

Parte integrante do concurso Netriders 2006

Arquivos de Configuração

30 de Março de 2006

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Diagrama da Rede

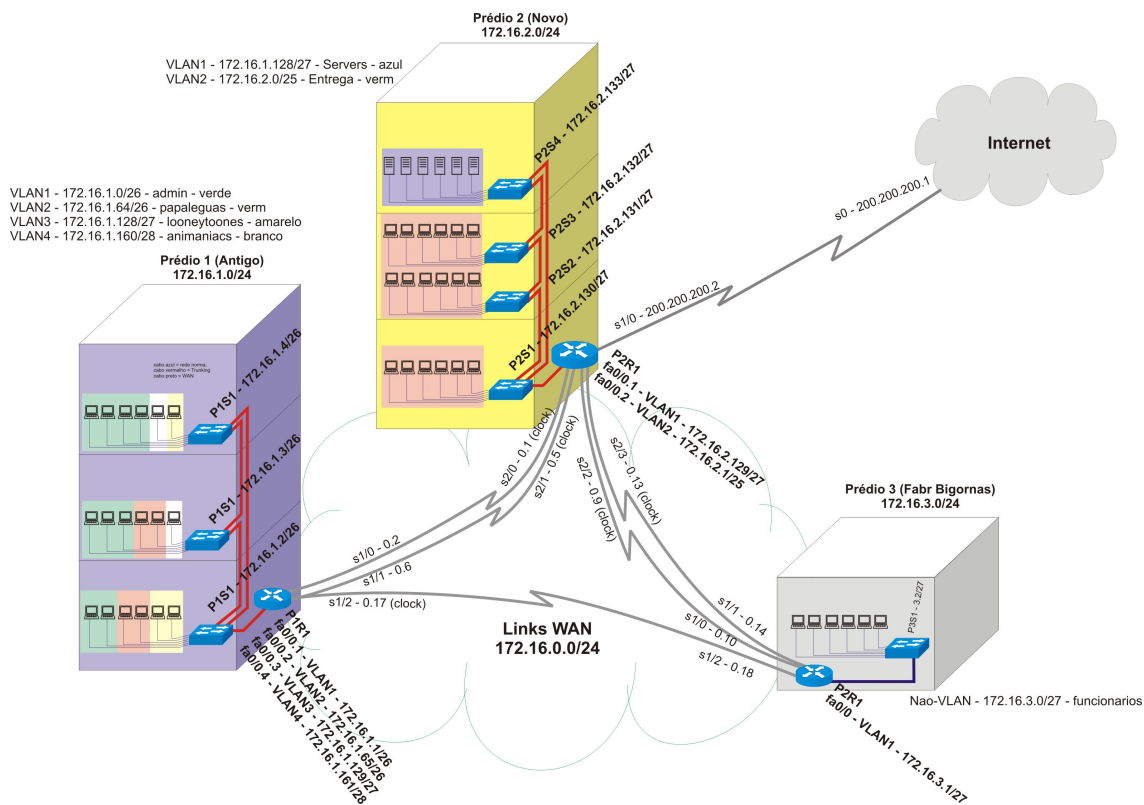
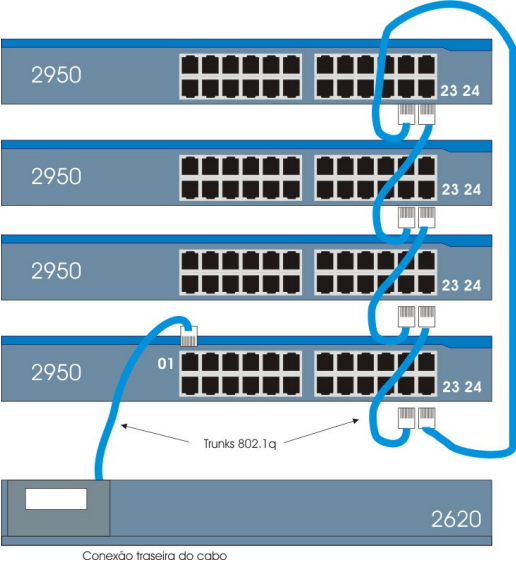


Diagrama de Conexões dos Switches (exemplo do prédio 2)



