

CODING DevOps

Code Hosting



Tencent Cloud

Copyright Notice

©2013–2024 Tencent Cloud. All rights reserved.

The complete copyright of this document, including all text, data, images, and other content, is solely and exclusively owned by Tencent Cloud Computing (Beijing) Co., Ltd. ("Tencent Cloud"); Without prior explicit written permission from Tencent Cloud, no entity shall reproduce, modify, use, plagiarize, or disseminate the entire or partial content of this document in any form. Such actions constitute an infringement of Tencent Cloud's copyright, and Tencent Cloud will take legal measures to pursue liability under the applicable laws.

Trademark Notice

 Tencent Cloud

This trademark and its related service trademarks are owned by Tencent Cloud Computing (Beijing) Co., Ltd. and its affiliated companies ("Tencent Cloud"). The trademarks of third parties mentioned in this document are the property of their respective owners under the applicable laws. Without the written permission of Tencent Cloud and the relevant trademark rights owners, no entity shall use, reproduce, modify, disseminate, or copy the trademarks as mentioned above in any way. Any such actions will constitute an infringement of Tencent Cloud's and the relevant owners' trademark rights, and Tencent Cloud will take legal measures to pursue liability under the applicable laws.

Service Notice

This document provides an overview of the as-is details of Tencent Cloud's products and services in their entirety or part. The descriptions of certain products and services may be subject to adjustments from time to time.

The commercial contract concluded by you and Tencent Cloud will provide the specific types of Tencent Cloud products and services you purchase and the service standards. Unless otherwise agreed upon by both parties, Tencent Cloud does not make any explicit or implied commitments or warranties regarding the content of this document.

Contact Us

We are committed to providing personalized pre-sales consultation and technical after-sale support. Don't hesitate to contact us at 4009100100 or 95716 for any inquiries or concerns.

Contents

Code Hosting

- Quick Start

- Configuring permission

- Git repository

 - Creating a Repository

 - Import or Associate External Repository

 - Manage Repository

 - Code Comparison

- SVN Repository

 - Create an SVN repository

 - Access SVN Repository

 - Manage SVN Directory Permissions

- SSH Protocol

 - Configure SSH Public Keys

 - Key Fingerprint Authentication

 - Push/Pull Code Via SSH Protocol

- Branch management

 - Create Branch

 - Set Default Branch

 - Set Protected Branch

 - Set Hidden Branch

 - Set Read-only Branch

- Merge Request and Code Review

 - Merge Request Settings

 - Initiate Merge Request

 - Sign Git Commits with GPG

- Versions and Tags

 - Code Version

 - Code Tag

Code Hosting Quick Start

Last updated: 2024-09-05 16:11:00

Initialization Phase

Local Installation of Git

Windows

1. Download the Git client from [Git Official Website](#) and follow the instructions to complete the installation. It is recommended to use the default options.
2. After the installation is complete, you can use the right mouse button to bring up the Git Bash terminal and start your Git journey.

Linux

In Linux, Git can be installed directly using the package management tool provided by the system to install precompiled Git binary packages.

- Install with yum in Fedora/CentOS: `yum install git-core`
- Install with apt-get in Ubuntu/Debian: `apt-get install git`

macOS

1. Run the following command to install the package management tool Homebrew.

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

Note:

If an error is reported, refer to this [Open-source Repository](#) and switch to a domestic source for downloading.

2. After Homebrew is installed, enter the command `brew install git` in the terminal to complete the Git installation.
3. After installing Git, you can run `git --version` to check the current Git version.

Local Environment Initialization

After installation, create a new folder and enter the folder in the terminal. Enter the command `git init` to complete the local environment initialization.

```
/Volumes/CODING-Help/new-file git init SIGINT(2) 11074 11:28:57
Initialized empty Git repository in /Volumes/CODING-Help/new-file/.git/
/Volumes/CODING-Help/new-file master | 11075 11:29:02
```

Setting User Information

After installing Git, you should set the committer's name and email address promptly. Each subsequent commit will use this information as a record. The commands to set user information are as follows:



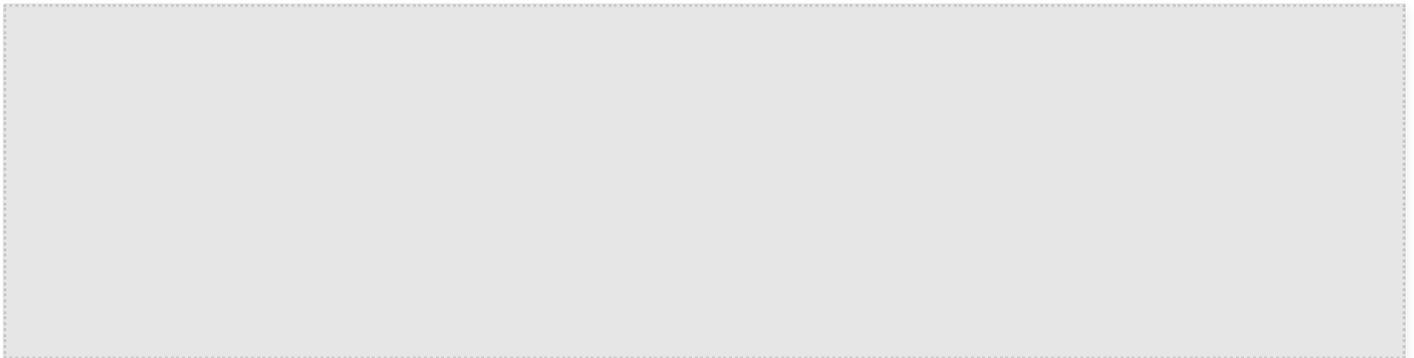
For example, your CODING account nickname is "大黑", and the user information configured in Git is: `user.name 大白`, `user.email dabai@coding.net`. After you push the code to the CODING repository, the activity is displayed as follows:



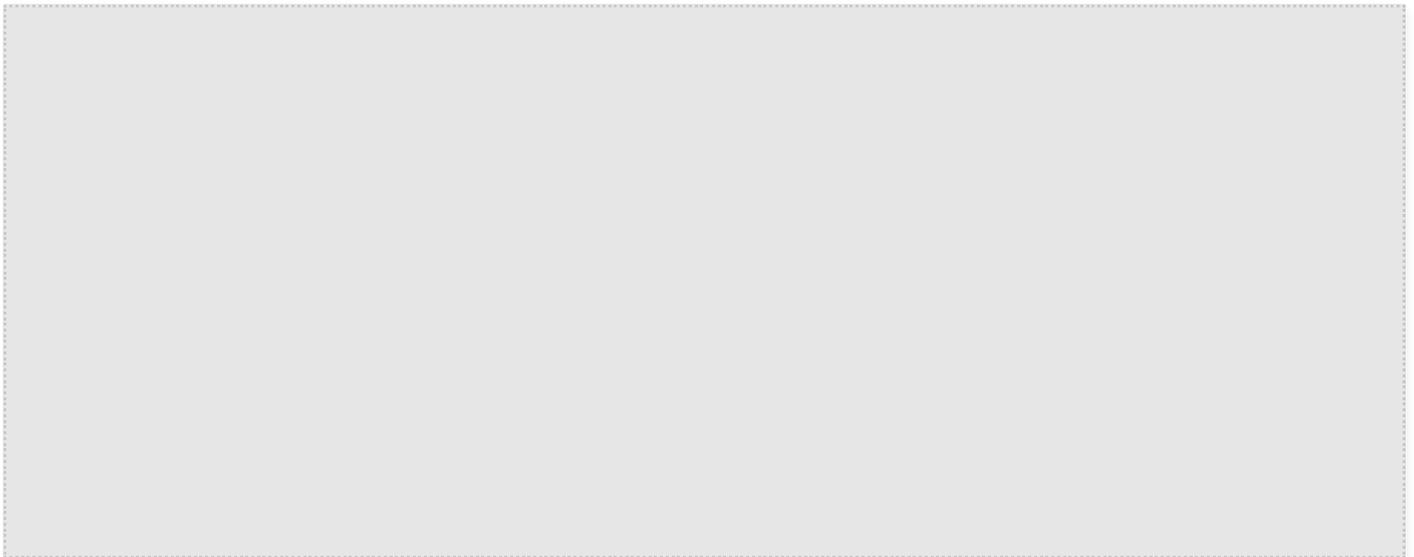
The user information configured in Git is customizable. It is recommended to directly fill in your CODING username and registered email for better collaboration.

Creating a CODING Code Repository

Enter any project and click on **Code Repository** in the left navigation bar to enter the code repository management page, and then create or enter any repository.



If the code repository entry is not shown, the project administrator needs to enter the project, click on **Project Settings** at the bottom left corner, and then open the code repository feature in **Project and Members > Menu Management**.



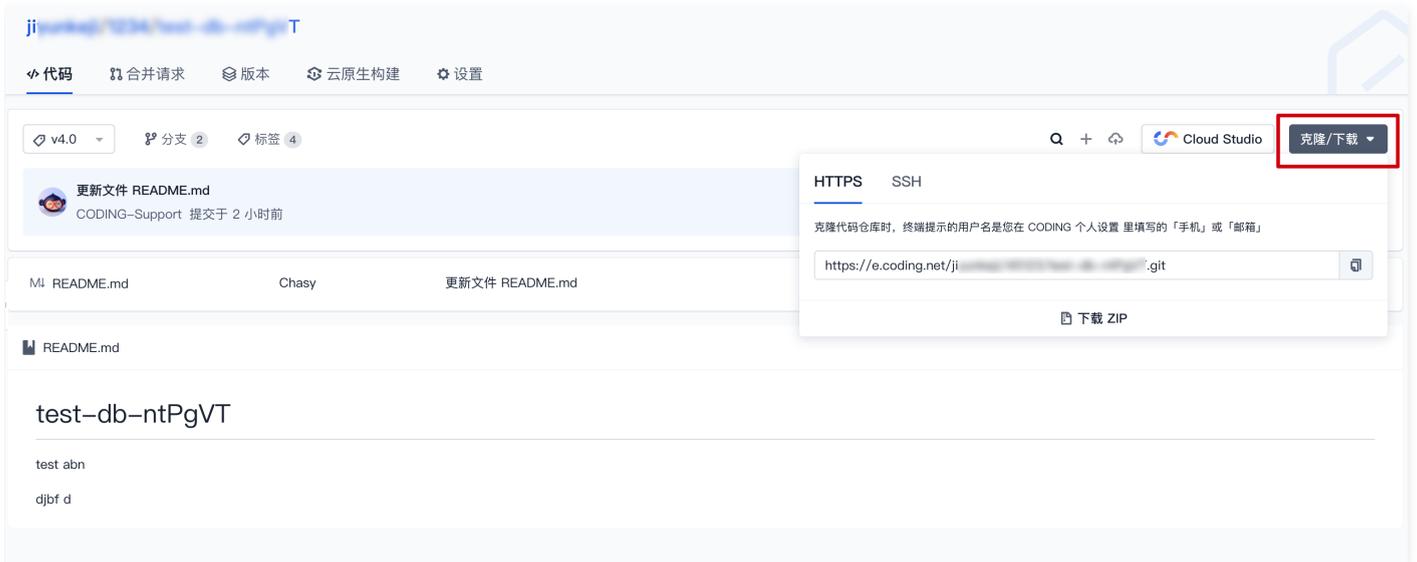
Push and Pull Code

This operation will demonstrate how to pull code from a remote repository / upload local code to a remote repository, aiding your code cloud journey.

Pulling Remote Repository Code

After initializing the code repository locally, bring up the terminal in the folder and input the command

```
git clone + repository address to pull the code.
```



After the first pull, you will be prompted to fill in the credentials. Here, you can enter the email and password used at the time of registration with CODING. You can also go to the **Personal Account Settings** at the bottom left corner to modify the credential information.

After the command operation is successful, you can modify the code in the local code repository.

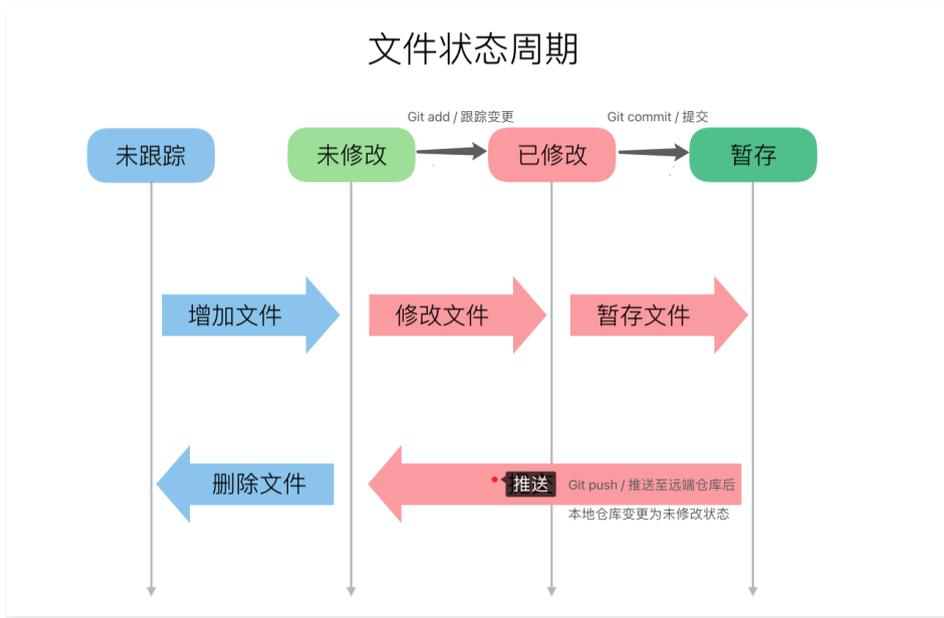


Editing Files

In the folder, create `readme.txt` and `learn-git.txt` files, write the sentence `I'm learning git.` (you can fill in the content as needed) in one of the files and save it.

Flow Diagram

Before officially submitting the code, you can refer to this flow diagram to understand the status cycle Git goes through when tracking files.



Track Files (git add)

After creating or modifying files, call the `git add` command to add the changed files to the local Git repository's staging area (Index Stage).

Command to track specific files:

```
git add readme.txt
```

Command to add multiple files:

```
git add readme.txt learn_git.txt
```

If you want to **track all files at once**, you can directly enter `git add .` in the terminal

Commit Files (git commit)

Once the files are staged, run the `git commit` command to officially commit the files to the local repository. This command will commit all files in the staging area at once:

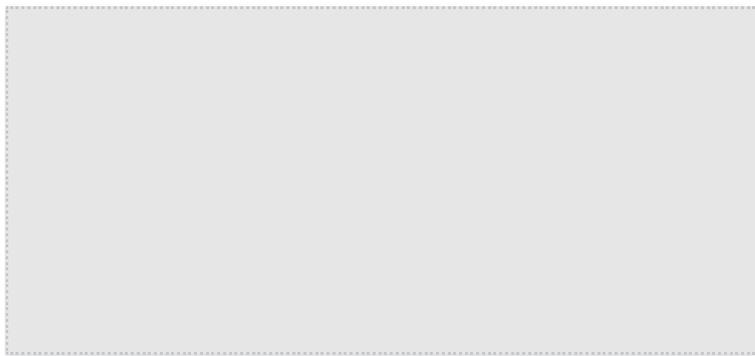
```
git commit -m "wrote a readme and a learn_git file"
```

```

/Volumes/CODING-Help/new-file } master + git commit -m "wrote a readme and a learn_git file"
[master (root-commit) f382773] wrote a readme and a learn_git file
2 files changed, 2 insertions(+)
create mode 100644 learn-git.txt
create mode 100644 readme.txt
/Volumes/CODING-Help/new-file } master |
  
```

The content inside the quotes after `>-m` is your commit message. The following lines are the terminal's return results. By attaching a change description to each commit, you can clearly control what modifications were committed.

In addition to the `git commit` command, you can also use standardized plugins to standardize commit information in the repository, making it easier to backtrack later.



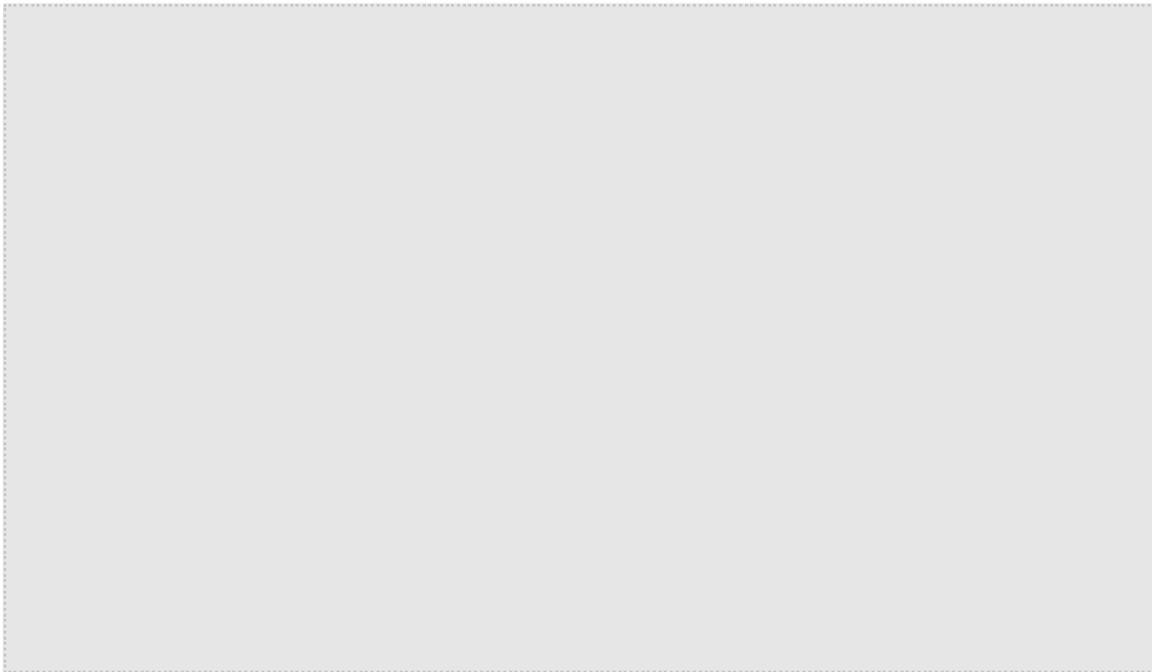
Automatic Issue Association

When committing code, you can also include the `# Issue ID` in the commit message to directly associate with issues in the project, allowing you to view related code commit records within the issue.

For example: If the issue (type: requirement) ID is 630, adding `#630` in the commit message will automatically associate it with the requirement; adding `project-1#630` will associate it with issue 630 in `project-1`.



After associating issues, hover the mouse over the commit record's ID to preview the issue.



Check File Status (git status)

Use the `git status` command to check the file status. This command allows you to confirm whether Git is accurately tracking the modified files and their status.

When no files in the current repository are being tracked, the result is as follows:

```
$ git status
```

```
On branch master
Your branch is up-to-date with 'origin/master'
nothing to commit, working directory clean
```

When files have changes but are not being tracked, the result is as follows:

```
adolf@P_ADOLFLAN-MB0:/Volumes/CODING-Help/new-file
/Volumes/CODING-Help/new-file master ● git status SIGINT(2) 11090 14:15:38
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
       modified:   learn-git.txt
       modified:   readme.txt

no changes added to commit (use "git add" and/or "git commit -a")
/Volumes/CODING-Help/new-file master ● | 11091 14:15:40
```

At this point, running the `git add` command will track the files. Once tracked, the text color changes from red to green.

When files are tracked and have been committed to the repository, the result is as follows:

```
adolf@P_ADOLFLAN-MB0:/Volumes/CODING-Help/new-file
/Volumes/CODING-Help/new-file master ● git st 11093 14:17:34
On branch master
nothing to commit, working tree clean
/Volumes/CODING-Help/new-file master ● | 11094 14:17:48
```

Push Files to Remote Repository (git push)

Run the following command in the terminal:

```
git push
```

To automatically create a merge request and associate it with the project upon submission, you can use the following command:

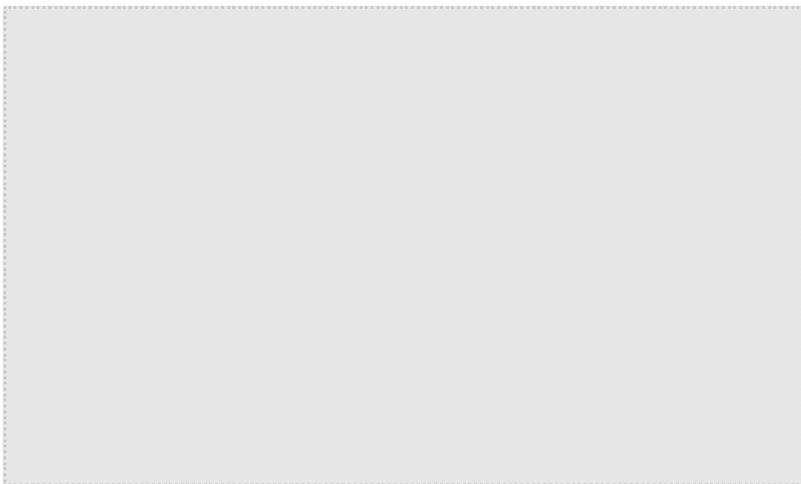
```
git push origin local-branch:mr/target-branch/local-branch
```

`git push` is the push command, which essentially pushes the local branch to the remote repository, creating a backup on the remote. Go to the CODING repository to view the pushed files. If multiple people are collaborating on the remote repository, once others have committed their code, you only need to run the `git pull` command locally to keep your local code in sync with the remote.

View or Edit Remote Repository

After the files are pushed to the CODING repository, you can edit the code, save, and submit changes on the webpage.

For example, with the `README.md` file, after editing and committing, you can provide a brief description of the changes. If not filled in, the default commit message is "Update file xxx".



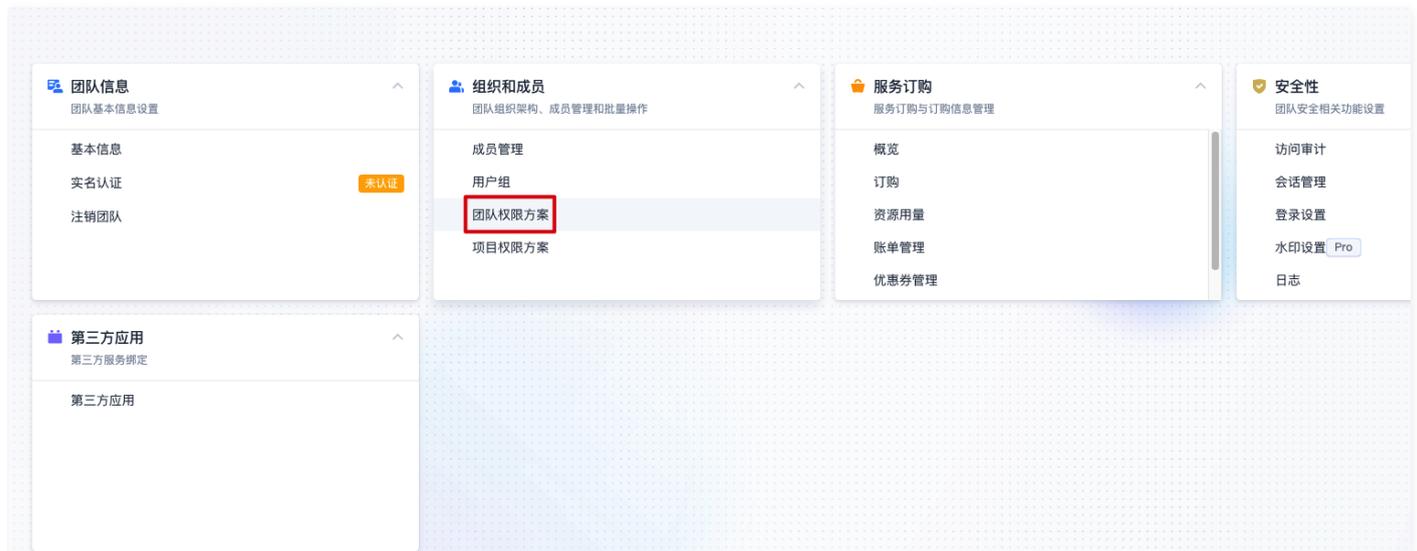
Configuring permission

Last updated: 2024-09-05 16:11:19

Based on the usage scenarios and feature positioning of code repositories, the types of permissions include "Team Permission Scheme", "Project Permission Group", and "Individual Repository Permission".

Team Permission Scheme

Repository settings, team deployment of public keys, and team repository standards fall under team-level permission management. This is adjusted by the team owner/administrator in the Team Settings Center under "Team Permission Scheme".



