

Lab: Advanced Branching Techniques

In this lab, we will cover following:

- Viewing branches in your repository
- Renaming a branch
- About changing the default branch
- Deleting and restoring branches in a pull request

Note: You can fork following repository to complete the lab or use one of the your existing GitHub repository:

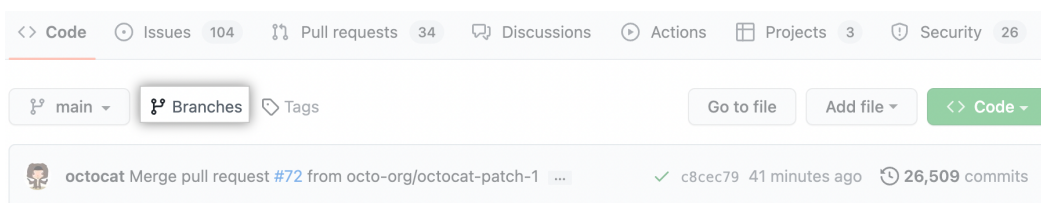
<https://github.com/fenago/publish-packages>

The screenshot shows the 'Create a new fork' page on GitHub. At the top, the repository 'fenago/publish-packages' is identified as 'Public'. Navigation links for Code, Issues, Pull requests, Actions, Projects, Security, and Insights are visible. The main heading is 'Create a new fork', with a subtext explaining that a fork is a copy of a repository. Below this, there are input fields for 'Owner' (set to 'athertahir') and 'Repository name' (set to 'publish-packages' with a green checkmark). A note states that forks are named the same as their upstream repository by default. There is an optional 'Description' text area. A checkbox labeled 'Copy the main branch only' is present, with a note about contributing back. At the bottom, a message indicates 'You are creating a fork in your personal account.' and a green 'Create fork' button is at the very bottom.

Viewing branches in your repository

Branches are central to collaboration on GitHub, and the best way to view them is the branches page.

1. On GitHub.com, navigate to the main page of the repository.
2. Above the list of files, click **Branches**.



3. Use the navigation at the top of the page to view specific lists of branches:
 - **Your branches:** In repositories that you have push access to, the **Yours** view shows all branches that you've pushed to, excluding the default branch, with the most recent branches first.
 - **Active branches:** The **Active** view shows all branches that anyone has committed to within the last three months, ordered by the branches with the most recent commits first.

- **Stale branches:** The **Stale** view shows all branches that no one has committed to in the last three months, ordered by the branches with the oldest commits first.
- **All branches:** The **All** view shows the default branch, followed by all other branches ordered by the branches with the most recent commits first.

4. Optionally, use the search field on the top right. It provides a simple, case-insensitive, sub-string search on the branch name. It does not support any additional query syntax.

The screenshot shows the GitHub interface for managing branches. At the top, there are tabs for 'Overview', 'Yours', 'Active', 'Stale', and 'All branches'. A search bar is on the right. The 'Default branch' section shows 'main' as the current default, updated 16 minutes ago by octocat. Below this, the 'Your branches' section lists three branches: 'add-emoji' (updated 21 minutes ago, 2 commits, 17 pull requests, #60 Open), 'my-patch-1' (updated 3 hours ago, 2 commits, 1 pull request, #71 New pull request), and 'octocat-patch-1' (updated 4 hours ago, 1 commit, 0 pull requests, #72 Merged).

Renaming a branch

You can change the name of a branch in a repository.

About renaming branches

When you rename a branch on GitHub.com, any URLs that contain the old branch name are automatically redirected to the equivalent URL for the renamed branch. Branch protection policies are also updated, as well as the base branch for open pull requests (including those for forks) and draft releases. After the rename is complete, GitHub provides instructions on the repository's home page directing contributors to update their local Git environments.

Although file URLs are automatically redirected, raw file URLs are not redirected. Also, GitHub does not perform any redirects if users perform a `git pull` for the previous branch name.

Renaming a branch

1. On GitHub.com, navigate to the main page of the repository.
2. Above the list of files, click **Branches**.

The screenshot shows the GitHub repository page with the 'Branches' tab selected. The 'main' branch is highlighted. Below the branches list, a merge pull request #72 from octocat-patch-1 is shown, indicating a successful merge with commit c8cec79 41 minutes ago and 26,509 commits.

3. In the list of branches, to the right of the branch you want to rename, click .

Overview

Yours

Active

Stale

All branches

Search branches...

