EPITECH.
PARIS GRADUATE SCHOOL OF DIGITAL INNOVATION

Day 05

Kick-off

T5 - Networks and Systems Admin. Seminar

T-NSA-500

Why automate?

In IT, automation has become essential.

Environments are complex.
The need for rapid scaling overwhelms developers and system administrators.

Automation simplifies the complex processes,
it allows the developers to focus on other tasks.

What is Ansible?

Ansible offers automation features.

It is mainly used for:

- application deployment,
- server and workstation updates,
- configuration management,
- intra-service orchestration,
- and various tasks that make up the daily life of a system administrator.

How Ansible works?

To automatically perform the tasks, Ansible needs instructions.
These are written in the form of a script.

There are two categories of devices:

- the **control node** runs Ansible, there must be at least one ;
- the **managed nodes** are all the other devices managed by the control node.

Playbooks

An Ansible playbook is a sequence of tasks or roles described in a YAML file format

To start the Ansible playbook:

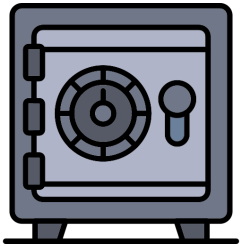
```
Terminal
~/T-NSA-500> ansible-playbook -i PATH_TO_PLAYBOOK.yml
```

To use a variable in a playbook:
“{{ VARIABLE }}”

Vault

A good (and mandatory!) practice is to securely store sensitive data (credentials, keys, …)

For this, the tool ansible-vault exists.



Tips & Tricks

To check if a host is up:

```
Terminal
~/T-NSA-500> ansible hosts -m ping
```

Questions

Do you have any questions?