Exercise 5
VPN Configuration

Computer Network Technologies and Services (CNTS)
Tecnologie e Servizi di Rete (TSR)

Warning

The exercise requires:

- Microsoft Windows XP (at least with SP1), with Administrator privileges (you can also use a different OS, but you have to learn by yourself how to setup a VPN connection in your OS)
- a network analyzer installed in your PC
- a network allowing PPTP traffic

1 VPN connection configuration

You have to setup a VPN characterized by the following parameters:

- access server: 130.192.225.254
- username: tsr_user
- password: sperodiprendereilmassimo
- authentication: Microsoft CHAP
- compression/encryption: None

In Microsoft Windows XP, the configuration of a VPN adapter is possible by clicking on the link Create New Connection, in the folder Network Connections.

If you do not have Administrator privileges, you can create the connection in the following way:

Start -> Programs -> Communication -> New Connection Wizard

Once you created the VPN connection, you have to run the network analyzer and open the VPN. Then, open the browser and connect to any website (i.e. www.google.com).

ATTENTION! In order to capture enveloped protocols, you need to select the physical interface. dialup/VPN interface is not correct.
1. Show a schematic representation of a generic traffic packet (not a connection setup packet!), highlighting the envelopes.

2. Is the traffic encrypted or not?

3. Is the connection setup phase encrypted or not?
4. Briefly describe the authentication procedure. Base your description on your capture file
5. On MS Windows XP, open the TCP/IP properties of the VPN adapter. In the section Advanced TCP/IP Settings, deselect the checkbox Use Default Gateway on remote Network. Open again any website on your browser and describe the difference you observe with these new VPN properties.