



GitHub Actions

Getting started & best practices

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Prerequisites

- Basic knowledge of git.
(Commit, Branch, Remote vs Local repository)
- Familiarity with any remote Git based service. (Preferably GitHub)

What are GitHub Actions?

Automation platform on GitHub.

Trigger

Run

Post Run

The [trigger event](#) to start the action in the specified [runner/s](#).

For example:

- Changes to a branch.
- Pull request merged.
- Schedule based on a cron expression.

There are [multiple runner OS images](#) that are available.

Run the specified commands and code.

The action has to be written in a [GitHub supported yaml syntax](#).

Enforce status checks.



Maintaining GitHub Actions

Do you reuse the same action in multiple repositories within the same organization?

Maintain them in the organization .github repositories and set it up for each repository as needed.

The only advantage this offers is in the ease of setting up the action, updating it is still cumbersome and has to be done in all repositories using this action.

Does your action need access to secrets?

If yes, ensure that the action is NOT triggered from untrusted forks. Will demonstrate why.



Recommended GitHub Actions

Starter actions for different programming languages

<https://docs.github.com/en/actions/automating-builds-and-tests/about-continuous-integration>

Organization report

https://github.com/padaiyal/org_report

Additional actions for Java and Python repositories

<https://github.com/padaiyal/github/tree/main/workflow-templates>