# 1 Local deployment

This document explains how to deploy the different Ansible playbooks on an infrastructure with CentOS 7 Operating System.

#### 1.1 Install Ansible

The Ansible installation is explained in the "Install Ansible" document of <u>(Tools Installation)</u>.

#### 1.2 SSH Access

Ansible executes the playbooks on the servers through SSH, therefore, in order to run the playbooks, it is necessary to have SSH access to the servers without password (using public/private key pairs).

On the host where we have Ansible installed, we have to create SSH key pair.

```
$ ssh-keygen -t dsa
```

Once the keys are created, we have to copy the public key to the servers that are going to be configured with Ansible. Use the following command, changing the "user" and "IP" with the corresponding for each server.

```
$ ssh-copy-id -i ~/.ssh/id dsa.pub ikerlan@172.16.8.231
```

## 1.3 Configure Playbooks

For each playbook we have to configure the variables and the IPs to work in other environments.

#### 1.3.1 Inventory

In "**inventory**" directory we can found the "**hosts.ini**" file, there are defined the IPs that Ansible will read to deploy the playbooks in those servers. So it is necessary to configure the correct IPs of the servers that are going to be configured.

### 1.3.2 Variables

In the playbooks, there are two types of variables files; global variables and role variables.

The global variables are the most important variables, such as the user, hostname and other variables depending on the playbook.

### 1.3.2.1 Global variables

The file of global variables is inside the playbook in "group\_vars" directory.

The variables we have to configure, depends on the playbook we want to use, but the most important variable that have to be configured in all the playbooks:

- User: The user that Ansible will use to Access the servers through ssh.

In this file, we can found more variables that generally they are optional, such as the version of the technology that is going to be installed, the directories in which the installation will be installed.

#### 1.3.2.2 Role Variables

The role variables are not necessary to be changed, since they are standard configurations. If you need to change something on those variables, they are inside each role in the "defaults" directory.

# 1.4 Playbooks deployment

Once at this point, the playbooks are very easy to deploy, thanks to the Makefile that allows you to deploy any playbook with a simple "make playbook-name" command.

From the Ubuntu console, we will access to the directory where the Makefile and the playbooks are located. Then we are going to execute the following command:

~/playbooks\$ make PlaybookName

Once executed, it will ask us for the "sudo" password to have the super user privileges.