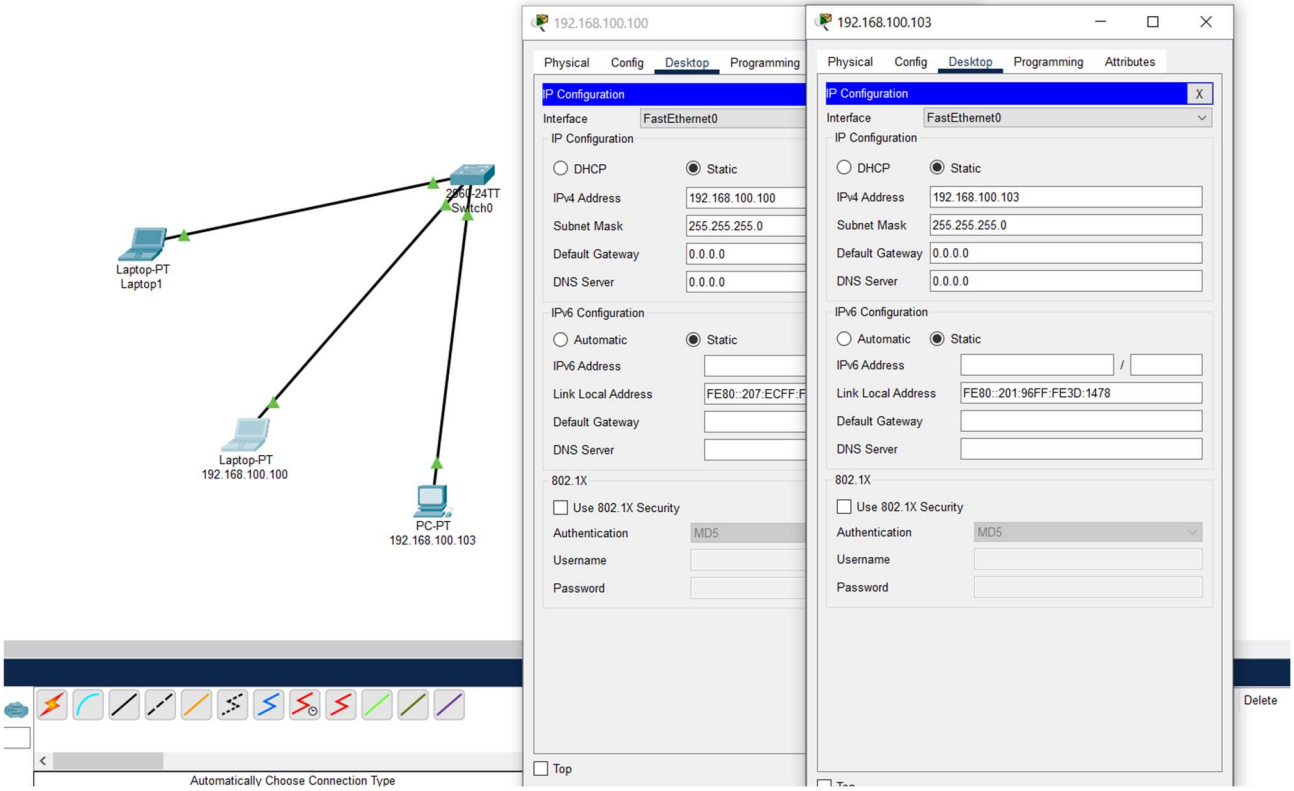
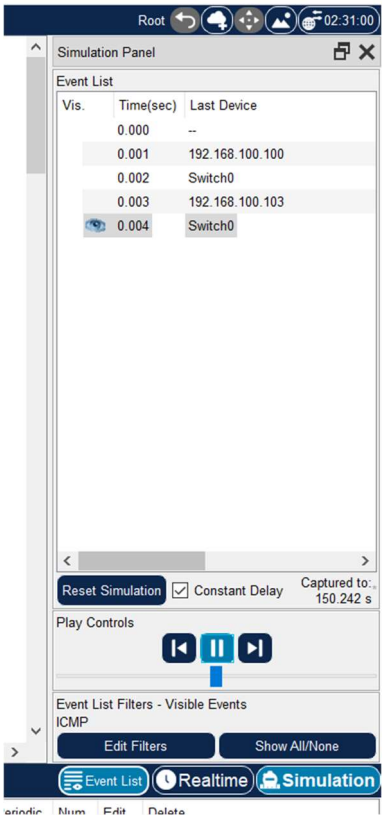
Comunicazione tra Laptop0 e PC1, questi device stanno sulla medesima rete 192.168.100.0

