Network Topologies

Network topologies describe how the parts of a wired network are arranged and connected together

The topology includes the **nodes** (e.g. computers, printers, servers etc...) and the **connections** (cables)
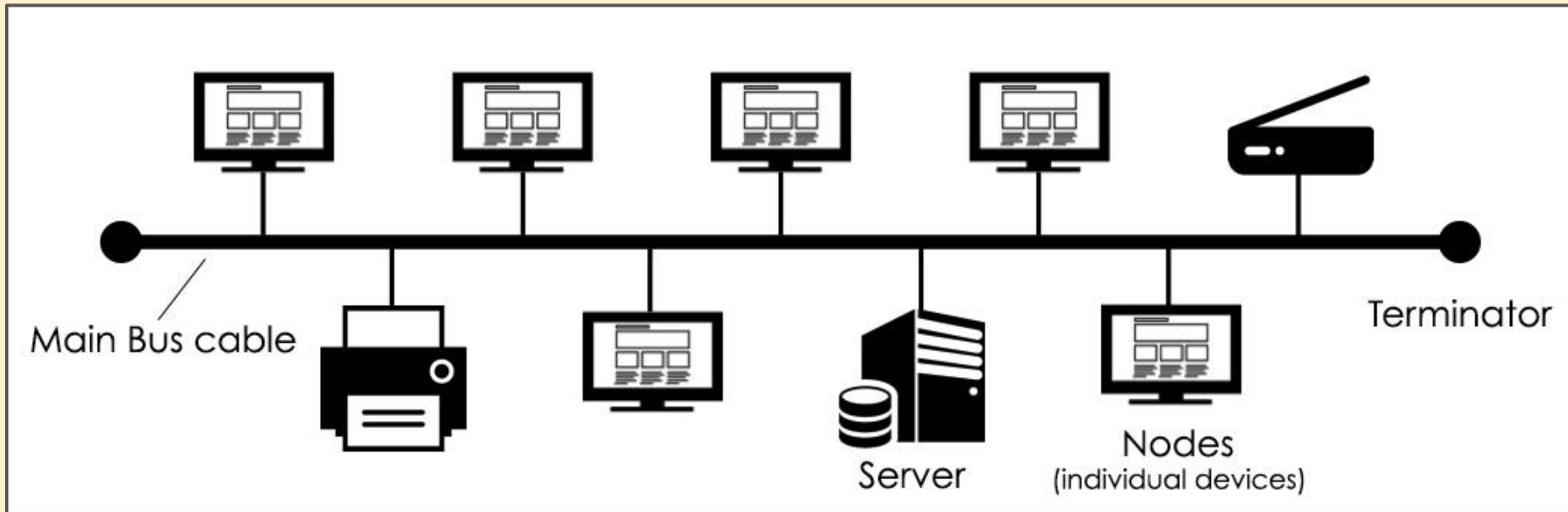
Network Topologies

There are two network topologies that you need to know about:

- **bus** topology
- **star** topology

Network Topologies

Bus topology
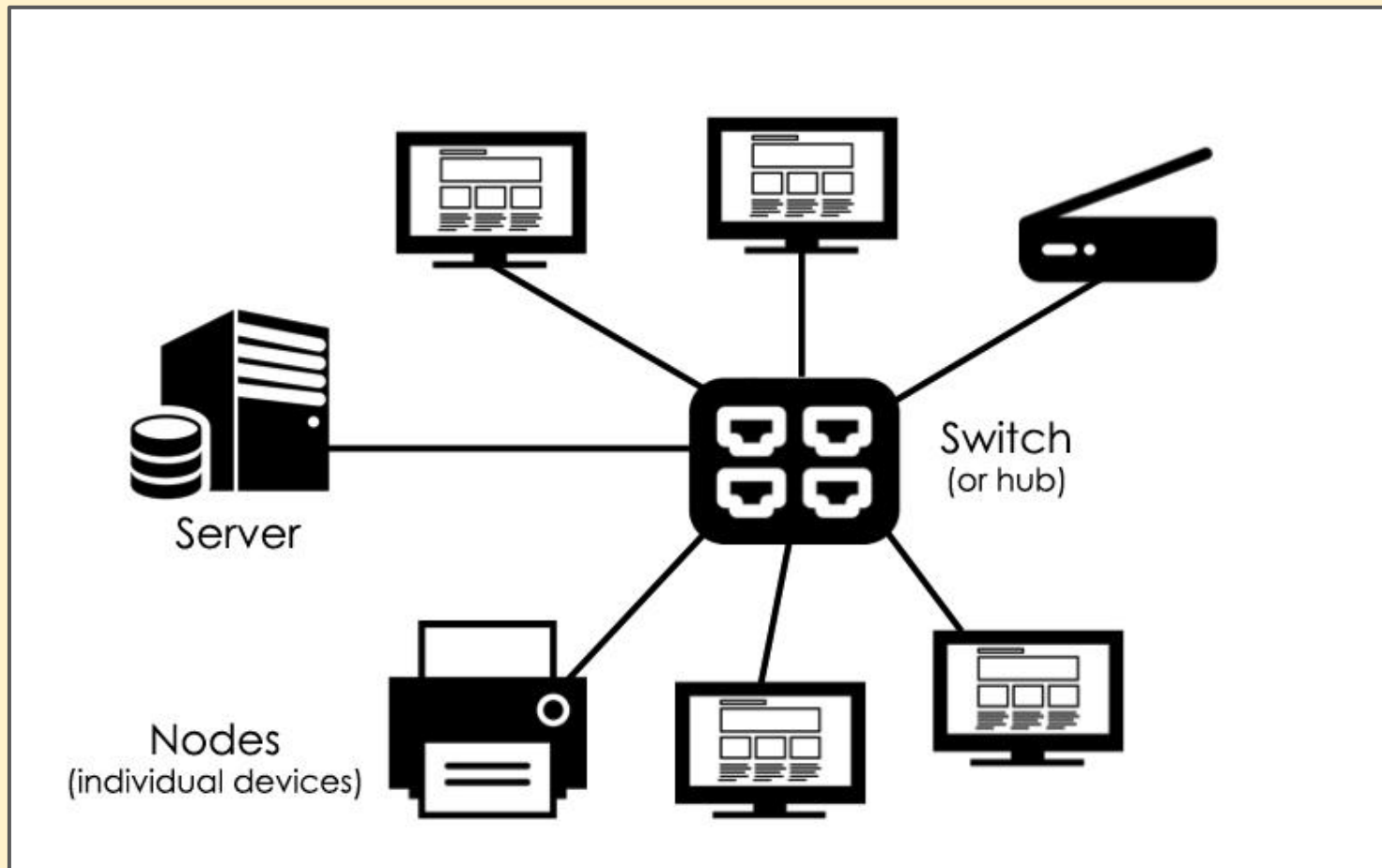
Network Topologies

Bus topology

Simple network which relies on a bus cable - a central cable which acts as a backbone

Simple to set up and doesn't require much in the way of specialist equipment (so cheap)

The bus cable is vulnerable - if it's damaged the network goes down and it can be attacked to steal data. Lots of data on the bus cable will slow down the network

Network Topologies

Star topology

Network Topologies

Star topology

Every device is connected to a switch in the centre of the network. This controls data flow. A server acts as the central data store

Better data speeds and more secure as cables not shared

But more difficult and expensive to set up. And if the switch or server fail the network goes down