

COMPUTER NETWORKS

PRACTICUM 2



By :

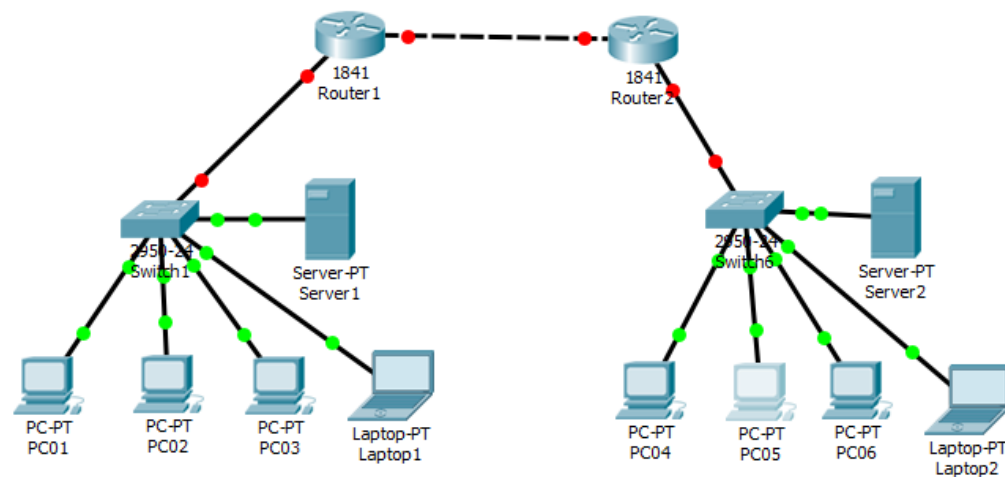
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2020

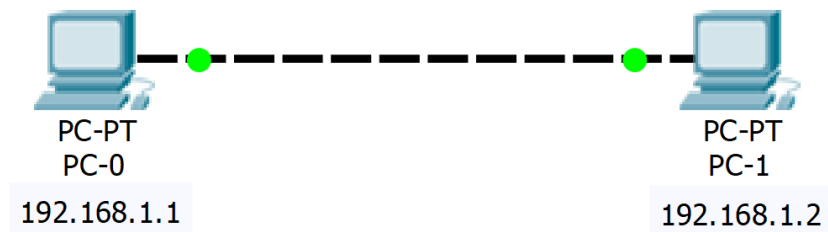
1. Activity 1



In the first activity there are router components, switches, and devices that are connected by connectors. Each connector has a lamp that symbolizes that the connector is connected. The red color represents the connector is not connected, the orange color represents the connector is being installed / the connection process, the green color represents the connector is connected.

