

TLDR: Visit hud.pytorch.org for a quick glance into PyTorch's CI. Go to `hud.pytorch.org/pr/<pr number>` (example) or `hud.pytorch.org/commit/<long hash>` (example) for a detailed view of GitHub Actions jobs.

Please report any HUD bugs you find in our [issue tracker](#)!

Jobs

PyTorch's CI currently runs on 3 platforms, GitHub Actions, Jenkins, and CircleCI. It can be hard to tell at a glance how the various jobs across these services are doing on recent commits to PyTorch to determine if a failure on your pull request is a real failure vs. something that is broken on `master`. hud.pytorch.org aims to fill this gap by providing a quick view over all the jobs on these commits.

The screenshot shows the PyTorch CI HUD interface. At the top, there are tabs for 'Pytorch CI HUD', 'Master', 'Nightly', and 'MiniHUD'. A message states: 'HUD Migration: HUD is being migrated. If you would like to use the old HUD, go here to use the old HUD or file an issue to let us know what's wrong.' Below this, the 'pytorch/pytorch: master' branch is selected. A 'Job filter' input field is present with a 'Go' button. A 'Use grouped view' checkbox is checked. The main table displays a list of commits with columns for Time, SHA, Commit, and PR. Annotations 1-7 point to specific UI elements: 1. Branches/Helpful Links, 2. Repo/Branch Switcher, 3. Job Filter, 4. Grouped View Checkbox, 5. HUD Commit View Link, 6. Github PR Link, and 7. Expand Group.

Time	SHA	Commit	PR
2:21 PM	adae0d3	RNN args renaming in memonger...	#24388
1:49 PM	4802449	ci: Fix cudatoolkit issue, make docker builds testa...	#73974
1:43 PM	aed7188	[GHF][BE] Add match_rules test	#73975
1:41 PM	63a1e7b	Revert "Check that PR base is default branch in tr...	#73746
12:18 PM	69cdcd2	[OSS] add script to generate test models for mob...	#73746
10:44 AM	012829e	[Lazy][JIT] Do not crash when target device is un...	#73820
9:45 AM	2f90c82	Get rid of TorchScript sparse tensor is experiment...	#73874
9:45 AM	0239284	Relax dtype restrictions on torch.Tensor (#73850)	#73850
9:33 AM	8811d21	[DataPipe] Slight refactoring IterDataPipe serializ...	#73922
9:33 AM	0821154	[DataPipe] Adding serialization test for all MapDa...	#73921
8:55 AM	7534525	Reset worker cycle iterator for determinism across...	#73675
8:31 AM	3c82e42	Print system info as part of EC2 info step	#71891
8:26 AM	97ae431	[ONNX] Add symbolic support for torch.nn.cosine...	#73283
8:26 AM	95b1232	[ONNX] use onnxruntime 1.10 in CI (#69271) (#73...	#73282
8:26 AM	341e20a	[ONNX] Add module name as PythonOp attribute...	#73281
8:26 AM	9210e8f	[ONNX] Adds overload_name to Aten op (#6937...	#73280
4:59 AM	343a973	[AutoAccept][Codemod][FBS]SourceClangFormatL...	#73334
1:09 AM	a267c8e	add script to aggregate production ops	#73334
12:09 AM	7ebab92	FX graph module - prevent infinite recursion (#73...	#73866
Tue, Mar 8	b9c59dd	[PyTorch] Move is_nested_tensor_impl & add get...	#73928
Tue, Mar 8	ad6290f	[pytorch] flatten_indices function should use vect...	#73831
Tue, Mar 8	97b20b9	[SR][easy] Stack/concat out variants do not segfa...	#73704
Tue, Mar 8	18ed747	Add test/mobile to merge_rules.json	#73695
Tue, Mar 8	5b011fc	Fix Undefined variable in QInterpolateBenchmark	#73130
Tue, Mar 8	dc38326	Check that PR base is default branch in trymerge...	#73715
Tue, Mar 8	1c152f8	Parametrize some TestAutogradFunctional tests t...	#73854
Tue, Mar 8	a149a4d	Clean up some tests to use common_utils.param...	#73853
Tue, Mar 8	15df909	Move autograd functional tests to separate file (#...	#73852
Tue, Mar 8	0723639	Revert D34455360: Multisect successfully blame...	#73663
Tue, Mar 8	2e039b6	[Quant] Qadd: Add qint8 support backed by xnnp...	#73949
Tue, Mar 8	41b86f4	[CircleCI] Delete MacOS binary smoke tests	#68376
Tue, Mar 8	ee8d7d8	Use cub::DeviceSelect::UniqueByKey for Embedd...	#73888
Tue, Mar 8	600a01a	Add test with multiple ops (#73888)	#73888
Tue, Mar 8	2ad3003	[codemod][type-comments] Convert type comm...	#73607
Tue, Mar 8	a482fd7	[ONNX] Fix onnx gather shape inference	#71916
Tue, Mar 8	1fbc08c	Add Autocast support for Einsum (#71916)	#73940
Tue, Mar 8	beda4e8	Fix fx tracing for OpOverload (#73940)	#73262
Tue, Mar 8	11231b0	ci: Migrate windows conda to GHA	#73716
Tue, Mar 8	be535e2	[FSDP] Provide a utility API to allow users easily t...	#73579
Tue, Mar 8	e47a5a6	Back out "Revert D34524207: [pytorch][PR] rem...	#73867
Tue, Mar 8	37e0d2e	Fix segfault while real and imaginary attributes ar...	#73545
Tue, Mar 8	5dfbe52	[ROCM] Navi21 Enablement 5: Softmax kernels (#...	#73085
Tue, Mar 8	299dec1	[codemod][type-comments] Convert type comm...	#73702
Tue, Mar 8	3b30c8d	Add logging for ProcessGroup backends. (#73702)	#73918
Tue, Mar 8	f982d6a	Fix nightly docker publish build	#73881
Tue, Mar 8	31b64fc	[JIT] log extract tool - dump NVFuser fallbacks in...	#73842
Tue, Mar 8	56164c0	Fix libtorch_cuda_linalg builds (#73896)	#73553
Tue, Mar 8	9012e8d	[ZeRO][BE] Clean up ZeRO tests (#73842)	#72755
Tue, Mar 8	5372dcd	[FSDP] Generalize fsdp_modules() (#73553)	
Tue, Mar 8	4e6aefa	[Qunat] Refactor reference module mapping (#72...	

