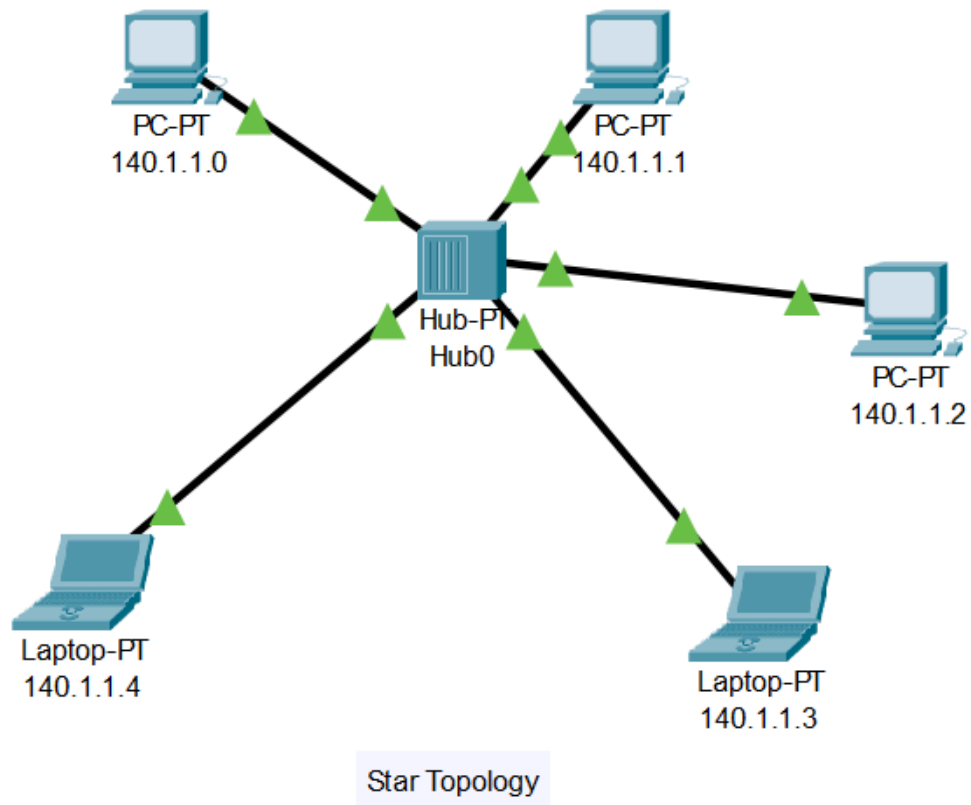
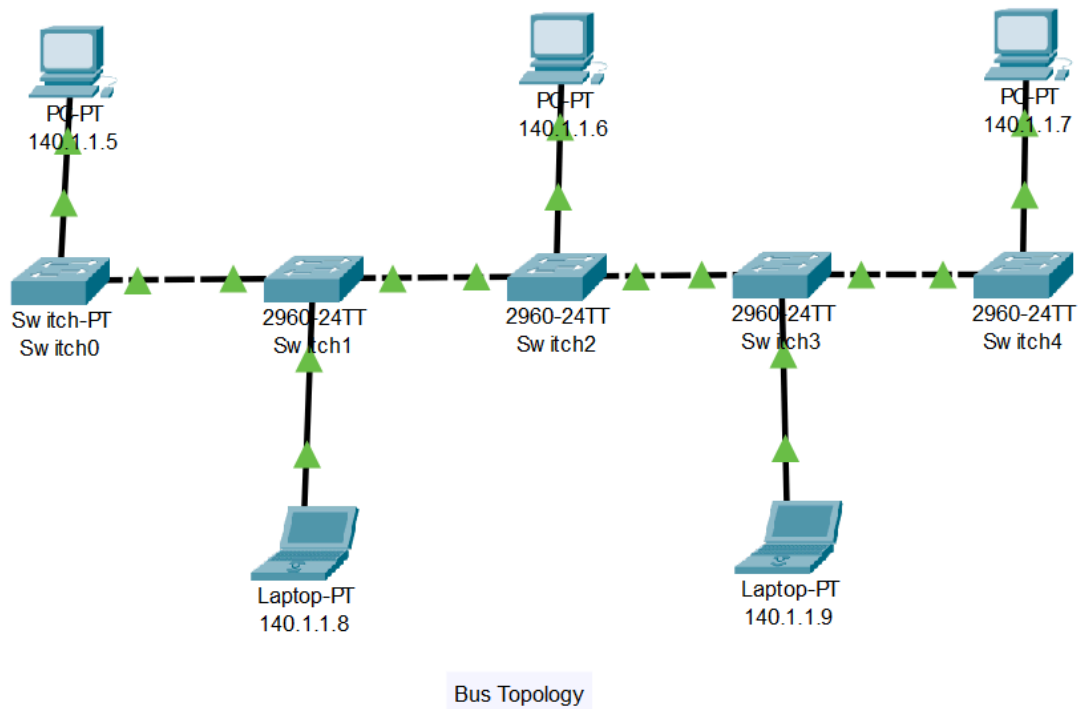


