



PROYECTO VAGRANT

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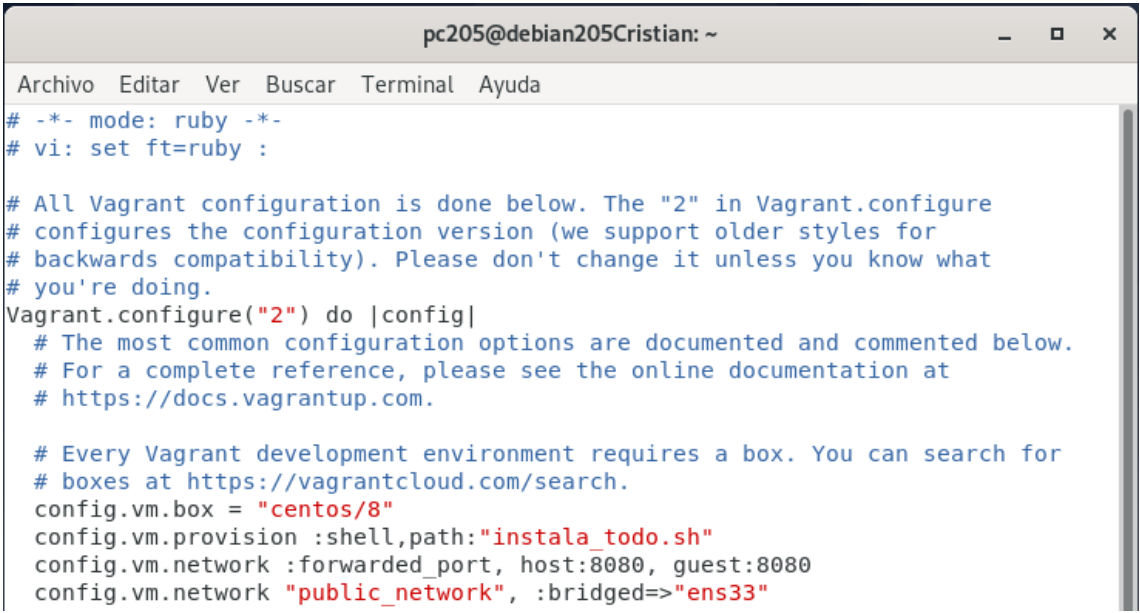
Procedimiento

Creación del fichero Vagrantfile

Primero de todo hay que crear un repositorio para la máquina que queremos levantar.

```
root@debian205Cristian:~# mkdir Opencms
root@debian205Cristian:~# cd Opencms
root@debian205Cristian:~/Opencms# vagrant init
A `Vagrantfile` has been placed in this directory. You are now
ready to `vagrant up` your first virtual environment! Please read
the comments in the Vagrantfile as well as documentation on
`vagrantup.com` for more information on using Vagrant.
```

Luego de esto crea un archivo Vagrantfile, el cual debemos editar:



```
pc205@debian205Cristian: ~
Archivo  Editar  Ver  Buscar  Terminal  Ayuda
# -*- mode: ruby -*-
# vi: set ft=ruby :

# All Vagrant configuration is done below. The "2" in Vagrant.configure
# configures the configuration version (we support older styles for
# backwards compatibility). Please don't change it unless you know what
# you're doing.
Vagrant.configure("2") do |config|
  # The most common configuration options are documented and commented below.
  # For a complete reference, please see the online documentation at
  # https://docs.vagrantup.com.

  # Every Vagrant development environment requires a box. You can search for
  # boxes at https://vagrantcloud.com/search.
  config.vm.box = "centos/8"
  config.vm.provision :shell, path: "instala_todo.sh"
  config.vm.network :forwarded_port, host: 8080, guest: 8080
  config.vm.network "public_network", :bridged=>"ens33"
```

En **config.vm.box** ponemos el nombre de la box que se va a descargar (en caso de que no la tengamos ya).

