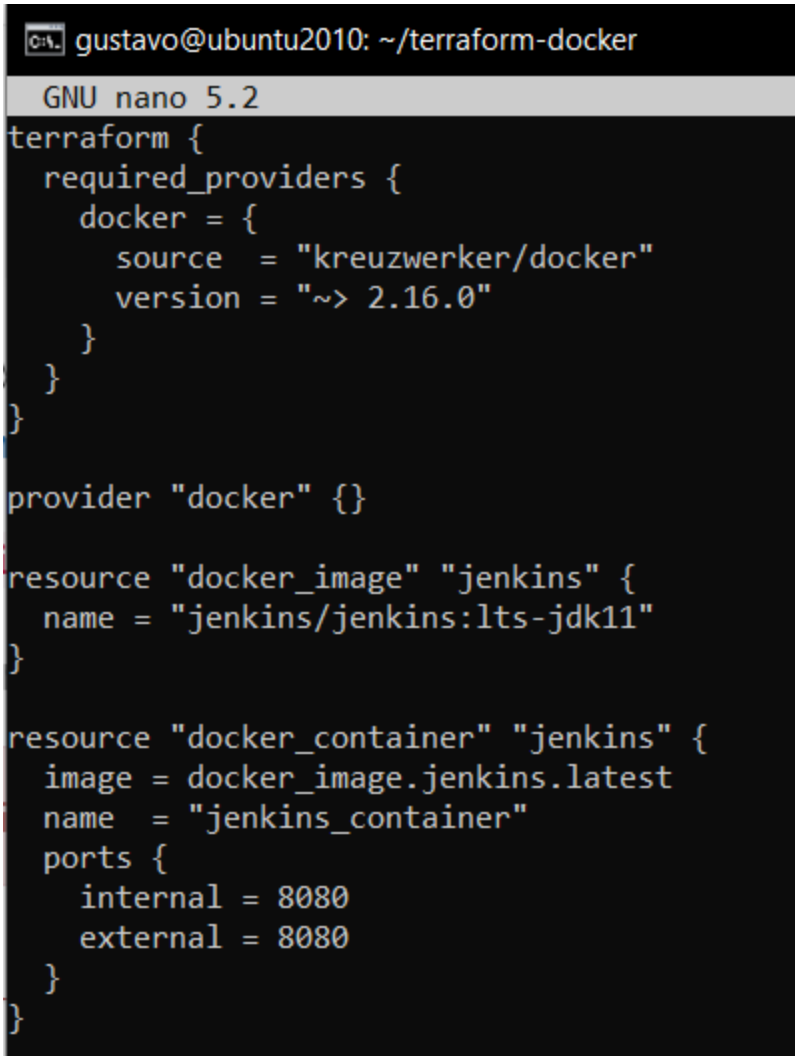
