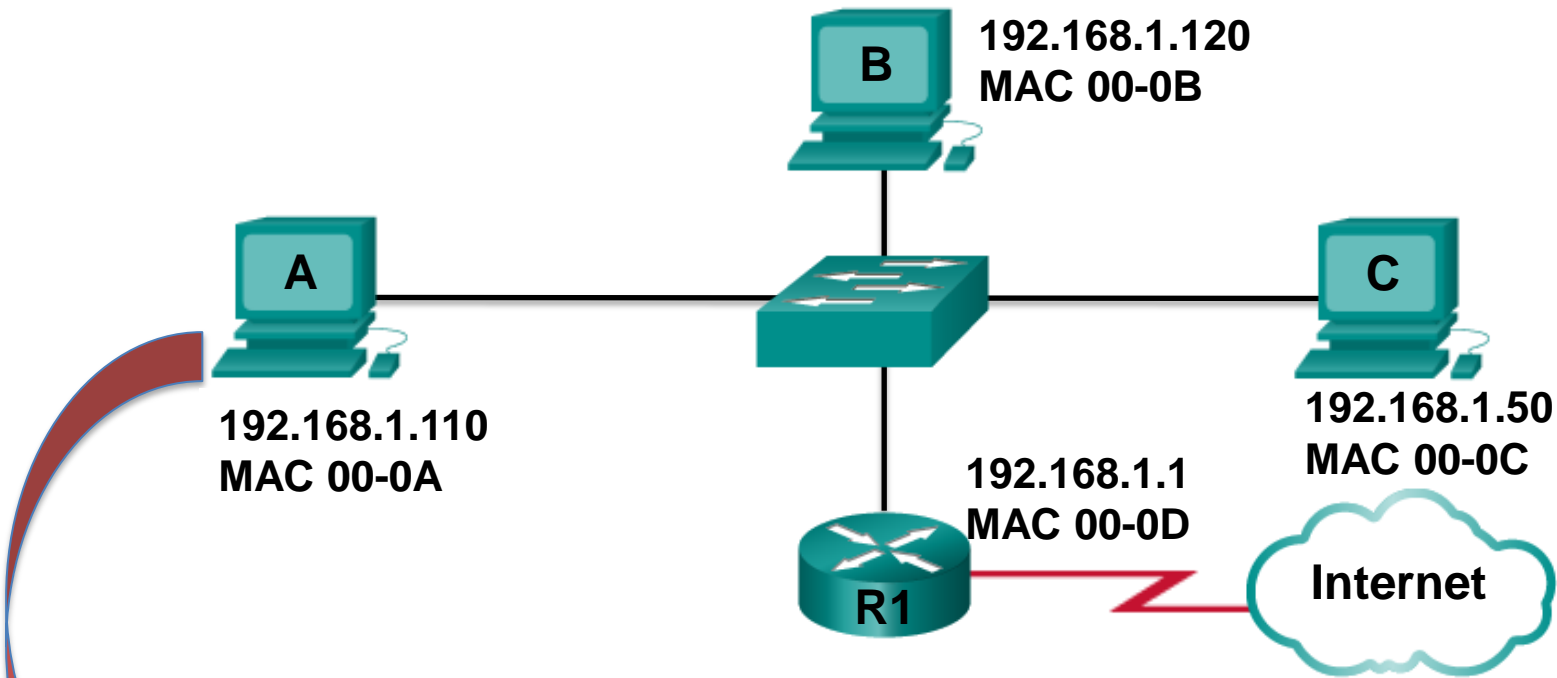


# **5.3.2.3 - ARP Operation - ARP Request**



### Ethernet Header

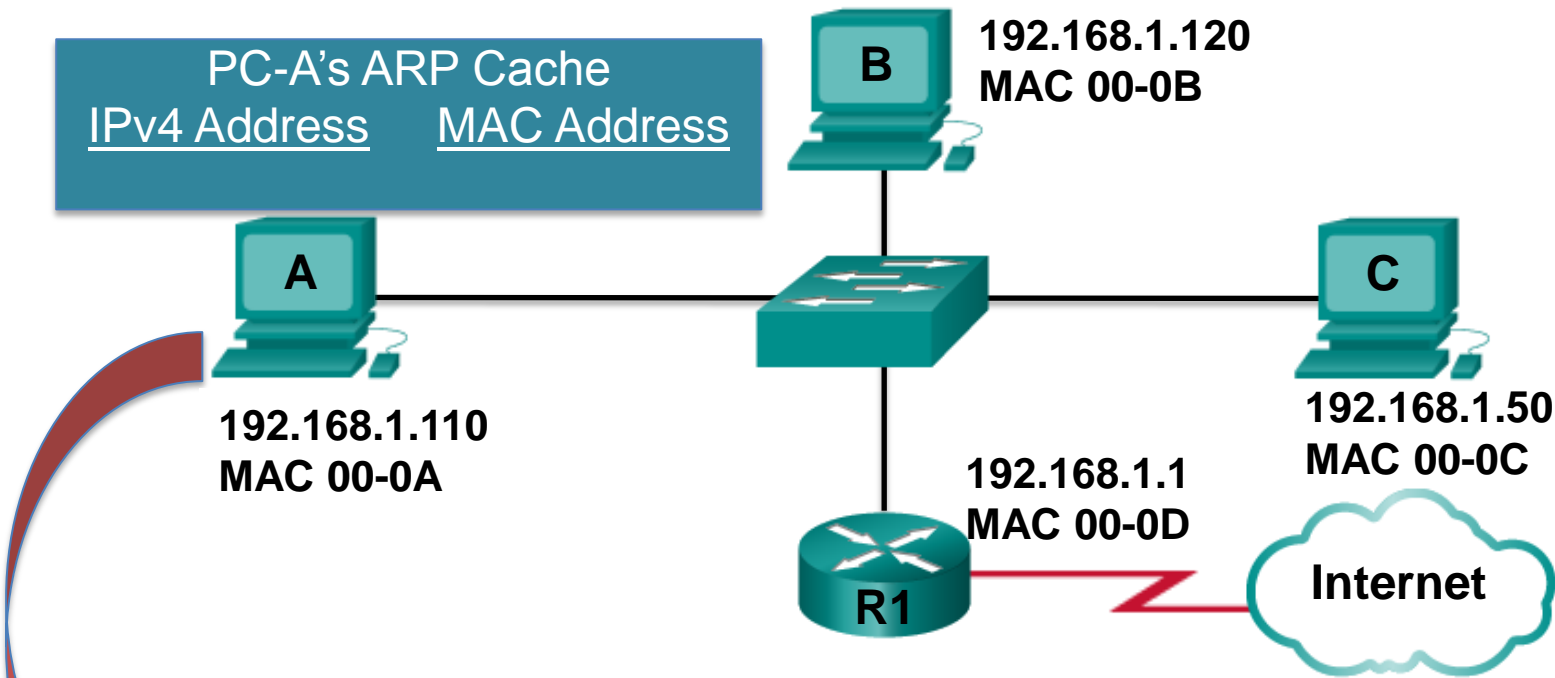
Destination MAC  
???

