Available time: <u>60 minutes</u>.
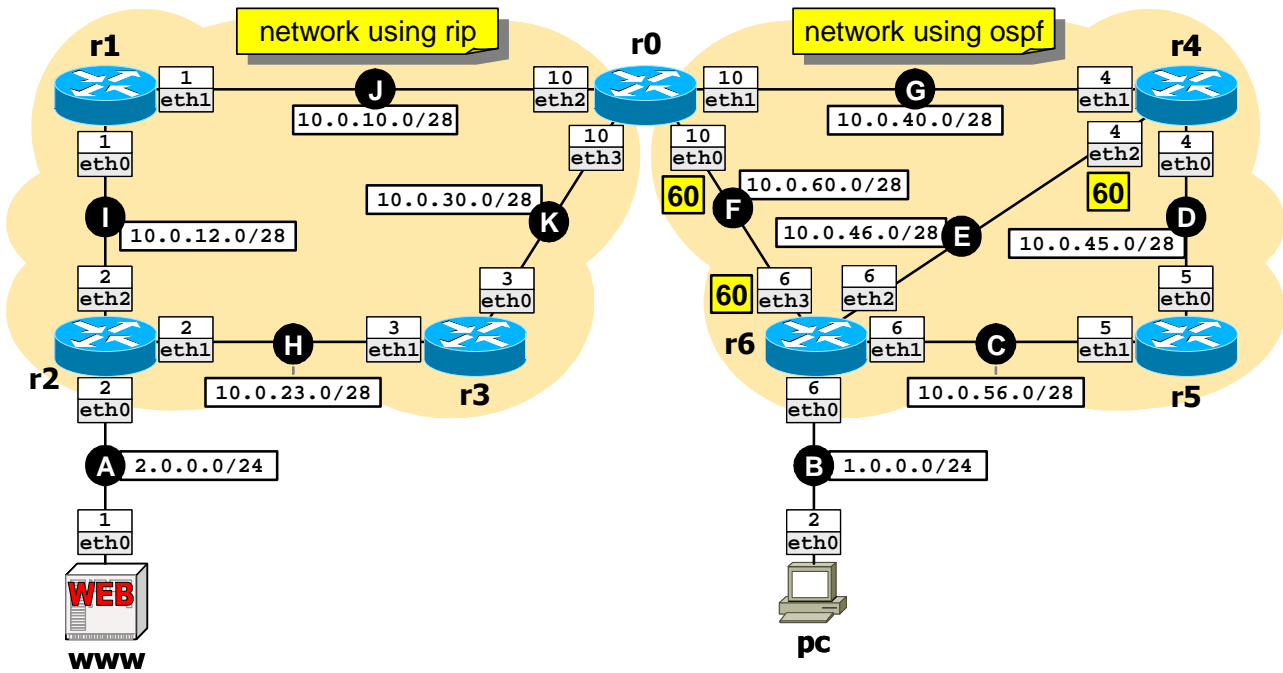

Using Netkit, implement the network shown in the figure and described below.
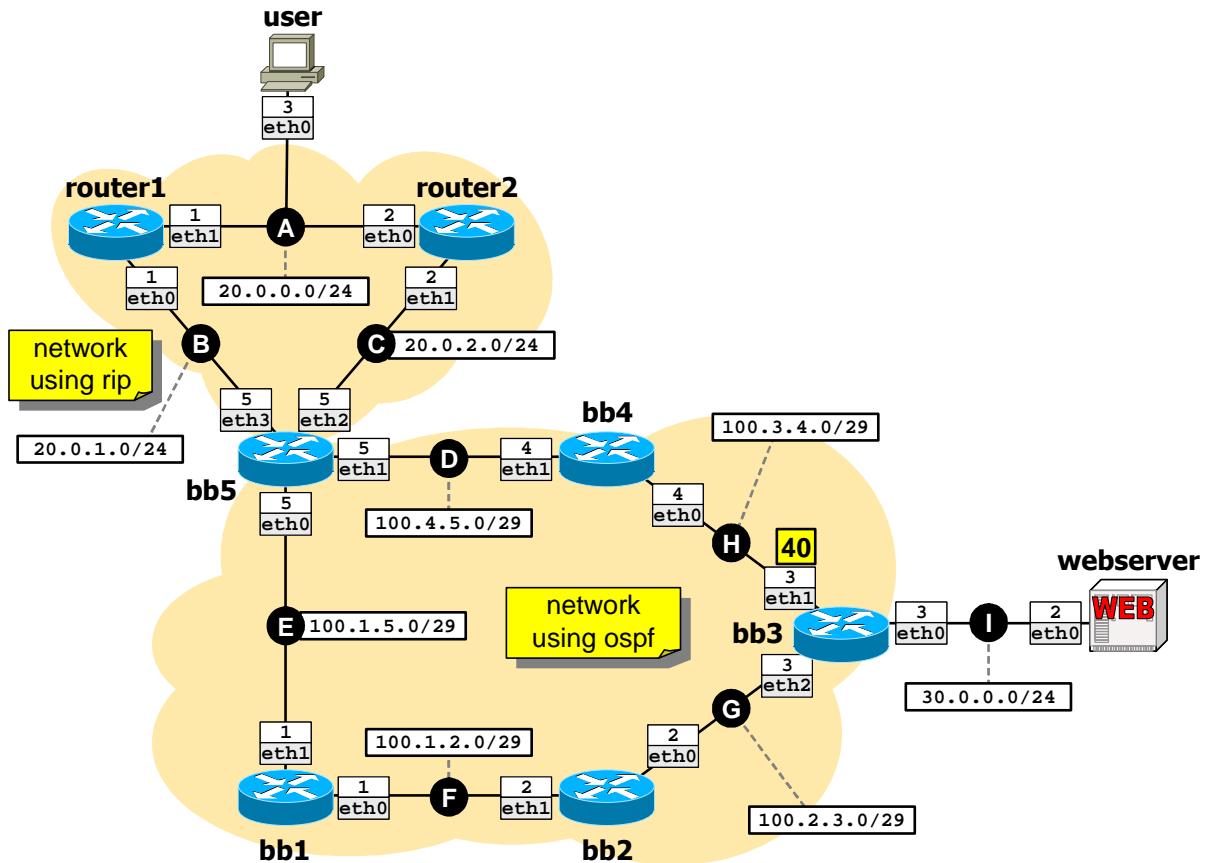
- Each network, indicated by a cloud, uses the specified routing protocol.
- Router **r0**:
  - announces in RIP *solely* a default route (**0.0.0.0/0**);
  - redistributes into OSPF all the routes learned by RIP.
- All OSPF routers belong to area **0.0.0.0**.
- Interfaces must be assigned OSPF costs as indicated in the figure. If the cost is unspecified, the default value is to be assumed.
- **www** is a web server that runs apache2 and serves page **http://2.0.0.1/**

<u>Goals</u>:
- **pc** must be able to access the Web page exposed by **www** by using **links**.
- By running suitable traceroutes, check that traffic from **pc** to **www** traverses link **E**, while traffic from **www** to **pc** traverses links **D** and **C**.

Available time: <u>60 minutes</u>.

