### Configuração completa do Switch SW01:

```
Current configuration: 1802 bytes
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname SW01
vtp mode transparent
spanning-tree mode pvst
spanning-tree extend system-id
vlan 10
name VLAN10
vlan 20
name VLAN20
vlan 30
name VLAN30
interface FastEthernet0/1
description Computadores
switchport access vlan 10
switchport mode access
spanning-tree portfast
interface FastEthernet0/2
description Computadores
switchport access vlan 20
switchport mode access
spanning-tree portfast
interface FastEthernet0/3
description Computadores
switchport access vlan 10
switchport mode access
spanning-tree portfast
interface FastEthernet0/4
description Computadores
switchport access vlan 20
switchport mode access
spanning-tree portfast
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
description TRUNK COM R1
switchport mode trunk
spanning-tree portfast
interface GigabitEthernet0/1
description SERVIDOR HTTP
switchport access vlan 30
switchport mode access
spanning-tree portfast
interface GigabitEthernet0/2
description CONEXAO COM SW02
switchport mode trunk
interface Vlan1
no ip address
shutdown
line con 0
line vty 04
login
```

```
line vty 5 15
login
!
!
!
!
```

## Configuração completa do Switch SW02:

```
Current configuration: 1328 bytes
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname SW02
vtp mode transparent
spanning-tree mode pvst
spanning-tree extend system-id
vlan 10
name VLAN10
vlan 20
name VLAN20
interface FastEthernet0/1
description Computadores
switchport access vlan 10
switchport mode access
interface FastEthernet0/2
switchport access vlan 20
switchport mode access
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 GigabitEthernet0/1
description CONEXAO COM SW01
switchport mode trunk
interface GigabitEthernet0/2
interface Vlan1
no ip address
shutdown
line con 0
line vty 04
login
line vty 5 15
login
!
!
End
```

### Configuração completa do Switch SW03:

```
Current configuration: 3006 bytes
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname SW03
!
spanning-tree mode pvst
spanning-tree extend system-id
interface FastEthernet0/1
description Computadores
switchport access vlan 40
switchport mode access
spanning-tree portfast
interface FastEthernet0/2
description Computadores
switchport access vlan 50
switchport mode access
spanning-tree portfast
interface FastEthernet0/3
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/4
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/5
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/6
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/7
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/8
```

description Computadores

```
switchport mode access
spanning-tree portfast
interface FastEthernet0/9
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/10
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/11
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/12
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/13
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/14
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/15
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/16
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/17
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/18
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/19
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/20
description Computadores
```

```
switchport mode access
spanning-tree portfast
interface FastEthernet0/21
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/22
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/23
description Computadores
switchport mode access
spanning-tree portfast
interface FastEthernet0/24
description Computadores
switchport mode access
spanning-tree portfast
interface GigabitEthernet0/1
description TRUNK COM R2
switchport mode trunk
interface GigabitEthernet0/2
description TRUNK COM R2
switchport mode trunk
interface Vlan1
no ip address
shutdown
line con 0
line vty 04
login
line vty 5 15
login
!
!
!
!
end
```

## Configuração completa do Switch SW04:

Current configuration: 3551 bytes!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec

```
no service password-encryption
hostname SW04
spanning-tree mode pvst
spanning-tree extend system-id
interface FastEthernet0/1
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/2
description Computadores
switchport access vlan 70
switchport mode access
spanning-tree portfast
interface FastEthernet0/3
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/4
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/5
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/6
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/7
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/8
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
```

```
interface FastEthernet0/9
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/10
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/11
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/12
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/13
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/14
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/15
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/16
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/17
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/18
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
```

```
interface FastEthernet0/19
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/20
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/21
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/22
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/23
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface FastEthernet0/24
description Computadores
switchport access vlan 60
switchport mode access
spanning-tree portfast
interface GigabitEthernet0/1
description TRUNK COM R3
switchport mode trunk
interface GigabitEthernet0/2
interface Vlan1
no ip address
shutdown
!
!
line con 0
line vty 04
login
line vty 5 15
login
```

end

### Configuração completa do Roteador R1:

```
Current configuration: 2542 bytes
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname R1
!
ip dhcp excluded-address 10.1.10.1 10.1.10.4
ip dhcp excluded-address 10.1.20.1 10.1.20.4
ip dhep pool VLAN-10
network 10.1.10.0 255.255.255.0
default-router 10.1.10.1
dns-server 8.8.8.8
ip dhcp pool VLAN-20
network 10.1.20.0 255.255.255.0
default-router 10.1.20.1
dns-server 8.8.8.8
no ip cef
no ipv6 cef
spanning-tree mode pvst
interface GigabitEthernet0/0/0
ip address 10.99.100.1 255.255.255.252
ip nat inside
duplex auto
speed auto
interface GigabitEthernet0/0/1
ip address 200.179.230.38 255.255.255.252
ip nat outside
```

```
duplex auto
speed auto
interface GigabitEthernet0/1/0
description TRUNK COM SW01
switchport mode trunk
interface GigabitEthernet0/1/1
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/1/2
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/1/3
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/0
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/1
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/2
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/3
switchport mode access
switchport nonegotiate
shutdown
interface Vlan1
no ip address
shutdown
interface Vlan10
mac-address 00d0.d356.ea01
ip address 10.1.10.1 255.255.255.0
ip nat inside
interface Vlan20
mac-address 00d0.d356.ea02
ip address 10.1.20.1 255.255.255.0
ip nat inside
interface Vlan30
mac-address 00d0.d356.ea03
ip address 10.1.30.1 255.255.255.0
ip nat inside
```

```
router eigrp 1
redistribute static
network 10.1.0.0 0.0.255.255
network 10.99.0.0 0.0.255.255
router rip
ip nat inside source list INTERNET interface GigabitEthernet0/0/1 overload
ip nat inside source static tcp 10.1.30.5 80 200.179.230.38 80
ip route 0.0.0.0 0.0.0.0 200.179.230.37
ip flow-export version 9
ip access-list standard INTERNET
permit 10.1.10.0 0.0.0.255
permit 10.1.20.0 0.0.0.255
permit 10.1.30.0 0.0.0.255
remark ACESSO A INTERNET
permit 10.2.40.0 0.0.0.255
permit 10.2.50.0 0.0.0.255
permit 10.3.60.0 0.0.0.255
permit 10.3.70.0 0.0.0.255
no cdp run
line con 0
line aux 0
line vty 04
login
end
```

