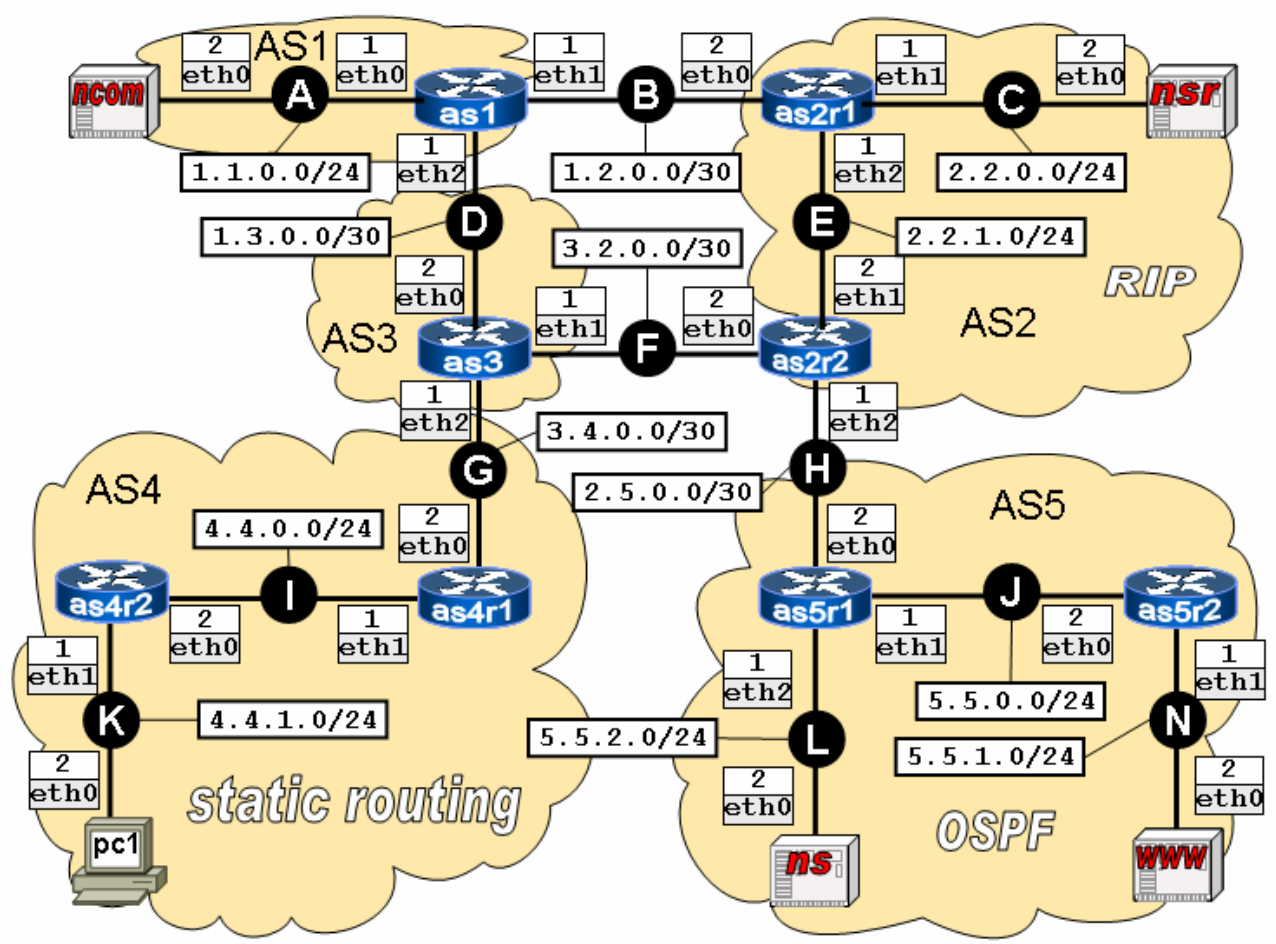
Cognome e nome: ..... Matricola: ..... PC:.....

Internet and Data Centers (11-09-2024) Copycat

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.



Using Kathará, implement the network depicted in the above figure and described below.

Regarding the routing:

- ☐ Links between different ASes correspond to eBGP peerings.
- ☐ AS5's routers run OSPF in all the internal interfaces redistributing all connected LANs and redistributing BGP.
- ☐ AS4's routers have no internal gateway protocol. They have static routes (as4r2 has a default route to as4r1).
- ☐ No device has the default route with the exception of as4r2, pc1, ns, nsr, nscom, and www which have the default gateway set.
- ☐ All ASes announce in BGP the /30 networks they are adjacent to and their internal networks (if any). AS4 only announces in BGP the prefix 4.4.0.0/16. AS5 only announces in BGP the prefix 5.5.0.0/16.
- ☐ All BGP policies regard AS2:
  - AS2 does not accept prefix 1.1.0.0/24 from link B.
  - AS2 prefers to accept prefix 4.4.0.0/16 from link B.

Regarding the application level:

- ☐ pc1 is a client that would like to access the Web page http://www.com/index.html; its default name server is ns. Name server ns is not an authority for any zone but just offers name resolution to clients. www is a Web server with the name www.com and offers a Web page (containing an arbitrary text). nsr is the root name server. nscom is a name server authority for the com zone.

Target:

- All machines should be able to ping each other.
- pc1 should be able to browse the Web page at http://www.com

Upload procedure:

- Connect to http://esame.inf.uniroma3.it/ and follow the procedure described there.