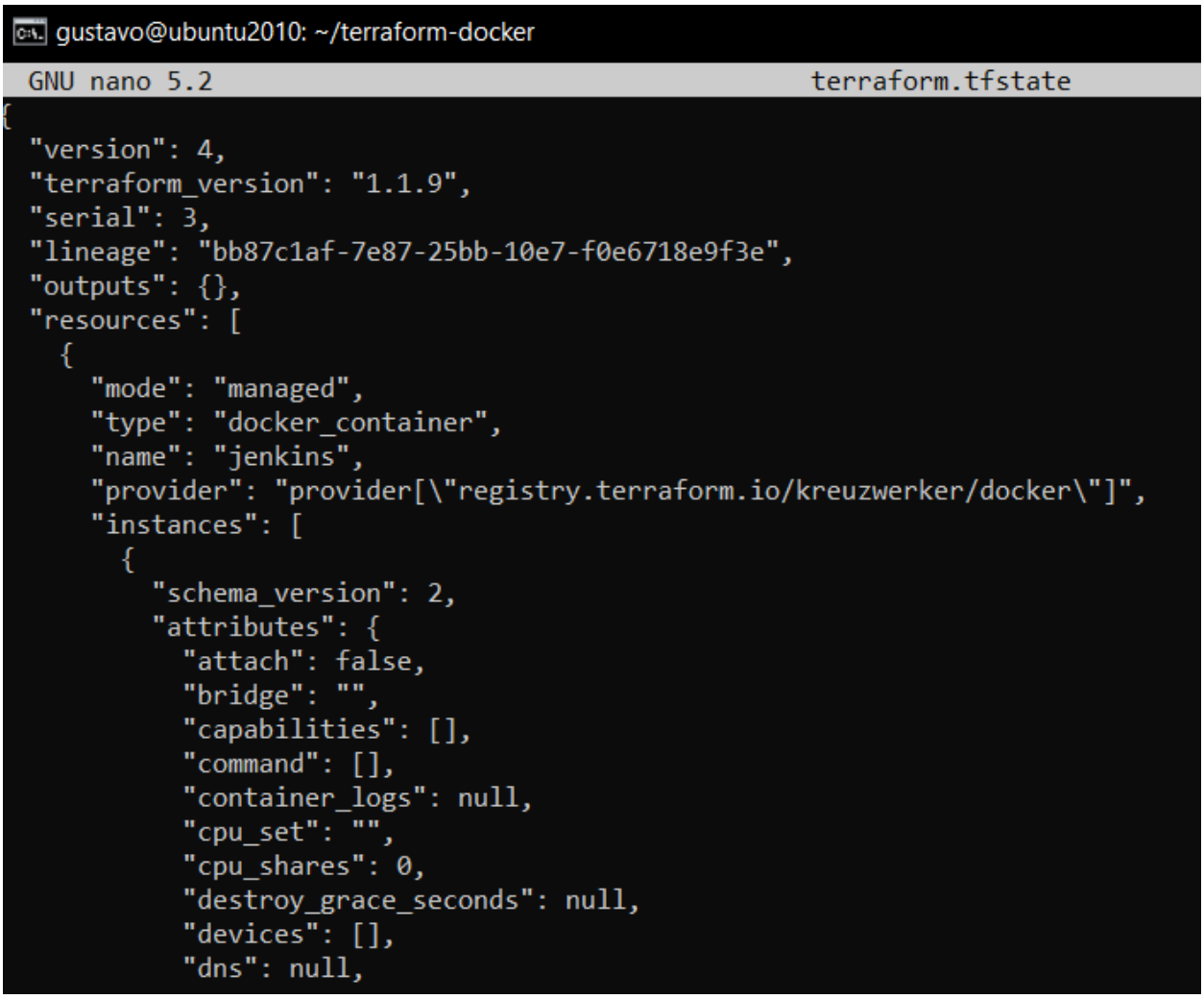
Terraform Docker Jenkins