Source MAC  
00-0A

### IP Packet

Source IP  
192.168.1.110

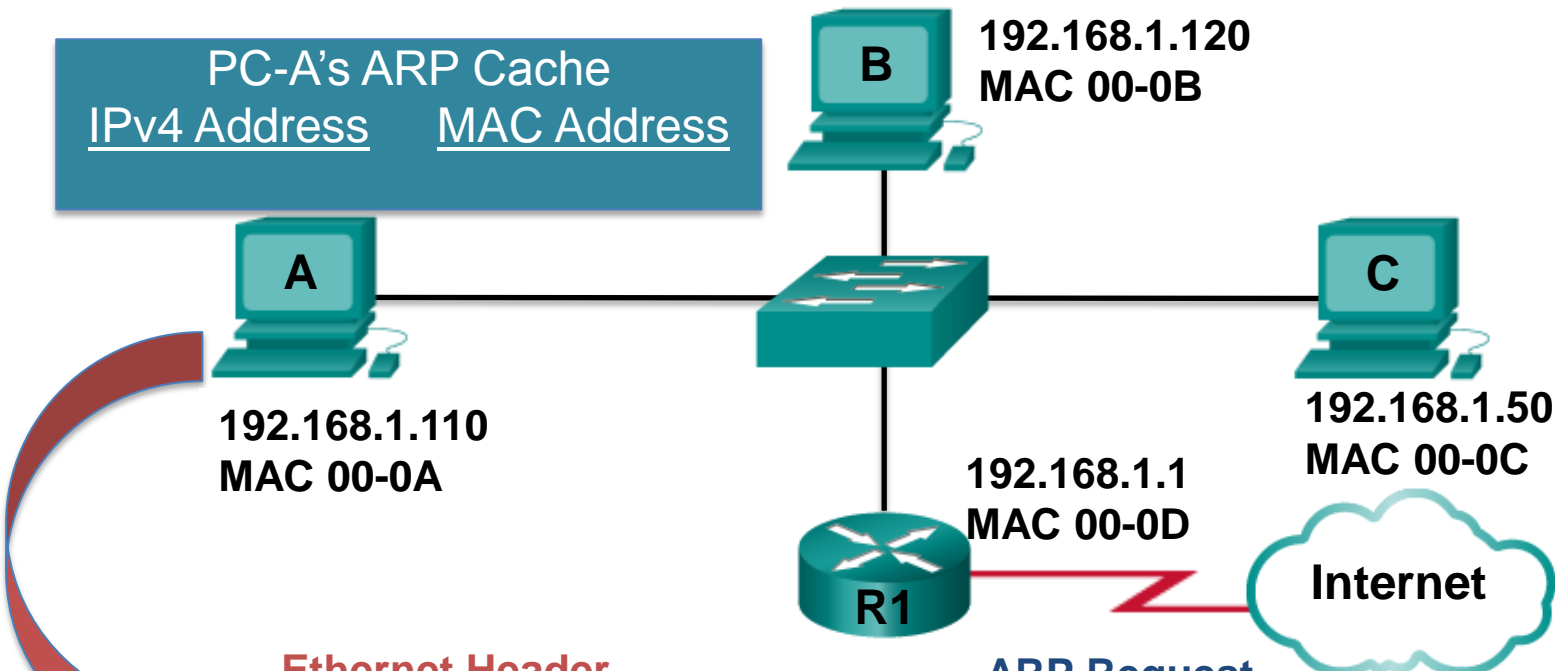
Destination IP  
192.168.1.50



### Ethernet Header

Destination MAC ???	Source MAC 00-0A	Source IP 192.168.1.110	Destination IP 192.168.1.50
------------------------	---------------------	----------------------------	--------------------------------

