

```
pip3.5 install -i http://192.168.25.200/ali --trusted-host 192.168.25.200 tensorflow==1.14.0
pip3.5 install -i http://192.168.25.200/ali --trusted-host 192.168.25.200 tensorflow-gpu==1.14.0
```

安装对应版本的CUDA10

https://developer.nvidia.com/compute/cuda/10.0/Prod/local_installers/cuda-repo-rhel7-10-0-local-10.0.130-410.48-1.0-1.x86_64

1. `sudo rpm -i cuda-repo-rhel7-10-0-local-10.0.130-410.48-1.0-1.x86_64.rpm`
2. `sudo yum clean all`
3. `sudo yum install cuda`

安装对应版本的cuDNN10

<https://developer.nvidia.com/rdp/cudnn-archive>

```
rpm -ivh libcudnn7-7.6.5.32-1.cuda10.0.x86_64.rpm
rpm -ivh libcudnn7-devel-7.6.5.32-1.cuda10.0.x86_64.rpm
rpm -ivh libcudnn7-doc-7.6.5.32-1.cuda10.0.x86_64.rpm
```

Download cuDNN v7.6.5 (November 5th, 2019), for CUDA 10.0

Library for Windows, Mac, Linux, Ubuntu and RedHat/Centos(x86_64architectures)

- cuDNN Library for Windows 7
- cuDNN Library for Windows 10
- [cuDNN Library for Linux](#)
- cuDNN Library for OSX
- cuDNN Runtime Library for Ubuntu18.04 [Deb]
- cuDNN Developer Library for Ubuntu18.04 [Deb]
- cuDNN Code Samples and User Guide for Ubuntu18.04 [Deb]
- cuDNN Runtime Library for Ubuntu16.04 [Deb]
- cuDNN Developer Library for Ubuntu16.04 [Deb]
- cuDNN Code Samples and User Guide for Ubuntu16.04 [Deb]
- cuDNN Runtime Library for Ubuntu14.04 [Deb]
- cuDNN Developer Library for Ubuntu14.04 [Deb]
- cuDNN Code Samples and User Guide for Ubuntu14.04 [Deb]

Library for Red Hat (x86_64 & Power architecture)

- cuDNN Runtime Library for RedHat/Centos 7.3 [RPM]
- cuDNN Developer Library for RedHat/Centos 7.3 [RPM]
- cuDNN Code Samples and User Guide for RedHat/Centos 7.3 [RPM]
- cuDNN Runtime Library for RedHat/Centos 7.3 Power [RPM]
- cuDNN Developer Library for RedHat/Centos 7.3 Power [RPM]
- cuDNN Code Samples and User Guide for RedHat/Centos 7.3 Power [RPM]

一测试

```
import tensorflow as tf
print('GPU', tf.test.is_gpu_available())
```

```

>>> import tensorflow as tf
print('GPU',tf.test.is_gpu_available())
>>> print('GPU',tf.test.is_gpu_available())
2020-07-31 15:15:24.321591: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports instructions that this TensorFlow binary was not built to use. Please see the readme for supported instructions.
2020-07-31 15:15:24.349775: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcuda.so.1
2020-07-31 15:15:26.056359: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x5969d90 executing computations on platform CUDA. Devices:
2020-07-31 15:15:26.056401: I tensorflow/compiler/xla/service/service.cc:175]   StreamExecutor device (0): Tesla P100-PCIE-12GB, Compute Capability 3.75
2020-07-31 15:15:26.056411: I tensorflow/compiler/xla/service/service.cc:175]   StreamExecutor device (1): Tesla P100-PCIE-12GB, Compute Capability 3.75
2020-07-31 15:15:26.060384: I tensorflow/core/platform/profile_utils/cpu_utils.cc:94] CPU Frequency: 2300000000 Hz
2020-07-31 15:15:26.066330: I tensorflow/compiler/xla/service/service.cc:168] XLA service 0x5ab3db0 executing computations on platform Host. Devices:
2020-07-31 15:15:26.066375: I tensorflow/compiler/xla/service/service.cc:175]   StreamExecutor device (0): <undefined>, <undefined>
2020-07-31 15:15:26.069175: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1640] Found device 0 with properties:
name: Tesla P100-PCIE-12GB major: 6 minor: 0 memoryClockRate(GHz): 1.3285
pciBusID: 0000:3b:00.0
2020-07-31 15:15:26.070079: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1640] Found device 1 with properties:
name: Tesla P100-PCIE-12GB major: 6 minor: 0 memoryClockRate(GHz): 1.3285
pciBusID: 0000:86:00.0
2020-07-31 15:15:26.070433: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcudart.so.10.0
2020-07-31 15:15:26.072763: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcublas.so.10.0
2020-07-31 15:15:26.074983: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcufft.so.10.0
2020-07-31 15:15:26.075399: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcublas.so.10.0
2020-07-31 15:15:26.078242: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcusolver.so.10.0
2020-07-31 15:15:26.080383: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcusparse.so.10.0
2020-07-31 15:15:26.086959: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcudnn.so.7
2020-07-31 15:15:26.090413: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1763] Adding visible gpu devices: 0, 1
2020-07-31 15:15:26.090472: I tensorflow/stream_executor/platform/default/dso_loader.cc:42] Successfully opened dynamic library libcudart.so.10.0
2020-07-31 15:15:26.092985: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1181] Device interconnect StreamExecutor with strength 1 edge matrix:
2020-07-31 15:15:26.093013: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1187]   0 1
2020-07-31 15:15:26.093046: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1200] 0:  N Y
2020-07-31 15:15:26.093061: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1200] 1:  Y N
2020-07-31 15:15:26.095998: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1326] Created TensorFlow device (/device:GPU:0 with 11312 MB memory)
2020-07-31 15:15:26.097255: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1326] Created TensorFlow device (/device:GPU:1 with 11312 MB memory)
GPU True
>>> █

```

Ubuntu参考同事李思源的 <http://sivuanblog.com/?p=915>