

# Typhon

Nix-based continuous integration

# You are a Nix enthusiast...

... and you are asked to set up CI at work.

You convince your boss to use Nix.

You install Hydra!





## The sad reality:

- Hard to set up, stateful
- System-defined plugins
- Barely extensible
- Deployment is flaky and **stateful**

## The dream:

- Simplicity, declarativity
- User-defined plugins
- Extensible with Nix
- Better deployment support

Typhon



# Defining a jobset

github:alice/website#typhonJobs

```
{  
  "x86_64-linux".build = «derivation /nix/store/...»;  
  "x86_64-linux".test = «derivation /nix/store/...»;  
  ...  
}
```

# Defining a project

github:alice/website#typhonProject

```
mkGithubProject {  
    owner = "alice";  
    repo = "website";  
    deploy.main.githubPages = true;  
    secrets = ./secrets.age;  
}
```



# Actions!

- User-defined (by project)
- Built with Nix
- Sandboxed
- Triggered by Typhon

Action 1

- Setting statuses



Nix job



Action 2

- Setting statuses
- Deploying

```
{  
  "job": "build",  
  "system":  
    "x86_64-linux",  
  "secrets": ...,  
  ...  
}
```



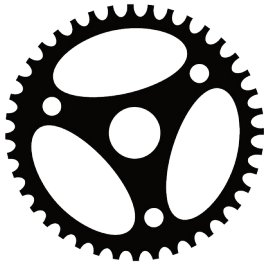
```
{ ... }
```

# A Nix library to write CI workflows

github:typhon-ci/typhon#lib

```
{  
  mkGithubProject = «lambda @ ...»;  
  mkGitlabProject = «lambda @ ...»;  
  ...  
}
```

# How it's made



DIESEL

Leptos



<https://etna.typhon-ci.org>

**✖ Evaluation** 018d658e-7378-7396-8b3f-728ee2afb7dd 9a70eff3 Re-run all jobs ⋮

[Overview](#)

x86\_64-linux

- ✔ build
- ✔ doc
- ✔ formatted
- ✖ nixos

```
formatted (x86_64-linux)
succeeded 35 mins ago in 1m 9s

✔ Begin 1s  ✔ Build 1m 8s  ✔ End 1s

1  ▼ unpackPhase
2  Running phase: unpackPhase
3  unpacking source archive /nix/store/ig7wb3yvb4xvvzffvf613k3gwz7qvxm1-8ah8v1pwg5vsah6jihxi9njdizjm25xr-source
4  source root is 8ah8v1pwg5vsah6jihxi9njdizjm25xr-source
5  ▼ patchPhase
6  Running phase: patchPhase
7  ▼ updateAutotoolsGnuConfigScriptsPhase
8  Running phase: updateAutotoolsGnuConfigScriptsPhase
9  ▼ configurePhase
10 Running phase: configurePhase
11 no configure script, doing nothing
12 ▼ buildPhase
13 Running phase: buildPhase
14 Checking style in 40 files using 6 threads.
```

# Try it out!

Documentation: <https://typhon-ci.org>

Repo: <https://github.com/typhon-ci/typhon>

Disclaimer: **Typhon is a prototype!** 🚧

Contribute: Help us write cool actions!

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