

V2 --skip design

Problem

The commands `./pants lint`, `./pants fmt`, and `./pants test` run every single tool possible, e.g. `./pants fmt2` may run both Black and isort.

Generally, we need a way to **permanently** enable/disable a tool and also a way to **temporarily** modify what tools run.

Specifically, we must fix these problems for V1 - V2 compatibility:

1. Remove `--fmt-skip` and `--lint-skip`, which prevent us from renaming the goals `fmt2` and `lint2` to `fmt` and `lint`.
2. Provide a mechanism in V2 to **temporarily** disable a tool.

Permanent toggling

Pants provides implementations for many linters/formatters; we must have a mechanism for users to specify which of these tools they actually want to use.

Current V1 behavior

We activate linters/formatters/test runners automatically when registering the `backend_package`, e.g. `pants.backend.python` will automatically enable isort. The core `backend_packages` are enabled by default, whereas some need to be installed via contrib wheels.

To turn off tools, users set `skip: True` in `pants.ini`.

That is, *tools are opt-out in V1*.

Current V2 behavior

Unlike V1, V2 makes you explicitly opt in to every linter you want via `backend_packages2`, e.g.

```
backend_packages2: [  
    "pants.backend.python.lint.isort",  
    "pants.backend.python.lint.flake8",
```

]

That is, tools are *opt-in in V2*.

Temporarily toggling

Users should be able to temporarily toggle tools on/off via the CLI. When iterating, for example, a user may only want to run Flake8 and ignore what isort and Pylint say.

V1 implements this via `./pants --fmt-isort-skip`, but V2 has no implementation.

Proposed use cases

1. Turn off a certain tool, e.g. `./pants --pylint-skip lint2 ::`
 - Motivating use case: you want to use all your linters—Pylint, Black, isort, Bandit, and Flake8—except for MyPy, because you don't want to worry about types yet.
2. Specify you want to run *only certain tools*, e.g. `./pants --lint-only='pylint'`
`lint ::`
 - Motivating use case: you're having issues with MyPy but got all the other linters working and don't want to spend time running them all.
 - Avoids the verbosity of `./pants --pylint-disabled --black-disabled --isort-disabled --bandit-disabled --flake8-disabled lint2 ::`

Proposal

1. Keep the same permanent toggling setup for V2.
2. Deprecate task-level `--skip` in favor of subsystem-level options `--skip`
 - a. The default is `disabled=False` `skip=False`, so that if the backend plugin is registered, the tool is used.
3. Add `--lint-only` and `--fmt-only` options as an enhancement.

Ignore test runners for now. We're not ready to mess with that yet and only have one V2 test runner at the moment.