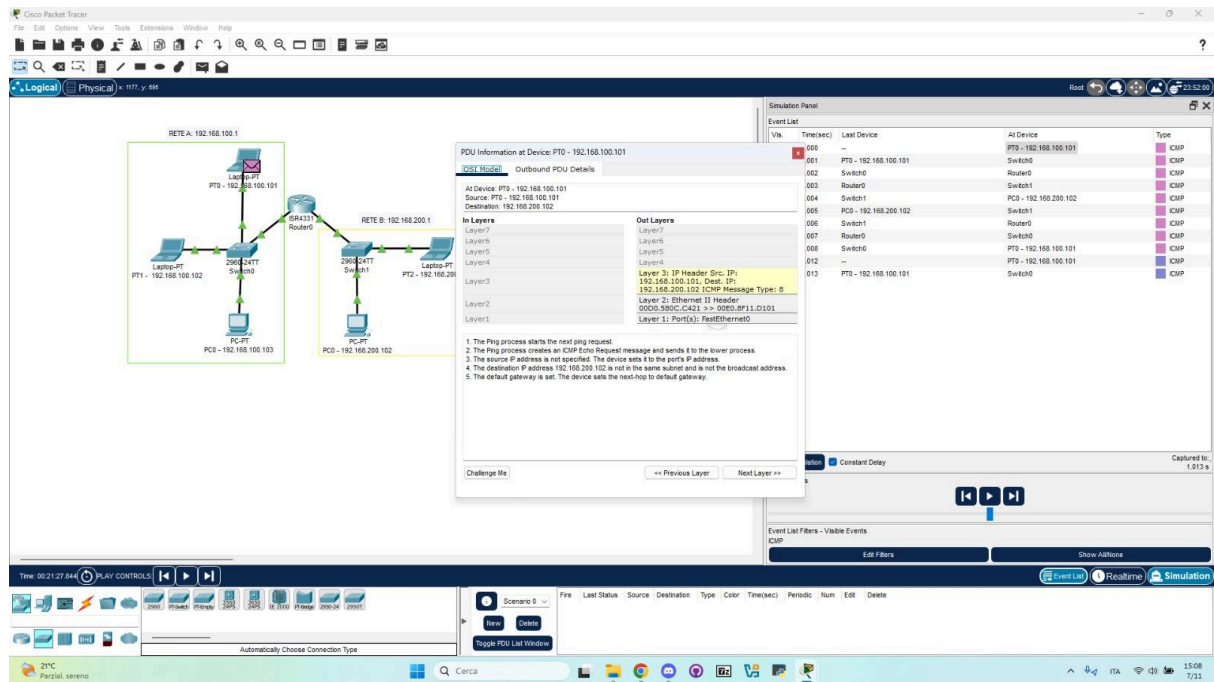
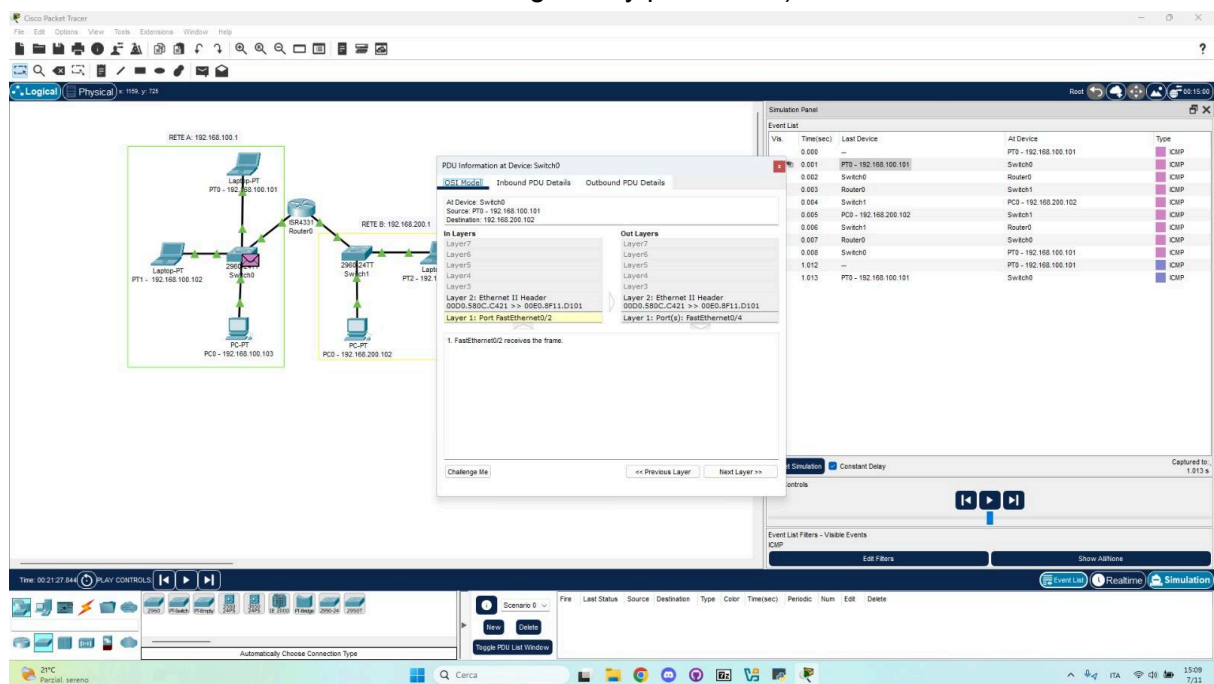


