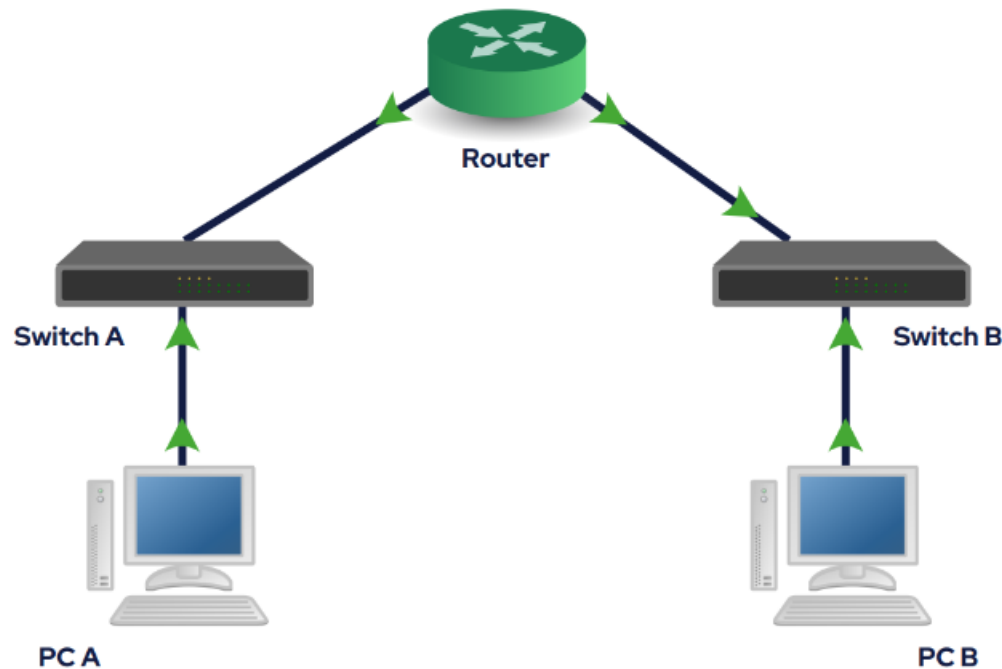


Information Technology

Basic Networking with Cisco Packet Tracer



Any enquiries please contact your trainer

Basic Networking with Cisco Packet Tracer



Networking

Introduction to Cisco
Packet Tracer

Networking

What is a network?

- A computer network is a collection of devices, such as computers, servers, printers and other hardware components, that are linked together to share resources and information.

End Devices

- PC
- Laptop
- Phone
- Printer
- Server



Network Devices

- Switch
- Router
- Hub
- Access Point

Switches

- Connects multiple end devices together on the same network.
- It makes sure that data gets where it needs to go quickly and efficiently.



Routers

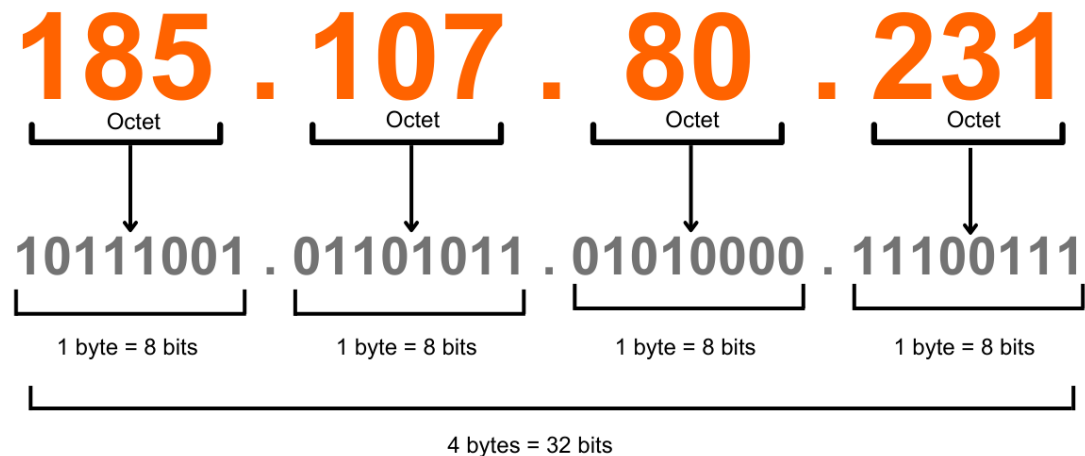
- Connects devices to the internet.
- Can find best path to send and receive data.