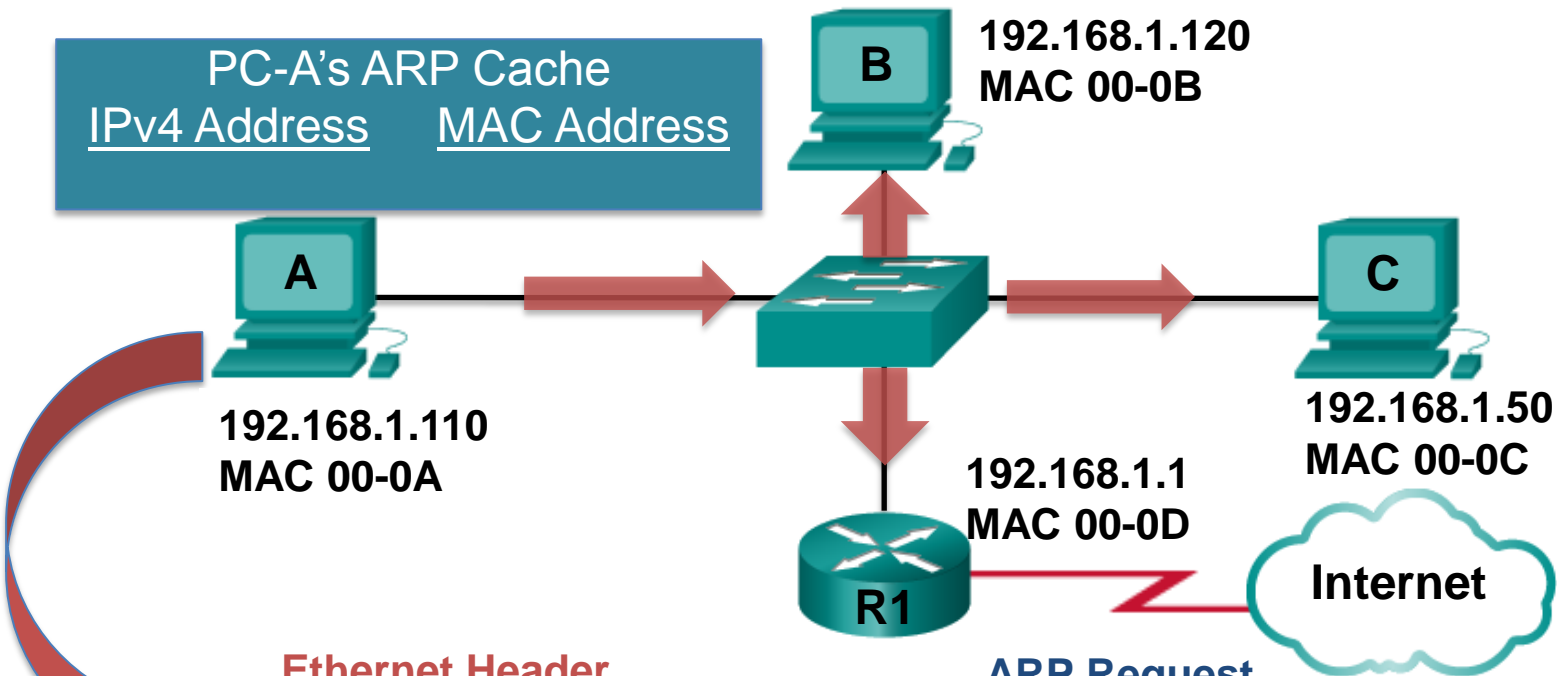
### IP Packet



Ethernet Header		ARP Request	
Destination MAC FF-FF	Source MAC 00-0A	Target IPv4 192.168.1.50	Target MAC ???

Ethernet Header		IP Packet	
Destination MAC ???	Source MAC 00-0A	Source IP 192.168.1.110	Destination IP 192.168.1.50

On Hold



PC-A's ARP Cache

IPv4 Address	MAC Address
--------------	-------------