**STEP 1:** Viene creato un pacchetto ICMP di tipo Echo Request con l'indirizzo IP sorgente 192.168.100.101 e l'indirizzo IP di destinazione 192.168.200.102.



**STEP 2:** Il pacchetto viene instradato verso la sua destinazione passando per lo switch (il PT0 ha indicato direttamente il MAC del gateway predefinito).



**STEP 3:** Poiché i dispositivi sono su reti diverse (192.168.100.0/24 e 192.168.200.0/24), il pacchetto è inviato al gateway predefinito della rete di sinistra, il router centrale (Router0).

The screenshot shows the Cisco Packet Tracer interface. The network topology consists of two subnets: RETE A (192.168.100.1) and RETE B (192.168.200.1). RETE A includes a Laptop-PT (PT1 - 192.168.100.102) connected to a Switch0, which is connected to a Router0. RETE B includes a Laptop-PT (PT2 - 192.168.200.102) connected to a Switch1, which is also connected to the Router0. The Router0 is the central gateway. The packet capture window is open, showing the packet details at the Router0. The packet is an ICMP Echo (ping) from PT1 to PT2. The capture shows the packet entering the Router0 and being processed. The simulation panel on the right shows the event list, with the packet capture event highlighted.

**STEP 4:** Il router riceve il pacchetto, controlla la tabella di routing e inoltra il pacchetto alla rete di destra, individuando l'indirizzo di destinazione 192.168.200.102.

The screenshot shows the Cisco Packet Tracer interface. The network topology is the same as in Step 3. The packet capture window is open, showing the packet details at the Switch1. The packet is an ICMP Echo (ping) from PT1 to PT2. The capture shows the packet entering the Switch1 and being processed. The simulation panel on the right shows the event list, with the packet capture event highlighted. The packet details window shows the packet being forwarded by the Switch1 to the Router0, which then forwards it to the destination network.

**STEP 5:** Il pacchetto raggiunge il dispositivo di destinazione nella rete di destra, che risponde all'ICMP con un echo reply.

The screenshot shows the Cisco Packet Tracer interface during a simulation. The network topology consists of two networks, RETE A and RETE B, connected by a central router (R04211). RETE A contains a laptop (PT0), a switch (S000247T), and a PC (PC0). RETE B contains a switch (S000247T) and a PC (PC1). The simulation panel on the right shows the packet's path through the network, with the last event being an ICMP echo reply from PC1 to PC0. The packet details window shows the packet's structure, including the IP header and Ethernet II header.

**Packet Details:**

- In Layers:** Layer7, Layer6, Layer5, Layer4, Layer3, Layer2, Layer1
- Out Layers:** Layer7, Layer6, Layer5, Layer4, Layer3, Layer2, Layer1
- Layer 3:** IP Header Src: IP: 192.168.200.101, Dest: IP: 192.168.200.102, ICMP Message Type: 0
- Layer 2:** Ethernet II Header Src: D000.0387.CEA7 >> D000.0387.CEA7
- Layer 1:** Port FastEthernet0/1