En **config.vm.provision**, le decimos que cuando la cree, abra la terminal y ejecute el archivo `instala_todo.sh` que crearemos luego.

En **config.vm.network**;

- `:forwarded_port`, le decimos que mapee los puertos del host 8080 con el 8080 de la máquina que se va a crear.
- En `"public_network"`, le decimos que haga un puente con la `ens33` (la interfaz física).

En mi caso, Opencms necesita como mínimo 2GB de ram, para ello he editado la siguiente parte que se encuentra más abajo en este mismo documento.

```

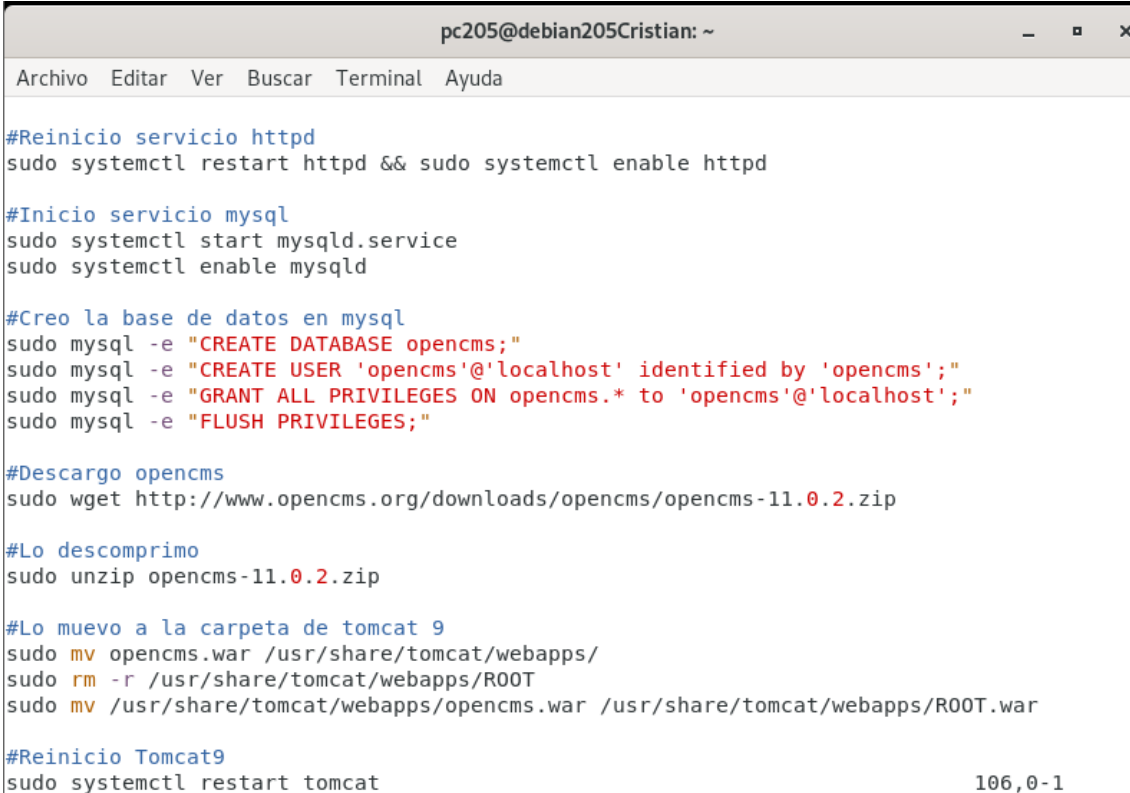
config.vm.provider "virtualbox" do |vb|
  # # Display the VirtualBox GUI when bo
  # vb.gui = true
  #
  # # Customize the amount of memory on
  vb.memory = "2048"
end
#

```

Donde le decimos que quien nos va a dar la máquina virtual será virtualbox y nos ofrezca 2GB de ram.