Using Netkit, implement the network shown in the figure and described below.
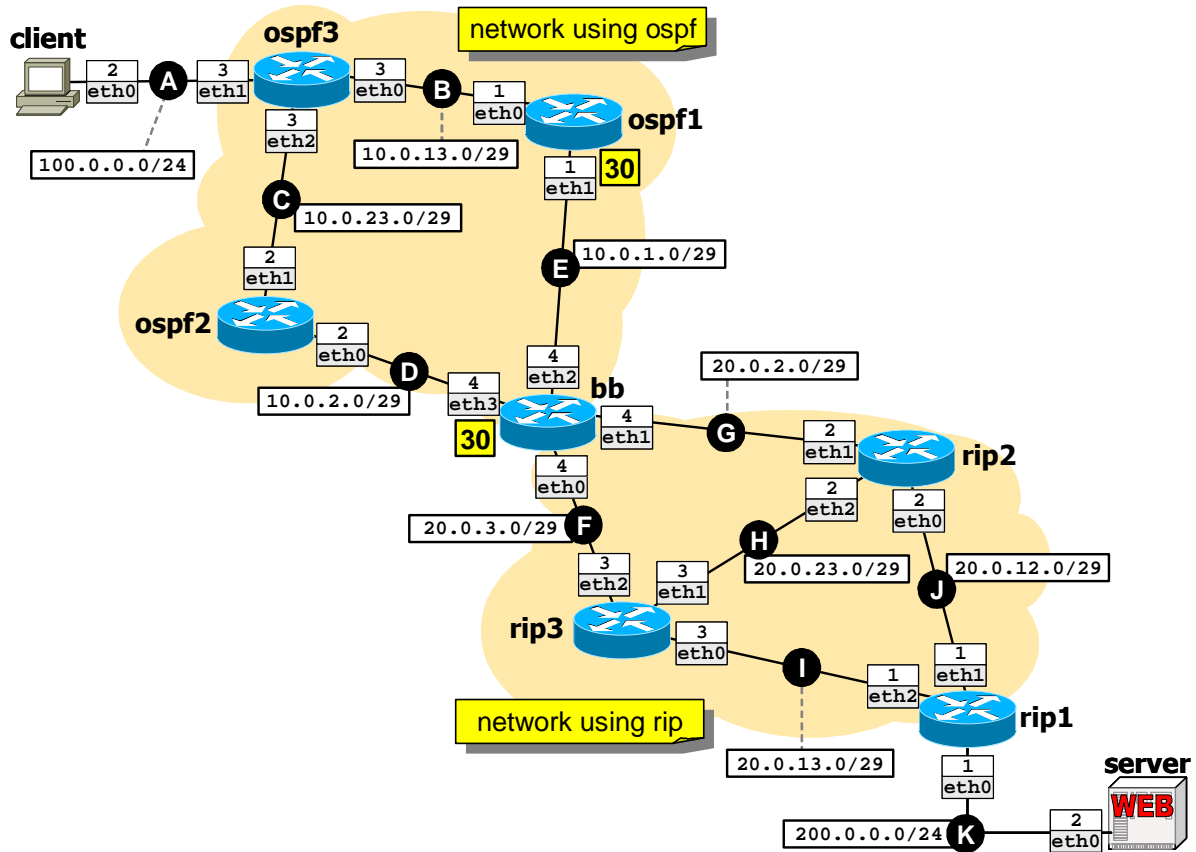
- Each network, indicated by a cloud, uses the specified routing protocol.
- Router **bb5**:
  - announces in RIP *solely* a default route (**0.0.0.0/0**);
  - redistributes into OSPF all the routes learned by RIP.
- All OSPF routers belong to area **0.0.0.0**.
- Interfaces must be assigned OSPF costs as indicated in the figure. If the cost is unspecified, the default value is to be assumed.
- **webserver** is a web server that runs apache2 and serves page **http://30.0.0.2/**

<u>Goals</u>:
- **user** must be able to access the Web page exposed by **webserver** by using **links**.
- By running suitable traceroutes, check that traffic from **user** to **webserver** traverses links **D** and **H**, while traffic from **webserver** to **user** traverses links **G**, **F**, and **E**.

Available time: <u>60 minutes</u>.

