

WARNING flwr 2024-03-23 09:38:31,577 | logger.py:118 |
DEPRECATED FEATURE: `FedXgbNnAvg` strategy

This is a deprecated feature. It will be removed
entirely in future versions of Flower.

WARNING flwr 2024-03-23 09:38:31,580 | app.py:211 | Both server and strategy
were provided, ignoring strategy
INFO flwr 2024-03-23 09:38:31,582 | app.py:178 | Starting Flower simulation, config:
ServerConfig(num_rounds=3, round_timeout=None)
Data partitioned across 10 clients and 0.0 of local dataset reserved for validation.
FL experiment configured for 3 rounds with 10 client in the pool.
FL round will proceed with 100.0% of clients sampled, at least 1.
2024-03-23 09:38:36,280 INFO worker.py:1621 -- Started a local Ray instance.
INFO flwr 2024-03-23 09:38:37,822 | app.py:213 | Flower VCE: Ray initialized with
resources: {'object_store_memory': 34812090777.0, 'GPU': 1.0, 'CPU': 40.0,
'node:10.10.1.148': 1.0, 'node:__internal_head__': 1.0, 'memory': 71228211815.0}
INFO flwr 2024-03-23 09:38:37,825 | app.py:219 | Optimize your simulation with
Flower VCE: <https://flower.dev/docs/framework/how-to-run-simulations.html>
INFO flwr 2024-03-23 09:38:37,826 | app.py:242 | Flower VCE: Resources for each
Virtual Client: {'num_cpus': 1}
INFO flwr 2024-03-23 09:38:37,948 | app.py:288 | Flower VCE: Creating
VirtualClientEngineActorPool with 40 actors
INFO flwr 2024-03-23 09:38:37,950 | 2437557820.py:20 | Initializing global
parameters
INFO flwr 2024-03-23 09:38:37,951 | 2437557820.py:226 | Requesting initial
parameters from one random client
[2m[36m(DefaultActor pid=132091)[0m /home/user/.local/lib/python3.10/site-
packages/torch/cuda/__init__.py:141: UserWarning: CUDA initialization: Unexpected
error from cudaGetDeviceCount(). Did you run some cuda functions before calling
NumCudaDevices() that might have already set an error? Error 803: system has
unsupported display driver / cuda driver combination (Triggered internally at ../c10/
cuda/CUDAFunctions.cpp:108.)
[2m[36m(DefaultActor pid=132091)[0m return torch._C._cuda_getDeviceCount() >
0
[2m[36m(DefaultActor pid=132091)[0m /home/user/.local/lib/python3.10/site-
packages/torch/utils/data/_utils/collate.py:183: UserWarning: The given NumPy array
is not writable, and PyTorch does not support non-writable tensors. This means
writing to this tensor will result in undefined behavior. You may want to copy the array
to protect its data or make it writable before converting it to a tensor. This type of
warning will be suppressed for the rest of this program. (Triggered internally at ../
torch/csrc/utils/tensor_numpy.cpp:206.)
[2m[36m(DefaultActor pid=132091)[0m return collate([torch.as_tensor(b) for b in
batch], collate_fn_map=collate_fn_map)
INFO flwr 2024-03-23 09:38:49,022 | 2437557820.py:231 | Received initial
parameters from one random client
INFO flwr 2024-03-23 09:38:49,025 | 2437557820.py:23 | Evaluating initial
parameters
f off
INFO flwr 2024-03-23 09:39:50,627 | 2437557820.py:26 | initial parameters (loss,

other metrics): 0.028281427567559837, {'accuracy': tensor(0.0013)}

INFO flwr 2024-03-23 09:39:50,629 | 2437557820.py:36 | FL starting

DEBUG flwr 2024-03-23 09:39:50,630 | 2437557820.py:165 | fit_round 1: strategy sampled 10 clients (out of 10)

Evaluation on the server: test_loss=0.0283, test_accuracy=0.0013

Configuring round 1

[2m[36m(DefaultActor pid=132090)[0m /home/user/.local/lib/python3.10/site-packages/torch/cuda/__init__.py:141: UserWarning: CUDA initialization: Unexpected error from cudaGetDeviceCount(). Did you run some cuda functions before calling NumCudaDevices() that might have already set an error? Error 803: system has unsupported display driver / cuda driver combination (Triggered internally at ../c10/cuda/CUDAFunctions.cpp:108.)