Star Topology:



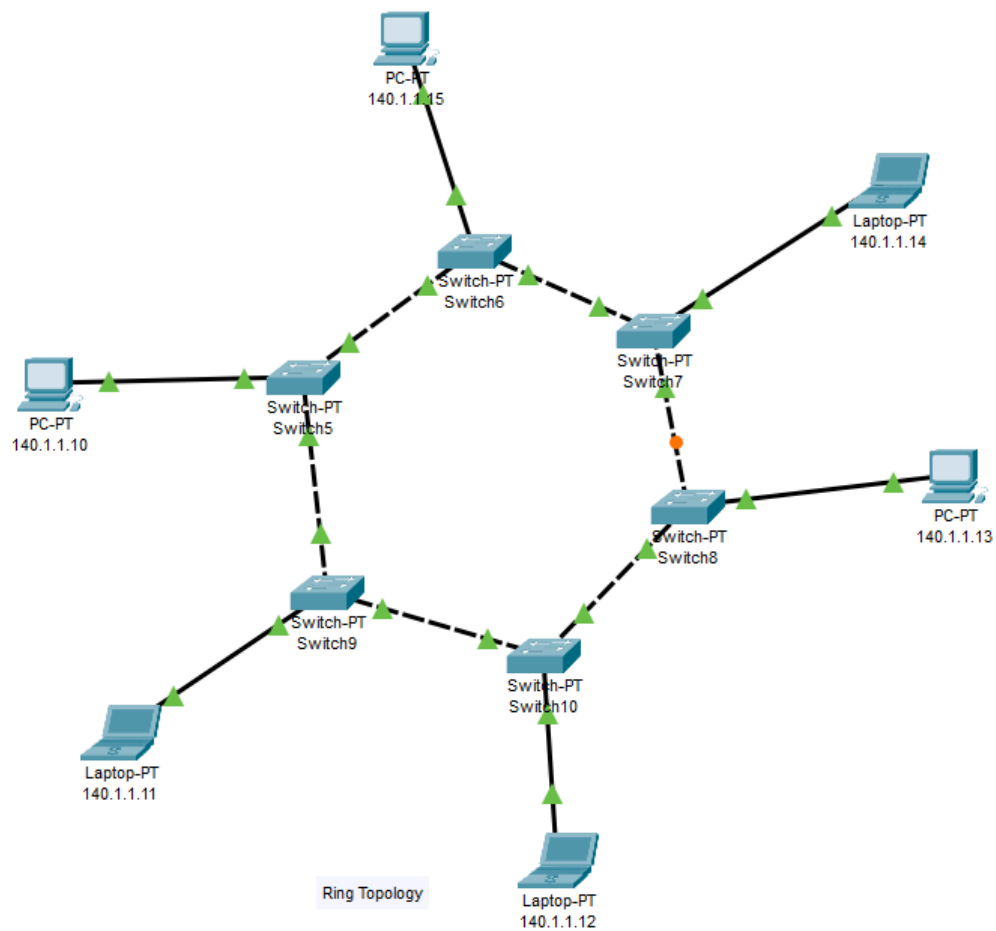
Star topology in computer networks is a layout where all devices are connected to a central hub, such as a switch or router. Each device communicates directly with the hub, simplifying management and troubleshooting.

Bus Topology:



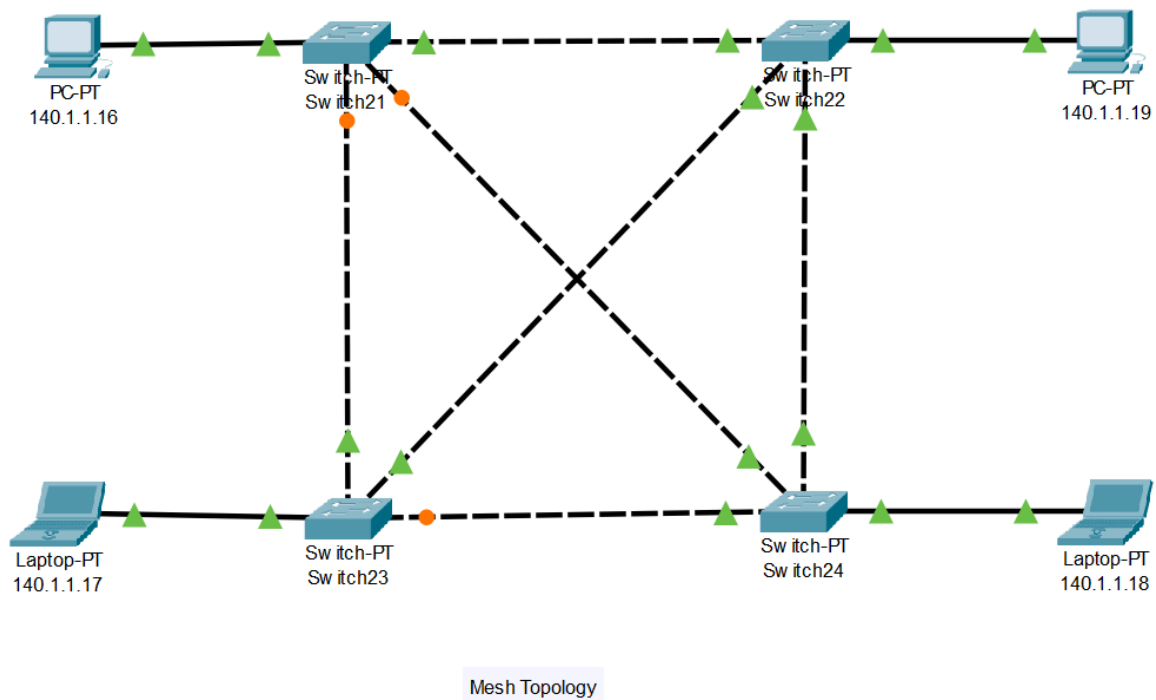
Bus topology is a network configuration where all devices share a single communication line. Each device has its own address, and data travels along the bus until it reaches the intended recipient. It's easy to set up but prone to data collisions.

