Physical | Config | CLI | Attributes

```
System Bootstrap, Version 15.1(4)M4, RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 2010 by cisco Systems, Inc.
Total memory size = 512 MB - On-board = 512 MB, DIMM0 = 0 MB
CISCO2911/K9 platform with 524288 Kbytes of main memory
Main memory is configured to 72/-1(On-board/DIMM0) bit mode with ECC disabled

Readonly ROMMON initialized

program load complete, entry point: 0x80803000, size: 0x1b340
program load complete, entry point: 0x80803000, size: 0x1b340

IOS Image Load Test
_
Digitally Signed Release Software
program load complete, entry point: 0x81000000, size: 0x3bcd3d8
Self decompressing the image :
################################################################### [OK]
Smart Init is enabled
smart init is sizing iomem
                  TYPE      MEMORY_REQ
    Onboard devices &
          buffer pools    0x022F6000
-----------------------------------------------
                  TOTAL:    0x022F6000
Rounded IOMEM up to: 36Mb.
Using 6 percent iomem. [36Mb/512Mb]

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          cisco Systems, Inc.
          170 West Tasman Drive
          San Jose, California 95134-1706

Cisco IOS Software, C2900 Software (C2900-UNIVERSALK9-M), Version 15.1(4)M5, RELEASE SOFTWARE (fc2)Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2007 by Cisco Systems, Inc.
Compiled Wed 18-Jul-07 04:52 by pt_team
Image text-base: 0x2100F918, data-base: 0x24729040

This product contains cryptographic features and is subject to United
States and local country laws governing import, export, transfer and
use. Delivery of Cisco cryptographic products does not imply
third-party authority to import, export, distribute or use encryption.
```
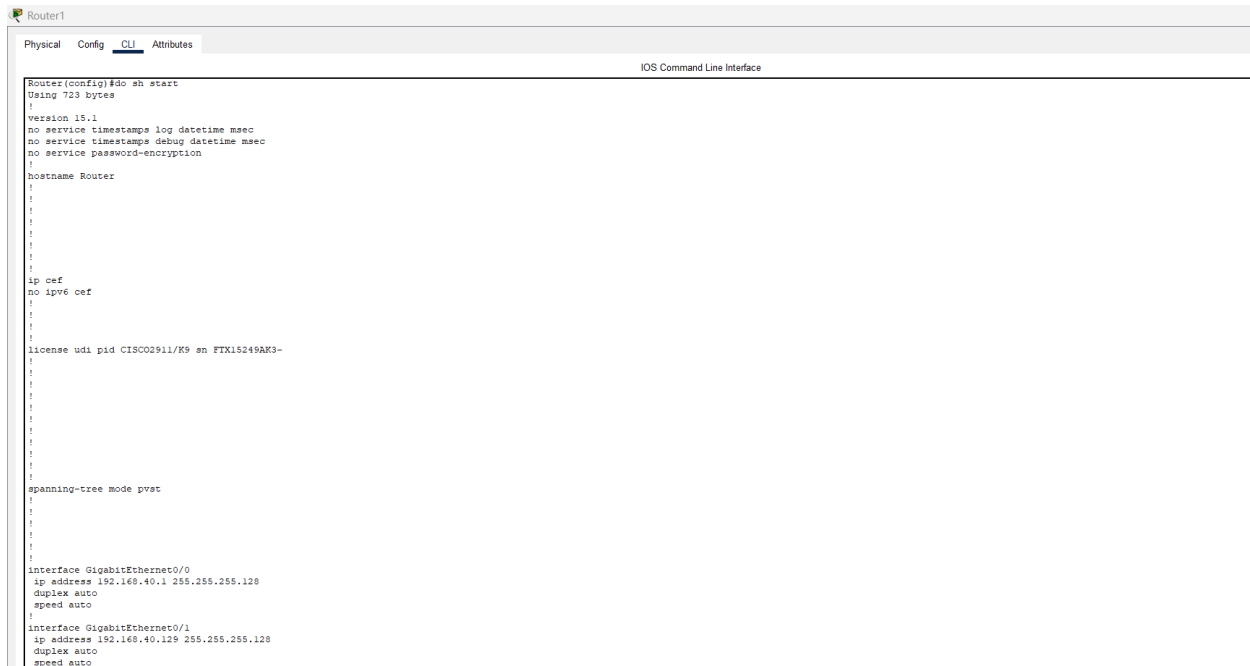
Physical | Config | CLI | Attributes

```
          --- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no


Press RETURN to get started!