2. Activity 2. Creating a Peer to Peer Network

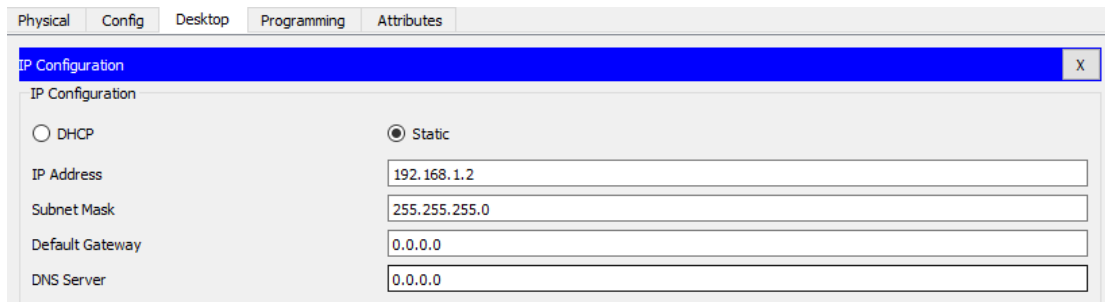
- Creating a network design



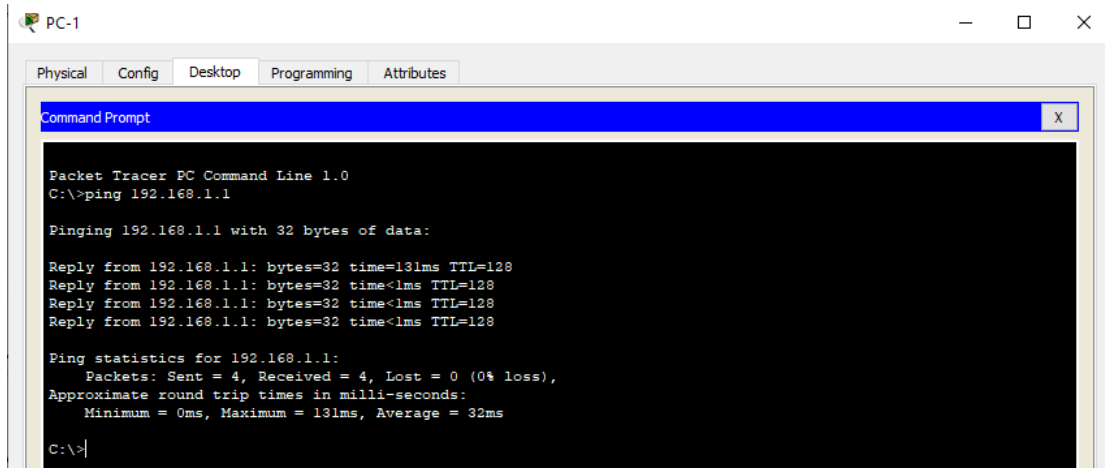
- Set IP

The screenshot shows the 'IP Configuration' window in a network configuration tool. The window has tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes'. The 'Config' tab is selected. The 'IP Configuration' section is active, showing options for 'DHCP' and 'Static'. The 'Static' option is selected. The fields for 'IP Address', 'Subnet Mask', 'Default Gateway', and 'DNS Server' are filled with the following values: '192.168.1.1', '255.255.255.0', '0.0.0.0', and '0.0.0.0' respectively.

Field	Value
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0



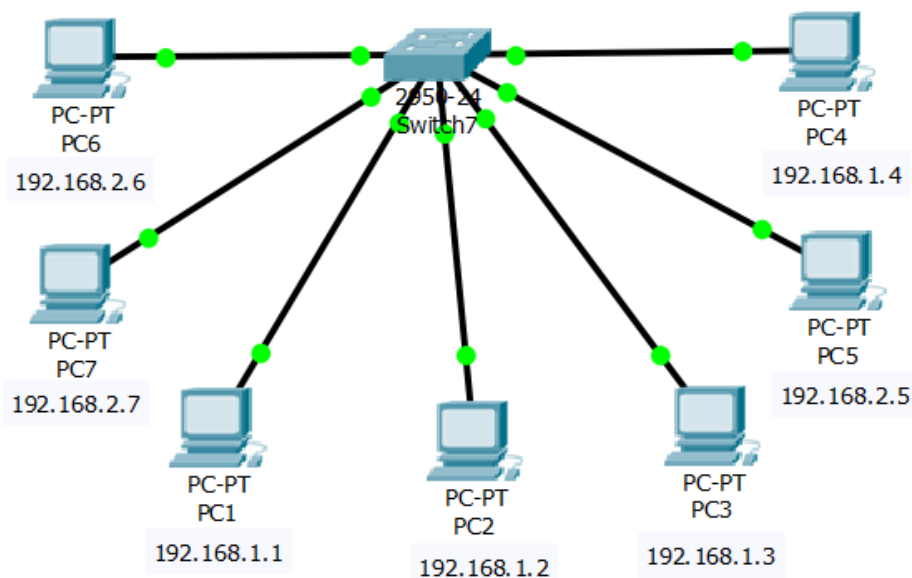
- Check the connection by pinging from one PC and entering another PC's IP



