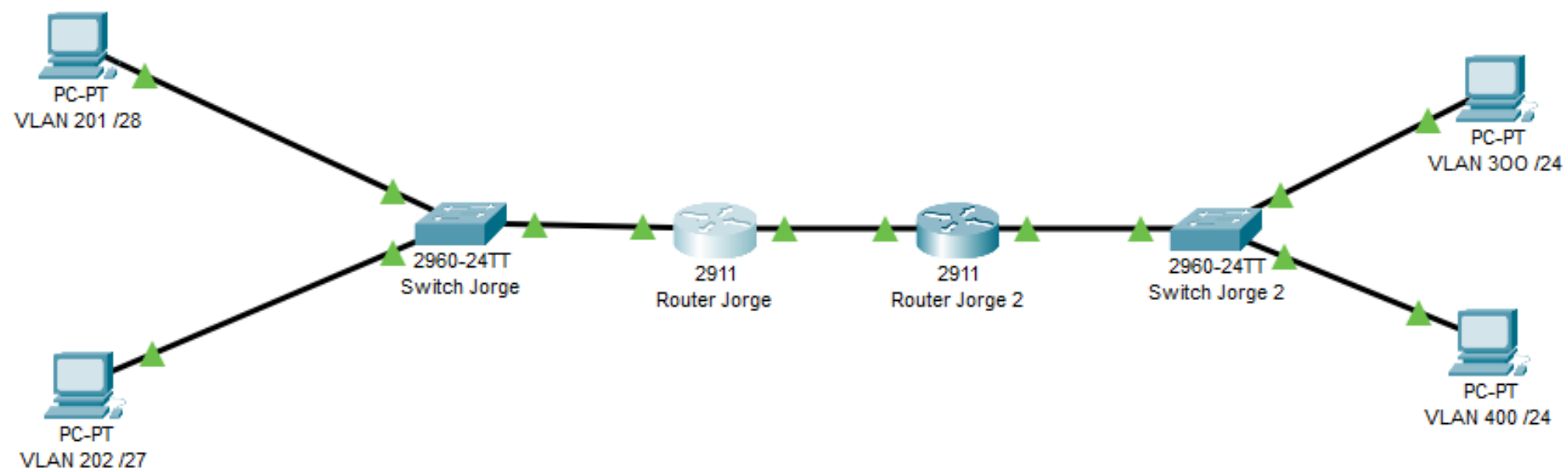


# Laboratorio 5

Jorge Parra Hidalgo ITIT 13104



## IOS Command Line Interface

```
!  
!  
!  
!  
!  
!  
!  
!  
spanning-tree mode pvst  
!  
!  
!  
!  
interface GigabitEthernet0/0  
  no ip address  
  duplex auto  
  speed auto  
!  
interface GigabitEthernet0/0.201  
  encapsulation dot1Q 201  
  ip address 10.10.201.1 255.255.255.240  
!  
interface GigabitEthernet0/0.202  
  encapsulation dot1Q 202  
  ip address 10.10.202.1 255.255.255.224  
!  
interface GigabitEthernet0/0.203  
  encapsulation dot1Q 203  
  ip address 10.10.203.1 255.255.255.192  
!  
interface GigabitEthernet0/0.204  
  encapsulation dot1Q 204  
  ip address 10.10.204.1 255.255.255.128  
!  
--More--
```

## IOS Command Line Interface

```
!  
!  
!  
!  
spanning-tree mode pvst  
!  
!  
!  
!  
interface GigabitEthernet0/0  
  no ip address  
  duplex auto  
  speed auto  
!  
interface GigabitEthernet0/0.300  
  encapsulation dot1Q 300  
  ip address 11.11.3.1 255.255.255.0  
!  
interface GigabitEthernet0/0.400  
  encapsulation dot1Q 400  
  ip address 11.11.4.1 255.255.255.0  
!  
interface GigabitEthernet0/1  
  ip address 192.168.0.2 255.255.255.252  
  duplex auto  
  speed auto  
!  
interface GigabitEthernet0/2  
  no ip address  
  duplex auto  
  speed auto  
  shutdown  
!  
interface Vlan1  
  --More--
```

Copy

Paste

## Command Prompt

Cisco Packet Tracer PC Command Line 1.0

C:\&gt;ipconfig

FastEthernet0 Connection: (default port)

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: FE80::20B:BEFF:FE29:78D6

IPv6 Address.....: ::

IPv4 Address.....: 10.10.201.14

Subnet Mask.....: 255.255.255.240

Default Gateway.....: ::

10.10.201.1

Bluetooth Connection:

