

# Create a p3 instance

## Start the instance

AMI Nvidia Deep Learning AMI

Instance: p3.2xlarge

The screenshot shows the AWS Management Console interface for the 'Lancer l'assistant d'instance' wizard. The current step is 'Étape 6 : Configurer le groupe de sécurité'. The user is creating a new security group named 'NVIDIA Deep Learning AMI-21-02-2-AutogenByAWSMP-1'. The description states: 'This security group was generated by AWS Marketplace and is based on recommendations for NVIDIA Deep Learning AMI-21-02-2-AutogenByAWSMP-1'. Below this, there is a table of rules to be added to the security group.

Type	Protocole	Plage de ports	Source	Description
SSH	TCP	22	Personnali: 0.0.0.0/0	par exemple SSH for Admin Desktop
HTTPS	TCP	443	Personnali: 0.0.0.0/0	par exemple SSH for Admin Desktop
Règle TCP pe	TCP	5000	Personnali: 0.0.0.0/0	par exemple SSH for Admin Desktop
Règle TCP pe	TCP	8888	N'importe c 0.0.0.0/0, ::/0	par exemple SSH for Admin Desktop

Below the table, there is a button 'Ajouter une règle'. At the bottom of the console, there is a yellow warning box with the text 'Avertissement' and a link to 'Annuler', 'Précédent', and 'Vérifier et lancer'.

i-0fd1e342bb2715d2d

ec2-3-141-47-131.us-east-2.compute.amazonaws.com

3.141.47.131

## Check the GPU drivers

```
ssh -i "AWS.pem" ubuntu@ec2-3-141-47-131.us-east-2.compute.amazonaws.com
```

nvidia-smi

```
ubuntu@ip-172-31-12-53:~$ nvidia-smi
Thu Mar 25 16:29:25 2021

+-----+
| NVIDIA-SMI 460.32.03      Driver Version: 460.32.03      CUDA Version: 11.2      |
+-----+-----+
| GPU   Name                Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf    Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
|=====+=====+
|    0   Tesla V100-SXM2...    On      | 00000000:00:1E.0 Off |           0          |
| N/A   32C   P0      23W / 300W | 0MiB / 16160MiB |      0%      Default |
|=====+=====+
|
+-----+
| Processes:                                                       GPU Memory |
|  GPU   GI    CI          PID    Type   Process name                  Usage   |
|=====+=====+
| No running processes found                                     |
+-----+-----+
```

## Configure Anaconda and Jupyter notebook

see

<https://medium.com/google-cloud/set-up-anaconda-under-google-cloud-vm-on-windowsf71fc1064bd7>

