

## Assignment 1: TCP/IP basics. SINGLE STUDENT ACTIVITY

In this assignment you have to properly setup three (small) networks, within the Kathará framework. You have to download the lab package and configure all the machines, as described in the lab description. Moreover, you have to plan the testing activity to show that your lab is properly working, according to specifications. Here there are some additional details for the three labs:

### Es1

The border is already configured to act as the gateway. Use the subnet 192.168.10.16/29 and assign the lower address of the subnet for the border, using udphcd. Border eth0 has not to be configured.

### Es2

The border is already configured to act as the gateway. Check the DNS (bind) configuration, the configuration files are as usual in the /etc/ directory. Border eth0 has not to be configured.

### Es3

The border is already configured to act as the gateway. Border eth0 has not to be configured. The network topology is shown in Figure 1. PC from the two lans have to be able to reach each other and to reach internet. You can choose any private subnet. Motivate your choice.

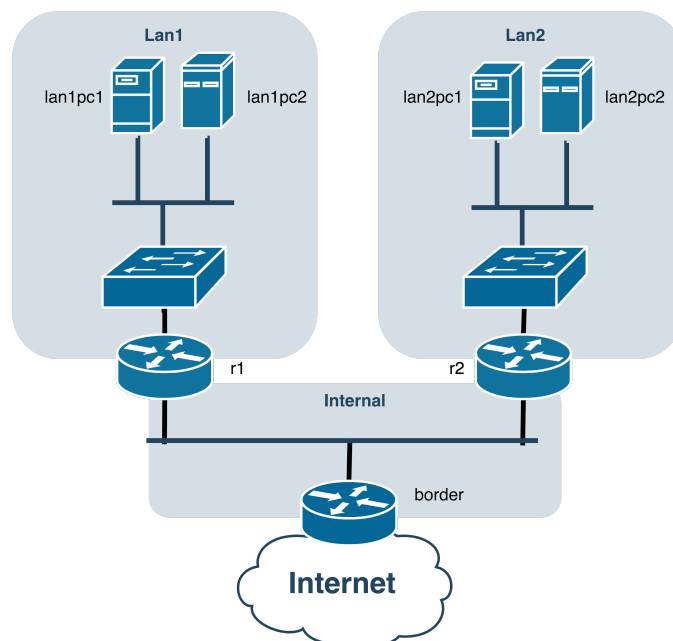


Figure 1: Es3 topology

### Scheme of your hand-in

You have to prepare a document with the following structure:

## Assignment 1: TCP/IP basics.

### Student name:

### Student matricola:

1. Introduction
2. Es1: DHCP network
  1. Plan of the activities
  2. Implementation details
    1. hostx.startup
    2. hosty.startup
    3. ...
  3. Testing procedure
  4. Final remarks
3. Es2: network with static addressing

1. Plan of the activities
  2. Implementation details
    1. hostx.startup
    2. hosty.startup
    3. ...
  3. Testing procedure
  4. Final remarks
4. Es3: two networks with static routes
1. Plan of the activities
  2. Implementation details
    1. hostx.startup
    2. hosty.startup
    3. ...
  3. Testing procedure
  4. Final remarks