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: ::

IPv6 Address.....: ::

IPv4 Address.....: 0.0.0.0

Subnet Mask.....: 0.0.0.0

Default Gateway.....: ::

0.0.0.0

C:\&gt;|

## Command Prompt

Cisco Packet Tracer PC Command Line 1.0

C:\&gt;ipconfig

FastEthernet0 Connection: (default port)

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: FE80::2D0:BAFF:FE9B:4CE6

IPv6 Address.....: ::

IPv4 Address.....: 10.10.202.30

Subnet Mask.....: 255.255.255.224

Default Gateway.....: ::

10.10.202.1

Bluetooth Connection:

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: ::

IPv6 Address.....: ::

IPv4 Address.....: 0.0.0.0

Subnet Mask.....: 0.0.0.0

Default Gateway.....: ::

0.0.0.0

C:\&gt;|

VLAN 300 /24

Physical

Config

Desktop

Programming

Attributes

Command Prompt

Cisco Packet Tracer PC Command Line 1.0

C:\>ipconfig

FastEthernet0 Connection:(default port)

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: FE80::2E0:8FFF:FE0B:3313

IPv6 Address.....: ::

IPv4 Address.....: 11.11.3.254

Subnet Mask.....: 255.255.255.0

Default Gateway.....: ::

11.11.3.1

Bluetooth Connection:

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: ::

IPv6 Address.....: ::

IPv4 Address.....: 0.0.0.0

Subnet Mask.....: 0.0.0.0

Default Gateway.....: ::

0.0.0.0

C:\>

☐ Top

VLAN 400 /24

Physical

Config

Desktop

Programming

Attributes

Command Prompt

Cisco Packet Tracer PC Command Line 1.0

C:\>ipconfig

FastEthernet0 Connection:(default port)

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: FE80::202:4AFF:FE93:1691

IPv6 Address.....: ::

IPv4 Address.....: 11.11.4.254

Subnet Mask.....: 255.255.255.0

Default Gateway.....: ::

11.11.4.1

Bluetooth Connection:

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: ::

IPv6 Address.....: ::

IPv4 Address.....: 0.0.0.0

Subnet Mask.....: 0.0.0.0

Default Gateway.....: ::

0.0.0.0

C:\>

☐ Top

## IOS Command Line Interface

```
Router#show i
Router#show ip rou
Router#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
        i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
        * - candidate default, U - per-user static route, o - ODR
        P - periodic downloaded static route
```

Gateway of last resort is not set

```
    10.0.0.0/8 is variably subnetted, 12 subnets, 7 masks
C       10.10.201.0/28 is directly connected, GigabitEthernet0/0.201
L       10.10.201.1/32 is directly connected, GigabitEthernet0/0.201
C       10.10.202.0/27 is directly connected, GigabitEthernet0/0.202
L       10.10.202.1/32 is directly connected, GigabitEthernet0/0.202
C       10.10.203.0/26 is directly connected, GigabitEthernet0/0.203
L       10.10.203.1/32 is directly connected, GigabitEthernet0/0.203
C       10.10.204.0/25 is directly connected, GigabitEthernet0/0.204
L       10.10.204.1/32 is directly connected, GigabitEthernet0/0.204
C       10.10.206.0/23 is directly connected, GigabitEthernet0/0.206
L       10.10.206.1/32 is directly connected, GigabitEthernet0/0.206
C       10.10.208.0/21 is directly connected, GigabitEthernet0/0.208
L       10.10.208.1/32 is directly connected, GigabitEthernet0/0.208
    11.0.0.0/24 is subnetted, 2 subnets
S       11.11.3.0/24 [1/0] via 192.168.0.2
S       11.11.4.0/24 [1/0] via 192.168.0.2
    192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.0.0/30 is directly connected, GigabitEthernet0/1
L       192.168.0.1/32 is directly connected, GigabitEthernet0/1
```

```
Router#
Router#
Router#
Router#
```

Copy

## IOS Command Line Interface

```
Router#
Router#
Router#
Router#show ip ro
Router#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
        i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
        * - candidate default, U - per-user static route, o - ODR
        P - periodic downloaded static route
```

