

```
root@a9d1d71ec426:/tmp/lingvo# bazel-bin/lingvo/trainer --run_locally=gpu --
mode=sync --model=asr.librispeech.Librispeech960Base --logdir=/tmp/
librispeech/log --logtostderr --enable_asserts=false
I0802 21:28:28.350172 140561199576832 model_imports.py:46] Importing
lingvo.tasks.asr.params
I0802 21:28:28.364603 140561199576832 model_registry.py:124] Registering
models from module: lingvo.tasks.asr.params.librispeech
```

[Importing Register lines]

```
2019-08-02 21:28:28.377249: I tensorflow/core/platform/cpu_feature_guard.cc:
142] Your CPU supports instructions that this TensorFlow binary was not
compiled to use: AVX2 AVX512F FMA
2019-08-02 21:28:28.383012: I tensorflow/core/platform/profile_utils/
cpu_utils.cc:94] CPU Frequency: 2900000000 Hz
2019-08-02 21:28:28.384247: I tensorflow/compiler/xla/service/service.cc:168]
XLA service 0x6ca9080 executing computations on platform Host. Devices:
2019-08-02 21:28:28.384274: I tensorflow/compiler/xla/service/service.cc:175]
StreamExecutor device (0): Host, Default Version
2019-08-02 21:28:28.386034: I tensorflow/core/distributed_runtime/rpc/
grpc_channel.cc:258] Initialize GrpcChannelCache for job local -> {0 ->
localhost:43821}
2019-08-02 21:28:28.388252: I tensorflow/core/distributed_runtime/rpc/
grpc_server_lib.cc:365] Started server with target: grpc://localhost:43821
```

```
I0802 21:28:28.388480 140561199576832 trainer.py:1576] Job controller start
I0802 21:28:28.416687 140561199576832 base_runner.py:58]
```

```
=====
I0802 21:28:28.425231 140561199576832 base_runner.py:60]
allow_implicit_capture : NoneType
I0802 21:28:28.425334 140561199576832 base_runner.py:60] cls : type/
lingvo.core.base_model/SingleTaskModel
I0802 21:28:28.425389 140561199576832 base_runner.py:60]
cluster.add_summary : NoneType
I0802 21:28:28.425434 140561199576832 base_runner.py:60] cluster.cls : type/
lingvo.core.cluster/Cluster
I0802 21:28:28.425483 140561199576832 base_runner.py:60]
cluster.controller.cpus_per_replica : 1
```

[other cluster.controller lines]

```
I0802 21:28:28.425834 140561199576832 base_runner.py:60]
cluster.decoder.cpus_per_replica : 1
```

[other cluster.decoder lines]

```
I0802 21:28:28.426189 140561199576832 base_runner.py:60]
cluster.evaler.cpus_per_replica : 1
```

[other cluster.evaler lines]

```
I0802 21:28:28.426518 140561199576832 base_runner.py:60]
cluster.input.cpus_per_replica : 1
```

[other cluster.input lines]

```
I0802 21:28:28.426870 140561199576832 base_runner.py:60] cluster.job :
'controller'
I0802 21:28:28.426909 140561199576832 base_runner.py:60] cluster.mode :
'sync'
```

```
I0802 21:28:28.426950 140561199576832 base_runner.py:60]
cluster.ps.cpus_per_replica : 1
I0802 21:28:28.426995 140561199576832 base_runner.py:60]
cluster.ps.devices_per_split : 1
I0802 21:28:28.427036 140561199576832 base_runner.py:60]
cluster.ps.gpus_per_replica : 0
I0802 21:28:28.427077 140561199576832 base_runner.py:60] cluster.ps.name : '/
job:local'
I0802 21:28:28.427117 140561199576832 base_runner.py:60]
cluster.ps.num_tpu_hosts : 0
I0802 21:28:28.427166 140561199576832 base_runner.py:60]
cluster.ps.replicas : 1
I0802 21:28:28.427206 140561199576832 base_runner.py:60] cluster.ps.targets :
''
I0802 21:28:28.427248 140561199576832 base_runner.py:60]
cluster.ps.tpus_per_replica : 0
I0802 21:28:28.427288 140561199576832 base_runner.py:60] cluster.task : 0
I0802 21:28:28.427333 140561199576832 base_runner.py:60]
cluster.worker.cpus_per_replica : 1
I0802 21:28:28.427377 140561199576832 base_runner.py:60]
cluster.worker.devices_per_split : 1
I0802 21:28:28.427418 140561199576832 base_runner.py:60]
cluster.worker.gpus_per_replica : 1
I0802 21:28:28.427464 140561199576832 base_runner.py:60]
cluster.worker.name : '/job:local'
I0802 21:28:28.427540 140561199576832 base_runner.py:60]
cluster.worker.num_tpu_hosts : 0
I0802 21:28:28.427581 140561199576832 base_runner.py:60]
cluster.worker.replicas : 1
I0802 21:28:28.427625 140561199576832 base_runner.py:60]
cluster.worker.targets : ''
I0802 21:28:28.427665 140561199576832 base_runner.py:60]
cluster.worker.tpus_per_replica : 0
I0802 21:28:28.427706 140561199576832 base_runner.py:60] dtype : float32
I0802 21:28:28.427747 140561199576832 base_runner.py:60] fprop_dtype :
NoneType
I0802 21:28:28.427787 140561199576832 base_runner.py:60]
inference_driver_name : NoneType

I0802 21:28:28.427828 140561199576832 base_runner.py:60]
input.allow_implicit_capture : NoneType
I0802 21:28:28.427872 140561199576832 base_runner.py:60]
input.append_eos_frame : True
I0802 21:28:28.427922 140561199576832 base_runner.py:60]
input.bucket_adjust_every_n : 0
I0802 21:28:28.427967 140561199576832 base_runner.py:60]
input.bucket_batch_limit : [96, 48, 48, 48, 48, 48, 48, 48]
I0802 21:28:28.428008 140561199576832 base_runner.py:60]
input.bucket_upper_bound : [639, 1062, 1275, 1377, 1449, 1506, 1563, 1710]
I0802 21:28:28.428075 140561199576832 base_runner.py:60] input.cls : type/
lingvo.tasks.asr.input_generator/AsrInput
I0802 21:28:28.428119 140561199576832 base_runner.py:60] input.dtype :
float32
I0802 21:28:28.428160 140561199576832 base_runner.py:60]
input.file_buffer_size : 10000
I0802 21:28:28.428200 140561199576832 base_runner.py:60]
input.file_parallelism : 16
I0802 21:28:28.428241 140561199576832 base_runner.py:60] input.file_pattern :
'tfrecord:/tmp/librispeech/train/train.tfrecords-*'
I0802 21:28:28.428287 140561199576832 base_runner.py:60]
```