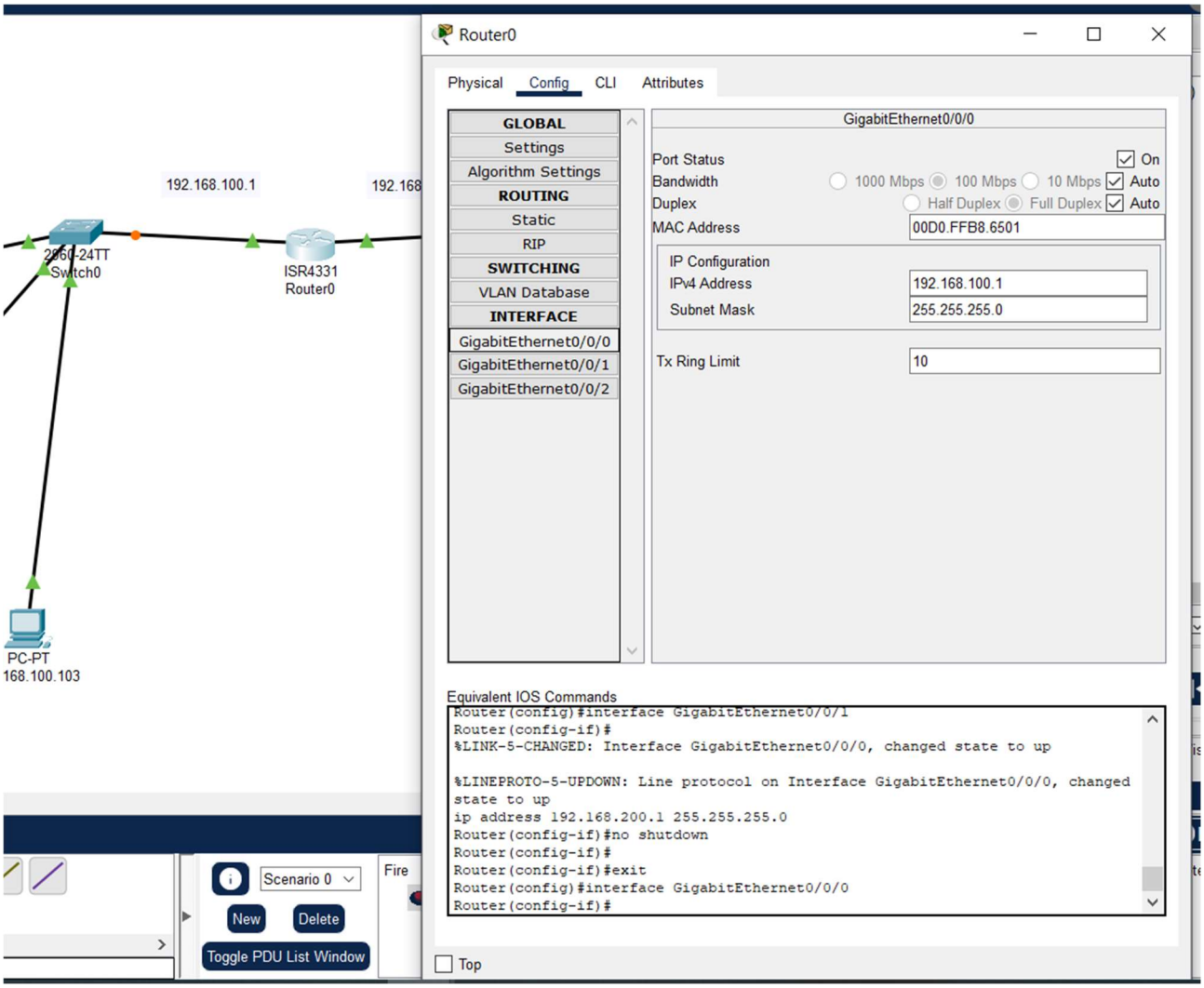


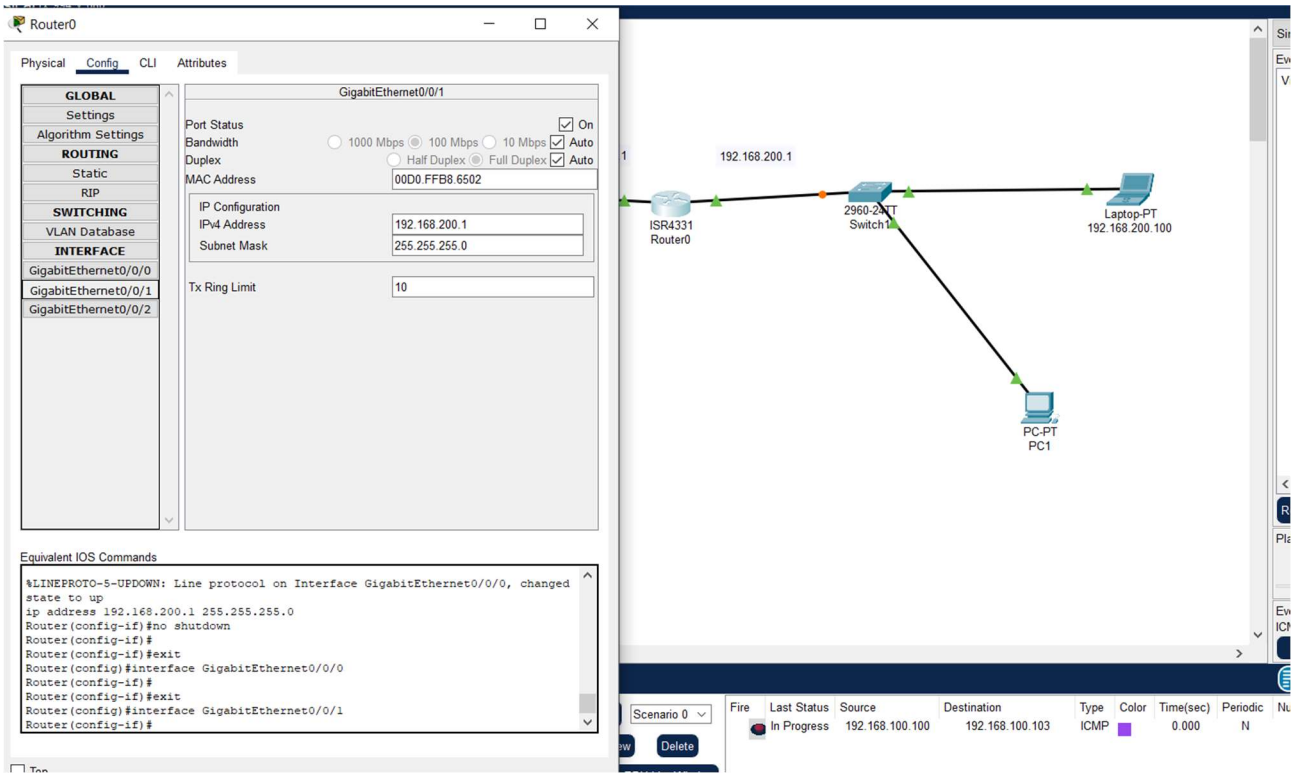
Simulazione comunicazione in realtime dei due pc

