Exercise 2

Container Job

Video link : https://youtu.be/WHIki4nYSP4

Container Job – uploading files and data

- Please download the zip file. Download link : https://reurl.cc/V54QeA
- Unzip the file and upload the folder to the server with FTP tool.

  (Upload and put MNIST folder in /workdir directory.)
- The files in Mnist folder :
  - Pytorch_Mnist.py
  - Tensorflow_Mnist.py
  - TFKeras_Mnist.ipynb
  - MNIST_data (folder)
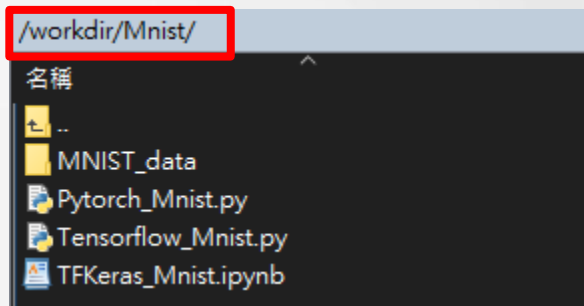
Exercise 2:The Implementation of MNIST Handwritten Digit Classification (Using Container Job)

- "Pytorch_Mnist.py" in Mnist folder will be executed in this exercise.

- Build up a CNN model for classification of MNIST Handwritten digit.

- 60000 examples in training dataset and 10000 in test dataset

- Train model for 10 epochs

- Model evaluation - Print out Accuracy and plot Loss and Accuracy learning curves.
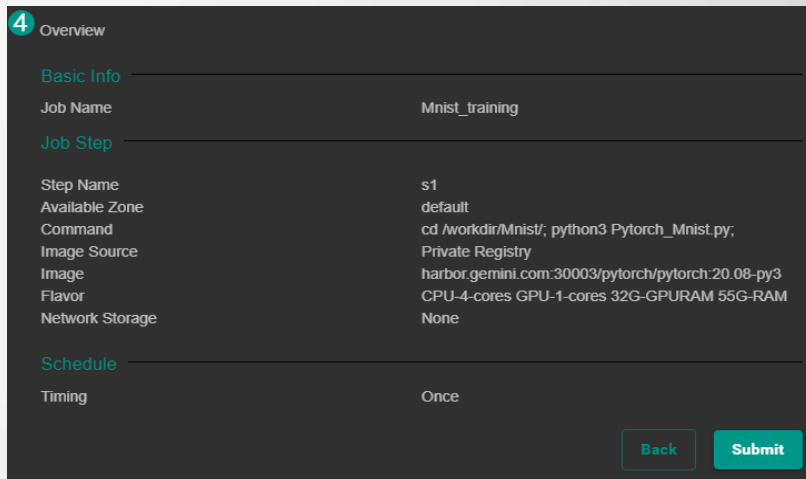
Exercise 2:The Implementation of MNIST Handwritten Digit Classification (Using Container Job)

1. Create Container Job and execute "Pytorch_Mnist.py"

(1) Please enter the information

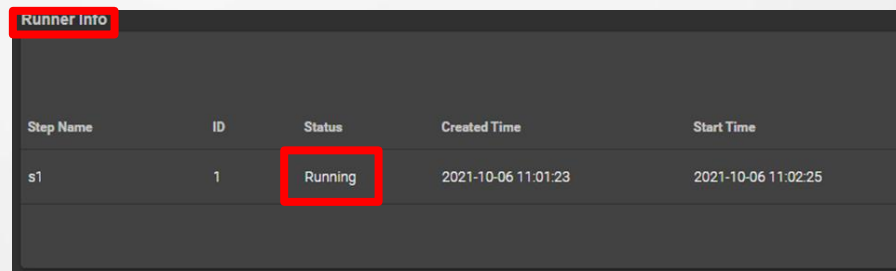| Job Name	e.g. Pytorch Mnist Training
Step Name	e.g. Step 1
Available Zone	default
Command	cd /wokrdir/Mnist/; python3 Pytorch_Mnist.py;
Project	pytorch (using Pytorch Image)
Image	pytorch/pytorch
Image Tag	20.08-py3
Flavor	CPU-4-cores GPU-1-cores 32G-GPURAM 55G-RAM
Network Storage	None
Schedule Timing	Once

(2) Submit to complete the process

Exercise 2: The Implementation of MNIST Handwritten Digit Classification (Using Container Job)

2. Select "start" to activate Container Job.
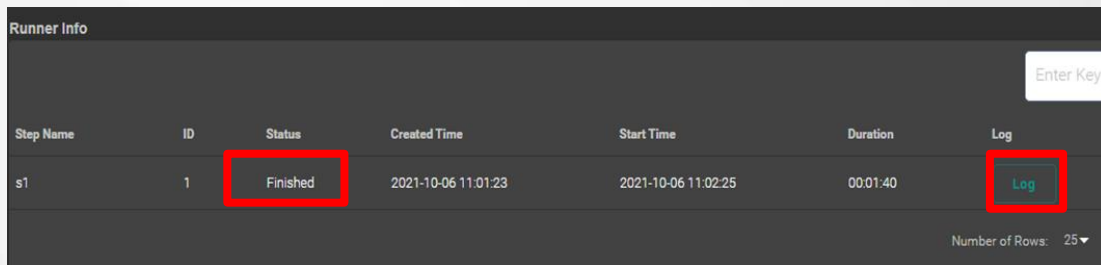
3. Switch to "Runner Info" and wait for the status to become "Running."

Exercise 2:The Implementation of MNIST Handwritten Digit Classification (Using Container Job)

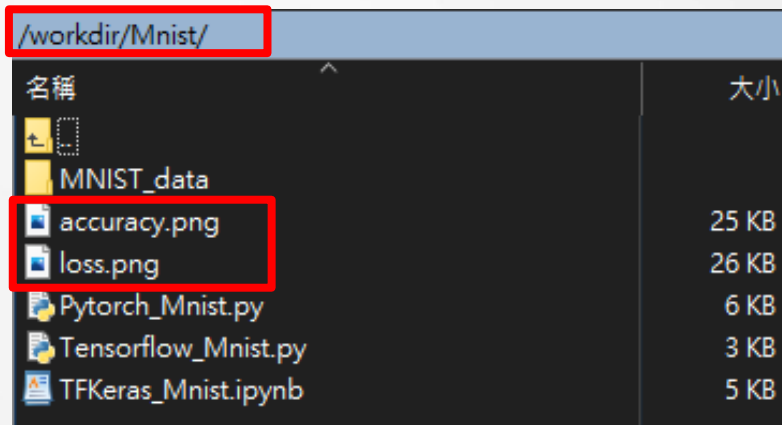4. When status becomes "Finished", click on "Log" to see the result.

Exercise 2:The Implementation of MNIST Handwritten Digit Classification (Using Container Job)

5. "Loss.png" and "accuracy.png" will be produced after model training and can be found in the working directory "Mnist" folder by using FTP tool.

Exercise 2:The Implementation of MNIST Handwritten Digit Classification (Using Container Job)

6. The decline of loss and the improvement of accuracy when predicting train data and test data during 10 epochs of training can be observed.

loss.png	accuracy.png