



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**.
 - o Remember to set a default route on all network nodes that do *not* act as routers.
- ☐ **r1**, **r2**, **r3**, and **r4** are routers statically configured.
- ☐ The DNS hierarchy is as follows:
 - o **root** is the root name server.
 - o **it** is authority for the domain “.it”; its name is “**dns.it**”.
 - o **roma3** is authority for the domain “**roma3.it**”; its name is “**dns.roma3.it**”.
 - o **local** is the local name server for **client**.

Goals:

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**.