IP Address

- a digital address for a device on a network
- IP address must be **unique**!
- a series of numbers separated by dots

IPv4 Address Format



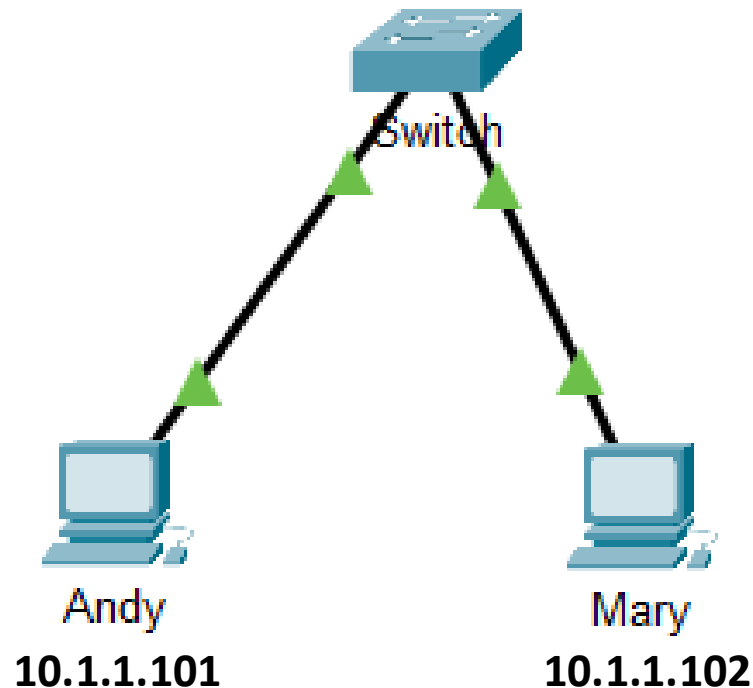
Routing Protocol

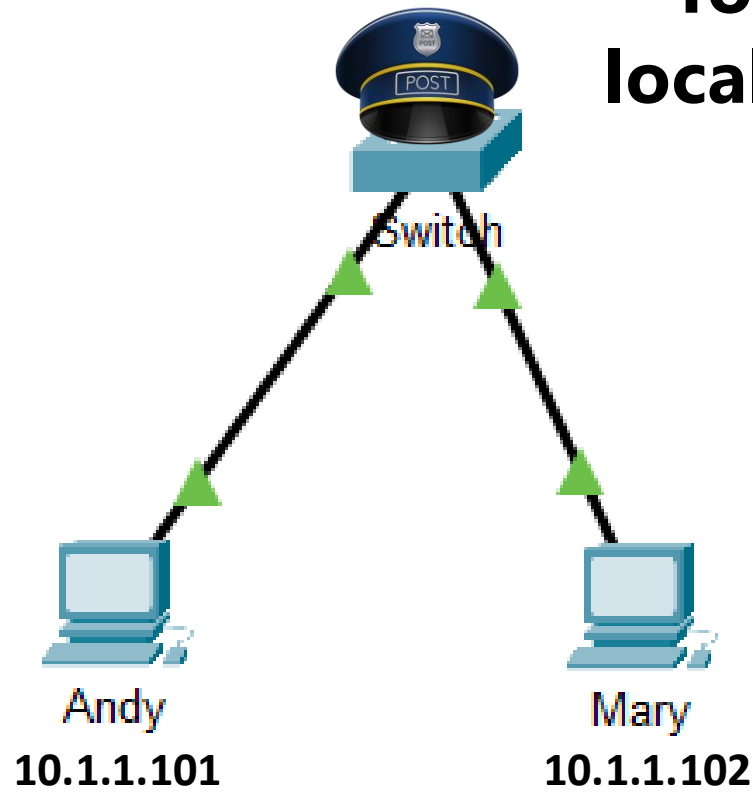
- a set of rules that helps computers and devices on a network figure out the best paths for sending data to each other