Indice

INDICE	3
ROTEADOR P1R1.....	3
SWITCH P1S1.....	6
SWITCH P1S2.....	8
SWITCH P1S3.....	11
ROTEADOR P2R1.....	13
SWITCH P2S1.....	17
SWITCH P2S2.....	19
SWITCH P2S3.....	22
SWITCH P2S4.....	24
ROTEADOR P3R1.....	27
SWITCH P3S1.....	29

Roteador P1R1

```
!  
version 12.3  
service timestamps debug datetime msec  
service timestamps log datetime msec  
no service password-encryption  
!  
hostname P1R1  
!  
boot-start-marker  
boot-end-marker  
!  
no logging console  
!  
no network-clock-participate slot 1  
no network-clock-participate wic 0  
no aaa new-model  
ip subnet-zero  
ip cef  
!  
!  
!  
no ftp-server write-enable  
!  
!  
!  
!  
interface Serial1/0  
description Link para Predio 2 - oficial  
ip address 172.16.0.2 255.255.255.252  
ip summary-address eigrp 100 172.16.1.0 255.255.255.0  
no ip directed-broadcast  
!
```

```

interface Serial1/1
  description Link para Predio 2 - redundancia
  ip address 172.16.0.6 255.255.255.252
  ip summary-address eigrp 100 172.16.1.0 255.255.255.0
  no ip directed-broadcast
!
interface Serial1/2
  description Link para Predio 3 - redundancia
  ip address 172.16.0.17 255.255.255.252
  ip summary-address eigrp 100 172.16.1.0 255.255.255.0
  no ip directed-broadcast
  clock rate 2000000
!
interface Serial1/3
  no ip address
  no ip directed-broadcast
  backup interface
  shutdown
!
interface FastEthernet0/0
  no ip address
  duplex auto
  speed auto
!
interface FastEthernet0/0.1
  description VLAN1-admin
  encapsulation dot1q 1
  ip address 172.16.1.1 255.255.255.192
  ip access-group 102 in
!
interface FastEthernet0/0.2
  description VLAN2-papaleguas
  encapsulation dot1q 2
  ip address 172.16.1.65 255.255.255.192
  ip access-group 102 in
!
interface FastEthernet0/0.3
  description VLAN3-looneytoonies
  encapsulation dot1q 3
  ip address 172.16.1.129 255.255.255.224
  ip access-group 102 in
!
interface FastEthernet0/0.4
  description VLAN4-animaniacs
  encapsulation dot1q 4
  ip address 172.16.1.161 255.255.255.240
  ip access-group 102 in
!
!
router eigrp 100
  network 172.16.0.0
  no auto-summary
!
ip classless
no ip http server
!

access-list 1 permit 172.16.1.0 0.0.0.63
!acesso livre da admin aos servers
access-list 102 permit ip 172.16.1.0 0.0.0.63 172.16.2.128 0.0.0.31
! Routers/switches acessam tftpserver

```

```

access-list 102 permit udp host 172.16.0.2 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.6 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.17 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.10 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.14 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.18 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.1 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.2 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.3 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.129 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.130 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.131 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.132 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.133 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.3.1 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.3.2 host 172.16.2.153 eq 69
! Bloqueio de TFTP para fora para evitar roubo de arquivos de
configuracao
access-list 102 deny udp 172.16.0.0 0.0.3.255 any eq 69
! acesso aos servers web
access-list 102 permit tcp any host 172.16.2.136 eq 80
access-list 102 permit tcp any host 172.16.2.137 eq 80
access-list 102 permit tcp any host 172.16.2.138 eq 80
access-list 102 permit tcp any host 172.16.2.139 eq 80
access-list 102 permit tcp any host 172.16.2.140 eq 80
access-list 102 permit tcp any host 172.16.2.141 eq 80
access-list 102 permit tcp any host 172.16.2.142 eq 80
access-list 102 permit tcp any host 172.16.2.143 eq 80
access-list 102 deny tcp any 172.16.2.128 0.0.0.31 eq 80
! permite query dns apenas para server interno
access-list 102 permit udp any host 172.16.2.151 eq 53
access-list 102 permit tcp any host 172.16.2.151 eq 53
access-list 102 deny udp any any eq 53
access-list 102 deny tcp any any eq 53
! Libera o resto
access-list 102 permit ip any any
!
snmp-server community public RO 1
snmp-server trap-source FastEthernet0/0.1
snmp-server location Predio ACMECorp
snmp-server contact acme@acmecorp.com
banner motd ^CC Se voce nao e autorizado, desconecte agora ^C
!
line con 0
  transport input none
line aux 0
!
line vty 0 4
  login
  password cisco
  access-class 1 in
!
no scheduler allocate
end