- Repository Settings

Members in the group with this permission point can access the **Settings** page within all repositories of the project.

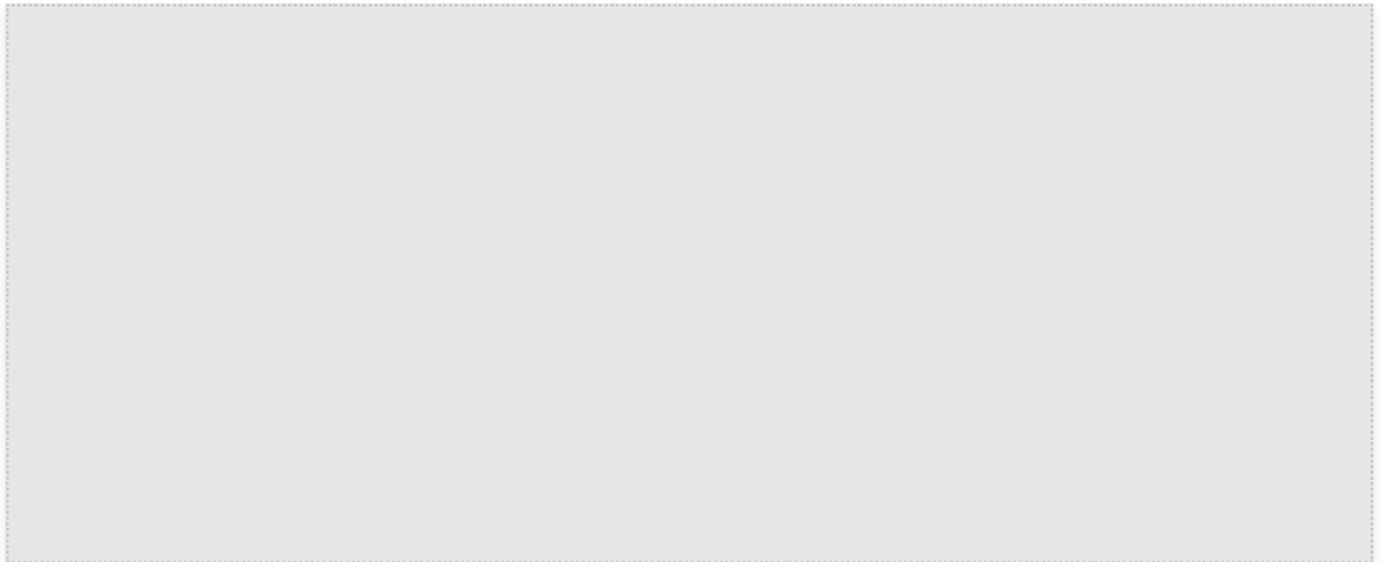
The screenshot shows the 'Settings' (设置) page for a repository named 'flash-demo'. The left sidebar contains navigation options: 仓库设置 (Repository Settings), 基本设置 (Basic Settings), 权限方案 (Permission Scheme), 部署公钥 (Deployment Public Key), 文件锁定 (File Locking), 分支设置 (Branch Settings), 仓库规范 (Repository Rules), 访问设置 (Access Settings), 推送设置 (Push Settings), 合并请求 (Merge Request), 版本发布 (Version Release), 代码标签 (Code Tagging), 仓库安全 (Repository Security), and 推送权限 (Push Permissions). The main content area is titled '基本设置' (Basic Settings) and includes the following sections:

- 仓库名称 (Repository Name):** Shows 'flash-demo' with a character count of '10 / 100'. A warning message states: '修改仓库名称将导致仓库的访问 URL 改变, 在此之前的 URL 地址将失效。Git 仓库地址修改方法: git remote set-url origin https://e.coding.net/zzz7/collaboration-testing/flash-demo.git'.
- 仓库描述 (Repository Description):** A text input field with the placeholder '请输入仓库描述'.
- 设为自定义模板仓库 (Set as Custom Template Repository):** An unchecked checkbox with a sub-note: '自定义模板仓库可让用户创建仓库时以相同的目录结构和文件生成新的仓库, 模板仓库当前团队可用。' Below it is a '保存' (Save) button.
- 仓库容量管理 (Repository Capacity Management):** A progress bar showing '已使用 24.67 MB / 总容量 20.00 GB' and a link to '修改仓库容量上限' (Modify Repository Capacity Limit).
- 仓库清理 (Repository Cleanup):** A '仓库清理' (Repository Cleanup) button with a sub-note: '仓库清理使用 git gc 优化代码仓库存储空间, 压缩存储库对象, 减少存储库磁盘占用。'.
- 危险操作 (Dangerous Operation):** A section titled '归档代码仓库' (Archive Code Repository) with a sub-note: '归档代码仓库后, 将无法继续访问和操作该仓库。若需解除归档, 您可在 已归档 页进行操作。' and a red '归档' (Archive) button.

On the right side, there is a '仓库图标' (Repository Icon) section showing a teal square with a white letter 'F' and a '更改图标' (Change Icon) button.

- Team Deployment Public Key and Repository Standards

Members in the group with this permission point can access the **feature settings** for **Team Deployment Public Key** and **Repository Standards**.



Project Permission Scheme

The project permission group is used to control various features for project members collaborating in the code repository, including protection branches, Tag and version creation, and other permission points.

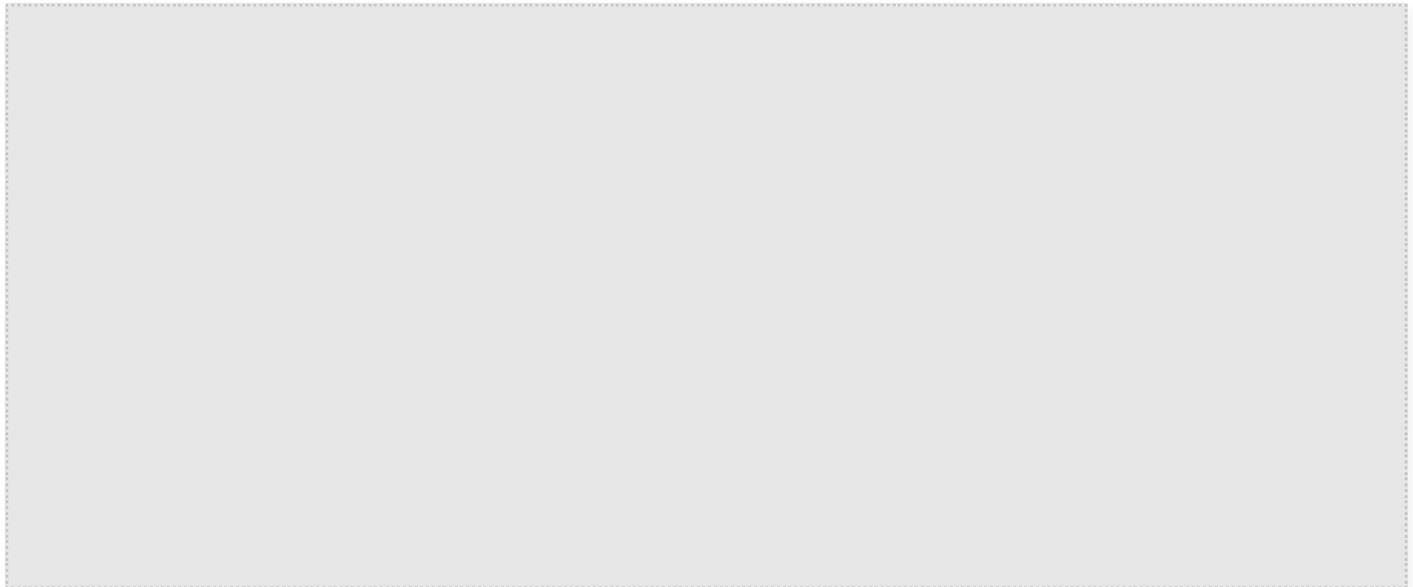
全局设置 / 项目权限方案 / 开发

开发 系
具备代码仓库、持续集成、制品仓库的访问与操作权限。

配置权限

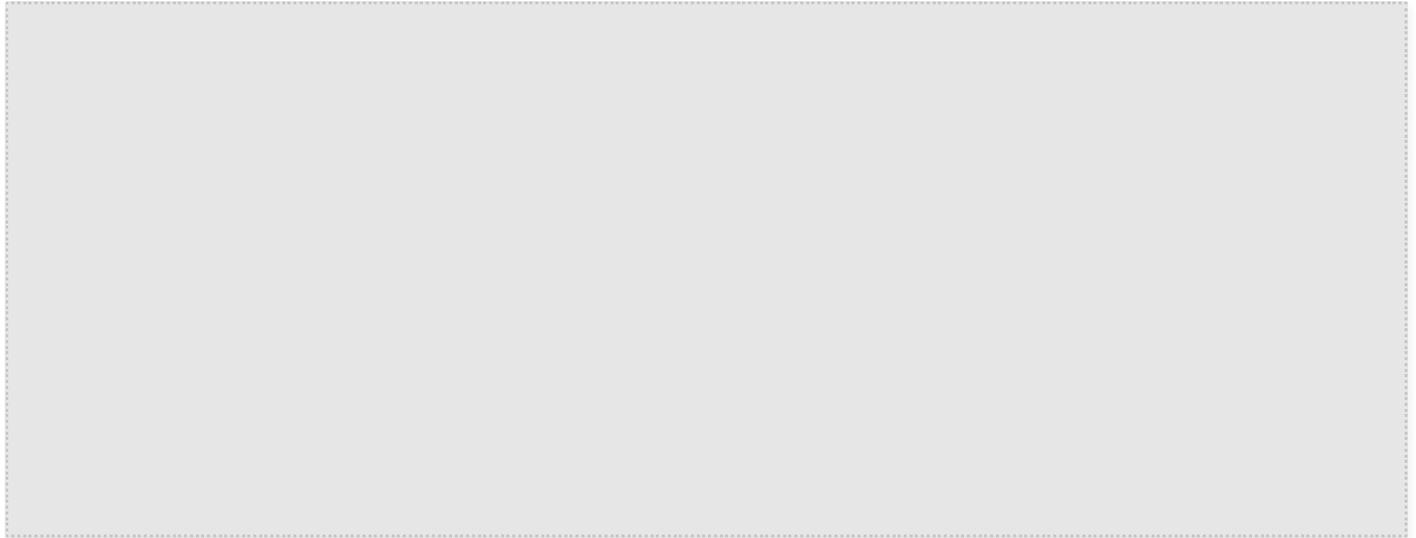
分类	功能权限				
项目协同	<input checked="" type="checkbox"/> 访问项目协同	<input type="checkbox"/> 编辑迭代	<input type="checkbox"/> 删除迭代	<input checked="" type="checkbox"/> 编辑事项	
	<input checked="" type="checkbox"/> 删除事项				
测试管理	<input checked="" type="checkbox"/> 访问测试管理	<input type="checkbox"/> 编辑测试计划	<input type="checkbox"/> 归档测试计划	<input type="checkbox"/> 删除测试计划	
	<input type="checkbox"/> 编辑用例	<input type="checkbox"/> 删除用例	<input type="checkbox"/> 编辑报告	<input type="checkbox"/> 删除报告	
	<input type="checkbox"/> 执行测试	<input type="checkbox"/> 编辑自动化用例	<input type="checkbox"/> 删除自动化用例		
代码扫描	<input checked="" type="checkbox"/> 访问代码扫描	<input checked="" type="checkbox"/> 扫描任务管理	<input checked="" type="checkbox"/> 扫描问题管理	<input checked="" type="checkbox"/> 扫描方案管理	
	<input checked="" type="checkbox"/> 访问代码	<input checked="" type="checkbox"/> 创建仓库	<input type="checkbox"/> 仓库设置	<input checked="" type="checkbox"/> 下载代码	
代码仓库	<input checked="" type="checkbox"/> 拉取代码	<input checked="" type="checkbox"/> 本地推送代码	<input checked="" type="checkbox"/> 在线编辑仓库文件	<input checked="" type="checkbox"/> 创建分支和编辑备注	
	<input checked="" type="checkbox"/> 删除普通分支	<input type="checkbox"/> 删除保护分支	<input type="checkbox"/> 保护分支规则	<input checked="" type="checkbox"/> 创建标签	
	<input checked="" type="checkbox"/> 删除普通标签	<input type="checkbox"/> 删除保护标签	<input type="checkbox"/> 创建版本	<input checked="" type="checkbox"/> 编辑版本	
	<input checked="" type="checkbox"/> 删除版本	<input checked="" type="checkbox"/> 创建合并请求	<input type="checkbox"/> 部署公钥	<input type="checkbox"/> 解锁锁定文件	
	<input checked="" type="checkbox"/> 访问持续集成	<input checked="" type="checkbox"/> 持续集成管理	<input checked="" type="checkbox"/> 手动触发/停止构建	<input checked="" type="checkbox"/> 重置缓存	
持续集成	<input checked="" type="checkbox"/> 删除构建记录	<input checked="" type="checkbox"/> 创建构建计划	<input checked="" type="checkbox"/> 修改构建计划	<input checked="" type="checkbox"/> 复制构建计划	
	<input checked="" type="checkbox"/> 删除构建计划	<input type="checkbox"/> 人工确认			
持续部署	<input checked="" type="checkbox"/> 访问持续部署	<input checked="" type="checkbox"/> 持续部署管理	<input type="checkbox"/> 删除部署记录		
	<input checked="" type="checkbox"/> 访问应用管理	<input type="checkbox"/> 应用发布	<input type="checkbox"/> 应用编辑	<input checked="" type="checkbox"/> 数据库变更管理	

After the team leader/administrator completes the project permission group configuration, they can go to the **Global Settings > Project Permission Scheme > Project Member Management** page to assign appropriate permission schemes to project members.



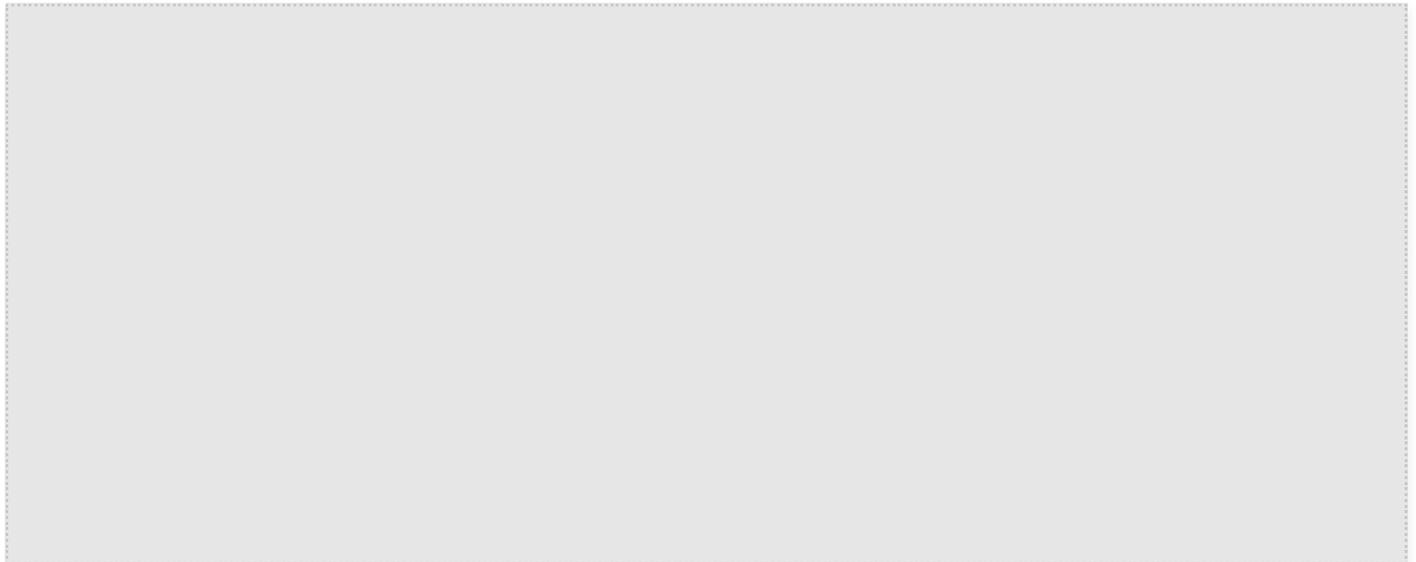
Repository Permission Scheme

In addition to using the project permission scheme, it also supports configuring repository permission schemes within a single code repository to meet the requirements for development process security between different code repositories within the same project. For detailed configuration instructions, please refer to [Creating a Resource Permission Scheme Group](#).



Specifying Permission Scheme Type

After the creation of the code repository permission group, the repository administrator goes to the repository settings to adjust the "Permission Scheme".



Note:

A repository administrator is a user whose project permission scheme includes the "Repository Settings" permission point.

To distinguish the applied permission schemes, the repository administrator must select the appropriate permission scheme based on the scenario before adding members.

- **Using Project Permissions & Repository Scheme Simultaneously**

Balance the project permission scheme and the repository permission scheme for repository members. For example, if Member A's project permission scheme includes the "Delete Normal Branch" permission but the code repository permissions do not, Member A will have the "Delete Normal Branch" permission.

- **Using Repository Permission Scheme Only**

Discard the project permission scheme, and follow the repository permission scheme for the repository members. For example, if Member A's project permission scheme includes the "Delete Normal Branch" permission but the code repository permissions do not, Member A will not have the "Delete Normal Branch" permission.

Note:

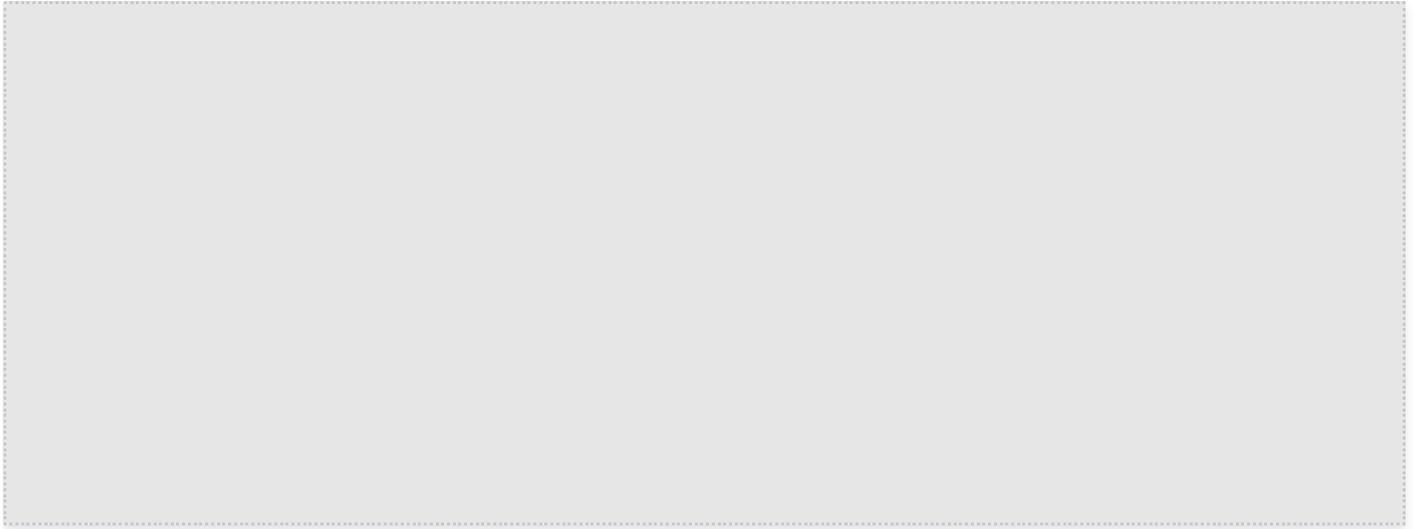
If you choose "Using Repository Permission Scheme Only", only the team leader/administrator or other members with code permissions in the team are allowed to access the repository page for operations.

- **Using Project Permission Scheme Only**

Discard the repository permission scheme and follow the project permission scheme for the repository members. For example, if Member A's project permission scheme includes the "Delete Normal Branch" permission but the code repository permissions do not, Member A will have the "Delete Normal Branch" permission.

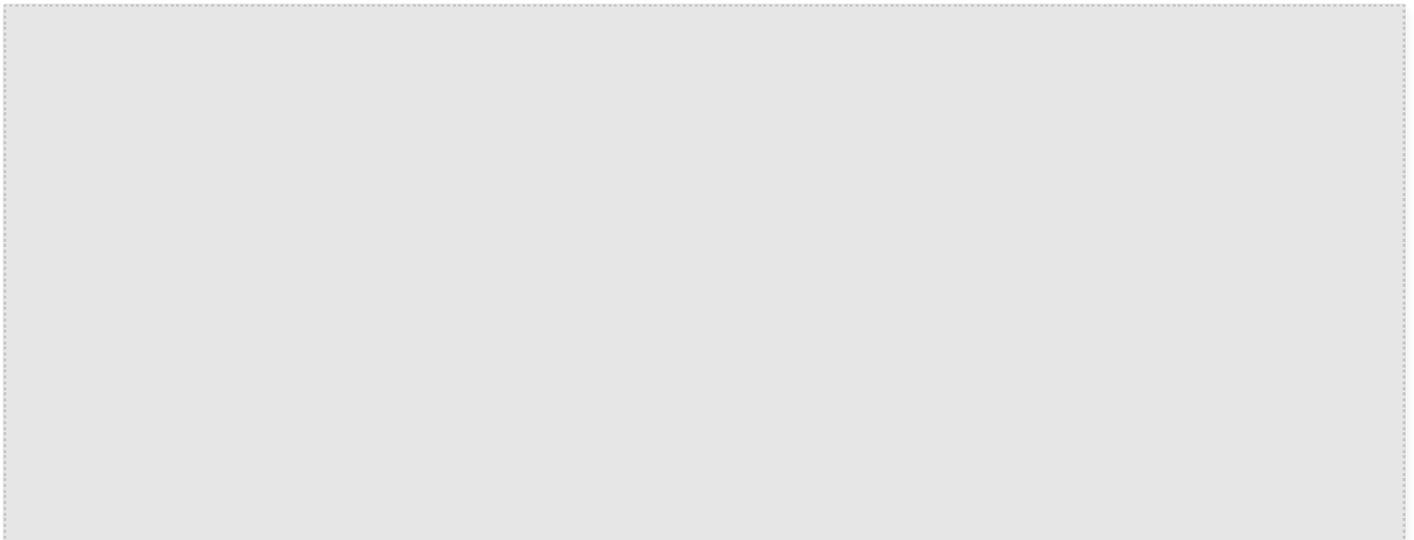
Assign Code Repository Permissions

After adding members, assign them to a code repository permission group.



View Code Repository Permission Group

Switch to the **Repository Permission Group** tab to view the current permission points included in the permission group.



If the assigned permission group lacks the necessary permission points, please contact the team administrator for [Resource Permission Scheme Configuration](#) to add the relevant permission points.

Git repository

Creating a Repository

Last updated: 2024-09-05 16:11:39

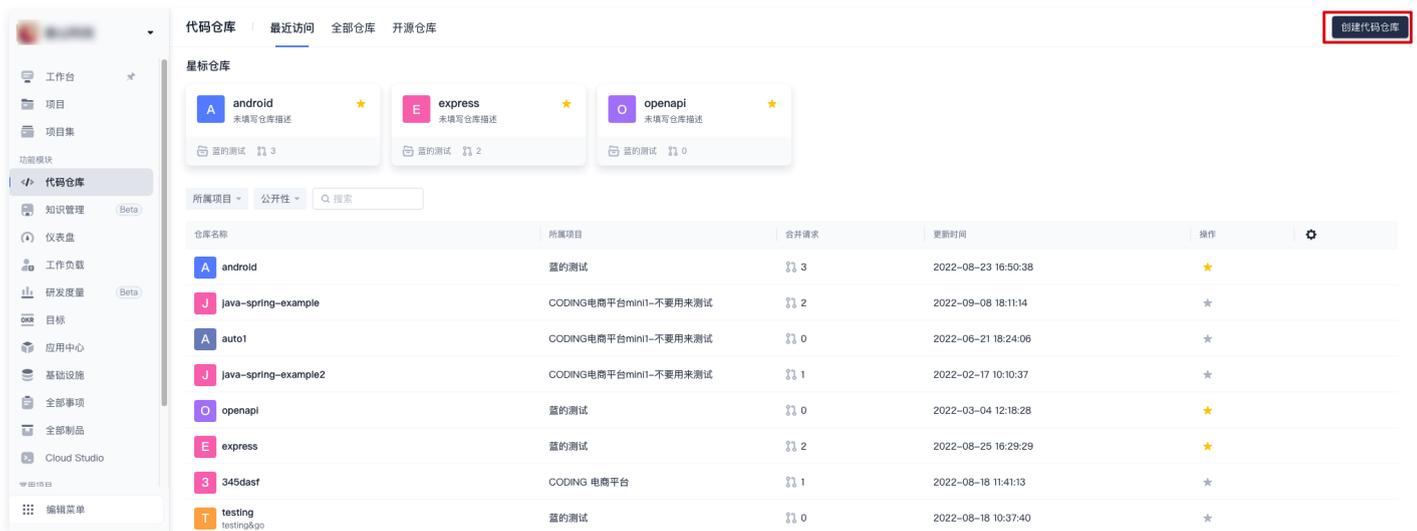
This document describes how to create a Git code repository.

