

CodeArts Repo

API Reference

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1 Before You Start

Welcome to CodeArts Repo. CodeArts Repo incorporates experience in managing hundreds of billions of lines of code. It is a Git-based code hosting service that allows you to clone, pull, commit, push, compare, merge, and review code online, as well as create branches.

This document describes how to use APIs to perform operations on CodeArts Repo, such as creating a repository, adding a deploy key, and adding repository members. For details about all supported operations, see [API Overview](#).

If you plan to access CodeArts Repo using an API, ensure that you are familiar with CodeArts Repo concepts. For details, see [Product Overview](#).

Endpoints

The following table lists the endpoints of CodeArts Repo. Select a desired one based on the service requirements.

Table 1-1 CodeArts Repo endpoints

Region Name	Region	Endpoint	Protocol
LA-Mexico City2	la-north-2	codehub-ext.la-north-2.myhuaweicloud.com	HTTPS
LA-Sao Paulo1	sa-brazil-1	codehub-ext.sa-brazil-1.myhuaweicloud.com	HTTPS
LA-Santiago	la-south-2	codeartsrepo-ext.la-south-2.myhuaweicloud.com	HTTPS
ME-Riyadh	me-east-1	repo.me-east-1.myhuaweicloud.com	HTTPS
TR-Istanbul	tr-west-1	codeartsrepo-ext.tr-west-1.myhuaweicloud.com	HTTPS

Region Name	Region	Endpoint	Protocol
AF-Johannesburg	af-south-1	repo.af-south-1.myhuaweicloud.com	HTTPS
AF-Cairo	af-north-1	repo.af-north-1.myhuaweicloud.com	HTTPS
AP-Singapore	ap-southeast-3	codehub-ext.ap-southeast-3.myhuaweicloud.com	HTTPS

Concepts

- **Account**

An account is created upon successful registration with Huawei Cloud. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used directly to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.
- **User**

A user is created using a domain to use cloud services. Each user has its own identity credentials (password and access keys).

An IAM user can view the account ID and user ID on the [My Credentials](#) page of the console. The account name, username, and password will be required for API authentication.
- **Region**

Regions are divided from the dimensions of geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified into universal and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

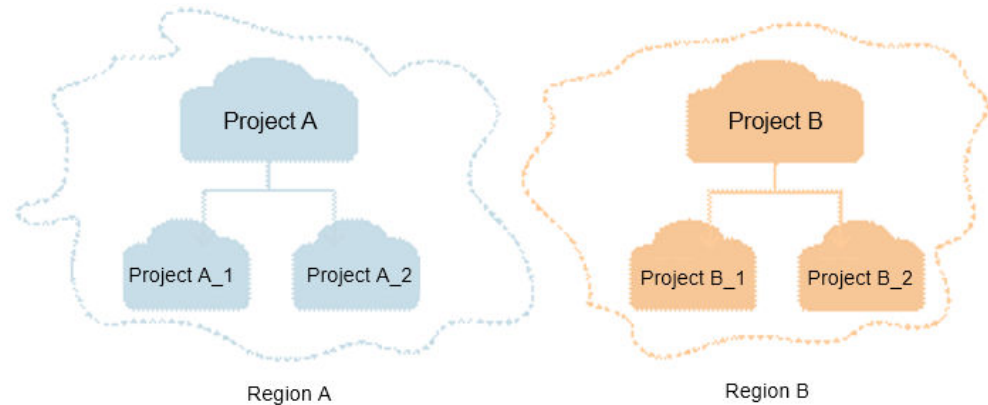
For details, see [Region and AZ](#).
- **Availability zone (AZ)**

An AZ contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, computing, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to support cross-AZ high-availability systems.
- **Project**

A project corresponds to a region. Default projects are defined to group and physically isolate resources (including compute, storage, and network resources) between different regions. Users can be granted permissions in a default project to access all resources under their accounts in the region

associated with the project. For more refined access control, create subprojects under a project and create resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolation model



You can obtain the project ID on the [My Credentials](#) page.

- **Git**
Distributed version management software originally authored by Linus Torvalds.
- **Branching**
Branching, in version control and software configuration management, is the duplication of an object (such as a program or a piece of software). Each object can thereafter be modified separately and in parallel so that the objects become different. In this context the objects are called branches. Branches are also known as trees, streams or codelines. The originating branch is sometimes called the parent branch or the upstream branch. Child branches are branches that have a parent branch. A branch without a parent is referred to as the trunk or the mainline.
- **Revision Tag/Tag**
A revision tag is a textual label that can be associated with a specific revision of a project maintained by a version control system. This allows the user to define a meaningful name to be given to a particular state of a project that is under version control. This label can then be used in place of the revision identifier for commands supported by the version control system. For example, in software development, a tag may be used to identify a specific release of the software such as "version 1.2".
- **Fork**
In software engineering, a project fork happens when developers take a copy of source code from one software package and start independent development on it, creating a distinct and separate piece of software. The term often implies not merely a development branch, but also a split in the developer community; as such, it is a form of schism.
After GitHub appeared, fork became the norm. Forking and merge requests (MRs) together make communities more active instead of divided.

- Pull requests (PRs)/MRs
You can request for merging your own code (written in the fork repository or in a new branch). Code repository administrators review requests and merge the code.

2 API Overview

SSH Key

API	Description
Obtaining the SSH Key List	Obtain the SSH key list.
Adding an SSH Key	Add an SSH key.
Checking Whether a Private Key Can Be Used to Pull Code	Check whether a private key has the permission to pull code.

Repository

API	Description
Obtaining Files in a Branch Directory	Obtain files in the branch directory.
Obtaining Repository Statistics	Obtain repository statistics.
Obtaining Image Files of a Specific Branch in a Repository	Obtain image files of a specific branch in a repository.
Modifying the Status of a Repository Referenced by a Pipeline	Modify the status of a repository referenced by a pipeline.
Checking Whether a User Has the Repository Administrator Permission	Check whether a user has the repository administrator permission.

API	Description
Setting a Repository to Public or Private	Indicate whether a repository is public or private.
Obtaining the Content of a Specified File in a Repository Branch	Obtain the content of a specified file in a specified branch of a repository.
Obtaining a Public Template List	Obtain the list of public sample templates.
Creating a Repository	Create a repository on a specified project with the specified name. Input parameters include the repository name, template ID, whether to import project members, and home project.
Obtaining a Repository Short ID to Generate the Details Page URL	Obtain the short ID of a repository, which is used to obtain the URL of the repository details page.
Querying a Commit of a Branch by Repository or Repository Group Name	Obtain the commit list by repository group name, repository name, and branch.
Querying Branches of a Specified Repository	Obtain the branch list of a specified repository based on the repository ID.
Querying a Commit of a Repository Branch by the Repository ID	Query the commit of a repository branch based on the repository ID.
Adding a Deploy Key	Add a deployment key.
Deleting a Deploy Key	Delete the repository deployment key.
Obtaining the Last Commit Statistics of a Repository	Obtain the last commit statistics of the repository.
Repository Statistics	Query code commit record statistics of a repository based on the repository short ID.
Deleting a Repository	Delete a repository based on the 32-bit UUID of the repository.
Viewing a Repository Creation Status	Obtain the repository status.
Querying the Tag List of a Repository	Query the branch corresponding to a specified repository.
Adding a Tag	Create a tag.

API	Description
Querying Details About a Repository.	Obtain repository information based on the repository UUID. The returned information contains the ID, name, group name, and repository access URL.
Obtaining the Number of Committed Code Lines	Obtain the number of committed code lines of a specified branch in the code repository on a specified date.
Downloading a Repository	Download a repository in the specified format.
Creating a Protected Branch	Create a protection branch.
Obtaining a Repository Branch List	Obtain the repository branch list.
Obtaining the MR List of a Repository	Obtain the repository MR list.
Obtaining MR Details of a Repository	Obtain details about a repository MR.

V2Project

API	Description
Querying All Repositories of a User	Obtain information about all repositories of a user.
Creating a Project and Repository	After a project is created, the parameters for creating a repository group are generated in the background, including the repository name, template ID, whether to import project members, and home project.
Creating a Project and Forking a Repository	After a repository is created, parameters transferred to the fork repository include the repository name, whether to import project members, and home project.
Querying All Repositories in a Project	Obtain the repository list. Fuzzy query is supported: If the project UUID is not specified, fuzzy query by repository name or project name is supported; otherwise, fuzzy query by repository name is supported.
Associating Branches with Work Items	Associate a branch with a work item.