- examples of routing protocols:
 - Enhanced Interior Gateway Routing Protocol (EIGRP)
 - Open Shortest Path First (OSPF)
 - Border Gateway Protocol (BGP)
 - Routing Information Protocol (RIP)

So, how does these devices work?

How to communicate with other devices in the same network

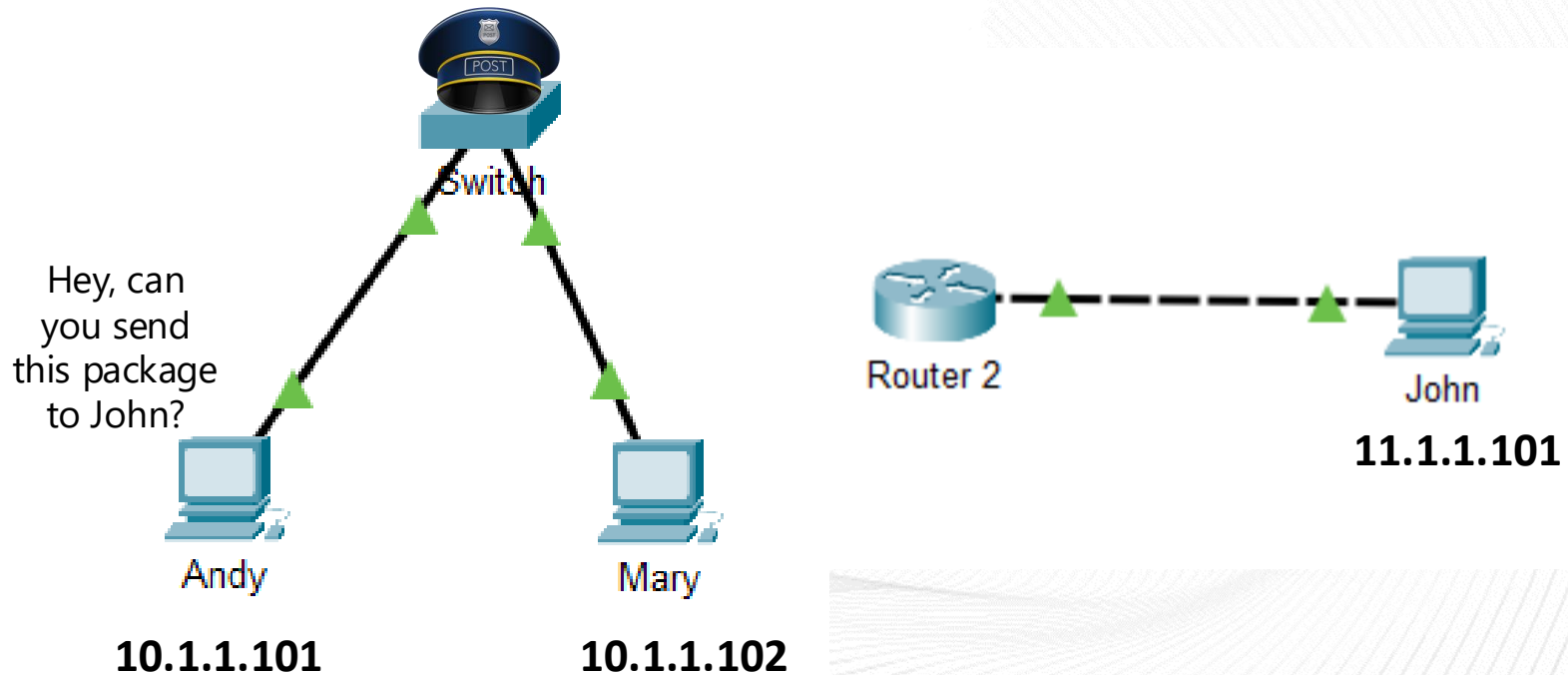


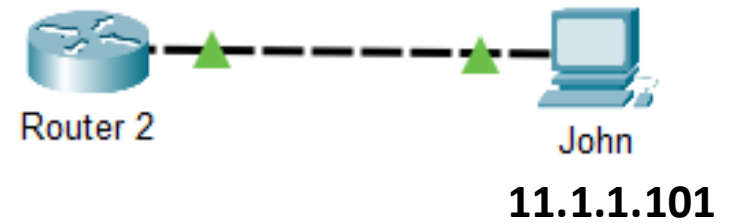
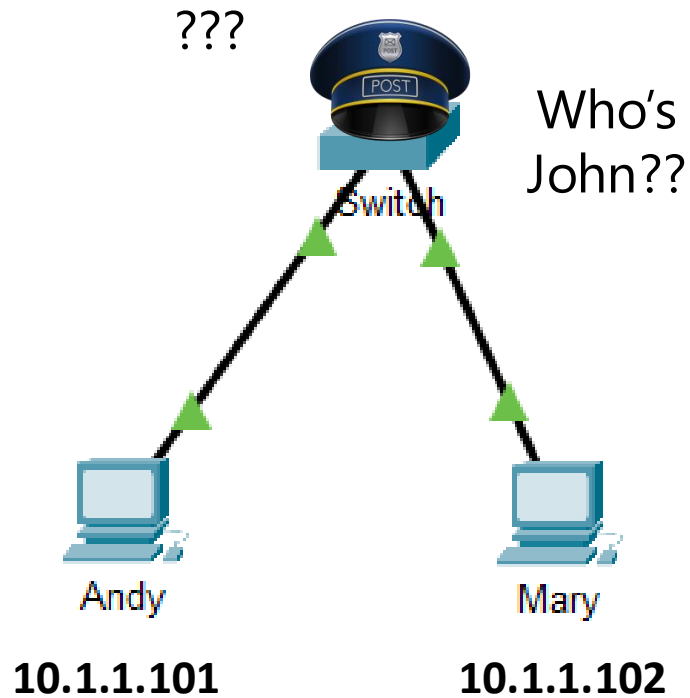