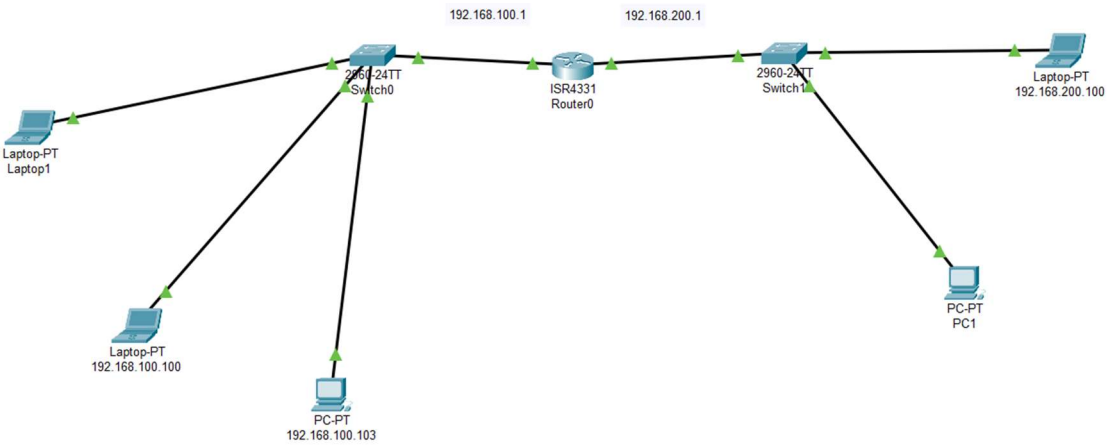
Simulazione comunicazione tra i due pc evidenziando solamente il protocollo ICMP