```

Switch P1S1

```
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname P1S1
!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!
interface FastEthernet0/1
  description porta do router
  switchport mode trunk
  no ip address
!
interface FastEthernet0/2
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/3
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/4
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/5
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/6
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/7
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/8
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/9
  switchport access vlan 2
  no ip address
  spanning-tree portfast
```

```

!
interface FastEthernet0/10
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/11
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/12
  switchport access vlan 4
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/13
  switchport access vlan 4
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/14
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/15
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/16
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/17
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/18
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/19
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/20
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/21
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!

```

```

interface FastEthernet0/22
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/23
  switchport mode trunk
  no ip address
!
interface FastEthernet0/24
  switchport mode trunk
  no ip address
!
interface Vlan1
  ip address 172.16.1.2 255.255.255.192
  no ip route-cache
!
ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
  password cisco
  login
  ip access-class 1 in
line vty 5 15
  password cisco
  login
  ip access-class 1 in
!
end

```

Switch P1S2

```

version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname P1S2
!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!
interface FastEthernet0/1
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/3

```



```

no ip address
spanning-tree portfast
!
interface FastEthernet0/4
no ip address
spanning-tree portfast
!
interface FastEthernet0/5
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/6
switchport access vlan 3
no ip address
spanning-tree portfast
!
interface FastEthernet0/7
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/8
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/9
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/10
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/11
no ip address
spanning-tree portfast
!
interface FastEthernet0/12
no ip address
spanning-tree portfast
!
interface FastEthernet0/13
switchport access vlan 4
no ip address
spanning-tree portfast
!
interface FastEthernet0/14
switchport access vlan 3
no ip address
spanning-tree portfast
!
interface FastEthernet0/15
no ip address
spanning-tree portfast
!
interface FastEthernet0/16
switchport access vlan 3

```

```

no ip address
spanning-tree portfast
!
interface FastEthernet0/17
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/18
switchport access vlan 3
no ip address
spanning-tree portfast
!
interface FastEthernet0/19
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/20
no ip address
spanning-tree portfast
!
interface FastEthernet0/21
no ip address
spanning-tree portfast
!
interface FastEthernet0/22
switchport access vlan 3
no ip address
spanning-tree portfast
!
interface FastEthernet0/23
switchport mode trunk
no ip address
!
interface FastEthernet0/24
switchport mode trunk
no ip address
!
interface Vlan1
ip address 172.16.1.3 255.255.255.192
no ip route-cache
!
ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
password cisco
login
ip access-class 1 in
line vty 5 15
password cisco
login
ip access-class 1 in
!
end

```

Switch P1S3

```
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname P1S2
!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!
interface FastEthernet0/1
no ip address
spanning-tree portfast
!
interface FastEthernet0/2
no ip address
spanning-tree portfast
!
interface FastEthernet0/3
no ip address
spanning-tree portfast
!
interface FastEthernet0/4
no ip address
spanning-tree portfast
!
interface FastEthernet0/5
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/6
switchport access vlan 3
no ip address
spanning-tree portfast
!
interface FastEthernet0/7
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/8
no ip address
spanning-tree portfast
!
interface FastEthernet0/9
no ip address
spanning-tree portfast
!
interface FastEthernet0/10
no ip address
spanning-tree portfast
!
```

```

interface FastEthernet0/11
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/12
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/13
  switchport access vlan 4
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/14
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/15
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/16
  switchport access vlan 3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/17
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/18
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/19
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/20
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/21
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/22
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/23
  switchport mode trunk
  no ip address
!
interface FastEthernet0/24
  switchport mode trunk
  no ip address
!

