


Provision war file Jenkins using terraform cloud

✓ Applied **Triggered via UI**

 kingorijosphat triggered a **run** from UI a few seconds ago

✓ **Plan finished** 3 minutes ago

✓ **Apply finished** a few seconds ago

Started a few seconds ago

+ 22 created

Get the output generated at the end of the terraform life cycle.

✓ **Outputs** 1 total

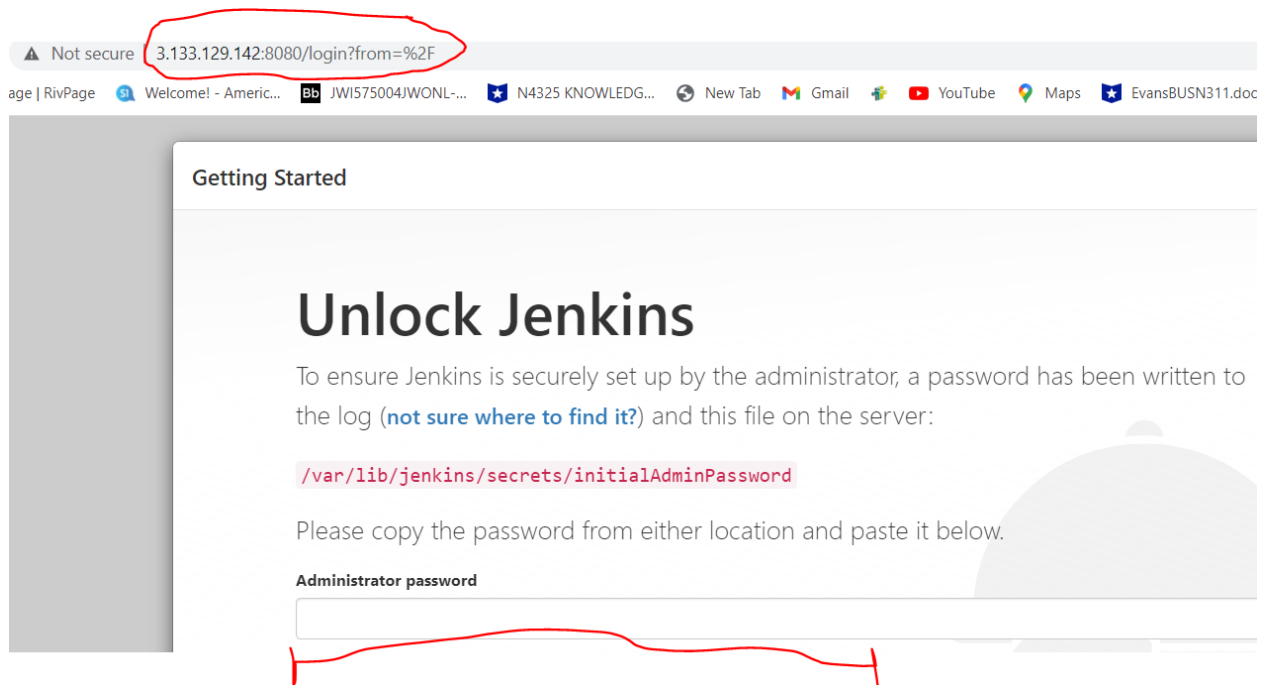
jenkins_ip_address :

"3.133.129.142"

State versions created:

[CloudAfrica/Provisioning-Regular-Jenkins-Using-Terraform#sv-tz75chyV9csgKdFR](#) (Mar 22, 2022 15:05:16 pm)

Paste the jenkins_ip_address on browser

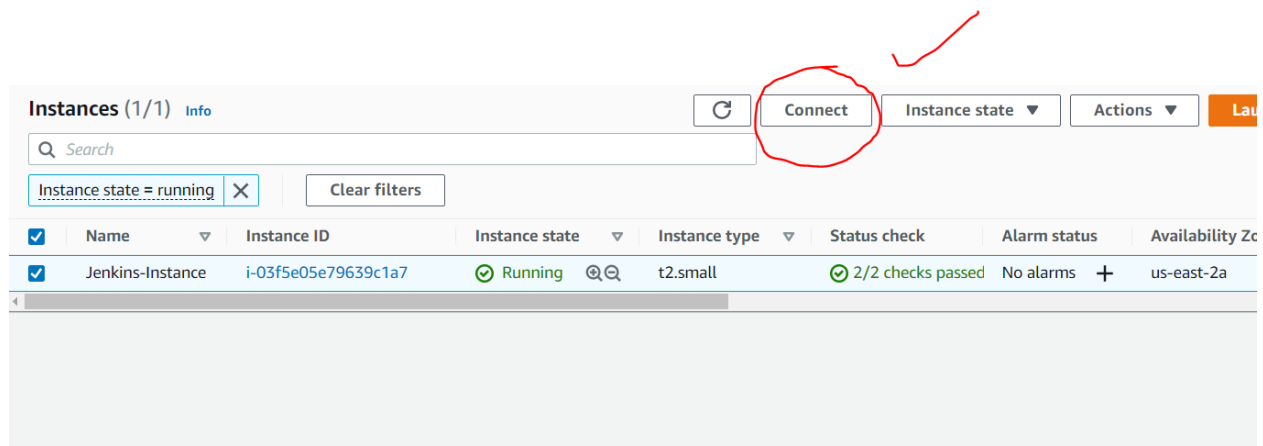


We need to go and get the admin password for the Jenkins from the Jenkins console