Open Project

1. Log in to the [CODING console](#) and click the team domain name to enter the CODING page.
2. Click **Projects** on the left side of the team homepage to enter the project list page, then select the target project.
3. In the menu on the left, select **Code Repositories** to enter the code repository homepage.

Manual Repository Creation

1. Log in to the team, then click **Code Repositories** on the left side of the homepage and click **Create Code Repository**.



2. Code repositories cannot exist independently and must belong to a project. One project can correspond to multiple code repositories.



3. Select Git as the repository type and enter a valid repository name.

4. When creating a code repository, you can also choose whether to enable repository standards to quickly establish the team development workflow.



Template Creation

CODING provides several preset code repository modules with development frameworks to help you quickly experience how code repositories work with continuous integration or artifacts.

← 创建代码仓库 | 普通创建 模板创建

所属项目 *
所属项目

仓库名称 *
仓库名称只支持字母、数字、下划线(_)、中划线(-)和点(.)的组合 0/100

仓库描述
请输入仓库描述

选择模板 * | 预置模板 自定义模板

 spring-demo 基于简单的 Java 网页应用。	 ruby-on-rails-demo 基于简单的 Ruby on Rails 网页应用。	 ruby-sinatra-demo 基于简单的 Ruby Sinatra 网页应用。
 express-demo 基于简单的 Node.js 网页应用。	 android-demo 基于简单的 Android APP 应用。	 flask-demo 基于简单的 Python Flask 网页应用。

是否开源

私有仓库 (仅对仓库成员可见, 仓库成员可访问仓库)

公开仓库 (公开后, 任何人都可以访问代码仓库, 请谨慎考虑!)

完成创建 取消

Import an External Repository

You can quickly migrate open-source Git repositories or repositories from other platforms to the CODING DevOps platform. For details, see [Import or Associate External Repository](#).

Git Repository Initialization

After creating a repository, you can initialize it in four ways.



代码仓库还未初始化

当您使用客户端克隆代码仓库时, 终端提示的用户名是您在 CODING [个人设置](#) 里填写的「手机」或「邮箱」。

HTTPS

- 导入外部仓库 >
- 快速初始化仓库 >
- 使用命令行创建仓库 >
- 使用命令行推送已存在的仓库 >

Import an External Repository

Enter the Git repository address for import to complete the initialization.

导入外部仓库

仓库克隆地址

Quick Repository Initialization

This method completes the initialization by generating a README.md file.

快速初始化仓库

快速初始化仓库会为您的仓库新建一个 README 文件。同时您也可以选择为仓库增加一个 .gitignore 文件。

启用README.md文件初始化仓库

Creating a Repository Using Command Line

This method essentially generates a README.md file in the local repository and then uploads it to the remote repository for initialization.

使用命令行创建仓库

如果您还没有任何代码, 可以通过命令行工具创建一个全新的 Git 仓库并初始化到本项目仓库中。

```
git clone https://e.coding.net, nit.git
cd init
echo "# init" >> README.md
git add README.md
git commit -m "first commit"
git push -u origin master
```

Pushing Local Repository Using Command Line

You can also directly upload a locally initialized repository to the remote repository.

使用命令行推送已存在的仓库

如果您已有一个 Git 仓库, 可以通过命令行工具将其直接推送到本仓库中。

```
git remote add origin http://e.staging-corp.coding.io, ting/restore.git
git push -u origin master
```

Import or Associate External Repository

Last updated: 2024-09-05 16:12:32

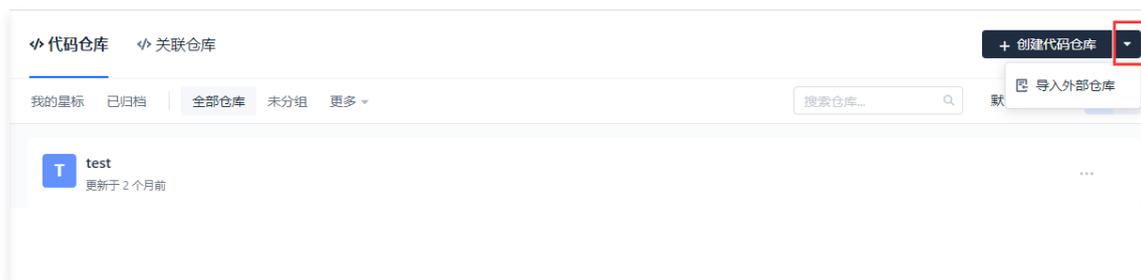
Open Project

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.

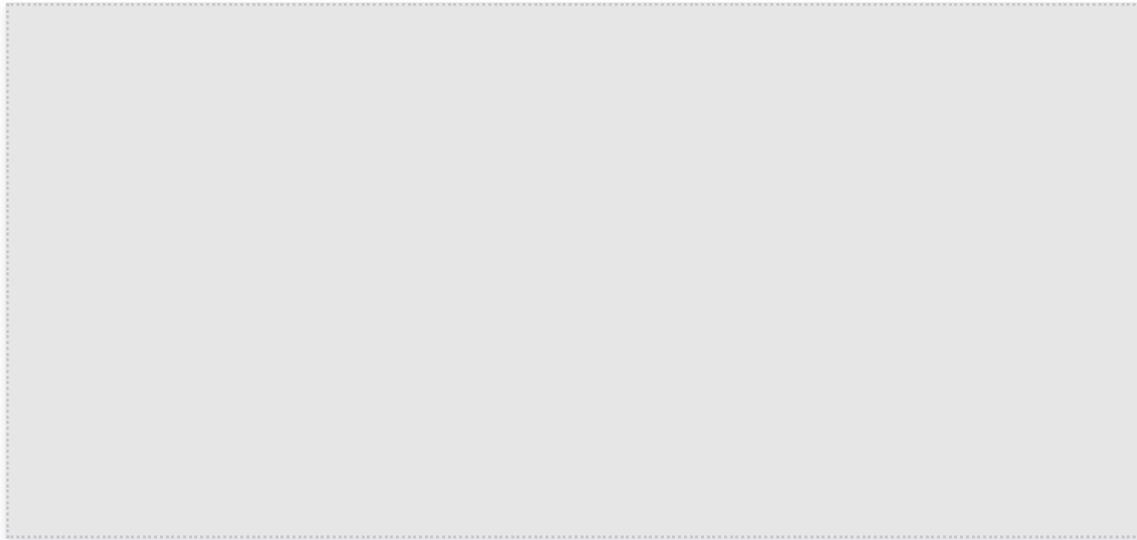
Import Repository

CODING provides not only a one-click import feature for external repositories but also supports scheduling syncs for external open-source repositories.

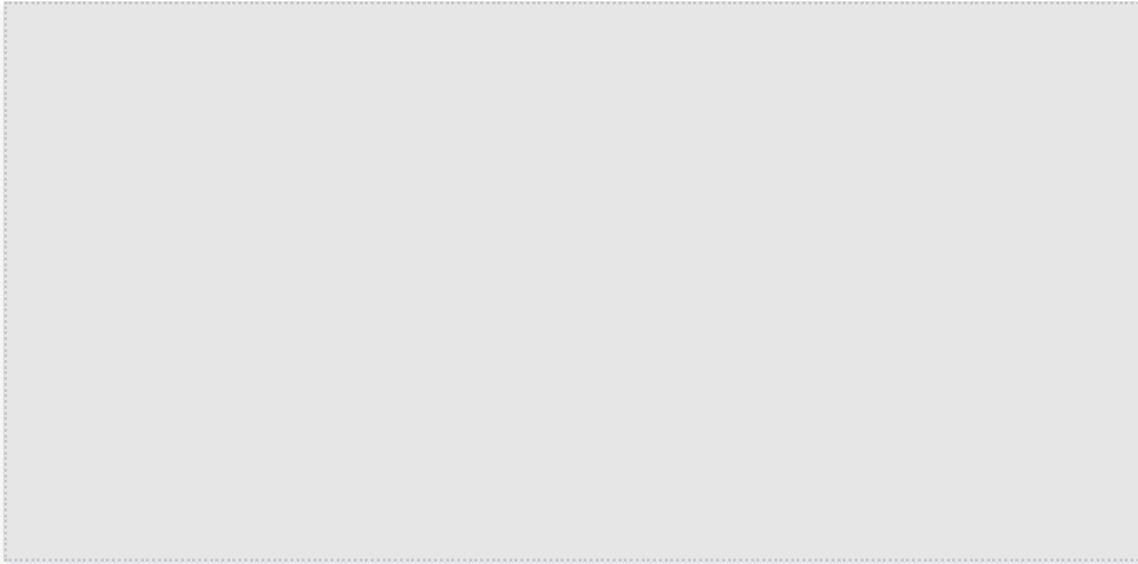
1. Go to any project, click **Code Repository** on the left sidebar, and click **Import External Repository** in the top right corner of the page.



2. Follow the prompts to select the type of repository source.

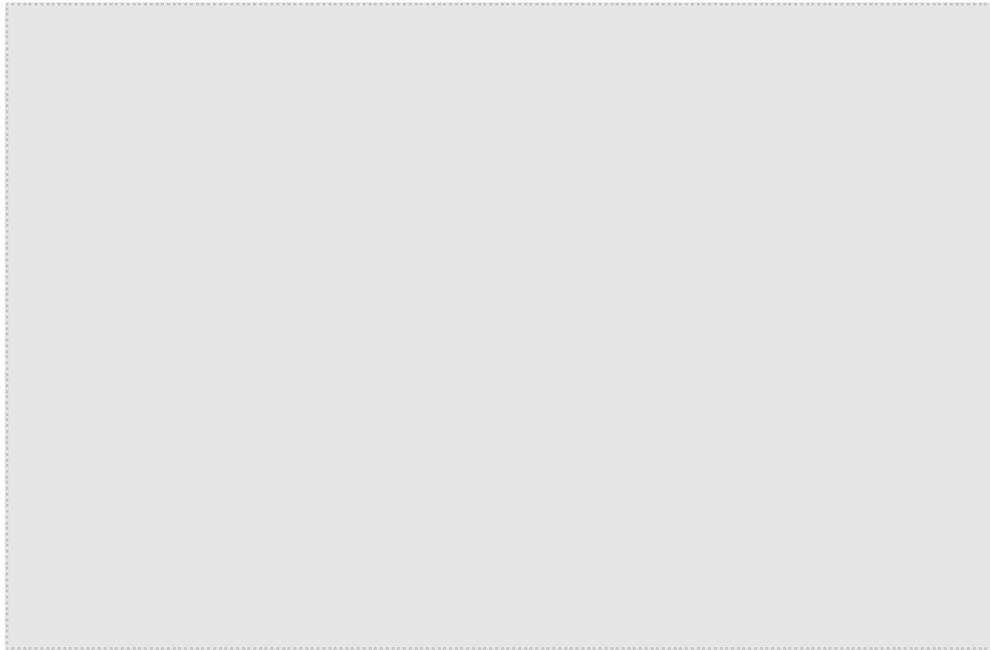
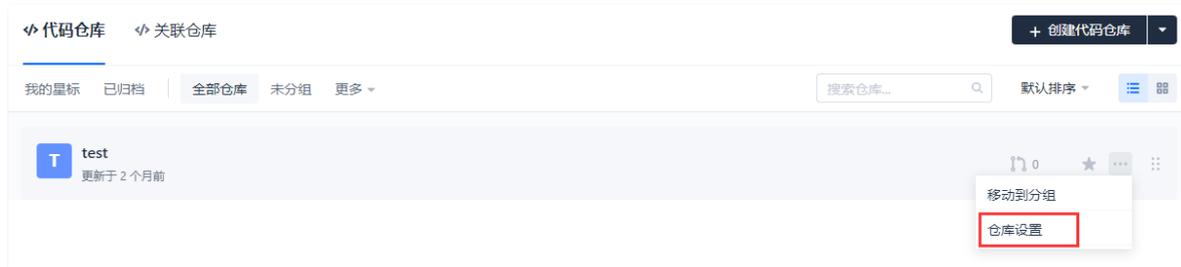


3. You can choose to import private or open-source repositories via URL. If the source repository is private, you will need to enter the username and password as prompted by the page.



Synchronize Repository

The sync feature is only available for open-source repositories. This means that it will keep consistent with the source repository and overwrite any changes made in the CODING repository. Click **Repository Settings** to change the sync frequency or disable the auto-sync feature.



On the homepage of the imported repository, you can also manually force sync the code repository by clicking the import button.



Import Mirror Repository

For security reasons, you can also choose to import an external private (non-open source) Git mirror repository. Refer to the following steps.

Step 1: Pull the private repository to your local machine

```
git clone --mirror [private repository URL]
```

```
/Volumes/CODING-Help git clone --mirror git@gitlab.com:ios-go.git
Cloning into bare repository 'ios-go.git'...
remote: Enumerating objects: 53, done.
remote: Total 53 (delta 0), reused 0 (delta 0), pack-reused 53
Receiving objects: 100% (53/53), 2.31 MiB | 1.68 MiB/s, done.
Resolving deltas: 100% (9/9), done.
```

Note:

The local mirror repository folder typically has a `.git` suffix.

Step 2: Obtain the target CODING code repository address

Enter the CODING project on the web to get the address of the target repository.



Step 3: Push to the target CODING repository

Enter the terminal command to access the private repository.

```
cd private repository
```

Use the push command to push the private repository to the target CODING repository.

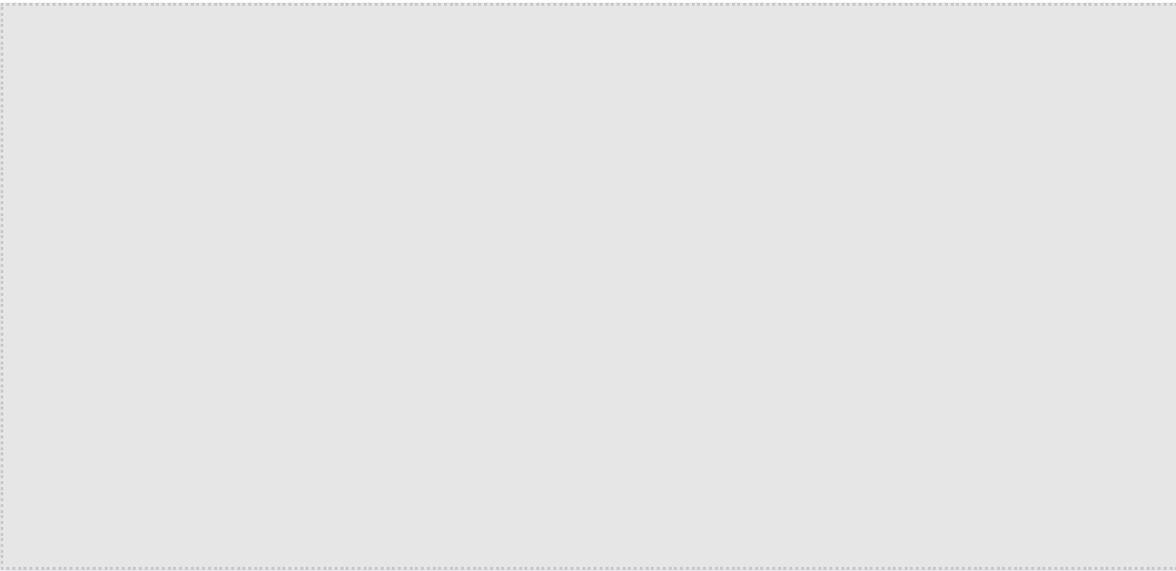
```
git push --mirror target repository address
```

```
/Volumes/CODING-Help/ios-go.git | master | git push --mirror git@e.coding.net:StrayBirds/demo/gitlab.git
Enumerating objects: 53, done.
Counting objects: 100% (53/53), done.
Delta compression using up to 12 threads
Compressing objects: 100% (43/43), done.
Writing objects: 100% (53/53), 2.31 MiB | 2.23 MiB/s, done.
Total 53 (delta 9), reused 53 (delta 9)
To e.coding.net:StrayBirds/demo/gitlab.git
* [new branch] master -> master
```

If an `refs/pull` error occurs, you can use the following command to avoid the error:

```
git push URL "+refs/heads/*:refs/heads/*" "+refs/tags/*:refs/tags/*"
```

After the push is successful, you can see that the private repository has been uploaded to the target repository.



Associate a Code Repository

The Link Repository feature essentially "temporary stores" the credentials for accessing external repositories on CODING. When you use continuous integration or continuous deployment, it allows direct calls to third-party repositories as the source code, thereby eliminating the cumbersome process of frequent migration.

代码仓库

关联仓库

+ 关联代码仓库

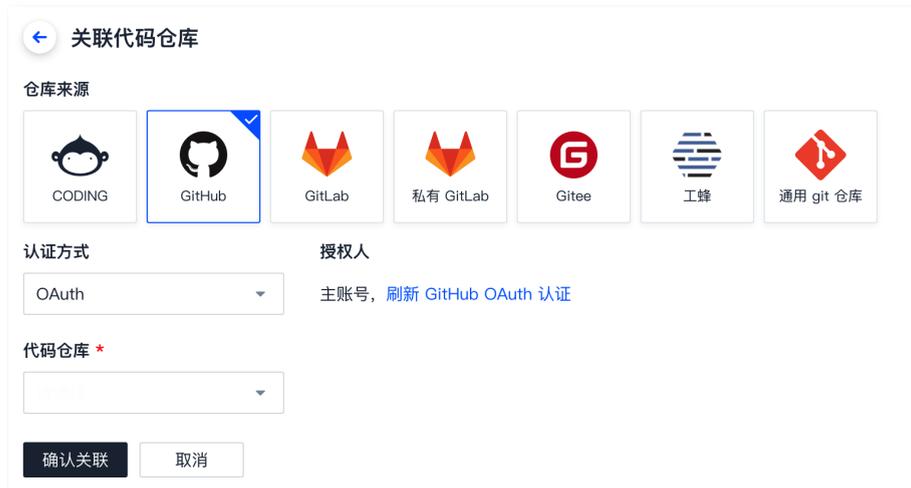
仓库来源 全部
认证方式 全部
已开启项目模块 全部
关联人 全部
搜索仓库...

代码仓库	仓库来源	认证方式	已开启项目模块	关联人	关联时间	操作
ios-go	GitHub	OAuth	全部模块	主账号	2021-06-11 11:38	...

1-1 个代码库, 共 1 个

The supported types of linked repositories include GitHub, GitLab, private GitLab, Gitee, Gongfeng, Universal Git repositories, and other projects' CODING repositories. The first five types of repositories support OAuth authentication method, while Universal Git

repositories support account password authentication. The code of the linked repositories will not be stored in the CODING code repository.



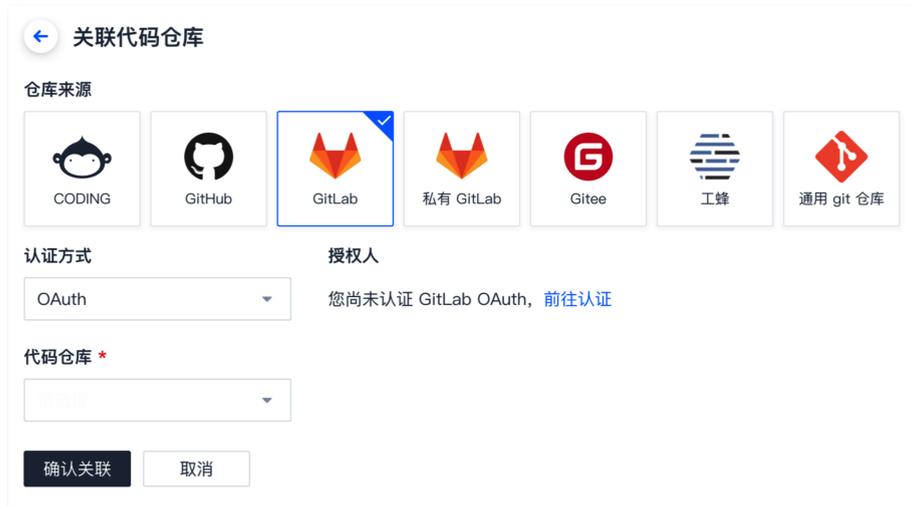
The screenshot shows the 'Associate Code Repository' interface. Under 'Repository Source', GitHub is selected with a blue checkmark. The authentication method is set to OAuth, and the authorization person is the main account. A dropdown menu for 'Code Repository' is visible but empty. Buttons for 'Confirm Association' and 'Cancel' are at the bottom.

Associate a private GitLab repository

To associate a private GitLab repository, you must create an application in GitLab and then the team admin must bind the private GitLab service. For details, see [Bind Private GitLab](#).

Associate a GitLab SaaS repository

To associate a GitLab SaaS repository, select **Associate Code Repository** page and choose **GitLab** as the code source, then click **Verify Now** to go to the GitLab Authorization page and click **Authorize** to complete authorization. After successful authorization, select the code repository to complete the operation.



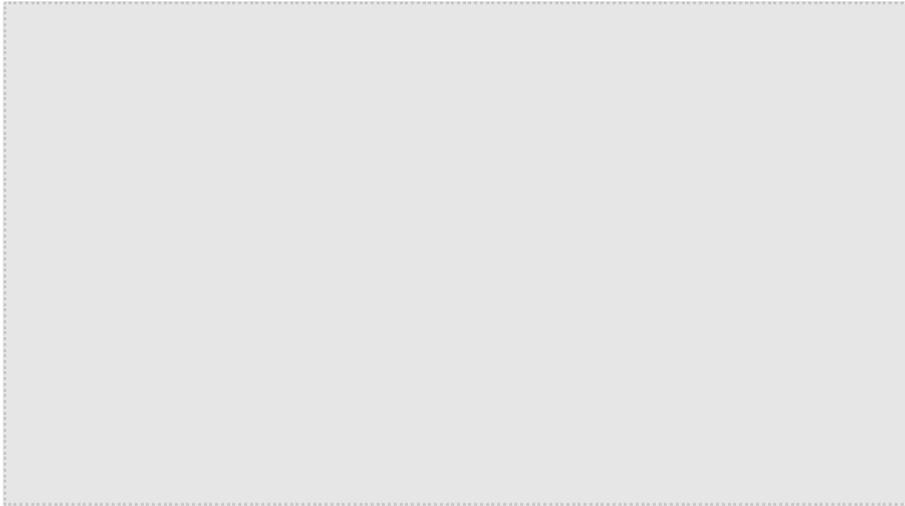
The screenshot shows the 'Associate Code Repository' interface. Under 'Repository Source', GitLab is selected with a blue checkmark. The authentication method is set to OAuth, and the authorization person is 'You have not yet authenticated GitLab OAuth, go to authentication'. A dropdown menu for 'Code Repository' is visible but empty. Buttons for 'Confirm Association' and 'Cancel' are at the bottom.

Associate a GitHub repository

On the **Associate Code Repository** page, select **GitHub** as the code source, then click **Verify Now** to use OAuth authorization and go to GitHub for authorization. If authorization fails, this may be because you did not enter your username in GitHub. In this case, go to **Settings > Profile > Name** and enter your username.

Associate repositories from other projects

To associate code repositories under your name from other CODING projects, go to the **Associate Code Repository** page, select CODING as the repository source, check the target repository to associate it. After association, it can be used as a code source for continuous integration or continuous deployment.



If you want to import the repository directly into the project for modification, go to the target repository's **Access Settings** and set it to open source status, then refer to [Import Open Source Repository](#) to import the target code.

Modify Associated Repositories

This chapter takes GitHub as an example:

After logging in to GitHub, click on the avatar in the upper right corner **Settings > Applications > Authorized OAuth Apps** to disassociate.

The screenshot shows the GitHub 'Authorized OAuth Apps' settings page. On the left is a sidebar with 'Account settings' and various options like Profile, Account, Appearance, etc. The main content area is titled 'Applications' and has three tabs: 'Installed GitHub Apps', 'Authorized GitHub Apps', and 'Authorized OAuth Apps'. Below the tabs, it says 'You have granted 4 applications access to your account.' and includes a 'Sort' dropdown and a 'Revoke all' button. The list of applications includes:

- CODING DevOps**: Last used within the last week · Owned by Coding. A red box highlights the 'Report abuse' and 'Revoke' options for this application.
- iconfont**: Last used within the last 6 months · Owned by iconfont-cn.
- Linode**: Last used within the last 3 months · Owned by linode.
- Server**: Last used within the last 12 months · Owned by easychen.