**A**

192.168.1.110  
MAC 00-0A

**B**

192.168.1.120  
MAC 00-0B

**C**

192.168.1.50  
MAC 00-0C

**R1**

192.168.1.1  
MAC 00-0D

Internet

**Ethernet Header**

Destination MAC FF-FF	Source MAC 00-0A	Target IPv4 192.168.1.50	Target MAC ???
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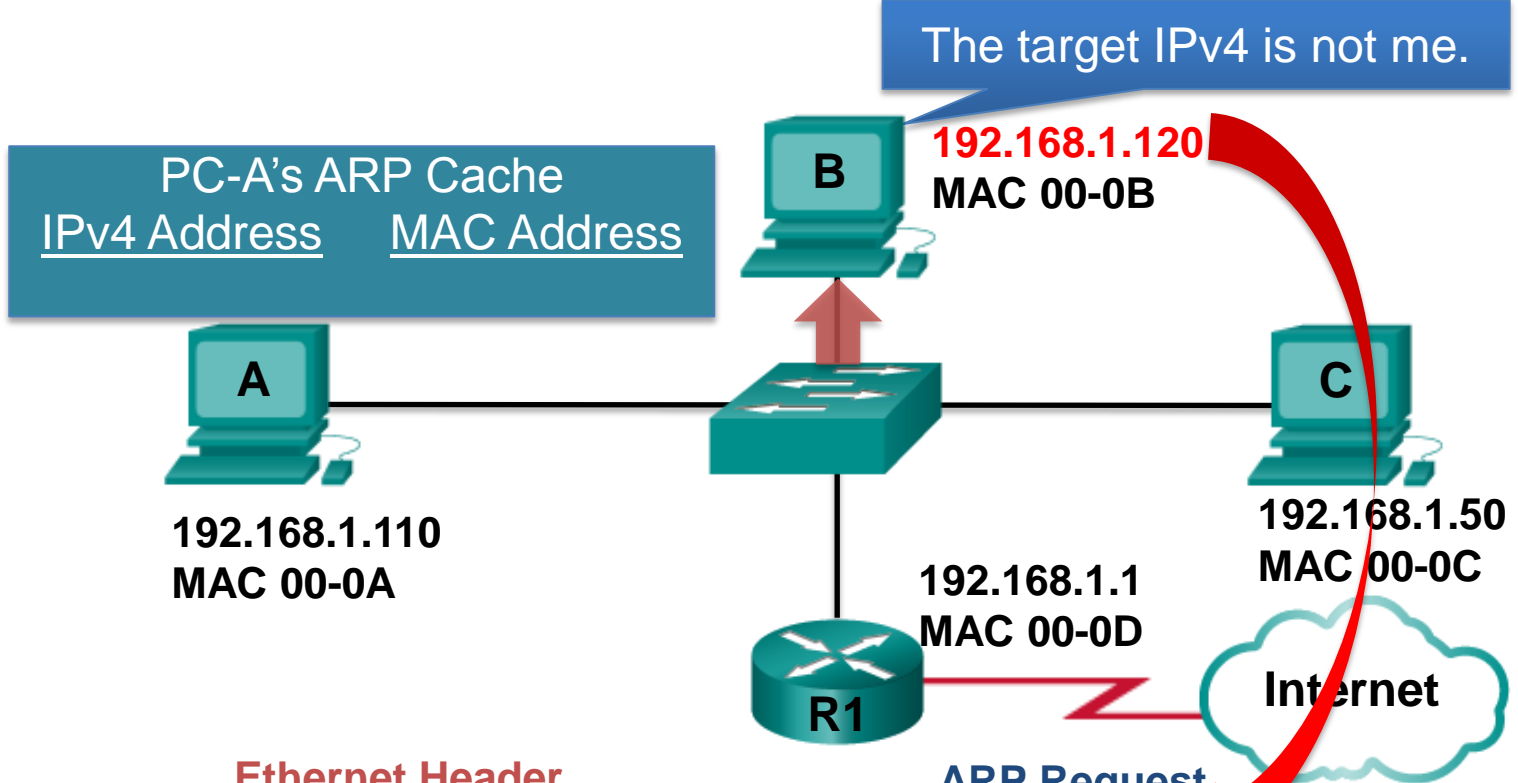
**ARP Request**