```

```

interface Vlan1
  ip address 172.16.1.4 255.255.255.192
  no ip route-cache
!
ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
  password cisco
  login
  ip access-class 1 in
line vty 5 15
  password cisco
  login
  ip access-class 1 in
!
end

```

Roteador P2R1

```

!
version 12.3
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname P2R1
!
boot-start-marker
boot-end-marker
!
!
no network-clock-participate slot 1
no network-clock-participate wic 0
no aaa new-model
ip subnet-zero
ip cef
!
!
!
no ftp-server write-enable
!
interface Serial1/0
  description Link para Internet - SAIDA
  ip address 200.200.200.2 255.255.255.252
  no ip directed-broadcast
  ip access-group 102 in
  ip access-group 103 out
!
interface Serial1/1
  no ip address
  no ip directed-broadcast
  backup interface
  shutdown

```

```

!
interface Serial2/0
  description Link para Predio 1 - oficial
  ip address 172.16.0.1 255.255.255.252
  ip summary-address eigrp 100 172.16.2.0 255.255.255.0
  no ip directed-broadcast
  clock rate 2000000
!
interface Serial2/1
  description Link para Predio 1 - redundante
  ip address 172.16.0.5 255.255.255.252
  ip summary-address eigrp 100 172.16.2.0 255.255.255.0
  no ip directed-broadcast
  clock rate 2000000
!
interface Serial2/2
  description Link para Predio 3 - oficial
  ip address 172.16.0.9 255.255.255.252
  ip summary-address eigrp 100 172.16.2.0 255.255.255.0
  no ip directed-broadcast
  clock rate 2000000
!
interface Serial2/3
  description Link para Predio 3 - redundante
  ip address 172.16.0.13 255.255.255.252
  ip summary-address eigrp 100 172.16.2.0 255.255.255.0
  no ip directed-broadcast
  clock rate 2000000
!
interface FastEthernet0/0
  no ip address
  no ip directed-broadcast
  no fair-queue
!
interface FastEthernet0/0.1
  description VLAN1-Servers
  encapsulation dot1q 1
  ip address 172.16.2.129 255.255.255.224
  ip access-group 110 in
  ip access-group 111 out
!
interface FastEthernet0/0.2
  description VLAN2-Users
  encapsulation dot1q 2
  ip address 172.16.2.1 255.255.255.128
  ip access-group 108 in
!
!
router eigrp 100
  redistribute static
  network 172.16.0.0
  no auto-summary
!
ip classless
no ip http server
ip route 0.0.0.0 0.0.0.0 200.200.200.1
access-list 1 permit 172.16.1.0 0.0.0.63

!Conexoes Estabelecidas
access-list 102 permit tcp any any established
! Servers web

```

```

access-list 102 permit tcp any host 172.16.2.136 eq 80
access-list 102 permit tcp any host 172.16.2.137 eq 80
access-list 102 permit tcp any host 172.16.2.138 eq 80
access-list 102 permit tcp any host 172.16.2.139 eq 80
access-list 102 permit tcp any host 172.16.2.140 eq 80
access-list 102 permit tcp any host 172.16.2.141 eq 80
access-list 102 permit tcp any host 172.16.2.142 eq 80
access-list 102 permit tcp any host 172.16.2.143 eq 80
!DNS (transferzone/request)
access-list 102 permit udp any host 172.16.2.151 eq 53
access-list 102 permit tcp any host 172.16.2.151 eq 53
! Bloqueia o resto
access-list 102 deny ip any 172.16.0.0 0.0.3.255
! SAIDA
access-list 103 permit tcp host 172.16.2.151 any eq 53
access-list 103 permit udp host 172.16.2.151 any eq 53
access-list 103 deny udp 172.16.0.0 0.0.3.255 any eq 53
access-list 103 deny tcp 172.16.0.0 0.0.3.255 any eq 53
access-list 103 deny udp 172.16.0.0 0.0.3.255 any eq 69
access-list 103 permit ip 172.16.0.0 0.0.3.255 any

!AL 108 - VLAN Users (prx origem)
!acesso livre da admin aos servers
access-list 108 permit ip 172.16.1.0 0.0.0.63 172.16.2.128 0.0.0.31
! Routers/switches acessam tftpserver
access-list 108 permit udp host 172.16.0.2 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.0.6 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.0.17 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.0.10 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.0.14 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.0.18 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.1.1 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.1.2 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.1.3 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.2.129 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.2.130 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.2.131 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.2.132 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.2.133 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.3.1 host 172.16.2.153 eq 69
access-list 108 permit udp host 172.16.3.2 host 172.16.2.153 eq 69
! Bloqueio de TFTP para fora para evitar roubo de arquivos de
configuracao
access-list 108 deny udp 172.16.0.0 0.0.3.255 any eq 69
! acesso aos servers web
access-list 108 permit tcp any host 172.16.2.136 eq 80
access-list 108 permit tcp any host 172.16.2.137 eq 80
access-list 108 permit tcp any host 172.16.2.138 eq 80
access-list 108 permit tcp any host 172.16.2.139 eq 80
access-list 108 permit tcp any host 172.16.2.140 eq 80
access-list 108 permit tcp any host 172.16.2.141 eq 80
access-list 108 permit tcp any host 172.16.2.142 eq 80
access-list 108 permit tcp any host 172.16.2.143 eq 80
access-list 108 deny tcp any 172.16.2.128 0.0.0.31 eq 80
! permite query dns apenas para server interno
access-list 108 permit udp any host 172.16.2.151 eq 53
access-list 108 permit tcp any host 172.16.2.151 eq 53
access-list 108 deny udp any any eq 53
access-list 108 deny tcp any any eq 53