At the bottom, there is a link: 'Read more about connecting with third-party applications at [GitHub Help](#).'

Switch to another GitHub account and re-authorize using OAuth to complete [Associate GitHub Repository](#).

Manage Repository

Last updated: 2024-09-05 16:12:49

This document provides detailed instructions on how to perform some operations in the repository.

Open Project

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.

Clean Repository

Remote repositories generate cached files during use. You can click **Repository Cleanup** to reduce the space occupied by cached files in the repository.



Archive Repository

To archive a repository, click **...** in the code repository list and follow the prompts to confirm.



After archiving the repository, Git or web access requests will be automatically blocked. Users will not be able to access or operate the repository. Archived repositories can only be viewed under the **Archived** classification. To restore normal access to the repository, you need to unarchive it.



Delete and Reset

To reset or delete a repository, click **...** in the code repository list and follow the prompts to confirm.

Deleted repositories are moved to the recycle bin and retained for 30 days. Project admins can restore them from the recycle bin before the time limit. After the limit, all code, including code branches, merge requests, code versions, within the repository will be permanently deleted and cannot be recovered.



Click **Reset Repository** to reset all the code in the repository, including code branches, merge requests, and code versions. This action cannot be undone, and the repository will be reset to an empty state.

Restore Deleted Repository

Project admins can restore deleted repositories from the recycle bin within 30 days.

1. On the **Code Repository** page, click the Recycle Bin icon in the top-right corner.



2. In the recycle bin, select the repository to restore and click **Recover** to restore the repository.



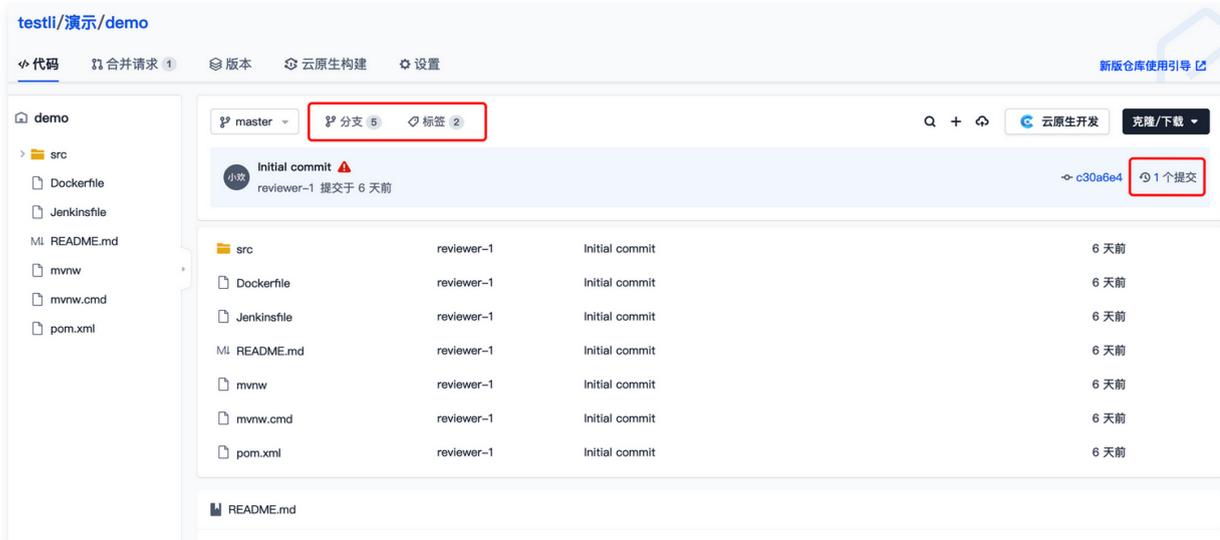
Code Comparison

Last updated: 2024-09-05 16:13:04

This article provides a detailed introduction on how to use the code comparison feature.

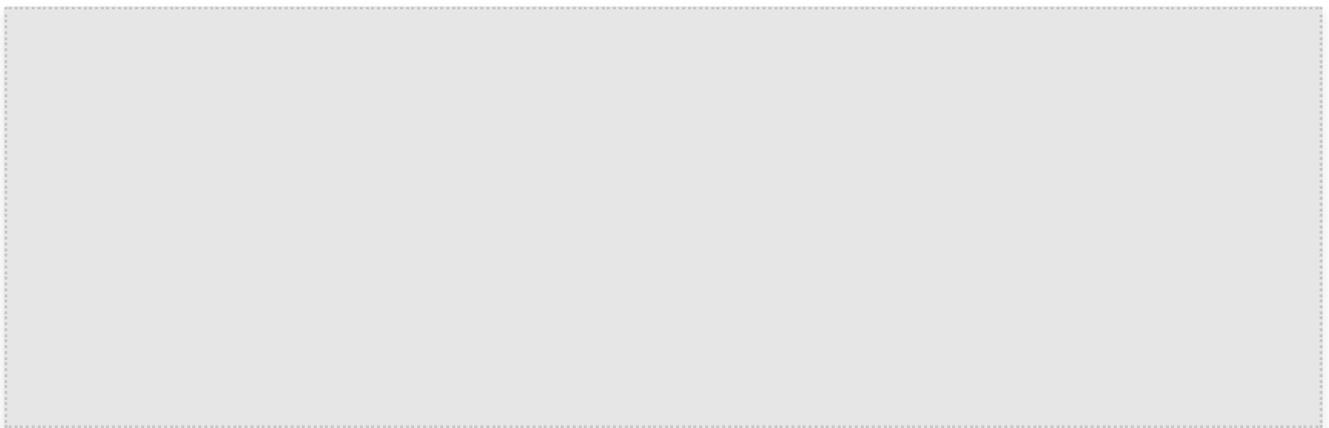
Operation step

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.
4. Enter the specified code repository, then click **Branch, Tag**, or Revision Version (hash value) to go to the corresponding page.

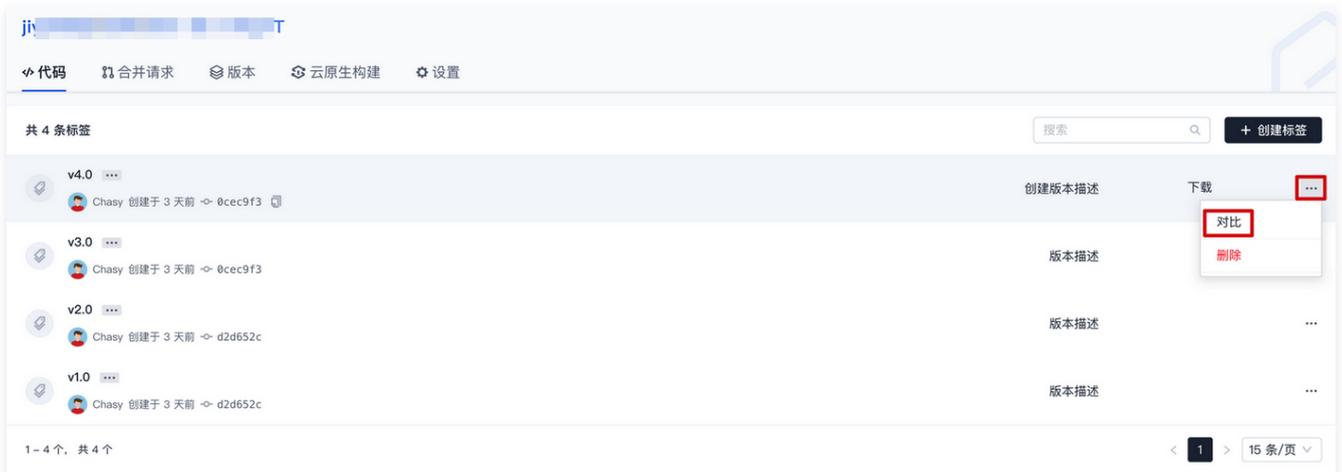


5. On the corresponding page, click **...** and select **Compare**.

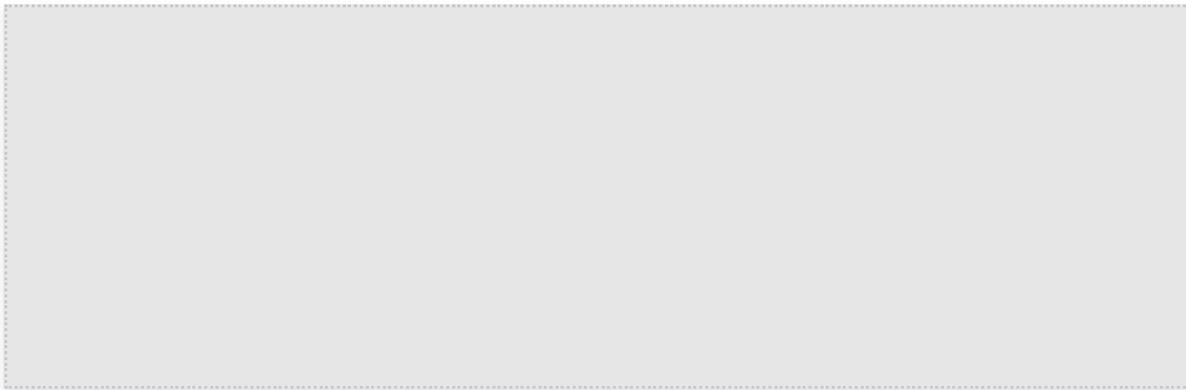
- For the branch list, select a specified branch, click **...** and select **Compare**.



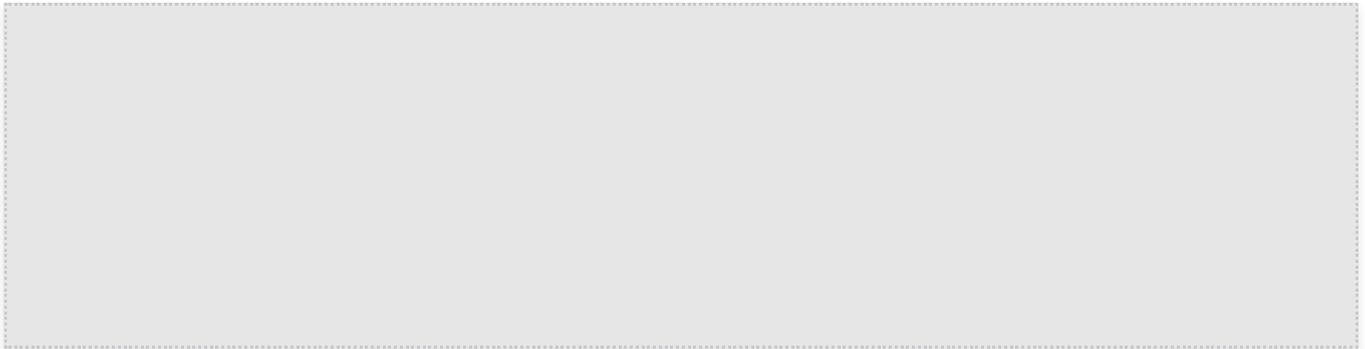
- For the tag list, select a specified tag, click **...** and select **Compare**.



- If you have entered the specified revision version (hash value), click **对比** in the upper-right corner and select **Compare**

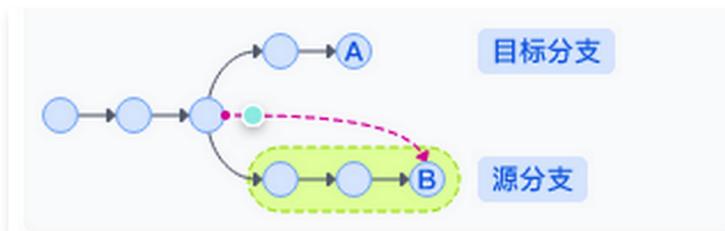


6. In the code comparison page, select the corresponding branch, tag, or revision version for comparison.

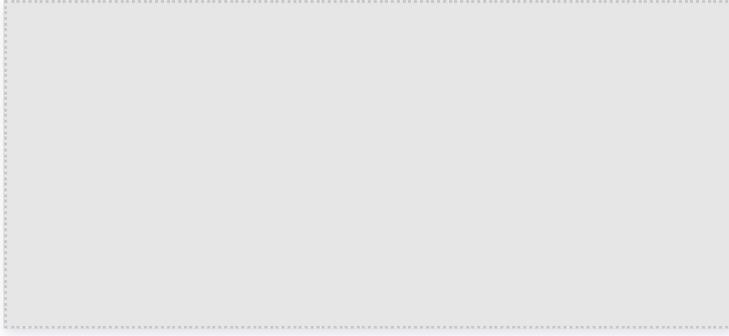


Feature Overview

- To ensure web page responsiveness, you cannot use the **Expand All** feature if there are differences in more than 20 files.
- The code comparison feature essentially provides an online graphical representation of the `git diff` command. If the **Difference from Common Ancestor** option is selected, it will show the differences between the source branch and the common ancestor.



- If the **Difference from Common Ancestor** option is not selected, it will directly show the comparison between the source branch and the target branch.



SVN Repository

Create an SVN repository

Last updated: 2024-09-05 16:13:23

This document describes how to create an SVN repository.

Open Project

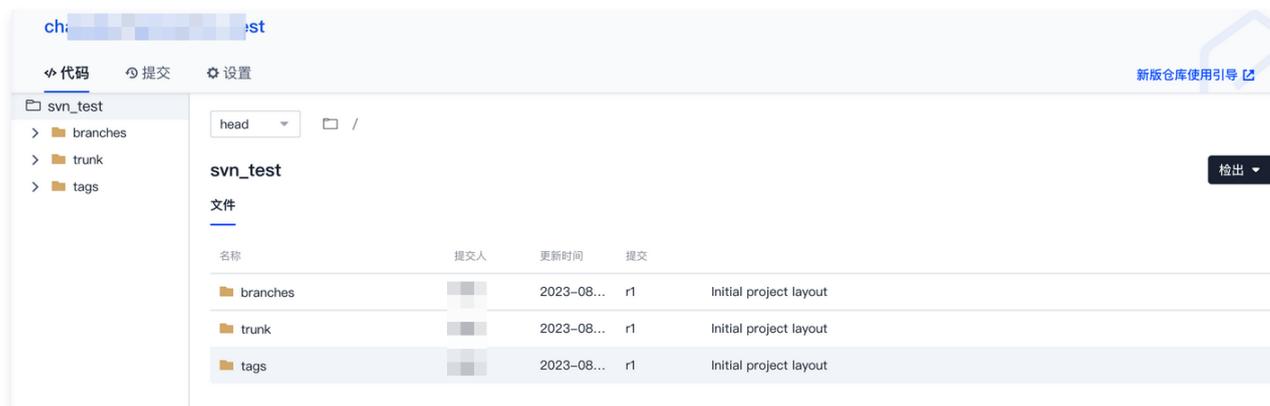
1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.

Operation step

1. After entering a project, click on the left navigation bar **Code Repository** to access the Code Repository Management page.
2. In the upper-right corner of the page, click **Create Code Repository**, and then select **SVN Repository** as the repository type.



3. If you choose **Create Recommended SVN Repository Layout**, the system will automatically create the tags, branches, and trunk directories. This is the recommended directory layout for most SVN repositories.
4. After the repository initialization is complete, you can view the content of the SVN repository in the **Code** interface.



5. Click **Detection** in the upper-right corner to see the SVN address of the repository.



Note:

Currently, you must create SVN repositories in a project. You cannot create an SVN repository in a Git repository.

Access SVN Repository

Last updated: 2024-09-05 16:13:39

The SVN repository service currently supports most mainstream SVN clients. We recommend you use the latest stable version of the client.

Open Project

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.

Mac Environment

In a Mac environment, you can use Homebrew to install the SVN client.

1. Run the following command to install Homebrew:

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

2. After you install Homebrew, input the following command in your terminal to install SVN:

```
brew install subversion
```

3. Run the command `svn --version` to verify that SVN has been correctly installed:

```
svn, version 1.9.7 (r1800392)
compiled Feb 28 2018, 15:54:50 on x86_64-apple-darwin17.3.0
Copyright (C) 2017 The Apache Software Foundation.
This software consists of contributions made by many people;
see the NOTICE file for more information.
Subversion is open source software, see http://subversion.apache.org/
The following repository access (RA) modules are available:

* ra_svn : Module for accessing a repository using the svn network protocol.
- with Cyrus SASL authentication
- handles 'svn' scheme
* ra_local : Module for accessing a repository on local disk.
- handles 'file' scheme
* ra_serf : Module for accessing a repository via WebDAV protocol using serf.
- using serf 1.3.9 (compiled with 1.3.9)
- handles 'http' scheme
- handles 'https' scheme

The following authentication credential caches are available:
* Plaintext cache in /Users/Liwenqiu/.subversion
* Mac OS X Keychain
```

4. Run the command `svn checkout svn://subversion.e.coding.net/example/example-project` (replacing the URL with your SVN repository URL) to check out the SVN repository:

```
~/Documents/Coding : ~/Documents/Coding (zsh)
~/Documents/Coding ✓ svn checkout svn://subversion.coding.net/ /svn-project
Authentication realm: <svn://subversion.coding.net: > /svn-project
Password for ' ': *****

A   svn-project/branches
A   svn-project/trunk
A   svn-project/tags
Checked out revision 1.
~/Documents/Coding ✓
```

5. Then, you can use the add and commit commands to add content to the repository:

```
~/Documents/Coding/svn-project/trunk : ~/Documents/Coding/svn-project/trunk (zsh)
~/Documents/Coding/svn-project/trunk ✓ svn status
?   README.md
?   src
~/Documents/Coding/svn-project/trunk ✓ svn add README.md src
A   README.md
A   src
A   src/main.c
~/Documents/Coding/svn-project/trunk ✓ svn commit -m "First commit"
Adding      README.md
Adding      src
Adding      src/main.c
Transmitting file data ..done
Committing transaction...
Committed revision 2.
~/Documents/Coding/svn-project/trunk ✓
```

6. In addition to using the SVN protocol, you can use the `svn+ssh` protocol to access the repository, as shown below:

```
~/Documents/Coding : ~/Documents/Coding (zsh)
~/Documents/Coding ✓ svn checkout svn+ssh://subversion.coding.net/ /svn-project
A   svn-project/trunk
A   svn-project/trunk/src
A   svn-project/trunk/src/main.c
A   svn-project/trunk/README.md
A   svn-project/branches
A   svn-project/tags
Checked out revision 3.
~/Documents/Coding ✓
```

Cornerstone Tool

You can use SVN repositories through Cornerstone.

1. Open Cornerstone and click **Add Repository** to add an SVN repository reference (replacing the URL with your SVN repository URL).

Cloud Service
File Repository
HTTP Server
SVN Server

SERVER LOCATION

Enter the location of the server. The title is used to identify the repository in the source list.

Tunnel: None

Server:

Port:

Path:

svn:// /svn-project

Title:

ACCOUNT INFORMATION

Specify the account you use to access the server. Leave the fields blank when using a tunnel that requires the use of an agent (such as SSH with private key authentication).

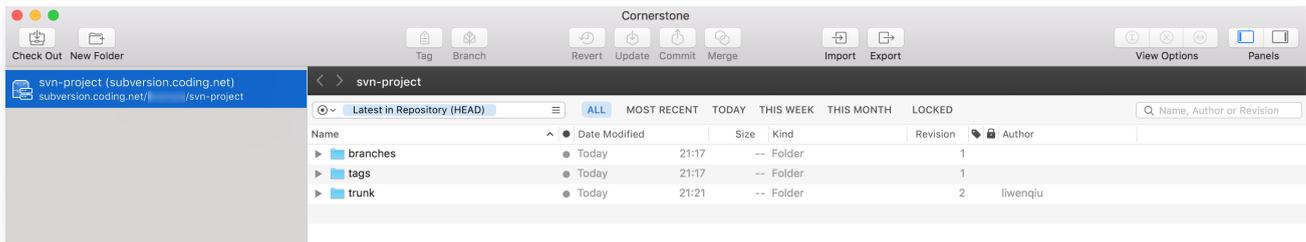
Name:

Password:

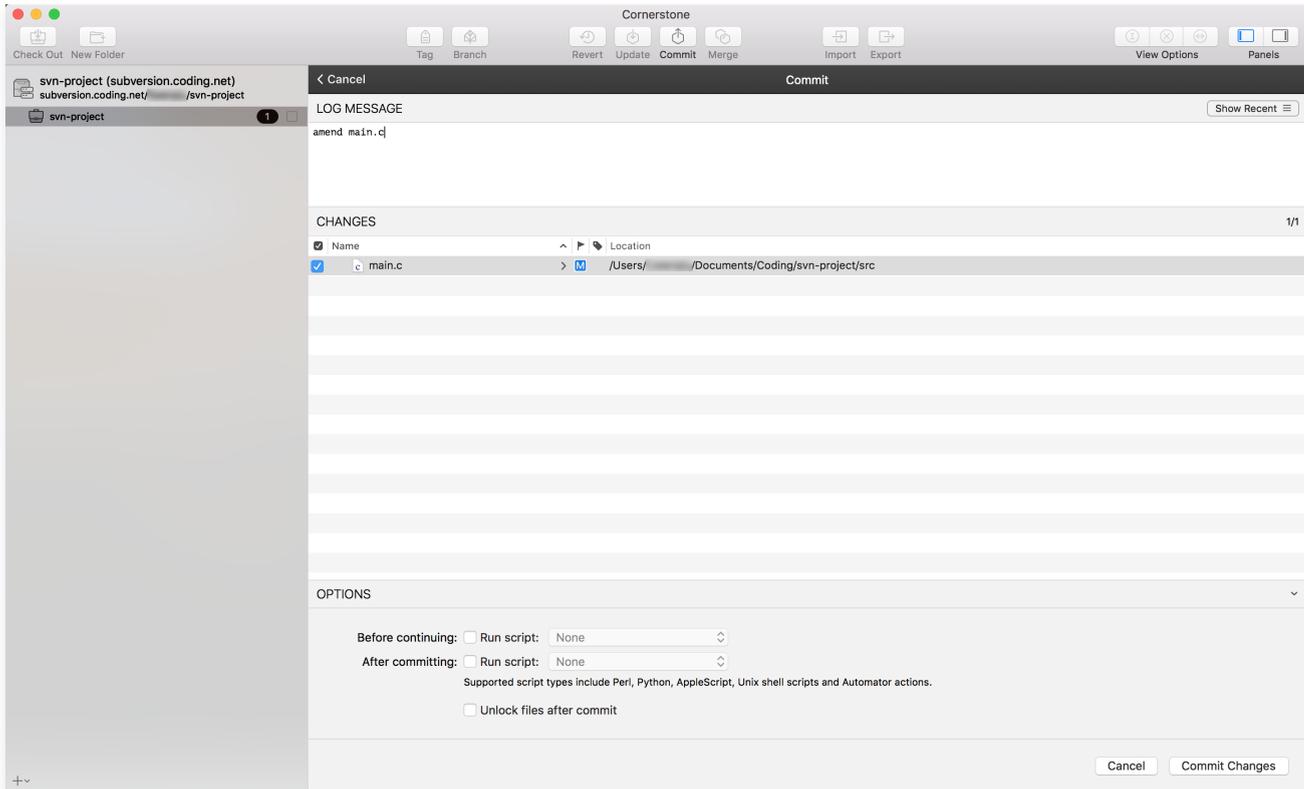
Save name and password in my keychain

Paste URL
Reset
Cancel
Add

Then, you can view the repository content as follows:



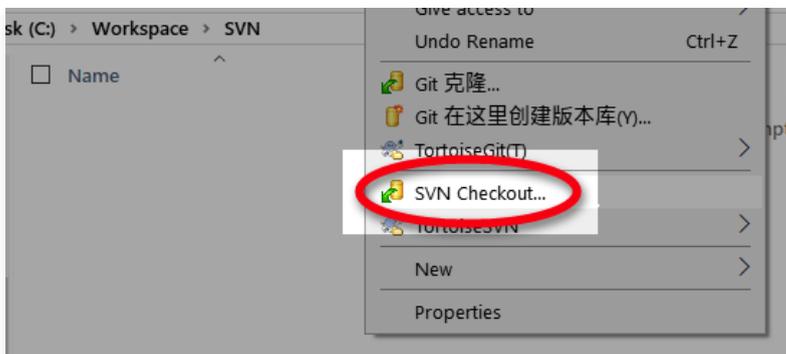
2. Check out the repository, edit the files, and use commit to commit the changes, as shown below:



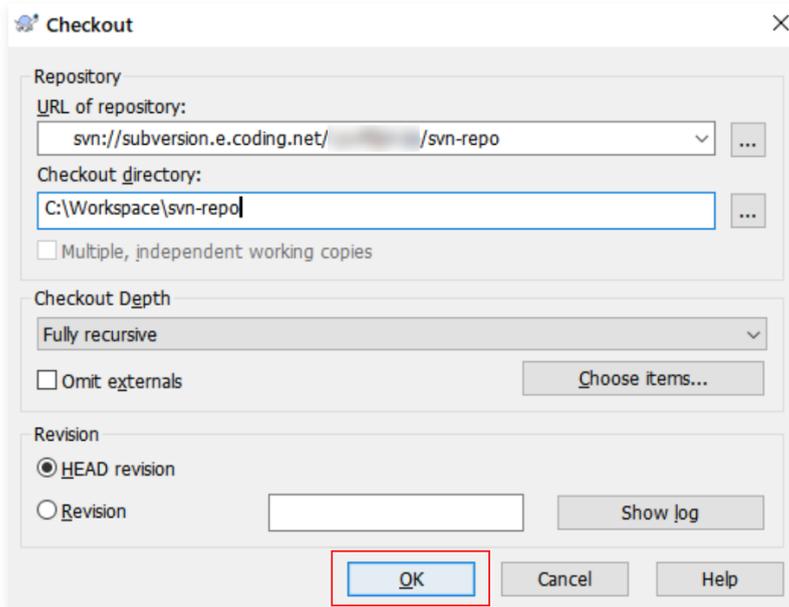
Windows Environment

In Windows, we recommend you use TortoiseSVN.