RepoMember

API	Description
Obtaining All Member Records in a Repository	Obtain the repository member list. You can search for a member by keyword.
Adding a Repository Member	The calling party codehubportal adds a repository member.
Setting a Role for a Member in the Repository	Assign repository operation permissions to repository members.
Deleting a Repository Member	Delete repository members

Commit

API	Description
Querying a Commit Message of a Repository	Obtain commit information based on the repository short ID. The list of all commits in the path can be queried based on the file path.
Creating a Commit	Multiple files in different directories can be submitted at a time. If the directory does not exist, the system automatically creates a directory. The forcible overwrite option is supported. When the forcible overwrite flag is set to true, the conflict is ignored and the configuration is forcibly committed.
Querying a Specific Commit of a Repository	Obtain a specific commit by commit ID, branch name, or tag name.
Querying the Commit Difference Information of a Repository	Query commit difference information by commit ID.

File

API	Description
Querying File Information in a Repository	Obtain information about files in the repository, such as the name, size, and content. Note that the file content is encoded using Base64.

User

API	Description
Verifying HTTPS Account and Password	Check whether the username and password entered when you upload or download code using HTTPS are valid.

Webhook

API	Description
Querying a Webhook of a Specified Repository	Obtain the repository webhook.
Adding a Hook to a Specified Repository	A code commit automatically triggers building and addition of a repository hook.
Deleting a Hook from a Specified Repository	A code commit automatically triggers building and deletion of a repository hook.

Project

API	Description
Obtaining the List of Repositories that Can be Set to Public under a Project	Obtain the list of repositories that can be set to the public state under a project.
Verifying a Repository Name of a Specified Project	This API is called when a repository is created. The project UUID and repository name are transferred, and the CoudeHubAdapter API is called to query the database to check whether the repository name is duplicate.

V2 Repository Management

API	Description
Creating a Branch	Create a branch in a specified repository based on the repository ID.

Discussion

API	Description
Creating an MR Review	Create MR review comments.
Obtaining a Review List	Obtain the review list.
Replying to an MR Review	Reply to MR review comments.
Obtaining Review Settings	Obtain review comments.

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a REST API request. The API in [Obtaining the SSH Key List](#) is taken as an example to demonstrate how to call a CodeArts Repo API.

Request URI

The format of a request URI is as follows:

{URI-scheme} :// {Endpoint} / {resource-path} ? {query-string}

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

- **URI-scheme:** Protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:** Domain name or IP address of the server bearing the REST service endpoint. Obtain the value from [Regions and Endpoints](#).
- **resource-path:** Access path of an API for performing a specified operation. Obtain the value from the URI of an API. For example, the **resource-path** of the API for obtaining a user token is **/v3/auth/tokens**.
- **query-string:** optional query parameter. Ensure that a question mark (?) is included before a query parameter that is in the format of "Parameter name=Parameter value". For example, **? limit=10** indicates that a maximum of 10 pieces of data is to be viewed.

For example, to obtain the SSH key list in the **AP-Singapore** region, obtain the endpoint of CodeArts Repo (**codehub-ext.cn-southeast-3.testcloud.com**) for this region and the **resource-path (v1/users/sshkey)** in the URI of the API used to obtain the SSH key list ([Obtaining the SSH Key List](#)). Then, construct the URI as follows:

```
https://codehub-ext.cn-southeast-3.huaweiloud.com/v1/users/sshkey
```


 NOTE

To simplify the URI display in this document, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

Request Method

The HTTP protocol defines the following four request methods that can be used to send a request to CodeArts Repo:

- **GET**: requests the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, such as an object.

For example, in the case of the API used to obtain the SSH key list (see [Obtaining the SSH Key List](#)), the request method is GET. The request is as follows:

```
GET https://codehub-ext.cn-southeast-3.huaweicloud.com/v1/users/sshkey
```

Request Header

You can add additional fields, for example, the fields required by a specified URI or HTTP method, to a request header. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

Common request header fields:

- **Content-Type**: specifies the request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **X-Auth-Token**: A user token only for token-based API authentication. The user token is a response to the API used to [obtain a user token](#). This API is the only one that does not require authentication.

 NOTE

In addition to supporting token-based authentication, public cloud APIs also support authentication using AK/SK. During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature information) and **X-Sdk-Date** (time when the request is sent) header fields are automatically added to the request.

For more information, see [AK/SK-based Authentication](#).

The API used to [obtain a user token](#) does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://iam.ap-southeast-3.huaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

Request Body

A request body is generally sent in structured format. It corresponds to **Content-Type** in the request header and transfers content except the request header.

The request body varies according to APIs. Certain APIs do not require the request body, such as GET and DELETE.

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace ***username***, ***domainname***, *********** (login password), and ***xxxxxxxxxx*** (project ID, for example, cn-north-1) with the actual values. To learn how to obtain a project ID, see [Regions and Endpoints](#).

NOTE

The **scope** parameter specifies where a token takes effect. In the following example, the token takes effect only for the resources in a specified project. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see [Obtaining a User Token](#)

```
POST https://iam.ap-southeast-3.mytestcloud.com/v3/auth/tokens
Content-Type: application/json
```

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxxxx"
      }
    }
  }
}
```

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding. In the response to the API used to [obtain a user token](#), **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

3.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair.

Token-based Authentication

NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the Identity and Access Management (IAM) API for obtaining a user token.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API.

When calling the API to **obtain a user token**, you must set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxx"
      }
    }
  }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** should be added to a request as follows:

```
GET https://iam.ap-southeast-3.huaweicloud.com/v3/auth/projects Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

AK/SK-based Authentication

NOTE

AK/SK authentication supports API requests with a body no larger than 12 MB. For API requests with a larger body, use token authentication.

In AK/SK-based authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID. It is a unique ID associated with an SK. AK is used together with SK to sign requests.
- SK: secret access key. It is used together with an access key ID to identify a sender who initiates a request and to cryptographically sign requests, preventing the request from being modified.

In AK/SK-based authentication, you can use an AK/SK to sign requests based on the signature algorithm or use the signing SDK to sign requests. For details about

how to sign requests and use the signing SDK, see [AK/SK Signing and Authentication Guide](#).

NOTICE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

3.3 Response

Status Code

After sending a request, you will receive a response, including a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see [Status Codes](#).

For example, if status code **200** is returned for calling the API used to obtain the SSH key list (see [Obtaining the SSH Key List](#)), the request is successful.

Response Header

Similar to a request, a response also has a header, for example, **Content-Type**.

Figure 3-1 shows the response header fields for the API used to [obtain a user token](#). The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-1 Header fields of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → [REDACTED]
x-xss-protection → 1; mode=block;
```

Response Body

The body of a response is often returned in structured format as specified in the **Content-Type** header field. The response body transfers content except the response header.

For the API used to **obtain a user token**, the response body is as follows: The following example is part of the response body for the API used to obtain a user token:

```
{
  "token": {
    "expires_at": "2019-02-13T06:52:13.855000Z",
    "methods": [
      "password"
    ],
    "catalog": [
      {
        "endpoints": [
          {
            "region_id": "ap-southeast-3",
            .....

```

If an error occurs during API calling, an error code and the corresponding error message will be displayed. The following shows an error response body:

```
{
  "error_msg": "The format of message is error",
  "error_code": "AS.0001"
}
```

In the response body, **error_code** is an error code, and **error_msg** provides information about the error.

4 APIs

4.1 SSH Key

4.1.1 Obtaining the SSH Key List

Function

This API is used to obtain the public key list of CodeArts Repo.

Debugging

You can debug this API in [API Explorer](#). Automatic authentication is supported. [API Explorer](#) automatically generates sample SDK code and provides the debug function.

URI

GET /v1/users/sshkey

Request Parameters

Table 4-1 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Table 4-2 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error. Range: None
result	PublicKeyList object	Explanation: SSH key list.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-3 PublicKeyList

Parameter	Type	Description
sshkey	Array of PublicKey objects	Explanation: SSH key list.
total	Integer	Explanation: Total number of SSH keys. Range: 0-2147483647

Table 4-4 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">CH.10000. The system is busy. Try again later.
message	String	Explanation: Error message returned when the API fails to be called. Range: <ul style="list-style-type: none">The system is busy. Try again later.

Table 4-5 PublicKey

Parameter	Type	Description
id	String	Explanation: Key ID. Range: 1-40 digits.
key	String	Explanation: Key, which is uploaded by a user. Range: Max. 2,048 digits.

Parameter	Type	Description
title	String	Explanation: A custom title set when the SSH key is added. Range: Max. 255 characters.

Example Requests

GET https://{endpoint}/v1/users/sshkey

Example Responses

Status code: 200

OK

