

Fyra datorer, Rak kabel och switch

According to the instructions, I inserted two computers, (PC2 and PC3) to the previous network, (PC0 and PC1) with the same IP addresses as the previous computers.

192.168.0.90 for PC0 and PC2

192.168.0.91 for PC1 and PC3

All computers had FastEthernet0 and the switch used FastEthernet0/1 for PC0, FastEthernet0/2 for PC1, FastEthernet0/3 for PC2 and FastEthernet0/4 for PC3

After the configuration of the IP addresses I did ping.

Ping from PC0,(192.168.0.90) to the address 192.168.0.91,(PC1). Successful.

Ping from PC0,(192.168.0.90) to the address 192.168.0.90,(PC0). Successful*

Ping from PC1,(192.168.0.91) to the address 192.168.0.90,(PC0). Successful.

Ping from PC1,(192.168.0.91) to the address 192.168.0.91,(PC1). Successful.*

Ping from PC2,(192.168.0.90) to the address 192.168.0.91,(PC1). Successful.

Ping from PC2,(192.168.0.90) to the address 192.168.0.90,(PC2). Successful.*

Ping from PC3,(192.168.0.91) to the address 192.168.0.90,(PC2). Unsuccessful.

Ping from PC3,(192.168.0.91) to the address 192.168.0.91,(PC3). Successful.*

The switch allowed the ping to pass, but it send the ping to the IP owners with the smaller port, (PC0 and PC1). The switch it is itself a small kind of computer, so it did the most logical thing for a computer to do. It iterated every port from the smaller to the biggest and took the first owner it found with the desirable address.

That doesn't explain the result of PC3 to PC2, but it covers I believe the idea that the issue with IP addresses wasn't solved, and the whole network just worked unaware of the IP resolution's problem that was on hand.

The relations between IP and MAC was checked with ARP.

*The ARP didn't show the owner of the same IP so I assume the PCs were pointing out to themselves.



