

4

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

- □ client and web are standard end hosts. web has domain name web.roma3.it.
 - Remember to set a default route on all network nodes that do *not* act as routers.
- \Box **r1**, **r2**, **r3**, and **r4** are routers statically configured.
- □ The DNS hierarchy is as follows:
 - \circ **root** is the root name server.
 - it is authority for the domain ".it"; its name is "dns.it".
 - roma3 is authority for the domain "roma3.it"; its name is "dns.roma3.it".
 - **local** is the local name server for **client**.

<u>Goals:</u>

client must be able to ping web (ping web.roma3.it).

The traffic generated inside the collision domain A must pass through routers **r2**, **r1** and **r4** while the traffic generated inside the collision domain B must pass through routers **r4**, **r3** and **r2**.