```
{
  "result": {
    "total": 2,
    "sshkey": [ {
      "id": "1015292",
      "title": "reop1@test.com",
      "key": "ssh-rsa AAAAB3NzaC1yc2EAAAADAQAAAAAAAAAAAAAAAAAAAAAaBqA/
pE8buOrxri6AWqAky0bmtjSuVf reop1@test.com"
    }, {
      "id": "1031709",
      "title": "reop@test.com",
      "key": "ssh-rsa
AAAAB3NzaC1yc2EAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU7xcma6HU8nj1E0i46VObWyOONI3gh142
BV repo@test.com"
    } ]
  },
  "status": "success"
}
```

Error Codes

See [Error Codes](#).

4.1.2 Adding an SSH Key

Function

This API is used to configure an SSH key in CodeArts Repo to establish a secure connection between a local computer and a repository under your account.

URI

POST /v1/users/sshkey

Request Parameters

Table 4-6 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-7 Request body parameters

Parameter	Mandatory	Type	Description
key	Yes	String	Explanation: A locally generated SSH key. Constraints: None Range: Max. 2,048 digits and letters. Default value: None
title	Yes	String	Explanation: A custom title set when the SSH key is added. Range: Max. 255 characters.

Response Parameters

Table 4-8 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error. Range: None
result	PublicKey object	Explanation: Response result. Range: None
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-9 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">● 40: Failed to add the key. Check whether the key is valid.● CH.080002: The key already exists. Generate a new one.
message	String	Explanation: Error message returned when the API fails to be called. Range: <ul style="list-style-type: none">● Failed to add the key. Check whether the key is valid.● The key already exists. Generate a new one.

Table 4-10 PublicKey

Parameter	Type	Description
id	String	Explanation: Key ID. Range: 1–40 digits.
key	String	Explanation: Key, which is uploaded by a user. Range: Max. 2,048 digits.
title	String	Explanation: A custom title set when the SSH key is added. Range: Max. 255 characters.

Example Requests

```
POST https://{endpoint}/v1/users/sshkey
{
  "title" : "repo@xxx.com",
  "key" : "ssh-rsa
AAAAB3NzaC1yc2EAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU7xcma6HU8nj1E0i46VObWyOONl3gh142
BV repo@xxx.com"
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "id" : "1034531",
    "title" : "repo@xxx.com",
    "key" : "ssh-rsa
AAAAB3NzaC1yc2EAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU7xcma6HU8nj1E0i46VObWyOONl3gh142
BV repo@xxx.com"
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

Table 4-11 Error codes

Status Code	Error Code	Error Message	Description	Measure
409	CH.080002	The key already exists. Generate a new one.	The key has been configured in CodeArts Repo. Generate a new one locally.	See steps 1 to 3 .
200	CH.010202	Failed to add the key. Check whether the key is valid.	The key cannot be added in CodeArts Repo. The key or title is invalid.	<ul style="list-style-type: none">• If the key is incomplete, copy it again.• If the title is invalid, enter a new one.
400	CH.080002	title cannot be left blank	Title is required.	Specify a title.
400	CH.080002	key is empty	SSH key is required.	Specify an SSH key.

4.1.3 Checking Whether a Private Key Can Be Used to Pull Code

Function

This API is used to check whether a private key has permission to pull code from a repository.

URI

POST /v1/users/sshkey/privatekey/verify

Request Parameters

Table 4-12 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: None Range: 1–100,000 characters. Default value: None

Table 4-13 Request body parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Explanation: Repo UUID, which is returned by the CreateRepository API. Range: 32 digits and letters.
private_key	Yes	String	Explanation: Key, which is uploaded by a user. Range: Max. 2,048 digits.

Response Parameters

Table 4-14 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error. Range: None
result	String	Explanation: Response result. Range: None
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-15 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called.
message	String	Explanation: Error message returned when the API fails to be called.

Example Requests

```
POST https://{endpoint}/v1/users/sshkey/privatekey/verify
{
  "private_key" : "-----BEGIN RSA PRIVATE KEY-----****-----END RSA PRIVATE KEY-----",
  "repository_uuid" : "9b2fab276e9240e09cd01ed0400fc439"
}
```

Example Responses

Status code: 200

OK

```
{  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2 Repository

4.2.1 Obtaining Files in a Branch Directory

Function

This API is used to obtain files in a branch directory.

URI

GET /v1/repositories/{repository_uuid}/branch/{branch_name}/sub-files

Table 4-16 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Explanation: Repository UUID returned by the CreateRepository API. Constraints: Mandatory Range: 32 digits and letters. Default value: None

Parameter	Mandatory	Type	Description
branch_name	Yes	String	Explanation: Name of the target branch to be queried. Constraints: Mandatory Range: Minimum length: 1 Maximum length: 200 Default value: None

Table 4-17 Query Parameters

Parameter	Mandatory	Type	Description
path	No	String	Explanation: Branch path to be queried. For example, <code>src/main/java</code> . Constraints: None Range: None Default value: None
offset	No	Integer	Explanation: Page index. Constraints: None Range: Minimum value: 1 Maximum value: 2,147,483,647 Default value: 1

Parameter	Mandatory	Type	Description
limit	No	Integer	Explanation: Number of records on each page. Constraints: None Range: Minimum value: 1 Maximum value: 100 Default value: 100

Request Parameters

Table 4-18 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-19 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.

Parameter	Type	Description
result	LogsTreeList object	Explanation: Response result.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-20 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.
message	String	Explanation: Error message. Range: None

Table 4-21 LogsTreeList

Parameter	Type	Description
trees	Array of LogsTree objects	Explanation: File log tree.
total	Integer	Explanation: Total number of records.

Table 4-22 LogsTree

Parameter	Type	Description
blob_id	String	Explanation: Storage block ID.

Parameter	Type	Description
commit	Commit object	Explanation: Commit message.
file_name	String	Explanation: File name.
file_path	String	Explanation: File path.
md5	String	Explanation: MD5.
type	String	Explanation: Storage type.

Table 4-23 Commit

Parameter	Type	Description
author_email	String	Explanation: Author's email address.
author_name	String	Explanation: Author.
authored_date	String	Explanation: Author's submission time.
committed_date	String	Explanation: Commit time.
committer_email	String	Explanation: Committer's email address.
committer_name	String	Explanation: Committer.
format	Object	Explanation: File change details. The format is specified in the stat_format parameter.
id	String	Explanation: SHA ID of a commit.
message	String	Explanation: Commit message.

Parameter	Type	Description
parent_ids	Array of strings	Explanation: Parent commit ID.

Example Requests

```
GET https://{endpoint}/v1/repositories/{repository_uuid}/branch/{branch_name}/sub-files
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "trees": [ {
      "blob_id": "ef69ef5dc0c53022fe52a4d02de15f73d96e055c",
      "file_name": "csharpDemo.png",
      "file_path": "images/csharpDemo.png",
      "md5": "8830d25fe6b4e2cd14d75ddb5cae73a7",
      "type": "blob",
      "commit": {
        "id": "1cfd6d81fff948828c7f59bda74c0ef80e53def0",
        "message": "init",
        "parent_ids": [ ],
        "author_name": "repo",
        "author_email": "repo@test.com",
        "committed_date": "2019-11-13 11:29:26",
        "committer_name": "repo",
        "committer_email": "repo@test.com"
      }
    } ],
    "total": 5
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.2 Obtaining Repository Statistics

Function

This API is used to obtain repository statistics.

