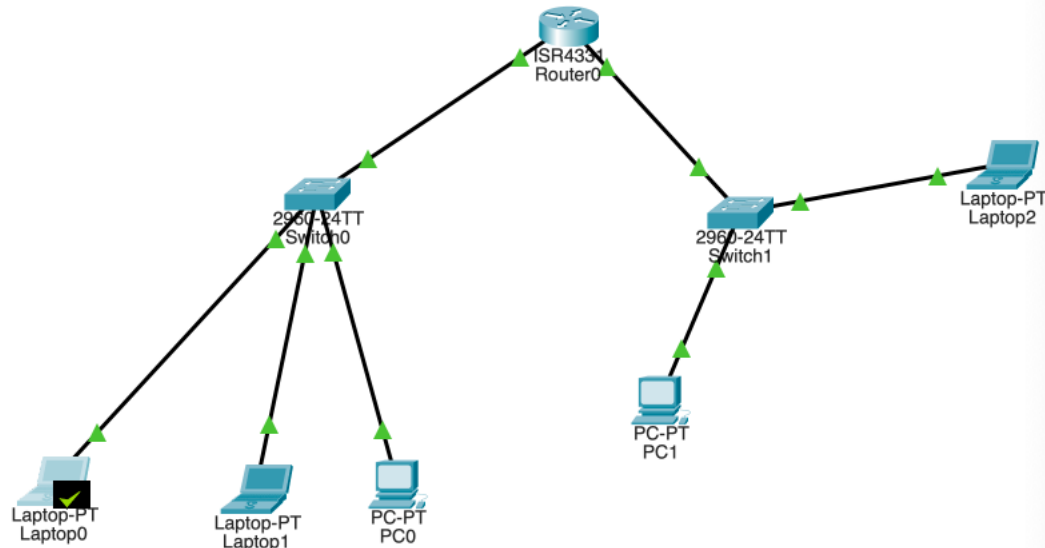


Verifica di collegamento tra laptop0 e PC0 appartenenti alla stessa sottorete



Laptop0

Physical Config **Desktop** Programming Attributes

Command Prompt

```
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 193.168.100.103

Pinging 193.168.100.103 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 193.168.100.103:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.100.103

Pinging 192.168.100.103 with 32 bytes of data:

Reply from 192.168.100.103: bytes=32 time=9ms TTL=128
Reply from 192.168.100.103: bytes=32 time=4ms TTL=128
Reply from 192.168.100.103: bytes=32 time=4ms TTL=128
Reply from 192.168.100.103: bytes=32 time=4ms TTL=128

Ping statistics for 192.168.100.103:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 9ms, Average = 5ms

C:\>ping 192.168.100.103

Pinging 192.168.100.103 with 32 bytes of data:

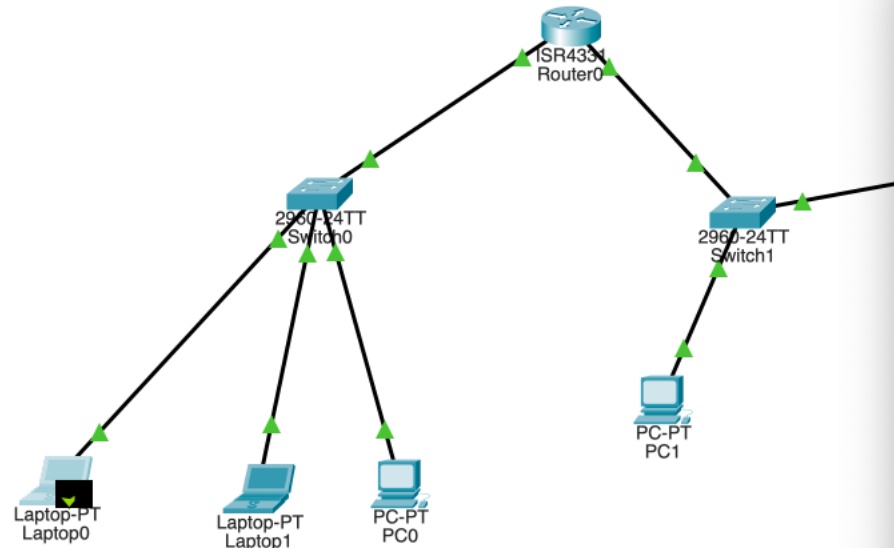
Reply from 192.168.100.103: bytes=32 time=9ms TTL=128
Reply from 192.168.100.103: bytes=32 time=4ms TTL=128
Reply from 192.168.100.103: bytes=32 time=4ms TTL=128
Reply from 192.168.100.103: bytes=32 time=4ms TTL=128

Ping statistics for 192.168.100.103:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 9ms, Average = 5ms

C:\>|
```

