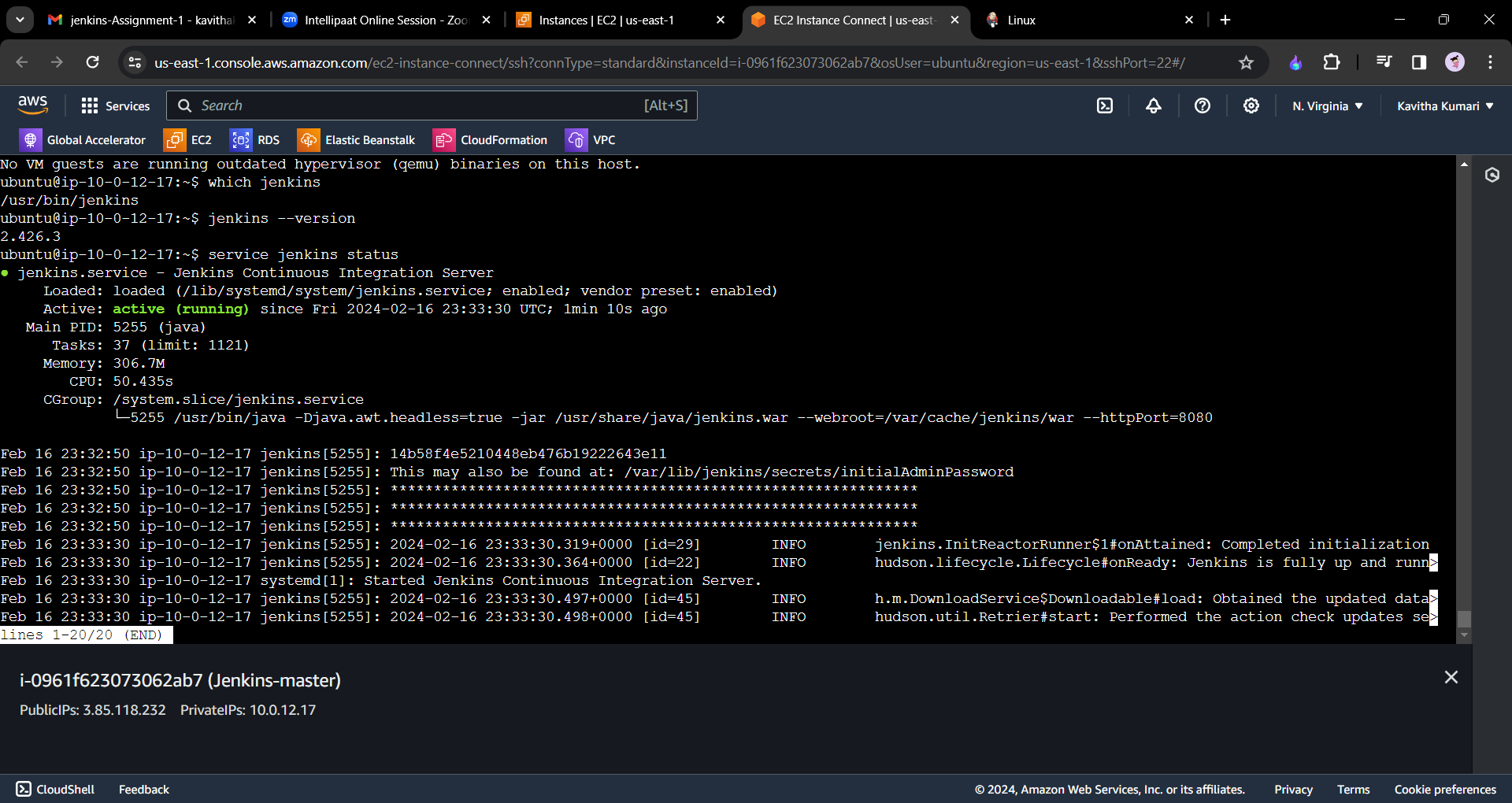
Tasks To Be Performed:

1. Trigger a pipeline using Git when push on develop branch

2. Pipeline should pull Git content to a folder

**To install jenkins we need to install java**

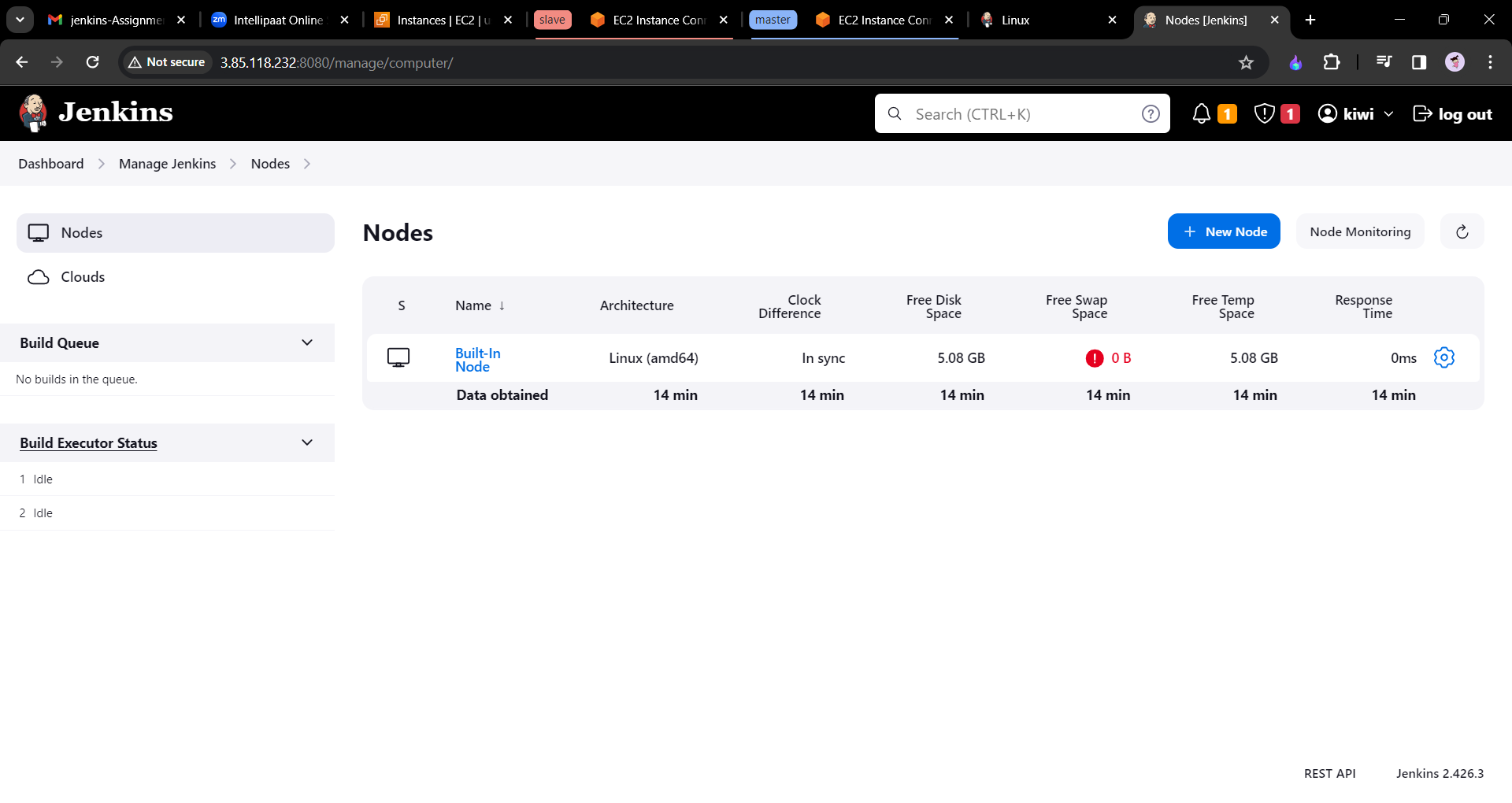
* **sudo apt install openjdk-11-jdk**
* **check the version of java “java –version”**
* **We need to add jenkins repository and source list and then install jenkins.**
* **which java** (to check the path of the installation of java)
* [**https://www.jenkins.io/doc/book/installing/linux/#debianubuntu**](https://www.jenkins.io/doc/book/installing/linux/#debianubuntu) **follow the commands of this link. We can create an .sh file where we can save all the commands and run that script.**
* **sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \**
* **https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key**
* **echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \**
* **https://pkg.jenkins.io/debian-stable binary/ | sudo tee \**
* **/etc/apt/sources.list.d/jenkins.list > /dev/null**
* **sudo apt-get update**
* **sudo apt-get install jenkins**
* **sudo nano script.sh and bash script.sh**
* **check the status of the jenkis with the command sudo jenkins status**