1. After [download](#) and installation are complete, right-click in any file directory.

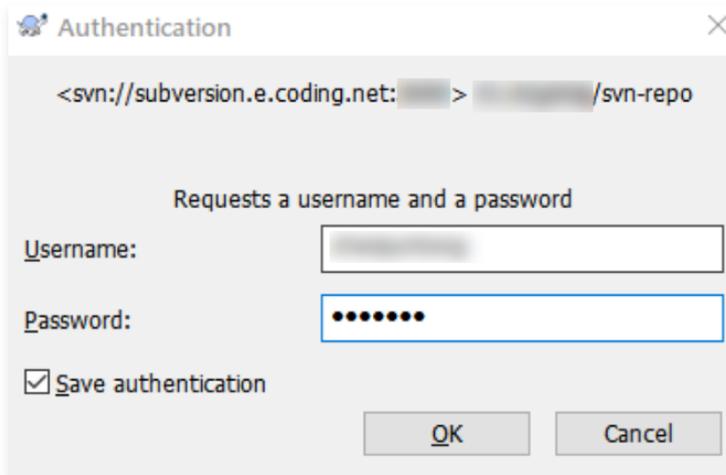


Select `checkout` to check out the SVN repository `checkout` to your local environment (replacing the URL with your SVN repository URL).

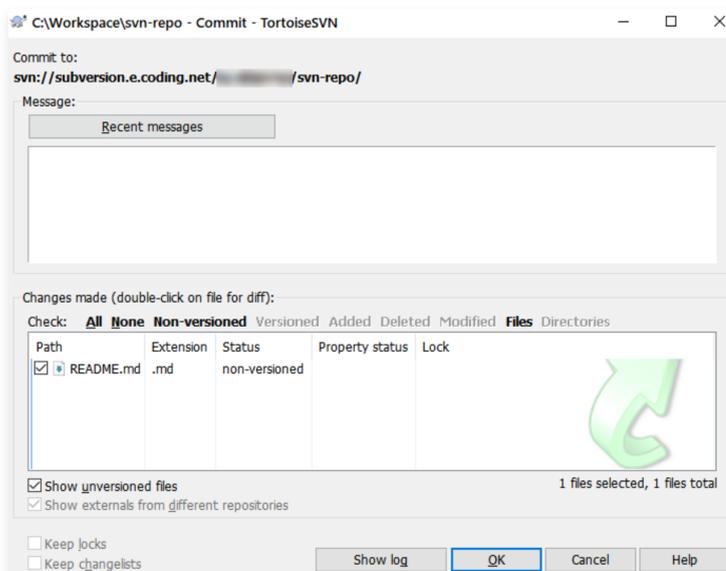


2. The first time you checkout, you need to enter a username and password. Check "Save authentication" to save the authentication information, so you won't need to enter the password every time.

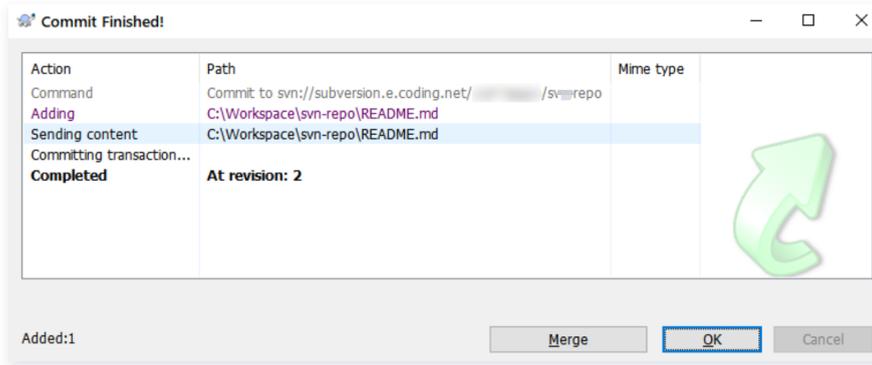
The username you enter should be the email linked to your CODING account.



3. Open the checked-out folder and create a README.md file.



Right-click on a blank space and select SVN commit... to save the new file to the version repository:



Linux Environment

On a Linux system, you can use the system's package management tool to install SVN.

Install with yum in Fedora

```
$ sudo yum install subversion
```

Install with apt-get in Ubuntu or Debian

```
$ sudo apt-get install subversion
```

After successful installation, you can use `svn checkout / commit` to access the SVN repository.

Note:

This method is similar to the command line used in Mac systems.

Negotiation authentication mechanism error using SVN command line on Ubuntu

The following errors might occur when using the SVN command line client on Ubuntu:

```
svn: E210007: Cannot negotiate authentication mechanism
```

This is because the SVN authentication process uses the SASL library, so you need to run the following command to install the dependency library required for SASL authentication:

```
$ sudo apt-get install cyrus-sasl2-dbg
```

Manage SVN Directory Permissions

Last updated: 2024-09-05 16:13:55

This document describes how to manage SVN repository permissions.

Open Project

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.

The SVN repository now supports permission control, allowing administrators to set directory permissions for individual users. Administrators can set the following three permissions for repositories and subdirectories individually:

- **Read-only:** Users can check out and view the specified directory, but cannot write to it.
- **Read/Write:** Users can check out, view, and write to the specified directory.
- **No permission:** Users cannot check out, view, or write to the specified directory.

Setting permissions

Because each user has read/write permission for a repository by default, to set permission control for a directory in an SVN repository, click the directory's **...** and select **Permissions**.



On the permission settings page that appears, you can add individual users/user groups and corresponding permissions for this directory.



After you configure permission control for a directory, the directory is shown in a different color. Directories for which you have not configured permission control are shown in black, and all users have **Read/Write** permission for this directory.

- **Read/Write:** black (default)
- **Read-only:** yellow
- **No permission:** gray

Permission Override Description

In some scenarios, different permission settings may be configured for a parent directory and its subdirectories, and these permissions might conflict. For example, the parent directory might have read-only permission while the subdirectory has read/write permission.

The precedence rules for parent directory and subdirectory permissions in an SVN repository are as follows:

- If permissions are set for the parent directory but not its subdirectory, the subdirectory inherits the permission settings of the parent directory.

- If permissions are set for both the parent directory and subdirectory, the subdirectory permissions take precedence. For example:
 - If the parent directory has **Read/Write** permission and the subdirectory has **Read-only** permission, the subdirectory will actually have **Read-only** permission.
 - If the parent directory has **Read-only** permission and the subdirectory has **Read/Write** permission, the subdirectory will actually have **Read/Write** permission.
 - If the parent directory has **Read/Write** or **Read-only** permission, but the subdirectory has **No permission**, the subdirectory will actually have **No permission**.

SSH Protocol

Configure SSH Public Keys

Last updated: 2024-09-05 16:14:11

This document describes how to configure SSH public keys.

Open Project

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.

Description of the Feature

SSH stands for Secure Shell, an encryption protocol for network communication. It provides a secure data transmission environment in a public network and is generally used to log in to remote hosts and push/pull code.

If an SSH public key is added to a code repository, it is called a **Deploy Public Key**. By default, it has read-only permission to the project with an option to add read/write permission. If it is added to the Team Settings Center, it is called a **Team Deployment Public Key** and has read-only permission. If added to a personal account, it is called an **Account SSH Public Key** and has read/write permission to all code repositories under the account. The same SSH public key cannot be used as both a Deploy Public Key and an Account SSH Public Key.

Note:

If the SSH public key is not used as an Account SSH Public Key but you still encounter errors when adding it as a Deploy Public Key, it is possible that someone else has used this public key as an Account SSH Public Key. If you belong to multiple teams, the key might have been added to another team member's account settings.

Generate Public Key

Here, we use the `ssh-keygen` tool to generate an SSH public key. Run the following command:

```
ssh-keygen -m PEM -t ed25519 -C "your.email@example.com" // Create a new SSH private and public key pair,
using your email as the Tag
Enter file in which to save the key (/Users/you/.ssh/id_rsa): [Press enter] // We recommend using the
default address
Enter passphrase (empty for no passphrase): // Press Enter directly here; if you set a password, you will
be prompted to enter it each time you push code using SSH
```

Note:

- If you need to use multiple SSH key pairs, enter a new file name at the `Enter file in which to save the key` step to avoid overwriting existing keys. For more information about SSH, visit [Baidu Baike](#).
- If your system does not support the Ed25519 algorithm, use the command

```
ssh-keygen -m PEM -t rsa -b 4096 -C "your.email@example.com" .
```

After the operation succeeds, you will see the following information:

```
Your identification has been saved in /Users/you/.ssh/id_ed25519.
# Your public key has been saved in /Users/you/.ssh/id_ed25519.pub.
# The key fingerprint is:
# 01:0f:f4:3b:ca:85:d6:17:a1:7d:f0:68:9d:f0:a2:db your.email@example.com
```

Add Public Key

You can add the public key to a single repository or a personal account as needed. The same SSH public key cannot be added more than once.

Add to Deploy Public Key

1. Navigate to the address where the key pair was generated (usually the `~/.ssh/` folder) and find the public key file with the `pub` extension. Use the `cat` command to output all content and copy it.

```
~/.ssh cat id_ed25519.pub
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIB33328@qq.com
```

2. Go to the code repository's **Settings > Deploy Public Key** page, click Add Deploy Key, paste the copied public key content, and the email at the end will automatically fill in as the public key name.



Note:

Public deploy keys have read-only permission to the project by default. Select Grant Push Permission in the public deploy key settings to obtain push permission.

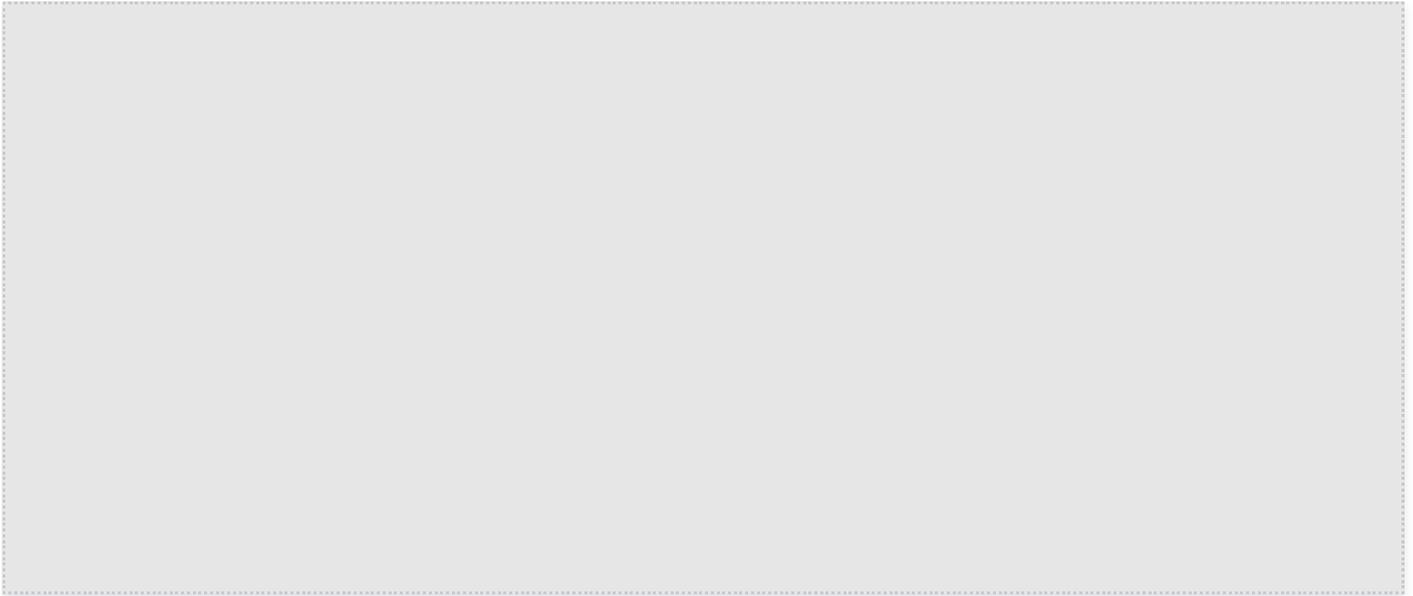
3. Afterward, run the authentication command of the public key locally for the first connection: `ssh -T git@e.coding.net`.



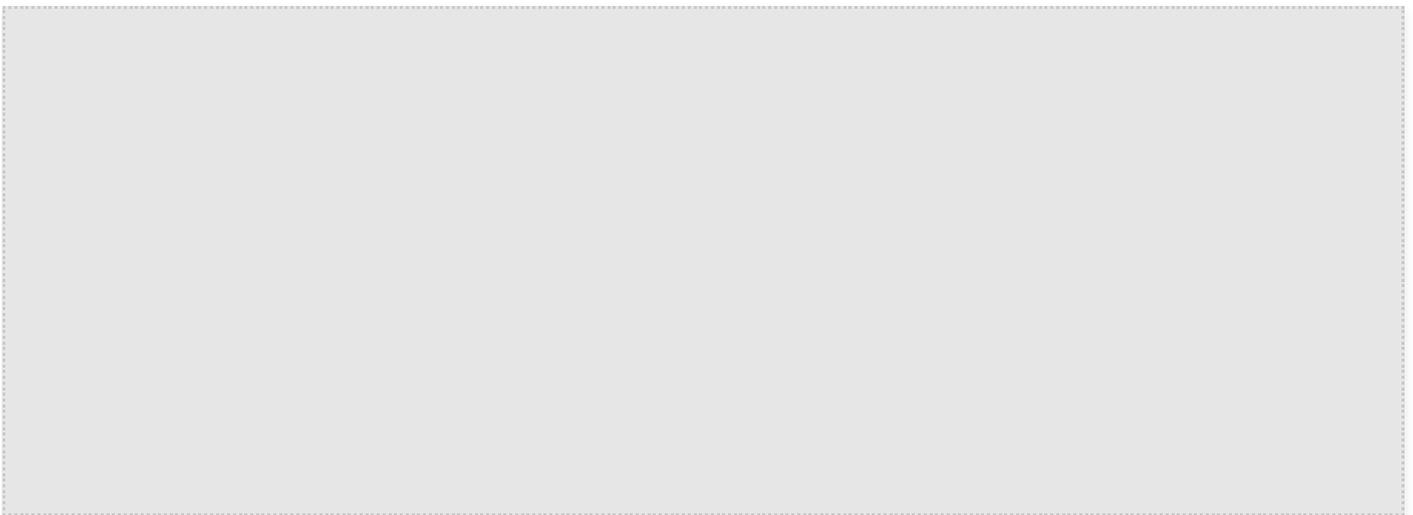
Add to Team Deployment Public Key

Team Deployment Public Keys have pull-only permissions and are mainly used to conveniently pull code repositories from different projects. After a team administrator inputs an [SSH public key](#) as a Team Deployment Public Key, they can share the corresponding private key with team members. This allows code repository access without needing to open source the repositories or worry about personal private key leaks.

In the context of continuous delivery, providing the private key allows the corresponding build machine or host group to check out code. This eliminates the need for complex secondary associations and verification, making the build process more convenient. Team Owners/Administrators can click the settings button at the bottom left corner of the home page navigation to go to **Team Settings Center > Feature Settings > Code Repository > Team Deployment Public Keys** to input the SSH Public Key.



After input, add it to the respective target repository.



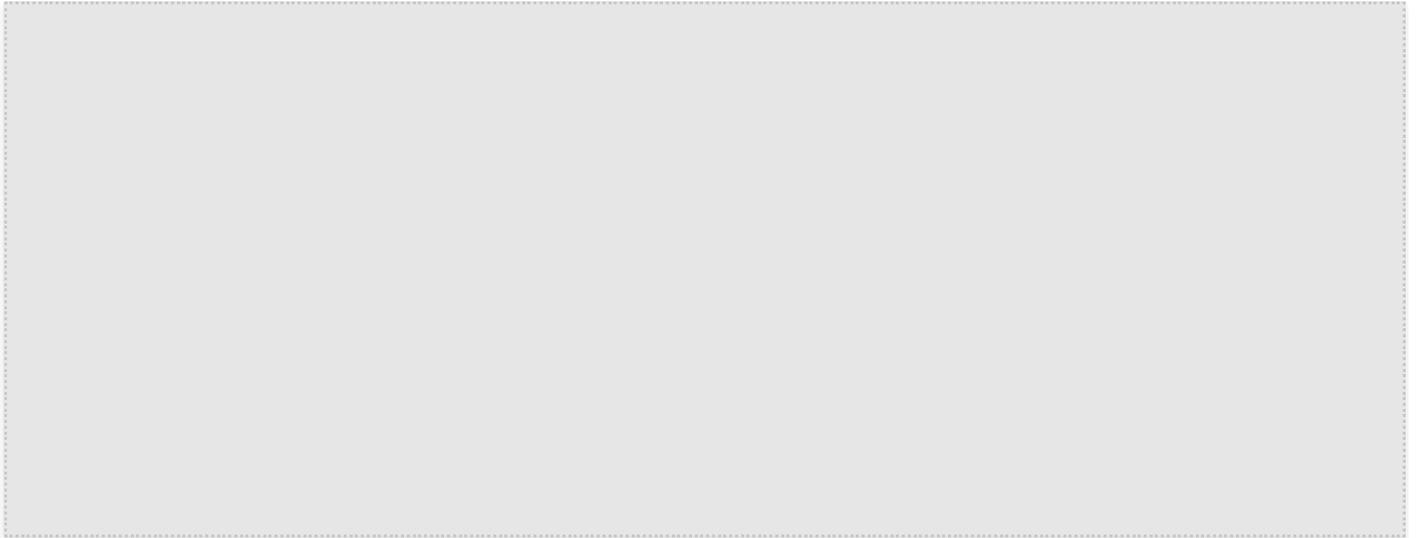
Once added, you can use the private key to pull the code repository through the SSH protocol.

Add to Personal Account SSH Public Key

1. Go to the address of the key pair generated above (the default address is generally `~/.ssh/`), find the public key file with the `pub` extension, use the `cat` command to output all content, and copy it.



2. Log in to CODING, click the profile photo in the upper-right corner to go to **Personal Account Settings > SSH Public Keys**, and then click **Create Public Key**.



3. Follow the instructions to paste the public key content you copied and enter a name for the public key.
4. Then, the first time you attempt to connect from your local device, run the public key authentication command:

```
ssh -T git@e.coding.net
```

Key Fingerprint Authentication

Last updated: 2024-09-05 16:14:25

This document describes how to use key fingerprints for code repository authentication. This ensures that the connected remote repository is a genuine CODING repository.

Open Project

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.
4. If the Code Repository is not shown on the left, the project admin needs to go to **Project Settings > Projects and Members > Feature Toggle** to enable it.

Description of the Feature

Code security is always essential. To ensure that the remote repository you are connecting to is an authentic CODING code repository, SSH key fingerprints are now provided for authentication. You simply need to run the command locally and verify the returned result to determine the authenticity of the remote repository.

Verify SHA256 Fingerprint

View the `.ssh/known_hosts` file locally for the SHA256 fingerprint of `e.coding.net`. If the return value is `jok3FH7q5LJ6qvE7iPNehBgXRw51ErE77S0Dn+Vg/Ik`, it confirms that you are connected to the correct CODING server. You can view the result of the command on the terminal.

```
ssh-keygen -lf ~/.ssh/known_hosts
```

```
~ ssh-keygen -lf ~/.ssh/known_hosts
256 SHA256:Bdo9PWvc9YJra+FK28v7oxW0dghA/DI3ZLT3BhDz/nQ [ ]:12400 (ECDSA)
256 SHA256:V8ggXUfieT6Q//G/miMxK+8Dx05gS/2NaNpPYAU629s [ ]:28954 (ECDSA)
256 SHA256:ox9ko2YsRDgwp4C9im0Tha9FWxAXhfe7H7yLIXhcT5A [ ]:11900 (ECDSA)
256 SHA256:u2Xk2ekDfmrav2FALTppnGX9seyiZEK0vsFiGyp/EKo [ ]:28524 (ECDSA)
256 SHA256:za8qm0BYDLKBCx+hG4gT4/0iq06ZR/w00JhMoqJIWtA [ ]:ECDSA)
2048 SHA256:jok3FH7q5LJ6qvE7iPNehBgXRw51ErE77S0Dn+Vg/Ik e.coding.net, (RSA)
```

Verify MD5 Fingerprint

View the `.ssh/known_hosts` file locally for the MD5 fingerprint of `e.coding.net`. If the return value is `98:ab:2b:30:60:00:82:86:bb:85:db:87:22:c4:4f:b1`, it confirms that you are connected to the correct CODING server. You can view the result of the command on the terminal.

```
ssh-keygen -E md5 -lf ~/.ssh/known_hosts
```

Push/Pull Code Via SSH Protocol

Last updated: 2024-09-05 16:14:40

This document describes how to use SSH protocol to push/pull code.

Open Project

1. Log in to [CODING Console](#), click the team domain name to enter the CODING page.
2. Click **Item** on the left side of the team homepage to enter the project list page and select the target project.
3. In the menu on the left, select **Code Repository** to enter the code repository homepage.
4. If the Code Repository is not shown on the left, the project admin needs to go to **Project Settings > Projects and Members > Feature Toggle** to enable it.

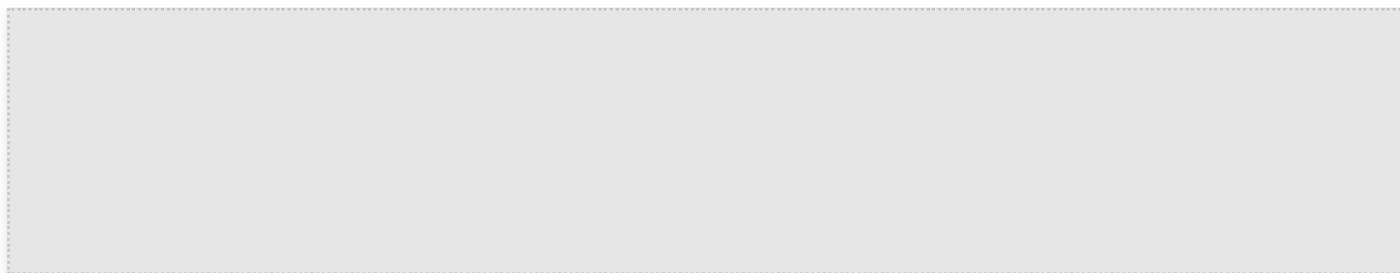
Operation step

CODING supports pushing/pulling code via SSH protocol.

1. Refer to [Configure SSH Public Keys](#) to generate a public key and add it to a code repository or personal account.
2. Copy the SSH URL on the code repository's Browse page.



