在torchversion==1.12.0环境中运行bash run\_enwik8\_base.sh train --work\_dir PATH\_TO\_WORK\_DIR，报如下错误：

Traceback (most recent call last):

File "/home/ubuntu/AdamWen/Transformer-XL/Transformer-XL/pytorch/train.py", line 539, in <module>

train()

File "/home/ubuntu/AdamWen/Transformer-XL/Transformer-XL/pytorch/train.py", line 445, in train

ret = para\_model(data, target, \*mems)

File "/home/ubuntu/anaconda3/envs/torch/lib/python3.9/site-packages/torch/nn/modules/module.py", line 1130, in \_call\_impl

return forward\_call(\*input, \*\*kwargs)

File "/home/ubuntu/AdamWen/Transformer-XL/Transformer-XL/pytorch/utils/data\_parallel.py", line 70, in forward

outputs = self.parallel\_apply(replicas, device\_ids, inputs, kwargs)

File "/home/ubuntu/AdamWen/Transformer-XL/Transformer-XL/pytorch/utils/data\_parallel.py", line 74, in parallel\_apply

return parallel\_apply(replicas, inputs, kwargs, device\_ids)

File "/home/ubuntu/anaconda3/envs/torch/lib/python3.9/site-packages/torch/nn/parallel/parallel\_apply.py", line 86, in parallel\_apply

output.reraise()

File "/home/ubuntu/anaconda3/envs/torch/lib/python3.9/site-packages/torch/\_utils.py", line 461, in reraise

raise exception

StopIteration: Caught StopIteration in replica 0 on device 0.

Original Traceback (most recent call last):

File "/home/ubuntu/anaconda3/envs/torch/lib/python3.9/site-packages/torch/nn/parallel/parallel\_apply.py", line 61, in \_worker

output = module(\*input, \*\*kwargs)

File "/home/ubuntu/anaconda3/envs/torch/lib/python3.9/site-packages/torch/nn/modules/module.py", line 1130, in \_call\_impl

return forward\_call(\*input, \*\*kwargs)

File "/home/ubuntu/AdamWen/Transformer-XL/Transformer-XL/pytorch/mem\_transformer.py", line 742, in forward

if not mems: mems = self.init\_mems()

File "/home/ubuntu/AdamWen/Transformer-XL/Transformer-XL/pytorch/mem\_transformer.py", line 610, in init\_mems

param = next(self.parameters())

StopIteration

Transformer-XL作者回复如下：

As of now, Pytorch doesn't support calling self.parameters() within DataParallel, which causes the current issue. Even after fixing that, which was straightforward, Pytorch also doesn't support calling self.ParameterList and self.ParameterDict, which are also used in TransfoXL, which will cause another issue. As Pytorch is moving people away from DataParallel, they are unlikely to fix this anytime soon on their end. On our end, this is going to be much harder to fix in a non-BC way, as changing the way the model is organized means previous checkpoints cannot be loaded. In the meantime, you could use DistributedDataParallel instead.

换言之，从1.5.0版本开始，高版本的Pytorch已经逐步停止对DataParallel的支持，所以要想多GPU并行训练Transformer-XL，最好降低torch版本。

然而，在1.4.0版本的pytorch运行仍然报错：

Traceback (most recent call last):

File "train.py", line 184, in <module>

corpus = get\_lm\_corpus(args.data, args.dataset)

File "/home/ubuntu/AdamWen/Transformer-XL/Transformer-XL/pytorch/data\_utils.py", line 240, in get\_lm\_corpus

corpus = torch.load(fn)

File "/home/ubuntu/anaconda3/envs/torch\_old/lib/python3.6/site-packages/torch/serialization.py", line 527, in load

with \_open\_zipfile\_reader(f) as opened\_zipfile:

File "/home/ubuntu/anaconda3/envs/torch\_old/lib/python3.6/site-packages/torch/serialization.py", line 224, in \_\_init\_\_

super(\_open\_zipfile\_reader, self).\_\_init\_\_(torch.\_C.PyTorchFileReader(name\_or\_buffer))

RuntimeError: version\_ <= kMaxSupportedFileFormatVersion INTERNAL ASSERT FAILED at /opt/conda/conda-bld/pytorch\_1579022034529/work/caffe2/serialize/inline\_container.cc:132, please report a bug to PyTorch. Attempted to read a PyTorch file with version 3, but the maximum supported version for reading is 2. Your PyTorch installation may be too old. (init at /opt/conda/conda-bld/pytorch\_1579022034529/work/caffe2/serialize/inline\_container.cc:132)

frame #0: c10::Error::Error(c10::SourceLocation, std::string const&) + 0x47 (0x7f927a485627 in /home/ubuntu/anaconda3/envs/torch\_old/lib/python3.6/site-packages/torch/lib/libc10.so)

frame #1: caffe2::serialize::PyTorchStreamReader::init() + 0x1f5b (0x7f927eef69ab in /home/ubuntu/anaconda3/envs/torch\_old/lib/python3.6/site-packages/torch/lib/libtorch.so)

frame #2: caffe2::serialize::PyTorchStreamReader::PyTorchStreamReader(std::string const&) + 0x64 (0x7f927eef7bc4 in /home/ubuntu/anaconda3/envs/torch\_old/lib/python3.6/site-packages/torch/lib/libtorch.so)

frame #3: <unknown function> + 0x6d1326 (0x7f92acb55326 in /home/ubuntu/anaconda3/envs/torch\_old/lib/python3.6/site-packages/torch/lib/libtorch\_python.so)

frame #4: <unknown function> + 0x28c076 (0x7f92ac710076 in /home/ubuntu/anaconda3/envs/torch\_old/lib/python3.6/site-packages/torch/lib/libtorch\_python.so)

<omitting python frames>

看来1.4.0的pytorch太老了。再换成1.5.0，可以正常运行。