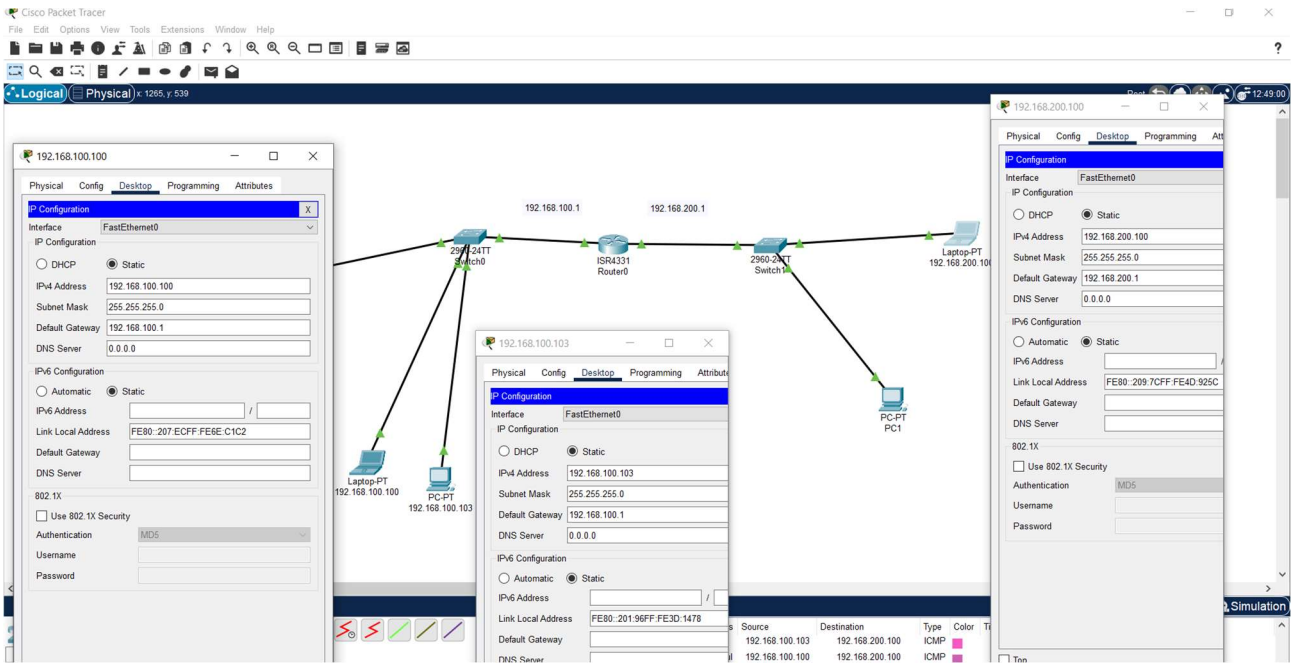
Configurazione interfacce router


192.168.100.1
2960-24TT
Switch0
ISR4331
Router0
PC-PT
168.100.103
Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
GigabitEthernet0/0/2
GigabitEthernet0/0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.FFB8.6501
IP Configuration
IPv4 Address
192.168.100.1
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up
ip address 192.168.200.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Top

