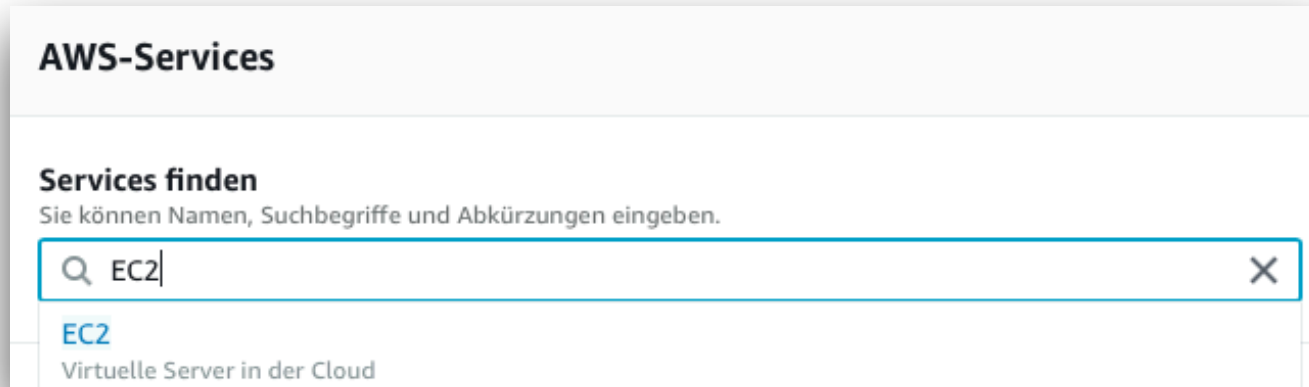


1. Log in at AWS for Deep Learning AMIs (Amazon Machine Images)

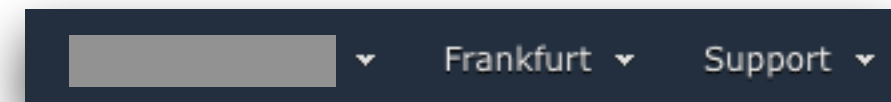
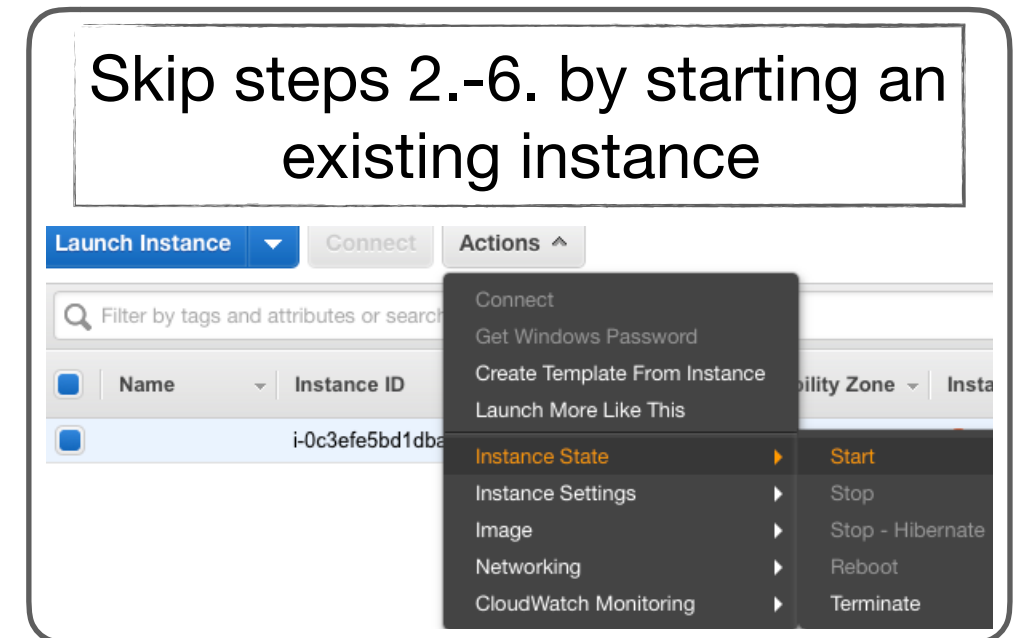
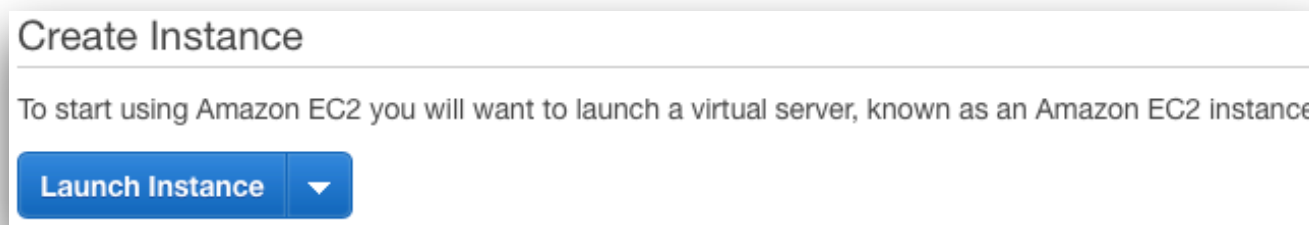
<https://aws.amazon.com/machine-learning/amis>