URI

GET /v1/repositories/{repository_uuid}/statistic-data

Table 4-24 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Explanation: Repo UUID, which is returned by the CreateRepository API. Constraints: Mandatory Range: 32 digits and letters. Default value: None

Request Parameters

Table 4-25 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-26 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	RepositoryStatisticsVO object	Explanation: Response result.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-27 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.
message	String	Explanation: Error message. Range: None

Table 4-28 RepositoryStatisticsVO

Parameter	Type	Description
repoName	String	Explanation: Repository name.
commitCount	Integer	Explanation: Number of commits.
repoSize	String	Explanation: Repository capacity.
lastCommitTime	String	Explanation: Last commit time.

Parameter	Type	Description
codeLines	Integer	Explanation: Lines of code.
branchCount	Integer	Explanation: Number of branches.
archiveUrl	String	Explanation: Code repository download address.

Example Requests

```
GET https://{endpoint}/v1/repositories/{repository_uuid}/statistic-data
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "repoName" : "repoName",
    "commitCount" : "111",
    "repoSize" : "0.26 MB",
    "lastCommitTime" : "2020-01-01 11:11:11",
    "codeLines" : "368965",
    "branchCount" : "222",
    "archiveUrl" : "https://test.com/repo/v1/repo/repository/2111663431/archive"
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error codes

See [Error Codes](#).

4.2.3 Obtaining Image Files of a Specific Branch in a Repository

Function

This API is used to obtain image files of a specific branch in a repository.

URI

GET /v1/repositories/{repository_uuid}/branch/{branch_name}/image

Table 4-29 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository ID.
branch_name	Yes	String	Branch name.

Table 4-30 Query Parameters

Parameter	Mandatory	Type	Description
path	Yes	String	Image path.

Request Parameters

Table 4-31 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

None.

Example Requests

GET https://{endpoint}/v1/repositories/{repository_uuid}/branch/{branch_name}/image

Example Responses

None.

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.4 Modifying the Status of a Repository Referenced by a Pipeline

Function

This API is used to modify the status of a repository referenced by a pipeline.

URI

PUT /v1/repositories/{repository_uuid}/pipeline

Table 4-32 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository ID.

Request Parameters

Table 4-33 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200**Table 4-34** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Boolean	Response result.
status	String	Response status.

Table 4-35 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
PUT https://{endpoint}/v1/repositories/{repository_uuid}/pipeline
```

Example Responses

Status code: 200

OK

```
{
  "result" : true,
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.5 Checking Whether a User Has the Repository Administrator Permission

Function

This API is used to check whether a user has the repository administrator permission.

URI

GET /v1/repositories/{repository_uuid}/master

Table 4-36 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository ID.

Request Parameters

Table 4-37 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200**Table 4-38** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Boolean	Response result.
status	String	Response status.

Table 4-39 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

GET https://{endpoint}/v1/repositories/{repository_uuid}/master

Example Responses

Status code: 200

OK

```
{
  "result" : true,
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.6 Setting a Repository to Public or Private

Function

This API is used to set a repository to public or private.

URI

PUT /v2/repositories/{repository_uuid}/template-status

Table 4-40 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository ID.

Request Parameters

Table 4-41 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-42 Request body parameters

Parameter	Mandatory	Type	Description
template_type	Yes	String	Template type.
code_title	No	String	Code template name.
creator_name	No	String	Creator name.
code_description	No	String	Code template description.
languages	No	Array of strings	Template language.
platform	No	Array of strings	Template platform.
entertype	No	Array of strings	Template type.

Response Parameters

Status code: 200

Table 4-43 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	String	Response result.
status	String	Response status.

Table 4-44 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
PUT https://{endpoint}/v2/repositories/{repository_uuid}/template-status
{
  "template_type": "SHARE",
  "code_title": "exampleTitle",
  "creator_name": "exampleName",
  "code_description": "exampleDescription",
  "languages": ['Java'],
  "platform": ['Console'],
  "entertype": ['AI']
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : null,
  "error" : null,
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.7 Obtaining the Content of a Specified File in a Specified Branch of a Repository

Function

This API is used to obtain the content of a specified file in a specified branch of a repository.

URI

GET /v1/repositories/{repository_uuid}/branch/{branch_name}/file

Table 4-45 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository ID.
branch_name	Yes	String	Branch name.

Table 4-46 Query Parameters

Parameter	Mandatory	Type	Description
path	Yes	String	File path.

Request Parameters

Table 4-47 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-48 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	FilesResponseInfo object	Response result.
status	String	Response status.

Table 4-49 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-50 FilesResponseInfo

Parameter	Type	Description
file_name	String	File name
file_path	String	File path.
size	String	File size.
encoding	String	Coding type.
ref	String	Branch name.
blob_id	String	File block ID.
file_type	String	File type.
content	String	File content.

Example Requests

```
GET https://{endpoint}/v1/repositories/{repository_uuid}/branch/{branch_name}/file
```

Example Responses

Status code: 200

OK

```
{
  "result": [ {
    "file_name": "README.md",
    "file_path": "README.md",
    "size": 666,
    "encoding": "base64",
    "ref": "master",
    "blob_id": "75c19b5b1904a72c8a9959c98ae6884d0ace0279",
    "file_type": "text/plain; charset=utf-8",
    "content": "RUVFRUVFRUU="
  } ],
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.8 Obtaining a Public Template List

Function

This API is used to obtain a public template list.

URI

GET /v2/repositories/repository-templates

Table 4-51 Query Parameters

Parameter	Mandatory	Type	Description
platform	No	String	Template platform type.
language	No	String	Language.
pipeline	No	String	Whether pipelines are supported.
enter_type	No	String	Template category.
search	No	String	Template name.
date_order	No	String	Templates date order.
used_time_order	No	String	Template reference time.
type	No	String	Template visibility.

Parameter	Mandatory	Type	Description
region	No	String	Region name.
page_no	Yes	Integer	Page number.
page_size	Yes	Integer	Number of data records on each page.

Request Parameters

Table 4-52 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-53 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	TemplateRepositoryList object	Response result.
status	String	Response status.

Table 4-54 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-55 TemplateRepositoryList

Parameter	Type	Description
projects	Array of TemplateRepository objects	Template list.
total	Integer	Total number of templates.

Table 4-56 TemplateRepository

Parameter	Type	Description
id	Integer	Template unique ID.
name	String	Template name.
template_name	String	Name of the repository associated with the template.
tags	Array of strings	Template tag.
description	String	Template description.
brief_introduction	String	Template overview.
auto_pending_pipelines	Integer	Whether to automatically create a pipeline.
language	String	Template language category.
created_at	String	Template creation time.
used_times	Integer	Template reference time.
liked_times	Integer	Likes.
creator_name	String	Template creator.
https_url	String	Template HTTPS link.

Example Requests

```
GET https://{endpoint}/v2/repositories/repository-templates?page_no=1&page_size=10
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "projects" : [ {
      "id" : 453613,
      "name" : "javaMavenDemo",
      "template_name" : "javaMavenDemo",
      "tags" : [ "UnsupportedPipeline", "OTHERS", "Kunpeng ARM64" ],
      "description" : "javaMavenDemo",
      "brief_introduction" : "javaMavenDemo",
      "auto_pending_pipelines" : 0,
      "language" : "OTHERS",
      "created_at" : "Sep 25, 2019 4:03:31 PM",
      "used_times" : 58,
      "liked_times" : 1,
      "creator_name" : "repo",
      "https_url" : "https://repo.alpha.devcloud.inhuawei.com/chentest00001/javaMavenDemo.git"
    } ],
    "total" : 100
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.9 Creating a Repository

Function

This API is used to create a repository on a specified project with the specified name. Input parameters: repository name, template ID, whether to import project members, and home project

URI

POST /v1/repositories

Request Parameters

Table 4-57 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-58 Request body parameters

Parameter	Mandatory	Type	Description
import_members	No	Integer	Explanation: Whether to import project members. Constraints: None Range: <ul style="list-style-type: none">● 0: Do not import project members.● 1: Import project members. Default value: 0

Parameter	Mandatory	Type	Description
name	Yes	String	Explanation: Repository name. Constraints: Mandatory Range: <ul style="list-style-type: none">Start with a letter, digit, or underscore (_), and use letters, digits, hyphens (-), underscores (_), and periods (.). Do not end with .git, .atom, or a period (.).1-256 characters. Default value: None
project_uuid	Yes	String	Explanation: Project ID. Constraints: Mandatory Range: 32 characters. Default value: None
template_id	No	String	Explanation: Template ID. Constraints: None Range: Character string Default value: None

