



# T5 - Systems and Networks Seminar

T-NSA-500

## Day 08

Virtual Private Network



1.0



For this day, it's review



Unless otherwise stated, this day should be done only on the Debian Buster environment.

## **TASK 00 - PRELIMINARY (3PT)**

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Create three Debian Buster virtual machines.

VM1 without GUI

- Three network card : 1 in bridge mode and 2 in private network (lan1 & lan2)
- Hostname must be vm-dhcp

VM2 machine without GUI

- One network card lan2 (192.168.42.0/24)
- Hostname must be vm-server

VM3 machine with the GUI of your choice

- One network card lan1 (192.168.24.0/24)
- Hostname must be vm-client

## **TASK 01 - GATEWAY (5PT)**

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Configure the virtual machine VM1 so that it can be used as a DHCP, it must have access to the internet and to the lan1 and lan2 networks



## TASK 02 - OPENVPN SERVER (5PT)

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You must use openvpn

Set up the machine VM2 as an openVPN server

OpenVPN is TLS/SSL VPN this means that it utilizes certificates in order to encrypt traffic between server and clients.

You must setup your own simple certificate authority (CA). To do this you must download and use easy-rsa.



PKI - Public Key Infrastructure

Configure firewall rules to allow port port 1194/UDP

## TASK 03 - CLIENT (5PT)

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Create 3 users on the system VM3 with the following specifications :

- "jack" with "eSs9hNM52" as password
- "nsa" with "NsalsLife" as password
- "bozou" with "Str4sbOurg.<3" as password

Each user must have it's own vpn connection kit located at /home/[USERNAME] and should be able to connect to the VPN server



Remember that an user always need a home ...