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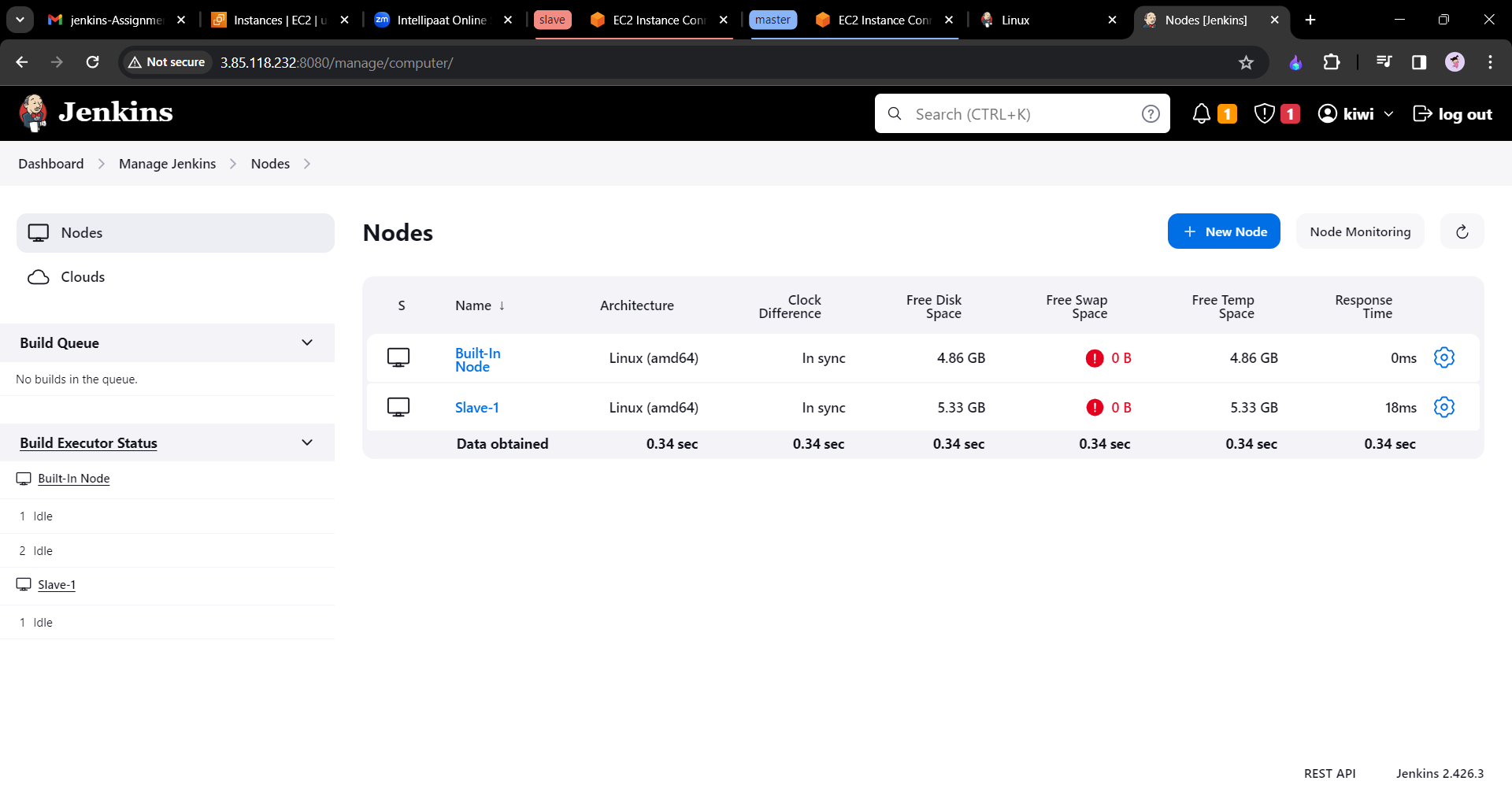
**Now we will create another instance with the name jenkins-slave and install java in it.**

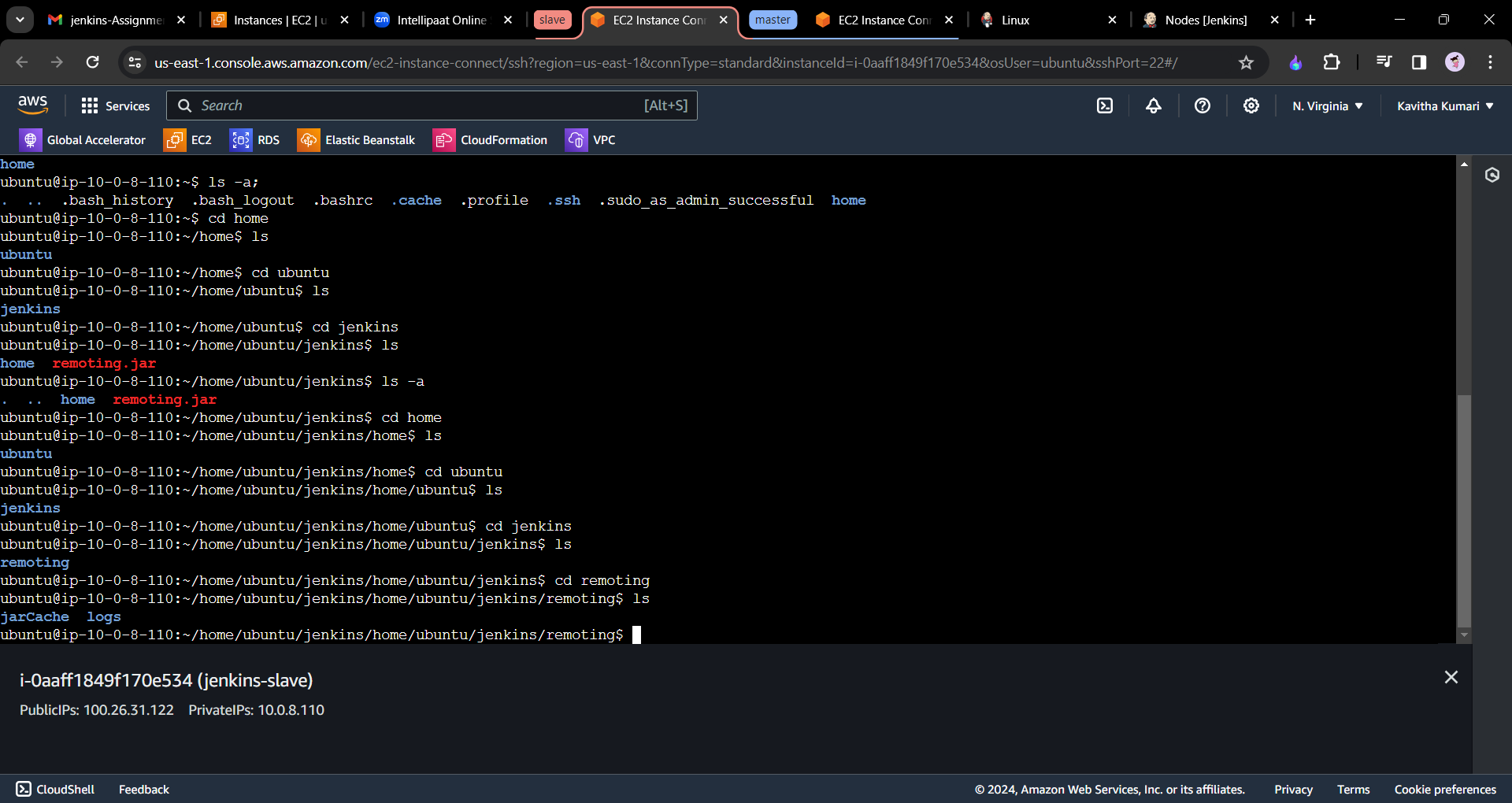
**On the port <master-IP>:8080 we will add the node.**

* **To add a node goto manage jenkins >> nodes**

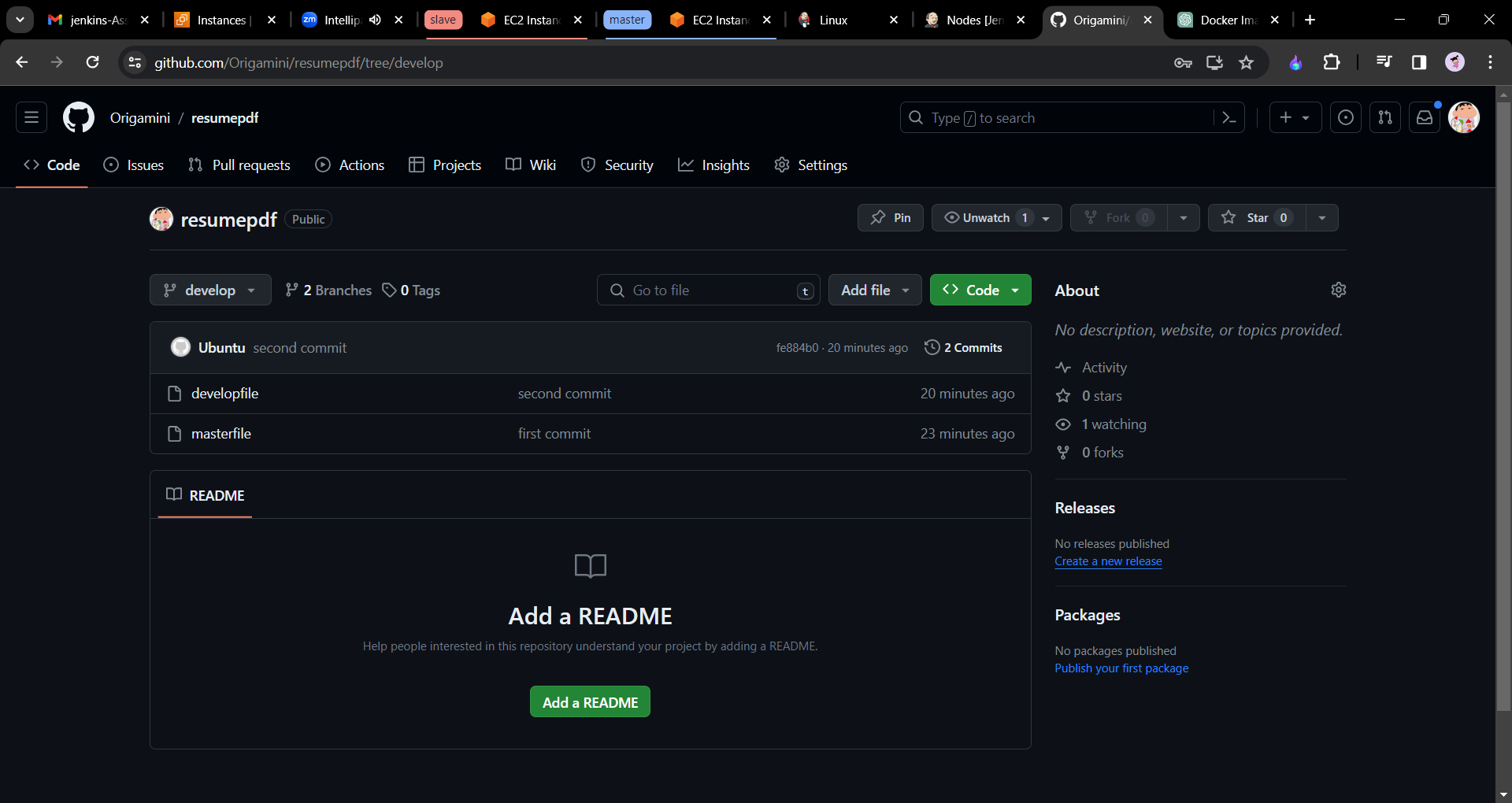
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* **We can see that now there is only one node present. To add the new node we need to click on new node and give the name for the node, click on permanent agent. Further in the remote root directory mention home/ubuntu/jenkins/**
* **In the launch method click on launch via ssh. Add the private IP of the slave1 machine. Add credential as ubuntu.and paster the key by clicking on add. Also in the Host Key Verification Strategy** select non verifying verification strategy. Then click on save

