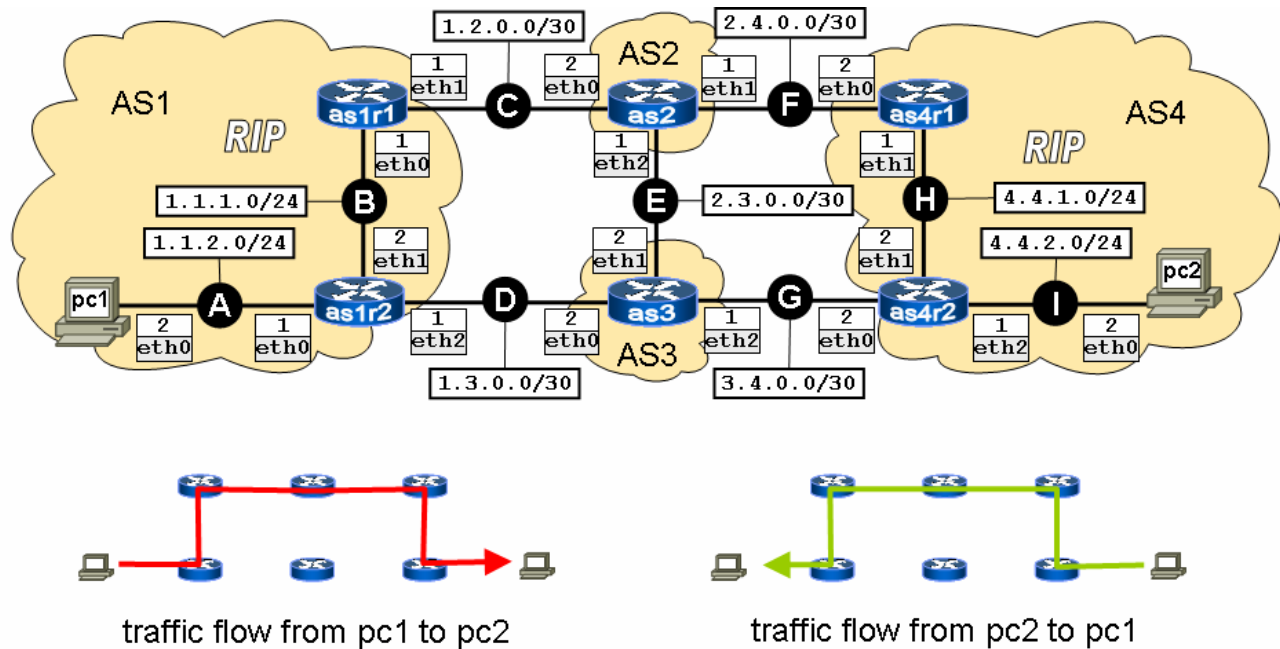**Internet and Data Centers – Third Intermediate Test (10-12-2021)**

Rules of the game: 1) Fill in this page with your last name, first name, university registration number and the number of the PC you are using now. 2) You can browse all the course material. 3) You cannot interact in any way with others. It would be considered a serious disciplinary issue if you do so.

