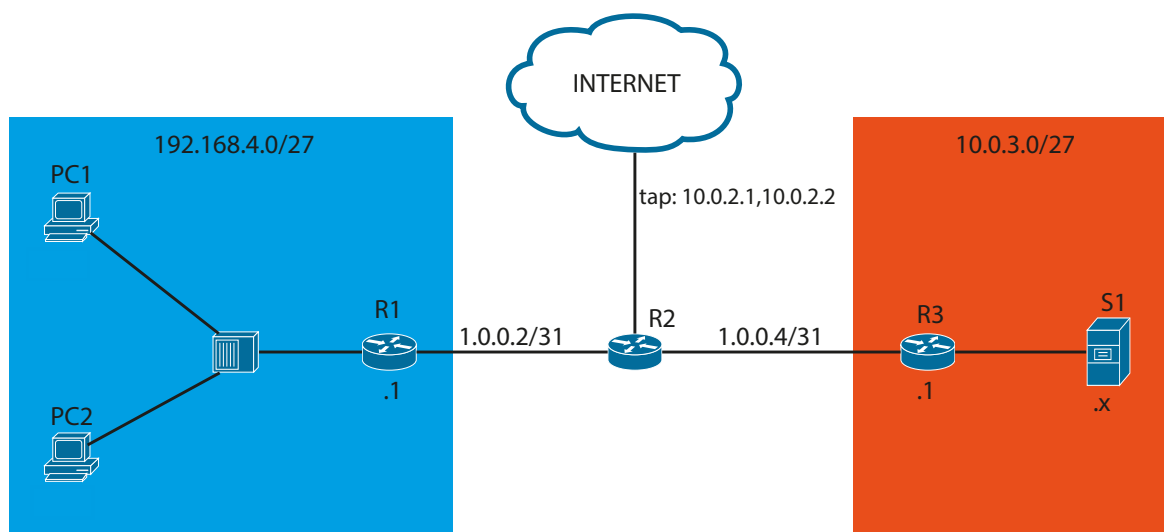# First Homework: C topology
## For MATRICOLA ending with 5-6-7



Given the topology in figure, reproduce it in netkit. You must use the VM names and addresses specified in the figure above.

For /31 subnets, the addresses are assigned with the following rule: the lower router number takes the even address, e.g. R1 takes 1.0.1.2 with respect to R2. The maximum points are 6 and are assigned as follows:

- +0.5 point: lab and folders created with correct lab.conf

- +0.5 point: configure subnet 10.0.3.0/27 with iproute2 using startup scripts. Give to S1 the highest address **assignable** of the subnet.

- +1 point: configure subnet 192.168.4.0/27 with DHCP using R1 as DHCP server

- +1 point: configure 1.0.0.2/31 and 1.0.0.4/31 via static /etc/network/interfaces

- +1 point: configure TAP interface on R2

- +1 point: Use NAT to allow the party to go to Internet. Configure default gateways in order to allow the subnets to go to the internet.

- +1 point: Using netcat and tcpdump, send "c_topo" string on UDP port 9000 from PC1 to S1 and capture the communication. (Include in the lab only the relevant .pcap file)

Restart of all the daemons is required.