

DEVOPS SEMINAR

ANSIBLE



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Slug of the day: nsapoold05



Ansible work only on Linux.

Maybe you've already noticed it, but it is quite painful and repetitive to install servers. ;) There are automation solutions that you will discover today.

Task 00 - Mandatory

All of the following tasks must be executed with ansible

The inventory must nammed 'host.ini' and must be the same:

Terminal -+ X

> cat host.ini
[nsapoold05]

127.0.0.1 ansible_connection=local

The playbook will be executed as:



Be careful, the autograder may take time to execute the playbook

Task 01 - Server

Install a new virtual machine with Debian 11.

Nothing needs to be installed apart from the base system.

- ✓ Configure the root account with by3xy paswword.
- ✓ The network card is connected in bridge mode or nat.





The machine must be clear and clean for the demonstration



snapshot

Task 02 - Hostname

Create a role that changes the name of your server to nsapoold05.

Task 03 - User

Create a role that creates a user named marvin with the following characteristics:

- ✓ Password: NsaPool42
- ✓ Home directory: /home/marvin

Task 04 - Custom message of the day

Create a role that changes the welcome message to Welcome to nsapoold05 when you login into the server.

Task 05 - Base

Create a role that updates the remote directory and installs the following packages:

- ✓ git
- ✓ htop
- ✓ curl
- ✓ sudo
- ✓ unzip
- ✓ python3
- ✓ python3-pip



Task 06 - Nginx

Nginx is similar to apache2 and you will discover nginx for this day

Create a role that installs the latest version of *Nginx* and copies the provided website inside the Nginx's root directory. Website must listen on port 80.

Task 07 - PHP

Create a role which install php <= 7.4 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

Additionally, you must ensure the timezone is set to Europe/Paris in php.ini.

Task 8 - MySQL

Create a role that:

- ✓ installs the latest MariaBD version;
- ✓ copies the provided database.

Create a user for the database with the following features:

- ✓ USer: nsad04;
- ✓ rights: All on all databases;
- ✓ password: E24h7U5kA9HJhq5VM98pm7p5zmJpf8AK.



Task 9 - End

Eventually, if everything works, you should see a success message about the \mathtt{marvin} user on the website available at $\mathtt{http://[IP_SERVER]/data.php}$.