Creación del archivo ejecutable instala_todo.sh

Guardamos, cerramos y procedemos a crear el archivo **instala_todo.sh** que ejecutará los comandos dentro de la máquina.



```

pc205@debian205Cristian: ~
Archivo Editar Ver Buscar Terminal Ayuda

#Reinicio servicio httpd
sudo systemctl restart httpd && sudo systemctl enable httpd

#Inicio servicio mysql
sudo systemctl start mysqld.service
sudo systemctl enable mysqld

#Creo la base de datos en mysql
sudo mysql -e "CREATE DATABASE opencms;"
sudo mysql -e "CREATE USER 'opencms'@'localhost' identified by 'opencms';"
sudo mysql -e "GRANT ALL PRIVILEGES ON opencms.* to 'opencms'@'localhost';"
sudo mysql -e "FLUSH PRIVILEGES;"

#Descargo opencms
sudo wget http://www.opencms.org/downloads/opencms/opencms-11.0.2.zip

#Lo descomprimo
sudo unzip opencms-11.0.2.zip

#Lo muevo a la carpeta de tomcat 9
sudo mv opencms.war /usr/share/tomcat/webapps/
sudo rm -r /usr/share/tomcat/webapps/ROOT
sudo mv /usr/share/tomcat/webapps/opencms.war /usr/share/tomcat/webapps/ROOT.war

#Reinicio Tomcat9
sudo systemctl restart tomcat

```

En mi caso va todo orientado a instalar lo necesario para la instalación de OpenCMS, el archivo sh lo adjunto a este proyecto.

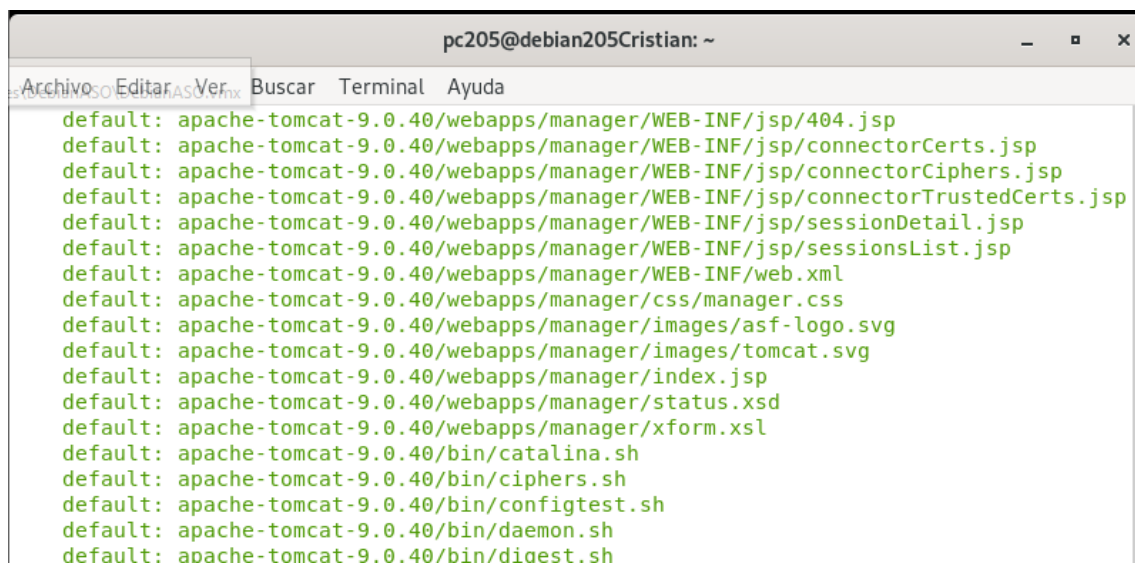
Tras editarlo todo, solo queda su ejecución.