Parameter	Mandatory	Type	Description
visibility_level	No	Integer	Explanation: Repository visibility. Constraints: None Range: <ul style="list-style-type: none">• 0: Private• 20: Public Default value: 0
import_url	No	String	Explanation: Base64-encoded HTTPS address of the template repository. Constraints: None Range: 10–512 characters. Default value: None
description	No	String	Explanation: Repository description. Constraints: None Range: [0-2000] Default value: None

Parameter	Mandatory	Type	Description
gitignore_id	No	String	<p>Explanation: .gitignore file generated based on the programming language.</p> <p>Constraints: None</p> <p>Range: Actionscript,Ada,Agda,Android,Ansible,AppceleratorTitanium,AppEngine,ArchLinuxPackages,Autotools,C#,C++,C,CakePHP,CFWheels,ChefCookbook,Clojure,CMake,CodeIgniter,CommonLisp,Composer,Concrete5,Coq,CraftCMS,CUDA,D,Dart,Delphi,DM,Dreamweaver,Dropbox,Drupal,Eagle,Eclipse,Elisp,Elixir,Elm,Emacs,EPiServer,Erlang,ExpressionEngine,ExtJS,Fancy,Finale,ForceDotCom,Fortran,FuelPHP,Gcov,GitBook,Go,Godot,GPG,Gradle,Grails,GWT,Haskell,Idris,IGORPro,Java,JavaScript,Jboss,Jekyll,JetBrains,Joomla,Julia,KiCad,Kohana,Kotlin,LabVIEW,Laravel,Leiningen,LemonStand,Lilypond,Lithium,Lua,Magento,Maven,Mercury,MetaProgrammingSystem,Nanoc,NetBeans,Nim,Node,NotepadPP,Objective-C,OCaml,Opa,OpenCart,OracleForms,Packer,Perl,Phalcon,PlayFramework,Plone,Prestashop,Processing,PureScript,Python,Qooxdoo,Qt,R,Rails,RhodesRhomobile,ROS,Ruby,Rust,Sass,Scala,Scheme,SCons,Scrivener,Sdcc,SeamGen,SketchUp,Smalltalk,Stella,SublimeText,SugarCRM,SVN,Swift,Symfony,SymphonyCMS,Terraform,TeX,Textpattern,TortoiseGit,TurboGears2,Typo3,Umbraco,Unity,UnrealEngine,VisualStudio,VisualStudioCode,VVV,Waf,WordPress,Xojo,Yeoman,Yii,ZendFramework,Zephir</p> <p>Default value:</p>

Parameter	Mandatory	Type	Description
			None
license_id	No	Integer	Explanation: Open-source license ID. Constraints: None Range: <ul style="list-style-type: none">• 1,Apache_License_v2.0• 2,MIT_License,,BSD_3Clause• 3,Eclipse_Public_License_v1.0• 4,BSD_2Clause• 5,GNU_General_Public_License_v2.0• 6,GNU_General_Public_License_v3.0• 7,GNU_Affero_General_Public_License_v3.0• 8,GNU_Lesser_General_Public_License_v2.1• 9,GNU_Lesser_General_Public_License_v3.0• 10,Mozilla_Public_License_v2.0• 11,The_Unlicense Default value: None
enable_readme	No	Integer	Explanation: Whether to generate a README file. Constraints: None Range: <ul style="list-style-type: none">• true: Yes• false: No Default value: None

Parameter	Mandatory	Type	Description
caller	No	String	Explanation: Caller. Constraints: None Range: Character string Default value: None

Response Parameters

Status code: 200

Table 4-59 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error.
result	Repository object	Explanation: Response result.
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">• success• fail

Table 4-60 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: See Error Codes .
message	String	Explanation: Error message. Range: Character string

Table 4-61 Repository

Parameter	Type	Description
repository_uid	String	Explanation: Project ID. Range: 32 characters.

Example Requests

```
POST https://{endpoint}/v1/repositories
{
  "project_uuid": "4838955a48e2492bbe44b31bc4c272f6",
  "name": "demotest1",
  "import_members": "0",
  "visibility_level": "20",
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "repository_uid" : "d161fd00d9194816a455cb3c1d6a783e"
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.10 Obtaining a Repository Short ID to Generate the Details Page URL

Function

This API is used to obtain a repository short ID, which is used to obtain the URL of the repository details page.

URI

GET /v1/repositories/repoid

Table 4-62 Query parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Repository group name (the segment between the domain name and repository name in a clone address. Example: Demo00228 in git@repo.alpha.devcloud.inh uawei.com:Demo00228/testword.git).
repository_name	Yes	String	Repository name

Request Parameters

Table 4-63 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-64 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Integer	Response result.
status	String	Response status.

Table 4-65 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
GET https://{endpoint}/v1/repositories/repoid
```

Example Responses

Status code: 200

OK

```
{  
  "result" : 468485,  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.11 Querying a Commit of a Branch by Repository or Repository Group Name

Function

This API is used to obtain the commit list by repository or repository group name and branch.

URI

GET /v1/repositories/{group_name}/{repository_name}/commits

Table 4-66 Path parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Repository group name (the segment between the domain name and repository name in a clone address. Example: Demo00228 in git@repo.alpha.devcloud.inh uawei.com:Demo00228/testword.git).
repository_name	Yes	String	Repository name

Table 4-67 Query parameters

Parameter	Mandatory	Type	Description
page_index	No	Integer	Page index.
page_size	No	Integer	Number of records on each page.
ref_name	Yes	String	Branch or tag name, in SHA format.

Request Parameters

Table 4-68 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200**Table 4-69** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	CommitList object	Response result.
status	String	Response status.

Table 4-70 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-71 CommitList

Parameter	Type	Description
commits	Array of Commit objects	Commit list.
total	Integer	Total commits.

Table 4-72 Commit

Parameter	Type	Description
author_email	String	Author email.
author_name	String	Author.
authored_date	String	Author commit time.
committed_date	String	Commit time.
committer_email	String	Committer email.
committer_name	String	Committer.
format	Object	File change details. The format is determined by the stat_format parameter.
id	String	SHA ID of a commit.
message	String	Commit message.
parent_ids	Array of strings	Parent commit ID.

Example Requests

```
GET https://{endpoint}/v1/repositories/{group_name}/{repository_name}/commits
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "total": 1,
    "commits": [ {
      "id": "a27fafa7d8da2dd55f691bef989226d22f50d8ce",
      "message": "Initial commit",
```

```
"parent_ids" : [ ],
"authored_date" : null,
"author_name" : "repo",
"author_email" : "repo@huawei.com",
"committed_date" : "2019-10-15 09:40:29",
"committer_name" : "repo",
"committer_email" : "repo@huawei.com"
} ]
},
"status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.12 Querying Branches of a Specified Repository

Function

This API is used to query the branch list of a specified repository by the repository ID.

URI

GET /v1/repositories/{repository_id}/branches

Table 4-73 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Repository primary key ID.

Request Parameters

Table 4-74 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200**Table 4-75** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	BranchList object	Response result.
status	String	Response status.

Table 4-76 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-77 BranchList

Parameter	Type	Description
branches	Array of Branch objects	Branch list of a specified repository.
total	Integer	Total number of branches in a specified repository.

Table 4-78 Branch

Parameter	Type	Description
is_protected	Boolean	Whether to protect the branch.
name	String	Branch name.