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input.file_random_seed : 0
I0802 21:28:28.428327 140561199576832 base_runner.py:60]
input.flush_every_n : 0
I0802 21:28:28.428368 140561199576832 base_runner.py:60] input.fprop_dtype :
NoneType
I0802 21:28:28.428407 140561199576832 base_runner.py:60] input.frame_size :
80
I0802 21:28:28.428457 140561199576832 base_runner.py:60]
input.inference_driver_name : NoneType
I0802 21:28:28.428503 140561199576832 base_runner.py:60] input.is_eval :
False
I0802 21:28:28.428548 140561199576832 base_runner.py:60] input.is_inference :
NoneType
I0802 21:28:28.428587 140561199576832 base_runner.py:60] input.name : 'input'
I0802 21:28:28.428632 140561199576832 base_runner.py:60]
input.num_batcher_threads : 1
I0802 21:28:28.428673 140561199576832 base_runner.py:60] input.num_samples :
281241
I0802 21:28:28.428714 140561199576832 base_runner.py:60]
input.pad_to_max_seq_length : False
I0802 21:28:28.428755 140561199576832 base_runner.py:60]
input.params_init.method : 'xavier'
I0802 21:28:28.428803 140561199576832 base_runner.py:60]
input.params_init.scale : 1.000001
I0802 21:28:28.428844 140561199576832 base_runner.py:60]
input.params_init.seed : NoneType
I0802 21:28:28.428889 140561199576832 base_runner.py:60] input.random_seed :
NoneType
I0802 21:28:28.428939 140561199576832 base_runner.py:60]
input.remote.max_inflights_per_target : 32
I0802 21:28:28.429007 140561199576832 base_runner.py:60]
input.remote.shardable_batch : False
I0802 21:28:28.429047 140561199576832 base_runner.py:60]
input.require_sequential_order : False
I0802 21:28:28.429091 140561199576832 base_runner.py:60]
input.skip_lp_regularization : NoneType
I0802 21:28:28.429136 140561199576832 base_runner.py:60]
input.source_max_length : 3000
I0802 21:28:28.429177 140561199576832 base_runner.py:60]
input.target_max_length : 300
I0802 21:28:28.429227 140561199576832 base_runner.py:60]
input.tokenizer.allow_implicit_capture : NoneType
I0802 21:28:28.429285 140561199576832 base_runner.py:60]
input.tokenizer.append_eos : True
```

[other input.tokenizer lines]

```
I0802 21:28:28.430320 140561199576832 base_runner.py:60]
input.tpu_infeed_parallelism : 1
I0802 21:28:28.430373 140561199576832 base_runner.py:60] input.use_chaining :
False
I0802 21:28:28.430413 140561199576832 base_runner.py:60]
input.use_per_host_infeed : False
I0802 21:28:28.430459 140561199576832 base_runner.py:60]
input.use_within_batch_mixing : False
I0802 21:28:28.430504 140561199576832 base_runner.py:60] input.vn.global_vn :
False
I0802 21:28:28.430557 140561199576832 base_runner.py:60]
input.vn.per_step_vn : False
I0802 21:28:28.430598 140561199576832 base_runner.py:60] input.vn.scale :
```

```
NoneType
I0802 21:28:28.430639 140561199576832 base_runner.py:60] input.vn.seed :
NoneType
I0802 21:28:28.430680 140561199576832 base_runner.py:60] is_eval : NoneType
I0802 21:28:28.430720 140561199576832 base_runner.py:60] is_inference :
NoneType
I0802 21:28:28.430764 140561199576832 base_runner.py:60] model :
'asr.librispeech.Librispeech960Base@/tmp/lingvo/bazel-bin/lingvo/
trainer.runfiles/__main__/lingvo/tasks/asr/params/librispeech.py:55'
I0802 21:28:28.430809 140561199576832 base_runner.py:60] name : ''
I0802 21:28:28.430855 140561199576832 base_runner.py:60] params_init.method :
'xavier'
I0802 21:28:28.430900 140561199576832 base_runner.py:60] params_init.scale :
1.000001
I0802 21:28:28.430941 140561199576832 base_runner.py:60] params_init.seed :
NoneType
I0802 21:28:28.430980 140561199576832 base_runner.py:60] random_seed :
NoneType
I0802 21:28:28.431021 140561199576832 base_runner.py:60]
skip_lp_regularization : NoneType
I0802 21:28:28.431061 140561199576832 base_runner.py:60]
task.allow_implicit_capture : NoneType
I0802 21:28:28.431102 140561199576832 base_runner.py:60] task.cls : type/
lingvo.tasks.asr.model/AsrModel
I0802 21:28:28.431143 140561199576832 base_runner.py:60]
task.decoder.allow_implicit_capture : NoneType
```

[other task.decoder lines]

```
I0802 21:28:28.442398 140561199576832 base_runner.py:60] task.dtype : float32
I0802 21:28:28.442442 140561199576832 base_runner.py:60]
task.encoder.after_conv_lstm_cnn_tpl.activation : 'RELU'
```

[other task.encoder lines]