works as of **9 July 2019**

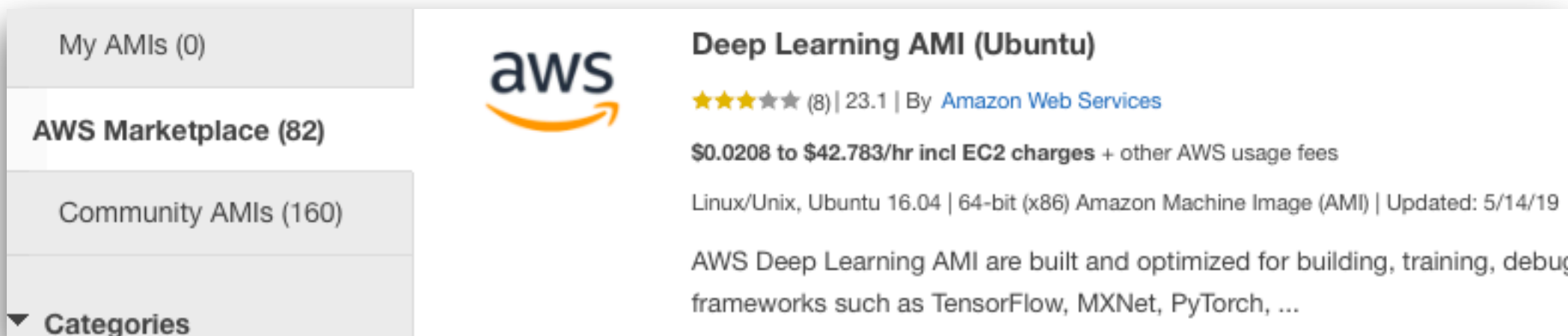
2. Search for EC2



3. Hit Launch Instance



4. Searching for TensorFlow leads to this promising AMI (available from Frankfurt, choose it and continue)



5. Check the instance prices on <https://aws.amazon.com/ec2/pricing/on-demand> then select an instance and hit Review and Launch
6. Go through the process of selecting a private key (create one and remove the “.txt” ending if necessary), then hit Launch Instances
7. After a possibly long wait, hit View Instances, and then copy the Public DNS

```
Public DNS (IPv4)    ec2-18-184-181-69.eu-central-1.compute.amazonaws.com
IPv4 Public IP      18.184.181.69
IPv6 IPs            -
```

8. Run chmod 400 with the private key in a terminal (with the key being in the current folder)

```
[...] $ chmod 400 AWS_key.pem
```

9. Log into the instance via ssh using localhost and the public DNS (copied above)

```
[...] $ ssh -L localhost:8888:localhost :8888 -i default_key.pem.txt ubuntu@ec2-3-122-61-231.eu-central-1.compute.amazonaws.com
```

10. Start a jupyter notebook, copy the link and select an appropriate environment

```
[ubuntu@ip-172-31-35-249:~]$ jupyter notebook
```

```
| Environment (conda_tensorflow_p36) ○
```

Note that an **AWS instance** of *jupyter notebook* seems not to work if a **local instance** is already running (possibly because of confusion about *localhost*).