3. Run `git clone + repository URL` command on your local machine to pull code.



Branch management

Create Branch

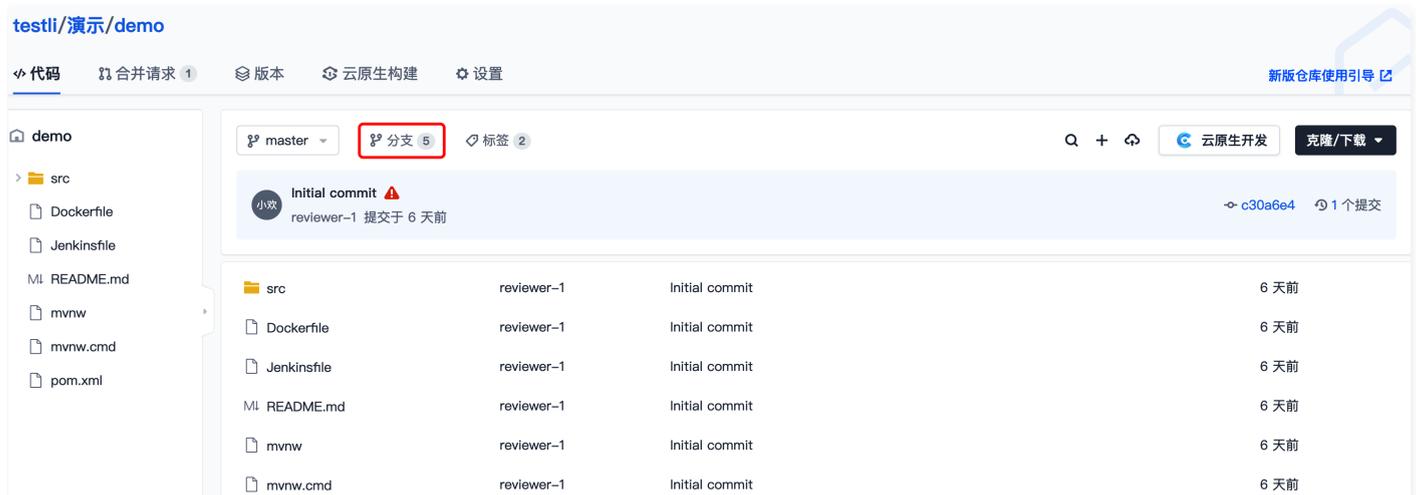
Last updated: 2024-09-05 16:14:54

Branches are a common function in Git. The common development approach is to retain one trunk (or master branch), while each development or bug fix task is carried out on its own branch. When finished, the branches are merged back into the trunk. Because development directly on the trunk is very risky, the branch can be viewed as a safety valve, which isolates different development tasks. It can ensure that the stability of the master version is not compromised, while allowing different people to focus on different development tasks.

Below, we will refer to branches in CODING code repositories as remote branches and branches in local Git repositories as local branches. You can run relevant commands on your local terminal to quickly create branches. For details, see the [Git Command Quick Reference](#).

View Branches

Go to the code repository details page and click **Branches** to see all branches in the remote repository. Here, you can create branches, enable protected branches, etc. The branch list page shows the number of commits ahead or behind the default branch.

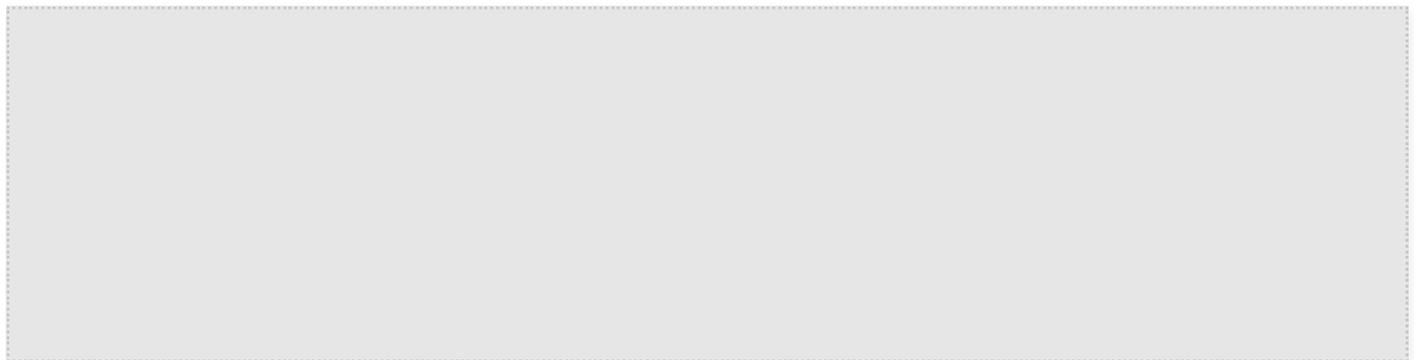


The screenshot shows the CODING interface for a repository named 'demo'. The 'Branches' tab is active, and the '分支' (Branch) button is highlighted with a red box. Below the branch list, a table shows the commit history for various files:

File	Branch	Commit	Time
src	reviewer-1	Initial commit	6 天前
Dockerfile	reviewer-1	Initial commit	6 天前
Jenkinsfile	reviewer-1	Initial commit	6 天前
README.md	reviewer-1	Initial commit	6 天前
mvnw	reviewer-1	Initial commit	6 天前
mvnw.cmd	reviewer-1	Initial commit	6 天前

Create Branch

Click the upper-right corner **Create Branch**, and follow the instructions in the pop-up window to enter the relevant configuration information. The master branch is used as the default source. The new branch content is identical to the original branch, essentially deriving a new branch from the original.



Add Remarks

If the branch name can't fully describe the branch purpose, you can add a simple description to explain the branch's purpose.



Set Default Branch

Last updated: 2024-09-05 16:15:10

The default branch is considered the base branch in the repository. Unless you specify another branch, all pull requests and code commits will be automatically generated based on the default branch. The default branch can be modified on the **Settings > Branch Settings** page of the code repository.

The screenshot shows the 'Branch Settings' (分支设置) page. The 'Default Branch' (默认分支) is set to 'master'. Below it, there is a section for 'Protect Branch Rules' (保护分支规则) with a table showing no data. At the bottom, there is a section for 'Hidden Branches' (隐藏分支) with a note and a '+ Add Hidden Branch' button.

When the user's permission group has the **Protect Branch** permission, they will have the authority to adjust the default branch.

The screenshot shows the 'Permissions' (配置权限) page. The 'Code Repository' (代码仓库) category has several permissions, including 'Delete Protected Branch' (删除保护分支) and 'Protect Branch Rules' (保护分支规则), which are highlighted with a red box.

分类	功能权限
项目协同	<input checked="" type="checkbox"/> 访问项目协同 <input checked="" type="checkbox"/> 删除版本 <input checked="" type="checkbox"/> 编辑迭代 <input checked="" type="checkbox"/> 编辑事项 <input checked="" type="checkbox"/> 删除迭代 <input checked="" type="checkbox"/> 删除事项 <input checked="" type="checkbox"/> 编辑版本
	<input checked="" type="checkbox"/> 访问测试管理 <input checked="" type="checkbox"/> 编辑用例 <input checked="" type="checkbox"/> 执行测试 <input checked="" type="checkbox"/> 用例评审管理 <input checked="" type="checkbox"/> 编辑测试计划 <input checked="" type="checkbox"/> 删除用例 <input checked="" type="checkbox"/> 编辑自动化用例 <input checked="" type="checkbox"/> 归档测试计划 <input checked="" type="checkbox"/> 编辑报告 <input checked="" type="checkbox"/> 删除自动化用例 <input checked="" type="checkbox"/> 删除测试计划 <input checked="" type="checkbox"/> 删除报告 <input checked="" type="checkbox"/> 编辑用例评审
代码扫描	<input checked="" type="checkbox"/> 访问代码扫描 <input checked="" type="checkbox"/> 扫描任务管理 <input checked="" type="checkbox"/> 扫描问题管理 <input checked="" type="checkbox"/> 扫描方案管理
代码仓库	<input checked="" type="checkbox"/> 访问代码 <input checked="" type="checkbox"/> 下载代码 <input checked="" type="checkbox"/> 创建分支和编辑备注 <input checked="" type="checkbox"/> 创建标签 <input checked="" type="checkbox"/> 编辑版本 <input checked="" type="checkbox"/> 解锁锁定文件 <input checked="" type="checkbox"/> 创建仓库 <input checked="" type="checkbox"/> 拉取代码 <input checked="" type="checkbox"/> 删除普通分支 <input checked="" type="checkbox"/> 删除普通标签 <input checked="" type="checkbox"/> 删除版本 <input checked="" type="checkbox"/> 删除保护分支 <input checked="" type="checkbox"/> 删除保护标签 <input checked="" type="checkbox"/> 创建合并请求 <input checked="" type="checkbox"/> 仓库设置 <input checked="" type="checkbox"/> 本地推送代码 <input checked="" type="checkbox"/> 删除保护分支 <input checked="" type="checkbox"/> 创建合并请求 <input checked="" type="checkbox"/> 仓库管理 <input checked="" type="checkbox"/> 在线编辑仓库文件 <input checked="" type="checkbox"/> 保护分支规则 <input checked="" type="checkbox"/> 创建版本 <input checked="" type="checkbox"/> 部署公钥

Set Protected Branch

Last updated: 2024-09-05 16:15:28

Branch protection is a special function CODING uses to limit Git code permissions. Selected branches can be protected from unreported and unauthorized changes.

When you enable branch protection, protected branches are marked with a green shield in the branch list. To modify a protected branch, members must create a new branch and modify it. Then, they submit a merge request to invite other members to review the code. If the review result is Allow Merge, the merge operation can be performed.



Set Protected Branch Rules

In a code repository, in the **Settings > Branch Settings**, enter the branch name you need to protect in the branch rules name. Branches that match the naming rules will be considered protected branches.

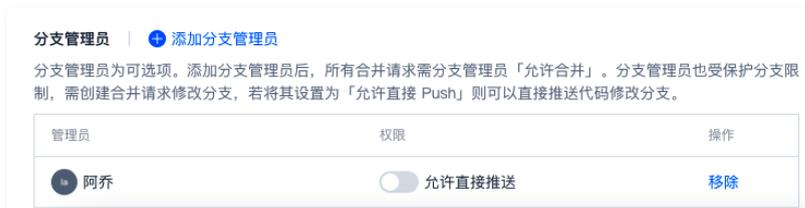


- **Disallow Force Push:** Enabled by default. Even users with permission to perform `git push -f` to force modify the branch commit history. We strongly recommend you enable this option when multiple people collaborate on a branch. This ensures that users must use new commits to change the branch content, rather than modifying prior commits.

- **Enable Status Check:** By setting the specification check conditions or setting a code scanning scheme in the CI, merges are allowed only after the CI is successful. Check [Trigger Rules](#) for more information.
- **Automatically Add Branch Admin as Reviewer:** When this feature is enabled, all merge requests to this protected branch automatically add all admins of the current branch as reviewers.
- **Enable Review by Code Owner:** When this feature is enabled, for merge requests involving protected branches, any modification must be reviewed by the relevant code owner before the merge is allowed. Typically, different code paths determine specific features in the application, and maintainers naturally do not want their code to be altered inadvertently by other members.
- **Number of Reviewers Authorizing Merge:** This sets the number of branch admins that must authorize a merge request before it can be merged into the target branch. If no branch admins are set for a protected branch, authorization from one ordinary member is required before the merge is allowed.

Specify Branch Admins

Branch administrators are optional. After adding an administrator, all merge requests need the administrator's permission to be merged. Administrators by default are subject to the protected branch's conditions and need to create a merge request to modify the branch. By selecting "Allow direct push", administrators will not be restricted by protection and can directly modify protected branch content.



If members do not have permissions (i.e., they are not designated as branch admins for the protected branch) to push to the branch, they will receive the following error message when attempting to push to the branch:

```
adolfo@P_ADOLFLAN-MB0:/Volumes/CODING/coding-help-generator ㄟ#1
/Volumes/CODING/coding-help-generator 》 api ↑1 ② git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 378 bytes | 378.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0)
remote: [err=31] You have no permission to update protected branch (refs/heads/a
pi).
remote: 你没有权限推送到保护分支 (refs/heads/api) , 查看更多信息: https://coding
.net/help/doc/git/git-branch.html#保护分支
remote: error: hook declined to update refs/heads/api
To https://e.coding.net/codingcorp/coding-help-generator.git
! [remote rejected] api -> api (hook declined)
error: failed to push some refs to 'https://e.coding.net/codingcorp/coding-help-
generator.git'
/Volumes/CODING/coding-help-generator 》 api ↑1 ② |
```

Set Hidden Branch

Last updated: 2024-09-05 16:15:45

To control access permissions to a single branch, you can make any branch other than the default branch a hidden branch. Only authorized users and user groups can access hidden branches, ensuring the security of the code.

1. On the details page of a code repository, click **Settings > Branch Settings** to go to the branch settings page.

The screenshot shows the 'Branch Settings' page for a code repository. The left sidebar contains navigation options: 仓库设置, 基本设置, 权限方案, 部署公钥, 文件锁定, 分支设置 (selected), 仓库规范, 访问设置, 推送设置, 合并请求, 版本发布, 代码标签, 仓库安全, 推送权限, 同步信息. The main content area is titled '分支设置' and includes a '默认分支' dropdown set to 'master', a '保护分支规则' section with a '+ 添加分支规则' button, and a '隐藏分支' section with a '+ 添加隐藏分支' button. The '隐藏分支' section contains a table with the following data:

保护分支规则	保护分支数量	操作
暂无数据		

Below the table, there are two explanatory notes:

说明 1: 隐藏分支访问权限优先级为 用户 > 用户组 > 所有用户, 当某个成员属于多个用户组时, 分支访问权限以所在的未排除的用户组为依据。
 说明 2: 分支规则为前缀匹配, 即 分支规则为 test, 将会匹配以 test 为前缀的所有分支。

The '隐藏分支' section also features a table for the 'gh-pages' branch:

gh-pages	新增用户组/成员	删除
所有人 (3)	<input type="checkbox"/> 允许访问	
项目管理员 (1)	<input checked="" type="checkbox"/> 允许访问	

2. Click **Add Hidden Branch**, select or enter the branch, and click **Save**. When a branch is hidden, it is shown in the hidden branch list.

3. Use **Add User Group** or **Add Member** to specify the users that are allowed or denied access to the branch.

The screenshot shows the '隐藏分支' settings page for the 'gh-pages' branch. It includes a '+ 添加隐藏分支' button and two explanatory notes:

说明 1: 隐藏分支访问权限优先级为 用户 > 用户组 > 所有用户, 当某个成员属于多个用户组时, 分支访问权限以所在的未排除的用户组为依据。
 说明 2: 分支规则为前缀匹配, 即 分支规则为 test, 将会匹配以 test 为前缀的所有分支。

The '隐藏分支' section contains a table for the 'gh-pages' branch:

gh-pages	新增用户组/成员	删除
所有人 (3)	<input type="checkbox"/> 允许访问	
项目管理员 (1)	<input checked="" type="checkbox"/> 允许访问	

A dropdown menu is open, showing options to '+ 新增用户组' and '+ 新增成员'.

The priority of hidden branch access permissions is as follows: user > user group > all users. If a member belongs to multiple user groups, the member can access a hidden branch if any of their groups has access permission.

For example, if User A belongs to User Group 1 (allowed access to the `dev/001` branch) and User Group 2 (denied access to the `dev/001` branch), User A can access the `dev/001` branch.

Set Read-only Branch

Last updated: 2024-09-05 16:16:03

After setting a read-only branch, no team member can write to or submit merge requests to this branch. Only pulling is allowed.

Configuring permission

In the **Team Settings Center** > **Organization and Members** > **Resource Permission Scheme** tab of the **Repository Permission Scheme** page, click the name of the permission group in the permission list to set repository permissions. When the repository permissions include **Repository Settings**, the administrator can set or cancel read-only branches.

团队设置中心 / 全局设置 / 资源权限方案 Q 搜索设置项

成员管理

用户组

团队权限方案

项目权限方案

资源权限方案

仓库权限方案

代码仓库开发成员 系

具备代码仓库访问、代码仓库写入、版本发布管理权限。

权限组详情

配置权限

分类	功能权限			
代码仓库	<input checked="" type="checkbox"/> 访问代码	<input checked="" type="checkbox"/> 仓库设置	<input type="checkbox"/> 仓库管理	<input checked="" type="checkbox"/> 下载代码
	<input checked="" type="checkbox"/> 拉取代码	<input checked="" type="checkbox"/> 本地推送代码	<input checked="" type="checkbox"/> 在线编辑仓库文件	<input checked="" type="checkbox"/> 创建分支和编辑备注
	<input checked="" type="checkbox"/> 删除普通分支	<input type="checkbox"/> 删除保护分支	<input type="checkbox"/> 保护分支规则	<input checked="" type="checkbox"/> 创建标签
	<input checked="" type="checkbox"/> 删除普通标签	<input type="checkbox"/> 删除保护标签	<input checked="" type="checkbox"/> 创建版本	<input checked="" type="checkbox"/> 编辑版本
	<input checked="" type="checkbox"/> 删除版本	<input checked="" type="checkbox"/> 创建合并请求	<input checked="" type="checkbox"/> 部署公钥	<input checked="" type="checkbox"/> 解锁文件

Set Read-only Branch

1. After entering any Code Repository, click **Branches** to enter the branch list.

testli/演示/demo

代码 合并请求 1 版本 云原生构建 设置 新版仓库使用引导

demo

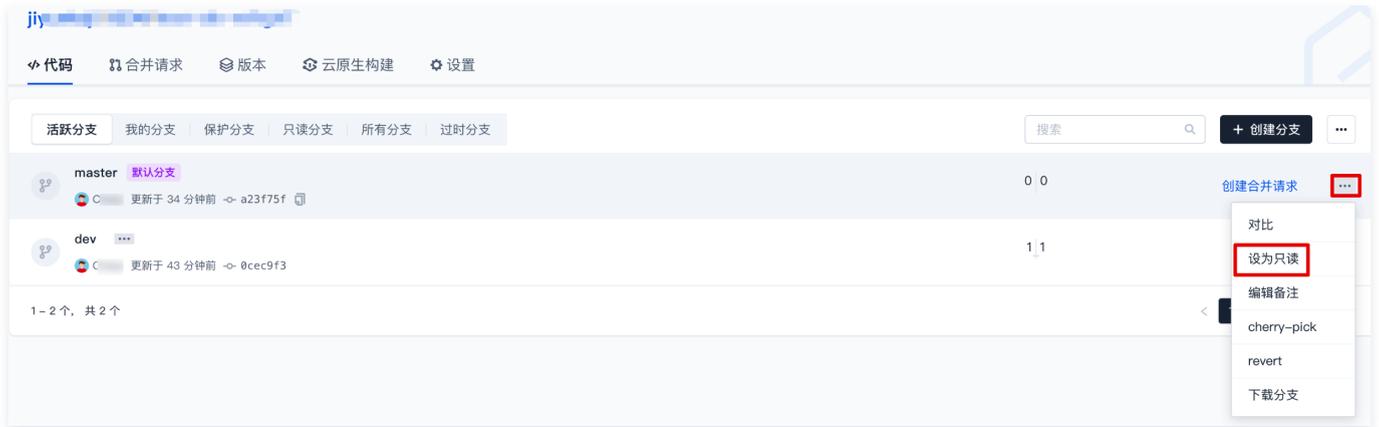
- src
 - Dockerfile
 - Jenkinsfile
 - README.md
 - mvnw
 - mvnw.cmd
 - pom.xml

master 分支 5 标签 2

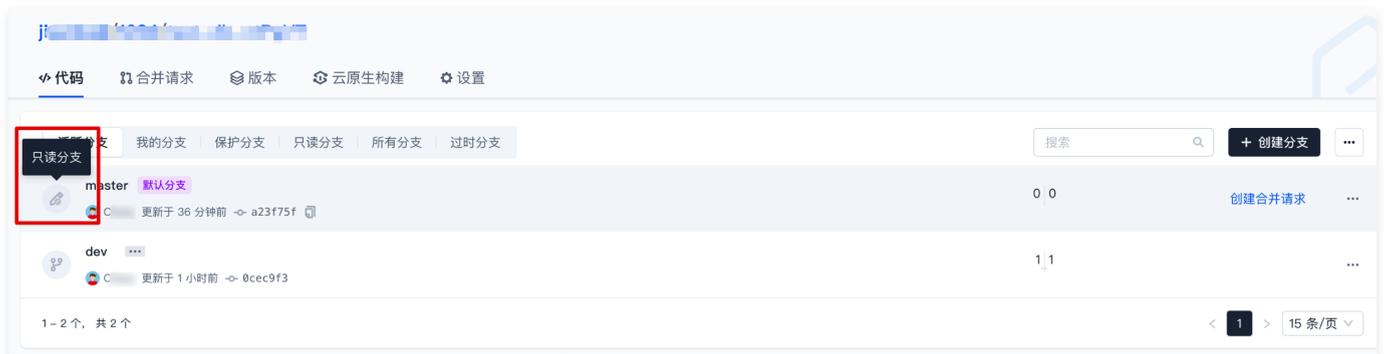
Initial commit ⚠ reviewer-1 提交于 6 天前 c30a6e4 1 个提交

文件	提交人	操作	时间
src	reviewer-1	Initial commit	6 天前
Dockerfile	reviewer-1	Initial commit	6 天前
Jenkinsfile	reviewer-1	Initial commit	6 天前
README.md	reviewer-1	Initial commit	6 天前
mvnw	reviewer-1	Initial commit	6 天前
mvnw.cmd	reviewer-1	Initial commit	6 天前

2. Select the specified branch, click **...** and choose **Set to Read-only**.



After enabling read-only mode, the branch will display a read-only indicator. To cancel read-only, click  and choose **Cancel Read-only**.



Merge Request and Code Review

Merge Request Settings

Last updated: 2024-09-05 16:16:24

The full name of a merge request is a Merge Request, abbreviated as MR below.

Project administrators can configure the basic settings for merge requests, adjust the default merge method, change the MR default target branch, and set the merge commit message template (Accept Merge Request) on the **Settings > Merge Requests** page of the code repository.



Basic settings

Delete Source Branch by Default

Deleting the source branch helps keep the repository clean. Once this switch is enabled, the MR request will auto-select the option shown in the image. If you do not want to delete the source branch, the merger can uncheck this button.

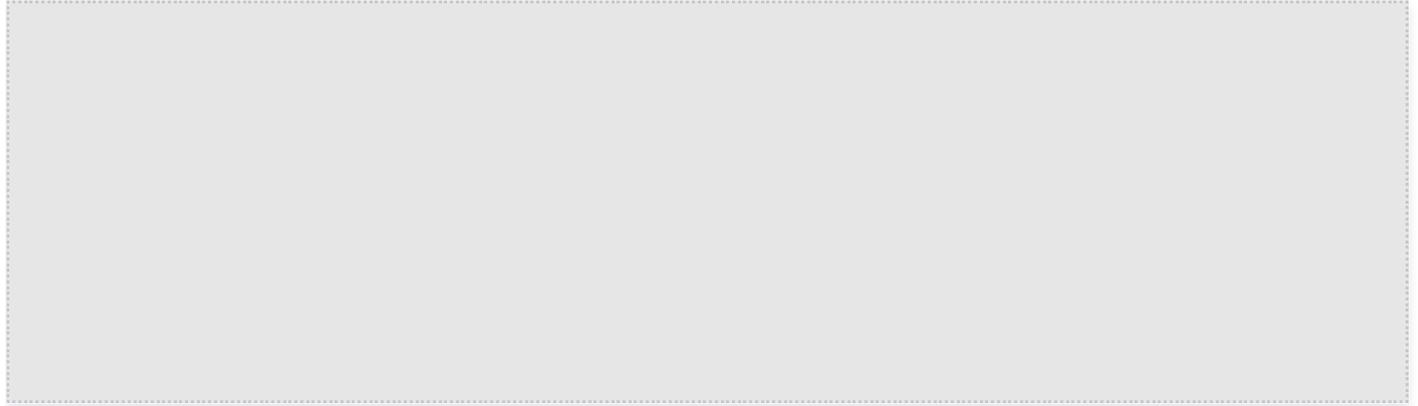


Fast-Forward Merge by Default

This feature is mainly to maintain the cleanliness of the trunk branch. This merge mode will not leave any historical information of the merges in the target branch. The commit messages of the source branch will directly merge into the target branch without creating a commit record of the merge, similar to adding the `--ff` parameter when using the `git merge` command.