```
I0802 21:28:28.453470 140561199576832 base_runner.py:60]
task.eval.decoder_samples_per_summary : 0
I0802 21:28:28.453511 140561199576832 base_runner.py:60]
task.eval.load_checkpoint_from : NoneType
I0802 21:28:28.453561 140561199576832 base_runner.py:60]
task.eval.samples_per_summary : 5000
I0802 21:28:28.453602 140561199576832 base_runner.py:60]
task.eval.start_eval_after : 0
I0802 21:28:28.453646 140561199576832 base_runner.py:60] task.fprop_dtype :
NoneType
I0802 21:28:28.453686 140561199576832 base_runner.py:60] task.frontend :
NoneType
I0802 21:28:28.453727 140561199576832 base_runner.py:60]
task.inference_driver_name : NoneType
I0802 21:28:28.453768 140561199576832 base_runner.py:60] task.input :
NoneType
I0802 21:28:28.453809 140561199576832 base_runner.py:60] task.is_eval :
NoneType
I0802 21:28:28.453854 140561199576832 base_runner.py:60] task.is_inference :
NoneType
I0802 21:28:28.453893 140561199576832 base_runner.py:60] task.name :
'librispeech'
I0802 21:28:28.453934 140561199576832 base_runner.py:60]
task.online_encoder : NoneType
I0802 21:28:28.453979 140561199576832 base_runner.py:60]
```

```
task.params_init.method : 'xavier'  
I0802 21:28:28.454020 140561199576832 base_runner.py:60]  
task.params_init.scale : 1.000001  
I0802 21:28:28.454065 140561199576832 base_runner.py:60]  
task.params_init.seed : NoneType  
I0802 21:28:28.454106 140561199576832 base_runner.py:60] task.random_seed :  
NoneType  
I0802 21:28:28.454145 140561199576832 base_runner.py:60]  
task.skip_lp_regularization : NoneType  
I0802 21:28:28.454186 140561199576832 base_runner.py:60]  
task.train.bprop_variable_filter : NoneType  
I0802 21:28:28.454231 140561199576832 base_runner.py:60]  
task.train.clip_gradient_norm_to_value : 1.0
```

[other task.train lines]

```
I0802 21:28:28.457551 140561199576832 base_runner.py:60] task.vn.global_vn :  
True  
I0802 21:28:28.457592 140561199576832 base_runner.py:60]  
task.vn.per_step_vn : False  
I0802 21:28:28.457637 140561199576832 base_runner.py:60] task.vn.scale :  
NoneType  
I0802 21:28:28.457678 140561199576832 base_runner.py:60] task.vn.seed :  
NoneType  
I0802 21:28:28.457722 140561199576832 base_runner.py:60]  
train.early_stop.metric_history.jobname : 'eval_dev'
```

[other train.early_stop lines]

```
I0802 21:28:28.458225 140561199576832 base_runner.py:60] train.ema_decay :  
0.0  
I0802 21:28:28.458271 140561199576832 base_runner.py:60]  
train.enqueue_max_steps : -1  
I0802 21:28:28.458316 140561199576832 base_runner.py:60]  
train.init_from_checkpoint_rules : {}  
I0802 21:28:28.458357 140561199576832 base_runner.py:60] train.max_steps :  
4000000  
I0802 21:28:28.458396 140561199576832 base_runner.py:60]  
train.save_interval_seconds : 600  
I0802 21:28:28.458437 140561199576832 base_runner.py:60]  
train.save_keep_checkpoint_every_n_hours : 0.5  
I0802 21:28:28.458482 140561199576832 base_runner.py:60]  
train.save_max_to_keep : 100  
I0802 21:28:28.458573 140561199576832 base_runner.py:60]  
train.start_up_delay_steps : 200  
I0802 21:28:28.458612 140561199576832 base_runner.py:60]  
train.summary_interval_steps : 100  
I0802 21:28:28.458653 140561199576832 base_runner.py:60]  
train.tpu_steps_per_loop : 20  
I0802 21:28:28.458698 140561199576832 base_runner.py:60] vn.global_vn : True  
I0802 21:28:28.458739 140561199576832 base_runner.py:60] vn.per_step_vn :  
False  
I0802 21:28:28.458784 140561199576832 base_runner.py:60] vn.scale : NoneType  
I0802 21:28:28.458825 140561199576832 base_runner.py:60] vn.seed : NoneType  
I0802 21:28:28.458864 140561199576832 base_runner.py:60]
```