**Ethernet Header**

Destination MAC ???	Source MAC 00-0A	Source IP 192.168.1.110	Destination IP 192.168.1.50
------------------------	---------------------	----------------------------	--------------------------------

**IP Packet**

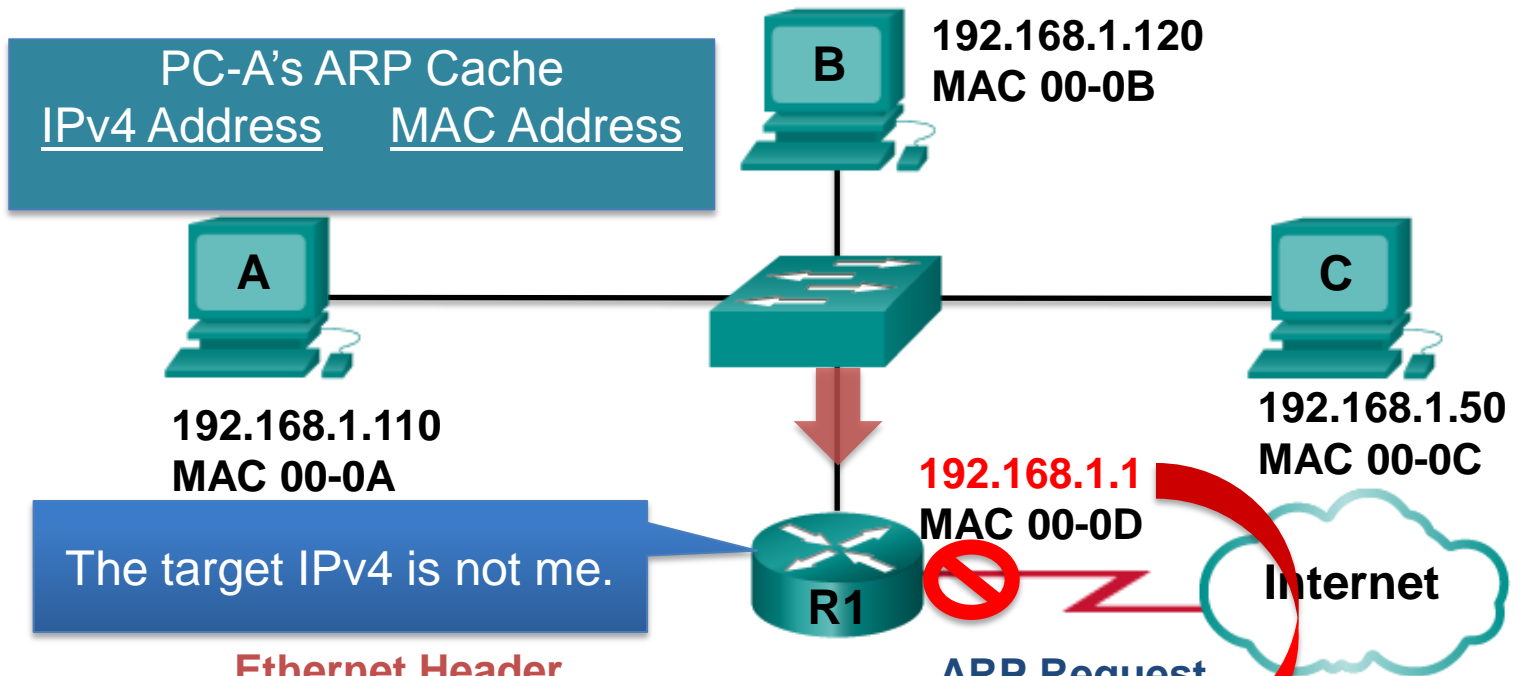
**On Hold**



Ethernet Header		ARP Request	
Destination MAC	Source MAC	Target IPv4	Target MAC
FF-FF	00-0A	192.168.1.50	???

Ethernet Header		IP Packet	
Destination MAC	Source MAC	Source IP	Destination IP
???	00-0A	192.168.1.110	192.168.1.50

