

Software required: CISCO Packet Tracer (student version)

**Objectives:**

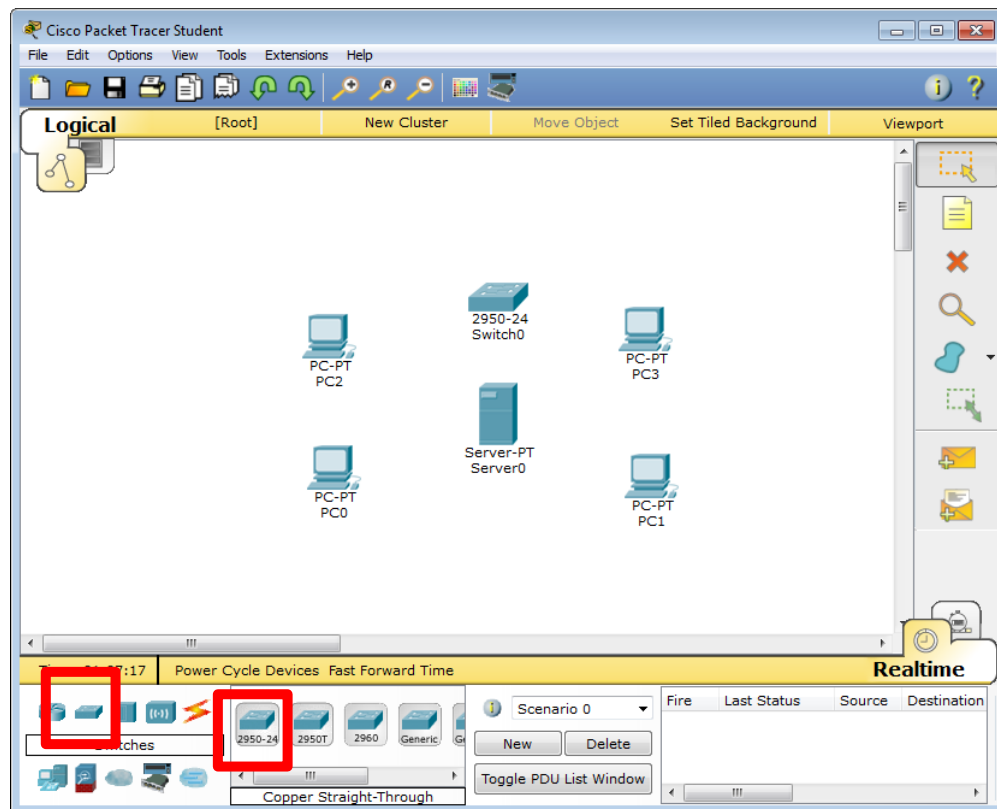
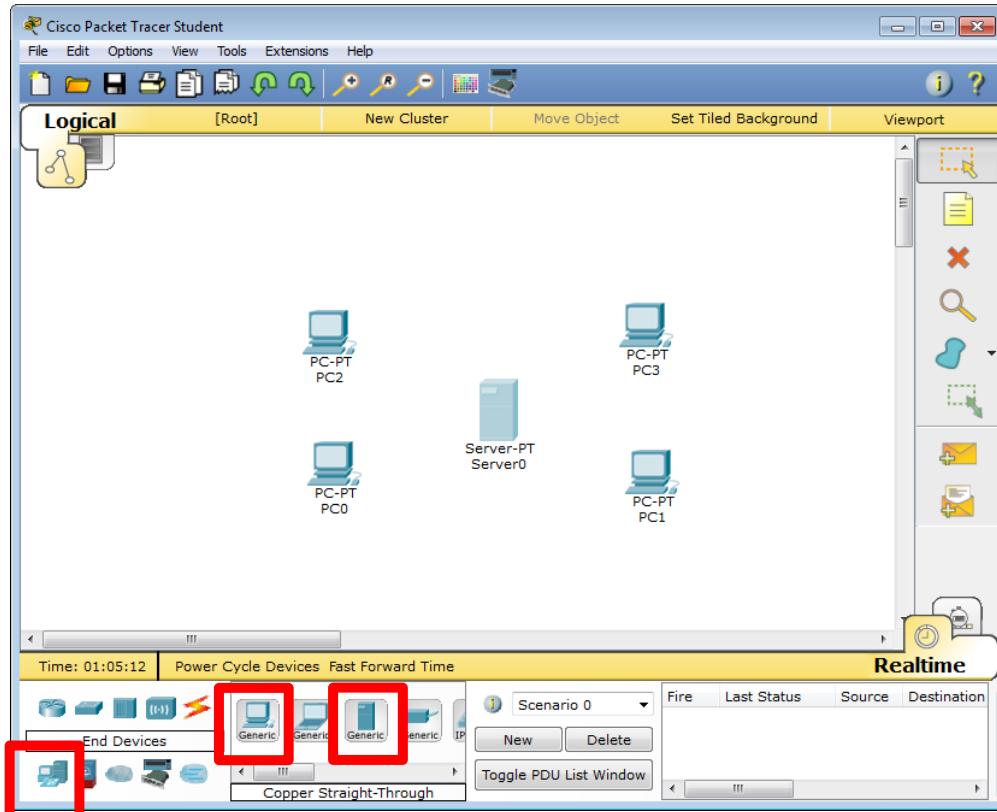
- Setup a client/server network
- Understand the purpose of client/server networks
- Know the advantages and disadvantages of client/server networks