The main.tf file contains the declarative syntax written in HCL to create a docker container and run a jenkins image inside of it before exposing the 8080 port of the container to the 8080 port of the guest OS (Ubuntu VM, ***IP: 192.168.0.24***).

main.tf File



terraform.tfstate file

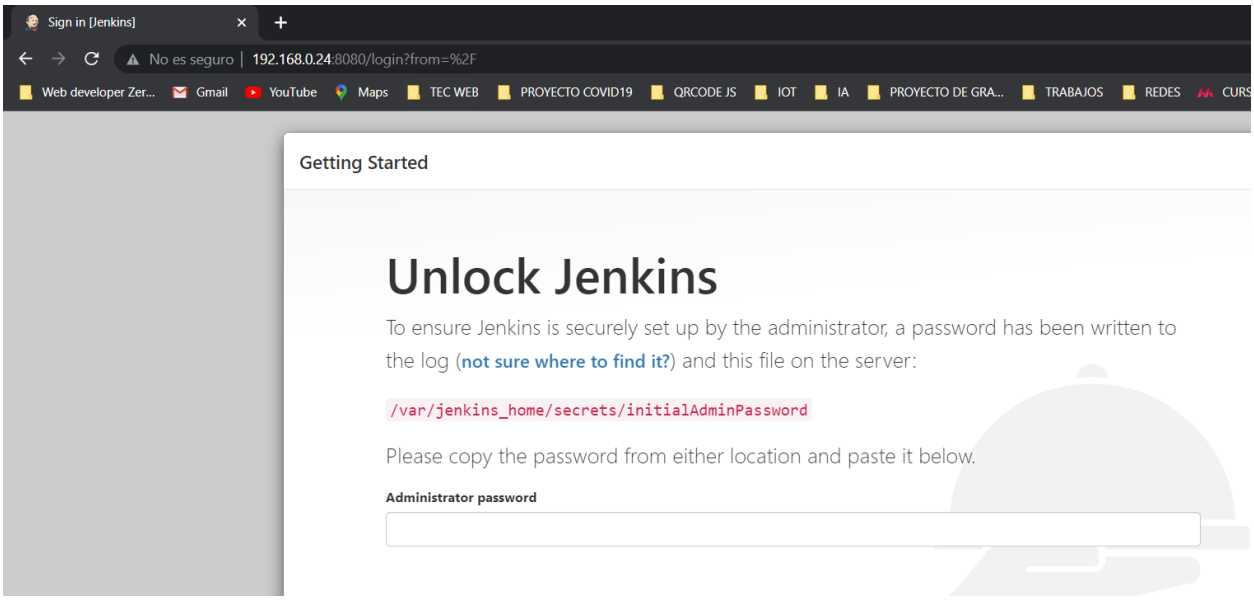

gustavo@ubuntu2010: ~/terraform-docker
GNU nano 5.2 terraform.tfstate
{
"version": 4,
"terraform_version": "1.1.9",
"serial": 3,
"lineage": "bb87c1af-7e87-25bb-10e7-f0e6718e9f3e",
"outputs": {},
"resources": [
{
"mode": "managed",
"type": "docker_container",
"name": "jenkins",
"provider": "provider[\"registry.terraform.io/kreuzwerker/docker\"]",
"instances": [
{
"schema_version": 2,
"attributes": {
"attach": false,
"bridge": "",
"capabilities": [],
"command": [],
"container_logs": null,
"cpu_set": "",
"cpu_shares": 0,
"destroy_grace_seconds": null,
"devices": [],
"dns": null,

Commands

```
gustavo@ubuntu2010: ~/terraform-docker
gustavo@ubuntu2010:~/terraform-docker$ terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of kreuzwerker/docker from the dependency lock file
- Using previously-installed kreuzwerker/docker v2.16.0

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
gustavo@ubuntu2010:~/terraform-docker$ terraform fmt
gustavo@ubuntu2010:~/terraform-docker$ terraform validate
Success! The configuration is valid.

gustavo@ubuntu2010:~/terraform-docker$
```

>terraform apply

```
gustavo@ubuntu2010: ~/terraform-docker
        + protocol = "tcp"
      }
    }

  # docker_image.jenkins will be created
  + resource "docker_image" "jenkins" {
      + id          = (known after apply)
      + latest      = (known after apply)
      + name        = "jenkins/jenkins:lts-jdk11"
      + output      = (known after apply)
      + repo_digest = (known after apply)
    }

Plan: 2 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

docker_image.jenkins: Creating...
docker_image.jenkins: Creation complete after 1s [id=sha256:fd576e09d1557d660d171a10e931c7030a20dd9bc71e1c97e611f8a3181027b6jenkins/jenkins:lts-jdk11]
docker_container.jenkins: Creating...
docker_container.jenkins: Creation complete after 2s [id=03a713abc10319567d6c477c8ffa35c8276edc624c967b482a4b5279b9190b71]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.
gustavo@ubuntu2010:~/terraform-docker$
```



