**Report by network security**

In order to fulfil our project, we have to install 3 virtual machines, which has a distributive called Ubuntu or another distributive Linux.

Our group chose Ubuntu as main operating system. Our task is to create a connection between a server and client using DNS tunnel.

Pre-installation:

When we installed VMs with ubuntu, we began to tune a server and client. The first step is to set a hostname of machine, which allows to refer to specified computer. A command is to set a hostname “sudo hostnamectl set-hostname <HOSTNAME>”:

A screenshot of a computer

Description automatically generated with medium confidence

Now, we have a server and client, which has own hostname.

Also, it needs to move in a directory and open a file called hosts, which contains IP-addresses and hostnames. Thus, a machine is able to connect to specified points. A server’s file must contain IP-address and hostname of client and client must contain IP-address and hostname of server.

Graphical user interface, text

Description automatically generated

Now, we can check we did everything right, we have to run a command “ping <hostname>” and we can see how our machines reads a packages each other.

A picture containing text, electronics, screenshot, display

Description automatically generated

1. We downloaded tool called iodine, which allows to set up a connection between client and server using DNS tunnel.