**What is a client server network?**

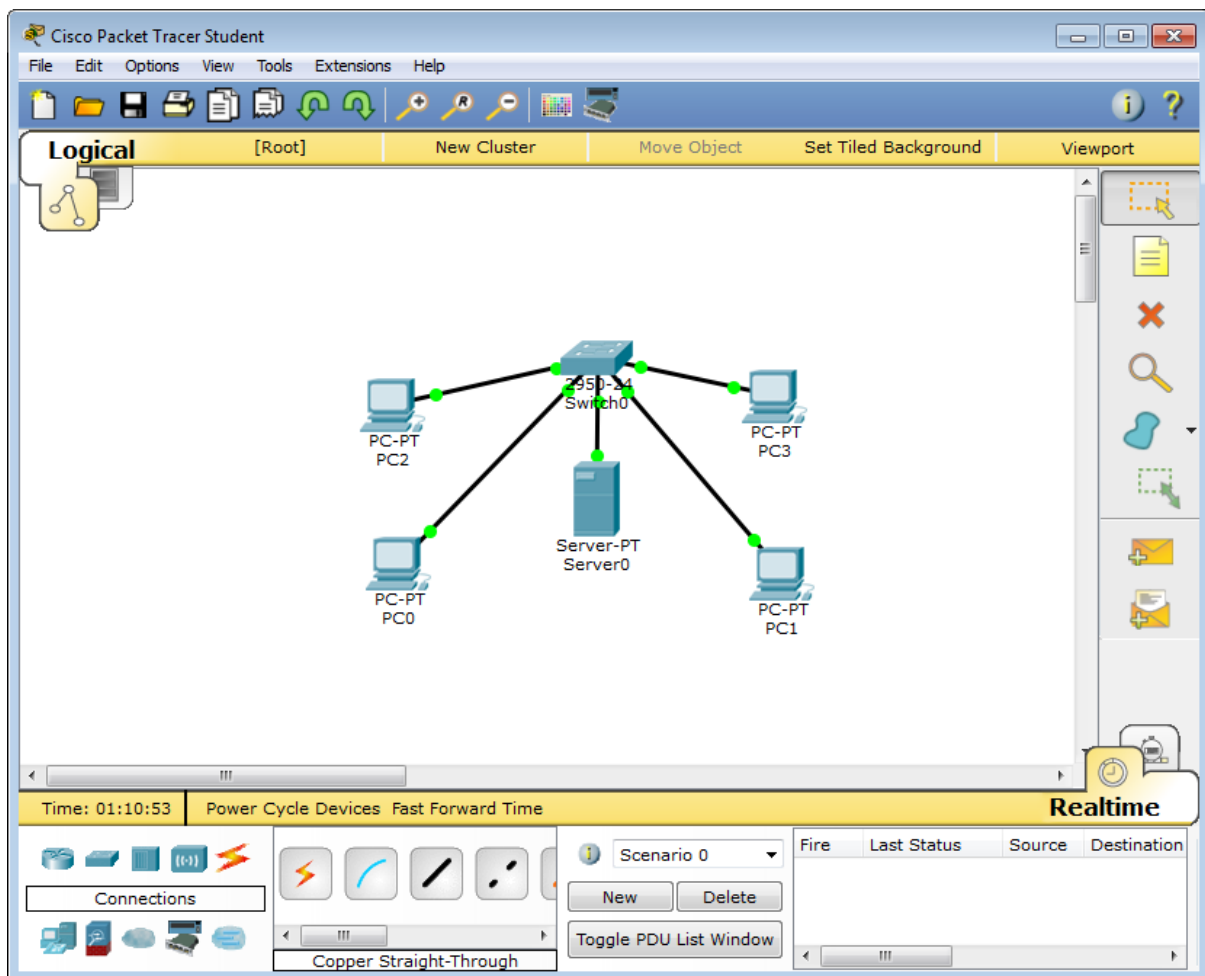
A client server network is a network where the resources are stored on at least one central server. These can then be accessed by the clients of the network. Each device has a dedicated role either as a client or a server. They cannot be both, like in a peer to peer network.

## Setup your client server network

Open Packet Tracer and drag four PC's and a server onto the screen, these are found under end devices. Also drag a switch onto the screen (found under switches).



As this is a local network, we will connect the PC's to the server through a switch using copper straight-through connections. These will all use the fast Ethernet ports on the devices. The green lights mean the connections are working.



## **Advantages and disadvantages of client server networks**

From your setups can you identify the advantages and disadvantages of using a client server network? Consider the following:

### Advantages

- All resources can be found from a central location
- Backups of resources can be done easily
- Devices attached to the network can be managed in one place
- All clients have access to a single version of the resource

### Disadvantages

- Requires specialist hardware and software to work
- A network manager or administrator is required for the up keep of the system
- If the server goes down, this will affect access to resources for the whole network