Ring Topology:



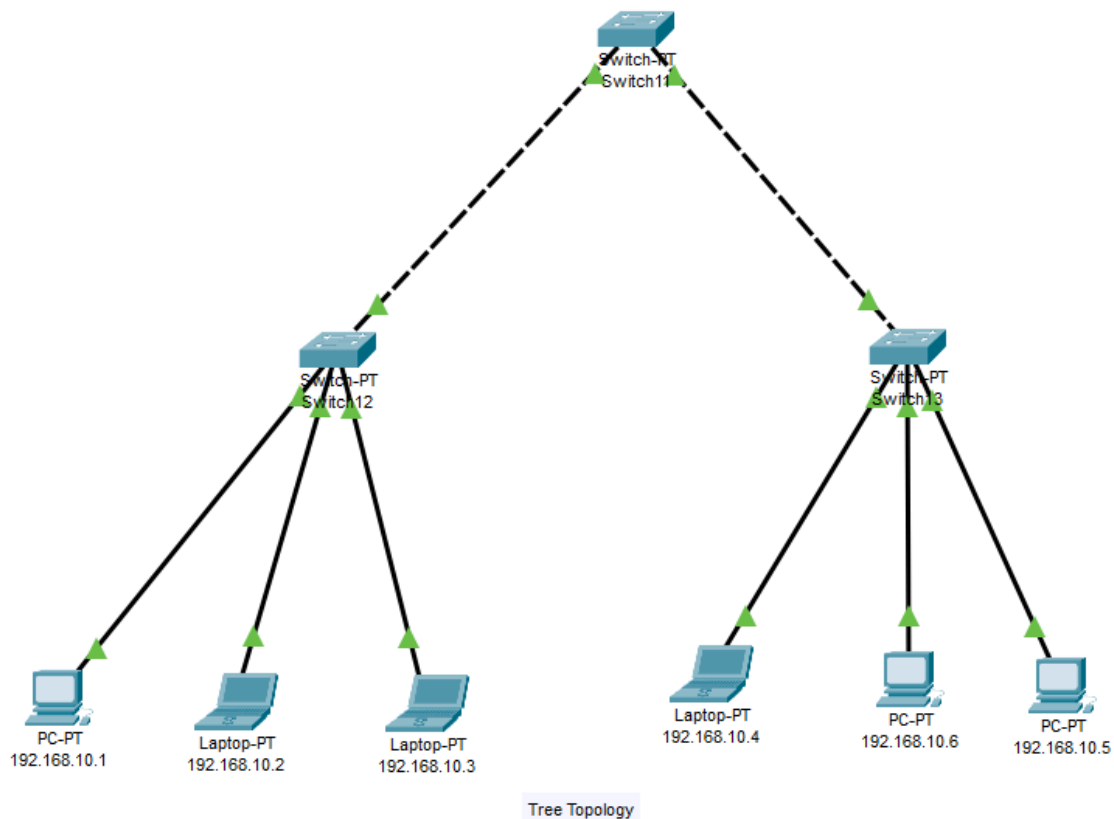
Ring topology is a network layout where each device is connected to exactly two other devices, forming a circular pathway. Data travels in one direction around the ring, passing through each device until it reaches its destination.

Mesh Topology:



Mesh topology is a network design where every device is connected to every other device, creating multiple paths for data transmission. This redundancy enhances reliability and fault tolerance but can be costly and complex to implement and manage.

Tree Topology:



Tree topology is a network topology in which multiple star networks are connected to a bus. It combines characteristics of both the star and bus topologies. In a tree topology, one central node (the root) is connected to other nodes, forming a hierarchical structure resembling a tree with branches. Each branch of the tree can be a separate star network, with its own central node, which in turn can have its own branches.