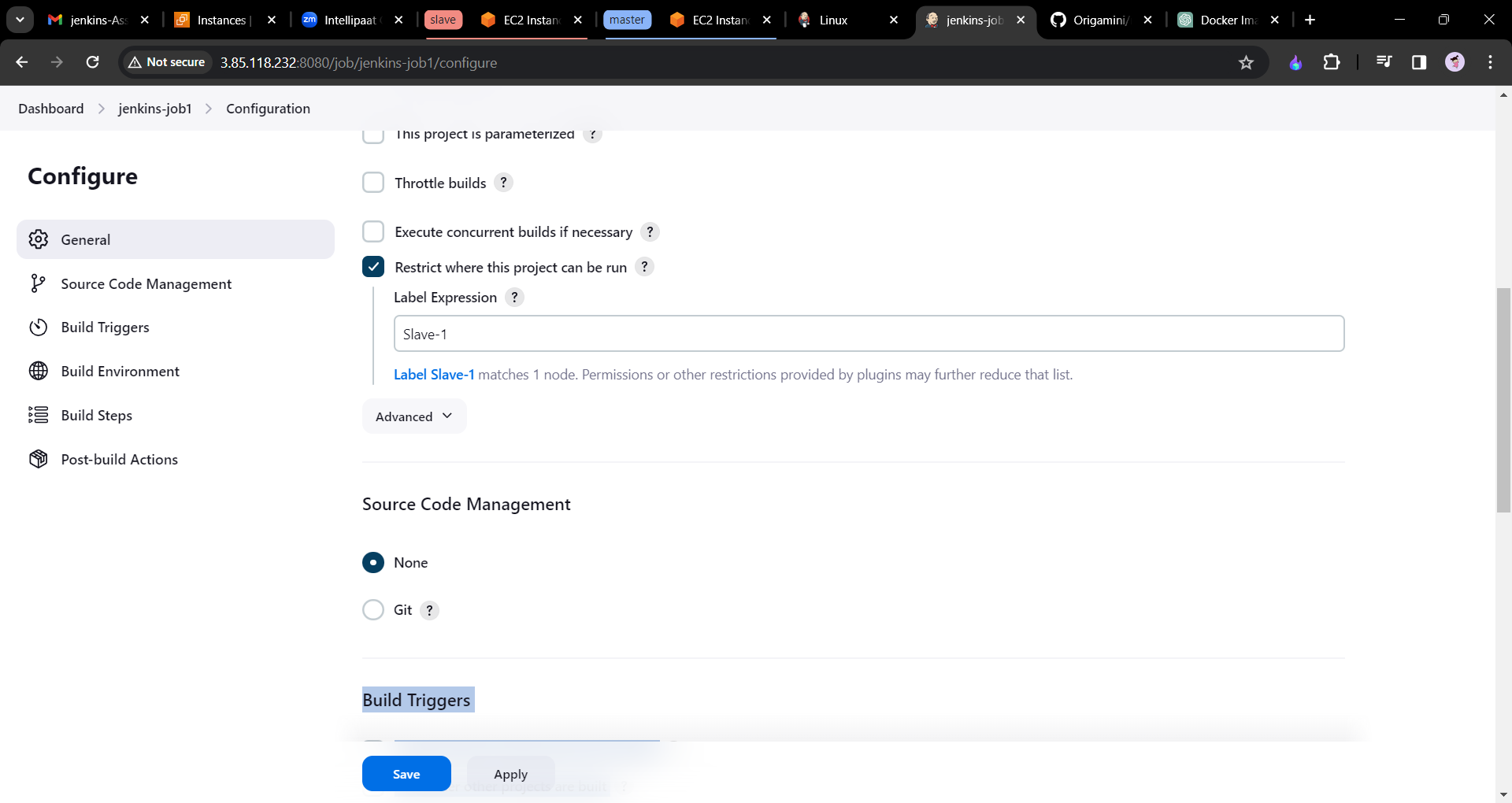
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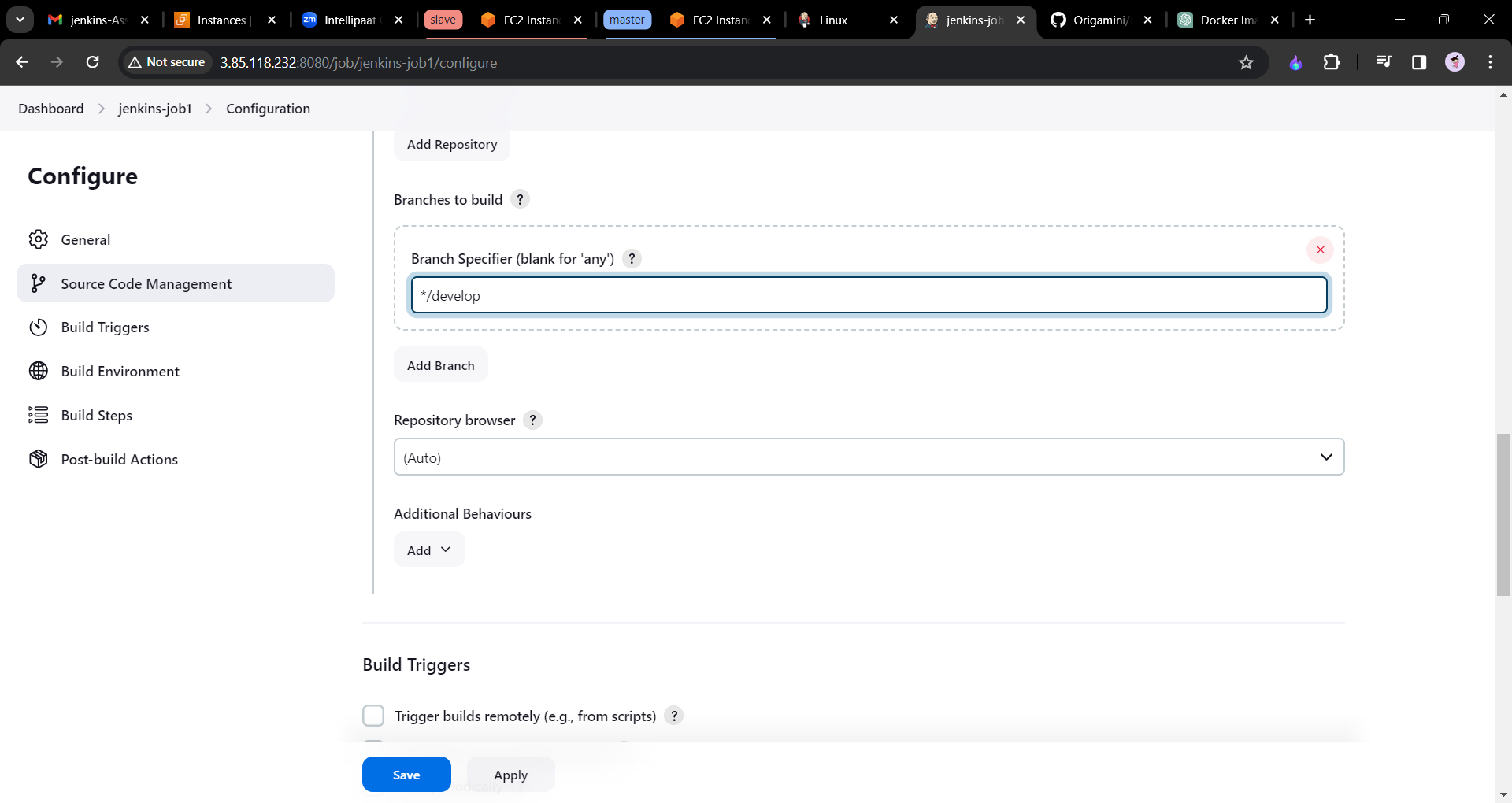
* **Let us create the directly on the master machine so that we can push changes to the github directory.**
* **git init //it will initialize the empty git repository.**
* **touch masterfile //create an empty file.**
* **git add masterfile //stages the file**
* **git commit -m “ first commit ”**
* **we need to create the new branch called develop branch. Therefore run the command git branch develop. To go to the develop branch write git checkout develop. Create a new file called developfile and stage the file and also commit the file.**
* **Goto to the github and create the repository.**
* **Come back to the master machine and add that local repository.**
* git remote add origin https://github.com/Origamini/resumepdf.git
* **presonal access token : ghp\_bMiMhh1vvuhTiJw5OnpsNUaefiAnym0jlCVl //expired**
* **now to push both the file on both the branches we use the command git push –all**
* **we need to provide the username and the personal access token password.**

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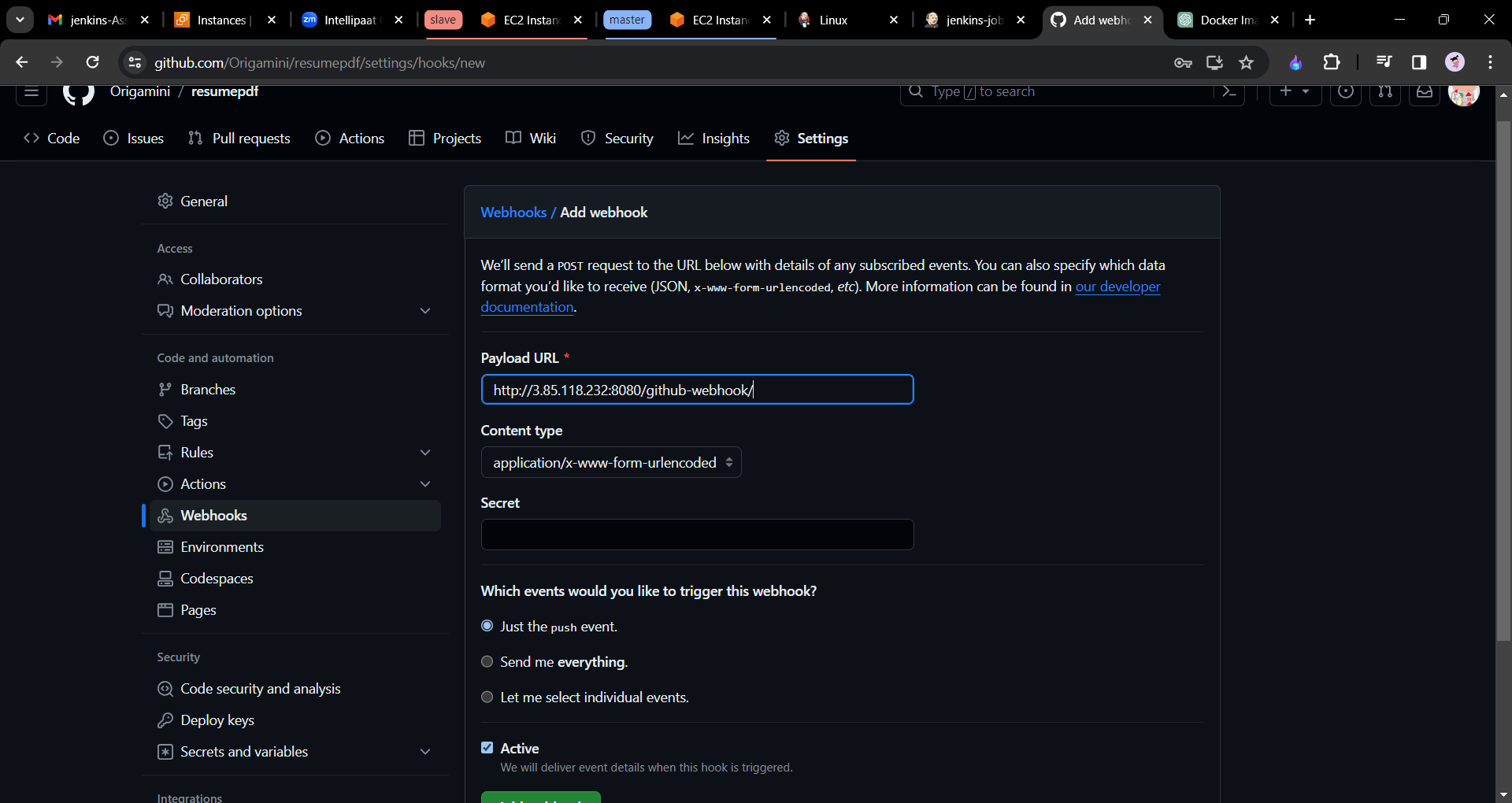
* **Now we have both the file on develop branch and the masterfile on master branch.**
* **Now in jenkis port we need to create the job. Click on new item give the name for the job click on freestyle and click on okay. Also in the restrick where this project can be run add the node name. In the branch specifire mention develop branch**