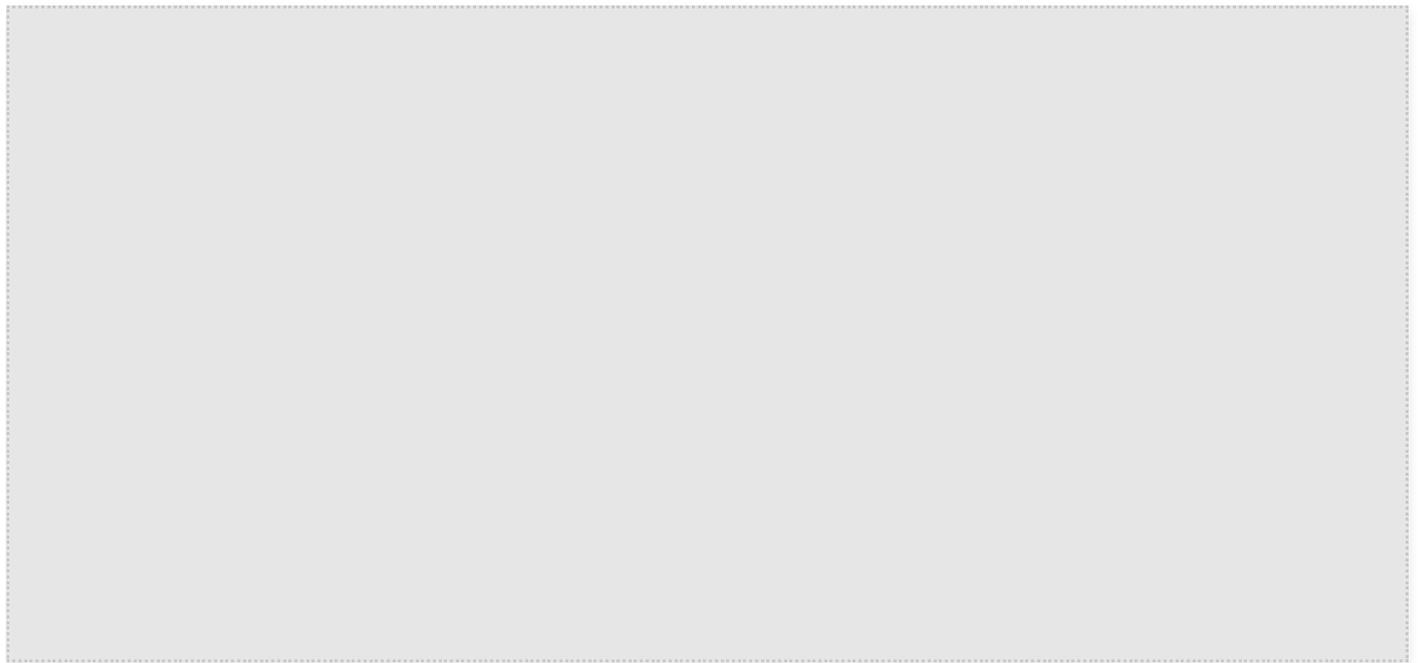
Status Check

Once this feature is enabled, all MRs will automatically trigger a Continuous Integration task on the source branch. Only after passing can they be allowed to merge into the target branch.



All reviewers must allow the merge before merging

This feature is mainly to ensure that all MRs can only be merged with the unanimous consent of all reviewers, regardless of whether the target branch is protected or not.



Merge Mode

Three merge modes are provided when the source branch has multiple commits:

- Default direct merge: A merge commit will be created.
- Default Squash merge: Multiple commits from the source branch will be squashed into one commit, and users can opt out of this behavior.
- Squash merge only: Forces the squashing of multiple commits from the source branch into one commit, and users cannot opt out.

Default Target Branch

After the default branch is specified, it will be automatically set as the target branch when creating merge requests. It is recommended to use the trunk branch as the default target branch for merge requests.

Merge Commit Message Template

All merge requests will leave a commit message in the target branch. For example, the default message in Git is 'Accept Merge Request #xxx.' You can modify this message template here to record the merge results more clearly.



Submit Message Variable

Variable name	Variable Description	Variable Example
<code>\${source_branch}</code>	Source Branch	feature/demo
<code>\${target_branch}</code>	Target Branch	main
<code>\${title}</code>	Merge Request Title	This is a merge request title
<code>\${id}</code>	Merge Request Reference Issue Number	#1
<code>\${url}</code>	Merge Request Access Link	https://team-name.coding.net/p/project-name/d/depot-name/git/merge/21
<code>\${reviewer}</code>	Merge Request Reviewer	@DevelopmentTeamLead
<code>\${approver}</code>	Merge Request Allowed to Merge Personnel	@DevelopmentTeamLead
<code>\${acceptor}</code>	Merge into Branch Personnel	@Development Team Member

<code>\${creator}</code>	Merge Request Creator	@Development Team Member
--------------------------	--------------------------	--------------------------

Initiate Merge Request

Last updated: 2024-09-05 16:16:59

If a multi-branch development workflow is used, we recommend you set the master branch as a protected branch. Developers can create temporary develop branches and initiate merge requests for them. After continuous integration (CI) and code reviews, developers can merge the develop branch into the master branch.

Initiate Merge Request

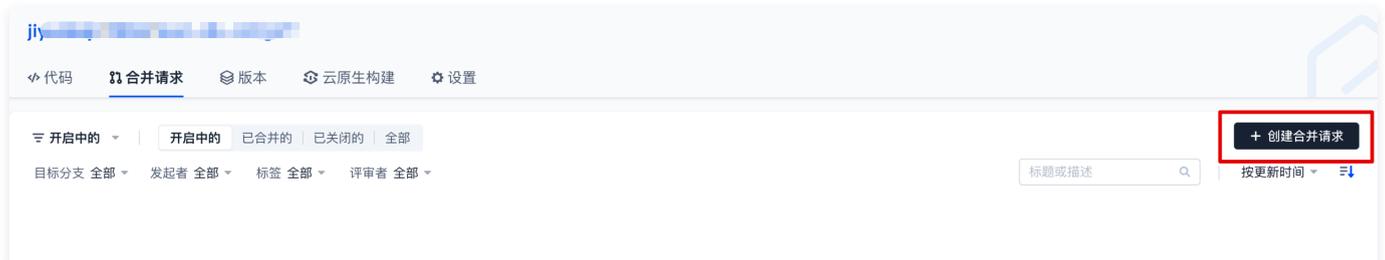
You can manually create merge requests on the command line or on the web.

Create via Command Line

```
git push origin local-branch:mr/target-branch/local-branch
```

Manual Creation

1. On the details page of a code repository, go to the **Merge Requests** tab and then click **Create Merge Request**.



2. Specify a source branch and target branch for the merge request. If no conflicts are found after the source branch is compared with the target branch, the system will indicate that the source branch can be merged into the target branch. You can view the differences between the files on the **File Changes** tab.



3. After creating a merge request, you can still view all the commit history and all individual commits included in a single push in the **Commit History** tab.



Resolve Merge Conflicts

The reason for merge conflicts is that the source branch and the target branch have made inconsistent changes to the same code. When a merge request is initiated, the system will automatically compare the differences between the source and target branches. If a conflict is found, the system will indicate that they cannot be automatically merged. You can resolve the conflict either online or locally before continuing to initiate the merge request.

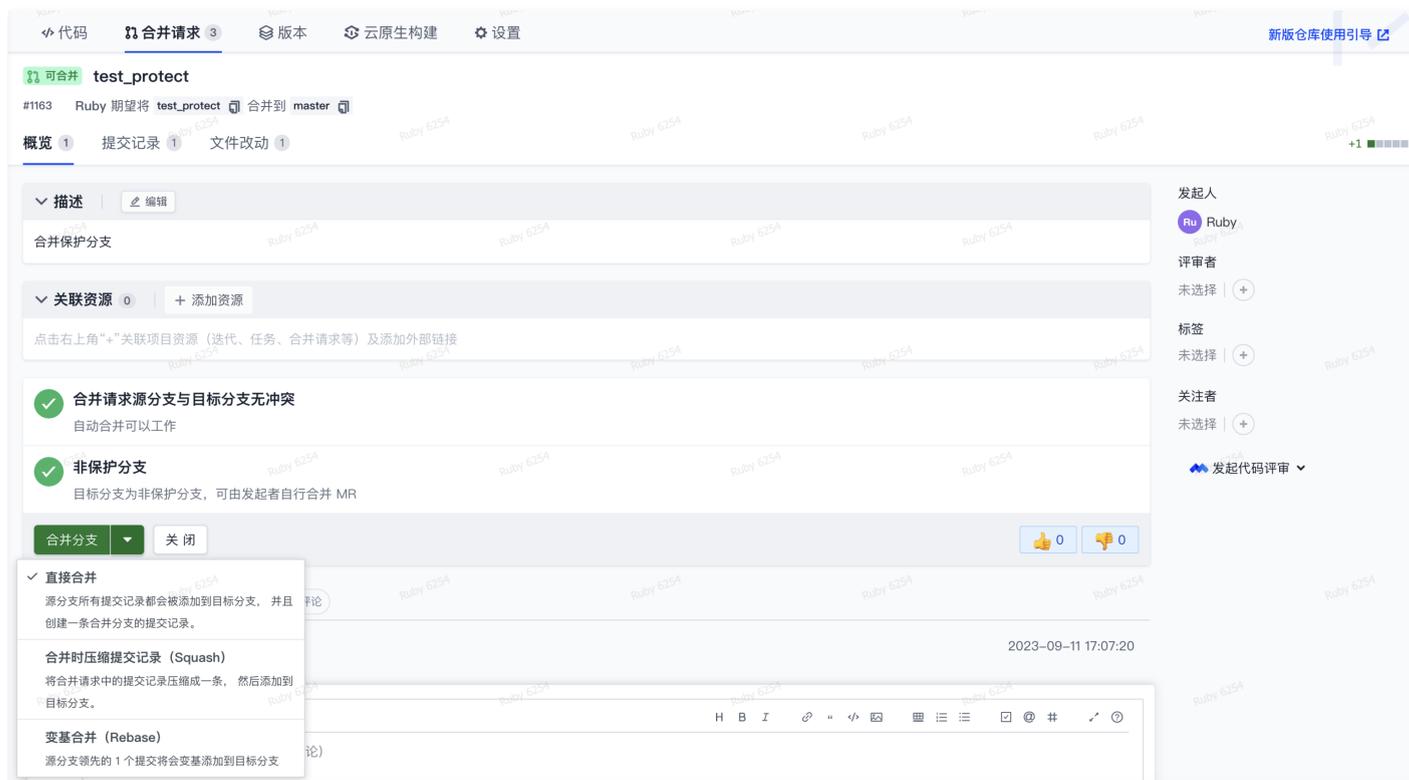


Online Conflict Resolution

When encountering code conflicts, it is often necessary to repeatedly pull and resolve them in the local terminal before pushing them to the remote repository. The online conflict resolution feature simplifies these tedious steps to simple mouse operations. Click **View Conflict Content** on the webpage to preview the conflicting content online.

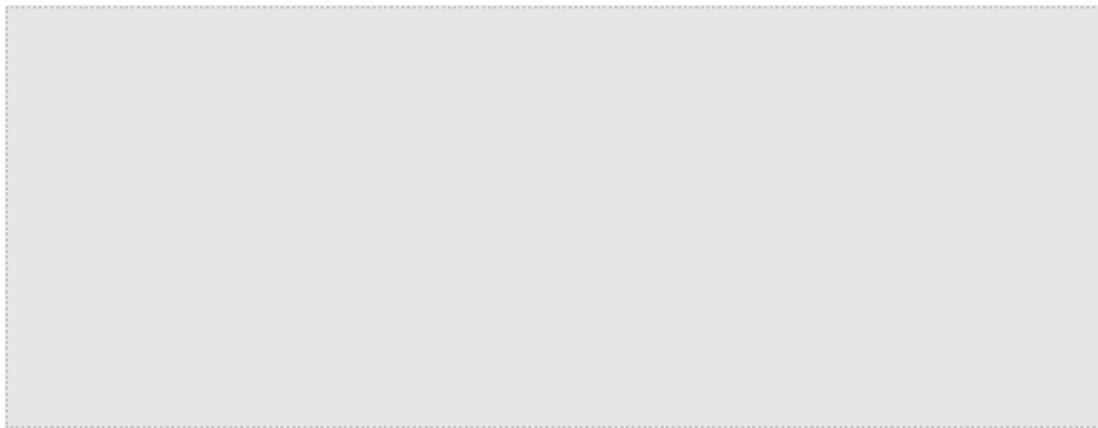


The conflicting content will be highlighted. You can select the content you want to keep. Click the toggle button in the upper-right corner to quickly switch to other conflicting lines. After resolving all conflicts and submitting the changes, a new commit record will be generated in the code repository.



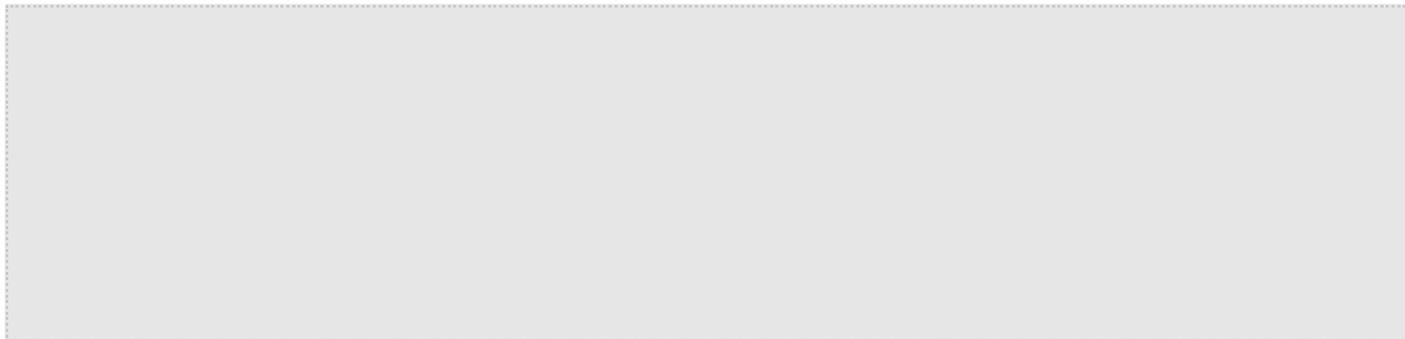
Delete source branch

When initiating a merge request, select Delete Source Branch to delete the source branch after the merge request is initiated.



Fast-Forward Merge

During a fast-forward merge, no historical information about the merge between the source and target branches is left in the target branch. The commits from the source branch will be directly combined with the target branch without creating a merge commit.



If Fast-Forward Merge is selected, the remote repository will determine if the fast-forward rules are met during the merge. If the rules are met, this merge will not create a new merge commit record; if this mode is not selected, previous development records will be kept and a new merge record will be created during the merge.

Selecting this option is equivalent to adding the `-ff` parameter when using `git merge`.

Note:

In [Merge Request Settings](#), you can set default options for deleting the source branch and using Fast-Forward Merge.

Sign Git Commits with GPG

Last updated: 2024-09-05 16:17:13

CODING supports GPG signature verification for Git commits. Verified commit records will be tagged as "Verified" to ensure the reliability of code submitters and enhance code security.

Generate GPG Key Pair

1. **Download** and install GPG. If you are using macOS, you can run the following command using the brew package manager:

```
brew install gpg
```

2. Run the following command to generate a GPG key pair (public/private key):

```
gpg --full-gen-key
```

In some scenarios, such as using Windows Gpg4win or other macOS versions, use the `gpg --gen-key` command to generate a key pair.

This is an interactive command. You will need to select the algorithm type, specify the validity period of the key, enter your real name and email, set a password, etc., based on the prompts.

- **Key Type:** Select the key type to use or press Enter to choose the default RSA and RSA.
- **Elliptic Curve:** Press Enter to select the default elliptic curve `Curve 25519`.
- **Validity period:** Specify the validity period of the key as needed, or press Enter to select the default never expires.
- **Email address:** This should be the email address configured in your CODING account.

3. Run the following commands to list the created GPG keys (the email address in the command should be the one specified in step 2):

```
gpg --list-secret-keys --keyid-format LONG "your_email"
```

4. Copy the GPG key ID that starts with `sec`. For example, copy `4AEA00A342C24CA3` in the example:

```
sec  ed25519/4AEA00A342C24CA3 2021-09-14 [SC]
    6DE3507E82DEB6E8828FAAC34AEA00A342C24BD4
uid  [ ultimate ] your_name "your_email"
ssb  cv25519/812B586FD245B560 2021-09-14 [E]
```

5. Use the copied ID to export the public key (using the ID mentioned above as an example):

```
gpg --armor --export 4AEA00A342C24CA3
```

After generating the public key, you can add it to your CODING account.

Add Public Key to Personal Account Settings

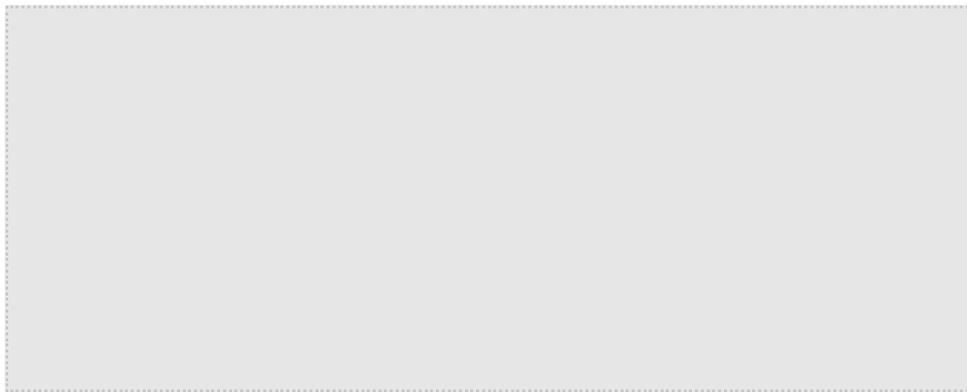
1. After logging in to CODING, click the **Personal Account Settings** option in the lower left corner of the page.
2. Select **GPG Public Key** from the left sidebar to enter the Public Key Management page.
3. Click **Add Public Key**, paste the exported GPG Public Key into the content box, and confirm.



After the public key is successfully added, the verification status of the email address, key ID, and subkey will be displayed.

Note:

If the email address shows an unverified status, it means the email is not configured in the CODING account. Please add the email in **Personal Account Settings > Email Settings**.



Associate with the local Git repository

1. Run the following commands to list the created GPG keys (the email address in the command should be the one specified when generating the key):

```
gpg --list-secret-keys --keyid-format LONG "your_email"
```

2. Copy the GPG key ID that starts with `sec`. In the example below, copy `4AEA00A342C24CA3`:

```
sec  ed25519/4AEA00A342C24CA3 2021-09-14 [SC]
    6DE3507E82DEB6E8828FAAC34AEA00A342C24BD4
uid  [ ultimate ] your_name "your_email"
ssb  cv25519/812B586FD245B560 2021-09-14 [E]
```

3. Configure the key in the local Git repository to sign commit submissions:

```
git config --global user.signingkey 4AEA00A342C24CA3
```

You have now successfully associated the created GPG key with the local Git repository. Sign the Git commit message when making local changes to verify the authenticity of the submitter.

Sign Git commits

When running the Git commit command, the `-S` parameter is required.

1. When you have finished editing the code locally and need to submit changes, add the `-S` parameter to the git commit command:

```
git commit -S -m "your_commit_message"
```

If you do not want to enter the `-S` flag every time, you can use the following command to set Git to automatically sign commits:

```
git config --global commit.gpgsign true
```

2. If prompted to enter a password, provide the password set when generating the GPG key.

Signature verification

After pushing the signed commit to the CODING code repository, you can check the commit verification on the repository's **commit** page to see if the signature was successful.

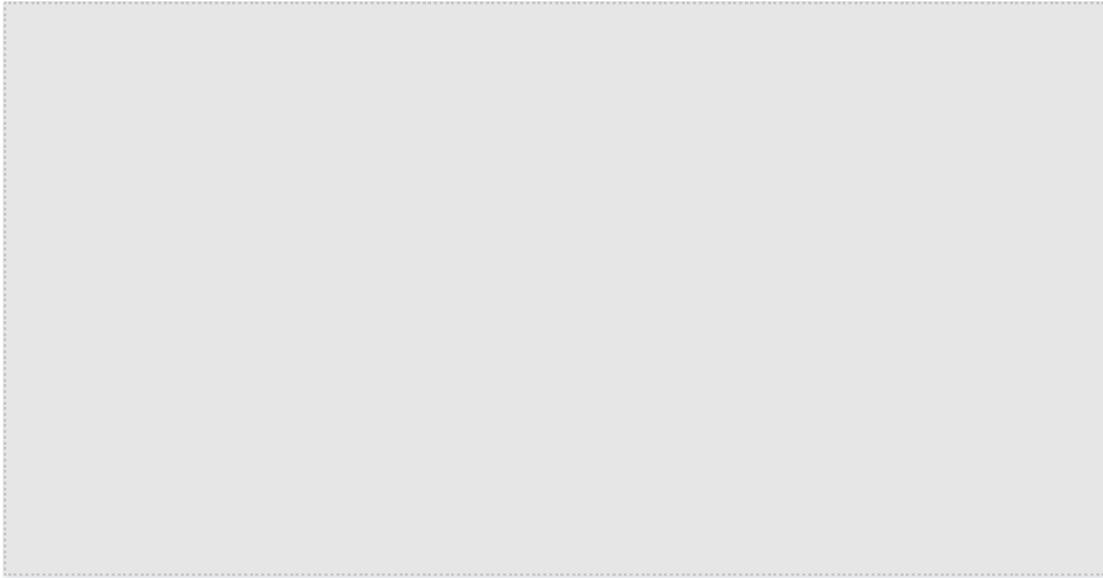


The explanations for the commit verification statuses are as follows:

Verification status	Description
Verified	Signed with a GPG private key, the corresponding public key is in the CODING account, and the public key email is verified.
Unverified	Signed with a GPG private key, but the corresponding public key is not in the CODING account, or the public key email is not verified (if an unverified email appears, please add the email in Personal Account Settings > Email Settings).
No verification status Tag	Did not use a GPG private key for the signature.

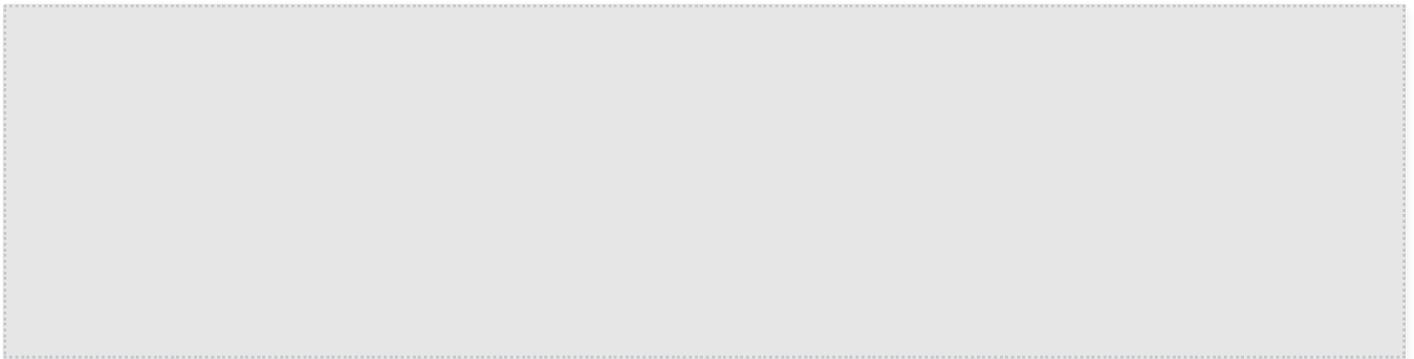
Delete GPG Public Key

If your GPG public key is at risk of being compromised or you no longer use GPG signatures, you can delete the public key in **Personal Account Settings > GPG Public Key**.



After the public key is deleted:

- Verified commits will become unverified.
- Commits still signed with the GPG private key (i.e., using `git commit -S -m`) will become unverified.
- Unsigned commits (i.e., using `git commit -m`) will not be verified and will have an unverified status tag.



Note:

If Git automatic signing is configured, you can run the command `git config --global commit.gpgsign false` to disable automatic signing. Otherwise, after deleting the GPG public key, commits pushed to the remote repository will still show an 'Unverified' status.

