

tensorflow_gpu - Support #5451

Instll Tensorflow 1.15.0 with Virtual Environment

2019-11-13 07:25 PM - Albert van Eck

Status:	Closed	Start date:	2019-11-13
Priority:	Normal	Due date:	
Assignee:		% Done:	100%
Category:		Estimated time:	6.00 hours
Target version:		Spent time:	6.00 hours
Description			
Tensorflow 1.15.0 installed with Horovod and Keras			
Please follow these instructions:			
Log in to the HPC execute the command: module load intelpython/3.6			
execute the command: conda init bash			
Log out of the HPC and log back in again Your prompt should change to look like: (base) [oriolao@login ~]			
Execute the following command: cat \$(which install_tensorflow)			
Execute the commands that are displayed on the screen, you can execute it line by line to see what the results are. Note that after the command: cat > \$APP_MODULE_FILE <<EOF no output will be displayed. This part actually creates a "here document" and will add all the commands into a file, up to the line that reads EOF			
Example:			
module purge			
module load hpc exit 1			
APP_DISPLAYNAME=TensorFlow-GPU			
APP_NAME=\$(echo \$APP_DISPLAYNAME sed "s -.* g" tr 'A-Z' 'a-z')			
APP_SHORTNAME=\$(echo \$APP_NAME tr 'a-z' 'A-Z')			
APP_MAJOR_VER=1.15			
.....			
.....			
EOF			
Tensorflow and Tensorflow-gpu should now be installed in a virtual environment. You only have to execute steps 1 to 7 once.			
Thereafter, when you log into the HPC, you can execute the following to load the environment for Tensorflow:			
module load tensorflow			
tensorflow_init			
#execute your python scripts here			
#To exit from the Tensorflow environment, just close the shell or execute:			

tensorflow_exit

The abovementioned steps 1 to 7 will install Tensorflow 1.15.0 . I had issues with some test code using Tensorflow v 2.0.0, so I decided to perform the installation for version 1.15.0. I have also not extensively tested TensorFlow with the GPUs but it should work on the GPU servers. If your code is GPU ready, we can test it on the GPU servers at a later time.

I hope this helps. Let me know if you would want me to execute it on your behalf.

History

#1 - 2019-11-13 07:26 PM - Albert van Eck

- *Status changed from New to Closed*