Ejecución de la máquina virtual

Para ello nos situamos dentro de la carpeta donde tenemos el archivo Vagrantfile y ejecutamos Vagrant up. Inmediatamente comenzará un proceso de creación de la máquina virtual.

```
root@debian205Cristian:~/Opencms# vagrant up
Bringing machine 'default' up with 'virtualbox' provider...
==> default: Importing base box 'centos/8'...
==> default: Matching MAC address for NAT networking...
==> default: Checking if box 'centos/8' version '1905.1' is up to date...
==> default: A newer version of the box 'centos/8' for provider 'virtualbox' is
==> default: available! You currently have version '1905.1'. The latest is version
==> default: '2011.0'. Run `vagrant box update` to update.
==> default: Setting the name of the VM: Opencms_default_1607764831775_55274
==> default: Clearing any previously set network interfaces...
==> default: Preparing network interfaces based on configuration...
    default: Adapter 1: nat
    default: Adapter 2: bridged
==> default: Forwarding ports...
    default: 8080 (guest) => 8080 (host) (adapter 1)
    default: 22 (guest) => 2222 (host) (adapter 1)
==> default: Running 'pre-boot' VM customizations...
==> default: Booting VM...
==> default: Waiting for machine to boot. This may take a few minutes...
    default: SSH address: 127.0.0.1:2222
    default: SSH username: vagrant
    default: SSH auth method: private key
```

Aquí podemos comprobar que está instalando dentro de la máquina el paquete de tomcat que indicamos en el archivo instala_todo.sh.



```
pc205@debian205Cristian: ~
Archivo Editar Ver Buscar Terminal Ayuda
default: apache-tomcat-9.0.40/webapps/manager/WEB-INF/jsp/404.jsp
default: apache-tomcat-9.0.40/webapps/manager/WEB-INF/jsp/connectorCerts.jsp
default: apache-tomcat-9.0.40/webapps/manager/WEB-INF/jsp/connectorCiphers.jsp
default: apache-tomcat-9.0.40/webapps/manager/WEB-INF/jsp/connectorTrustedCerts.jsp
default: apache-tomcat-9.0.40/webapps/manager/WEB-INF/jsp/sessionDetail.jsp
default: apache-tomcat-9.0.40/webapps/manager/WEB-INF/jsp/sessionsList.jsp
default: apache-tomcat-9.0.40/webapps/manager/WEB-INF/web.xml
default: apache-tomcat-9.0.40/webapps/manager/css/manager.css
default: apache-tomcat-9.0.40/webapps/manager/images/asf-logo.svg
default: apache-tomcat-9.0.40/webapps/manager/images/tomcat.svg
default: apache-tomcat-9.0.40/webapps/manager/index.jsp
default: apache-tomcat-9.0.40/webapps/manager/status.xsd
default: apache-tomcat-9.0.40/webapps/manager/xform.xsl
default: apache-tomcat-9.0.40/bin/catalina.sh
default: apache-tomcat-9.0.40/bin/ciphers.sh
default: apache-tomcat-9.0.40/bin/configtest.sh
default: apache-tomcat-9.0.40/bin/daemon.sh
default: apache-tomcat-9.0.40/bin/digest.sh
```

En mi archivo instala_todo.sh, lo último que ejecuto es la descarga de Opencms y el movimiento de sus archivos, y como podemos comprobar en la siguiente imagen, termina con eso.

```

pc205@debian205Cristian: ~
Archivo  Editar  Ver  Buscar  Terminal  Ayuda
s
default: 206550K .....
default: .
default: ..... 99% 3.60M 0s
default: 206600K ...
default: .....
default: .. .....
default: ..... 99% 4.12M 0s
default: 206650K .....
default: .....
default: ..... 99% 8.76M 0s
default: 206700K .....
default: .. ..... 99% 2.99M 0s
default: 206750K .....
default: ..... 99% 3.56M 0s
default: 206800K .....
default: .... 100% 9.36M=62s
default:
default: 2020-12-12 09:25:10 (3.28 MB/s) - 'opencms-11.0.2.zip' saved [211799039/21
1799039]
default: Archive:  opencms-11.0.2.zip
default:   inflating: opencms.war
default:
default:   inflating: history.txt
default:   inflating: license.txt
default:   inflating: install.html

```

Ya estaría nuestra máquina preparada para instalar Opencms desde el navegador.

