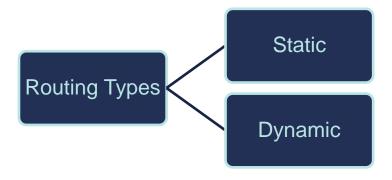


## Static vs. Dynamic Routing

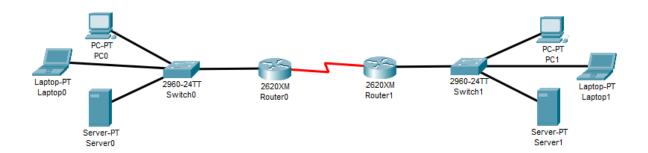
Routing can be broken up into two primary categories:





## Static Routing

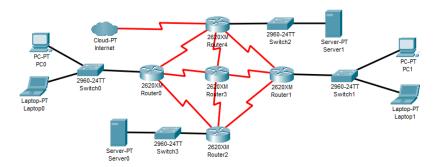
- The simplest form of routing
- Static routes that are manually entered by a network administrator
- Ideal for small networks with very few routes that rarely change
  - o There's no overhead like there is with dynamic routing.
- Can be problematic for larger networks or if the network regularly changes
  - o All changes must be made manually, which is time-consuming and can be error-prone.





## Dynamic Routing

- An automated form of routing that uses routing protocols to:
  - Populate router's routing table
  - o Make the most efficient routing decision
  - Updating the routing table whenever the network changes
- Automatic & Hands-Off
  - o All routing decisions are handled by the protocol
- Ideal for larger, and more complex networks





## Types of Dynamic Routing Protocols

 There are three different types of dynamic routing protocols, which we'll discuss in detail later in this section