Using Netkit, implement the network shown in the figure and described below.
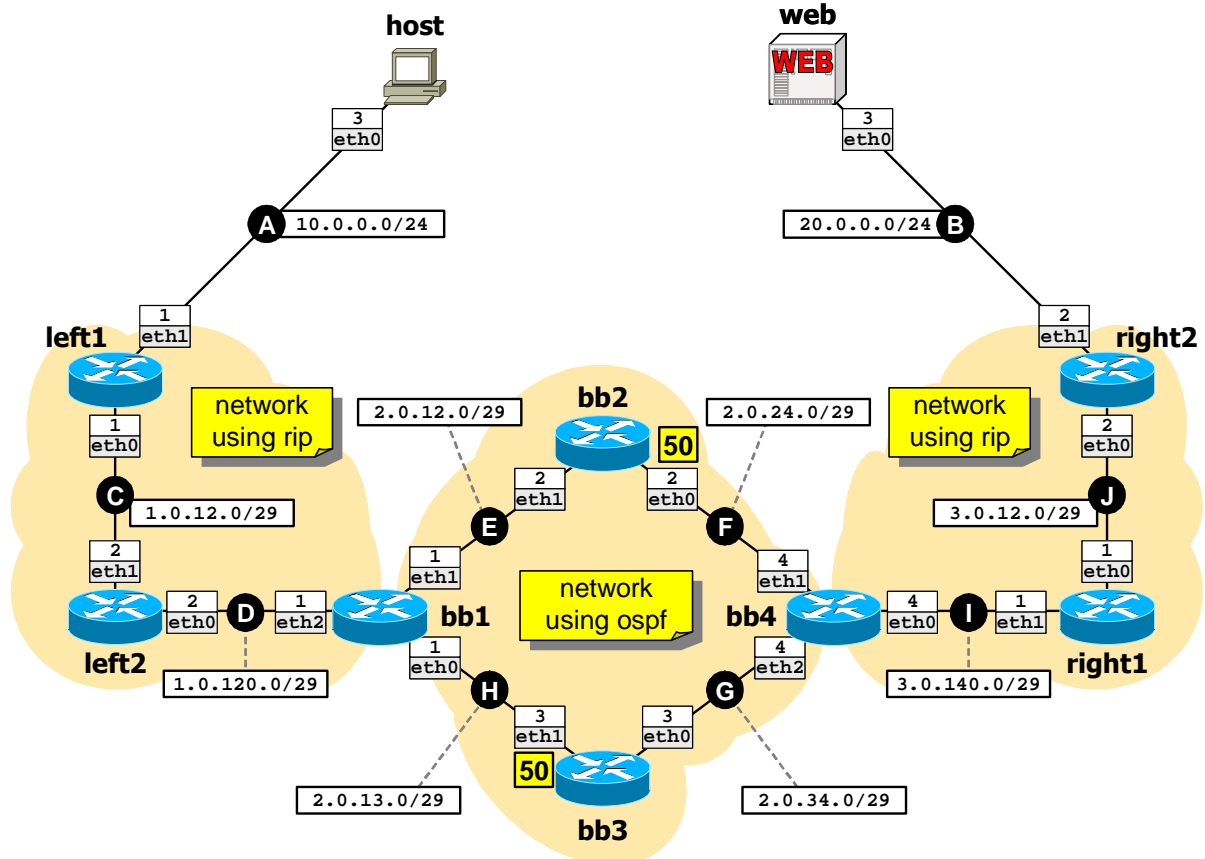
- Each network, indicated by a cloud, uses the specified routing protocol.
- Router **bb**:
  - announces in RIP *solely* a default route (**0.0.0.0/0**);
  - redistributes into OSPF all the routes learned by RIP.
- All OSPF routers belong to area **0.0.0.0**.
- Interfaces must be assigned OSPF costs as indicated in the figure. If the cost is unspecified, the default value is to be assumed.
- **server** is a web server that runs apache2 and serves page **http://200.0.0.2/**

Available time: <u>60 minutes</u>.

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

- Each network, indicated by a cloud, uses the specified routing protocol.
- Routers **bb1** and **bb4**:
    - announce in RIP *solely* a default route (**0.0.0.0/0**);
    - redistribute into OSPF all the routes learned by RIP.
- All OSPF routers belong to area **0.0.0.0**.
- Interfaces must be assigned OSPF costs as indicated in the figure. If the cost is unspecified, the default value is to be assumed.
- **web** is a web server that runs apache2 and serves page **http://20.0.0.3/**

Goals:
- **host** must be able to access the Web page exposed by **web** by using **links**.
- By running suitable traceroutes, check that traffic from **host** to **web** traverses links **H** and **G**, while traffic from **web** to **host** traverses links **F** and **E**.