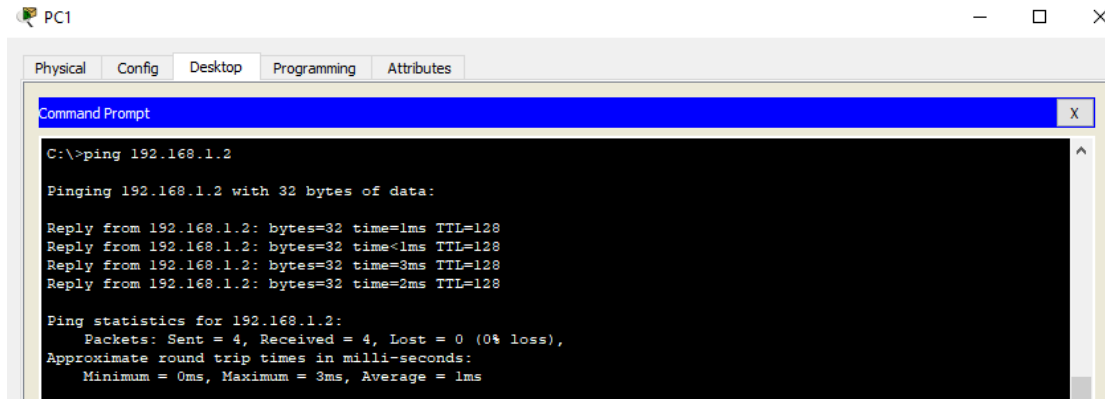
Peer to peer two workstations there are no obstacles. Each connection can be proven by pinging each other successfully and there is no RTO as shown in the message column.

3. Activity 3. Make a network with a switch

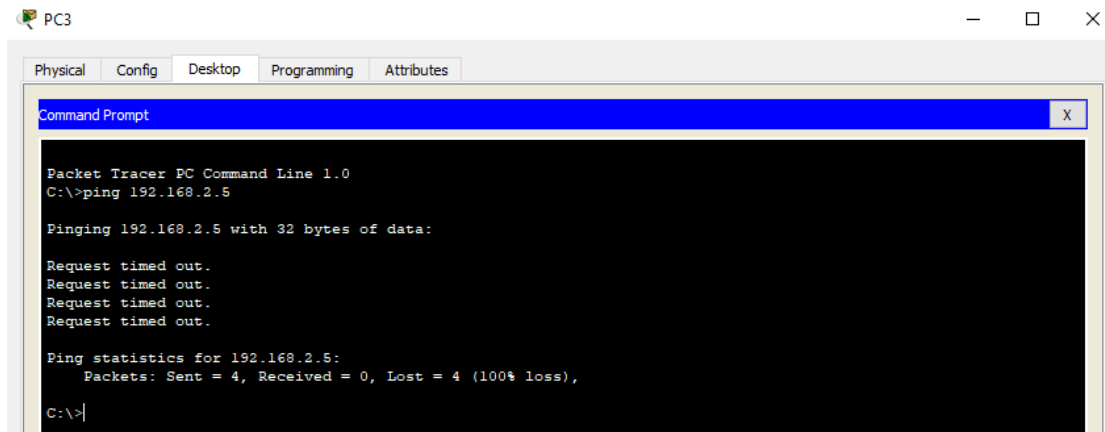
- Picture of network design by division of IP



- Check the ping connection from PC 1 to PC 2. And the connection can be connected



- Check ping connections from PC 3 to PC 3. And RTO connections due to differences in different networks.