## Configuração completa do Roteador CPE:

```
Current configuration: 653 bytes!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption!
hostname CPE
!
```

```
no ip cef
no ipv6 cef
spanning-tree mode pvst
interface GigabitEthernet0/0/0
ip address 200.179.230.34 255.255.255.252
duplex auto
speed auto
interface GigabitEthernet0/0/1
ip address 200.179.230.37 255.255.255.252
duplex auto
speed auto
interface Vlan1
no ip address
shutdown
ip classless
ip route 0.0.0.0 0.0.0.0 200.179.230.33
ip flow-export version 9
no cdp run
line con 0
line aux 0
line vty 04
login
```

# Configuração completa do Roteador ISP:

```
Current configuration: 659 bytes
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname ISP
no ip cef
no ipv6 cef
spanning-tree mode pvst
interface GigabitEthernet0/0/0
ip address 200.179.230.33 255.255.255.252
duplex auto
speed auto
interface GigabitEthernet0/0/1
ip address 8.8.8.1 255.255.255.0
duplex auto
speed auto
interface Vlan1
no ip address
shutdown
```

```
ip classless
ip route 200.179.230.36 255.255.252 200.179.230.34
!
ip flow-export version 9
!
!
no cdp run
!
!!!
!
line con 0
!
line aux 0
!
line vty 0 4
login
!
!
end
```

# Configuração completa do Roteador R2:

```
spanning-tree mode pvst
interface GigabitEthernet0/0/0
ip address 10.99.100.2 255.255.255.252
duplex auto
speed auto
interface GigabitEthernet0/0/1
ip address 10.99.100.5 255.255.255.252
duplex auto
speed auto
interface GigabitEthernet0/1/0
description TRUNK COM SW02
switchport mode trunk
interface GigabitEthernet0/1/1
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/1/2
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/1/3
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/0
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/1
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/2
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/3
switchport mode access
switchport nonegotiate
shutdown
interface Vlan1
no ip address
shutdown
```

```
interface Vlan40
mac-address 00d0.bae1.5a01
ip address 10.2.40.1 255.255.255.0
interface Vlan50
mac-address 00d0.bae1.5a02
ip address 10.2.50.1 255.255.255.0
router eigrp 1
redistribute ospf 1 metric 10000 1000 255 1 1500
network 10.2.0.0 0.0.255.255
network 10.99.0.0 0.0.255.255
router ospf 1
log-adjacency-changes
redistribute eigrp 1 subnets
network 10.2.0.0 0.0.255.255 area 0
network 10.99.100.0 0.0.0.255 area 0
default-information originate
router rip
ip classless
ip flow-export version 9
no cdp run
line con 0
line aux 0
line vty 04
login
end
```

## Configuração completa do Roteador R3:

```
Current configuration: 1645 bytes!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption!
hostname R3
```

```
no ip cef
no ipv6 cef
spanning-tree mode pvst
interface GigabitEthernet0/0/0
ip address 10.99.100.6 255.255.255.252
duplex auto
speed auto
interface GigabitEthernet0/0/1
description TRUNK COM SW03
no ip address
duplex auto
speed auto
interface GigabitEthernet0/0/1.60
encapsulation dot1Q 60
ip address 10.3.60.1 255.255.255.0
interface GigabitEthernet0/0/1.70
encapsulation dot1Q 70
ip address 10.3.70.1 255.255.255.0
interface GigabitEthernet0/1/0
switchport mode access
switchport nonegotiate
interface GigabitEthernet0/1/1
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/1/2
switchport mode access
switchport nonegotiate
shutdown
```

```
interface GigabitEthernet0/1/3
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/0
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/1
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/2
switchport mode access
switchport nonegotiate
shutdown
interface GigabitEthernet0/2/3
switchport mode access
switchport nonegotiate
shutdown
interface Vlan1
no ip address
shutdown
!
router ospf 1
log-adjacency-changes
network 10.3.0.0 0.0.255.255 area 0
network 10.99.100.0 0.0.0.255 area 0
router rip
ip classless
ip flow-export version 9
no cdp run
!
line con 0
line aux 0
line vty 04
login
!
end
```