En caso de querer acceder a dicha máquina virtual para modificar algunos archivos, solo tendríamos que ejecutar el siguiente comando.

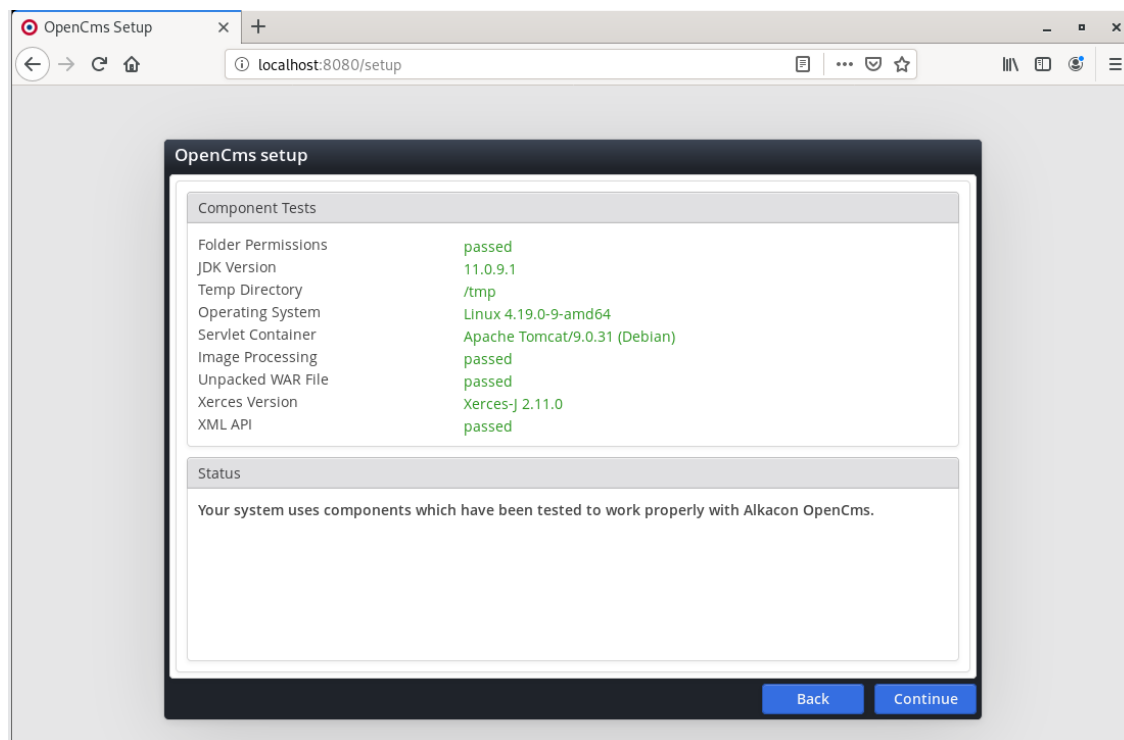
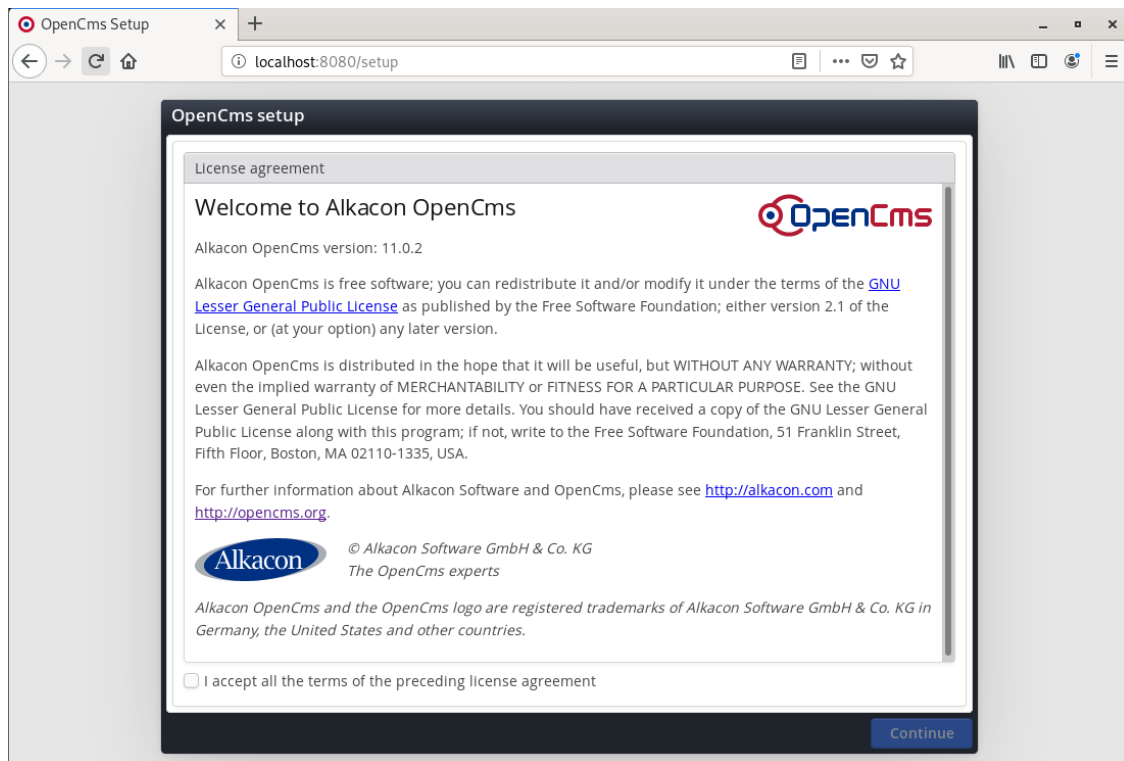
```

root@debian205Cristian:~/0opencms# vagrant ssh
[vagrant@localhost ~]$