traffic flow from pc1 to pc2   traffic flow from pc2 to pc1

Using Kathará, implement the network depicted in the above figure and described below.
- ☐ All ASes with more than one router run RIPv2 in all the internal interfaces redistributing all connected LANs and redistributing BGP.
- ☐ No device has the default route with exception of pc1 and pc2 which have the default gateway set.
- ☐ Links between different ASes correspond to eBGP peerings.
- ☐ All ASes announce in BGP the /30 networks they are adjacent to and their internal networks (if any).
- ☐ The traffic flows represented by the two small pictures are realized as follows:
    - ○ AS3 does not accept announcements for prefix 4.4.2.0/24 from all its neighbors.
    - ○ AS2 prefers sending traffic to 1.1.2.0/24 through link C.
    - ○ AS4 prefers sending traffic to 1.1.2.0/24 through link F.
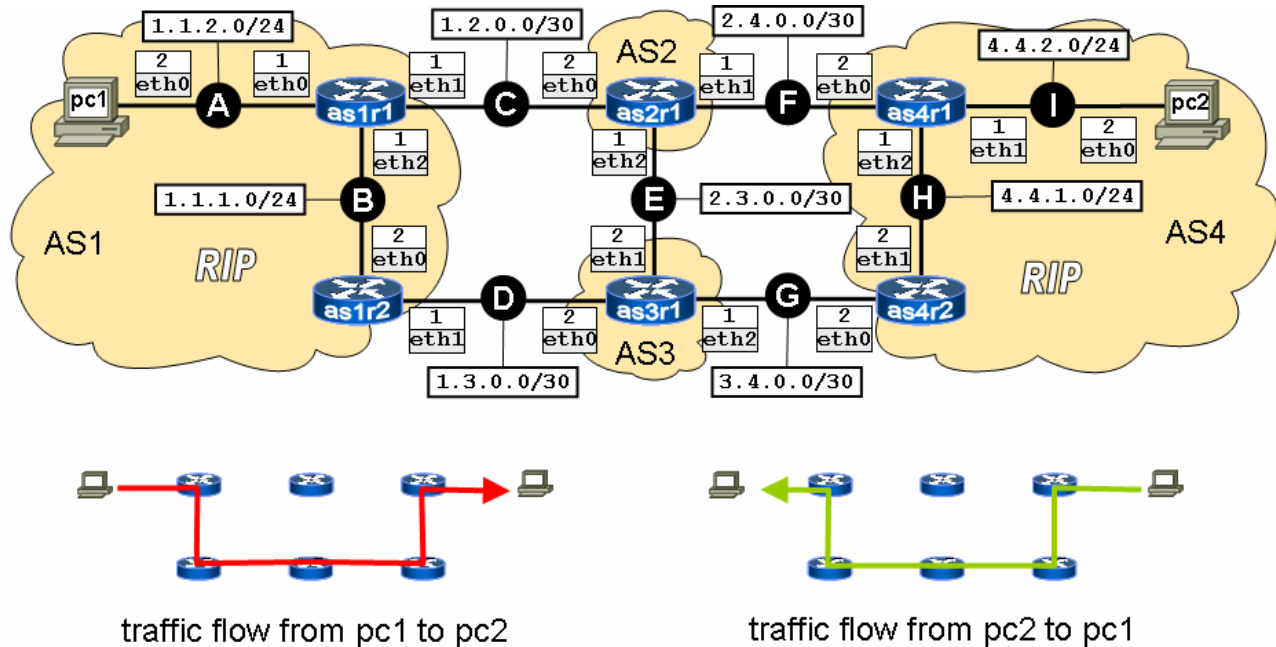
Goals:
- **The routing towards 4.4.2.0/24 and 1.1.2.0/24 follows the arrows in the small pictures above by means of the implemented BGP policies.**

Upload procedure:
- Move into the parent directory of the directory <lab-directory> containing the lab and create a .tar.gz file containing the lab with the command: tar czvf file.tar.gz <lab-directory>
- Upload the file.tar.gz file in the form at http://esame.inf.uniroma3.it/

Cognome e nome: .... Matricola: .... PC:.............

Cup

Internet and Data Centers – Third Intermediate Test (10-12-2021)

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traffic flow from pc1 to pc2   traffic flow from pc2 to pc1

Using Kathará, implement the network depicted in the above figure and described below.
☐ All ASes with more than one router run RIPv2 in all the internal interfaces redistributing all connected LANs and redistributing BGP.
☐ No device has the default route with exception of **pc1** and **pc2** which have the default gateway set.
☐ Links between different ASes correspond to eBGP peerings.
☐ All ASes announce in BGP the /30 networks they are adjacent to and their internal networks (if any).
☐ The traffic flows represented by the two small pictures are realized as follows:
   o AS2 does not accept announcements for prefix 4.4.2.0/24 from all its neighbors.
   o AS3 prefers sending traffic to 1.1.2.0/24 through link D.
   o AS4 prefers sending traffic to 1.1.2.0/24 through link G.

Goals:
• The routing towards 4.4.2.0/24 and 1.1.2.0/24 follows the arrows in the small pictures above by means of the implemented BGP policies.

Upload procedure:
• Move into the parent directory of the directory <lab-directory> containing the lab and create a .tar.gz file containing the lab with the command: tar czvf file.tar.gz <lab-directory>
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