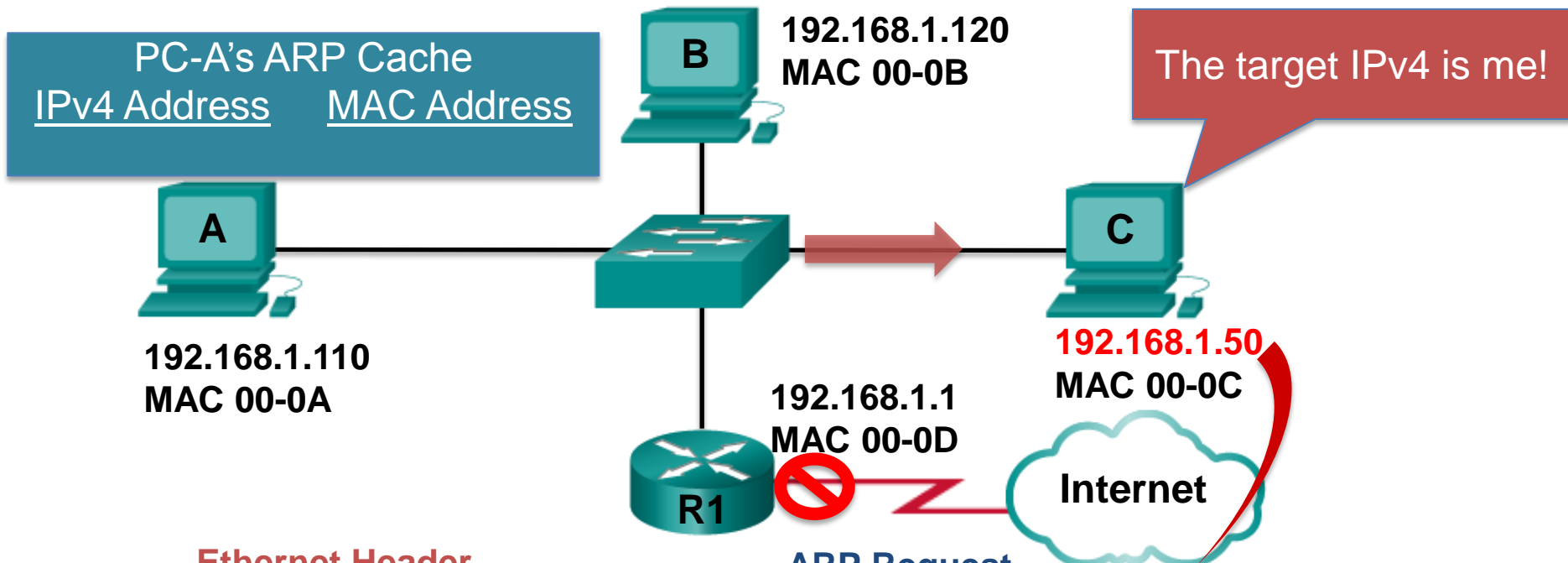
On Hold



Ethernet Header		ARP Request	
Destination MAC FF-FF	Source MAC 00-0A	Target IPv4 192.168.1.50	Target MAC ???

Ethernet Header		IP Packet	
Destination MAC ???	Source MAC 00-0A	Source IP 192.168.1.110	Destination IP 192.168.1.50

On Hold



Ethernet Header		ARP Request	
Destination MAC FF-FF	Source MAC 00-0A	Target IPv4 192.168.1.50	Target MAC ???

Ethernet Header		IP Packet	
Destination MAC ???	Source MAC 00-0A	Source IP 192.168.1.110	Destination IP 192.168.1.50

On  
Hold