```

```

! Libera o resto
access-list 108 permit ip any any
! entrada pela VLAN dos servers
! permit servidor mandar pacotes para clientes liberado (respostas
diversas)
access-list 110 permit ip 172.16.1.128 0.0.0.31 172.16.0.0 0.0.3.255

! AL 110 (in fastEth VLAN1)
! Permite apenas "entrada" de DNS do server
access-list 110 permit tcp host 172.16.2.151 any eq 53
access-list 110 permit udp host 172.16.2.151 any eq 53
access-list 110 deny udp 172.16.1.128 0.0.0.31 any eq 53
access-list 110 deny tcp 172.16.1.128 0.0.0.31 any eq 53
access-list 110 permit ip 172.16.0.0 0.0.3.255 any

!AL111 Aplicado fa0/0 out VLAN1 (indo servers)
!acesso irrestrito aos servers da admin
access-list 111 permit ip 172.16.1.0 0.0.0.63 172.16.2.128 0.0.0.31
! permite voltar conexoes abertas pelo server
access-list 111 permit tcp any any established
! Server web
access-list 111 permit tcp any host 172.16.2.136 eq 80
access-list 111 permit tcp any host 172.16.2.137 eq 80
access-list 111 permit tcp any host 172.16.2.138 eq 80
access-list 111 permit tcp any host 172.16.2.139 eq 80
access-list 111 permit tcp any host 172.16.2.140 eq 80
access-list 111 permit tcp any host 172.16.2.141 eq 80
access-list 111 permit tcp any host 172.16.2.142 eq 80
access-list 111 permit tcp any host 172.16.2.143 eq 80
! Internos/Externos fazem pesquisas/transferencias de zona Dns
access-list 111 permit udp any host 172.16.2.151 eq domain
access-list 111 permit tcp any host 172.16.2.151 eq domain
! Routers/switches acessam tftpserver
access-list 111 permit udp host 172.16.0.2 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.0.6 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.0.17 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.0.10 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.0.14 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.0.18 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.1.1 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.1.2 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.1.3 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.3.1 host 172.16.2.153 eq 69
access-list 111 permit udp host 172.16.3.2 host 172.16.2.153 eq 69
! bloqueia outros trafegos aos servers, pois nao tem permit anyany
!
!
snmp-server community public RO 1
snmp-server trap-source FastEthernet0/0.1
snmp-server location Predio ACMECorp
snmp-server contact acme@acmecorp.com
banner motd ^CC Se voce nao e autorizado, desconecte agora ^C
!
line con 0
transport input none
line aux 0
line vty 0 4
login
password cisco

```



```
access-class 1 in
!  
no scheduler allocate  
end
```

Switch P2S1

```
version 12.1  
no service pad  
service timestamps debug uptime  
service timestamps log uptime  
no service password-encryption  
!  
hostname P2S1  
!  
!  
ip subnet-zero  
!  
spanning-tree extend system-id  
!  
!  
interface FastEthernet0/1  
description porta do router  
switchport mode trunk  
no ip address  
!  
interface FastEthernet0/2  
switchport access vlan 2  
no ip address  
spanning-tree portfast  
!  
interface FastEthernet0/3  
switchport access vlan 2  
no ip address  
spanning-tree portfast  
!  
interface FastEthernet0/4  
switchport access vlan 2  
no ip address  
spanning-tree portfast  
!  
interface FastEthernet0/5  
switchport access vlan 2  
no ip address  
spanning-tree portfast  
!  
interface FastEthernet0/6  
switchport access vlan 2  
no ip address  
spanning-tree portfast  
!  
interface FastEthernet0/7  
switchport access vlan 2  
no ip address  
spanning-tree portfast  
!  
interface FastEthernet0/8  
switchport access vlan 2  
no ip address
```

```

    spanning-tree portfast
!
interface FastEthernet0/9
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/10
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/11
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/12
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/13
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/14
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/15
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/16
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/17
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/18
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/19
    switchport access vlan 2
    no ip address
    spanning-tree portfast
!
interface FastEthernet0/20
    switchport access vlan 2
    no ip address
    spanning-tree portfast

