Parte II

Abstract

This project is about the creation of a system to control the payment for access to the Internet. The project has been developed by me for Eneo Tecnología Company.

First, we are going to describe a typical scenario. It is composed of a local network, where there is a machine that is connected to Internet. This machine is the gateway and it is the bridge between the machines in the local network and the Internet. It is likely that the local network will be a wireless LAN, but the system can be used with any technology. The users that can access the Internet are controlled by a central server. This server can be wherever you want, it can be inside the local network or it can be in a remote site in the Internet. Furthermore, the central server incorporates the information of all the local networks' users. This server should controll all the gateways in the system.

The system developed permits control of the users connected, how long they are connected and where they are connected from. This information is saved in the central server and later it is used to charge the connection's cost to the users.

Besides the access control, the application has other functions that I want to accentuate: It allows control of the bandwidth, and also allows control of the following:

The different types of traffic that are permitted. The ports which are avaliable and thus, we can control which services a user can join like chat, ftp, email, telnet, ssh...

As well the project has an application to manage the system. This application helps the user to create a new user, to update their personal data, to define the connection parameters, and so on. Moreover, there is a section to show statistics, and to create a bill. The application is very easy to use, and the final user need not be aware or understand anything about the internal workings of the system.