate 2000000
shutdown
!
interface FastEthernet4/0
ip address 192.168.2.130 255.255.255.252
!
interface FastEthernet5/0
no ip address
shutdown
!
router ospf 10
log-adjacency-changes
network 192.168.131.96 0.0.0.15 area 0
network 192.168.131.0 0.0.0.31 area 0
network 192.168.131.64 0.0.0.15 area 0
network 192.168.131.128 0.0.0.3 area 0
network 192.168.2.96 0.0.0.15 area 0
network 192.168.2.0 0.0.0.31 area 0
network 192.168.2.64 0.0.0.15 area 0
network 192.168.2.128 0.0.0.3 area 0
!
```

```
router rip
!
ip classless
!
ip flow-export version 9
!
!
access-list 110 deny ip 192.168.131.96 0.0.0.15 any
access-list 110 deny ip 192.168.2.96 0.0.0.15 any
!
!
line con 0
!
line aux 0
!
line vty 0 4
login
!
!
!
end
```

SWITCH A

```
hostname SwitchA
spanning-tree mode pvst
spanning-tree extend system-id
```

!

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 20

switchport mode access

!

interface FastEthernet0/5

switchport access vlan 20

switchport mode access

!

interface FastEthernet0/6

switchport access vlan 30

switchport mode access

!

interface FastEthernet0/7

switchport access vlan 30

switchport mode access

```
!  
interface FastEthernet0/8  
switchport access vlan 10  
switchport mode access  
!  
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
```

RouterB

```
hostname RouterB
!
ip dhcp excluded-address 192.168.131.113
```

ip dhcp excluded-address 192.168.131.33

ip dhcp excluded-address 192.168.131.81

ip dhcp excluded-address 192.168.2.113

ip dhcp excluded-address 192.168.2.33

ip dhcp excluded-address 192.168.2.81

!

ip dhcp pool 10

network 192.168.2.112 255.255.255.240

default-router 192.168.2.113

ip dhcp pool 20

network 192.168.2.32 255.255.255.224

default-router 192.168.2.33

ip dhcp pool 30

network 192.168.2.80 255.255.255.240

default-router 192.168.2.81

!

!

!

ip cef

no ipv6 cef

!

interface FastEthernet0/0

no ip address

duplex auto

speed auto

!

interface FastEthernet0/0.10

```
encapsulation dot1Q 10
ip address 192.168.2.113 255.255.255.240
!
interface FastEthernet0/0.20
encapsulation dot1Q 20
ip address 192.168.2.33 255.255.255.224
!
interface FastEthernet0/0.30
encapsulation dot1Q 30
ip address 192.168.2.81 255.255.255.240
ip access-group 111 in
!
interface FastEthernet1/0
no ip address
duplex auto
speed auto
shutdown
!
interface Serial2/0
no ip address
clock rate 2000000
shutdown
!
interface Serial3/0
no ip address
clock rate 2000000
shutdown
```

```
!  
interface FastEthernet4/0  
ip address 192.168.2.134 255.255.255.252  
ip access-group 112 in  
!  
interface FastEthernet5/0  
no ip address  
shutdown  
!  
router ospf 10  
log-adjacency-changes  
network 192.168.131.112 0.0.0.15 area 0  
network 192.168.131.32 0.0.0.31 area 0  
network 192.168.131.132 0.0.0.3 area 0  
network 192.168.131.80 0.0.0.15 area 0  
network 192.168.2.112 0.0.0.15 area 0  
network 192.168.2.32 0.0.0.31 area 0  
network 192.168.2.64 0.0.0.31 area 0  
network 192.168.2.132 0.0.0.3 area 0  
!  
router rip  
!  
ip classless  
!  
ip flow-export version 9  
!  
!
```



```
access-list 111 deny ip 192.168.131.96 0.0.0.15 any
access-list 111 deny ip 192.168.2.96 0.0.0.15 any
access-list 112 deny ip 64.100.0.128 0.0.0.31 host 64.100.0.131
!
line con 0
!
line aux 0
!
line vty 0 4
login
!
!
end
```

SWITCH B

```
hostname SwitchB
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
switchport access vlan 30
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 20
switchport mode access
!
interface FastEthernet0/5
switchport access vlan 20
switchport mode access
!
interface FastEthernet0/6
switchport access vlan 30
switchport mode access
!
interface FastEthernet0/7
switchport mode access
!
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
```