Bachelor Cycle – Network

Rush #2 (Session n°1)

Read ALL the topic before asking questions
Most of the time, the answers are in the subject

Preliminaries

Each group will have:

- 5 routers Cisco 1841 ;
- 4 PCs ;

The rush is divided in several steps; you step must be validated by a teaching assistant before you could move to the next one. Any breach of this rule will result in a penalty.

If you are asked to make a diagram, it must be neat and in digital format. No paper diagram will be accepted (Software: Visio or Dia)

Any departure of a group needs to be reported to one of the assistants. Any breach of this rule will result in a -21 to members of the group.

If several groups had to work together, work should be done by the partner group (bonus will be assigned to them).

The last 10 minutes of the rush will be devoted to the cleaning of the room and the bay:

- ✓ Erase the configurations ;
- ✓ Unplug the equipment ;
- ✓ Storage the cables
- ✓ …etc.

If a group left without respecting this rule, a penalty will be given.

All claims must be addressed to the ASR laboratory at the following address: asr_paris@epitech.eu within 10 days of the publication of grades.

Step 1

Realize the assembly diagram of the entire rush. Your drawing must include:

- The equipment used ;
- Broadcast & Network addresses ;
- Subnets masks ;
- The name and the IP addresses of each interface used.

***Warning**: if your diagram is not validated after an hour, the assistants will provide you one. Your step will not be validated but your rush continue to be noted.*

Make validate step by an assistant.

Step 2

- Named your 5 routers « R1 », « R2 », « R3 », « R4 » et « R5 » ;
- Add the password "cisco" for enable mode of your routers;
- Add the motd « Be happy ! The Cisco rush is easy ! » on your 5 routers.

Make validate step by an assistant.

Step 3

Class C: 192.168.1.0

- Connect the router R1 to the router R2 using a serial cable.

Class C: 192.168.2.0

- Connect the router R3 to the router R4 using a serial cable.

Validation: the router R1 must be able to communicate with the router R2 and R3 router must be able to communicate with the router R4.

Make validate step by an assistant.

Step 4

Class C : 192.168.3.0

- Connect the router R2 to the router R5 using a serial cable.

Class C: 192.168.4.0

- Connect the router R4 to the router R5 using a serial cable.

Validation: your routers must be able to communicate with each other.

Make validate step by an assistant.

Step 5

Class C : 192.168.5.0

- Connect the « PC1 » to the router « R1 » using an Ethernet cable.

Class C : 192.168.6.0

- Connect the « PC2 » to the router « R2 » using an Ethernet cable.

Class C : 192.168.7.0

- Connect the « PC3 » to the router « R3 » using an Ethernet cable.

Validation: your 5 routers must be able to communicate with your 3 PCs.

Make validate step by an assistant.

Step 6

Class C: 192.168.8.0

- Install and set up a TFTP server on « PC4 » ;
- Connect the « PC4 » to the router « R4 » using an Ethernet cable ;
- Save the configurations of your 5 routers on your TFTP server.

Validation: your routers must be able to communicate with the TFTP server. The configurations of your routers must be saved on your TFTP server.

Make validate step by an assistant.