

1. What is the difference between all the routers, and when to use them (mentioned in Cisco packet tracer)

Routers:

Cisco Packet Tracer includes several types of routers, each with its own features and uses:

1. 1800 Series Router: Basic router for small networks, ideal for home or small office use.
2. 2811 Series Router: Mid-range router for medium-sized networks, suitable for branch offices or small enterprises.
3. 3640 Series Router: High-end router for large networks, ideal for enterprise headquarters or data centers.
4. ASR 1000 Series Router: High-performance router for large-scale networks, suitable for service providers or enterprises with high-bandwidth requirements.

2. What is the difference between all the switches, and when to use them (mentioned in Cisco packet tracers)

Switches:

Cisco Packet Tracer includes several types of switches, each with its own features and uses:

1. 2950 Series Switch: Basic switch for small networks, ideal for home or small office use.
2. 3550 Series Switch: Mid-range switch for medium-sized networks, suitable for branch offices or small enterprises.
3. 3750 Series Switch: High-end switch for large networks, ideal for enterprise headquarters or data centers.
4. ASR 9000 Series Switch: High-performance switch for large-scale networks, suitable for service providers or enterprises with high-bandwidth requirements.

3. What is the difference between all the connection wires, and when to use them (mentioned in Cisco Packet Tracer)

Connection Wires:

Cisco Packet Tracer includes several types of connection wires, each with its own uses:

- **Copper Straight-Through Cable:** Used for connecting devices within a local area network (LAN).
- **Fiber Optic Cable:** Used for connecting devices over long distances or for high-bandwidth requirements.
- **Serial Cable:** Used for connecting devices to a WAN (Wide Area Network) or for console connections.
- **Wireless Connection:** Used for connecting devices wirelessly, ideal for mobile devices or areas where cabling is impractical.