1. Quickly switch between different branches. Also has a link to MiniHUD, a more granular, commit based view. 2. Click on these to change the branch or repo. Only works on repos within Pytorch 3. Search for jobs in here and press "Go" to get the permalink 4. Group the workflows by logical organization 5. Click on these commits to take you to

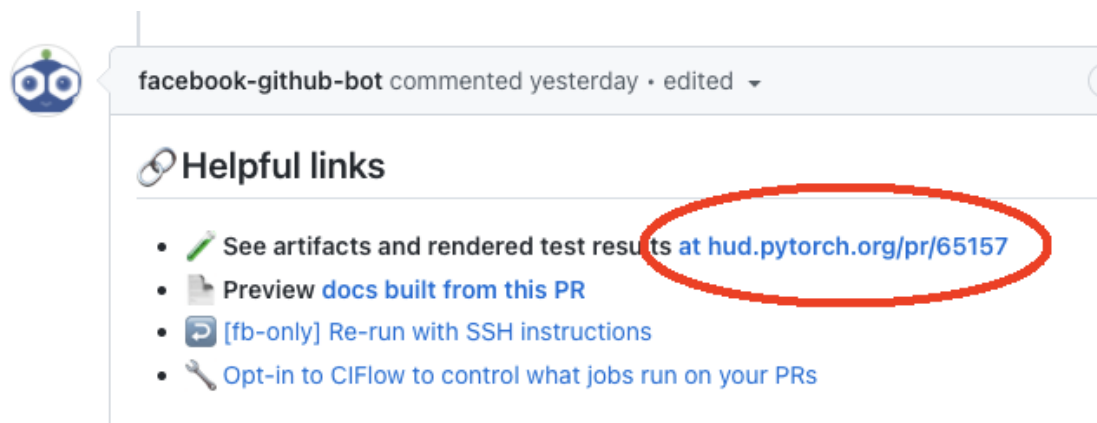
the HUD view of the jobs that ran 6. Click on these to take you to the PR on Github 7. Click on this to expand the group

Individual Pull Requests and Commits

GitHub provides a view for GitHub Action job logs for commits and PRs, but we received many reports that this was lacking in functionality and usability, so we created our own view which is also hosted on hud.pytorch.org. The page displays statuses for a commit, so if you are viewing a PR you will see statuses for the *latest* commit to that PR.

Finding the Page

For PRs, you can navigate to the page directly by going to `hud.pytorch.org/pr/<pr number>`, or by finding the link in the automated Dr. CI facebook-github-bot comment on your PR.



For commits, you can go to `hud.pytorch.org/commit/<long commit hash>` or by clicking the link from the main HUD page (see "Jobs" above).

Usage

You will need to sign in with GitHub on your first visit to the page. This is necessary so the HUD can make calls to the GitHub API.

hud.pytorch.org

New-style: [pytorch-master](#) [pytorch-nigh](#)

Old-style: [pytorch-master](#) ([perf/cost/bina](#)
([perf/cost](#)) [nightlies-uploaded](#)

[Click here](#) to sign in to GitHub

Loading... (make sure you are signed in)

Once done, you should be able to see the GitHub Actions jobs for that commit or PR. For PRs, the jobs shown are for the latest commit pushed to that PR. The jobs are sorted so failing jobs are at the top. Some jobs that are not very helpful are grouped together at the bottom (such as the "Triage" jobs).