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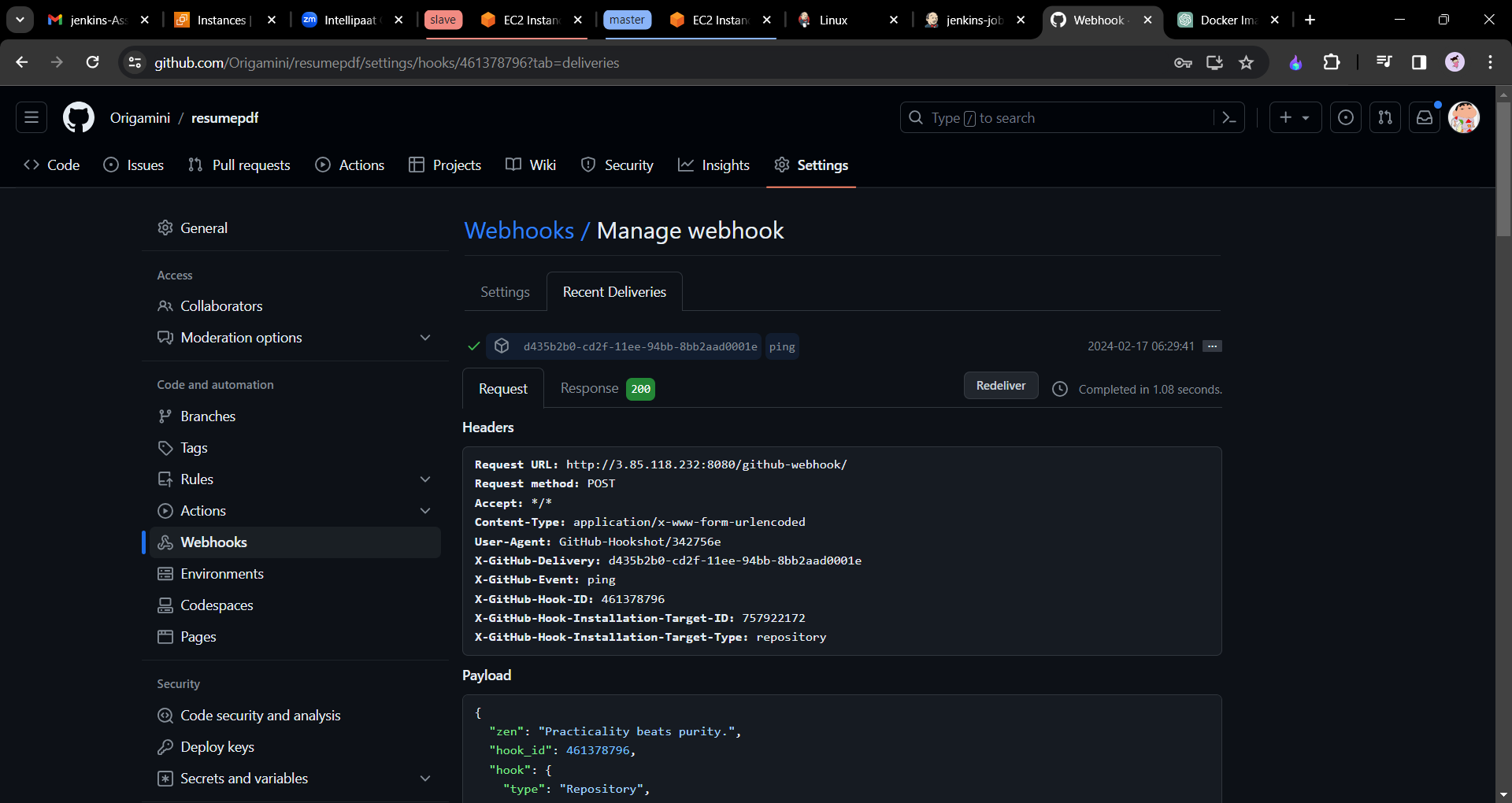
* **In the source code management paste the local git repository url**

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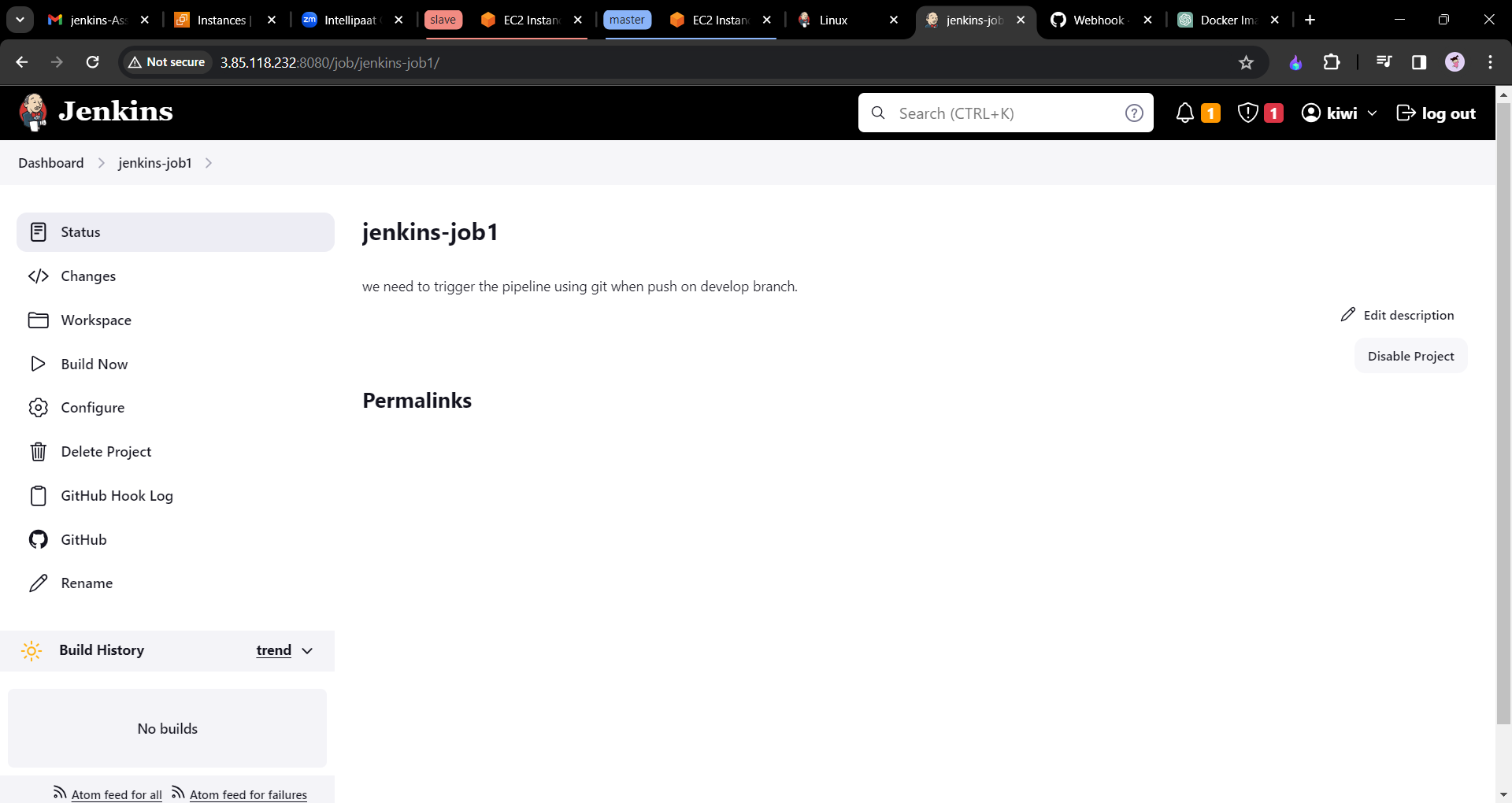
* **In build triggers select GitHub hook trigger for GITScm polling**
* **In the git hub account come to the settings and clilck on webhooks click on add webhooks and in the playload url write the following url**