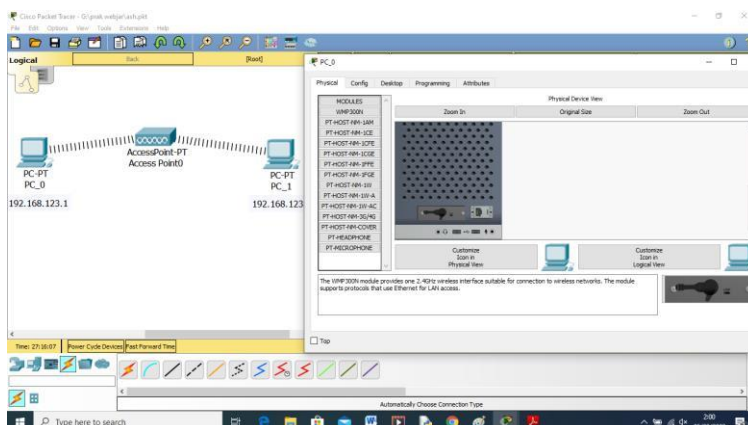


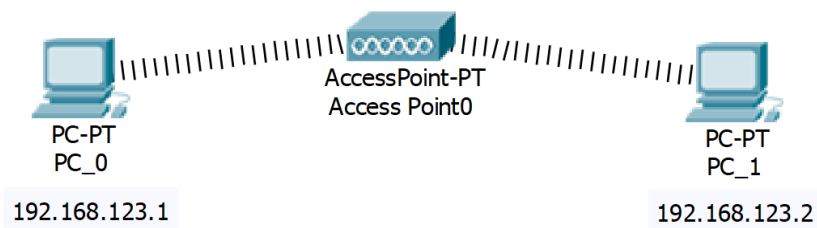
After the circuit is complete, ping between:

- PC1 to PC2 : is clear without any constraints.
- PC3 to PC5 : experiences RTO due to differences in network ID.

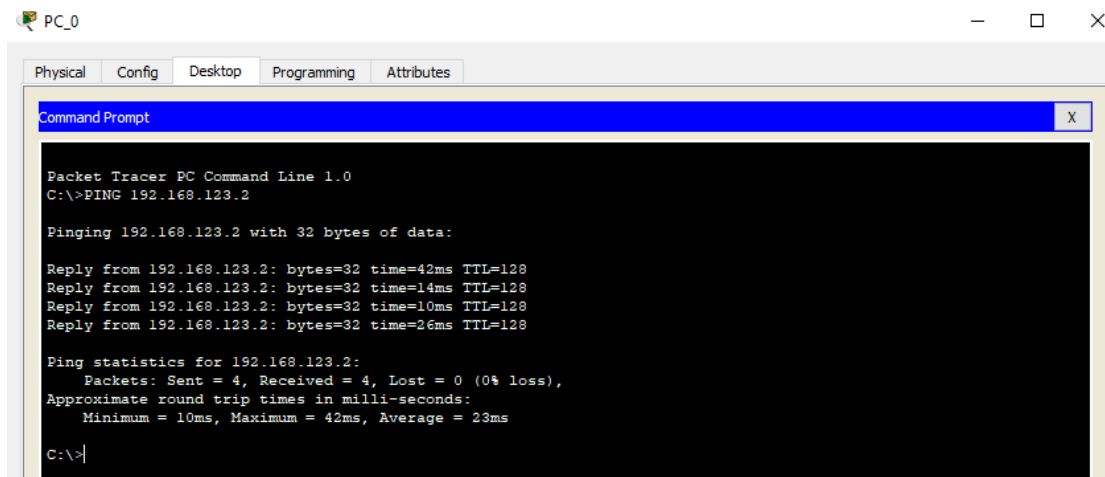
4. Activity 4. Wireless Network

- Network design using Access points with IP divisions.





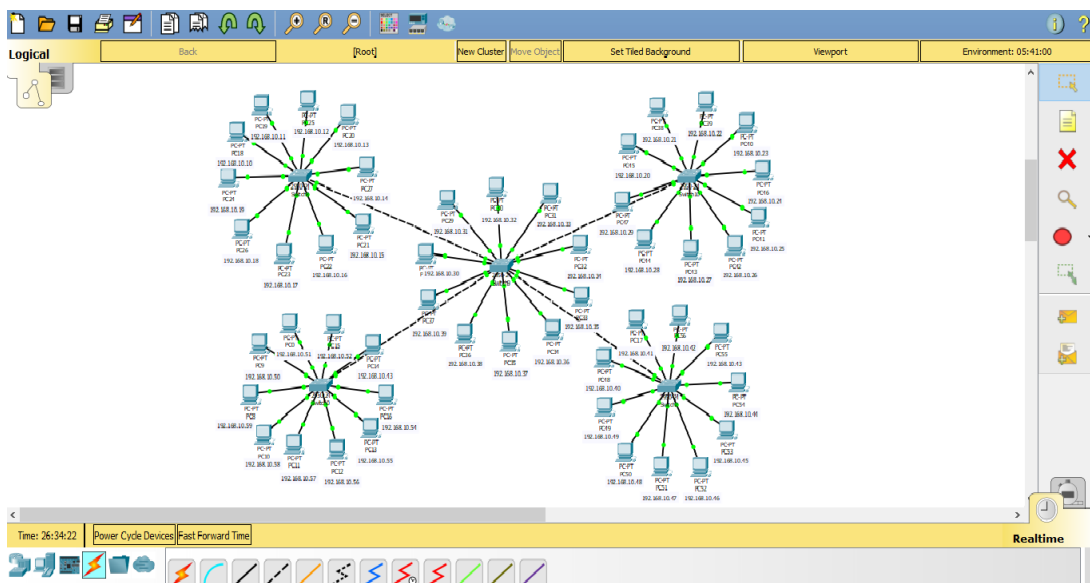
- Ping to check and the connection results are connected