Gateway of last resort is not set

```
    10.0.0.0/8 is variably subnetted, 6 subnets, 6 masks
S       10.10.201.0/28 [1/0] via 192.168.0.1
S       10.10.202.0/27 [1/0] via 192.168.0.1
S       10.10.203.0/26 [1/0] via 192.168.0.1
S       10.10.204.0/25 [1/0] via 192.168.0.1
S       10.10.206.0/23 [1/0] via 192.168.0.1
S       10.10.208.0/21 [1/0] via 192.168.0.1
    11.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C       11.11.3.0/24 is directly connected, GigabitEthernet0/0.300
L       11.11.3.1/32 is directly connected, GigabitEthernet0/0.300
C       11.11.4.0/24 is directly connected, GigabitEthernet0/0.400
L       11.11.4.1/32 is directly connected, GigabitEthernet0/0.400
    192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.0.0/30 is directly connected, GigabitEthernet0/1
L       192.168.0.2/32 is directly connected, GigabitEthernet0/1
```

```
Router#
Router#
Router#
Router#
Router#
```

Copy

Paste

4. Imagen de Ping NO exitoso de PC 300 y 400 a PC 201 y 202, Tambien de Router 300 y 400 a Router 201, (2 reactivos)

nota: ya habia hecho todo antes  
de tomar captura por lo que el ping  
si me aparece como exitoso x)|

## IOS Command Line Interface

```
Router#show ip
Router#show ip rou
Router#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

    10.0.0.0/8 is variably subnetted, 12 subnets, 7 masks
C       10.10.201.0/28 is directly connected, GigabitEthernet0/0.201
L       10.10.201.1/32 is directly connected, GigabitEthernet0/0.201
C       10.10.202.0/27 is directly connected, GigabitEthernet0/0.202
L       10.10.202.1/32 is directly connected, GigabitEthernet0/0.202
C       10.10.203.0/26 is directly connected, GigabitEthernet0/0.203
L       10.10.203.1/32 is directly connected, GigabitEthernet0/0.203
C       10.10.204.0/25 is directly connected, GigabitEthernet0/0.204
L       10.10.204.1/32 is directly connected, GigabitEthernet0/0.204
C       10.10.206.0/23 is directly connected, GigabitEthernet0/0.206
L       10.10.206.1/32 is directly connected, GigabitEthernet0/0.206
C       10.10.208.0/21 is directly connected, GigabitEthernet0/0.208
L       10.10.208.1/32 is directly connected, GigabitEthernet0/0.208
    11.0.0.0/24 is subnetted, 2 subnets
S       11.11.3.0/24 [1/0] via 192.168.0.2
S       11.11.4.0/24 [1/0] via 192.168.0.2
    192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.0.0/30 is directly connected, GigabitEthernet0/1
L       192.168.0.1/32 is directly connected, GigabitEthernet0/1
```

```
Router#
Router#
Router#
Router#
```

Copy

## IOS Command Line Interface

```
Router#
Router#
Router#
Router#show ip ro
Router#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
```

Gateway of last resort is not set

```
    10.0.0.0/8 is variably subnetted, 6 subnets, 6 masks
S       10.10.201.0/28 [1/0] via 192.168.0.1
S       10.10.202.0/27 [1/0] via 192.168.0.1
S       10.10.203.0/26 [1/0] via 192.168.0.1
S       10.10.204.0/25 [1/0] via 192.168.0.1
S       10.10.206.0/23 [1/0] via 192.168.0.1
S       10.10.208.0/21 [1/0] via 192.168.0.1
    11.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C       11.11.3.0/24 is directly connected, GigabitEthernet0/0.300
L       11.11.3.1/32 is directly connected, GigabitEthernet0/0.300
C       11.11.4.0/24 is directly connected, GigabitEthernet0/0.400
L       11.11.4.1/32 is directly connected, GigabitEthernet0/0.400
    192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.0.0/30 is directly connected, GigabitEthernet0/1
L       192.168.0.2/32 is directly connected, GigabitEthernet0/1
```

```
Router#
Router#
Router#
Router#
Router#
Router#
```

Copy

Past



Pinging 10.10.201.14 with 32 bytes of data:

Request timed out.

Request timed out.

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Ping statistics for 10.10.201.14:

Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 10.10.201.14

Pinging 10.10.201.14 with 32 bytes of data:

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time=9ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Ping statistics for 10.10.201.14:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 9ms, Average = 2ms

C:\>|

Physical

Config

Desktop

Programming

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Command Prompt

Cisco Packet Tracer PC Command Line 1.0

C:\>ipconfig

FastEthernet0 Connection:(default port)

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: FE80::202:4AFF:FE93:1691

IPv6 Address.....: ::

IPv4 Address.....: 11.11.4.254

Subnet Mask.....: 255.255.255.0

Default Gateway.....: ::

11.11.4.1

Bluetooth Connection:

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....: ::

IPv6 Address.....: ::

IPv4 Address.....: 0.0.0.0

Subnet Mask.....: 0.0.0.0

Default Gateway.....: ::

0.0.0.0

C:\>ping 10.10.201.14

Pinging 10.10.201.14 with 32 bytes of data:

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Ping statistics for 10.10.201.14:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|

Pinging 10.10.202.30 with 32 bytes of data:

Request timed out.