**Simulation Panel:**

Time(sec)	Last Device	At Device	Type
0.000	PT0 - 192.168.100.101	Switch0	ICMP
0.001	PT0 - 192.168.100.101	Router0	ICMP
0.002	Switch0	Router0	ICMP
0.003	Router0	Switch1	ICMP
0.004	Switch1	PC0 - 192.168.200.102	ICMP
0.005	PC0 - 192.168.200.102	Switch1	ICMP
0.006	Switch1	Router0	ICMP
0.007	Router0	Switch0	ICMP
0.008	Switch0	PT0 - 192.168.100.101	ICMP
1.012	PT0 - 192.168.100.101	Switch0	ICMP
1.013	PT0 - 192.168.100.101	Switch0	ICMP

The screenshot shows the Cisco Packet Tracer interface during a simulation. The network topology is the same as the previous screenshot. The simulation panel on the right shows the packet's path through the network, with the last event being an ICMP echo reply from PC1 to PC0. The packet details window shows the packet's structure, including the IP header and Ethernet II header.

**Packet Details:**

- In Layers:** Layer7, Layer6, Layer5, Layer4, Layer3, Layer2, Layer1
- Out Layers:** Layer7, Layer6, Layer5, Layer4, Layer3, Layer2, Layer1
- Layer 3:** IP Header Src: IP: 192.168.200.101, Dest: IP: 192.168.200.102, ICMP Message Type: 0
- Layer 2:** Ethernet II Header Src: D000.0387.CEA7 >> D000.0387.CEA7
- Layer 1:** Port FastEthernet0/1

**Simulation Panel:**

Time(sec)	Last Device	At Device	Type
0.000	PT0 - 192.168.100.101	Switch0	ICMP
0.001	PT0 - 192.168.100.101	Router0	ICMP
0.002	Switch0	Router0	ICMP
0.003	Router0	Switch1	ICMP
0.004	Switch1	PC0 - 192.168.200.102	ICMP
0.005	PC0 - 192.168.200.102	Switch1	ICMP
0.006	Switch1	Router0	ICMP
0.007	Router0	Switch0	ICMP
0.008	Switch0	PT0 - 192.168.100.101	ICMP
1.012	PT0 - 192.168.100.101	Switch0	ICMP
1.013	PT0 - 192.168.100.101	Switch0	ICMP

**STEP 6:** Il pacchetto di risposta ritorna alla rete di sinistra tramite il router, completando così il ciclo.

The screenshot shows the Cisco Packet Tracer interface. The network diagram displays two PCs connected to a central router. The router is labeled 'Router0'. The 'PDU Information at Device: Router0' window is open, showing the 'Inbound PDU Details' and 'Outbound PDU Details' tabs. The 'Inbound PDU Details' tab shows the packet's source IP (192.168.100.102) and destination IP (192.168.100.101). The 'Outbound PDU Details' tab shows the packet's source IP (192.168.100.101) and destination IP (192.168.100.102). The 'Event List' window on the right shows a list of events, including 'PDU: 0.000' and 'PDU: 0.001'. The 'Simulation' window at the bottom shows the simulation controls and a list of events.

The screenshot shows the Cisco Packet Tracer interface. The network diagram displays two PCs connected to a central router. The router is labeled 'Router0'. The 'PDU Information at Device: Switch0' window is open, showing the 'Inbound PDU Details' and 'Outbound PDU Details' tabs. The 'Inbound PDU Details' tab shows the packet's source IP (192.168.100.102) and destination IP (192.168.100.101). The 'Outbound PDU Details' tab shows the packet's source IP (192.168.100.101) and destination IP (192.168.100.102). The 'Event List' window on the right shows a list of events, including 'PDU: 0.000' and 'PDU: 0.001'. The 'Simulation' window at the bottom shows the simulation controls and a list of events.

The screenshot shows the Cisco Packet Tracer interface. The network diagram displays two PCs connected to a central router. The router is labeled 'Router0'. The 'PDU Information at Device: PC1' window is open, showing the 'Inbound PDU Details' and 'Outbound PDU Details' tabs. The 'Inbound PDU Details' tab shows the packet's source IP (192.168.100.102) and destination IP (192.168.100.101). The 'Outbound PDU Details' tab shows the packet's source IP (192.168.100.101) and destination IP (192.168.100.102). The 'Event List' window on the right shows a list of events, including 'PDU: 0.000' and 'PDU: 0.001'. The 'Simulation' window at the bottom shows the simulation controls and a list of events.