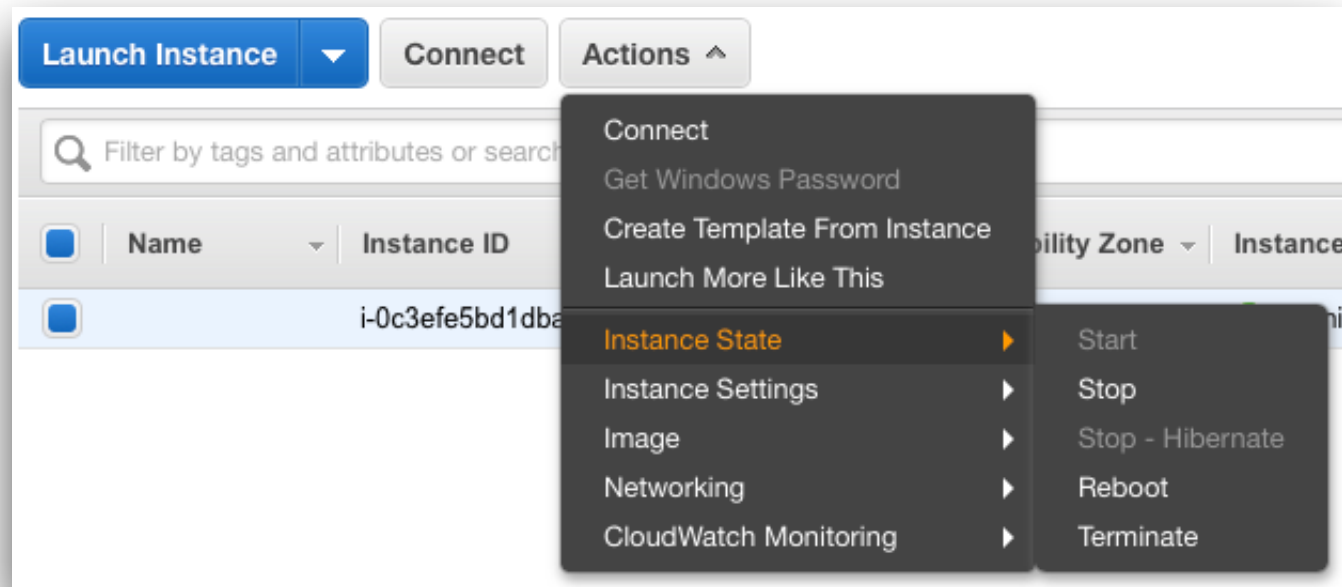
11. Initiate file transfer via SFTP

```
$ chmod 400 AWS_key.pem
```

```
$ sftp -i AWS_key.pem ubuntu@ec2-52-29-143-181.eu-central-1.compute.amazonaws.com
```

A list of SFTP commands is shown on the next page / slide.

12. When finished, stop or terminate the instance



Details can also be found here

[1] https://aws.amazon.com/de/getting-started/tutorials/get-started-dlami/?nc1=h_ls,

[2] <https://www.comparitech.com/net-admin/sftp-commands-cheat-sheet>, and here

[3] <https://unix.stackexchange.com/questions/7004/uploading-directories-with-sftp>.

Command	Description
?	List of all commands or explain a command, eg ? get
!	Leave the environment temporarily *
cd	Change the active directory on the remote host
chmod	Change the permissions of files on the remote host
chown	Change the owner of files on the remote host
dir	List the contents of the current directory on the remote host
exit	Close the connection and leave SFTP
get	Copy a file from the remote host to the local computer
help	Same as ?
lcd	Change the active directory on the local computer
lls	List the contents of the current directory on the local computer
mkdir	Create a directory on the local computer
ln	Create a symbolic link for a file on the remote host
lpwd	Show the present working directory on the local computer
ls	Same as dir
lumask	Change the local umask value
mkdir	Create a directory on the remote host
put	Copy a file from the local computer to the remote host
pwd	Show the present working directory on the remote host
quit	Same as exit
rename	Rename a file on the remote host
rm	Delete a file on the remote host
rmdir	Remove an empty directory on the remote host
symlink	Same as ln
version	Show the SFTP version