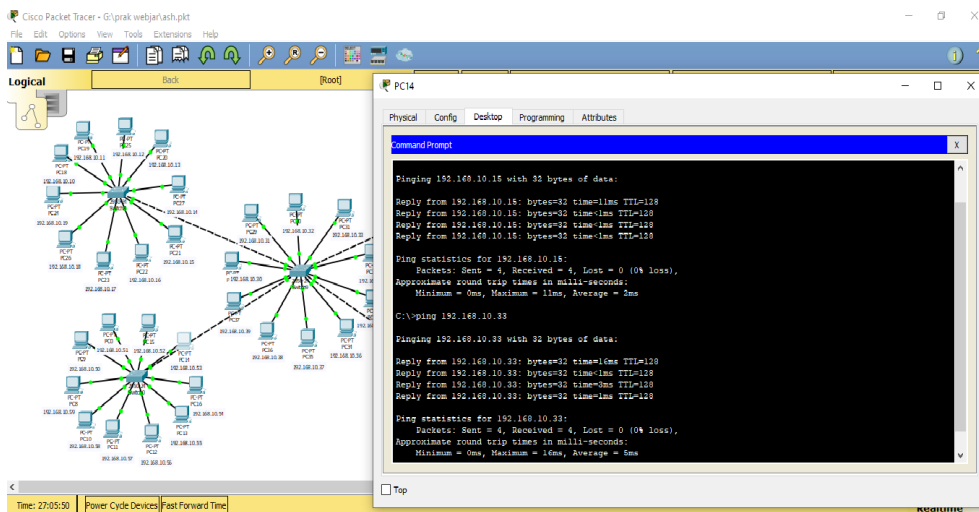
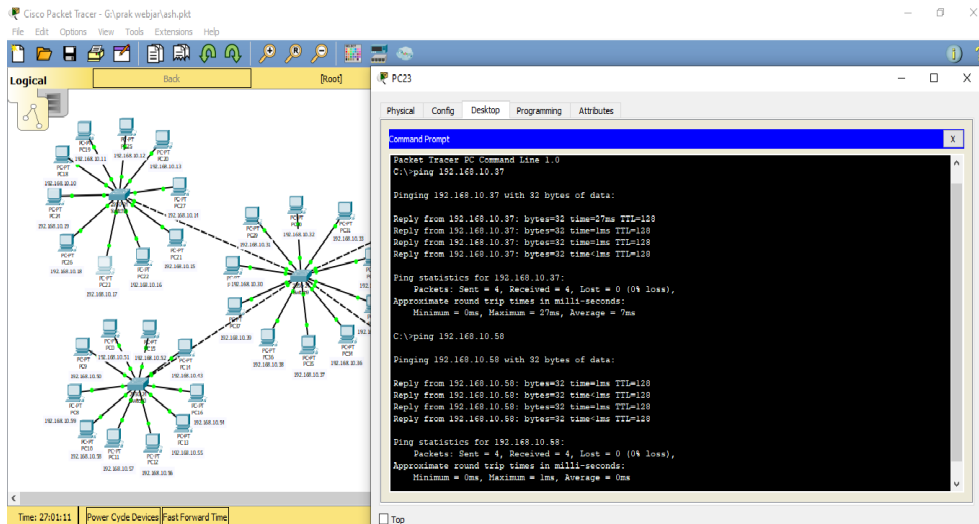
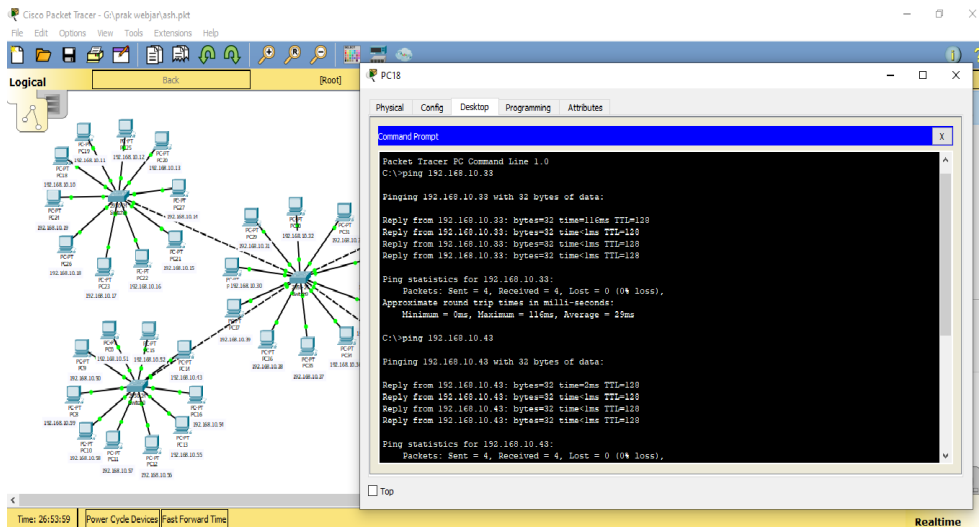
Replacing computer components into wireless components and connecting 2 computers with wireless components. There are 1 access point and 2 workstations. Ping clearly without any problems.