sudo apt-get update

sudo apt-get install bzip2 libxml2-dev

cd ubuntu

wget https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86\_64.sh

bash Miniconda3-latest-Linux-x86\_64.sh

rm Miniconda3-latest-Linux-x86\_64.sh

source .bashrc

conda

conda create -n ml python=3.7

conda activate ml

conda install scikit-learn pandas jupyter ipython

# Start Jupyter notebook

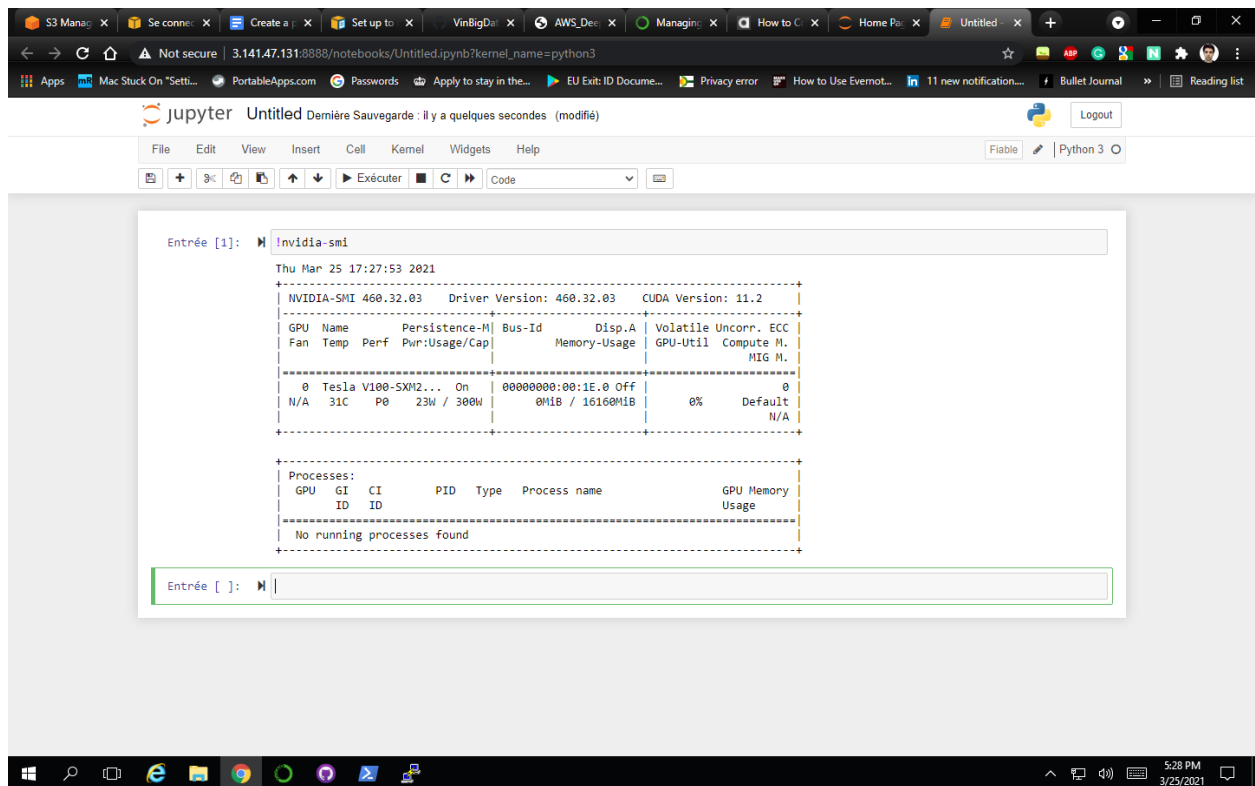
```
tmux new -s StreamSession
```

```
conda activate ml
```

```
jupyter notebook --ip=0.0.0.0 --no-browser
```

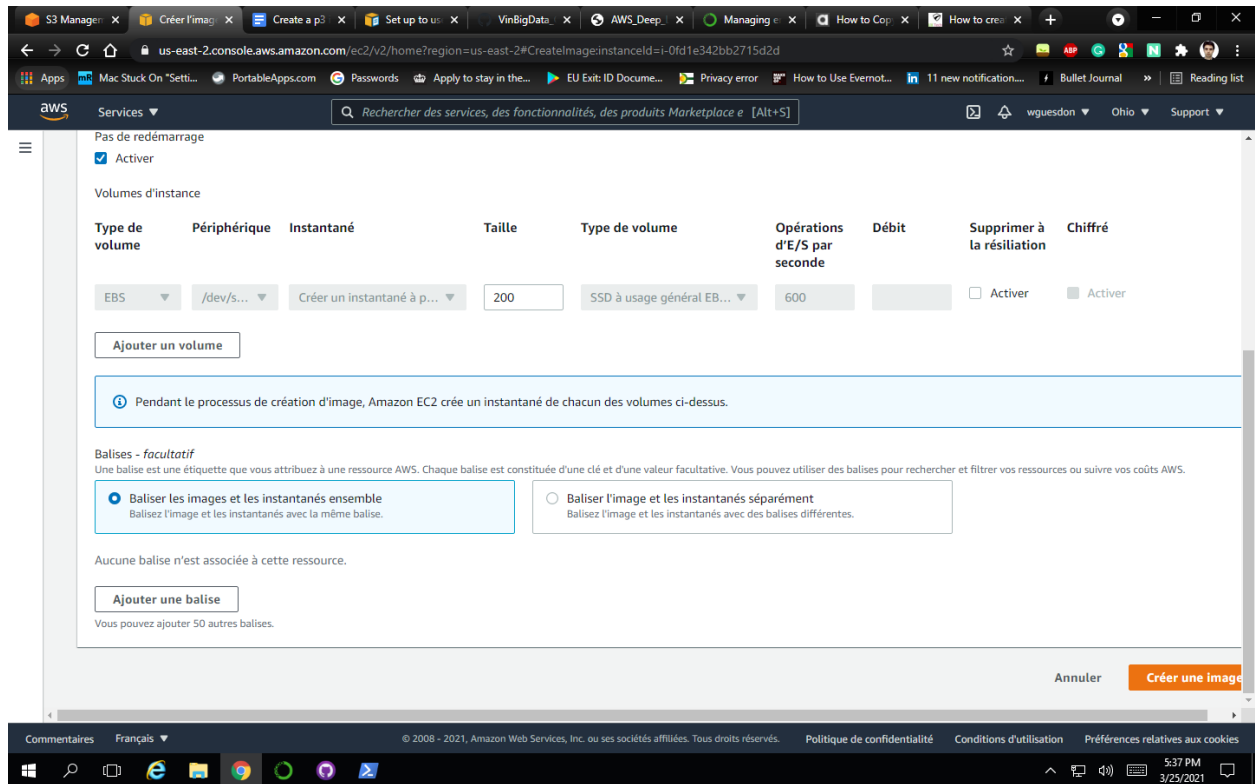
d5c29df61b8d5d0fd0fbde65d3d65b1d71ec9da91c715f48