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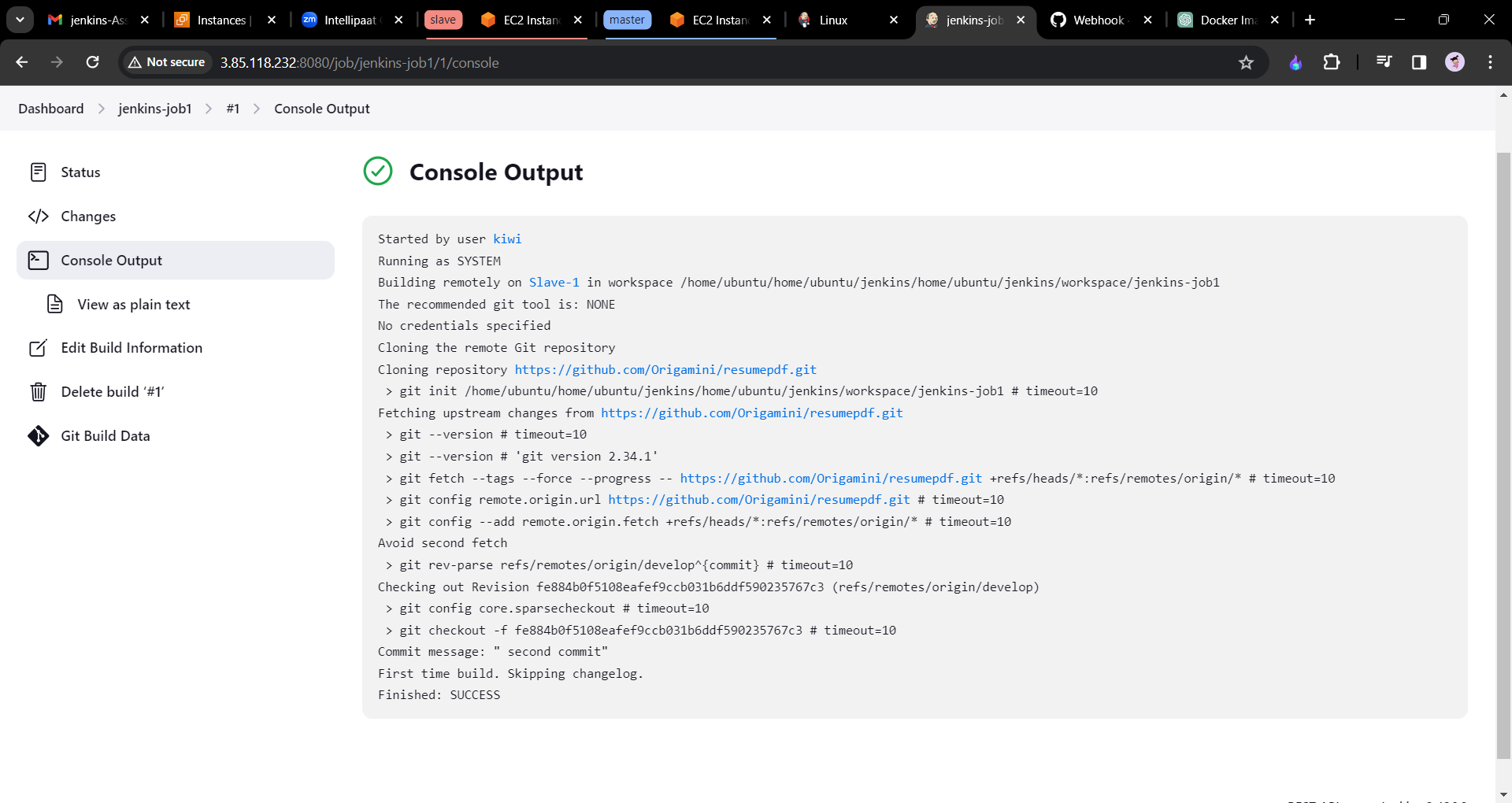
* **Click on add webhook**

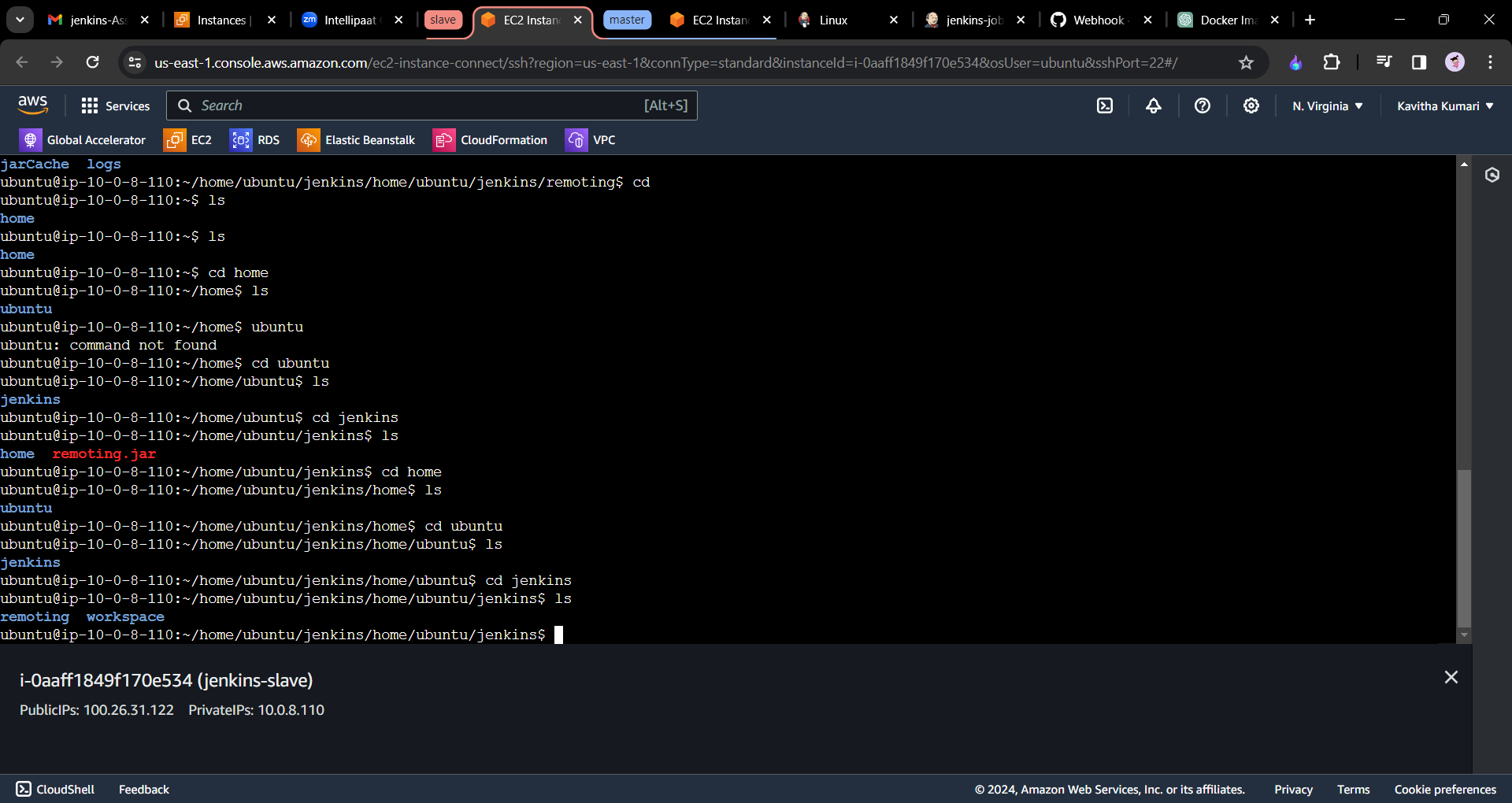
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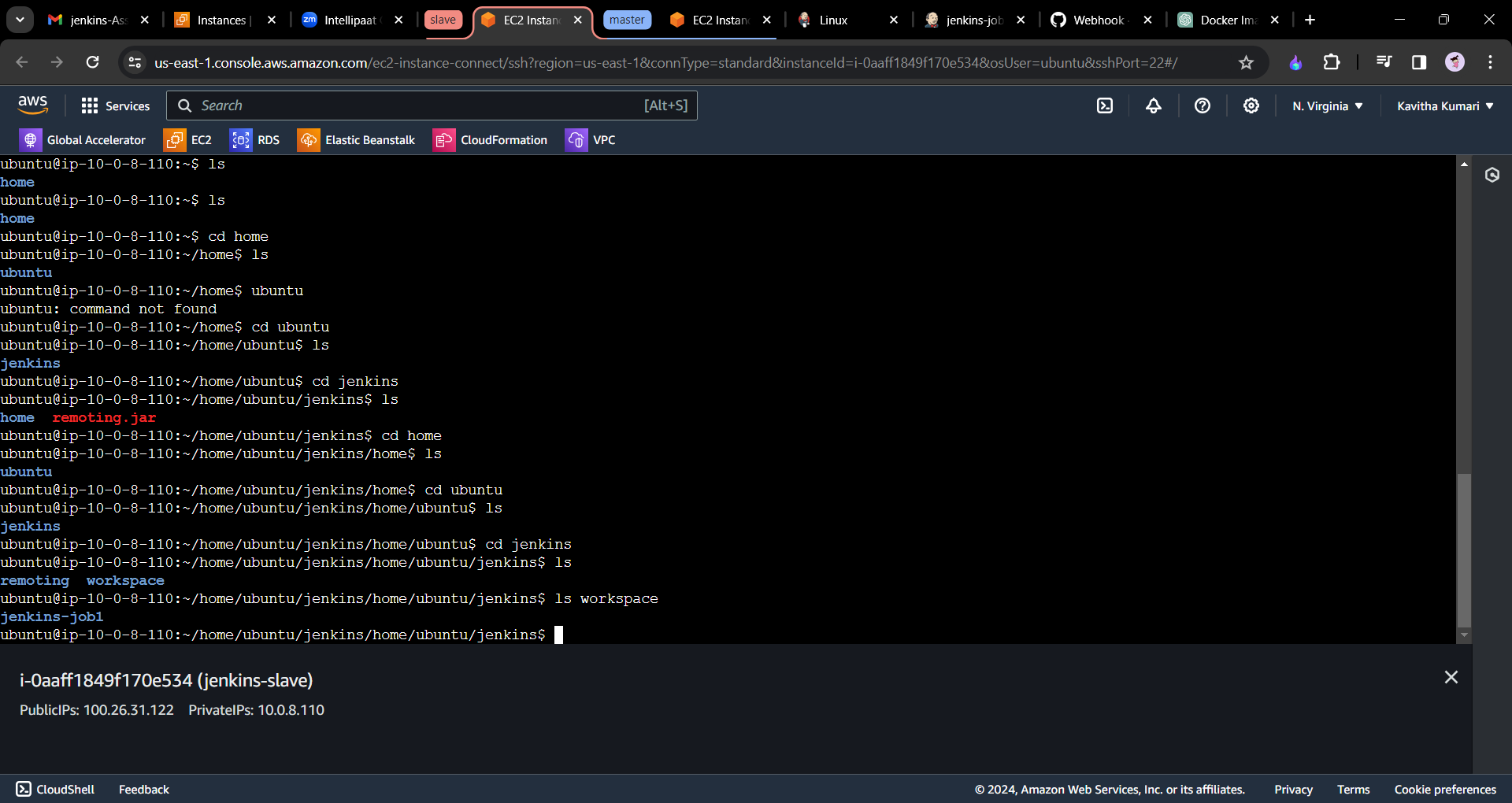
* **Now come to the configurations and click on save.**