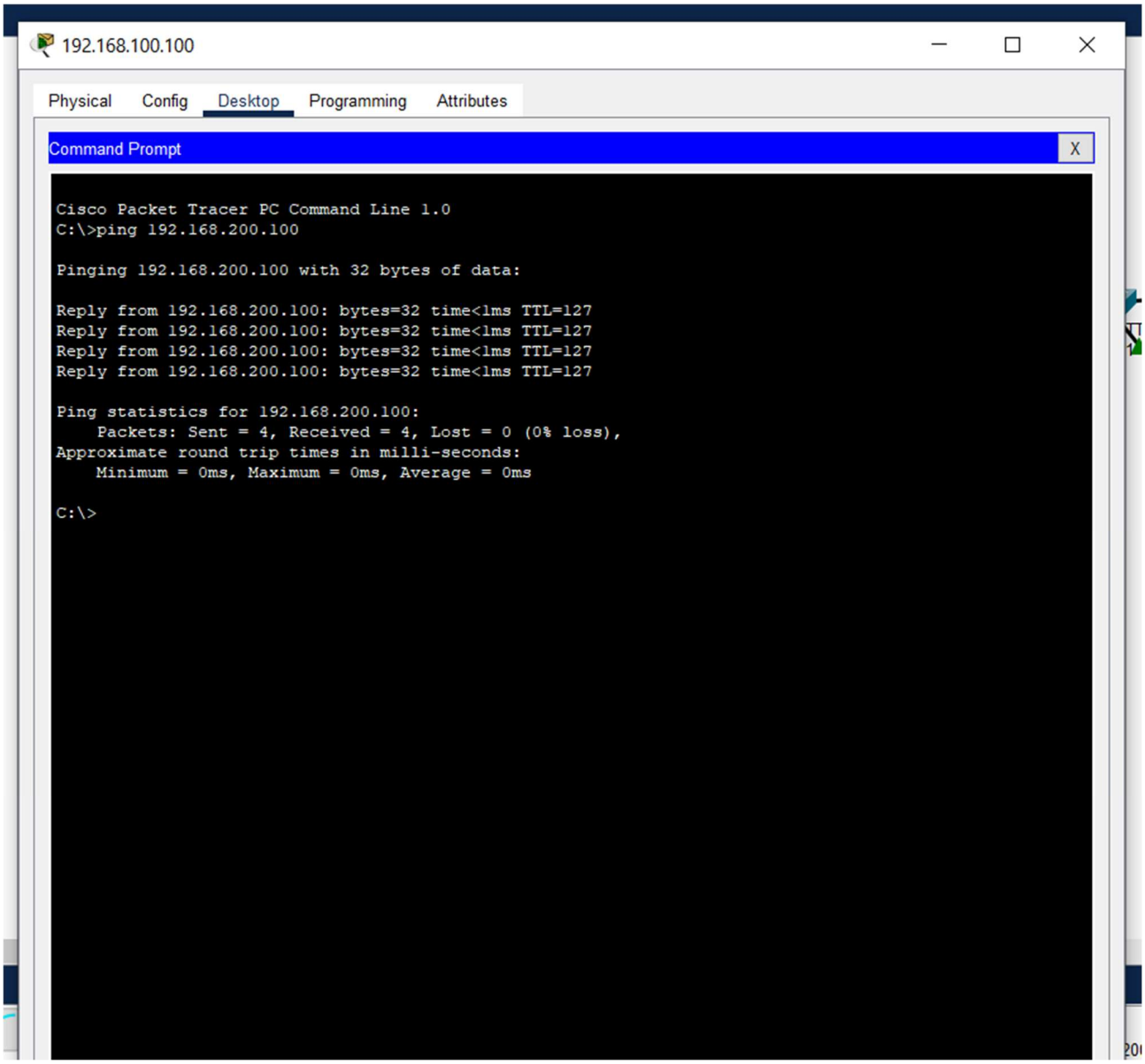

Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
GigabitEthernet0/0/2
GigabitEthernet0/0/1
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.FFB8.6502
IP Configuration
IPv4 Address
192.168.200.1
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up
ip address 192.168.200.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#
192.168.200.1
ISR4331
Router0
2960-24TT
Switch1
Laptop-PT
192.168.200.100
PC-PT
PC1
Scenario 0
Delete
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
In Progress
192.168.100.100
192.168.100.103
ICMP
0.000
N