GPG signature error handling

If, after completing all the steps mentioned above, you encounter the following error when signing commits using `git commit -S -m`, you can refer to [Solving GPG Signature Failures](#) to modify the related configurations.

```
error: gpg failed to sign the data
fatal: failed to write commit object
```

Versions and Tags

Code Version

Last updated: 2024-09-05 16:17:27

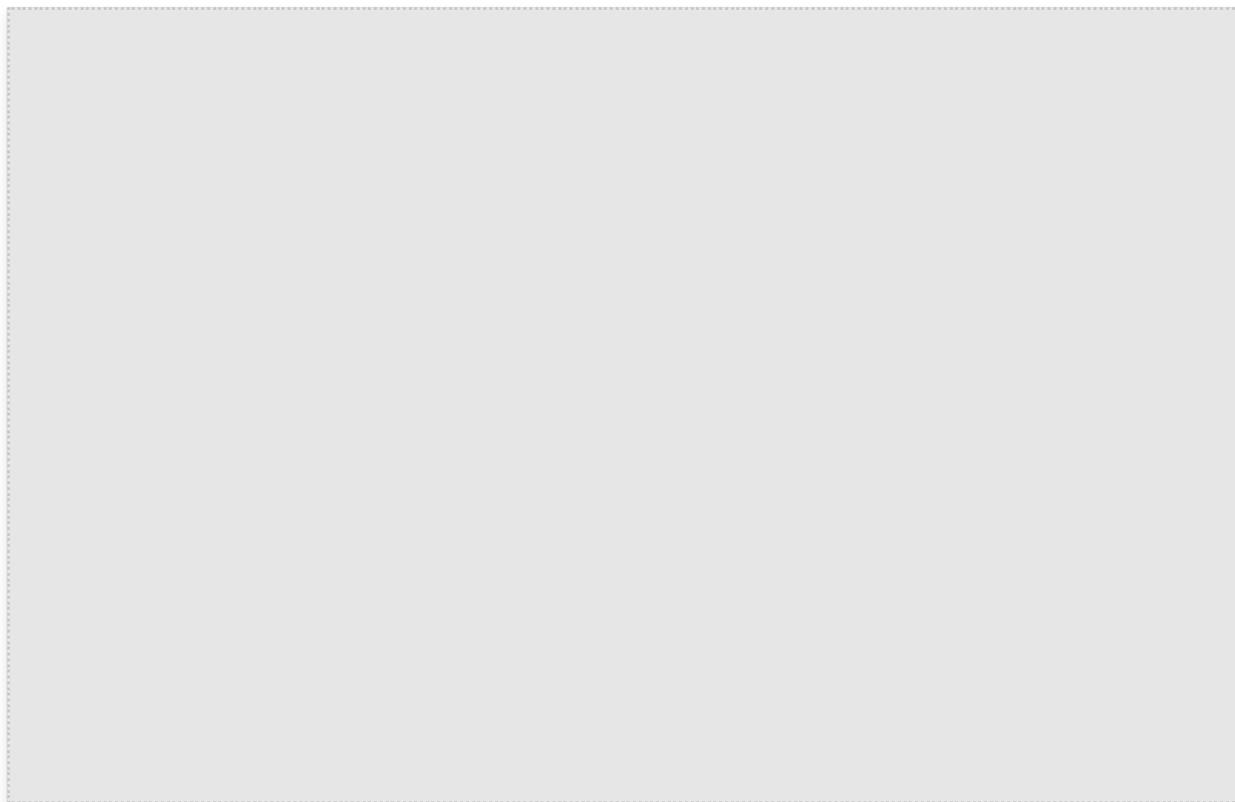
A code version can be understood as a snapshot of the code repository at a certain point in time. In the code repository management list, click the specified code repository to enter its detail page, and then click **Versions** to enter the Management Release Page.



The version release list displays code versions released in a project with their tag names and committed versions by descending order of creation time.

Create Code Version

1. On the version management page, click **Create Version** in the upper-right corner.
2. Enter a tag version, release title, and version description. You can upload files smaller than 100 MB and associate resources in the project (such as tasks, files, Wiki pages, and merge requests). Only new tag names are allowed and you need to select a source for new tag versions (branch, tag, or revision number).



3. Abstract content supports modification by definition and can be used as a team bulletin to inform how to fill in a compliant version number. The team leader or admin can go to **Team Settings Center > Feature Settings > Repository Settings** to define the abstract content.



4. After entering the above information, you can mark the version as a pre-release, and then create the code version release.

Edit Code Version

In the Version Release List, click any code version to enter its detail page, then the version release creator or project admin can click **Edit Version Description** to edit the version information.



Delete Code Version

On the details page of a code version, the release creator or project admins can delete the version by clicking on the Delete icon.

Note:

You can also delete the linked version tags when deleting a version. You can only use or create a tag with the same name after you have deleted the version tag.

#20 删除版本

预先测试

已发布 发布于 2021-08-16 | release-03 8541b4ff 🗑️

描述 | 编辑

编辑 预览 H B I 🔗 “ 📄 📁 ☰ ☰ ☑️ @ # ↶ 🔒

请在此输入版本发布描述内容（支持 Markdown）

保存 取消

引用 0 + 添加资源

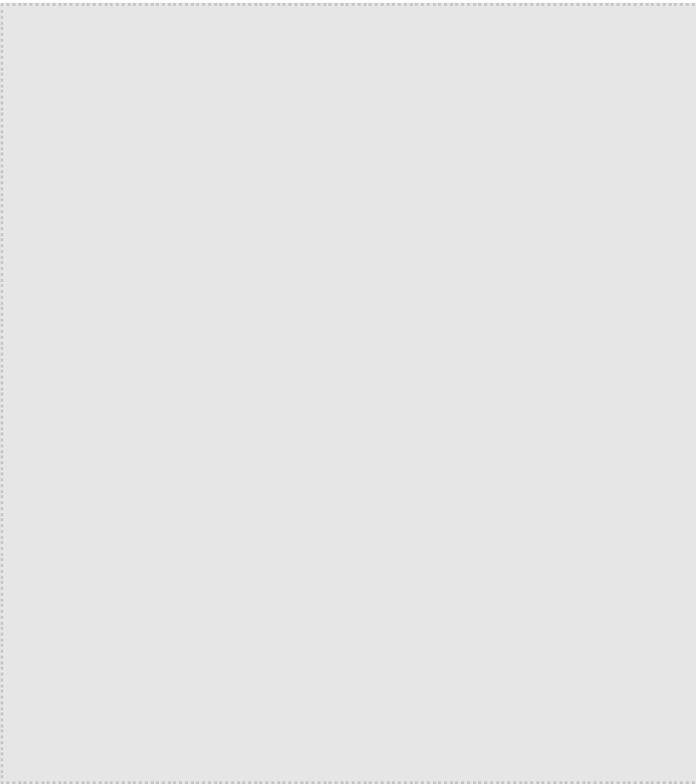
点击“+”关联项目资源（迭代、任务、合并请求等）及添加外部链接

下载 + 上传文件

📄 源代码 (zip) 📄 源代码 (tar.gz)

Set the Default Release Branch

Go to the code repository's **Settings > Version Release** page, where project admins can specify the default branch selected for version releases.



Code Tag

Last updated: 2024-09-05 16:18:56

Overview

Log in to [CODING DevOps Console > Code Repository](#) . After clicking **Use Now**, continue to click the target code repository in the code repository management list to enter its details page. Then click **Tag** to enter the Code Tag management list.

The screenshot shows the 'testli/演示/demo' repository page. The '标签' (Tags) tab is selected, showing a list of tags. The 'Initial commit' tag is highlighted. The list includes columns for the tag name, description, version, and creation time.

Tag Name	Tag Description	Version	Creation Time
Initial commit	reviewer-1	Initial commit	6 天前
src	reviewer-1	Initial commit	6 天前
Dockerfile	reviewer-1	Initial commit	6 天前
Jenkinsfile	reviewer-1	Initial commit	6 天前
README.md	reviewer-1	Initial commit	6 天前
mvnw	reviewer-1	Initial commit	6 天前
mvnw.cmd	reviewer-1	Initial commit	6 天前
pom.xml	reviewer-1	Initial commit	6 天前

The Tag list displays all Tags in the repository in descending order of creation. The Tag list shows the Tag name, Tag description, and the corresponding version, providing download entries for zip and tar.gz files and an option to delete the Tag. Click the Tag name or version number to go to the corresponding code version detail page.

Create New Tag

In the Tag management list, click **Create Tag** in the upper right, enter a Tag name, and select the code version (branch, Tag, revision number) corresponding to the Tag to create a new Tag. The "Summary" displayed on the right side of the page can serve as a bulletin board to inform team members on how to write code Tags in a unified format.

The screenshot shows the '创建标签' (Create Tag) form. It includes fields for '标签版本' (Tag Version), '创建来源' (Create Source), and '描述' (Description). A '摘要' (Summary) section on the right provides guidelines for writing tags.

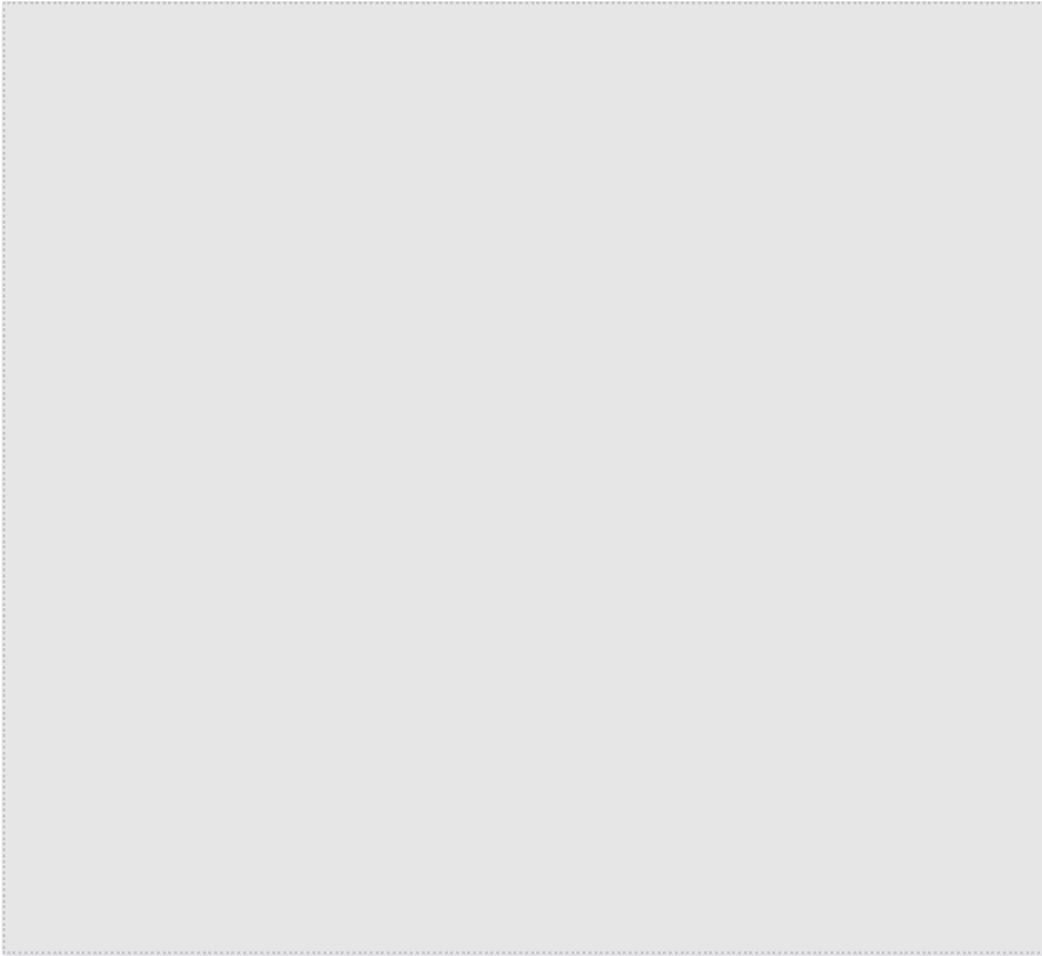
摘要

版本格式: 主版本号.次版本号.修订号, 版本号递增规则如下:

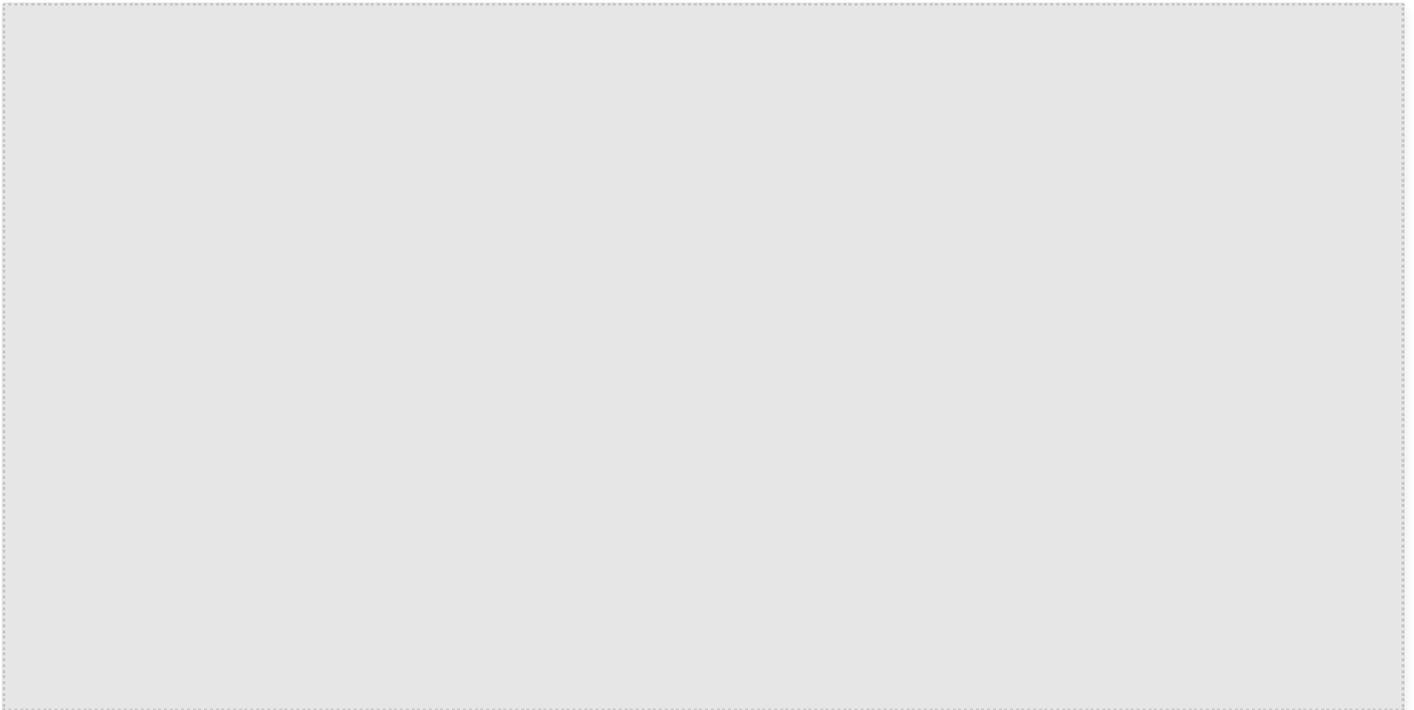
- 主版本号: 当你做了不兼容的 API 修改;
- 次版本号: 当你做了向下兼容的功能性新增;
- 修订号: 当你做了向下兼容的问题修正。

先行版本号及版本编译信息可以加到"主版本号.次版本号.修订号"的后面, 作为延伸。

The team leader/administrator can go to **Team Settings Center > Feature Settings > Code Repository > Repository Settings** to customize the content in the Definition summary.

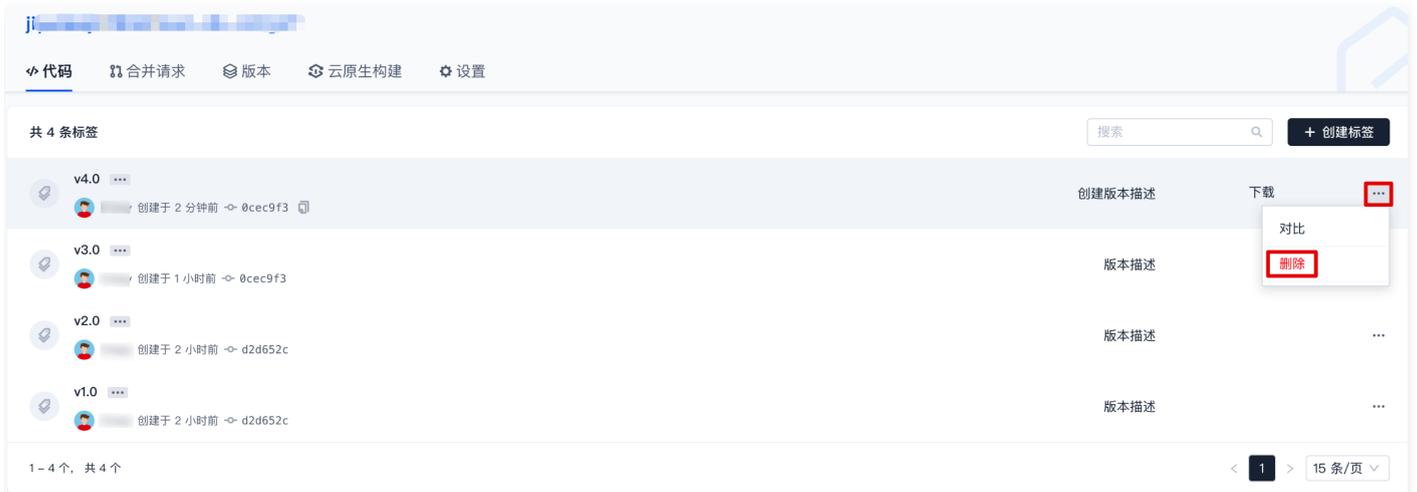


If you want Code Tags to strictly follow team standards, you can go to **Code Repository > Settings > Code Tag** page and click [Set Protected Tags](#) to restrict members from creating or modifying Code Tags of specific formats.

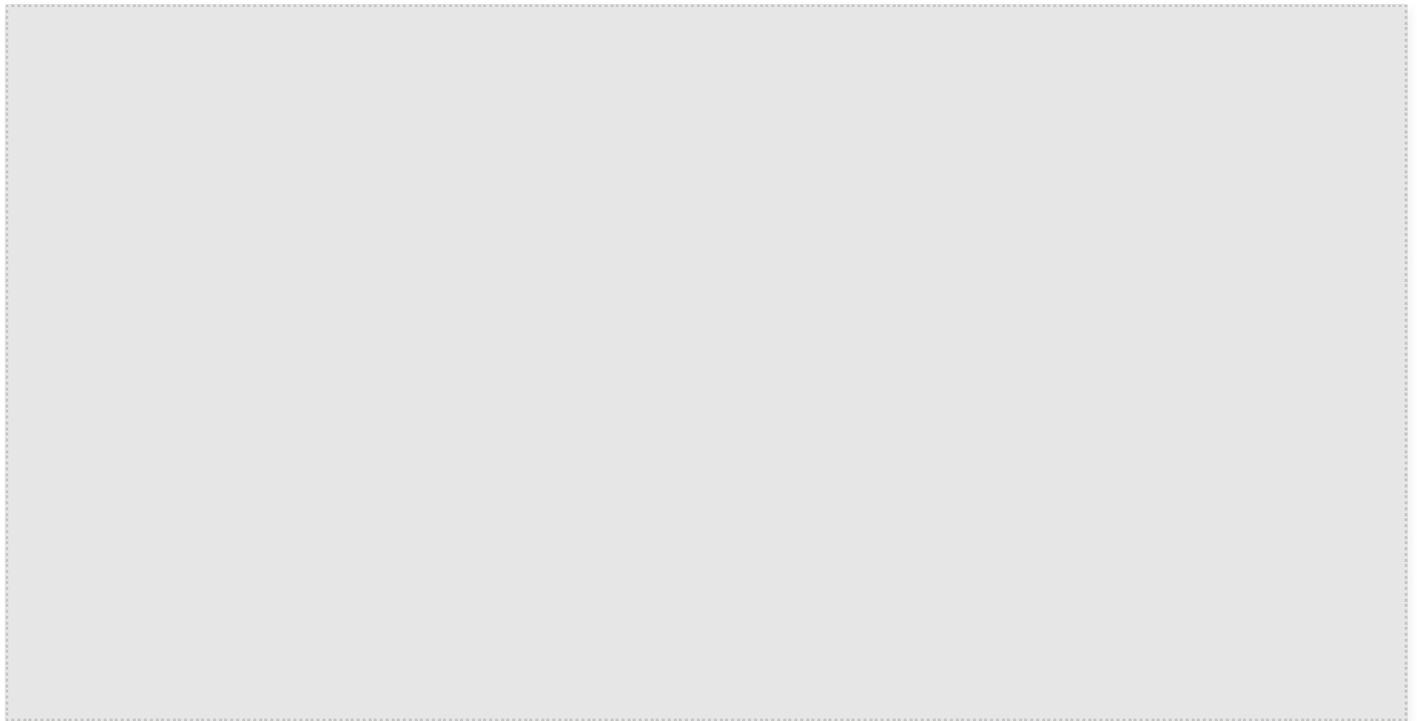


Deleting Tag

On the **Tag** page, the Tag creator or administrator can only delete code Tags that are not associated with any version.



If any Tag is associated with a version release, it can only be deleted by deleting the corresponding version on the **Version** list page. If you do not want the Tag to be deleted, the project administrator can go to **Code Repository > Settings > Code Tag** page and check whether Tag deletion is allowed. If Tag deletion is not allowed, all project members will be unable to delete Tags via the command line, and the Tag deletion feature will not be provided on the webpage.



Set Protected Tags

Protected Tags are mainly used to standardize the creation, update, or deletion of Tags by specific members. After enabling protected Tags, a Tag administrator must be set, and only the administrator is allowed to create Tags that match the Tag rules. When the *-release branch protection rule is set, non-admin users will receive the following prompt when pushing Tag xxx-release via Git:



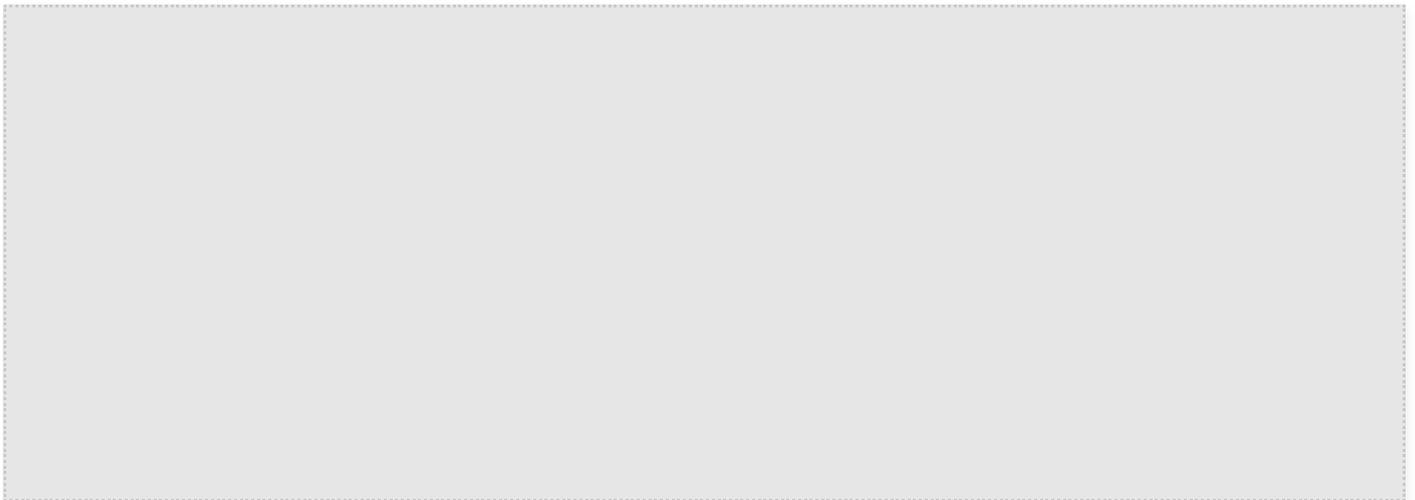
They will also fail to create Tags or new versions on the Web end.



For example, a team may use Tags as a trigger for CI builds, pushing a Tag with the format `v1.0-release` in the production branch as a release command. Setting protected Tags allows only the Tag administrator to create this type of Tag and complete the release action, maintaining the cleanliness and standardization of version sequences within the code repository.

Viewing Version Information

Code Tags can represent a specific code version. Click **Version Description** to view the release details of that version. Click **Edit Version Description** to edit it.



If a Tag does not correspond to any version release, click **Create Version Description** to quickly create a release version for the Tag.

The screenshot shows the 'Tags' page in the Tencent Cloud CODING DevOps console. The page title is 'ji...'. The navigation bar includes '代码', '合并请求', '版本', '云原生构建', and '设置'. The main content area shows a list of 4 tags. The 'v4.0' tag is highlighted, and the '创建版本描述' button is circled in red. The 'v3.0', 'v2.0', and 'v1.0' tags have '版本描述' buttons. The footer shows '1-4 个, 共 4 个' and a pagination control for '15 条/页'.

Tag Name	Created By	Created At	Commit ID	Action
v4.0	Chasy	创建于 2 分钟前	0cec9f3	创建版本描述
v3.0	Chasy	创建于 1 小时前	0cec9f3	版本描述
v2.0	Chasy	创建于 2 小时前	d2d652c	版本描述
v1.0	Chasy	创建于 2 小时前	d2d652c	版本描述