How do we do this

1. We need to ssh to the jenkins instance on aws

Go to aws console and locate your jenkins instance



2. Locate connect and click on it

Connect to instance [Info](#)

Connect to your instance i-03f5e05e79639c1a7 (Jenkins-Instance) using any of these options

EC2 Instance Connect

Session Manager

SSH client

EC2 Serial Console


Instance ID

 i-03f5e05e79639c1a7 (Jenkins-Instance)



1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is cake.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.


 `chmod 400 cake.pem` ✓ 

4. Connect to your instance using its Public DNS:

 `ec2-3-133-129-142.us-east-2.compute.amazonaws.com`

Example:

 `ssh -i "cake.pem" ec2-user@ec2-3-133-129-142.us-east-2.compute.amazonaws.com` ✓ 

 **Note:** In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

Run the commands in the Jenkins terminal

```
Forex@LAPTOP-4C614INS MINGW64 ~/OneDrive/Desktop/Regular _ jenkins-Terraform (master)
$ chmod 400 cake.pem

Forex@LAPTOP-4C614INS MINGW64 ~/OneDrive/Desktop/Regular _ jenkins-Terraform (master)
$ ssh -i "cake.pem" ec2-user@ec2-3-133-129-142.us-east-2.compute.
Last login: Tue Mar 22 20:02:48 2022 from 204.108.237.194

  _ | _ | _ )
  _ | ( _ /   Amazon Linux 2 AMI
  _ | \ _ | _ |

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-1-132 ~]$
```

Now you are inside Jenkins's terminal

We need to carry out the following commands to configure Jenkins's username and obtain the administrator password for the Jenkins console

1. Check whether your environment is ready

Sudo docker -v

Sudo terraform -v

Sudo ansible --version

Sudo aws --version

Sudo java --version

```
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-1-132 ~]$ sudo docker -v
Docker version 20.10.7, build f0df350 ✓
[ec2-user@ip-10-0-1-132 ~]$ sudo terraform -v
Terraform v1.1.2 ✓
on linux_amd64

Your version of Terraform is out of date! The latest version
is 1.1.7. You can update by downloading from https://www.terraform.io/downloads.html
```

2. Check the users in the system

```
tcpdump:x:72:72:::/sbin/nologin
ec2-user:x:1000:1000:EC2 Default User:/home/ec2-user:/bin/bash
nginx:x:995:993:Nginx web server:/var/lib/nginx:/sbin/nologin
jenkins:x:994:990:Jenkins Automation Server:/var/lib/jenkins:/bin/false
```

Jenkins come with bin/false shell

We need to change this to /bin/bash

3. Sudo usermod --shell /bin/bash jenkins

```
[ec2-user@ip-10-0-1-132 ~]$ sudo usermod --shell /bin/bash jenkins
```

4. Rerun the sudo cat /etc/passwd

```
chrony:x:996:994::/var/lib/chrony:/sbin/nologin
tcpdump:x:72:72:::/sbin/nologin
ec2-user:x:1000:1000:EC2 Default User:/home/ec2-user:/bin/bash
nginx:x:995:993:Nginx web server:/var/lib/nginx:/sbin/nologin
jenkins:x:994:990:Jenkins Automation Server:/var/lib/jenkins:/bin/bash
```

Now jenkins has a /bin/bash shell

5. Next, we need to add jenkins user to the sudoers file so that it can have the right to run commands as administrator.

Run the command: `sudo vi /etc/sudoers`

Go to the end of the file and add the following information

```
## Allows members of the users
# %users    localhost=/sbin/shutd

## Read drop-in files from /etc
#include::/etc/sudoers.d

jenkins ALL=(ALL) PASSWD: ALL
```

Save: `wq!`

6. Now, let add jenkins to the docker group.

Do some research and find out why we need to add jenkins to docker group

Command: `sudo usermod -aG docker jenkins` or `sudo usermod -a -G docker jenkins`

```
[ec2-user@ip-10-0-1-132 ~]$ sudo usermod -a -G docker jenkins
[ec2-user@ip-10-0-1-132 ~]$
```

7. Now we can switch to jenkins user

Run the command: `sudo su - jenkins`

```
[ec2-user@ip-10-0-1-132 ~]$ sudo su - jenkins
-bash-4.2$
-bash-4.2$
-bash-4.2$
-bash-4.2$
-bash-4.2$
```

Now you can run commands without using sudo

Let us try

Run: docker -v

```
-bash-4.2$ docker -v ✓
Docker version 20.10.7, build f0df350
-bash-4.2$ docker images ✓
REPOSITORY    TAG       IMAGE ID   CREATED   SIZE
-bash-4.2$ docker pa ✗
docker: 'pa' is not a docker command.
See 'docker --help'
-bash-4.2$ docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES
-bash-4.2$
```

We will continue from here