

Department of Information Engineering (DEI)
Master degree on ICT for Internet and Multimedia Engineering (MIME)
INTERNET – LAB Experience 1: Katharà

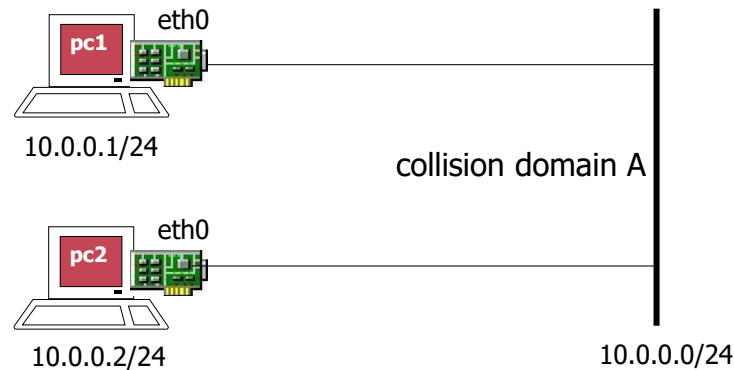


Figure 1: A simple network with two hosts connected to the same collision domain.

Exercise 1: Write the command to activate interface *eth0*, set its IP address to *10.0.0.5* and its maximum transfer unit (MTU) to *4000 Bytes*.

Exercise 2: We use the *ping* command to verify the connectivity between the two machines. What happens if you use a non-existent address as the argument for the *ping* command?

Exercise 3: Run *tcpdump* on *pc2*. Run the *ping* command towards *pc2* on *pc1*. Using Wireshark to inspect the packets exchanged between the two machines on collision domain A, report the MAC address of the interface *eth0* for both virtual machines.

Exercise 4: In addition to the two virtual machines already created, start two virtual machines (*pc3* and *pc4* that, however, use a different collision domain than that of *pc1* and *pc2*). Use the *ping* command to check the connectivity between *pc1* and *pc4*. Briefly motivate the result of the connectivity check.