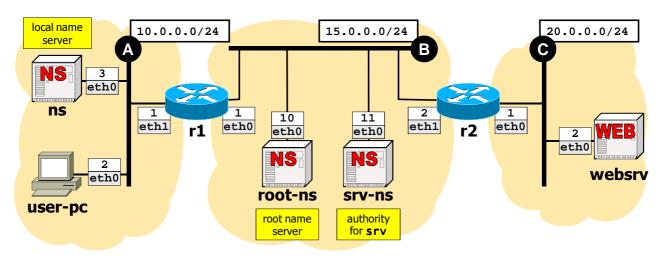
## ICN – Examination date: 06-11-2015 – Round – "Projector"



Available time: 90 minutes.



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

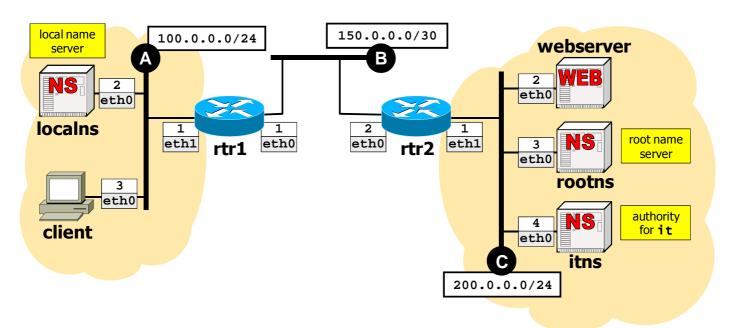
- Routing is configured by using static routes.
- There is a DNS service available on the network, structured as follows:
  - **root-ns** is the root name server:
  - **srv-ns** is the authority for **srv**;
  - **ns** is the local name server for **user-pc** (it is not authoritative for any zones).
- There is also a Web server on this network, implemented by websrv:
  - this node has DNS name web.srv;
  - this node serves a web page for the *guest* user, http://web.srv/~guest/, which contains an HTML redirect to a global page http://web.srv/real\_index.html (with arbitrary contents), implemented by the following code fragment: <head>

<meta http-equiv="refresh" content="0;URL=http://web.srv/real\_index.html">
</head>

<u>Goal</u>: **user-pc** must be able to access the Web page published by user *guest* on **web.srv** using **links**. Users must be presented with a redirect towards the global page **real\_index.html**.



Available time: 90 minutes.



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

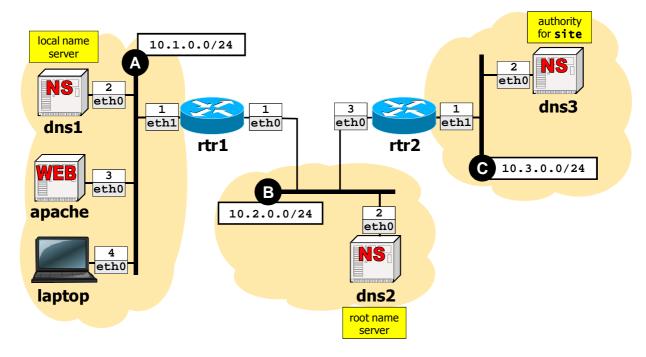
- Routing is configured by using static routes.
- There is a DNS service available on the network, structured as follows:
  - **rootns** is the root name server:
  - itns is the authority for it;
  - **localns** is the local name server for **client** (it is not authoritative for any zones).
- There is also a Web server on this network, implemented by **webserver**:
  - this node has DNS name **sito.it**;
  - this node serves a web page for the *guest* user, http://sito.it/~guest/, which contains an HTML redirect to a global page http://sito.it/global\_index.html (with arbitrary contents), implemented by the following code fragment: <head>

<meta http-equiv="refresh" content="0;URL=http://sito.it/global\_index.html">
</head>

<u>Goal</u>: **client** must be able to access the Web page published by user *guest* on **sito.it** using **links**. Users must be presented with a redirect towards the global page **global\_index.html**.



Available time: 90 minutes.



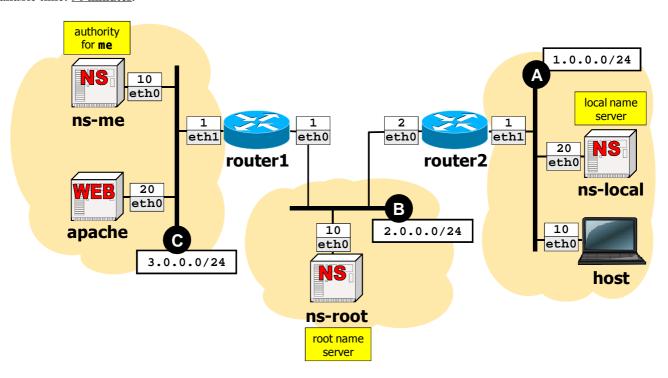
Using Netkit, implement the network depicted in the figure and described below.

- Routing is configured by using static routes.
- There is a DNS service available on the network, structured as follows:
  - **dns2** is the root name server;
  - **dns3** is the authority for **site**;
  - **dns1** is the local name server for **laptop** (it is not authoritative for any zones).
- There is also a Web server on this network, implemented by **apache**:
  - this node has DNS name my.site;
  - this node serves a web page for the guest user, http://my.site/~guest/, which contains an HTML redirect to a global page http://my.site/index2.html (with arbitrary contents), implemented by the following code fragment: <head>
    - <meta http-equiv="refresh" content="0;URL=http://my.site/index2.html"> </head>

Goal: client must be able to access the Web page published by user guest on my.site using links. Users must be presented with a redirect towards the global page index2.html.



Available time: 90 minutes.



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

- Routing is configured by using static routes.
- There is a DNS service available on the network, structured as follows:
  - **ns-root** is the root name server;
  - **ns-me** is the authority for **me**;
  - **ns-local** is the local name server for **host** (it is not authoritative for any zones).
- There is also a Web server on this network, implemented by **apache**:
  - this node has DNS name open.me;
  - this node serves a web page for the *guest* user, http://open.me/~guest/, which contains an HTML redirect to a global page http://open.me/index\_global.html (with arbitrary contents), implemented by the following code fragment: <head>
    - <meta http-equiv="refresh" content="0;URL=http://open.me/index\_global.html">
      </head>

<u>Goal</u>: host must be able to access the Web published by user *guest* on **open.me** using **links**. Users must be presented with a redirect towards the global page **index\_global.html**.