Default branch

main

Updated yesterday by octocat

Default

Your branches

development

Updated yesterday by octocat

0 | 0

New pull request

feature/onboarding

Updated yesterday by octocat

0 | 0

New pull request

bugfix/adjust-margins

Updated yesterday by octocat

0 | 0

New pull request

4. Type a new name for the branch.

Rename this branch

Rename

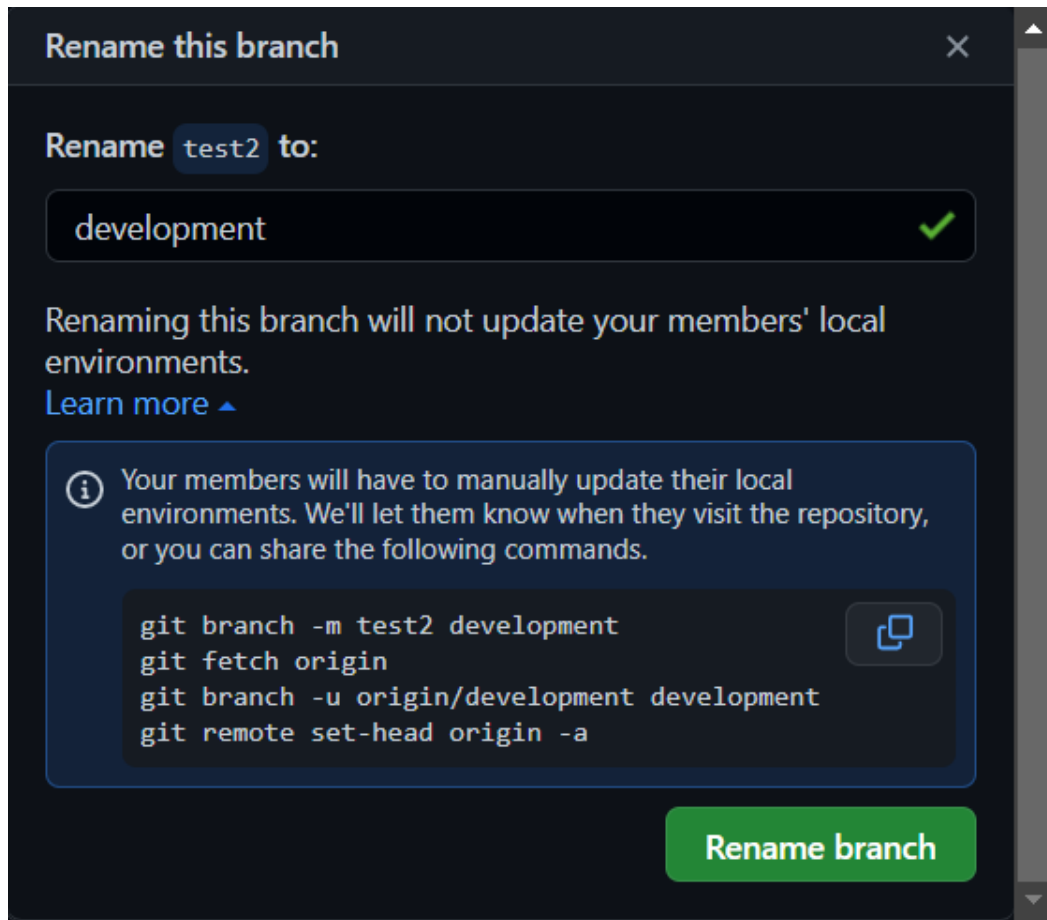
main

 to:

development

Most projects name the default branch main

- Review the information about local environments, then click **Rename branch**.



About changing the default branch

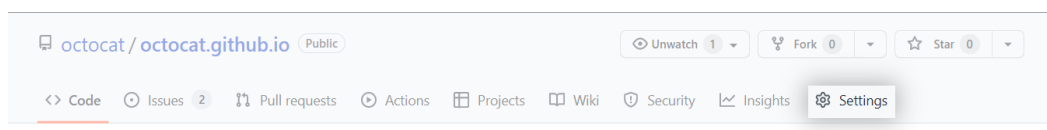
You can choose the default branch for a repository. The default branch is the base branch for pull requests and code commits.

Prerequisites

To change the default branch, your repository must have more than one branch.

Changing the default branch

- On GitHub.com, navigate to the main page of the repository.
- Under your repository name, click **Settings**.

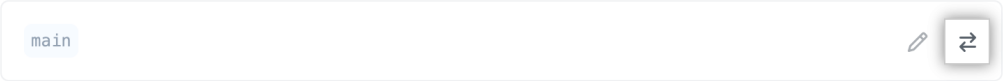


- In the "Code and automation" section of the sidebar, click **Branches**.

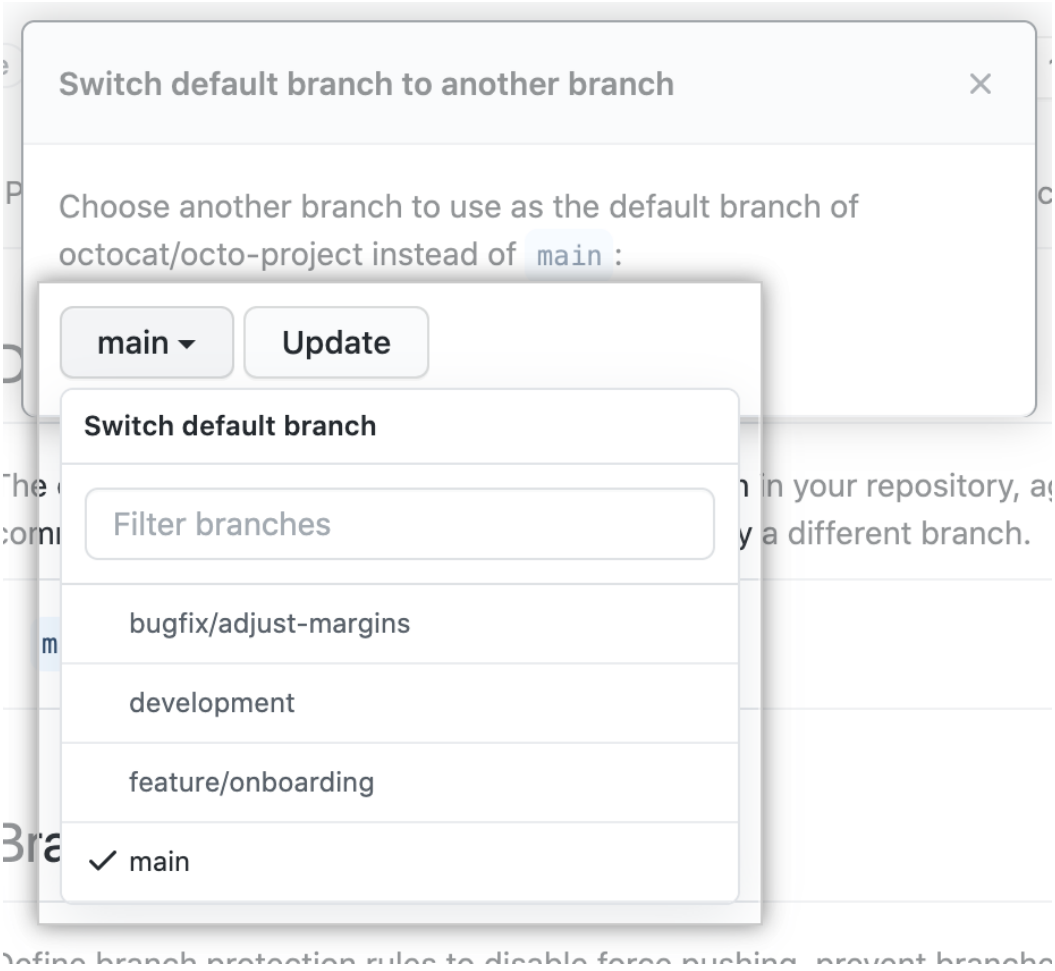
4. Under "Default branch", to the right of the default branch name, click .

Default branch

The default branch is considered the "base" branch in your repository, against which all pull requests and code commits are automatically made, unless you specify a different branch.



5. Use the drop-down, then click a branch name.



6. Click **Update**.

Switch default branch to another branch

Choose another branch to use as the default branch of octocat/octo-project instead of `main` :

development ▾

Update

7. Read the warning, then click **I understand, update the default branch**.

Switch default branch to another branch

Choose another branch to use as the default branch of octocat/octo-project instead of `main` :

Update default branch

Changing your default branch can have unintended consequences that can affect new pull requests and clones.

I understand, update the default branch.

Deleting and restoring branches in a pull request

If you have write access in a repository, you can delete branches that are associated with closed or merged pull requests. You cannot delete branches that are associated with open pull requests.

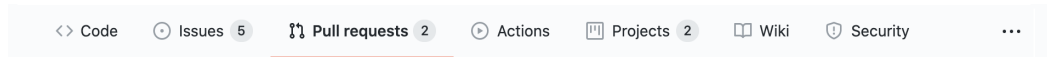
Prerequisites

Create a new branch and create new **Pull Request** after making some changes. Also, merge PR in the `main` branch.

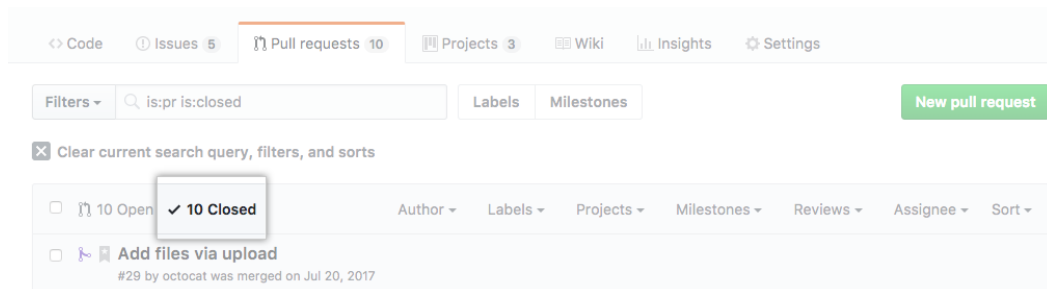
Deleting a branch used for a pull request

You can delete a branch that is associated with a pull request if the pull request has been merged or closed and there are no other open pull requests referencing the branch. For information on closing branches that are not associated with pull requests, see "[Creating and deleting branches within your repository]."

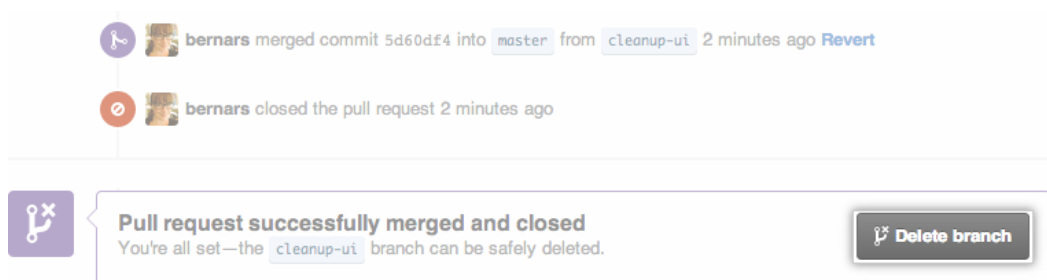
1. On GitHub.com, navigate to the main page of the repository.
2. Under your repository name, click **Pull requests**.



3. Click **Closed** to see a list of closed pull requests.



4. In the list of pull requests, click the pull request that's associated with the branch that you want to delete.
5. Near the bottom of the pull request, click **Delete branch**.

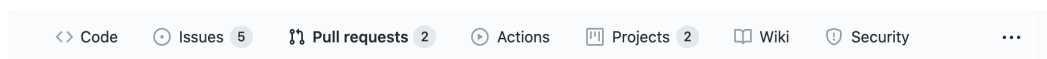


This button isn't displayed if there's currently an open pull request for this branch.

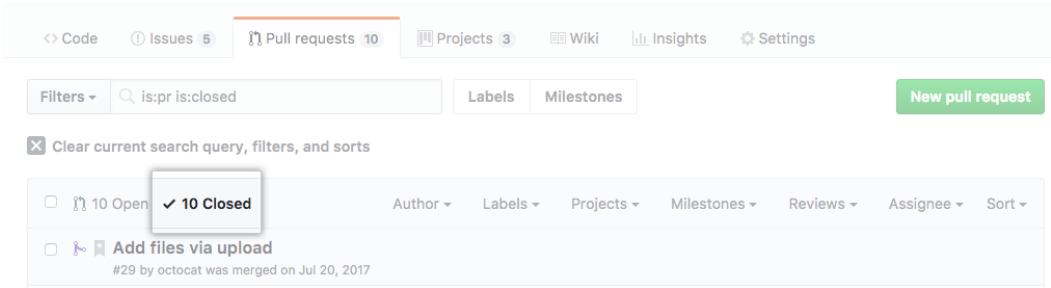
Restoring a deleted branch

You can restore the head branch of a closed pull request.

1. On GitHub.com, navigate to the main page of the repository.
2. Under your repository name, click **Pull requests**.



3. Click **Closed** to see a list of closed pull requests.



4. In the list of pull requests, click the pull request that's associated with the branch that you want to restore.

5. Near the bottom of the pull request, click **Restore branch**.