Router>
Router>
Router>config t
            ^
% Invalid input detected at '^' marker.

Router>enable
Router#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int range gig0/0-1
Router(config-if-range)#no shutdown


Router(config-if-range)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
do wr
Building configuration...
[OK]
Router(config-if-range)#
Router(config-if-range)#exit
Router(config)#
```

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Router>en
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int range gig0/0-1
Router(config-if-range)#no shutdown
Router(config-if-range)#
Router(config-if-range)#exit
Router(config)#int gig0/0
Router(config-if)#ip address 192.168.40.0 255.255.255.128
Bad mask /25 for address 192.168.40.0
Router(config-if)#ip address 192.168.40.1 255.255.255.128
Router(config-if)#
Router(config-if)#
Router(config-if)#int gig0/1
Router(config-if)#ip address 192.168.40.129 255.255.255.128
Router(config-if)#do wr
Building configuration...
[OK]
Router(config-if)#exit
Router(config)#
Router(config)#
Router(config)#do sh start
Using 723 bytes
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
!
license udi pid CISCO2911/K9 sn FTX15249AK3-
!
!
!
```

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Router(config)#do sh start
Using 723 bytes
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
!
license udi pid CISCO2911/K9 sn FTX15249AK3-
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
interface GigabitEthernet0/0
 ip address 192.168.40.1 255.255.255.128
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 192.168.40.129 255.255.255.128
 duplex auto
 speed auto
```

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
interface GigabitEthernet0/0
 ip address 192.168.40.1 255.255.255.128
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 192.168.40.129 255.255.255.128
 duplex auto
 speed auto
!
interface GigabitEthernet0/2
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
ip classless
!
ip flow-export version 9
!
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end

Router(config)#
Router(config)#
```

PC0

IP Configuration (Desktop)

Interface: FastEthernet0

IP Configuration
- ○ DHCP ● Static
- IPv4 Address: 192.168.40.2
- Subnet Mask: 255.255.255.128
- Default Gateway: 192.168.40.1
- DNS Server: 0.0.0.0

IPv6 Configuration
- ○ Automatic ● Static
- IPv6 Address: ___ / ___
- Link Local Address: FE80::2E0:A3FF:FE26:6A84
- Default Gateway:
- DNS Server:

802.1X
- ☐ Use 802.1X Security
- Authentication: MD5
- Username:
- Password:

Config — Global Settings

- **Display Name:** PC0
- **Interfaces:** FastEthernet0

GLOBAL
- Settings
- Algorithm Settings

INTERFACE
- FastEthernet0
- Bluetooth

Gateway/DNS IPv4
- ○ DHCP
- ● Static
- Default Gateway: 192.168.40.1
- DNS Server:

Gateway/DNS IPv6
- ○ Automatic
- ● Static
- Default Gateway:
- DNS Server:

PC1

PC1 — Physical | Config | **Desktop** | Programming | Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

○ DHCP ● Static

IPv4 Address: 192.168.40.3
Subnet Mask: 255.255.255.128
Default Gateway: 192.168.40.1
DNS Server: 0.0.0.0