```

```

!
interface FastEthernet0/21
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/22
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/23
  switchport mode trunk
  no ip address
!
interface FastEthernet0/24
  switchport mode trunk
  no ip address
!
interface Vlan1
  ip address 172.16.2.130 255.255.255.224
  no ip route-cache
!
ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
  password cisco
  login
  ip access-class 1 in
line vty 5 15
  password cisco
  login
  ip access-class 1 in
!
end

```

Switch P2S2

```

version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname P2S2
!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!

```

```
interface FastEthernet0/1
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/2
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/3
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/4
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/5
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/6
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/7
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/8
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/9
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/10
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/11
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/12
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/13
```

```

switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/14
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/15
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/16
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/17
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/18
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/19
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/20
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/21
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/22
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/23
switchport mode trunk
no ip address
!
interface FastEthernet0/24
switchport mode trunk
no ip address
!
interface Vlan1
ip address 172.16.2.131 255.255.255.224
no ip route-cache
!

```

```

ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
  password cisco
  login
  ip access-class 1 in
line vty 5 15
  password cisco
  login
  ip access-class 1 in
!
end

```

Switch P2S3

```

version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname P2S3
!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!
interface FastEthernet0/1
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/2
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/3
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/4
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/5
  switchport access vlan 2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/6

```

```

switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/7
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/8
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/9
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/10
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/11
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/12
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/13
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/14
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/15
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/16
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/17
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/18
switchport access vlan 2

```

```

no ip address
spanning-tree portfast
!
interface FastEthernet0/19
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/20
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/21
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/22
switchport access vlan 2
no ip address
spanning-tree portfast
!
interface FastEthernet0/23
switchport mode trunk
no ip address
!
interface FastEthernet0/24
switchport mode trunk
no ip address
!
interface Vlan1
ip address 172.16.2.132 255.255.255.224
no ip route-cache
!
ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
password cisco
login
ip access-class 1 in
line vty 5 15
password cisco
login
ip access-class 1 in
!
end

```

Switch P2S4

```

version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname P2S4

```



```

!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!
interface FastEthernet0/1
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/2
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/3
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/4
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/5
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/6
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/7
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/8
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/9
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/10
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/11
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/12
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/13
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/14
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/15
  no ip address
  spanning-tree portfast
!
interface FastEthernet0/16

```

```

no ip address
spanning-tree portfast
!
interface FastEthernet0/17
no ip address
spanning-tree portfast
!
interface FastEthernet0/18
no ip address
spanning-tree portfast
!
interface FastEthernet0/19
no ip address
spanning-tree portfast
!
interface FastEthernet0/20
no ip address
spanning-tree portfast
!
interface FastEthernet0/21
no ip address
spanning-tree portfast
!
interface FastEthernet0/22
no ip address
spanning-tree portfast
!
interface FastEthernet0/23
switchport mode trunk
no ip address
!
interface FastEthernet0/24
switchport mode trunk
no ip address
!
interface Vlan1
ip address 172.16.2.133 255.255.255.224
no ip route-cache
!
ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
password cisco
login
ip access-class 1 in
line vty 5 15
password cisco
login
ip access-class 1 in
!
end

