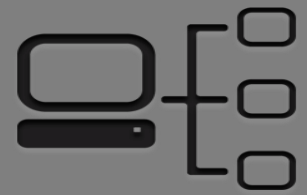# ARP – Address Resolution Protocol

- Resolves IP address to MAC Addresses
- Finds the hardware address of a host from a know IP address
  - And vice versa (RARP)
- **ARP Command**

```
C:\Users\Alton>arp -a

Interface: 192.168.1.69 --- 0xc
  Internet Address      Physical Address      Type
  192.168.1.254         00-24-c8-98-13-60     dynamic
  192.168.1.255         ff-ff-ff-ff-ff-ff     static
  224.0.0.22            01-00-5e-00-00-16     static
  224.0.0.251           01-00-5e-00-00-fb     static
  224.0.0.252           01-00-5e-00-00-fc     static
  239.255.255.250       01-00-5e-7f-ff-fa     static
  255.255.255.255       ff-ff-ff-ff-ff-ff     static
```

ARP Diagram
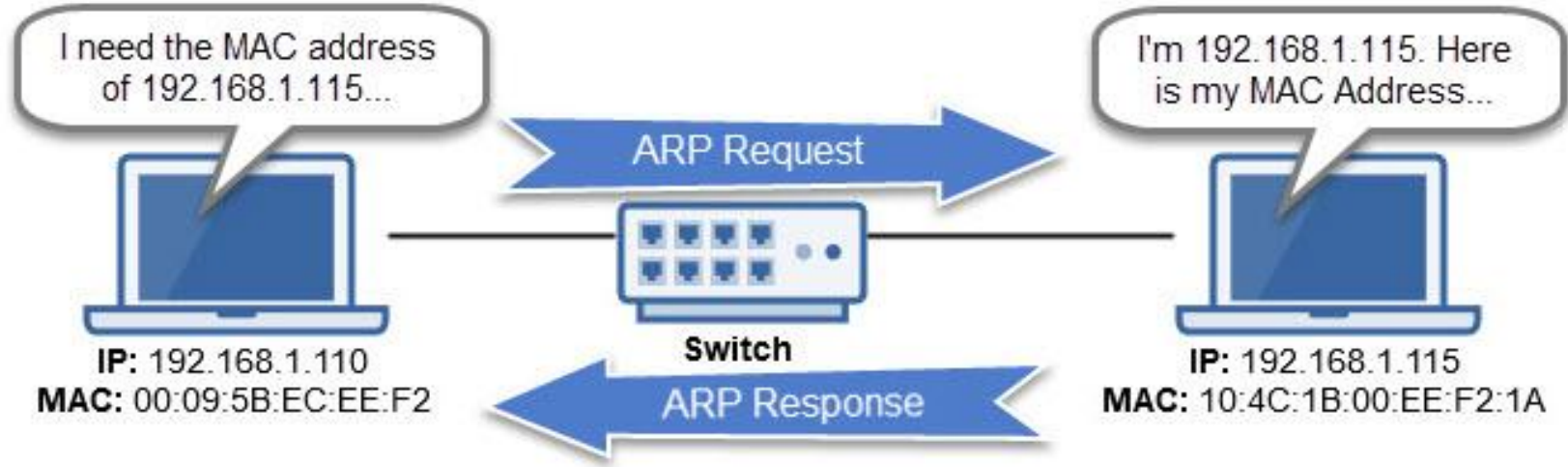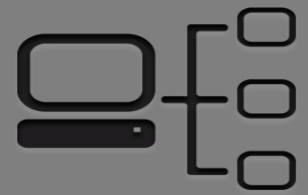
If a computer knows an IP address but not the MAC address, it will send a **broadcast** message to all of the devices on the LAN asking what device is assigned that IP address.