1. AWS connection:

Use pem file and ipv4 dns for connection

use security-group-…. Add ip address when using new devices

1. Mobaxterm ssh link:

ubuntu@ip-10-0-0-9:~$ ssh-keygen

Generating public/private rsa key pair.

Enter file in which to save the key (/home/ubuntu/.ssh/id\_rsa):

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /home/ubuntu/.ssh/id\_rsa

Your public key has been saved in /home/ubuntu/.ssh/id\_rsa.pub

The key fingerprint is:

SHA256:CurVynb1qChdXYMVlDRJ3EU4ZKAK14zBZTszKYjUvQI ubuntu@ip-10-0-0-9

The key's randomart image is:

+---[RSA 3072]----+

| .. o..o=BBo+o |

| .E...o\* +=o+ |

| ..o +.Xo . |

| .o.o.+o |

| ....S. . |

| . o..o |

| ....o. o |

| ..ooo. . . |

| .o+... |

+----[SHA256]-----+

ubuntu@ip-10-0-0-9:~$ cat ~/.ssh/id\_rsa.pub

ssh-rsa  ubuntu@ip-10-0-0-9

ubuntu@ip-10-0-0-9:~$ ^C

The last part was added into github SSH to establish the connection

1. Create Image from docker file:

ubuntu@ip-10-0-0-9:~/chang/infrastructure$ cd docker/

ubuntu@ip-10-0-0-9:~/chang/infrastructure/docker$ docker build -f Dockerfile.spotlight\_base -t spotlight\_base:latest .

check available Images: docker image list

REPOSITORY TAG IMAGE ID CREATED SIZE

spotlight\_base latest 928562bfdd6f 34 seconds ago 9.48GB

1. Create a container from the image:  
   Usage: docker run [OPTIONS] IMAGE [COMMAND] [ARG...]

Create and run a new container from an image

ubuntu@ip-10-0-0-9:~/chang$ docker run -v .:/workspace --gpus all -it spotlight\_base:latest

root@9b4ae2a4bd9f:/workspace# ls

infrastructure

docker ps: check containers

1. When running time is long, use screen to run jobs:

In root (container):

1. screen
2. screen -ls (check screens)
3. screen -r screenname (reactivate screen)
4. Ctrl + A ++D detach the screen
5. Windows VS code connects AWS-EC2

Host EC2

  HostName ec2-13-40-72-34.eu-west-2.compute.amazonaws.com

  User ubuntu

  IdentityFile C:\Users\chang\.ssh\ml\_ec2\_jan\_2024.pem

Note that the pem security: advanced-remove all, disable inheritage, leave only one, the User of the key (enter username (e.g. chang) in the check name box)

Hugging face write token for spotlight: hf\_UMZkjtuIKQizKDtsbBAdkapPvgKjwJADdg

11/7/2024

1. Use git lfs to handle large file commits in GitHub repository:
   1. Install git lfs
   2. git lfs install to initialize
   3. git track large files..:
      1. git lfs track "\*.bin"
      2. git lfs track "\*.safetensors"
   4. commit
2. after create a new branch, when operating on a different machine/server, use: git fetch origin to fetch the new created branch; may required enter the passphrase (bian1219), then you can use git branch -r to see the remote branches, and use git branch -a to see all; use git checkout <branchname > to checkout