[Log out](#)

Commit **d37c02b**

Allow parametrization to be nested (#65167)

[Python Docs](#)

[C++ Docs](#)

linux-bionic-cuda10.2-py3.9-gcc7

✓ [ciflow_should_run](#) ▶

✓ [generate-test-matrix](#) ▶

4 ✓ [calculate-docker-image](#) ▶

✓ [build](#) ▶

✗ [test \(default, 1, 2, linux.8xlarge.nvidia.gpu\)](#) ▶

Tests (234 KB)

✓ [test \(default, 2, 2, linux.8xlarge.nvidia.gpu\)](#) ▶

Tests (370 KB)

✓ [test \(distributed, 1, 1, linux.8xlarge.nvidia.gpu\)](#) ▶

Tests (75 KB)

linux-xenial-cuda10.2-py3.6-gcc7

1. If the doc builds for this commit or PR have finished, the link to the C++ / Python previews will be shown at the top.
2. You can view logs for this job by clicking the rightward arrow.
3. Some jobs report test results. The HUD can download and render these, similar to the test view on CircleCI. Click the button to expand and see failed tests. You can also see details of which tests ran in the "Summary" section.
4. Each job reports a status, one of:
 1. Success
 2. Failed
 3. Cancelled
 4. Skipped

Artifacts

Some jobs upload artifacts. Test report artifacts are hidden from view since their data is exposed via the test report renderer you see when you click the blue "Tests" button next to a test job. Other artifacts, some of which are stored in GitHub's artifact store and some in AWS S3, are shown below the job if there are any.

win-vs2019-cuda10.2-py3

- ✓ `ciflow_should_run` ▶
- ✓ `generate-test-matrix` ▶
- ✓ `build` ▶
- ✗ `test (default, 1, 2, windows.8xlarge.nvidia.gpu)` ▶
- ✓ `test (default, 2, 2, windows.8xlarge.nvidia.gpu)` ▶

Artifacts

[gha] win-vs2019-cuda10.2-py3 (208.30 MB)

Logs

Logs are shown using VSCode, so you can look through them with the same tools you would if you had downloaded them locally. The text is editable if you wish to operate on the logs, but these edits are not saved anywhere. You can also bring up the VSCode command palette with F1 and run most commands from there. The "Log Level" selector enables or disables line filtering of [known-noisy lines](#). Usually you will not have to move it off of "Minimal".

```
✗ test (default, 1, 2, linux.8xlarge.nvidia.gpu) ▼
Log Level: Minimal All
20981 2021-09-17T16:31:35.001497Z
20982 2021-09-17T16:31:35.001518Z
20983 2021-09-17T16:31:35.001568Z ✓ 12730 Passed
20984 2021-09-17T16:31:35.001627Z ⚪ 3930 Skipped
20985 2021-09-17T16:31:35.001686Z ❌ 2 Failed
20986 > 2021-09-17T16:31:35.033248Z ##[group]Run # Remove any previous test reports if they exist--
20987 > 2021-09-17T16:31:35.095588Z ##[group]Run actions/upload-artifact@v2-
20988 > 2021-09-17T16:31:35.161789Z With the provided path, there will be 1 file uploaded
20989 > 2021-09-17T16:31:35.346998Z Total size of all the files uploaded is 209490 bytes
20990 > 2021-09-17T16:31:35.395194Z Finished uploading artifact test-reports-default. Reported size is 209490 bytes. There were 0 items that
20991 > 2021-09-17T16:31:35.395328Z Artifact test-reports-default has been successfully uploaded!
20992 > 2021-09-17T16:31:35.407647Z ##[group]Run seemethere/upload-artifact-s3@v3-
20993 > 2021-09-17T16:31:35.796564Z With the provided path, there will be 1 file uploaded
20994 > 2021-09-17T16:31:35.796642Z Uploading to s3 prefix: pytorch/pytorch/1245860996/artifact
20995 > 2021-09-17T16:31:35.801218Z Starting upload of test-reports-test-default-1-2-linux.8xlarge.nvidia.gpu.zip
20996 > 2021-09-17T16:31:36.035784Z Finished upload of test-reports-test-default-1-2-linux.8xlarge.nvidia.gpu.zip
21000 > 2021-09-17T16:31:36.052007Z ##[group]Run python3 -m pip install -r requirements.txt-
```

GitHub's log viewer supports sigils to mark the start and end of groups of lines, `##[group]` and `##[endgroup]` respectively. The log viewer here detects and automatically folds these. You can expand them by clicking the arrow on the left or F1 -> "Unfold All".