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Reply from 10.10.202.30: bytes=32 time=1ms TTL=126

Ping statistics for 10.10.202.30:

Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 10.10.202.30

Pinging 10.10.202.30 with 32 bytes of data:

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Reply from 10.10.202.30: bytes=32 time=3ms TTL=126

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Ping statistics for 10.10.202.30:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 3ms, Average = 0ms

C:\>

Physical

Config

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Command Prompt

Bluetooth Connection:

Connection-specific DNS Suffix...:

Link-local IPv6 Address.....::

IPv6 Address.....::

IPv4 Address.....0.0.0.0

Subnet Mask.....0.0.0.0

Default Gateway.....::

0.0.0.0

C:\>ping 10.10.201.14

Pinging 10.10.201.14 with 32 bytes of data:

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Reply from 10.10.201.14: bytes=32 time<1ms TTL=126

Ping statistics for 10.10.201.14:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 10.10.202.30

Pinging 10.10.202.30 with 32 bytes of data:

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Reply from 10.10.202.30: bytes=32 time<1ms TTL=126

Reply from 10.10.202.30: bytes=32 time=9ms TTL=126

Ping statistics for 10.10.202.30:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 9ms, Average = 2ms

C:\>

Router Jorge

```
C 10.10.204.0/28 is directly connected, GigabitEthernet0/0.204
L 10.10.204.1/32 is directly connected, GigabitEthernet0/0.204
C 10.10.206.0/23 is directly connected, GigabitEthernet0/0.206
L 10.10.206.1/32 is directly connected, GigabitEthernet0/0.206
C 10.10.208.0/21 is directly connected, GigabitEthernet0/0.208
L 10.10.208.1/32 is directly connected, GigabitEthernet0/0.208
11.0.0.0/24 is subnetted, 2 subnets
S 11.11.3.0/24 [1/0] via 192.168.0.2
S 11.11.4.0/24 [1/0] via 192.168.0.2
192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.0.0/30 is directly connected, GigabitEthernet0/1
L 192.168.0.1/32 is directly connected, GigabitEthernet0/1
```

Router#  
Router#  
Router#

Router#show ip arp

Protocol	Address	Age (min)	Hardware Addr	Type	Interface
Internet	10.10.201.14	2	000B.BE29.78D6	ARPA	GigabitEthernet0/
Internet	10.10.202.30	1	00D0.BA9B.4CE6	ARPA	GigabitEthernet0/
Internet	192.168.0.1	-	00E0.F9B6.7C02	ARPA	GigabitEthernet0/
Internet	192.168.0.2	2	000C.8583.7502	ARPA	GigabitEthernet0/

Router#

Copy

Router Jorge 2

IOS Command Line Interface

```
S 10.10.201.0/28 [1/0] via 192.168.0.1
S 10.10.202.0/27 [1/0] via 192.168.0.1
S 10.10.203.0/26 [1/0] via 192.168.0.1
S 10.10.204.0/25 [1/0] via 192.168.0.1
S 10.10.206.0/23 [1/0] via 192.168.0.1
S 10.10.208.0/21 [1/0] via 192.168.0.1
11.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C 11.11.3.0/24 is directly connected, GigabitEthernet0/0.300
L 11.11.3.1/32 is directly connected, GigabitEthernet0/0.300
C 11.11.4.0/24 is directly connected, GigabitEthernet0/0.400
L 11.11.4.1/32 is directly connected, GigabitEthernet0/0.400
192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.0.0/30 is directly connected, GigabitEthernet0/1
L 192.168.0.2/32 is directly connected, GigabitEthernet0/1
```

Router#  
Router#  
Router#  
Router#  
Router#  
Router#  
Router#

Router#show ip arp

Protocol	Address	Age (min)	Hardware Addr	Type	Interface
Internet	11.11.3.254	3	00E0.8F0B.3313	ARPA	GigabitEthernet0/0.300
Internet	11.11.4.254	2	0002.4A93.1691	ARPA	GigabitEthernet0/0.400
Internet	192.168.0.1	3	00E0.F9B6.7C02	ARPA	GigabitEthernet0/1
Internet	192.168.0.2	-	000C.8583.7502	ARPA	GigabitEthernet0/1

Router#

Copy

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Top