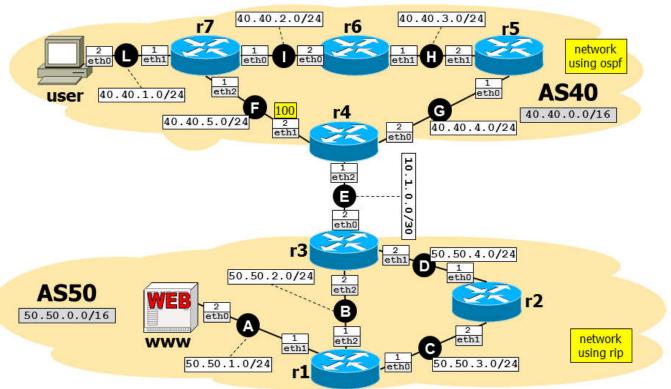
## ICN - Examination date: 16-12-2016 - "Hourglass"



## Available time: 75 minutes.



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

- www is web servers running apache2; it serves a single default page containing "www".
  - o Remember to set a default route on all network nodes that do *not* act as routers.
- □ Routing within AS40 is implemented by using OSPF, with the following setup:
  - O All the routers belong to the backbone area.
  - o BGP is redistributed into OSPF (note: enabling redistribution automatically injects into OSPF only routes learned from E-BGP).
  - Interface eth2 of r4 is assigned the indicated cost.
- □ Routing within AS50 is implemented by using RIP, with the following setup:
  - o BGP is redistributed into RIP.
- ☐ The BGP configuration is as follows:
  - o Routers do not filter any updates.
  - No routers announce the default route.
  - AS40's and AS30's border routers also announce their own subnet, as an aggregated prefix indicated in the gray box.
- Warning: it may take several minutes (up to 5) for the peerings to be established and for the routing protocols to converge, even if the configuration is correct!

## Goals:

The BGP peering, as well as OSPF and RIP routing must operate correctly.

client must be able to access web page http://50.50.1.2/ using the links web browser.