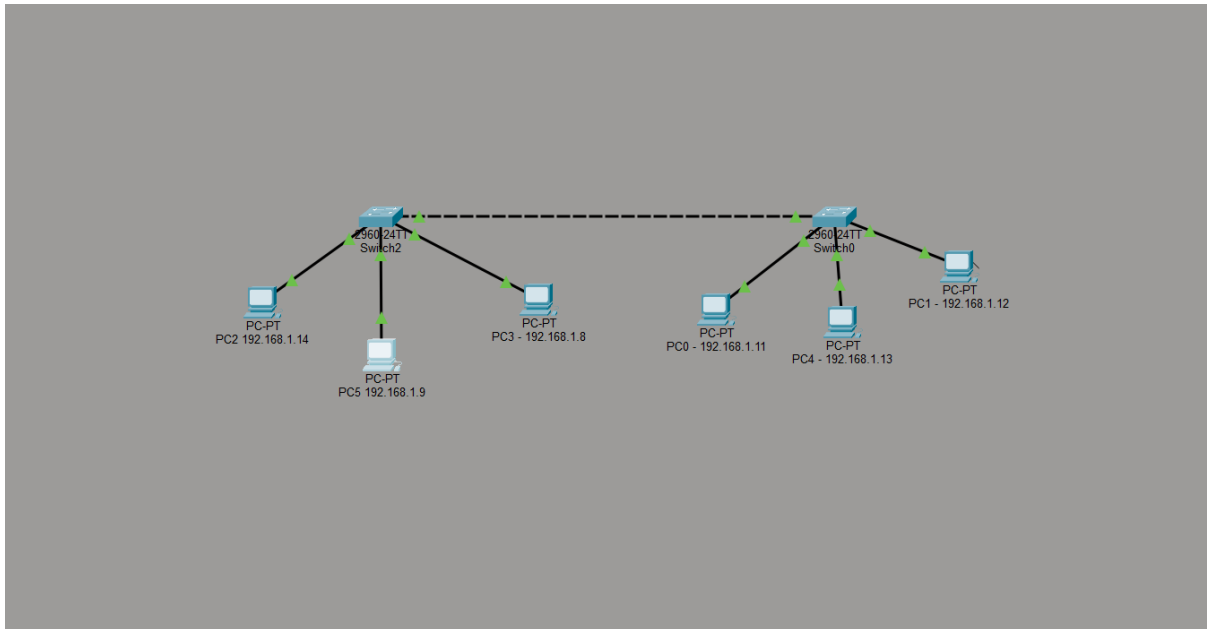


## Creazione rete lan attraverso protocollo ARP

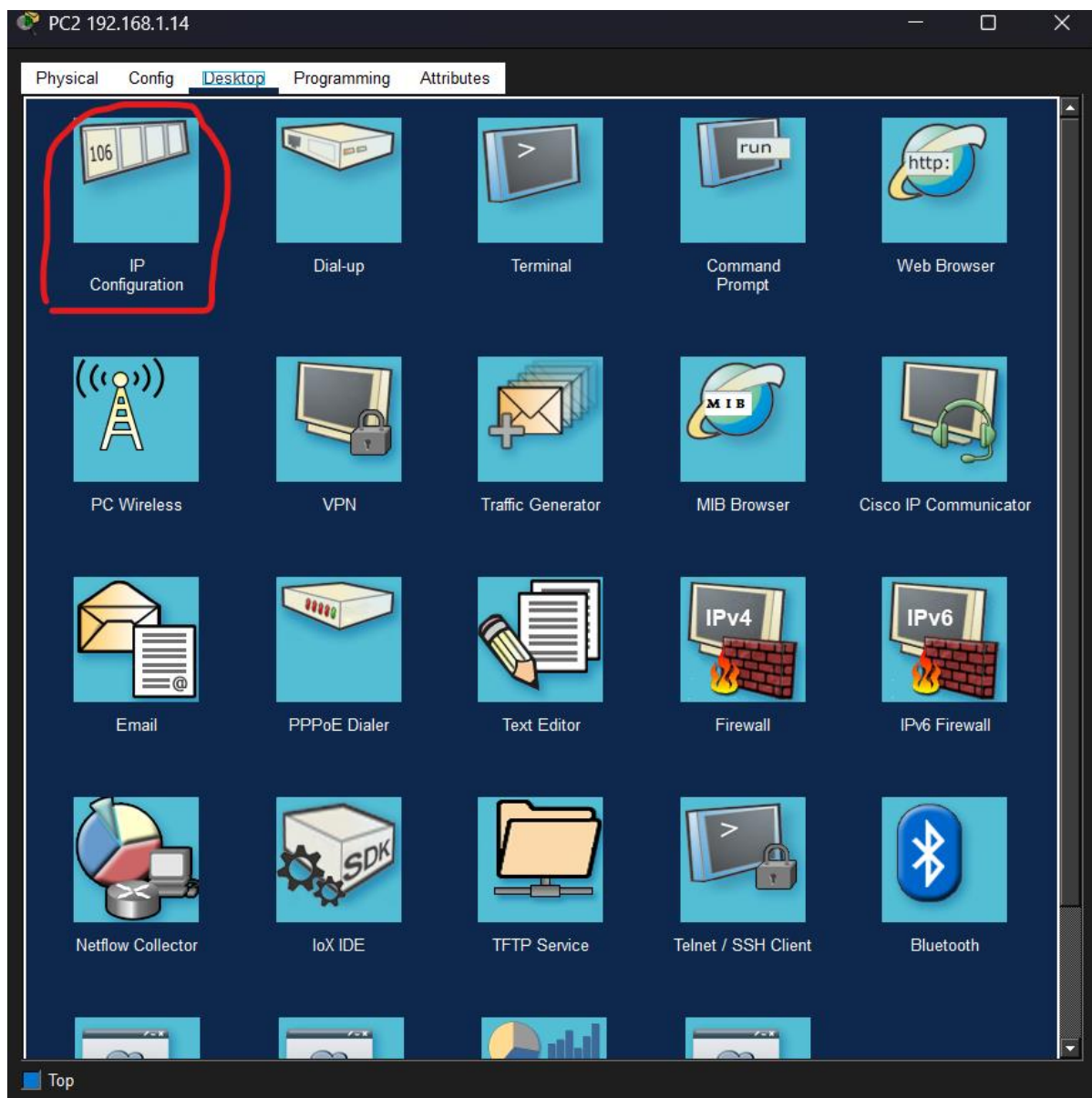
### 1. Utilizzo di Cisco Packetracer:



All'interno di Packetracer è possibile ricostruire una rete locale di PC comunicanti tra di loro attraverso gli Switch (tra gli switch è stato possibile collegarli attraverso le reciproche porte Gigabyt).

### 2. Configurazione PC attraverso indirizzi IP:

Affinchè sia possibile che i pc comunichino tra di loro, all'interno della configurazione (cliccando sul pc in questione e andando in desktop):



Bisogna andare nell'icona "IP configuration" e inserire il codice IP che si vuole assegnare, decidendo a monte quale parte vogliamo lasciare alla rete, e quale all'host, in base a questa scelta poi, verrà richiamata di default la "Submask", così:

PC2 192.168.1.14

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

☒ DHCP

☒ Static

IPv4 Address

192.168.1.14

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

0.0.0.0

IPv6 Configuration

☒ Automatic

☒ Static

IPv6 Address

Link Local Address

FE80::2D0:D3FF:FEDD:693B

Default Gateway

DNS Server

802.1X

☒ Use 802.1X Security

Authentication

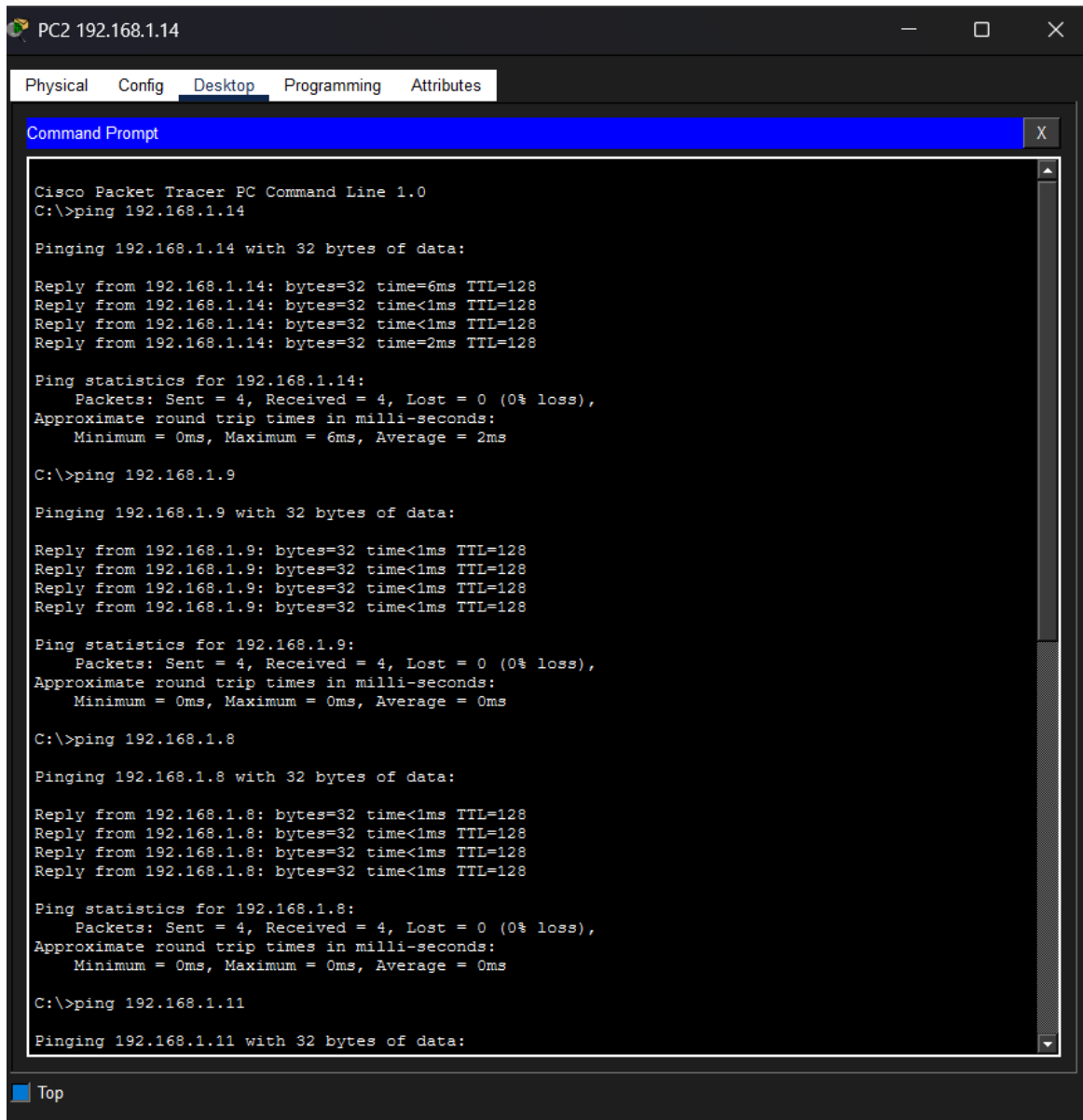
MD5

Username

Password

Top

Per verificare la funzionalità e la corretta comunicazione, dunque apriamo un terminale in uno dei pc configurati e verifichiamo che il ping funzioni:



```
PC2 192.168.1.14
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.14

Pinging 192.168.1.14 with 32 bytes of data:

Reply from 192.168.1.14: bytes=32 time=6ms TTL=128
Reply from 192.168.1.14: bytes=32 time<1ms TTL=128
Reply from 192.168.1.14: bytes=32 time<1ms TTL=128
Reply from 192.168.1.14: bytes=32 time=2ms TTL=128

Ping statistics for 192.168.1.14:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 6ms, Average = 2ms

C:\>ping 192.168.1.9

Pinging 192.168.1.9 with 32 bytes of data:

Reply from 192.168.1.9: bytes=32 time<1ms TTL=128
Reply from 192.168.1.9: bytes=32 time<1ms TTL=128
Reply from 192.168.1.9: bytes=32 time<1ms TTL=128
Reply from 192.168.1.9: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.9:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.1.8

Pinging 192.168.1.8 with 32 bytes of data:

Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128
Reply from 192.168.1.8: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.1.11

Pinging 192.168.1.11 with 32 bytes of data:
```