Example Requests

```
GET https://{endpoint}/v1/repositories/{repository_id}/branches
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "total" : 1,
    "branches" : [ {
      "name" : "master",
      "is_protected" : false
    } ]
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.13 Querying a Commit of a Repository Branch by the Repository ID

Function

This API is used to query a commit of a repository branch by the repository ID.

URI

GET /v1/repositories/{repository_id}/commits

Table 4-79 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.

Table 4-80 Query Parameters

Parameter	Mandatory	Type	Description
author	No	String	Committer.
begin_date	No	String	Start commit date, in the format of yyyy-MM-dd.
end_date	No	String	End commit date, in the format of yyyy-MM-dd.
message	No	String	Commit message.
page_index	No	Integer	Page index. Default value: 1
page_size	No	Integer	Number of records on each page. Default value: 10
path	No	String	File path.
ref_name	Yes	String	Branch or tag name, in SHA format.
stat_format	No	String	Commit file change details (excluding diff)

Request Parameters

Table 4-81 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200**Table 4-82** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	CommitList object	Response result.
status	String	Response status.

Table 4-83 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-84 CommitList

Parameter	Type	Description
commits	Array of Commit objects	Commit list.
total	Integer	Total commits.

Table 4-85 Commit

Parameter	Type	Description
author_email	String	Author email.
author_name	String	Author.
authored_date	String	Author commit time.
committed_date	String	Commit time.
committer_email	String	Committer email.
committer_name	String	Committer.
format	Object	File change details. The format is determined by the stat_format parameter.
id	String	SHA ID of a commit.
message	String	Commit message.
parent_ids	Array of strings	Parent commit ID.

Example Requests

```
null  
GET https://{endpoint}/v1/repositories/{repository_id}/commits
```

Example Responses

Status code: 200

OK

```
{  
  "result" : {  
    "total" : 1,  
    "commits" : [ {
```



```
"id" : "a27fafa7d8da2dd55f691bef989226d22f50d8ce",
"message" : "Initial commit",
"parent_ids" : [ ],
"authored_date" : null,
"author_name" : "repo",
"author_email" : "repo@huawei.com",
"committed_date" : "2019-10-15 09:40:29",
"committer_name" : "repo",
"committer_email" : "repo@huawei.com"
}]
},
"status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.14 Adding a Deploy Key

Function

This API is used to add a deploy key.

URI

POST /v2/repositories/{repository_id}/deploy-keys

Table 4-86 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.

Request Parameters

Table 4-87 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-88 Request body parameters

Parameter	Mandatory	Type	Description
application	Yes	String	Source of the SSH key for deployment.
can_push	Yes	Boolean	Whether the SSH key for deployment can push code.
key	Yes	String	SSH key for deployment.
key_title	Yes	String	Name of the SSH key for deployment.

Response Parameters

Status code: 200

Table 4-89 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Key object	Response result.
status	String	Response status.

Table 4-90 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-91 Key

Parameter	Type	Description
can_push	Boolean	Whether to allow push.
created_at	String	Creation time of the deploy key.
key	String	Deploy key.
key_id	String	Deploy key ID. Minimum length: 1 Maximum length: 40
key_title	String	Deploy key name.

Example Requests

```
POST https://{endpoint}/v2/repositories/{repository_id}/deploy-keys
{
  "key_title": "repo@huawei.com",
  "key": "ssh-rsa
AAAAB3NzaC1yc2EAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU7xcma6HU8nj1E0i46VObWyOONl3gh142
BV repo@huawei.com",
  "can_push": true,
  "application": ""
}
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "key_id": "1034546",
    "key_title": "repo@huawei.com",
    "key": "ssh-rsa
AAAAB3NzaC1yc2EAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU7xcma6HU8nj1E0i46VObWyOONl3gh142
BV repo@huawei.com"
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.15 Deleting a Deploy Key

Function

This API is used to delete a deploy key.

URI

DELETE /v2/repositories/{repository_id}/deploy-keys/{key_id}

Table 4-92 Path Parameters

Parameter	Mandatory	Type	Description
key_id	Yes	Integer	Deploy key ID.
repository_id	Yes	Integer	Repository primary key ID.

Request Parameters

Table 4-93 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-94 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Boolean	Response result.
status	String	Response status.

Table 4-95 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v2/repositories/{repository_id}/deploy-keys/{key_id}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : "false",  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.16 Obtaining the Last Commit Statistics of a Repository

Function

This API is used to obtain the last commit statistics of a repository.

URI

```
GET /v1/repositories/{repository_id}/statistics
```

Table 4-96 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Repository primary key ID.

Table 4-97 Query Parameters

Parameter	Mandatory	Type	Description
branch_name	Yes	String	Branch name.

Request Parameters

Table 4-98 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-99 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	RepoCommit Statistics object	Response result.
status	String	Response status.

Table 4-100 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-101 RepoCommitStatistics

Parameter	Type	Description
all_branch_commits_count	Integer	Total commits.
codelines	Array of RepoDailyCodeline objects	Daily committed lines in last 15 days.
count	Integer	Total commits in the corresponding repository.
event	RepoStatisticsEvent object	Repository statistics status.
statistics	Array of RepoStatistics objects	Repository statistics list.
total	Integer	Total collects.

Table 4-102 RepoDailyCodeline

Parameter	Type	Description
additions	Integer	Daily increased code lines.
date	String	Date.
deletions	Integer	Daily deleted code lines.

Table 4-103 RepoStatisticsEvent

Parameter	Type	Description
branch	String	Branch name. Minimum length: 1 Maximum length: 260
created_at	String	Repository statistics creation time.
date	String	Repository statistics date.
id	Integer	Repository statistical event ID.
project_id	Integer	Repository ID.
status	String	Repository statistical status: waiting , active , and finish .
updated_at	String	Repository statistics update time.
user_id	Integer	User ID.

Table 4-104 RepoStatistics

Parameter	Type	Description
add_lines	Integer	Add code lines.
branch	String	Branch name. Minimum length: 1 Maximum length: 260
commit_count	Integer	Number of commits.
created_at	String	Repository statistics creation time.
delete_lines	Integer	Deleted code lines.
id	Integer	Repository statistics record ID.
project_id	Integer	Repository ID.
updated_at	String	Repository statistics update time.
user_name	String	Username.

Example Requests

None.

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "event" : null,
    "total" : 0,
    "statistics" : [ ],
    "all_branch_commits_count" : 1,
    "count" : 1,
    "codelines" : {
      "additions" : 0,
      "deletions" : 0,
      "date" : "20191015"
    }
  },
  "status" : "success"
}
```


Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.17 Repository Statistics

Function

This API is used to query code commit record statistics of a repository by the repository short ID.

URI

POST /v1/repositories/{repository_id}/statistics

Table 4-105 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.

Request Parameters

Table 4-106 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-107 Request body parameters

Parameter	Mandatory	Type	Description
branch_name	Yes	String	Repository branch name.

Response Parameters

Status code: 200

Table 4-108 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	RepoStatisticLaunch object	Response result.
status	String	Response status.

Table 4-109 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-110 RepoStatisticsLaunch

Parameter	Type	Description
can_statistics	Boolean	Indicates whether the warehouse can collect statistics.
join_id	String	sidekiq task ID.
message	String	Information returned after repository statistics collection is started.

Example Requests

```
POST https://{endpoint}/v1/repositories/{repository_id}/statistics
{
  "branch_name" : "master"
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "can_statistics" : false,
```

```
"message" : "operation success",
"join_id" : "2a48a9fd140dd4efabcc6e07"
},
"status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.18 Deleting a Repository

Function

This API is used to delete a repository by the 32-bit UUID of the repository.

URI

DELETE /v1/repositories/{repository_uuid}

Table 4-111 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository UUID (returned by the CreateRepository API), which is used to specify the repository to be deleted.

Request Parameters

Table 4-112 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-113 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Boolean	Response result.
status	String	Response status.

Table 4-114 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v1/repositories/{repository_uuid}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : "false",  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.19 Viewing a Repository Creation Status

Function

This API is used to obtain the repository status.

URI

GET /v1/repositories/{repository_uuid}/status

Table 4-115 Path Parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	UUID of the repository to be viewed.

Request Parameters

Table 4-116 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-117 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Integer	Response result.
status	String	Response status.

Table 4-118 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
GET https://{endpoint}/v1/repositories/{repository_uuid}/status
```

Example Responses

Status code: 200

OK

```
{  
  "result" : 0,  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.20 Querying the Tag List of a Repository

Function

This API is used to query the branch corresponding to a specified repository.

URI