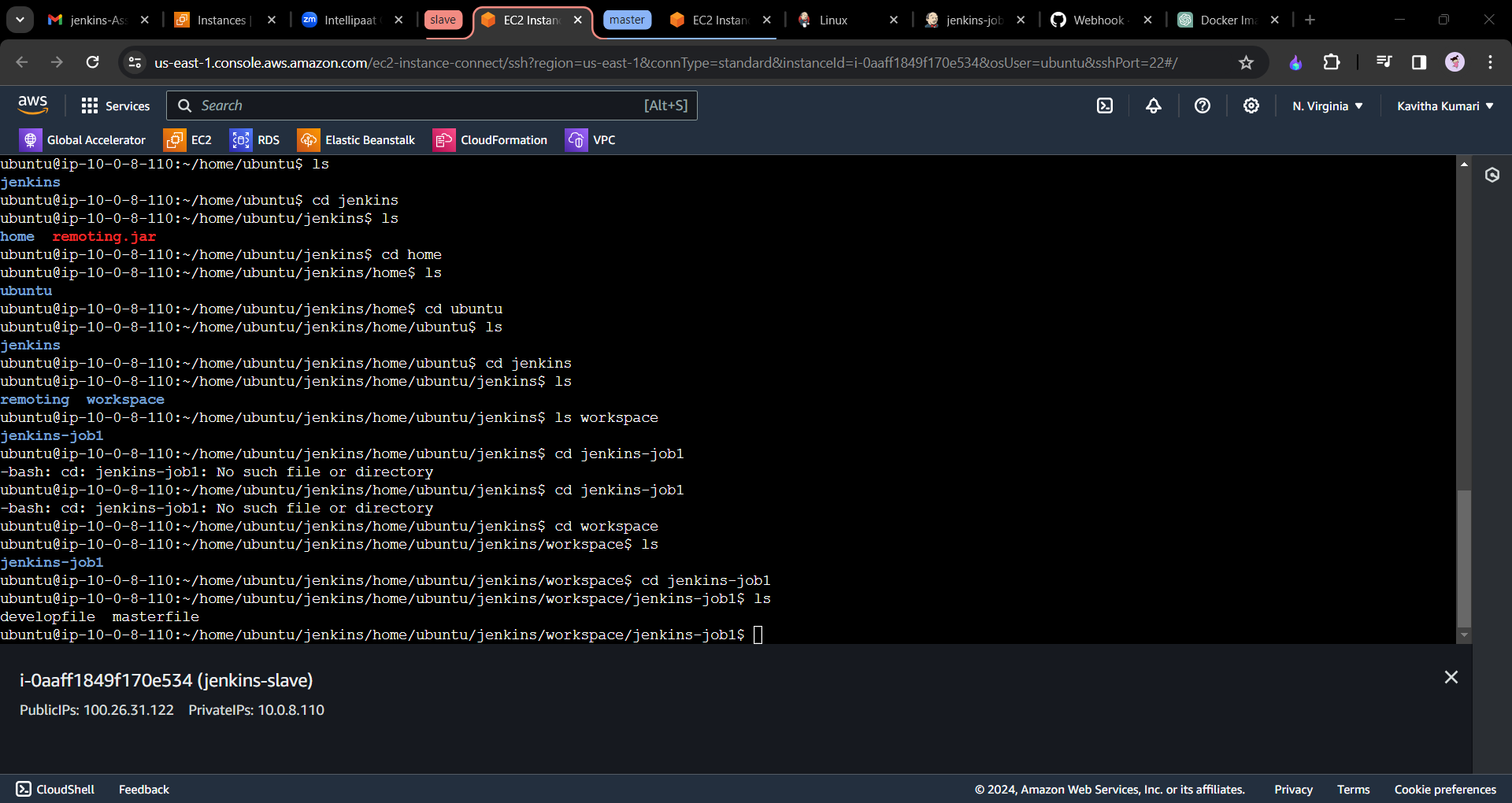
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* **Click on build now.**

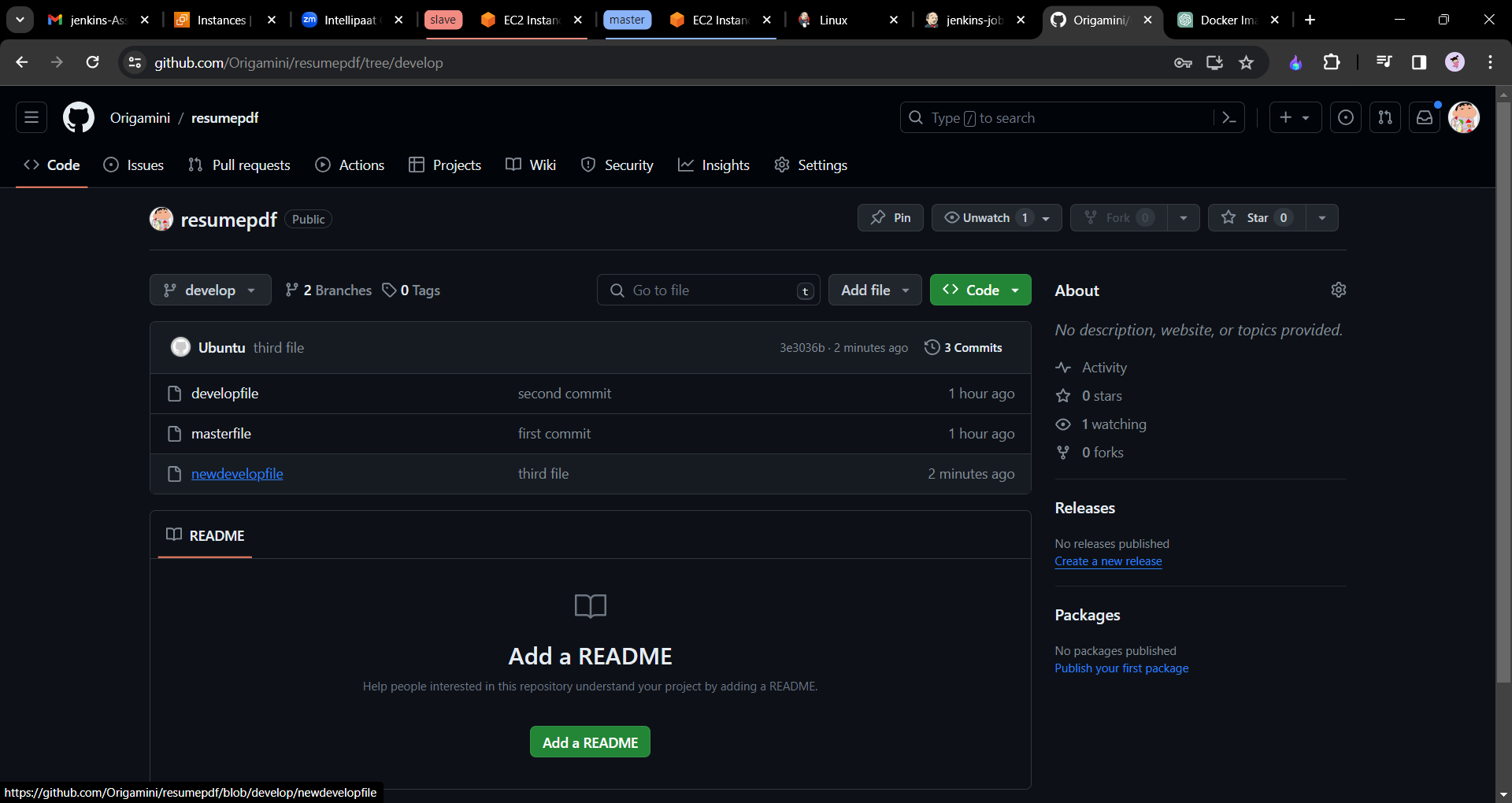
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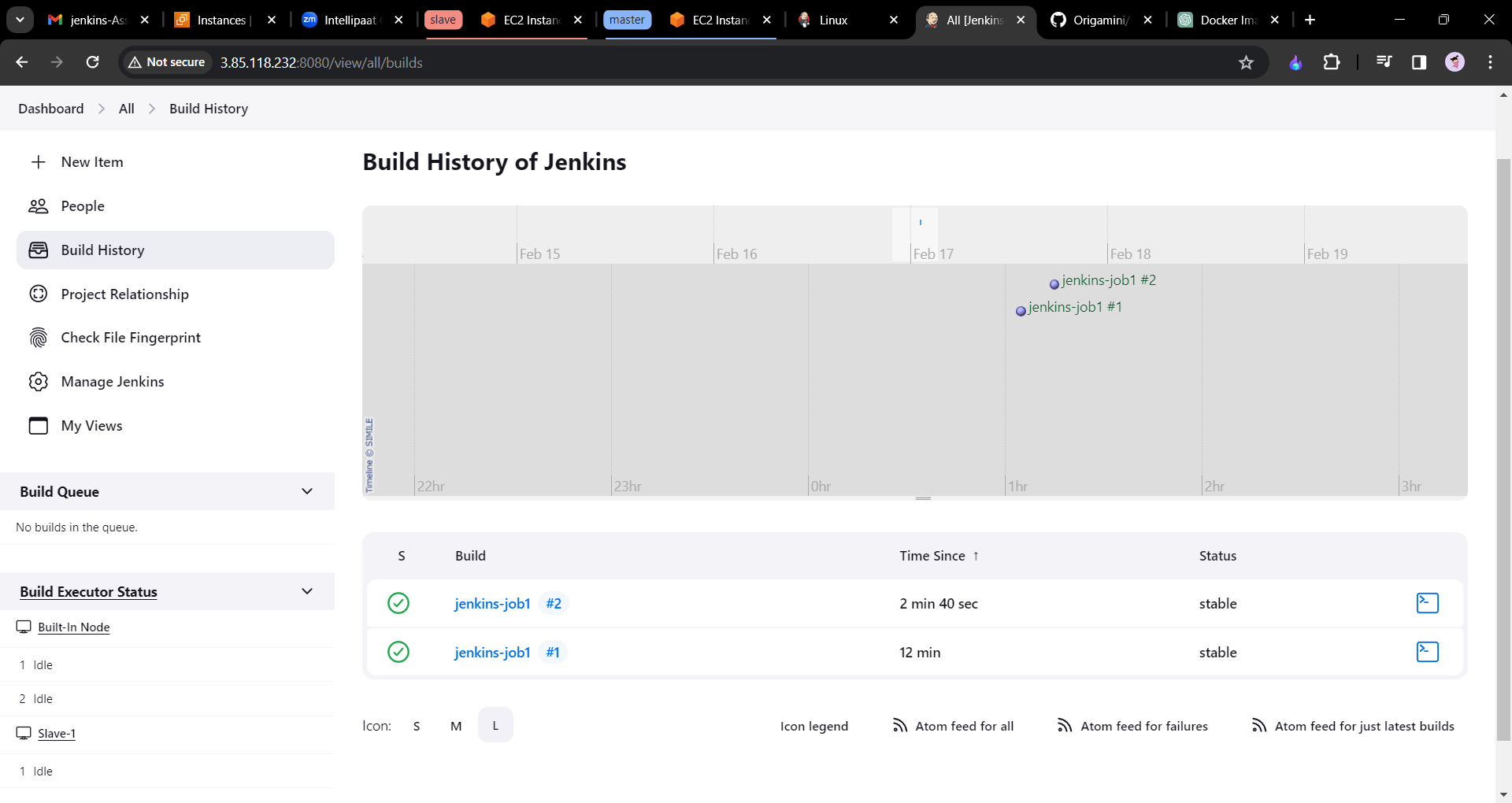
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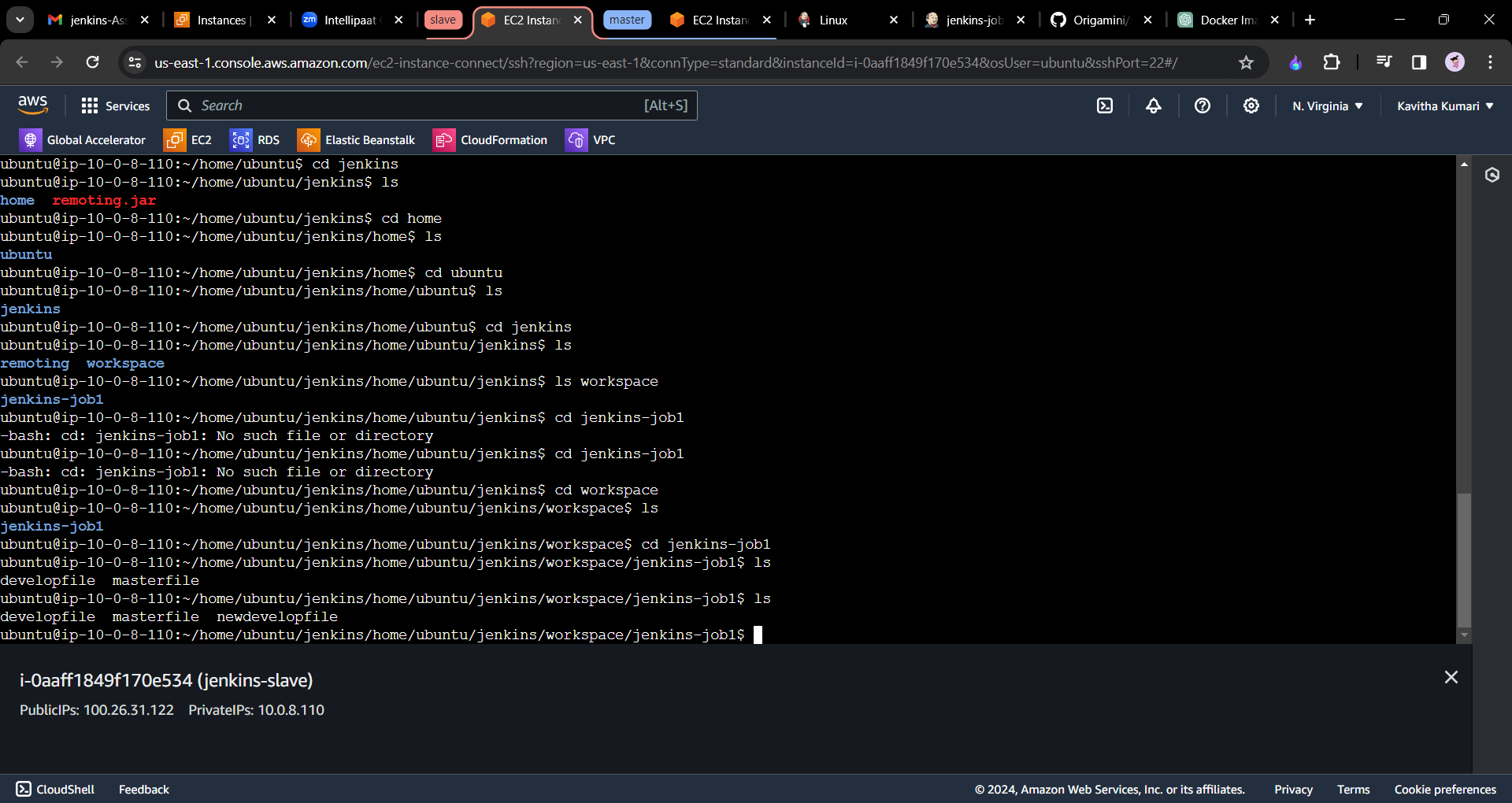
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* **Let us create a new file in the master machine in the develop branch and add and commit the file. Also push the file we need enter the username and the personal access token to the push the commits.**