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Verifica di collegamento tra laptop0 e Laptop2 appartenente ad una sottorete differente



Laptop0

Physical Config Desktop Programming Attributes

Command Prompt

```
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.200.100
Pinging 192.168.200.100 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.200.100:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.200.100
Pinging 192.168.200.100 with 32 bytes of data:
Request timed out.
Reply from 192.168.200.100: bytes=32 time=8ms TTL=127
Reply from 192.168.200.100: bytes=32 time=8ms TTL=127
Reply from 192.168.200.100: bytes=32 time=8ms TTL=127
Ping statistics for 192.168.200.100:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 8ms, Maximum = 8ms, Average = 8ms
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=13ms TTL=127
Reply from 192.168.200.100: bytes=32 time=8ms TTL=127
Reply from 192.168.200.100: bytes=32 time=8ms TTL=127
Reply from 192.168.200.100: bytes=32 time=8ms 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 = 8ms, Maximum = 13ms, Average = 9ms
C:\>
```

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Ad ogni passaggio del pacchetto, visibile nell'event list, gli indirizzi ip restano invariati (ip Source e ip destination) livello 3 (RETE) che ha il compito di estendere la comunicazione tra due device di reti differenti

del modello OSI, mentre i MAC cambiano ad ogni link e sono del livello 2 (DATA) che ha il compito di fornire un'interfaccia per il livello di rete e regolare i flussi di bit, sono chiamati anche frame del modello OSI

The image displays a network simulation interface with three main components:

- Network Topology:** A diagram showing a central router (SR4331 Router0) connected to two switches (2950-24TT Switch0 and 2950-24TT Switch1). Switch0 is connected to three laptops (Laptop-PT Laptop0, Laptop-PT Laptop1, and PC-PT PC0). Switch1 is connected to a PC (PC-PT PC1).
- PDU Information at Device: Switch0:** A window showing the details of an incoming packet. It includes Ethernet II header information (PREAMBLE, SRC ADDR, DEST ADDR, TYPE, DATA, FCS) and ARP request details (HARDWARE TYPE, PROTOCOL TYPE, HLEN, PLEN, OP CODE, SOURCE MAC, SOURCE IP, TARGET MAC, TARGET IP).
- Event List:** A table showing the sequence of events in the simulation, including time, device, and event type.

**Event List Table:**

Vis.	Time(sec)	Last Device	At Device	Type
	0.000	--	Laptop0	ARP
	0.000	--	Laptop0	ICMP
	0.000	--	Laptop0	ARP
	0.001	Laptop0	Switch0	ARP
	0.001	--	Laptop0	ARP
	0.002	Laptop0	Switch0	ARP
	0.002	Switch0	Router0	ARP
	0.002	Switch0	Laptop1	ARP
	0.002	Switch0	PC0	ARP
	0.003	Switch0	Router0	ARP
	0.003	Switch0	Laptop1	ARP
	0.003	Switch0	PC0	ARP
	0.004	Router0	Switch0	ARP
	0.005	Switch0	Laptop0	ARP
	0.005	--	Laptop0	ICMP
	0.006	Laptop0	Switch0	ICMP
	0.007	Switch0	Router0	ICMP
	0.008	Router0	Switch1	ICMP
	0.009	Switch1	PC1	ICMP
	0.009	Switch1	Laptop2	ICMP
	0.010	Laptop2	Switch1	ICMP
	0.011	Switch1	Router0	ICMP
	0.012	Router0	Switch0	ICMP
	0.013	Switch0	Laptop0	ICMP
	1.014	--	Laptop0	ICMP
	1.015	Laptop0	Switch0	ICMP
	1.016	Switch0	Router0	ICMP
	1.017	Router0	Switch1	ICMP
	1.018	Switch1	Laptop2	ICMP
	1.019	Laptop2	Switch1	ICMP
	1.020	Switch1	Router0	ICMP
	1.021	Router0	Switch0	ICMP
	1.022	Switch0	Laptop0	ICMP
	2.024	--	Laptop0	ICMP
	2.025	Laptop0	Switch0	ICMP
	2.026	Switch0	Router0	ICMP

**Simulation Controls:** Time: 43:38:48.300, PLAY CONTROLS, Event List, Realtime, Simulation.