```
GET /v2/repositories/{repository_id}/tags
```

Table 4-119 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Repository primary key ID.

Request Parameters

Table 4-120 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-121 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	TagList object	Response result.
status	String	Response status.

Table 4-122 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-123 TagList

Parameter	Type	Description
tags	Array of Tag objects	Tag list of a specified repository.
total	Integer	Total number of tags in a specified repository.

Table 4-124 Tag

Parameter	Type	Description
is_double_name	Boolean	Indicates whether the name is the same as that of a branch.
name	String	Label. Minimum length: 1 Maximum length: 260

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_id}/tags
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "total" : 1,
    "tags" : [ {
      "name" : "abctest",
      "is_double_name" : "false"
    } ]
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.21 Adding a Tag

Function

This API is used to add a tag.

URI

POST /v2/repositories/{repository_id}/tags

Table 4-125 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.

Request Parameters

Table 4-126 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-127 Request body parameters

Parameter	Mandatory	Type	Description
tag_name	Yes	String	Tag name.
ref	Yes	String	Branch name.
message	No	String	Remarks.

Response Parameters

Status code: 200

Table 4-128 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	AddTagsResponse object	Response result.
status	String	Response status.

Table 4-129 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-130 AddTagsResponse

Parameter	Type	Description
name	String	Tag name.
message	String	Remarks.
commit	CommitRepo V2 object	Commit message.

Table 4-131 CommitRepoV2

Parameter	Type	Description
id	String	SHA ID of a commit.
short_id	String	Short SHA ID of a commit.
created_at	String	Creation time.
title	String	Commit title.
parent_ids	Array of strings	Parent commit ID.
message	String	Commit message.
author_name	String	Author.
committer_name	String	Committer.
committed_date	String	Commit time.

Example Requests

```
POST https://{endpoint}/v2/repositories/{repository_id}/tags
{
  "tag_name": "test20220920",
  "ref": "master",
  "message": "test20220920"
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "name" : "test_tag_name",
    "message" : "test message",
    "commit" : {
      "id" : "3b68902cf0eb7de3d5c8757e4a990bc3fe0af349",
      "short_id" : "3b68902c",
      "created_at" : "2022-03-08T03:14:39.000Z",
      "title" : "Create a File",
      "parent_ids" : [ "08618c900a4048aae7e4cd88913d3d521eae02eb" ],
      "message" : "Create a file",
      "author_name" : "repo",
      "committer_name" : "repo",
      "committed_date" : "2022-03-08T03:14:39.000Z"
    }
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.22 Querying Details About a Repository

Function

This API is used to obtain details about a repository by UUID (returned by the CreateRepository API). The returned information contains the ID, name, repo group name, and repository access URL.

URI

GET /v2/repositories/{repository_uuid}

Table 4-132 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Explanation: Repository UUID. Constraints: Mandatory Range: 32 characters. Default value: None

Request Parameters

Table 4-133 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-134 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error.

Parameter	Type	Description
result	RepoInfoV2 object	Explanation: Response result.
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">• success• fail

Table 4-135 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: See Error Codes .
message	String	Explanation: Error message. Range: Character string

Table 4-136 RepoInfoV2

Parameter	Type	Description
created_at	String	Explanation: Creation time. Range: Character string
creator_name	String	Explanation: Username of the creator. If the user is a tenant, the username is the same as the tenant name. Range: Character string

Parameter	Type	Description
domain_name	String	Explanation: Tenant name of the creator. Range: Character string
group_name	String	Explanation: Repository group name (the segment between the domain name and repository name in a clone address. Example: Demo00228 in git@repo.alpha.devcloud.inhuawei.com:Demo00228/testword.git). Range: Character string
https_url	String	Explanation: URL for cloning repositories using HTTPS. Range: Character string
iam_user_uid	String	Explanation: IAM user UUID. Range: Character string
is_owner	Integer	Explanation: Whether the current user is the repository creator. Range: <ul style="list-style-type: none">• 1: Yes• 0: No
lfs_size	String	Explanation: Repository LFS capacity in MB. If the capacity is greater than 1,024 MB, the unit is GB. Range: Character string
project_is_deleted	String	Explanation: Whether the project is deleted. Range: Character string

Parameter	Type	Description
project_uuid	String	Explanation: Project ID. For details, see Obtaining a Project ID . Range: Character string
repository_id	Integer	Explanation: Repository primary key ID. Range: 1-2,147,483,647
repository_name	String	Explanation: Repository name. Range: Character string
repository_size	String	Explanation: Total repository capacity = Repository LFS capacity + Git repository capacity. The unit is MB. If the capacity is greater than 1,024 MB, the unit is GB. Range: Character string
repository_uuid	String	Explanation: Repository UUID returned by the CreateRepository API. Range: Character string
ssh_url	String	Explanation: URL for cloning repositories using SSH. Range: Character string
star	Boolean	Explanation: Whether you have followed the repository. Range: <ul style="list-style-type: none">● true: Followed● false: Not followed

Parameter	Type	Description
status	Integer	Explanation: Repository status. Range: <ul style="list-style-type: none">● 0: The repository has been created.● 1: The repository is being created.● 2: The creation failed.● 3: The repository is frozen.● 4: The repository is closed.
updated_at	String	Explanation: Update time. Range: Character string
userRole	Integer	Explanation: Your permissions for the repository. Range: <ul style="list-style-type: none">● 20: Read-only member● 30: Common member● 40: Administrator
visibility_level	Integer	Explanation: Visibility. Range: <ul style="list-style-type: none">● 0: Private repository● 20: Public repository
web_url	String	Explanation: Web URL. If you access it, the repository details page is displayed. Range: Character string

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_uuid}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : {
```



```
"repository_uuid" : "045ceabb9aea40579d5a759e84fa7f0a",
"repository_id" : 468485,
"repository_name" : "CreatRepository_MI9Af",
"ssh_url" : "git@repo.alpha.devcloud.inhuawei.com:Demo00228/CreatRepository_MI9Af.git",
"https_url" : "https://repo.alpha.devcloud.inhuawei.com/Demo00228/CreatRepository_MI9Af.git",
"group_name" : "Demo00228",
"web_url" : "https://alpha.devcloud.inhuawei.com/repo/468485/home",
"visibility_level" : 0,
"created_at" : "2019-10-15 09:40:27",
"updated_at" : null,
"repository_size" : null,
"lfs_size" : null,
"creator_name" : null,
"domain_name" : null,
"star" : null,
"status" : null,
"is_owner" : null,
"iam_user_uuid" : null,
"project_uuid" : "4838955a48e2492bbe44b31bc4c272f6",
"project_is_deleted" : "false",
"userRole" : null
},
"status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.23 Obtaining the number of committed code lines

Function

This API is used to obtain the number of committed code lines of a specified branch in the code repository on a specified date.

URI

GET /v3/repositories/{repository_id}/commit-lines

Table 4-137 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository short ID.

Table 4-138 Query Parameters

Parameter	Mandatory	Type	Description
ref_name	Yes	String	Branch name.
begin_date	Yes	String	Start commit date, in the format of yyyy-MM-dd.
end_date	Yes	String	End commit date, in the format of yyyy-MM-dd. The interval between begin_date and end_date cannot exceed 60 days.

Request Parameters

Table 4-139 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-140 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	CommitStatistic object	Number of added and deleted code lines.
status	String	Response status.

Table 4-141 Error

Parameter	Type	Description
code	String	Error code.

Parameter	Type	Description
message	String	Error message.

Table 4-142 CommitStatistic

Parameter	Type	Description
additions	Integer	Number of added lines.
deletions	Integer	Number of deleted lines.

Example Requests

```
GET https://{endpoint}/v2/repositories/907199/commit-lines
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "additions": 9,
    "deletions": 6
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.24 Downloading a Repository

Function

This API is used to download a repository in the specified format.

URI

```
GET /v2/repositories/{repository_uuid}/archive
```

Table 4-143 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository UUID.

Table 4-144 Query Parameters

Parameter	Mandatory	Type	Description
sha	Yes	String	Branch name.
format	Yes	String	Format of the downloaded compressed package.

Request Parameters

Table 4-145 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

None.

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_uuid}/archive
```

Example Responses

None.

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.25 Creating a Protected Branch

Function

This API is used to create a protected branch.

URI

PUT /v2/repositories/{repository_id}/branch/{branch_name}/protect

Table 4-146 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.
branch_name	Yes	String	Branch name.

Request Parameters

Table 4-147 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-148 Request body parameters

Parameter	Mandatory	Type	Description
access_level	Yes	AddProtectAccessLevel object	Permission to create a protected branch.