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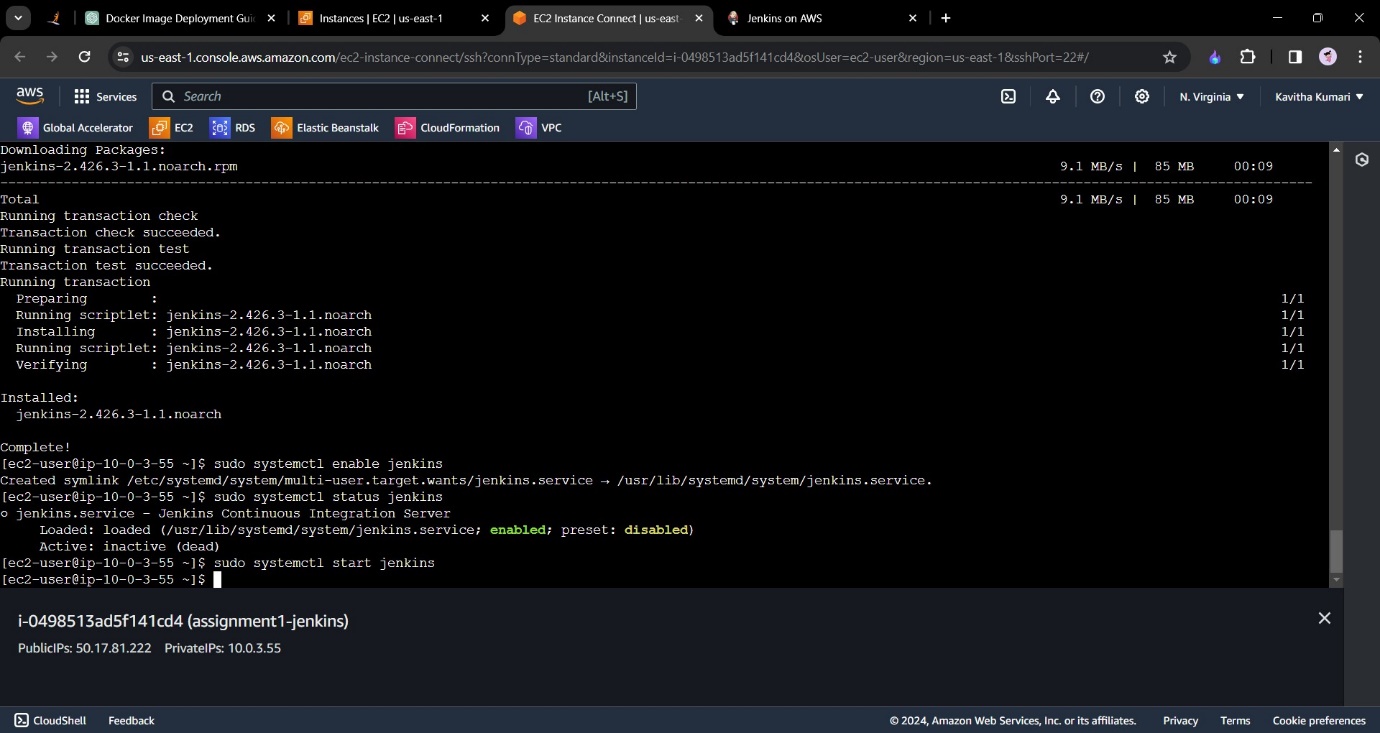
**On AmazonLinux**

* **sudo dnf install java-11-amazon-corretto -y**
* **or sudo yum install java-11-amazon-corretto -y**