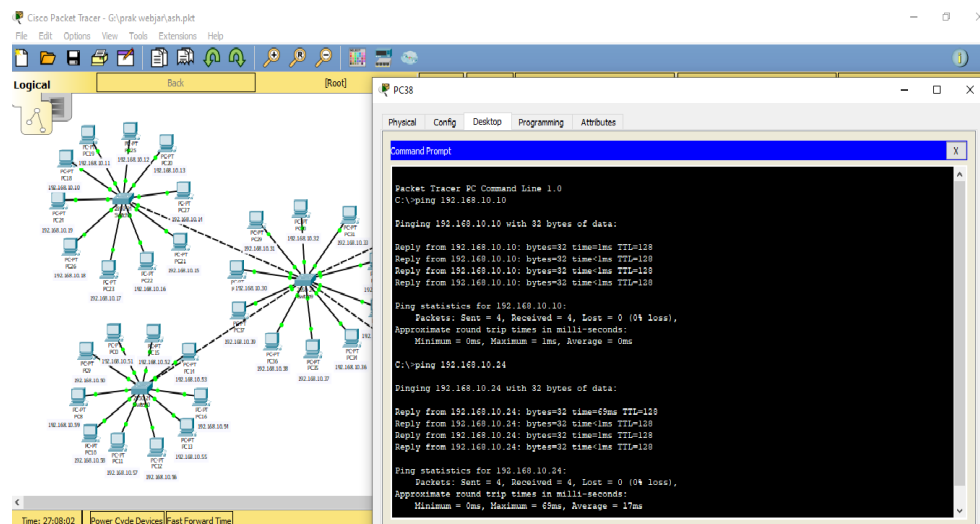
ASSIGNMENT

- Network Design



- Check the connection by pinging from IP computer 192.168.10.10 to another computer that has a different connection switch





Information :

5 switches. Each switch consists of 10 workstations. Each of which has an IP 192.168.10.10-192.168.10.60

Can be seen all workstations connected succesfull (ping).

It would be more effective if there is a router device, so that IP can be configured via DHCP.