```

Roteador P3R1

```
!  
version 12.3  
service timestamps debug datetime msec  
service timestamps log datetime msec  
no service password-encryption  
!  
hostname P1R1  
!  
boot-start-marker  
boot-end-marker  
!  
no logging console  
!  
no network-clock-participate slot 1  
no network-clock-participate wic 0  
no aaa new-model  
ip subnet-zero  
ip cef  
!  
!  
!  
no ftp-server write-enable  
!  
!  
!  
!  
interface Serial1/0  
  description Link para Predio 2 - oficial  
  ip address 172.16.0.10 255.255.255.252  
  ip summary-address eigrp 100 172.16.3.0 255.255.255.0  
  no ip directed-broadcast  
!  
interface Serial1/1  
  description Link para Predio 2 - redundante  
  ip address 172.16.0.14 255.255.255.252  
  ip summary-address eigrp 100 172.16.3.0 255.255.255.0  
  no ip directed-broadcast  
!  
interface Serial1/2  
  description Link para Predio 1 - redundante  
  ip address 172.16.0.18 255.255.255.252  
  ip summary-address eigrp 100 172.16.3.0 255.255.255.0  
  no ip directed-broadcast  
!  
interface Serial1/3  
  no ip address  
  no ip directed-broadcast  
  shutdown  
!  
interface FastEthernet0/0  
  description RedeLocal-Bigornas  
  ip address 172.16.3.1 255.255.255.0  
  no ip directed-broadcast  
  ip access-group 102 in  
  no fair-queue  
!  
!
```

```

router eigrp 100
 network 172.16.0.0
 no auto-summary
!
ip classless
no ip http server
access-list 1 permit 172.16.1.0 0.0.0.63
!acesso livre da admin aos servers
access-list 102 permit ip 172.16.1.0 0.0.0.63 172.16.2.128 0.0.0.31
! Routers/switches acessam tftpserver
access-list 102 permit udp host 172.16.0.2 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.6 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.17 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.10 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.14 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.0.18 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.1 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.2 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.3 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.1.4 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.129 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.130 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.131 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.132 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.2.133 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.3.1 host 172.16.2.153 eq 69
access-list 102 permit udp host 172.16.3.2 host 172.16.2.153 eq 69
! Bloqueio de TFTP para fora para evitar roubo de arquivos de
configuracao
access-list 102 deny udp 172.16.0.0 0.0.3.255 any eq 69
! acesso aos servers web
access-list 102 permit tcp any host 172.16.2.136 eq 80
access-list 102 permit tcp any host 172.16.2.137 eq 80
access-list 102 permit tcp any host 172.16.2.138 eq 80
access-list 102 permit tcp any host 172.16.2.139 eq 80
access-list 102 permit tcp any host 172.16.2.140 eq 80
access-list 102 permit tcp any host 172.16.2.141 eq 80
access-list 102 permit tcp any host 172.16.2.142 eq 80
access-list 102 permit tcp any host 172.16.2.143 eq 80
access-list 102 deny tcp any 172.16.2.128 0.0.0.31 eq 80
! permite query dns apenas para server interno
access-list 102 permit udp any host 172.16.2.151 eq 53
access-list 102 permit tcp any host 172.16.2.151 eq 53
access-list 102 deny udp any any eq 53
access-list 102 deny tcp any any eq 53
! Libera o resto
access-list 102 permit ip any any
!
snmp-server community public RO 1
snmp-server trap-source FastEthernet0/0.1
snmp-server location Predio ACMECorp
snmp-server contact acme@acmecorp.com
banner motd ^CC Se voce nao e autorizado, desconecte agora ^C
!
line con 0
 transport input none
line aux 0
!
line vty 0 4
 login

```

```
password cisco
access-class 1 in
!
no scheduler allocate
end
```

Switch P3S1

```
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname P3S1
!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!
interface FastEthernet0/1
no ip address
spanning-tree portfast
!
interface FastEthernet0/2
no ip address
spanning-tree portfast
!
interface FastEthernet0/3
no ip address
spanning-tree portfast
!
interface FastEthernet0/4
no ip address
spanning-tree portfast
!
interface FastEthernet0/5
no ip address
spanning-tree portfast
!
interface FastEthernet0/6
no ip address
spanning-tree portfast
!
interface FastEthernet0/7
no ip address
spanning-tree portfast
!
interface FastEthernet0/8
no ip address
spanning-tree portfast
!
interface FastEthernet0/9
no ip address
spanning-tree portfast
```

```
!  
interface FastEthernet0/10  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/11  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/12  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/13  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/14  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/15  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/16  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/17  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/18  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/19  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/20  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/21  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/22  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/23  
  no ip address  
  spanning-tree portfast  
!  
interface FastEthernet0/24  
  no ip address  
  spanning-tree portfast  
!
```

```
interface Vlan1
  ip address 172.16.3.2 255.255.255.224
  no ip route-cache
!
ip http server
!
access-list 1 permit 172.16.1.0 0.0.0.63
!
line con 0
line vty 0 4
  password cisco
  login
  ip access-class 1 in
line vty 5 15
  password cisco
  login
  ip access-class 1 in
!
end
```