http://3.141.47.131:8888



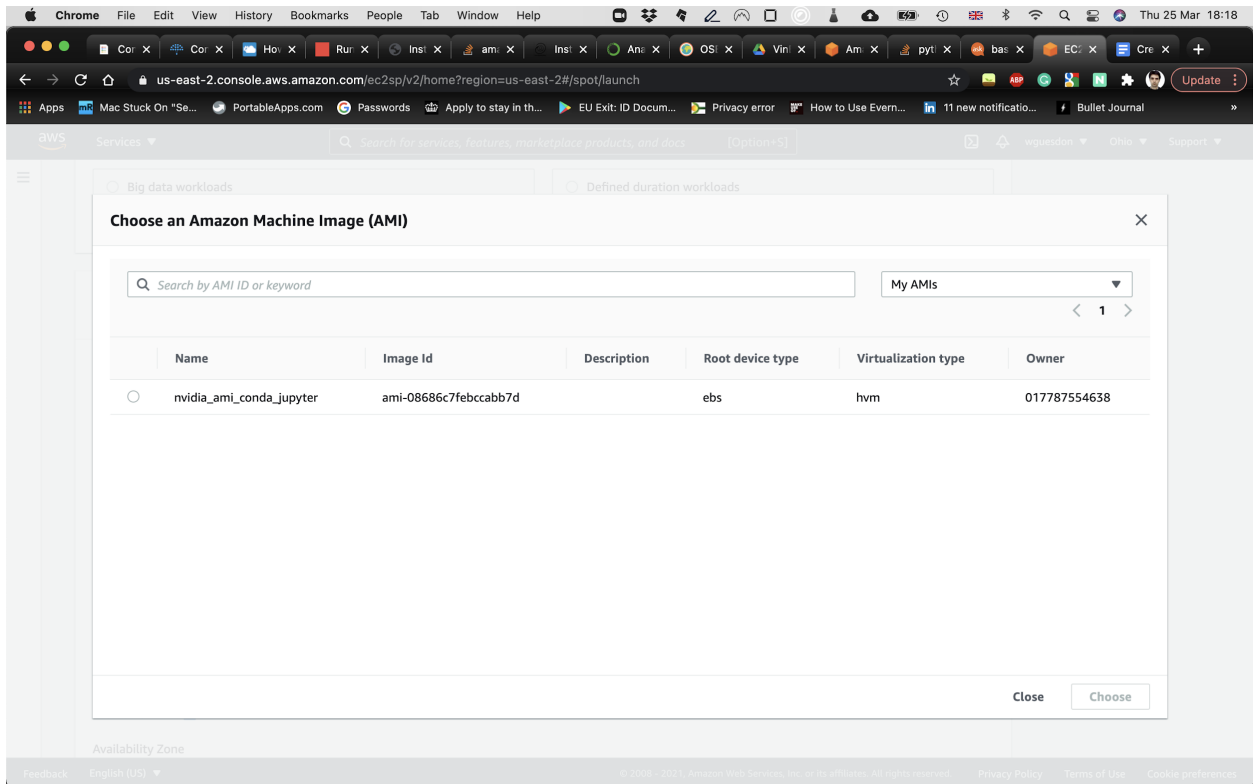
## Create an image from the instance

<https://linuxroutes.com/create-custom-ami-aws/>



ami-08686c7febccabb7d

## Start a spot instance from an AMI



## References

[https://chrisalbon.com/aws/basics/run\\_project\\_jupyter\\_on\\_amazon\\_ec2/](https://chrisalbon.com/aws/basics/run_project_jupyter_on_amazon_ec2/)  
<https://docs.nvidia.com/cuda/cuda-installation-guide-linux/index.html#abstract>  
<https://devopsmyway.com/install-anaconda-on-amazon-linuxec2/>  
<https://stackoverflow.com/questions/35246386/conda-command-not-found>