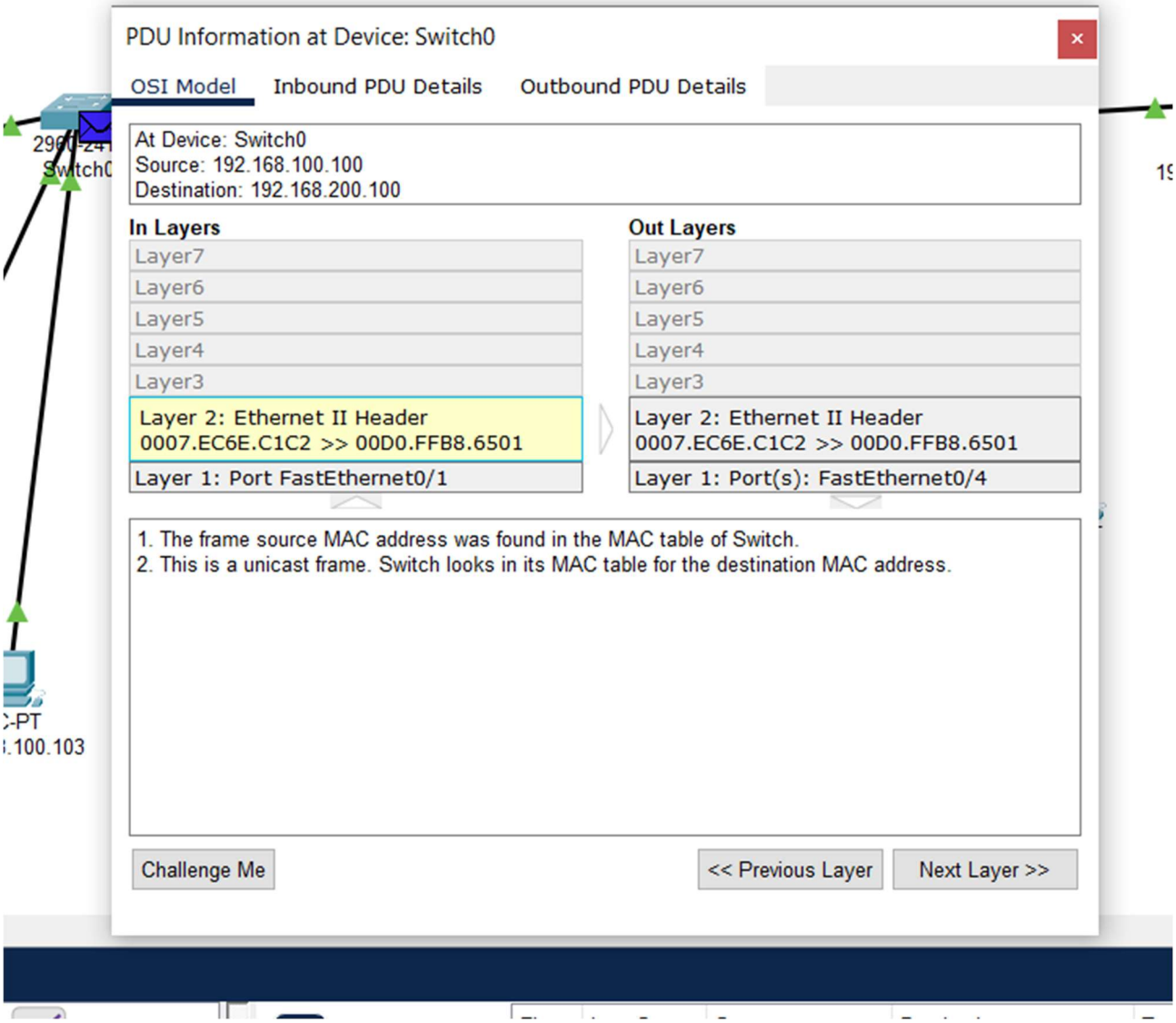


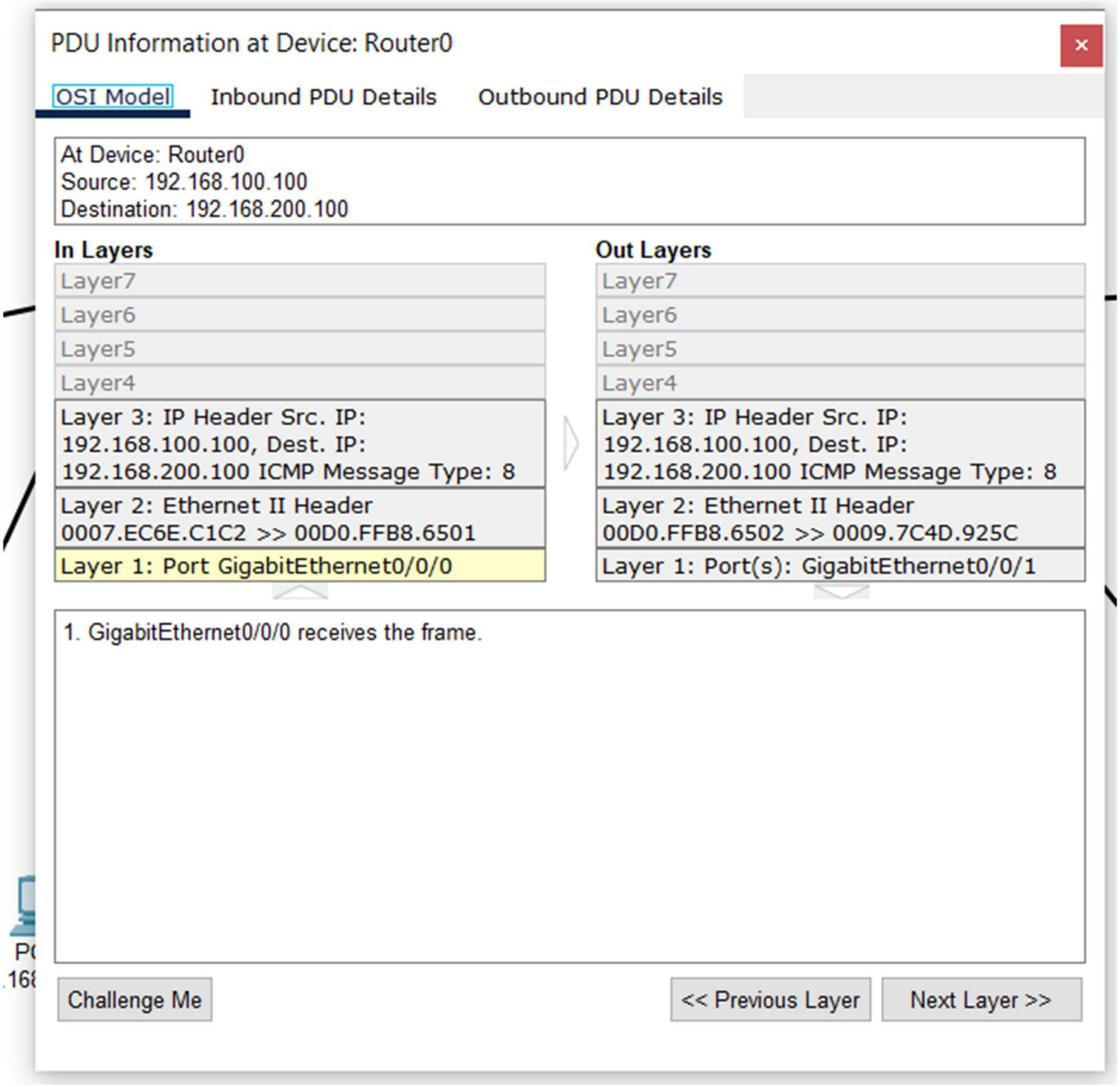
Configurazione del gateway per ogni pc che deve comunicare

