

EPICODE-CS0124

S1/L3 - Pratica

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Premessa

Sono state implementate due diverse reti:

- prima rete con un server con DHCP che assegna automaticamente gli IP agli host
- seconda rete con l'imputazione statica degli IP sui singoli host

Entrambe le reti, come si evince dall'invio di "Simple PDU" nel log sottostante, sono implementate correttamente in quanto tutti gli host comunicano tra loro.

Nel secondo screenshot è stato effettuato un test di ping tra due coppie di host nella rete con IP statici senza DHCP.

Si allega nel repository di GitHub anche il file .pkt utilizzato.

The screenshot displays the Cisco Packet Tracer interface. The top section shows two network topologies. The left topology, labeled "Rete con server DHCP", features a "Server-PT DHCP-Server" connected to a "2960-24TT SwitchA", which is then connected to three "PC-PT" devices (PC-A1, PC-A2, PC-A3). The right topology, labeled "Rete con IP statico su tutti gli host", shows two "2960-24TT" switches connected to each other. The first switch is connected to three "PC-PT" devices (PC-static_A1, PC-static_A2, PC-static_A3) with static IP addresses 192.168.1.10, 192.168.1.11, and 192.168.1.12. The second switch is connected to three "PC-PT" devices (PC-static_B1, PC-static_B2, PC-static_B3) with static IP addresses 192.168.1.13, 192.168.1.14, and 192.168.1.15.

The bottom section shows the "PDU List Window" with a table of network events:

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC-A1	PC-B1	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC-A1	PC-B2	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC-A1	PC-B3	ICMP		0.000	N	2	(edit)	(delete)
	Successful	PC-A2	PC-B1	ICMP		0.000	N	3	(edit)	(delete)
	Successful	PC-A2	PC-B2	ICMP		0.000	N	4	(edit)	(delete)
	Successful	PC-A2	PC-B3	ICMP		0.000	N	5	(edit)	(delete)
	Successful	PC-A3	PC-B1	ICMP		0.000	N	6	(edit)	(delete)
	Successful	PC-A3	PC-B2	ICMP		0.000	N	7	(edit)	(delete)
	Successful	PC-A3	PC-B3	ICMP		0.000	N	8	(edit)	(delete)
	Successful	PC-static_A1 192.168.1.10	PC-static_B1 192.168.1.13	ICMP		0.000	N	9	(edit)	(delete)
	Successful	PC-static_A1 192.168.1.10	PC-static_B2 192.168.1.14	ICMP		0.000	N	10	(edit)	(delete)
	Successful	PC-static_A1 192.168.1.10	PC-static_B3 192.168.1.15	ICMP		0.000	N	11	(edit)	(delete)
	Successful	PC-static_A2 192.168.1.11	PC-static_B1 192.168.1.13	ICMP		0.000	N	12	(edit)	(delete)
	Successful	PC-static_A2 192.168.1.11	PC-static_B2 192.168.1.14	ICMP		0.000	N	13	(edit)	(delete)
	Successful	PC-static_A2 192.168.1.11	PC-static_B3 192.168.1.15	ICMP		0.000	N	14	(edit)	(delete)
	Successful	PC-static_A3 192.168.1.12	PC-static_B1 192.168.1.13	ICMP		0.000	N	15	(edit)	(delete)
	Successful	PC-static_A3 192.168.1.12	PC-static_B2 192.168.1.14	ICMP		0.000	N	16	(edit)	(delete)
	Successful	PC-static_A3 192.168.1.12	PC-static_B3 192.168.1.15	ICMP		0.000	N	17	(edit)	(delete)

The bottom status bar shows the time as 02:27:16, the simulation mode as "Realtime", and the scenario as "Scenario 0".

Cisco Packet Tracer - C:\Users\Flaviano\Cisco Packet Tracer 8.2.1\saves\S1-L3.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 11, y: 503 Root 22:42:30

PC-static_A1 192.168.1.10

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection: (default port)
    Connection-specific DNS Suffix...: 
    Link-local IPv6 Address . . . . .: FE80::201:42FF:FE1B:4570
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 192.168.1.10
    Subnet Mask . . . . .: 255.255.255.0
    Default Gateway . . . . .: ::
                               192.168.1.1

Bluetooth Connection:
    Connection-specific DNS Suffix...: 
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                               0.0.0.0

C:\>ping 192.168.1.13

Pinging 192.168.1.13 with 32 bytes of data:

Reply from 192.168.1.13: bytes=32 time<1ms TTL=128
Reply from 192.168.1.13: bytes=32 time<1ms TTL=128
Reply from 192.168.1.13: bytes=32 time<1ms TTL=128
Reply from 192.168.1.13: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

PC-static_B2 192.168.1.14

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection: (default port)
    Connection-specific DNS Suffix...: 
    Link-local IPv6 Address . . . . .: FE80::20C:CFFF:FE0C:77B6
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 192.168.1.14
    Subnet Mask . . . . .: 255.255.255.0
    Default Gateway . . . . .: ::
                               192.168.1.1

Bluetooth Connection:
    Connection-specific DNS Suffix...: 
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                               0.0.0.0

C:\>ping 192.168.1.11

Pinging 192.168.1.11 with 32 bytes of data:

Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```