**Your trusty
local postman!**

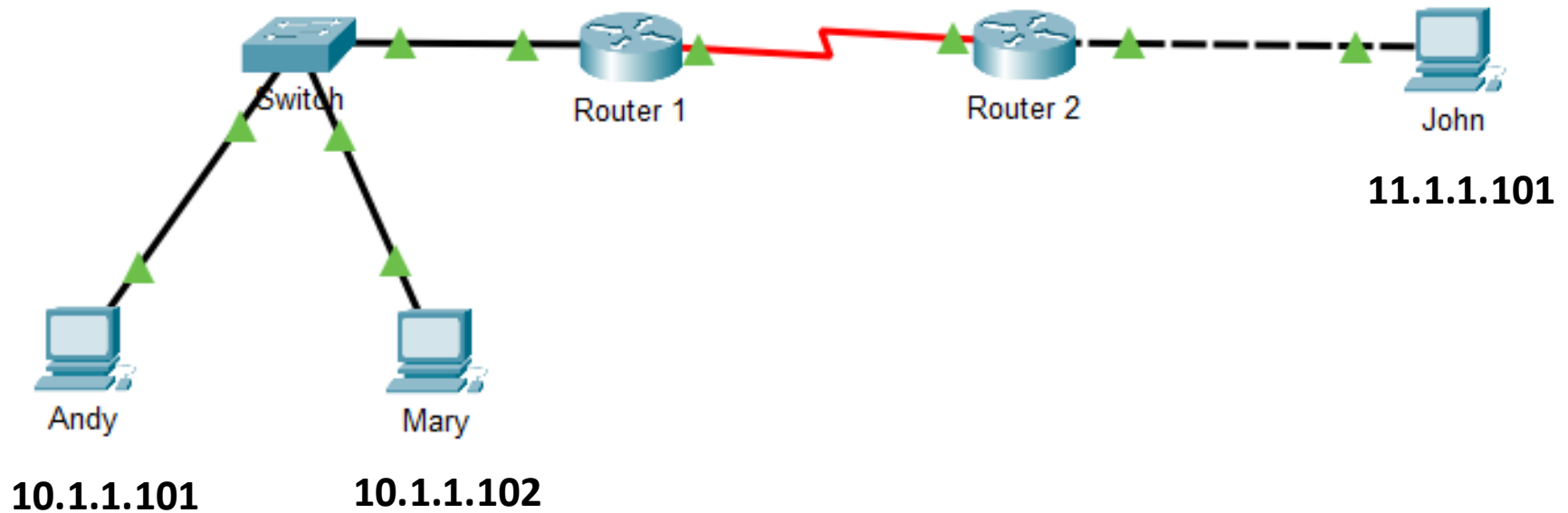


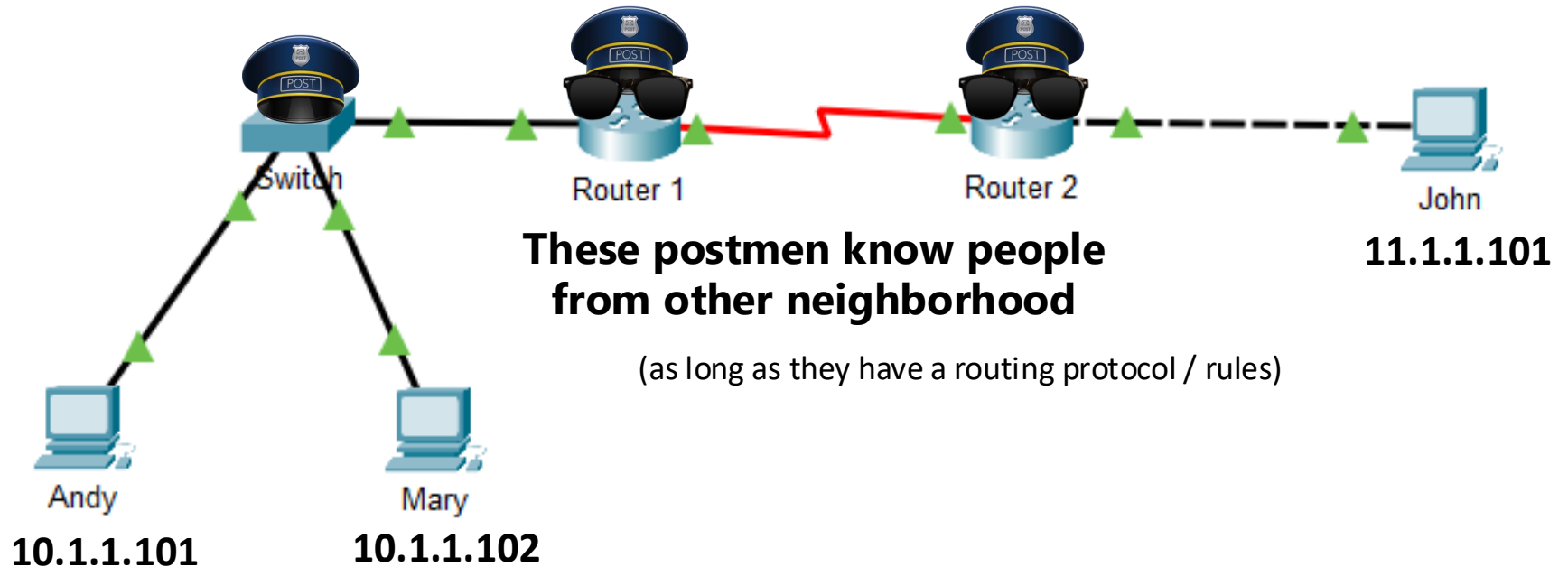
Can Andy send a package to John?





Will routers be able to help Andy send a package to John?





Any Questions?



Introduction to Cisco Packet Tracer