



T5 - Systems and Networks Seminar

T-NSA-500

Day 05

Ansible





For this day, it's review



Ansible work only on LINUX so linux host is required

You have probably noticed it, it's painful and repetitive to install servers.
There are automation solutions that you will discover today

TASK 00 - CLIENT

If you don't have a Linux host, you need to install a vm client debian 10.
Your client must be able to reach your server

TASK 01 - SERVER (3PT)

Install a new virtual machine with Debian 10.
The machine must be clear and clean.
Nothing needs to be installed apart the base system.

- Configure the ssh server to be able to access with "root" account from your host.
Also, you must be able to log in to the root account without password.
- The network card must be connected in bridge mode and be accessible by your host for deploy your playbook.



The machine must be clear and clean for the demonstration



snapshot

TASK 02 - INSTALL ANSIBLE

Ansible automates tasks.

Your role is to install it in your host. (in your client if you don't have a Linux host)

TASK 03- NETWORK NAME (1PT)

Create a role which change the name to `nsapool05` for your server

TASK 04 - USER (2PTS)

Create a role which create a user named *marvin* with the following characteristics:

- Password: NsaPool42
- "home" directory: /home/marvin



TASK 05 - CUSTOM MESSAGE OF THE DAY (2PT)

Create a role which change the welcome message when you login into the server.

TASK 06 - BASE (2PT)

Create a role which update remote directory apt and install following packages :

- vim
- git
- tree
- htop
- curl
- emacs
- net-tools
- sudo
- make
- unzip
- python3
- python3-pip

TASK 07 - INSTALLATION APACHE (2PT)

Create a role which install latest version of apache2 and copy provided website in root directory of apache. Website must listen on port 80.



TASK 08 - INSTALLATION OF PHP (3PT)

Create a role which install php >= 7.3 and the following modules

- php-cli
- php-fpm
- php-json
- php-pdo
- php-mysql
- php-zip
- php-gd
- php-mbstring
- php-curl
- php-xml
- php-pear
- php-bcmath
- php-intl

to end, Ensure timezone is set to "Europe/Paris" in php.ini

TASK 09 - INSTALL MYSQL AND COPY DATABASE. (2PT)

Create a role which install latest MariaBD version and copy provided database.

Create a user for the database with the following features:

- user: nsad04
- rights: All on all databases
- password: E24h7U5kA9HJhq5VM98pm7p5zmJpf8AK



TASK 10 - END (1PT)

Finally, if everything works, you should see a success about marvin user on the website available at [http://\[ip\]/data.php](http://[ip]/data.php)