# **GitHub Pages and Actions**



can u explain why we cannot change the GitHub Pages source from `gh-pages` to GitHub Actions, as this would deactivate the pages?

Yes! The reason you **cannot directly change** the GitHub Pages source from `gh-pages` to GitHub Actions is because **GitHub Actions is not a source branch**—it is a workflow automation service. GitHub Pages requires a **static site source**, which is usually a branch (`main`, `gh-pages`, etc.) or a `docs/` folder.

If you switch from `gh-pages` to GitHub Actions without properly setting up a deployment workflow, Pages will deactivate because there is no valid source for serving the site.

## Why does this happen?

### 1. GitHub Pages needs a static source

- Normally, GitHub Pages serves content from a specific branch (`gh-pages` or `main`) or a
   `docs/` folder.
- If you remove this and select GitHub Actions **without a workflow**, Pages loses its source and gets disabled.

#### 2. GitHub Actions is a workflow, not a storage branch

- Unlike `gh-pages`, Actions is not a location where static files are stored.
- Instead, it runs automated scripts (like building a website from source).
- You need to configure it to deploy files to a valid source branch.

## How to properly use GitHub Actions for Pages?

Instead of selecting `gh-pages` as the source, you can:

- Keep GitHub Actions enabled.
- Create a workflow that **builds and deploys** your site to `gh-pages` (or another branch).
- Then set **GitHub Pages to use that branch** as the source.

A common approach is using GitHub Actions to deploy to `gh-pages` like this:

```
name: Deploy to GitHub Pages
on:
    push:
        branches:
            - main

jobs:
    deploy:
        runs-on: ubuntu-latest
        steps:
            - name: Checkout repository
            uses: actions/checkout@v3
```



```
- name: Build website
run: |
    # Add commands to generate static files
    npm install
    npm run build
- name: Deploy to gh-pages
    uses: peaceiris/actions-gh-pages@v3
with:
    github_token: ${{ secrets.GITHUB_TOKEN }}
    publish_dir: ./dist # Change this to your build output folder
```

After setting this up, GitHub Actions will:

- Build your site
- Deploy it to the `gh-pages` branch
- GitHub Pages will serve from `gh-pages` as usual

**TL;DR**: GitHub Actions itself **does not store files** for Pages. You need to configure it to **deploy the built files to a valid branch** (`gh-pages`), then GitHub Pages can serve from there.

Is this conversation helpful so far?