S-38.115 Signaling Protocols, ENUM exercise

Deadline: Mon. 7.3.2005. All late answers will be disregarded. Please adhere to the deadline.

Return: The course mail box with the course code (S-38.115 Signaling Protocols). The Networking Laboratory's mail boxes are situated in the G-wing on the second floor of the Electrical and Communications Engineering. Remember to include your name and your student number *at the beginning of the document*.

Instructions: Language of the exercise is English. The exercise is to be done using ENUM parser that can be found on the following web page: http://www.hut.fi/~etornqvi/enum.html.

The ENUM tool works well with Internet Explorer and Firefox. There are some problems with older Netscape versions.

The upper text box of the ENUM Parser program represents Tier 2 ENUM server settings. The "Insert telephone number" is used for storing telephone number that has to be translated into logical names (e.g. sip or email address). The bottom text box displays the translation process.

Please note that it is recommended to store all of the modified entries from the upper text box as well as from the "Insert Telephone number" text box in some text editor eg. notepad since after running the number translation process and pressing Reload button the text boxes are filled in with default values.

Task 1:
Describe the process of translation of telephone numbers into logical names using ENUM parser's default settings. Please explain the process using full sentences and supporting graphs (e.g. lecture slide "A possible ENUM hierarchy"). Please also explain why you have obtained a particular result.

Each student has its own telephone number which is:

+358 9 45 "student number without a letter at the end of the number"

e.g. the 12345R student number corresponds to +358 9 451 2345.

Task 2:
Modify the default subscriber entry in the Tier2 ENUM server (using upper text box) to match it with your phone number. Present the modified entries in your report. Explain why particular changes were needed.

Task 3:
Imagine that you are a Tier 2 ENUM server administrator that has to input entry of a new client. The client requirements are:

- If someone is calling the client using the client's telephone number (please use your own telephone number) the entries should specify the client's sip address as the first priority contact. The client's email address should only be used when the caller can not contact the client using his/her sip address.
- The client sip address is sip:marcin@netlab.hut.fi, while his email address is mailto:marcin@netlab.hut.fi.

Please present the client related entries in your report. Explain the semantic of client entries.