```
I0802 21:28:28.458914 140561199576832 base_runner.py:61]
```

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```
I0802 21:28:28.461011 140561199576832 base_runner.py:106] Starting ...
```

```
I0802 21:28:28.463048 140561199576832 cluster.py:468] _LeastLoadedPlacer :
['/job:local/replica:0/task:0/device:CPU:0']
I0802 21:28:28.484791 140561199576832 cluster.py:486] Place variable
global_step on /job:local/replica:0/task:0/device:CPU:0 8

I0802 21:28:28.514473 140561199576832 base_model.py:1017] Training parameters
for <class 'lingvo.core.base_model.SingleTaskModel'>: {...}

I0802 21:28:28.531866 140561199576832 base_input_generator.py:649]
bucket_batch_limit [96, 48, 48, 48, 48, 48, 48, 48]
I0802 21:28:28.571058 140561199576832 learner.py:338] Ignoring legacy param
tpu_steps_per_loop=20 for optimization program

[other Ignoring legacy param lines]

I0802 21:28:28.572268 140561199576832 learner.py:343] Learner params:
allow_implicit_capture : NoneType

[other Learner params lines]

I0802 21:28:28.589397 140561199576832 cluster.py:486] Place variable
librispeech/enc/conv_L0/w/var on /job:local/replica:0/task:0/device:CPU:0
1160
I0802 21:28:28.590590 140561199576832 py_utils.py:1360] Creating var
librispeech/enc/conv_L0/w/var:0 shape=(3, 3, 1, 32) on device /job:local/
replica:0/task:0/device:CPU:0

[other Place and Creating variable lines]

I0802 21:28:29.102039 140561199576832 py_utils.py:1360] Creating var
librispeech/dec/atten/hidden_var/var:0 shape=(128,) on device /job:local/
replica:0/task:0/device:CPU:0

I0802 21:28:29.141071 140561199576832 py_utils.py:1449] === worker 0 ===
I0802 21:28:29.142127 140561199576832 py_utils.py:1439] worker 0:
decoder.atten.global_step /job:local/replica:0/task:
0/device:CPU:0 -> /job:local/replica:0/task:0/device:CPU:0

[other worker 0 lines]

I0802 21:28:29.145790 140561199576832 py_utils.py:1455] =====

I0802 21:28:31.398355 140561199576832 layers.py:2654] Using
sparse_softmax_cross_entropy_with_logits() in SimpleFullSoftmax::_FProp2D
logits_shape=[<tf.Tensor 'fprop/librispeech/tower_0_0/dec/strided_slice_13:0'
shape=() dtype=int32>, 96]
I0802 21:28:31.429826 140561199576832 decoder.py:752] Merging metric loss:
(<tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/truediv_1:0' shape=()
dtype=float32>, <tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/Sum:0' shape=()
dtype=float32>)
I0802 21:28:31.432374 140561199576832 decoder.py:752] Merging metric
fraction_of_correct_next_step_preds: (<tf.Tensor 'fprop/librispeech/
tower_0_0/dec_1/fraction_of_correct_next_step_preds:0' shape=()
dtype=float32>, <tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/Sum:0' shape=()
dtype=float32>)
I0802 21:28:31.434870 140561199576832 decoder.py:752] Merging metric
log_pplx: (<tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/truediv_1:0'
shape=() dtype=float32>, <tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/Sum:0'
shape=() dtype=float32>)
I0802 21:28:31.470196 140561199576832 cluster.py:486] Place variable
```

```
librispeech/total_samples/var on /job:local/replica:0/task:0/device:CPU:0
528952336
I0802 21:28:31.471366 140561199576832 py_utils.py:1360] Creating var
librispeech/total_samples/var:0 shape=() on device /job:local/replica:0/task:
0/device:CPU:0
I0802 21:28:31.474406 140561199576832 learner.py:150] loss: bprop variable:
librispeech/dec/atten/hidden_var/var:0

[other loss:bprop variable lines]

I0802 21:28:33.909163 140561199576832 py_utils.py:1947]
AdjustGradientsWithLpLoss: decoder.atten.hidden_var: <tf.Variable
'librispeech/dec/atten/hidden_var/var:0' shape=(128,) dtype=float32_ref>

[other AdjustGradientsWithLpLoss lines]

I0802 21:28:34.569726 140561199576832 learner.py:267]
gradient_adjuster=<bound method AsrModel.AdjustGradients of
<lingvo.tasks.asr.model.AsrModel object at 0x7fd6847cb750>>
I0802 21:28:34.570149 140561199576832 base_model.py:511]
BaseTask.AdjustGradients
I0802 21:28:34.791086 140561199576832 cluster.py:486] Place variable
beta1_power on /job:local/replica:0/task:0/device:CPU:0 528952340

[other Place variable lines]

I0802 21:28:35.107635 140561199576832 py_utils.py:1360] Creating var
total_nan_gradients/var:0 shape=() on device /job:local/replica:0/task:0/
device:CPU:0
I0802 21:28:35.266319 140561199576832 py_utils.py:1439] MODEL ANALYSIS:
I0802 21:28:35.266500 140561199576832 py_utils.py:1439] MODEL ANALYSIS:
_task.decoder.atten.hidden_var (128,) 128
librispeech/dec/atten/hidden_var/var

[other task.decoder lines]

I0802 21:28:35.266932 140561199576832 py_utils.py:1439] MODEL ANALYSIS:
_task.encoder.conv[0].bn.gamma (32,) 32
librispeech/enc/conv_L0/gamma/var

[other task.encoder lines]

I0802 21:28:35.268034 140561199576832 py_utils.py:1439] MODEL ANALYSIS:
=====
I0802 21:28:35.268066 140561199576832 py_utils.py:1439] MODEL ANALYSIS: total
#params: 132225664
I0802 21:28:35.268102 140561199576832 py_utils.py:1439] MODEL ANALYSIS:

I0802 21:28:36.532432 140561199576832 trainer.py:1576] Job trainer_client
start
I0802 21:28:36.538549 140561199576832 base_runner.py:58]
=====
I0802 21:28:36.541465 140561199576832 base_runner.py:60]
allow_implicit_capture : NoneType
I0802 21:28:36.541549 140561199576832 base_runner.py:60] cls : type/
lingvo.core.base_model/SingleTaskModel
I0802 21:28:36.541619 140561199576832 base_runner.py:60]
cluster.add_summary : NoneType
I0802 21:28:36.541663 140561199576832 base_runner.py:60] cluster.cls : type/
```

```
lingvo.core.cluster/_Cluster
I0802 21:28:36.541704 140561199576832 base_runner.py:60]
cluster.controller.cpus_per_replica : 1

[other cluster.controller lines]

I0802 21:28:36.542068 140561199576832 base_runner.py:60]
cluster.decoder.devices_per_split : 1

[other cluster.decoder lines]

I0802 21:28:36.542380 140561199576832 base_runner.py:60]
cluster.evaler.cpus_per_replica : 1

[other cluster.evaler lines]

I0802 21:28:36.542735 140561199576832 base_runner.py:60]
cluster.input.cpus_per_replica : 1

[other cluster.something lines]

I0802 21:28:36.543917 140561199576832 base_runner.py:60]
cluster.worker.tpus_per_replica : 0
I0802 21:28:36.543957 140561199576832 base_runner.py:60] dtype : float32
I0802 21:28:36.543993 140561199576832 base_runner.py:60] fprop_dtype :
NoneType
I0802 21:28:36.544034 140561199576832 base_runner.py:60]
inference_driver_name : NoneType
I0802 21:28:36.544075 140561199576832 base_runner.py:60]
input.allow_implicit_capture : NoneType

[other input.something lines]

I0802 21:28:36.546689 140561199576832 base_runner.py:60] is_eval : NoneType
I0802 21:28:36.546725 140561199576832 base_runner.py:60] is_inference :
NoneType
I0802 21:28:36.546766 140561199576832 base_runner.py:60] model :
'asr.librispeech.Librispeech960Base@/tmp/lingvo/bazel-bin/lingvo/
trainer.runfiles/__main__/lingvo/tasks/asr/params/librispeech.py:55'
I0802 21:28:36.546807 140561199576832 base_runner.py:60] name : ''
I0802 21:28:36.546847 140561199576832 base_runner.py:60] params_init.method :
'xavier'
I0802 21:28:36.546883 140561199576832 base_runner.py:60] params_init.scale :
1.000001
I0802 21:28:36.546919 140561199576832 base_runner.py:60] params_init.seed :
NoneType
I0802 21:28:36.546955 140561199576832 base_runner.py:60] random_seed :
NoneType
I0802 21:28:36.546991 140561199576832 base_runner.py:60]
skip_lp_regularization : NoneType
I0802 21:28:36.547027 140561199576832 base_runner.py:60]
task.allow_implicit_capture : NoneType
I0802 21:28:36.547063 140561199576832 base_runner.py:60] task.cls : type/
lingvo.tasks.asr.model/AsrModel
I0802 21:28:36.547099 140561199576832 base_runner.py:60]
task.decoder.allow_implicit_capture : NoneType
I0802 21:28:36.547135 140561199576832 base_runner.py:60]
task.decoder.atten_context_dim : 0

[other task.decoder lines]
```

```
I0802 21:28:36.556695 140561199576832 base_runner.py:60] task.dtype : float32
I0802 21:28:36.556731 140561199576832 base_runner.py:60]
task.encoder.after_conv_lstm_cnn_tpl.activation : 'RELU'
```