IPv6 Configuration

○ Automatic ● Static

IPv6 Address: _____ / ___
Link Local Address: FE80::20C:85FF:FEBA:D054
Default Gateway: _____
DNS Server: _____

802.1X

☐ Use 802.1X Security
Authentication: MD5
Username: _____
Password: _____

PC1 — Physical | **Config** | Desktop | Programming | Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

Global Settings

Display Name: PC1
Interfaces: FastEthernet0

Gateway/DNS IPv4
○ DHCP
● Static
Default Gateway: 192.168.40.1
DNS Server: _____

Gateway/DNS IPv6
○ Automatic
● Static
Default Gateway: _____
DNS Server: _____

Printer 0

PC2

PC2 — □ ×

Physical   Config   Desktop   Programming   Attributes

IP Configuration   X

Interface   FastEthernet0   ∨

IP Configuration

○ DHCP   ● Static

IPv4 Address   192.168.40.130

Subnet Mask   255.255.255.128

Default Gateway   192.168.40.129

DNS Server   0.0.0.0

IPv6 Configuration

○ Automatic   ● Static

IPv6 Address   /

Link Local Address   FE80::260:5CFF:FE0A:7CED

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication   MD5   ∨

Username

Password

PC2 — □ ×

Physical   Config   Desktop   Programming   Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

Global Settings

Display Name PC2

Interfaces   FastEthernet0   ∨

Gateway/DNS IPv4
○ DHCP
● Static
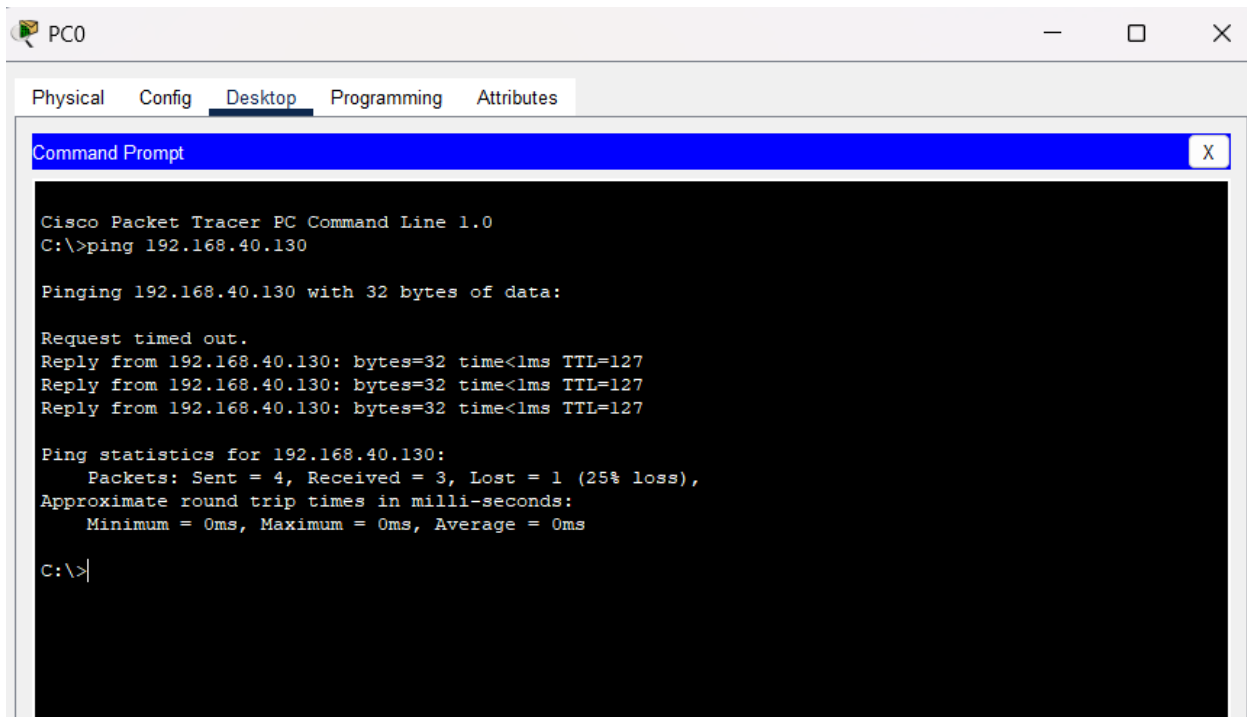Default Gateway 192.168.40.129
DNS Server

Gateway/DNS IPv6
○ Automatic
● Static
Default Gateway
DNS Server

PC3

PC3 — IP Configuration (Desktop tab)

Interface: FastEthernet0

IP Configuration
- DHCP ● Static
- IPv4 Address: 192.168.40.131
- Subnet Mask: 255.255.255.128
- Default Gateway: 192.168.40.129
- DNS Server: 0.0.0.0

IPv6 Configuration
- Automatic ● Static
- IPv6 Address: _____ / ___
- Link Local Address: FE80::2D0:BAFF:FEE1:3264
- Default Gateway: _____
- DNS Server: _____

802.1X
- ☐ Use 802.1X Security
- Authentication: MD5
- Username:
- Password:

PC3 — Config tab

GLOBAL
- Settings
- Algorithm Settings

INTERFACE
- FastEthernet0
- Bluetooth

Global Settings

Display Name: PC3
Interfaces: FastEthernet0

Gateway/DNS IPv4
- DHCP
- ● Static
- Default Gateway: 192.168.40.129
- DNS Server:

Gateway/DNS IPv6
- Automatic
- ● Static
- Default Gateway:
- DNS Server:

Printer 0

Printer1 — □ ×

Physical | Config | Attributes

GLOBAL
Settings
INTERFACE
FastEthernet0

FastEthernet0

Port Status ☑ On
Bandwidth ○ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex ○ Half Duplex ○ Full Duplex ☑ Auto
MAC Address 0003.E4D5.A78E

IP Configuration
○ DHCP
● Static
IPv4 Address 192.168.40.134
Subnet Mask 255.255.255.128

IPv6 Configuration
○ Automatic
● Static
IPv6 Address _____/___
Link Local Address: FE80::203:E4FF:FED5:A78E

Printer1 — □ ×

Physical | Config | Attributes

GLOBAL
Settings
INTERFACE
FastEthernet0

Global Settings

Display Name Printer1

Gateway/DNS IPv4
○ DHCP
● Static
Default Gateway 192.168.40.129
DNS Server _____

Gateway/DNS IPv6
○ Automatic
● Static
Default Gateway _____
DNS Server _____

Pinging PC2 from PC0

PC0 — □ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.40.130

Pinging 192.168.40.130 with 32 bytes of data:

Request timed out.