[2m[36m(DefaultActor pid=132090)[0m return torch._C._cuda_getDeviceCount() > 0

[2m[36m(DefaultActor pid=132089)[0m /home/user/.local/lib/python3.10/site-packages/torch/cuda/__init__.py:141: UserWarning: CUDA initialization: Unexpected error from cudaGetDeviceCount(). Did you run some cuda functions before calling NumCudaDevices() that might have already set an error? Error 803: system has unsupported display driver / cuda driver combination (Triggered internally at ../c10/cuda/CUDAFunctions.cpp:108.)

[2m[36m(DefaultActor pid=132089)[0m return torch._C._cuda_getDeviceCount() > 0

[2m[36m(DefaultActor pid=132090)[0m /home/user/.local/lib/python3.10/site-packages/torch/autograd/_utils/collect_data.py:183: UserWarning: The given NumPy array is not writable, and PyTorch does not support non-writable tensors. This means writing to this tensor will result in undefined behavior. You may want to copy the array to protect its data or make it writable before converting it to a tensor. This type of warning will be suppressed for the rest of this program. (Triggered internally at ../torch/csrc/autograd/utils/tensor_numpy.cpp:206.)

[2m[36m(DefaultActor pid=132090)[0m return collate([torch.as_tensor(b) for b in batch], collate_fn_map=collate_fn_map)

[2m[36m(DefaultActor pid=132091)[0m Client 5: only had its own tree

[2m[36m(DefaultActor pid=132087)[0m Client 1: only had its own tree[32m [repeated 4x across cluster][0m

[2m[36m(DefaultActor pid=132091)[0m Client 5: training for 50 iterations/updates

[2m[36m(DefaultActor pid=132091)[0m Client 5: training round complete, 3200 examples processed

[2m[36m(DefaultActor pid=132081)[0m Client 4: only had its own tree[32m [repeated 5x across cluster][0m

[2m[36m(DefaultActor pid=132084)[0m Client 3: training for 50 iterations/updates[32m [repeated 4x across cluster][0m

[2m[36m(DefaultActor pid=132086)[0m Client 0: training round complete, 3200 examples processed[32m [repeated 5x across cluster][0m

DEBUG flwr 2024-03-23 09:40:14,708 | 2437557820.py:180 | fit_round 1 received 10 results and 0 failures

WARNING flwr 2024-03-23 09:40:14,720 | fedxgb_nn_avg.py:102 | No fit_metrics_aggregation_fn provided

Server side aggregated 10 trees.