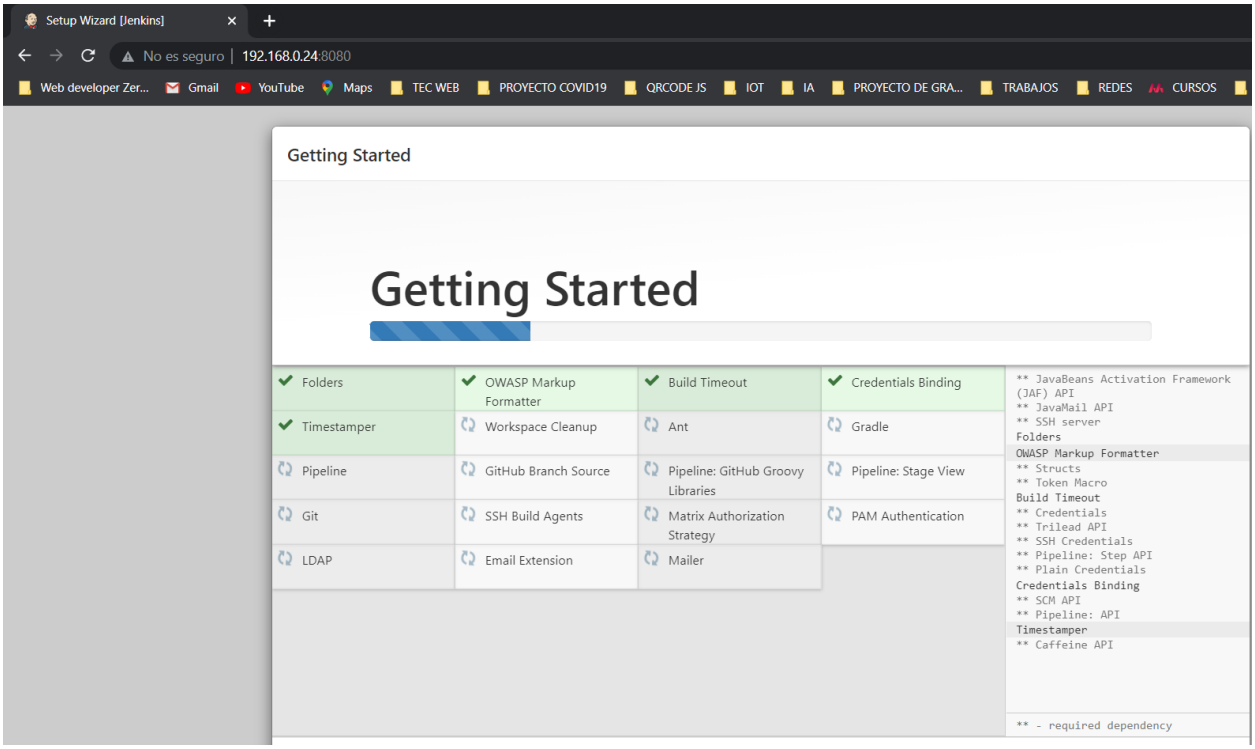
>sudo docker ps

```
gustavo@ubuntu2010:~/terraform-docker$ sudo docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED          STATUS          PORTS
    NAMES
03a713abc103   fd576e09d155   "/sbin/tini -- /usr/…"   18 minutes ago   Up 17 minutes   0.0.0.0:8080->8080/tcp, 50000/tc
p   jenkins_container
```

>sudo docker logs 03a713abc103

```
gustavo@ubuntu2010: ~/terraform-docker
2022-04-22 13:07:06.137+0000 [id=31]    INFO    jenkins.install.SetupWizard#init:

*************************************************************
*************************************************************
*************************************************************

Jenkins initial setup is required. An admin user has been created and a password generated.
Please use the following password to proceed to installation:

09dd04d31be746fdb7cdd3b901417ec9

This may also be found at: /var/jenkins_home/secrets/initialAdminPassword

*************************************************************
*************************************************************
*************************************************************
```

After using the jenkins key:


Setup Wizard [Jenkins]
No es seguro | 192.168.0.24:8080
Web developer Zer...
Gmail
YouTube
Maps
TEC WEB
PROYECTO COVID19
QRCODE JS
IOT
IA
PROYECTO DE GRA...
TRABAJOS
REDES
CURSOS
Getting Started
Getting Started
Folders
OWASP Markup Formatter
Build Timeout
Credentials Binding
Timestamper
Workspace Cleanup
Ant
Gradle
Pipeline
GitHub Branch Source
Pipeline: GitHub Groovy Libraries
Pipeline: Stage View
Git
SSH Build Agents
Matrix Authorization Strategy
PAM Authentication
LDAP
Email Extension
Mailer
** JavaBeans Activation Framework (JAF) API
** JavaMail API
** SSH server
Folders
OWASP Markup Formatter
** Structs
** Token Macro
Build Timeout
** Credentials
** Trilead API
** SSH Credentials
** Pipeline: Step API
** Plain Credentials
Credentials Binding
** SCM API
** Pipeline: API
Timestamper
** Caffeine API
** - required dependency