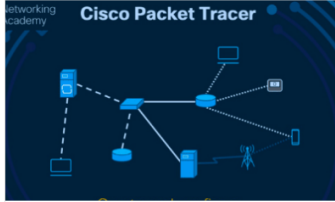


# PRE-REQUISITI: NETWORK(1)

## Creazione ed analisi di una rete di calcolatori

### I) Pre-requisiti

**1) Creazione di una rete con Cisco Packet Tracer.** Tool scaricabile gratuitamente da:  
<https://skillsforall.com/resources/lab-downloads> previa iscrizione al portale Cisco.



### Cisco Packet Tracer

Cisco Packet Tracer, an innovative network configuration simulation tool, helps you hone your networking configuration skills from your desktop. Use Packet Tracer to experiment while building, managing & securing infrastructures.

To obtain and install your copy of Cisco Packet Tracer, please follow these simple steps:

**Step 1.** Download the version of Packet Tracer you require.

Please login to download resources.

[Packet Tracer 8.2.1 MacOS 64bit](#)  
[Packet Tracer 8.2.1 Ubuntu 64bit](#)  
[Packet Tracer 8.2.1 Windows 64bit](#)

**Step 2.** Launch the Packet Tracer install program.

**Step 3.** Launch Cisco Packet Tracer by selecting the appropriate icon.

**Step 4.** When prompted, click on Skills For All green button to authenticate.


**Step 5.** Cisco Packet Tracer will launch and you are ready to explore its features.

If you need more guidance, please follow the [Cisco Packet Tracer Download and Installation Instructions](#).

**System Requirements:**


Computer with either Windows (10, 11), MacOS (10.14 or newer) or Ubuntu (20.04, 22.04) LTS operating system, amd64(x86-64) CPU, 4 GB of free RAM, 1.4 GB of free disk space


**2) Una volta completata l'installazione, potrete avviare il tool:**



# Cisco Packet Tracer

Sign in using one of the following options:

**Networking Academy**  
[Learn more about Networking Academy](#)

**Skills For All**  
[Learn more about Skills for All](#)

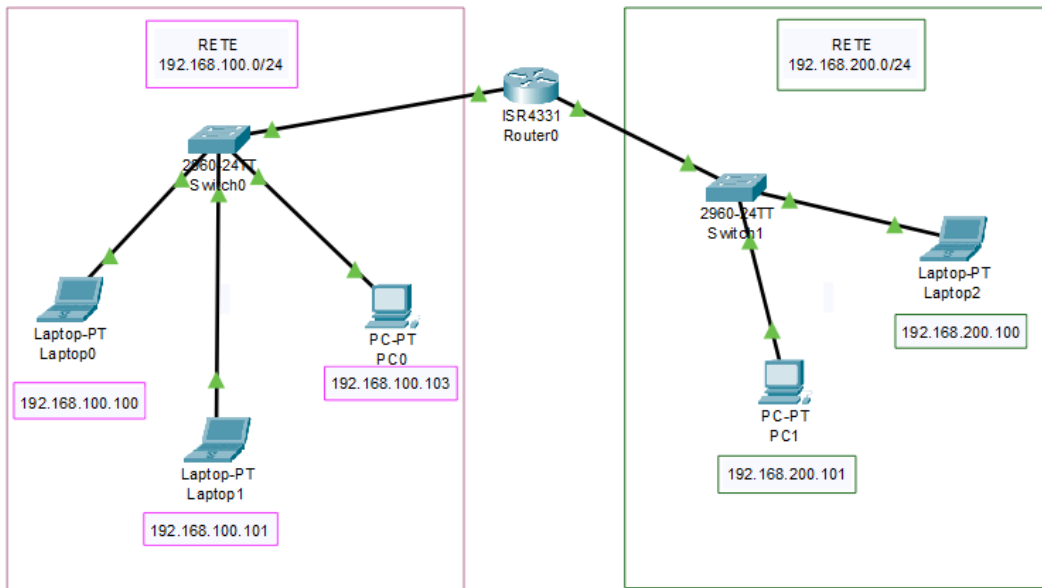
Login Server  
Worldwide

☐ Keep me logged in (for 3 months)  
*Not recommended for public or shared computers*

By using Cisco Packet Tracer you accept the Terms Of Service ([EULA](#) & [SEULA](#)) and [The Privacy Statement](#)  
[Proxy Settings](#)

## II) Creazione ed analisi di una rete di calcolatori

Capire come funzionano le comunicazioni a livello 2 e 3 del modello ISO/OSI con i rispettivi device di rete:



1) Mettere in comunicazione il laptop-PT0 con IP 192.168.100.100 con il PC-PT-PC0 con IP 192.168.100.103

```
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<1ms TTL=128
Reply from 192.168.100.103: bytes=32 time=1ms TTL=128
Reply from 192.168.100.103: bytes=32 time<1ms TTL=128
Reply from 192.168.100.103: bytes=32 time<1ms 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 = 0ms, Maximum = 1ms, Average = 0ms
```

2) Mettere in comunicazione il laptop-PT0 con IP 192.168.100.100 con il laptop-PT2 con IP 192.168.200.100

```
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
```