[other task.encoder lines]

```
I0802 21:28:36.567553 140561199576832 base_runner.py:60]
task.eval.decoder_samples_per_summary : 0
I0802 21:28:36.567601 140561199576832 base_runner.py:60]
task.eval.load_checkpoint_from : NoneType
I0802 21:28:36.567652 140561199576832 base_runner.py:60]
task.eval.samples_per_summary : 5000
I0802 21:28:36.567707 140561199576832 base_runner.py:60]
task.eval.start_eval_after : 0
I0802 21:28:36.567760 140561199576832 base_runner.py:60] task.fprop_dtype :
NoneType
I0802 21:28:36.567815 140561199576832 base_runner.py:60] task.frontend :
NoneType
I0802 21:28:36.567863 140561199576832 base_runner.py:60]
task.inference_driver_name : NoneType
I0802 21:28:36.567914 140561199576832 base_runner.py:60] task.input :
NoneType
I0802 21:28:36.567962 140561199576832 base_runner.py:60] task.is_eval :
NoneType
I0802 21:28:36.568012 140561199576832 base_runner.py:60] task.is_inference :
NoneType
I0802 21:28:36.568062 140561199576832 base_runner.py:60] task.name :
'librispeech'
I0802 21:28:36.568111 140561199576832 base_runner.py:60]
task.online_encoder : NoneType
I0802 21:28:36.568161 140561199576832 base_runner.py:60]
task.params_init.method : 'xavier'
I0802 21:28:36.568211 140561199576832 base_runner.py:60]
task.params_init.scale : 1.000001
I0802 21:28:36.568259 140561199576832 base_runner.py:60]
task.params_init.seed : NoneType
I0802 21:28:36.568310 140561199576832 base_runner.py:60] task.random_seed :
NoneType
I0802 21:28:36.568358 140561199576832 base_runner.py:60]
task.skip_lp_regularization : NoneType
I0802 21:28:36.568413 140561199576832 base_runner.py:60]
task.train.bprop_variable_filter : NoneType
```

[other task.train lines]

```
I0802 21:28:36.572549 140561199576832 base_runner.py:60] task.vn.global_vn :
True
I0802 21:28:36.572593 140561199576832 base_runner.py:60]
task.vn.per_step_vn : False
I0802 21:28:36.572643 140561199576832 base_runner.py:60] task.vn.scale :
NoneType
I0802 21:28:36.572691 140561199576832 base_runner.py:60] task.vn.seed :
NoneType
I0802 21:28:36.572736 140561199576832 base_runner.py:60]
train.early_stop.metric_history.jobname : 'eval_dev'
I0802 21:28:36.572786 140561199576832 base_runner.py:60]
train.early_stop.metric_history.local_filesystem : False
I0802 21:28:36.572835 140561199576832 base_runner.py:60]
train.early_stop.metric_history.logdir : ''
```

```
I0802 21:28:36.572880 140561199576832 base_runner.py:60]
train.early_stop.metric_history.metric : 'log_pplx'
I0802 21:28:36.572930 140561199576832 base_runner.py:60]
train.early_stop.metric_history.minimize : True
I0802 21:28:36.572974 140561199576832 base_runner.py:60]
train.early_stop.metric_history.name : 'MetricHistory'
I0802 21:28:36.573024 140561199576832 base_runner.py:60]
train.early_stop.metric_history.tfevent_file : False
I0802 21:28:36.573074 140561199576832 base_runner.py:60]
train.early_stop.min_steps : 0
I0802 21:28:36.573118 140561199576832 base_runner.py:60]
train.early_stop.name : 'EarlyStop'
I0802 21:28:36.573168 140561199576832 base_runner.py:60]
train.early_stop.tolerance : 0.0
I0802 21:28:36.573218 140561199576832 base_runner.py:60]
train.early_stop.verbose : True
I0802 21:28:36.573266 140561199576832 base_runner.py:60]
train.early_stop.window : 0
I0802 21:28:36.573312 140561199576832 base_runner.py:60] train.ema_decay :
0.0
I0802 21:28:36.573365 140561199576832 base_runner.py:60]
train.enqueue_max_steps : -1
I0802 21:28:36.573415 140561199576832 base_runner.py:60]
train.init_from_checkpoint_rules : {}
I0802 21:28:36.573461 140561199576832 base_runner.py:60] train.max_steps :
4000000
I0802 21:28:36.573509 140561199576832 base_runner.py:60]
train.save_interval_seconds : 600
I0802 21:28:36.573559 140561199576832 base_runner.py:60]
train.save_keep_checkpoint_every_n_hours : 0.5
I0802 21:28:36.573609 140561199576832 base_runner.py:60]
train.save_max_to_keep : 100
I0802 21:28:36.573658 140561199576832 base_runner.py:60]
train.start_up_delay_steps : 200
I0802 21:28:36.573708 140561199576832 base_runner.py:60]
train.summary_interval_steps : 100
I0802 21:28:36.573757 140561199576832 base_runner.py:60]
train.tpu_steps_per_loop : 20
I0802 21:28:36.573797 140561199576832 base_runner.py:60] vn.global_vn : True
I0802 21:28:36.573848 140561199576832 base_runner.py:60] vn.per_step_vn :
False
I0802 21:28:36.573901 140561199576832 base_runner.py:60] vn.scale : NoneType
I0802 21:28:36.573951 140561199576832 base_runner.py:60] vn.seed : NoneType
I0802 21:28:36.574001 140561199576832 base_runner.py:60]
I0802 21:28:36.574081 140561199576832 base_runner.py:61]
```

```
=====  
I0802 21:28:36.575615 140561199576832 base_runner.py:106] Starting ...  
I0802 21:28:36.575881 140561199576832 cluster.py:468] _LeastLoadedPlacer :  
['/job:local/replica:0/task:0/device:CPU:0']  
I0802 21:28:36.766789 140561199576832 cluster.py:486] Place variable  
global_step on /job:local/replica:0/task:0/device:CPU:0 8
```

```
I0802 21:28:36.774029 140561199576832 base_model.py:1017] Training parameters  
for <class 'lingvo.core.base_model.SingleTaskModel'>: {...}
```

```
I0802 21:28:36.784070 140561199576832 base_input_generator.py:649]  
bucket_batch_limit [96, 48, 48, 48, 48, 48, 48, 48]  
I0802 21:28:36.815315 140561199576832 learner.py:338] Ignoring legacy param  
tpu_steps_per_loop=20 for optimization program
```