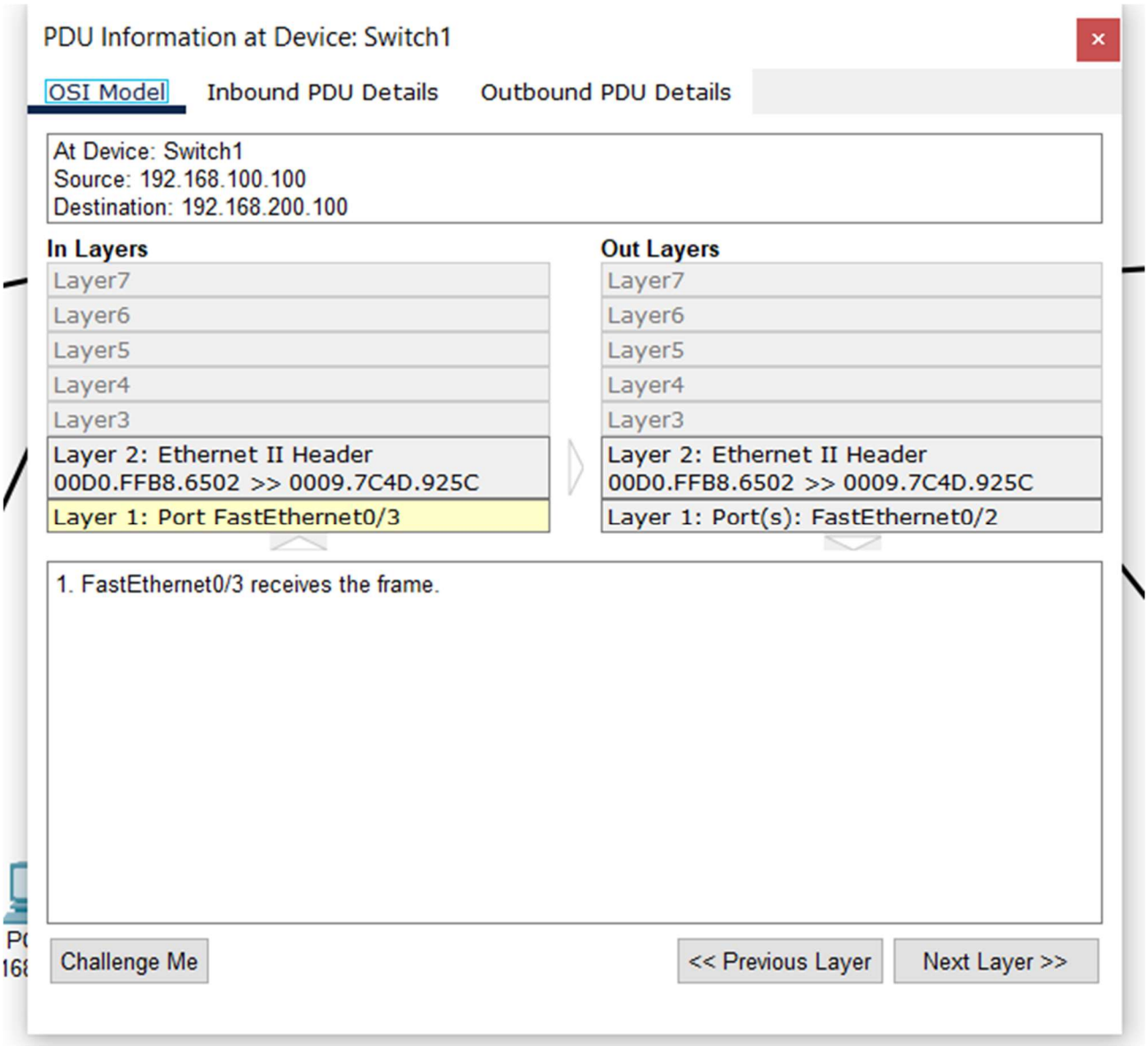


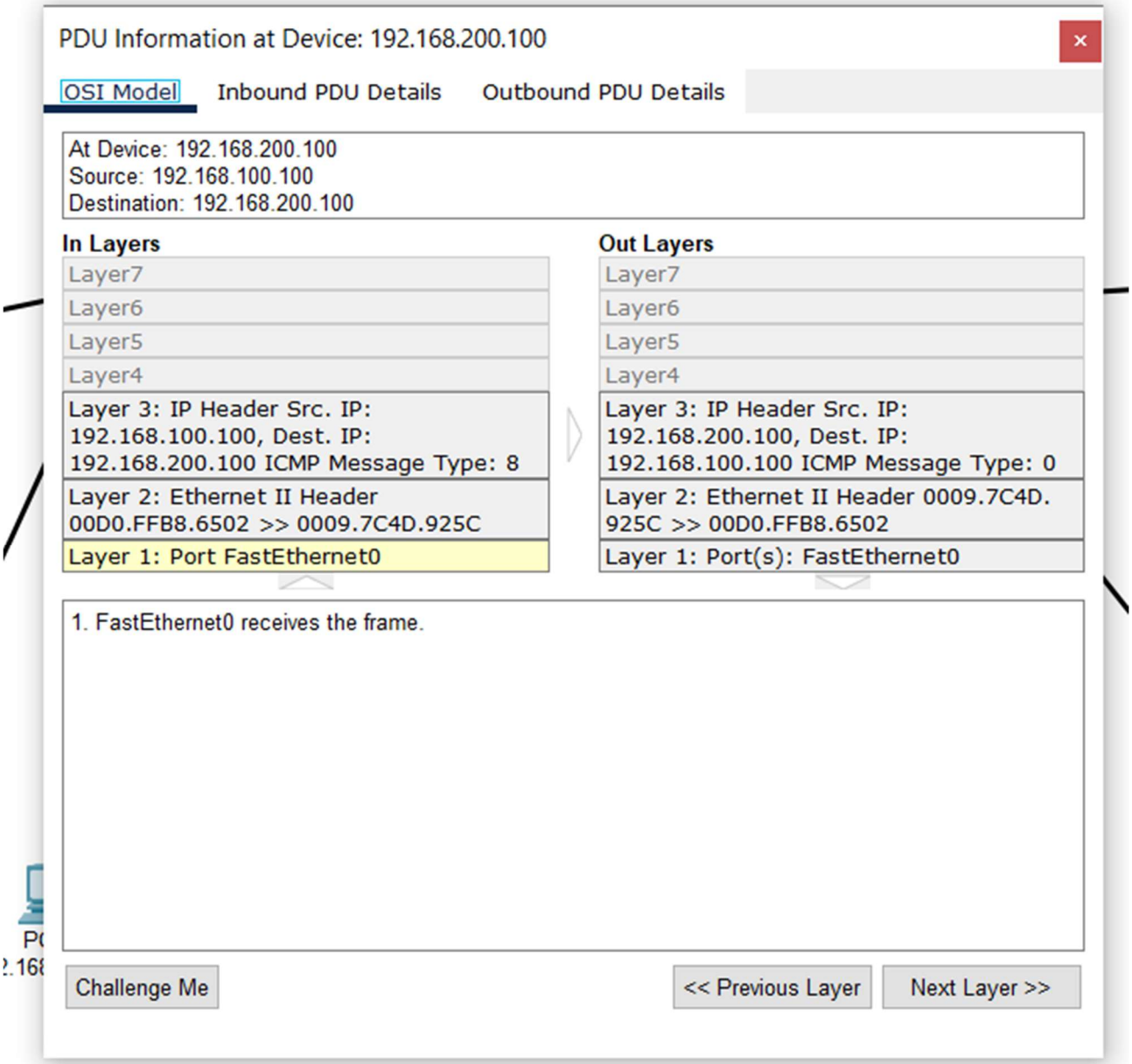
Corretta comunicazione tra pc su reti differenti