f off

INFO flwr 2024-03-23 09:41:16,646 | 2437557820.py:51 | fit progress: (1,

0.01095642885459366, {'accuracy': tensor(0.0009)}, 86.01626919400587)
INFO flwr 2024-03-23 09:41:16,647 | 2437557820.py:98 | evaluate_round 1: no
clients selected, cancel
DEBUG flwr 2024-03-23 09:41:16,648 | 2437557820.py:165 | fit_round 2: strategy
sampled 10 clients (out of 10)
Evaluation on the server: test_loss=0.0110, test_accuracy=0.0009
Configuring round 2
[2m[36m(DefaultActor pid=132081)[0m Client 9: recieved 10 trees
[2m[36m(DefaultActor pid=132081)[0m Client 4: training for 50 iterations/
updates[32m [repeated 5x across cluster][0m
[2m[36m(DefaultActor pid=132081)[0m Client 4: training round complete, 3200
examples processed[32m [repeated 4x across cluster][0m
[2m[36m(DefaultActor pid=132089)[0m Client 6: recieved 10 trees[32m [repeated 9x
across cluster][0m
[2m[36m(DefaultActor pid=132083)[0m Client 0: training for 50 iterations/updates
[2m[36m(DefaultActor pid=132083)[0m Client 0: training round complete, 3200
examples processed
[2m[36m(DefaultActor pid=132081)[0m Client 9: training for 50 iterations/updates
DEBUG flwr 2024-03-23 09:41:36,380 | 2437557820.py:180 | fit_round 2 received 10
results and 0 failures
Server side aggregated 10 trees.
f off
INFO flwr 2024-03-23 09:42:37,673 | 2437557820.py:51 | fit progress: (2,
0.0031838738386224166, {'accuracy': tensor(0.9987)}, 167.04371399700176)
INFO flwr 2024-03-23 09:42:37,676 | 2437557820.py:98 | evaluate_round 2: no
clients selected, cancel
DEBUG flwr 2024-03-23 09:42:37,677 | 2437557820.py:165 | fit_round 3: strategy
sampled 10 clients (out of 10)
Evaluation on the server: test_loss=0.0032, test_accuracy=0.9987
Configuring round 3
[2m[36m(DefaultActor pid=132089)[0m Client 5: recieved 10 trees
[2m[36m(DefaultActor pid=132091)[0m Client 1: training round complete, 3200
examples processed[32m [repeated 9x across cluster][0m
[2m[36m(DefaultActor pid=132091)[0m Client 1: training for 50 iterations/
updates[32m [repeated 8x across cluster][0m
[2m[36m(DefaultActor pid=132091)[0m Client 6: recieved 10 trees
[2m[36m(DefaultActor pid=132089)[0m Client 5: training for 50 iterations/updates
[2m[36m(DefaultActor pid=132081)[0m Client 0: recieved 10 trees[32m [repeated 8x
across cluster][0m
[2m[36m(DefaultActor pid=132089)[0m Client 5: training round complete, 3200
examples processed
[2m[36m(DefaultActor pid=132091)[0m Client 6: training for 50 iterations/updates
DEBUG flwr 2024-03-23 09:42:56,299 | 2437557820.py:180 | fit_round 3 received 10
results and 0 failures
Server side aggregated 10 trees.
f off
INFO flwr 2024-03-23 09:43:57,607 | 2437557820.py:51 | fit progress: (3,
0.0008502754231663765, {'accuracy': tensor(0.9987)}, 246.9778770260018)
INFO flwr 2024-03-23 09:43:57,609 | 2437557820.py:98 | evaluate_round 3: no
clients selected, cancel

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INFO flwr 2024-03-23 09:43:57,609 | 2437557820.py:79 | FL finished in
246.9800539130083
INFO flwr 2024-03-23 09:43:57,610 | app.py:226 | app_fit: losses_distributed []
INFO flwr 2024-03-23 09:43:57,611 | app.py:227 | app_fit: metrics_distributed_fit {}
INFO flwr 2024-03-23 09:43:57,611 | app.py:228 | app_fit: metrics_distributed {}
INFO flwr 2024-03-23 09:43:57,612 | app.py:229 | app_fit: losses_centralized [(0,
0.028281427567559837), (1, 0.01095642885459366), (2,
0.0031838738386224166), (3, 0.0008502754231663765)]
INFO flwr 2024-03-23 09:43:57,613 | app.py:230 | app_fit: metrics_centralized
{'accuracy': [(0, tensor(0.0013)), (1, tensor(0.0009)), (2, tensor(0.9987)), (3,
tensor(0.9987))]}
Evaluation on the server: test_loss=0.0009, test_accuracy=0.9987
History (loss, centralized):
    round 0: 0.028281427567559837
    round 1: 0.01095642885459366
    round 2: 0.0031838738386224166
    round 3: 0.0008502754231663765
History (metrics, centralized):
{'accuracy': [(0, tensor(0.0013)), (1, tensor(0.0009)), (2, tensor(0.9987)), (3,
tensor(0.9987))]}

Time = 5m 30s
```