[other Ignoring legacy param lines]

```
I0802 21:28:36.815982 140561199576832 learner.py:338] Ignoring legacy param
max_steps=4000000 for optimization program
I0802 21:28:36.816287 140561199576832 learner.py:343] Learner params:
allow_implicit_capture : NoneType
```

[other Learner params lines]

```
I0802 21:28:36.832946 140561199576832 cluster.py:486] Place variable
librispeech/enc/conv_L0/w/var on /job:local/replica:0/task:0/device:CPU:0
1160
I0802 21:28:36.834146 140561199576832 py_utils.py:1360] Creating var
librispeech/enc/conv_L0/w/var:0 shape=(3, 3, 1, 32) on device /job:local/
replica:0/task:0/device:CPU:0
```

```
I0802 21:28:37.217946 140561199576832 py_utils.py:1360] Creating var
librispeech/dec/atten/hidden_var/var:0 shape=(128,) on device /job:local/
replica:0/task:0/device:CPU:0
I0802 21:28:37.253338 140561199576832 py_utils.py:1449] === worker 0 ===
I0802 21:28:37.254337 140561199576832 py_utils.py:1439] worker 0:
decoder.atten.global_step /job:local/replica:0/task:
0/device:GPU:0 -> /job:local/replica:0/task:0/device:GPU:0
```

```
I0802 21:28:37.258153 140561199576832 py_utils.py:1455] =====
I0802 21:28:39.451868 140561199576832 layers.py:2654] Using
sparse_softmax_cross_entropy_with_logits() in SimpleFullSoftmax::_FProp2D
logits_shape=[<tf.Tensor 'fprop/librispeech/tower_0_0/dec/strided_slice_13:0'
shape=() dtype=int32>, 96]
I0802 21:28:39.483879 140561199576832 decoder.py:752] Merging metric loss:
(<tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/truediv_1:0' shape=()
dtype=float32>, <tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/Sum:0' shape=()
dtype=float32>)
I0802 21:28:39.486542 140561199576832 decoder.py:752] Merging metric
fraction_of_correct_next_step_preds: (<tf.Tensor 'fprop/librispeech/
tower_0_0/dec_1/fraction_of_correct_next_step_preds:0' shape=()
dtype=float32>, <tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/Sum:0' shape=()
dtype=float32>)
I0802 21:28:39.489106 140561199576832 decoder.py:752] Merging metric
log_pplx: (<tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/truediv_1:0'
shape=() dtype=float32>, <tf.Tensor 'fprop/librispeech/tower_0_0/dec_1/Sum:0'
shape=() dtype=float32>)
I0802 21:28:39.518748 140561199576832 cluster.py:486] Place variable
librispeech/total_samples/var on /job:local/replica:0/task:0/device:CPU:0
528952336
I0802 21:28:39.519970 140561199576832 py_utils.py:1360] Creating var
librispeech/total_samples/var:0 shape=() on device /job:local/replica:0/task:
0/device:CPU:0
I0802 21:28:39.522490 140561199576832 learner.py:150] loss: bprop variable:
librispeech/dec/atten/hidden_var/var:0
```

```
I0802 21:28:42.137712 140561199576832 py_utils.py:1947]
AdjustGradientsWithLpLoss: decoder.atten.hidden_var: <tf.Variable
```

'librispeech/dec/atten/hidden_var/var:0' shape=(128,) dtype=float32_ref>

I0802 21:28:42.700432 140561199576832 cluster.py:486] Place variable beta1_power on /job:local/replica:0/task:0/device:CPU:0 528952340

I0802 21:28:42.988543 140561199576832 py_utils.py:1360] Creating var total_nan_gradients/var:0 shape=() on device /job:local/replica:0/task:0/device:CPU:0

I0802 21:28:43.009499 140561199576832 trainer.py:551] Trainer number of enqueue ops: 0

I0802 21:28:43.009620 140561199576832 trainer.py:560] AttributeError. Expected for single task models.