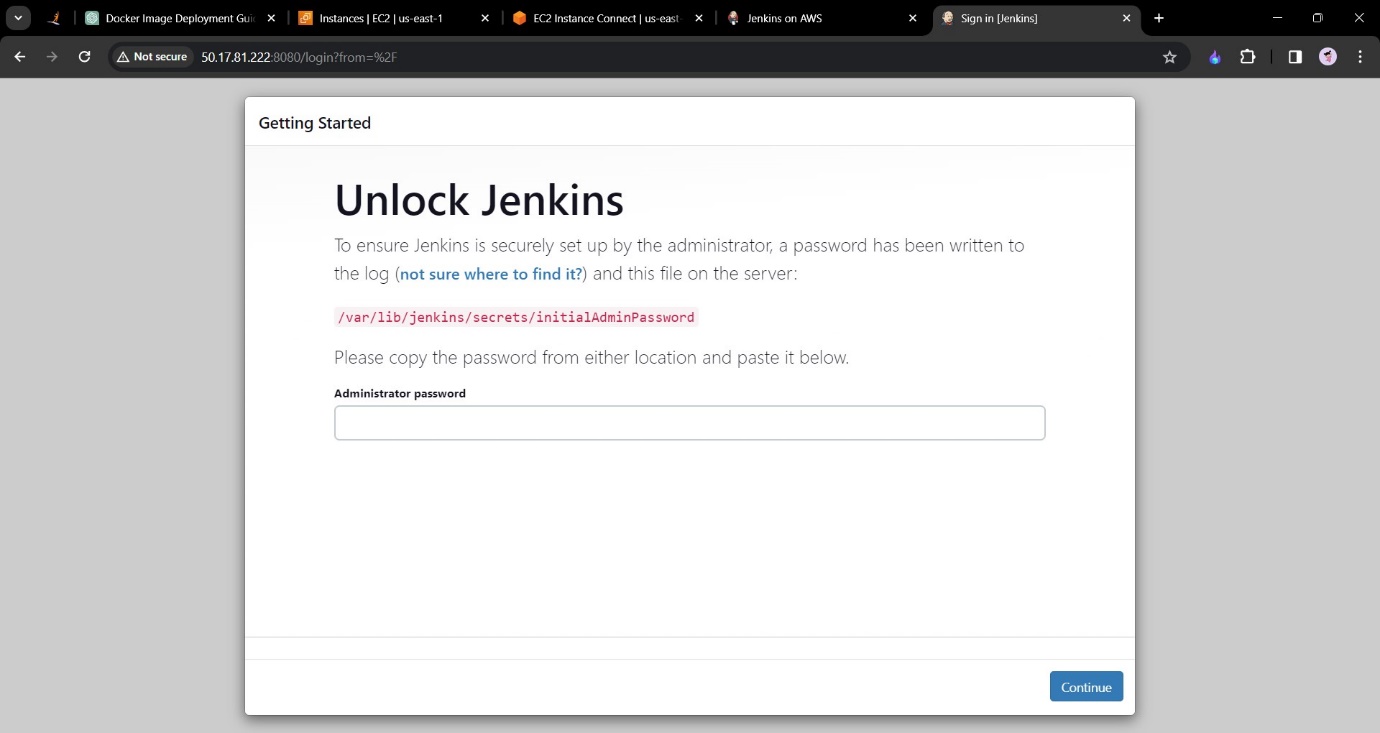
**Downloading and installing jenkins: -**

* **sudo wget -O /etc/yum.repos.d/jenkins.repo \**

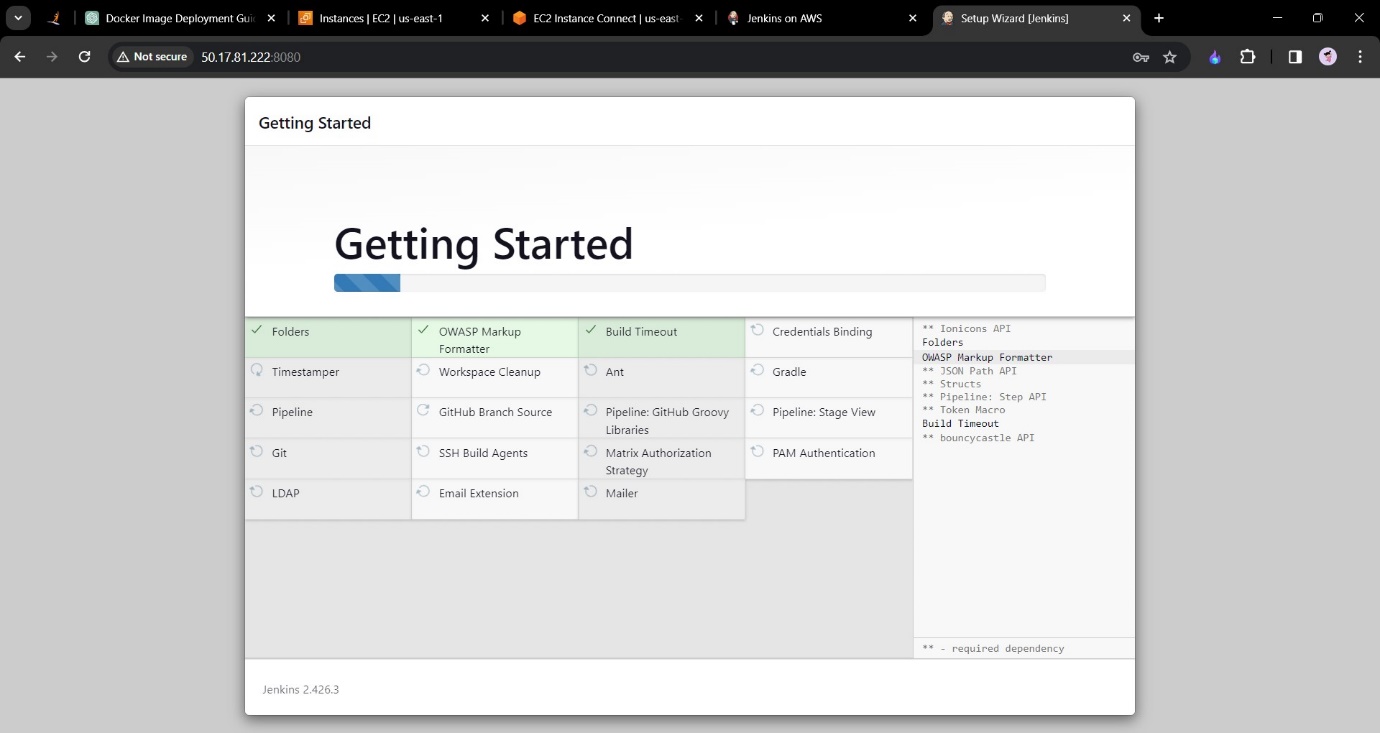
[**https://pkg.jenkins.io/redhat-stable/jenkins.repo**](https://pkg.jenkins.io/redhat-stable/jenkins.repo)

* **sudo rpm --import** [**https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key**](https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key)
* **sudo yum upgrade -y**
* **sudo yum install -y jenkins**
* **sudo systemctl enable jenkins**
* **sudo systemctl start jenkins**

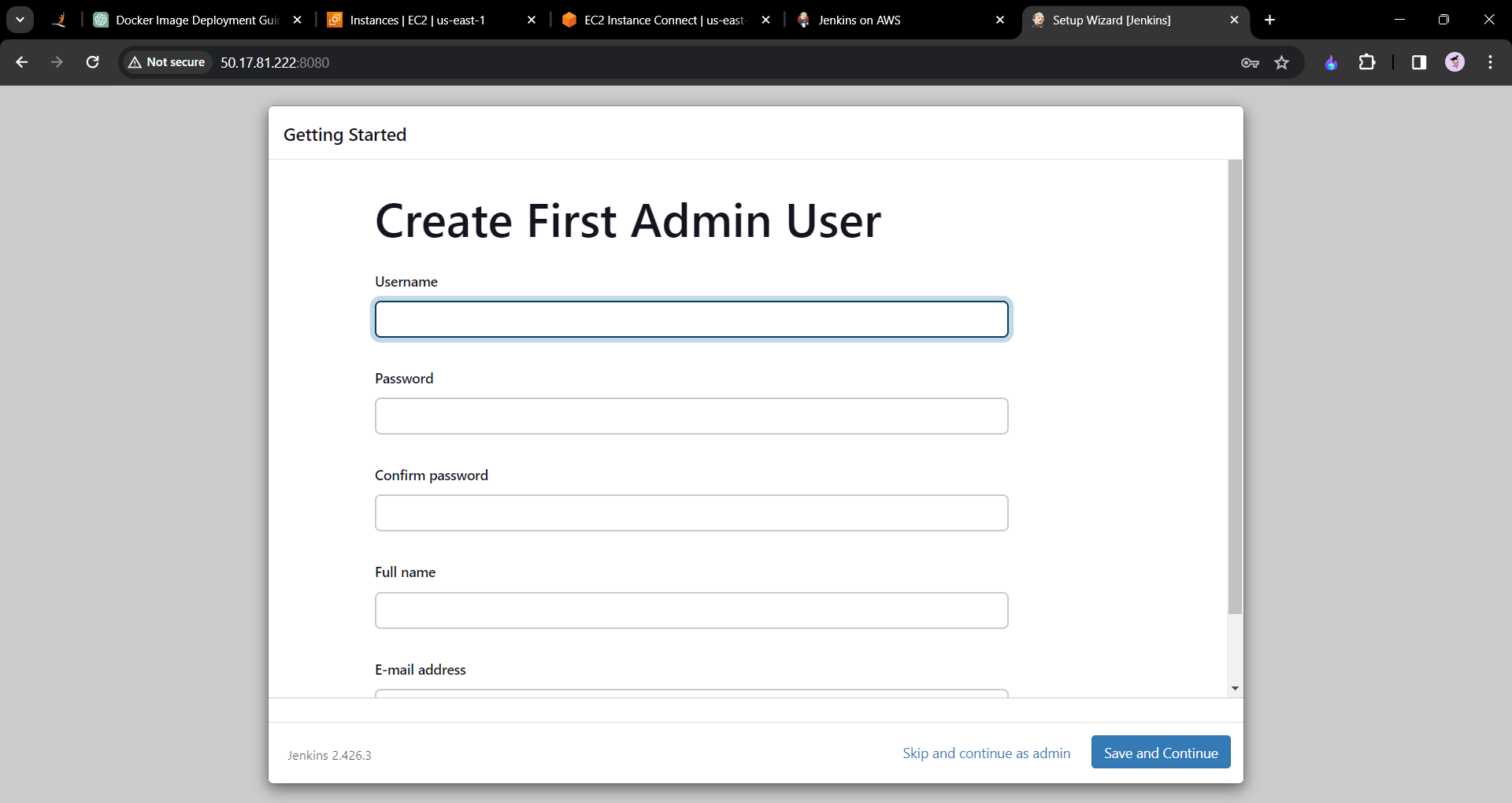
Connect to http://<your\_server\_public\_DNS>:8080 from your browser. You will be able to access Jenkins through its management interface:



* In the server go to the path **sudo cat** /var/lib/jenkins/secrets/initialAdminPassword
* The password which you will get past at this textbox.
* The Jenkins installation script directs you to the Customize Jenkins page. Click Install suggested plugins.



* After the necessary plugins are installed you will see the following page.



* Fill the following information and click on save and continue. And then save and finish.

**Install Required Plugins:**

* Once Jenkins is set up, install the necessary plugins for Git integration and pipeline support.
* Go to "Manage Jenkins" > "Manage Plugins" > "Available" tab.
* Search for and install the following plugins: pipeline and github.
* **git config --global user.name “user-name”**
* **git config --global user.email “your-email”**
* **git config --list**

**sudo vi sshd\_config :** to change the ssh file configuaration just change the “no” to “yes” at passwordAuthication. Once we do that we need to restart the sshd with the command **sudo systemctl restart sshd.** To find the file sshd go to the ssh directory.

( we can write all the commands in a file with the extension .sh and run that file using bash name.sh and then our all the excecutable commands will run automatically.)