Reply from 192.168.40.130: bytes=32 time<1ms TTL=127
Reply from 192.168.40.130: bytes=32 time<1ms TTL=127
Reply from 192.168.40.130: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.40.130:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```
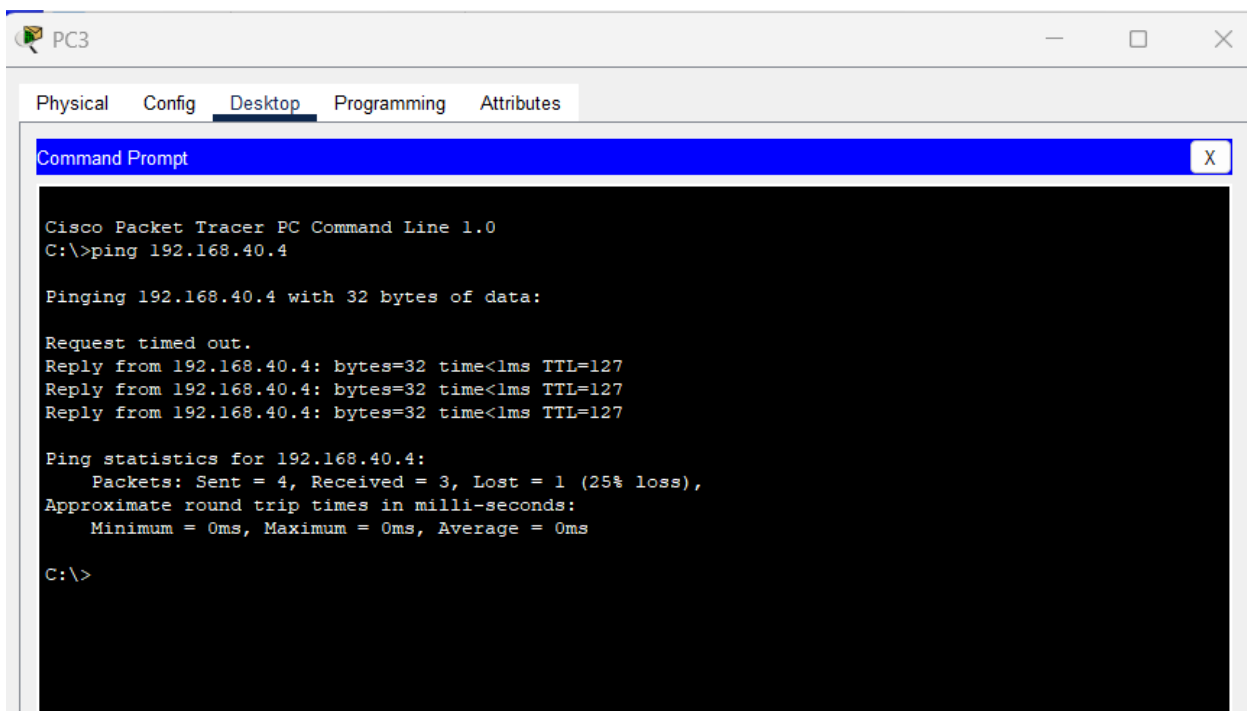
Pinging Printer from PC3

PC3 — □ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.40.4

Pinging 192.168.40.4 with 32 bytes of data:

Request timed out.
Reply from 192.168.40.4: bytes=32 time<1ms TTL=127
Reply from 192.168.40.4: bytes=32 time<1ms TTL=127
Reply from 192.168.40.4: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.40.4:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

SIMPLE NETWORK PROJECT