I0802 21:28:44.113790 140561199576832 trainer.py:1642] Starting runners

I0802 21:28:44.114339 140551479334656 base_runner.py:167] controller started.

I0802 21:28:44.114442 140561199576832 trainer.py:1649] Total num

runner.enqueue_ops: 0

I0802 21:28:44.115050 140550992819968 base_runner.py:167] trainer started.

I0802 21:28:44.115149 140561199576832 trainer.py:1649] Total num

runner.enqueue_ops: 0

I0802 21:28:44.115845 140561199576832 trainer.py:1659] Waiting for runners to finish...

I0802 21:28:44.914860 140550992819968 trainer.py:614] Probably the expected race on global_step: From /job:local/replica:0/task:0:

Attempting to use uninitialized value global_step
[[{{node _send_global_step_0}}]]

I0802 21:28:45.435194 140551479334656 trainer.py:327] Uninitialized var list: ['global_step', 'librispeech/enc/conv_L0/w/var', 'librispeech/enc/conv_L0/beta/var', ..., 'total_nan_gradients/var']

I0802 21:28:45.435739 140551479334656 trainer.py:334] Initialize ALL variables: ['global_step', 'librispeech/enc/conv_L0/w/var', 'librispeech/enc/conv_L0/beta/var', ..., 'total_nan_gradients/var']

I0802 21:28:45.917423 140550992819968 retry.py:71] **Retry: caught exception:** _WaitTillInit while running FailedPreconditionError: From /job:local/replica:0/task:0:

Attempting to use uninitialized value global_step
[[{{node _send_global_step_0}}]]

. Call failed at (most recent call last):

File "/usr/lib/python2.7/threading.py", line 774, in __bootstrap

self.__bootstrap_inner()

File "/usr/lib/python2.7/threading.py", line 801, in __bootstrap_inner

self.run()

File "/usr/lib/python2.7/threading.py", line 754, in run

self.__target(*self.__args, **self.__kwargs)

File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/trainer.py", line 579, in Start

self._RunLoop('trainer', self._Loop)

File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/core/retry.py", line 53, in Wrapper

return func(*args, **kwargs)

File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/

```
base_runner.py", line 168, in _RunLoop
    loop_func(*loop_args)
Traceback for above exception (most recent call last):
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/core/
retry.py", line 53, in Wrapper
    return func(*args, **kwargs)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/
trainer.py", line 612, in _WaitTillInit
    global_step = sess.run(py_utils.GetGlobalStep())
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 949, in run
    run_metadata_ptr)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 1172, in _run
    feed_dict_tensor, options, run_metadata)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 1350, in _do_run
    run_metadata)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 1375, in _do_call
    raise type(e)(node_def, op, message)
Waiting for 1.54 seconds before retrying.
I0802 21:28:45.918514 140550992819968 trainer.py:614] Probably the expected
race on global_step: From /job:local/replica:0/task:0:
Attempting to use uninitialized value global_step
    [{{node _send_global_step_0}}]]
```

```
I0802 21:28:47.461390 140550992819968 retry.py:71] Retry: caught exception:
_waitTillInit while running FailedPreconditionError: From /job:local/replica:
0/task:0:
```

```
Attempting to use uninitialized value global_step
    [{{node _send_global_step_0}}]]
. Call failed at (most recent call last):
  File "/usr/lib/python2.7/threading.py", line 774, in __bootstrap
    self.__bootstrap_inner()
  File "/usr/lib/python2.7/threading.py", line 801, in __bootstrap_inner
    self.run()
  File "/usr/lib/python2.7/threading.py", line 754, in run
    self._target(*self._args, **self._kwargs)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/
trainer.py", line 579, in Start
    self._RunLoop('trainer', self._Loop)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/core/
retry.py", line 53, in Wrapper
    return func(*args, **kwargs)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/
base_runner.py", line 168, in _RunLoop
    loop_func(*loop_args)
Traceback for above exception (most recent call last):
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/core/
retry.py", line 53, in Wrapper
    return func(*args, **kwargs)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/
trainer.py", line 612, in _WaitTillInit
    global_step = sess.run(py_utils.GetGlobalStep())
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 949, in run
    run_metadata_ptr)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
```

```
session.py", line 1172, in _run
    feed_dict_tensor, options, run_metadata)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 1350, in _do_run
    run_metadata)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 1375, in _do_call
    raise type(e)(node_def, op, message)
Waiting for 2.32 seconds before retrying.
I0802 21:28:47.462443 140550992819968 trainer.py:614] Probably the expected
race on global_step: From /job:local/replica:0/task:0:
Attempting to use uninitialized value global_step
    [{{node _send_global_step_0}}]]
```

```
I0802 21:28:49.076066 140551479334656 trainer.py:336] Initialize variables
done.
I0802 21:28:49.240230 140551479334656 trainer.py:530] Steps/second: 0.000000,
Examples/second: 0.000000
I0802 21:28:49.240830 140551479334656 trainer.py:307] Save checkpoint
```

```
I0802 21:28:49.789314 140550992819968 retry.py:71] Retry: caught exception:
_WaitTillInit while running FailedPreconditionError: From /job:local/replica:
0/task:0:
Attempting to use uninitialized value global_step
    [{{node _send_global_step_0}}]]
. Call failed at (most recent call last):
  File "/usr/lib/python2.7/threading.py", line 774, in __bootstrap
    self.__bootstrap_inner()
  File "/usr/lib/python2.7/threading.py", line 801, in __bootstrap_inner
    self.run()
  File "/usr/lib/python2.7/threading.py", line 754, in run
    self._target(*self._args, **self._kwargs)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/
trainer.py", line 579, in Start
    self._RunLoop('trainer', self._Loop)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/core/
retry.py", line 53, in Wrapper
    return func(*args, **kwargs)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/
base_runner.py", line 168, in _RunLoop
    loop_func(*loop_args)
Traceback for above exception (most recent call last):
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/core/
retry.py", line 53, in Wrapper
    return func(*args, **kwargs)
  File "/tmp/lingvo/bazel-bin/lingvo/trainer.runfiles/__main__/lingvo/
trainer.py", line 612, in _WaitTillInit
    global_step = sess.run(py_utils.GetGlobalStep())
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 949, in run
    run_metadata_ptr)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 1172, in _run
    feed_dict_tensor, options, run_metadata)
  File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/
session.py", line 1350, in _do_run
    run_metadata)
```

File "/usr/local/lib/python2.7/dist-packages/tensorflow_core/python/client/session.py", line 1375, in _do_call

raise type(e)(node_def, op, message)

Waiting for 3.52 seconds before retrying.

I0802 21:28:49.790514 140550992819968 base_runner.py:106] step: 0

W0802 21:28:51.212662 140551479334656 meta_graph.py:448] Issue encountered when serializing __batch_norm_update_dict.

Type is unsupported, or the types of the items don't match field type in CollectionDef. Note this is a warning and probably safe to ignore.

'dict' object has no attribute 'name'

W0802 21:28:51.212897 140551479334656 meta_graph.py:448] Issue encountered when serializing __model_split_id_stack.

Type is unsupported, or the types of the items don't match field type in CollectionDef. Note this is a warning and probably safe to ignore.

'list' object has no attribute 'name'

I0802 21:28:51.393297 140551479334656 trainer.py:309] **Save checkpoint done: /tmp/librispeech/log/train/ckpt-00000000**

2019-08-02 21:28:54.178403: W tensorflow/core/grappler/utils/graph_view.cc:830] No registered 'Shape' OpKernel for GPU devices compatible with node {{node Shape_1}}

. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64]; T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16, DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]

device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]

device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]

device='CPU'; out_type in [DT_INT64]

device='CPU'; out_type in [DT_INT32]

2019-08-02 21:28:54.179138: W tensorflow/core/grappler/utils/graph_view.cc:830] No registered 'Const' OpKernel for GPU devices compatible with node {{node strided_slice_1/stack}}

. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64, DT_STRING]

device='CPU'

device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]

2019-08-02 21:28:54.179368: W tensorflow/core/grappler/utils/graph_view.cc:830] No registered 'Const' OpKernel for GPU devices compatible with node {{node strided_slice_1/stack_1}}

. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64, DT_STRING]

device='CPU'

device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]

2019-08-02 21:28:54.179615: W tensorflow/core/grappler/utils/graph_view.cc:830] No registered 'Const' OpKernel for GPU devices compatible with node {{node strided_slice_1/stack_2}}

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.233601: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
{{node Shape_1}}
```

```
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
  device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='CPU'; out_type in [DT_INT64]
  device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:54.234209: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.234434: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_1}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.234650: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.374037: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
{{node Shape_1}}
```

```
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
```

```
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
  device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='CPU'; out_type in [DT_INT64]
  device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:54.374689: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.374914: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_1}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.375130: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.572139: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
{{node Shape_1}}
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
  device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='CPU'; out_type in [DT_INT64]
  device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:54.572819: W tensorflow/core/grappler/utils/graph_view.cc:
```

```
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.573057: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_1}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.573277: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.661436: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
{{node Shape_1}}
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
device='CPU'; out_type in [DT_INT64]
device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:54.662135: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.662387: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
```

```
{node strided_slice_1/stack_1}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.662603: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.925742: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
{{node Shape_1}}
```

```
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
device='CPU'; out_type in [DT_INT64]
device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:54.926435: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.926664: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_1}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.926881: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.972220: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
{{node Shape_1}}
```

```
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
device='CPU'; out_type in [DT_INT64]
device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:54.972877: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.973120: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_1}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:54.973340: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
I0802 21:28:55.176870 140551479334656 trainer.py:530] Steps/second: 0.000000,
Examples/second: 0.000000
```

```
2019-08-02 21:28:55.249158: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
```

```
{node Shape_1}
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
  device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='CPU'; out_type in [DT_INT64]
  device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:55.249846: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:55.250076: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_1}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:55.250292: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
```

```
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
  device='CPU'
  device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:55.321566: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Shape' OpKernel for GPU devices compatible with node
{{node Shape_1}}
```

```
. Registered: device='XLA_CPU_JIT'; out_type in [DT_INT32, DT_INT64];
T in [DT_FLOAT, DT_DOUBLE, DT_INT32, DT_UINT8, DT_INT8, ..., DT_BFLOAT16,
DT_COMPLEX128, DT_HALF, DT_UINT32, DT_UINT64]
  device='XLA_CPU'; out_type in [DT_INT64]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='XLA_CPU'; out_type in [DT_INT32]; T in [DT_UINT8, DT_QUINT8,
DT_INT8, DT_QINT8, DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT,
DT_DOUBLE, DT_COMPLEX64, DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
  device='CPU'; out_type in [DT_INT64]
  device='CPU'; out_type in [DT_INT32]
```

```
2019-08-02 21:28:55.322174: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:55.322408: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_1}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:55.322624: W tensorflow/core/grappler/utils/graph_view.cc:
830] No registered 'Const' OpKernel for GPU devices compatible with node
{{node strided_slice_1/stack_2}}
. Registered: device='XLA_CPU_JIT'; dtype in [DT_FLOAT, DT_DOUBLE,
DT_INT32, DT_UINT8, DT_INT8, ..., DT_COMPLEX128, DT_HALF, DT_UINT32,
DT_UINT64, DT_STRING]
device='CPU'
device='XLA_CPU'; dtype in [DT_UINT8, DT_QUINT8, DT_INT8, DT_QINT8,
DT_INT32, DT_QINT32, DT_INT64, DT_HALF, DT_FLOAT, DT_DOUBLE, DT_COMPLEX64,
DT_COMPLEX128, DT_BOOL, DT_BFLOAT16]
```

```
2019-08-02 21:28:56.181106: I ./lingvo/core/ops/input_common.h:71] Create
RecordProcessor
Segmentation fault (core dumped)
```