

# **ADDRESS RESOLUTION**

CyberQuince

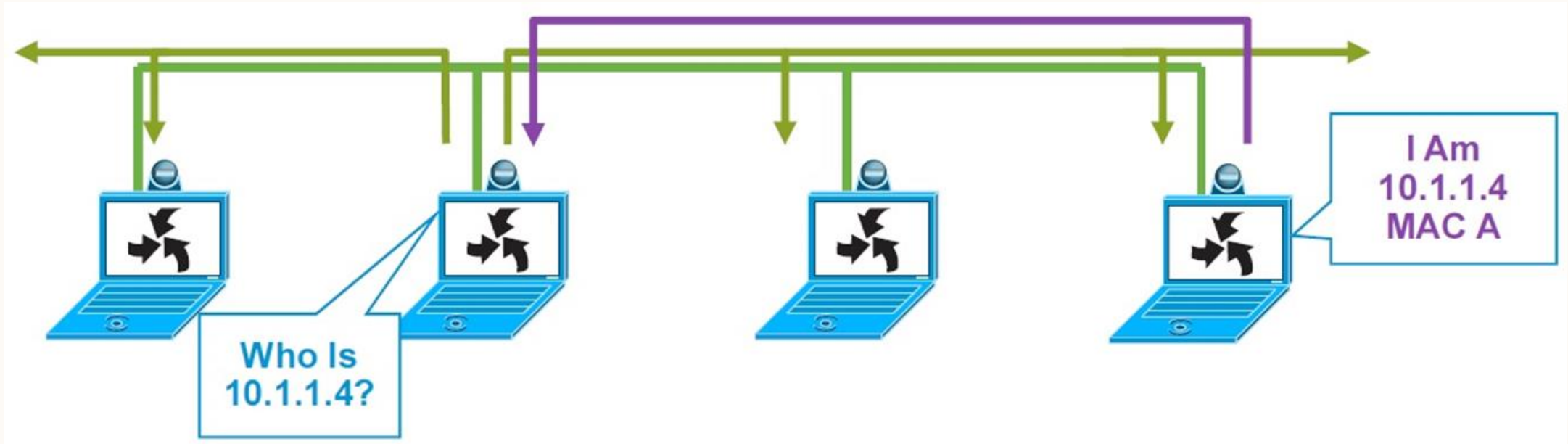
# ARP

Address Resolution Protocol (ARP) is a layer 2 protocol used to map MAC addresses to IP addresses.

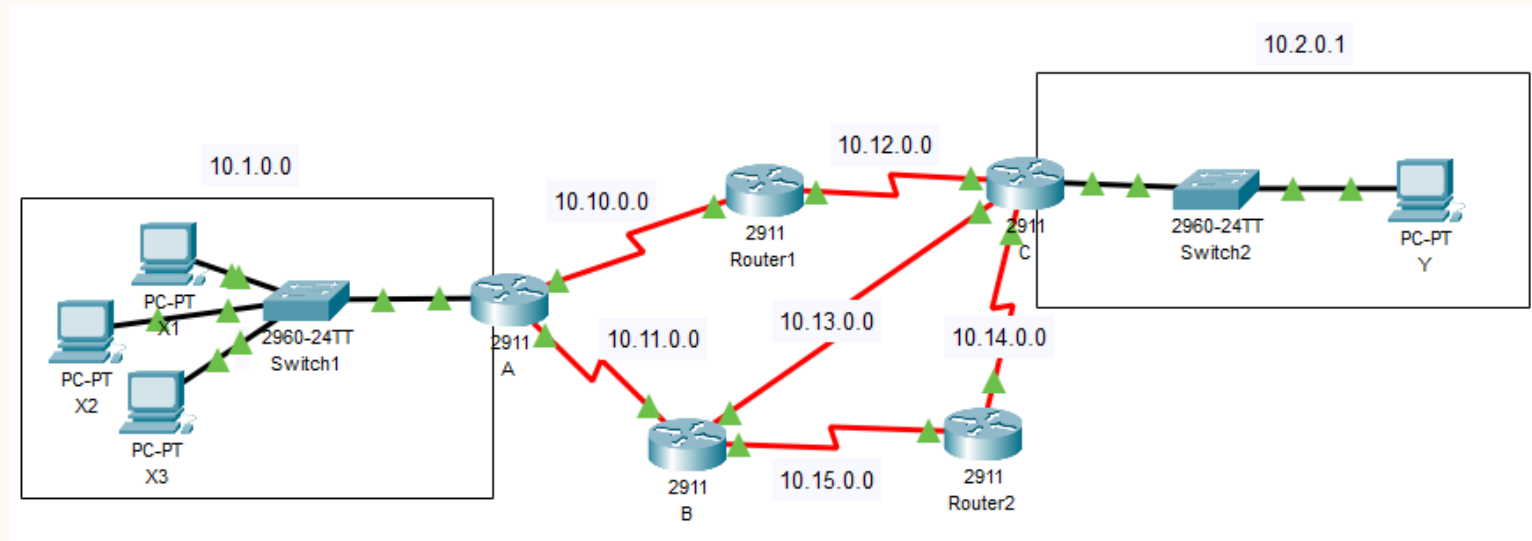
All hosts on a network are located by their IP address, but NICs do not have IP addresses, they have MAC addresses.

