**ASSIGNMENT: SCRIPTING /CICD/ JENKINS**

For this assignment I decided to use Jenkins.

The script to install Jenkins and its dependencies was made in bash and is shown below:

**Texto

Descripción generada automáticamente**

In lines 5 to 16 the script looks if Java is installed, this is required to run Jenkins in the VM, if it’s not it asks to the user if he wants to install it.

In lines 19 to 33 the script tries to install Jenkins, if the packages are not found it asks to the user if he wants to install the dependencies.

In lines 37 to 44 it verifies that node and npm are installed, if they are not, it installs them. This is necessary to build and run the nodejs app.

Finally, in lines 50-51 it searches for the initial Jenkins password and print it at the console.

Next images are examples of the output when running the script and the dependencies are not in the vm.

Texto

Descripción generada automáticamente

Texto

Descripción generada automáticamente

Now, Jenkins is running and listening to port 8080, this is stated in the Jenkins.xml. Guest port (vm) is forwarded to host port, then I’m able to open Jenkins GUI in the browser using http:localhost:8080.

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

Using the initial password, creating an administrator user, and downloading suggested plugins, Jenkins is ready to build pipelines.

Texto

Descripción generada automáticamente

In the Jenkinsfile 2 stages are created, one to take the last version of the node app project repository and another to build and run it.

After building the pipelines, the “hello node” nodejs is listening to port 3000:

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

This is the status of the pipeline, where the build stage is in continue process while the “run start” is not in a detached mode. To start it in a detached mode other dependency is needed, I’ll try to fix that next days :)

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente