The REST API is now versioned. For more information, see "About API versioning."

Branches

Use the REST API to modify branches and their protection settings.

List branches 🔗

✓ Works with GitHub Apps

Parameters for "List branches"

Headers

accept string

Setting to `application/vnd.github+json` is recommended.

Path parameters

owner string Required

The account owner of the repository. The name is not case sensitive.

repo string Required

The name of the repository without the `.git` extension. The name is not case sensitive.

Query parameters

protected boolean

Setting to `true` returns only protected branches. When set to `false`, only unprotected branches are returned. Omitting this parameter returns all branches.

per_page integer

The number of results per page (max 100).

Default: `30`

page integer

Page number of the results to fetch.

Default: `1`

HTTP response status codes for "List branches"

Status code	Description

200	OK
404	Resource not found

Code samples for "List branches"

GET /repos/{owner}/{repo}/branches

cURL   JavaScript   GitHub CLI

```
curl -L \ -H "Accept: application/vnd.github+json" \ -H "Authorization: Bearer <YOUR-TOKEN>" \ -H "X-GitHub-Api-Version: 2022-11-28"
\ http(s)://HOSTNAME/api/v3/repos/OWNER/REPO/branches
```

Response

Example response   Response schema

Status: 200

```
[ { "name": "master", "commit": { "sha": "c5b97d5ae6c19d5c5df71a34c7fbeeda2479ccbc", "url": "https://HOSTNAME/repos/octocat/Hello-
World/commits/c5b97d5ae6c19d5c5df71a34c7fbeeda2479ccbc" }, "protected": true, "protection": { "required_status_checks": {
"enforcement_level": "non_admins", "contexts": [ "ci-test", "linter" ] } }, "protection_url": "https://HOSTNAME/repos/octocat/hello-
world/branches/master/protection" } ]
```

Get a branch 🔗

✔ Works with GitHub Apps

Parameters for "Get a branch"

Headers

accept string

Setting to `application/vnd.github+json` is recommended.

Path parameters

owner string   Required

The account owner of the repository. The name is not case sensitive.

repo string   Required

The name of the repository without the `.git` extension. The name is not case sensitive.

branch string   Required

The name of the branch. Cannot contain wildcard characters. To use wildcard characters in branch names, use the GraphQL API.

HTTP response status codes for "Get a branch"

Status code	Description
200	OK
301	Moved permanently
404	Resource not found

Code samples for "Get a branch"

`GET` `/repos/{owner}/{repo}/branches/{branch}`

| cURL | JavaScript | GitHub CLI |

```
curl -L \ -H "Accept: application/vnd.github+json" \ -H "Authorization: Bearer <YOUR-TOKEN>" \ -H "X-GitHub-Api-Version: 2022-11-28"
\ http(s)://HOSTNAME/api/v3/repos/OWNER/REPO/branches/BRANCH
```

Response

| Example response | Response schema |

Status: 200

```
{ "name": "main", "commit": { "sha": "7fd1a60b01f91b314f59955a4e4d4e80d8edf11d", "node_id":
"MDY6Q29tbWl0MTI5NjI2OTo3ZmQxYTYwYjAxZjkxYjMxNGY1OTk1NWE0ZTRkNGU4MGQ4ZWRmMTFk", "commit": { "author": { "name": "The Octocat",
"email": "octocat@nowhere.com", "date": "2012-03-06T23:06:50Z" }, "committer": { "name": "The Octocat", "email":
"octocat@nowhere.com", "date": "2012-03-06T23:06:50Z" }, "message": "Merge pull request #6 from Spaceghost/patch-1\n\nNew line at
end of file.", "tree": { "sha": "b4eecafa9be2f2006ce1b709d6857b07069b4608", "url": "https://HOSTNAME/repos/octocat/Hello-
World/git/trees/b4eecafa9be2f2006ce1b709d6857b07069b4608" }, "url": "https://HOSTNAME/repos/octocat/Hello-
```

Rename a branch 🔗

✓ Works with [GitHub Apps](#)

Renames a branch in a repository.

Note: Although the API responds immediately, the branch rename process might take some extra time to complete in the background. You won't be able to push to the old branch name while the rename process is in progress. For more information, see "[Renaming a branch](#)".

The permissions required to use this endpoint depends on whether you are renaming the default branch.

To rename a non-default branch:

- Users must have push access.
- GitHub Apps must have the `contents:write` repository permission.

To rename the default branch:

- Users must have admin or owner permissions.
- GitHub Apps must have the `administration:write` repository permission.

Parameters for "Rename a branch"

Headers

accept string

Setting to `application/vnd.github+json` is recommended.

Path parameters

owner string Required

The account owner of the repository. The name is not case sensitive.

repo string Required

The name of the repository without the `.git` extension. The name is not case sensitive.

branch string Required

The name of the branch. Cannot contain wildcard characters. To use wildcard characters in branch names, use [the GraphQL API](#).

Body parameters

new_name string Required

The new name of the branch.

HTTP response status codes for "Rename a branch"

Status code	Description
201	Created
403	Forbidden
404	Resource not found
422	Validation failed, or the endpoint has been spammed.

Code samples for "Rename a branch"

POST `/repos/{owner}/{repo}/branches/{branch}/rename`
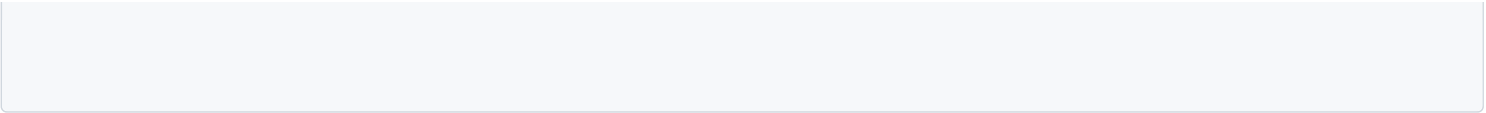
cURL   JavaScript   GitHub CLI

```
curl -L \ -X POST \ -H "Accept: application/vnd.github+json" \ -H "Authorization: Bearer <YOUR-TOKEN>" \ -H "X-GitHub-Api-Version:
2022-11-28" \ http(s)://HOSTNAME/api/v3/repos/OWNER/REPO/branches/BRANCH/rename \ -d '{"new_name":"my_renamed_branch"}'
```

Response

Example response   Response schema

Status: 201

{ "name": "master", "commit": { "sha": "7fd1a60b01f91b314f59955a4e4d4e80d8edf11d", "node_id": "MDY6Q29tbWl0N2ZkMWE2MGIwMWY5MWIzMTRmNTk5NTVhNGU0ZDRlODBkOGVkZjExZA==", "commit": { "author": { "name": "The Octocat", "date": "2012-03-06T15:06:50-08:00", "email": "octocat@nowhere.com" }, "url": "https://HOSTNAME/repos/octocat/Hello-World/git/commits/7fd1a60b01f91b314f59955a4e4d4e80d8edf11d", "message": "Merge pull request #6 from Spaceghost/patch-1\n\nNew line at end of file.", "tree": { "sha": "b4eecafa9be2f2006ce1b709d6857b07069b4608", "url": "https://HOSTNAME/repos/octocat/Hello-World/git/trees/b4eecafa9be2f2006ce1b709d6857b07069b4608" }, "committer": { "name": "The Octocat", "date": "2012-03-06T15:06:50-

Sync a fork branch with the upstream repository 🔗

✅ Works with [GitHub Apps](#)

Sync a branch of a forked repository to keep it up-to-date with the upstream repository.

Parameters for "Sync a fork branch with the upstream repository"

Headers

accept string

Setting to `application/vnd.github+json` is recommended.

Path parameters

owner string Required

The account owner of the repository. The name is not case sensitive.

repo string Required

The name of the repository without the `.git` extension. The name is not case sensitive.

Body parameters

branch string Required

The name of the branch which should be updated to match upstream.

HTTP response status codes for "Sync a fork branch with the upstream repository"

Status code	Description
200	The branch has been successfully synced with the upstream repository
409	The branch could not be synced because of a merge conflict
422	The branch could not be synced for some other reason

Code samples for "Sync a fork branch with the upstream repository"

POST `/repos/{owner}/{repo}/merge-upstream`

| cURL | JavaScript | GitHub CLI | 📋 |

```
curl -L \ -X POST \ -H "Accept: application/vnd.github+json" \ -H "Authorization: Bearer <YOUR-TOKEN>" \ -H "X-GitHub-Api-Version: 2022-11-28" \ http(s)://HOSTNAME/api/v3/repos/OWNER/REPO/merge-upstream \ -d '{"branch":"main"}'
```

The branch has been successfully synced with the upstream repository

Example response | Response schema

 Status: 200

```
{ "message": "Successfully fetched and fast-forwarded from upstream defunkt:main", "merge_type": "fast-forward", "base_branch":
"defunkt:main" }
```

Merge a branch 🔗

✔ Works with [GitHub Apps](#)

Parameters for "Merge a branch"

Headers

`accept` string

Setting to `application/vnd.github+json` is recommended.

Path parameters

`owner` string Required

The account owner of the repository. The name is not case sensitive.

`repo` string Required

The name of the repository without the `.git` extension. The name is not case sensitive.

Body parameters

`base` string Required

The name of the base branch that the head will be merged into.

`head` string Required

The head to merge. This can be a branch name or a commit SHA1.

`commit_message` string

Commit message to use for the merge commit. If omitted, a default message will be used.

HTTP response status codes for "Merge a branch"

Status code	Description
201	Successful Response (The resulting merge commit)
204	Response when already merged
403	Forbidden
404	Not Found when the base or head does not exist
409	Conflict when there is a merge conflict
422	Validation failed, or the endpoint has been spammed.

Code samples for "Merge a branch"

POST /repos/{owner}/{repo}/merges

cURL   JavaScript   GitHub CLI

```
curl -L \ -X POST \ -H "Accept: application/vnd.github+json" \ -H "Authorization: Bearer <YOUR-TOKEN>" \ -H "X-GitHub-Api-Version:
2022-11-28" \ http(s)://HOSTNAME/api/v3/repos/OWNER/REPO/merges \ -d
'{"base":"master","head":"cool_feature","commit_message":"Shipped cool_feature!"}'
```

Successful Response (The resulting merge commit)

Example response   Response schema

Status: 201

```
{ "url": "https://HOSTNAME/repos/octocat/Hello-World/commits/6dcb09b5b57875f334f61aebed695e2e4193db5e", "sha":
"6dcb09b5b57875f334f61aebed695e2e4193db5e", "node_id": "MDY6Q29tbWl0NmRjYjA5YjViNTc4NzVmMzM0ZjYxYWViZWQ2OTVlMmU0MTkzZGI1ZQ==",
"html_url": "https://github.com/octocat/Hello-World/commit/6dcb09b5b57875f334f61aebed695e2e4193db5e", "comments_url":
"https://HOSTNAME/repos/octocat/Hello-World/commits/6dcb09b5b57875f334f61aebed695e2e4193db5e/comments", "commit": { "url":
"https://HOSTNAME/repos/octocat/Hello-World/git/commits/6dcb09b5b57875f334f61aebed695e2e4193db5e", "author": { "name": "Monalisa
Octocat", "email": "mona@github.com", "date": "2011-04-14T16:00:49Z" }, "committer": { "name": "Monalisa Octocat", "email":
```