**ARP is the protocol used to associate the IP address to a MAC address.**

# HOW DOES ARP DO IT?

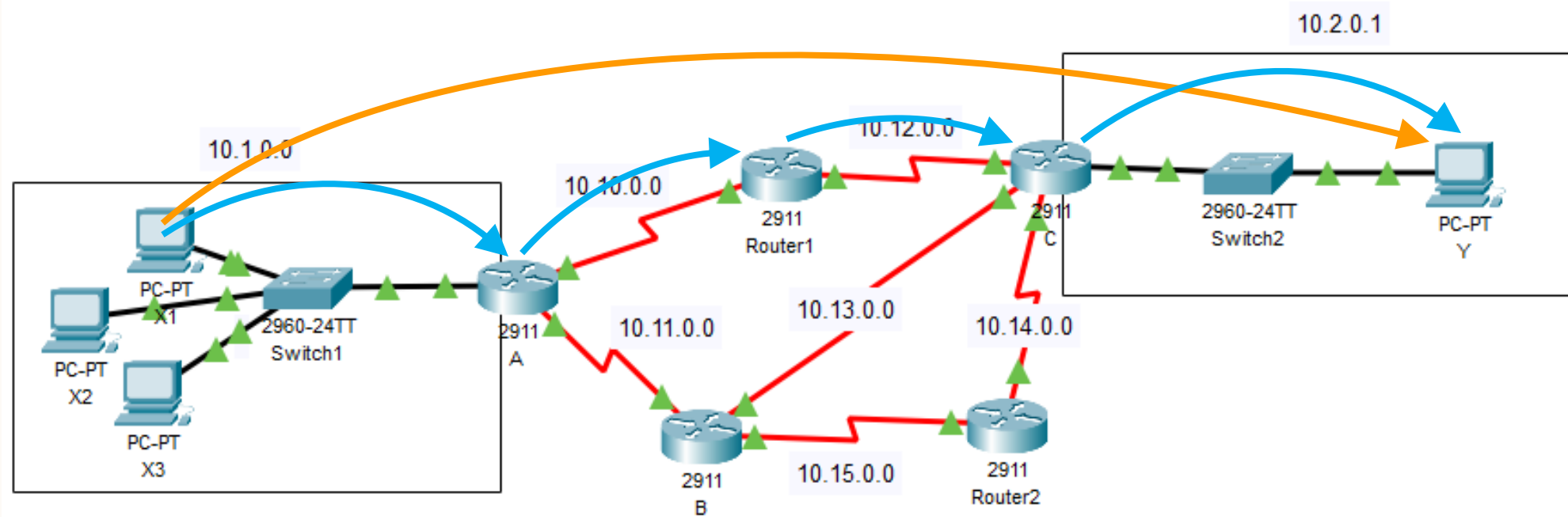


# HOW DOES ARP DO IT?



1. PC 1 checks its local cache
2. PC 1 sends an ARP request (to everyone)
3. PC 2 maps PC 1's MAC address to its IP address
4. PC 2 replies to PC1 with its MAC address
5. PC 1 receives PC's response
6. PC 1 memorizes the IP ↔ MAC address mapping

# ARP & ROUTERS?



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