```

Y ya estaríamos dentro.

Instalación de OpenCms por el Navegador



The screenshot shows the 'OpenCms setup' window in a web browser. The browser's address bar shows 'localhost:8080/setup'. The setup window has a dark header with the title 'OpenCms setup'. Below the header, there are several sections for configuration:

- Database product:** A dropdown menu showing 'MySQL 8.0, 5.7, 5.6, and 5.5'.
- Setup connection:** Fields for 'User' (opencms) and 'Password' (masked with dots).
- OpenCms connection:** Fields for 'User' (opencms) and 'Password' (masked with dots).
- Database configuration:** Fields for 'Connection string' (jdbc:mysql://localhost:3306/) and 'Database name' (opencms). Below these are two checked checkboxes: 'Create database and tables' and 'Drop database first if it already exists'.

At the bottom right of the setup window are two buttons: 'Back' and 'Continue'.

The screenshot shows the 'OpenCms setup' window in a web browser, displaying the 'Module groups available for installation' section. The browser's address bar shows 'localhost:8080/setup'. The setup window has a dark header with the title 'OpenCms setup'. Below the header, there is a section titled 'Module groups available for installation' with a list of options:

- ☒ OpenCms Workplace - Always required for a full OpenCms installation.
- ☐ Alkacon OpenCms Demo Template - The OpenCms demonstration template. Install this for a good demonstration of the OpenCms functionality.
- ☐ Legacy - Support for legacy XML pages or workplace tools written for OpenCms 9 or older. Install this only if you know you need it.

At the bottom right of the setup window are two buttons: 'Back' and 'Continue'.