192.168.100.100
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.200.100
Pinging 192.168.200.100 with 32 bytes of data:
Reply from 192.168.200.100: bytes=32 time<1ms TTL=127
Reply from 192.168.200.100: bytes=32 time<1ms TTL=127
Reply from 192.168.200.100: bytes=32 time<1ms TTL=127
Reply from 192.168.200.100: bytes=32 time<1ms TTL=127
Ping statistics for 192.168.200.100:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>


PDU Information at Device: Switch0
OSI Model
Inbound PDU Details
Outbound PDU Details
At Device: Switch0
Source: 192.168.100.100
Destination: 192.168.200.100
In Layers
Out Layers
Layer7
Layer6
Layer5
Layer4
Layer3
Layer 2: Ethernet II Header
0007.EC6E.C1C2 >> 00D0.FFB8.6501
Layer 1: Port FastEthernet0/1
Layer 1: Port(s): FastEthernet0/4
1. The frame source MAC address was found in the MAC table of Switch.
2. This is a unicast frame. Switch looks in its MAC table for the destination MAC address.
Challenge Me
<< Previous Layer
Next Layer >>


PDU Information at Device: Router0
OSI Model
Inbound PDU Details
Outbound PDU Details
At Device: Router0
Source: 192.168.100.100
Destination: 192.168.200.100
In Layers
Out Layers
Layer7
Layer6
Layer5
Layer4
Layer 3: IP Header Src. IP: 192.168.100.100, Dest. IP: 192.168.200.100 ICMP Message Type: 8
Layer 2: Ethernet II Header 0007.EC6E.C1C2 >> 00D0.FFB8.6501
Layer 1: Port GigabitEthernet0/0/0
Layer 3: IP Header Src. IP: 192.168.100.100, Dest. IP: 192.168.200.100 ICMP Message Type: 8
Layer 2: Ethernet II Header 00D0.FFB8.6502 >> 0009.7C4D.925C
Layer 1: Port(s): GigabitEthernet0/0/1
1. GigabitEthernet0/0/0 receives the frame.
Challenge Me
<< Previous Layer
Next Layer >>


PDU Information at Device: Switch1
OSI Model
Inbound PDU Details
Outbound PDU Details
At Device: Switch1
Source: 192.168.100.100
Destination: 192.168.200.100
In Layers
Out Layers
Layer7
Layer6
Layer5
Layer4
Layer3
Layer 2: Ethernet II Header
00D0.FFB8.6502 >> 0009.7C4D.925C
Layer 1: Port FastEthernet0/3
Layer 1: Port(s): FastEthernet0/2
1. FastEthernet0/3 receives the frame.
Challenge Me
<< Previous Layer
Next Layer >>


PDU Information at Device: 192.168.200.100
OSI Model
Inbound PDU Details
Outbound PDU Details
At Device: 192.168.200.100
Source: 192.168.100.100
Destination: 192.168.200.100
In Layers
Layer7
Layer6
Layer5
Layer4
Layer 3: IP Header Src. IP: 192.168.100.100, Dest. IP: 192.168.200.100 ICMP Message Type: 8
Layer 2: Ethernet II Header 00D0.FFB8.6502 >> 0009.7C4D.925C
Layer 1: Port FastEthernet0
Out Layers
Layer7
Layer6
Layer5
Layer4
Layer 3: IP Header Src. IP: 192.168.200.100, Dest. IP: 192.168.100.100 ICMP Message Type: 0
Layer 2: Ethernet II Header 0009.7C4D.925C >> 00D0.FFB8.6502
Layer 1: Port(s): FastEthernet0
1. FastEthernet0 receives the frame.
Challenge Me
<< Previous Layer
Next Layer >>