Table 4-149 AddProtectAccessLevel

Parameter	Mandatory	Type	Description
push_access_level	Yes	Integer	Commit permission. 0 : No one is allowed to commit. 30 : Developers and administrators can commit. 40 : Administrators can commit. Enumerated values: <ul style="list-style-type: none">• 0• 30• 40
merge_access_level	Yes	Integer	Merge permission. 0 : No one can merge; 30 : developers and administrators can merge; 40 : administrators can merge. The merge permission must be greater than or equal to the commit permission. Enumerated values: <ul style="list-style-type: none">• 0• 30• 40

Response Parameters

Status code: 200

Table 4-150 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	AddProtectResponse object	Response result.
status	String	Response status.

Table 4-151 Error

Parameter	Type	Description
code	String	Error code.

Parameter	Type	Description
message	String	Error message.

Table 4-152 AddProtectResponse

Parameter	Type	Description
name	String	Branch name.
commit	CommitRepo V2 object	Commit message.
protected	Boolean	Whether to protect it.
developers_can_push	Boolean	Whether a developer can commit.
developers_can_merge	Boolean	Whether a developer can merge.
master_can_push	Boolean	Whether an administrator can commit.
master_can_merge	Boolean	Whether an administrator can merge.
no_one_can_push	Boolean	No one can commit.
no_one_can_merge	Boolean	No one can merge.
in_an_opened_merge_request	Boolean	Whether it is in an open MR.

Table 4-153 CommitRepoV2

Parameter	Type	Description
id	String	SHA ID of a commit.
short_id	String	Short SHA ID of a commit.
created_at	String	Creation time.
title	String	Commit title.
parent_ids	Array of strings	Parent commit ID.
message	String	Commit message.

Parameter	Type	Description
author_name	String	Author.
committer_name	String	Committer.
committed_date	String	Commit time.

Example Requests

```
PUT https://{endpoint}/v2/repositories/{repository_id}/branch/{branch_name}/protect
{
  "access_level" : {
    "push_access_level" : 40,
    "merge_access_level" : 40
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "name" : "master",
    "commit" : {
      "id" : "3b68902cf0eb7de3d5c8757e4a990bc3fe0af349",
      "short_id" : "3b68902c",
      "title" : "Create a File",
      "created_at" : "2022-03-08T03:14:39.000Z",
      "parent_ids" : [ "08618c900a4048aae7e4cd88913d3d521eae02eb" ],
      "message": " Create a file",
      "author_name" : "repo",
      "committer_name" : "repo",
      "committed_date" : "2022-03-08T03:14:39.000Z"
    },
    "protected" : true,
    "developers_can_push" : false,
    "developers_can_merge" : false,
    "master_can_push" : false,
    "master_can_merge" : false,
    "no_one_can_push" : true,
    "no_one_can_merge" : true,
    "in_an_opened_merge_request" : false
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.26 Deleting a Protected Branch

Function

This API is used to delete a protected branch.

URI

DELETE /v2/repositories/{repository_id}/protected-branches/{branch_name}

Table 4-154 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.
branch_name	Yes	String	Branch name.

Request Parameters

Table 4-155 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-156 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	String	Response result.
status	String	Response status.

Table 4-157 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v2/repositories/{repository_id}/protected_branches/{branch_name}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : "1034531",  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.27 Deleting Protected Branches in Batches

Function

This API is used to delete protected branches in batches.

URI

```
DELETE /v2/repositories/{repository_id}/protected-branches
```

Table 4-158 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.

Request Parameters

Table 4-159 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-160 Request body parameters

Parameter	Mandatory	Type	Description
names	No	Array of strings	List of protected branch names.

Response Parameters

Status code: 200

Table 4-161 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	String	Response result.
status	String	Response status.

Table 4-162 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v2/repositories/{repository_id}/protected_branches
{
  "names": [ "test", "test123" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : "success",
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.28 Creating a Protected Tag

Function

This API is used to create a tag protection rule.

URI

POST /v2/repositories/{repository_id}/protected-tags

Table 4-163 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Explanation: Repository primary key ID. Constraints: Mandatory Range: 1-2147483647 Default value: None

Request Parameters

Table 4-164 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-165 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Explanation: Tag protection rule, which corresponds to tag name on the console. Constraints: None Range: 1–500 characters. Do not use spaces. Default value: None

Parameter	Mandatory	Type	Description
create_access_level	No	Integer	<p>Explanation: Permissions for creating protected tags.</p> <p>Constraints: None</p> <p>Range:</p> <ul style="list-style-type: none"> • 0: No one is allowed to create tags defined by this rule. • 30: Developers, committers, the project manager, and the administrator can create tags defined by this rule. • 40: The project manager and administrator can modify or delete tags defined by this rule. <p>Default value: None</p>

Response Parameters

Status code: 200

Table 4-166 Response body parameters

Parameter	Type	Description
error	Error object	<p>Explanation: Response error.</p>
result	AddProtectTagResponse object	<p>Explanation: Response result.</p>
status	String	<p>Explanation: Response status.</p> <p>Range:</p> <ul style="list-style-type: none"> • success: The tag protection rule is successfully created. • fail: The tag protection rule fails to be created.

Table 4-167 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: See Error Codes .
message	String	Explanation: Error message. Range: Character string.

Table 4-168 AddProtectTagResponse

Parameter	Type	Description
name	String	Explanation: Tag protection rule, which corresponds to tag name on the console. Range: 1–500 characters.
create_access_levels	CreateAccessLevels object	Explanation: Permissions for protected tags.

Table 4-169 CreateAccessLevels

Parameter	Type	Description
access_level	Integer	Explanation: Permissions for creating protected tags. Range: <ul style="list-style-type: none">● 0: No one is allowed to create tags defined by this rule.● 30: Developers, committers, the project manager, and the administrator can create tags defined by this rule.● 40: The project manager and administrator can create tags defined by this rule.

Parameter	Type	Description
access_level_description	String	Explanation: Permission description. Range: <ul style="list-style-type: none">• Maintainers: project manager and administrator• Developers + Committer + Maintainers: developers, committers, project manager, and administrator• No one: none

Example Requests

```
POST https://{endpoint}/v2/repositories/{repository_id}/protected_tags
{
  "name" : "test",
  "create_access_level" : 40
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "name" : "test",
    "create_access_levels" : {
      "access_level" : 40,
      "access_level_description" : "Maintainers"
    }
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.29 Deleting a Protected Tag

Function

This API is used to delete a protected tag.

URI

DELETE /v2/repositories/{repository_id}/protected-tags/{name}

Table 4-170 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository primary key ID.
name	Yes	String	Protected tag name.

Request Parameters

Table 4-171 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-172 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	String	Response result.
status	String	Response status.

Table 4-173 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v2/repositories/{repository_id}/protected_tags/{name}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : "1034531",  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.30 Obtaining a Repository Branch List

Function

This API is used to obtain a branch list of a repository.

URI

```
GET /v2/repositories/{repository_id}/branches
```

Table 4-174 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Repository short ID.

Table 4-175 Query Parameters

Parameter	Mandatory	Type	Description
page	No	String	Page number.
per_page	No	String	Number of data records on each page.
match	No	String	Match condition.

Request Parameters

Table 4-176 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-177 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	BranchResponse object	Response result.
status	String	Response status.

Table 4-178 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-179 BranchResponse

Parameter	Type	Description
branches	Array of BranchesItem objects	Branch information.
total	Double	Total number.

Table 4-180 BranchesItem

Parameter	Type	Description
commit	CommitV2 object	Commit message.
diverging_commit_counts	DivergingCommitCounts object	Commit discrepancy.
name	String	Branch name.

Table 4-181 CommitV2

Parameter	Type	Description
committed_date	String	Commit time.
committer_name	String	Committer.
id	String	Commit ID.
message	String	Commit message.
short_id	String	Commit short ID.
title	String	Commit title.

Table 4-182 DivergingCommitCounts

Parameter	Type	Description
ahead	Double	Ahead commit counts.
behind	Double	Behind commit counts.

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_id}/branches
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "total": 1,
    "branches": [ {
      "name": "master",
      "commit": {
        "id": "2912b8f2328e798f7d544272ffaebfccccb598ab",
        "title": "Initial commit",
        "message": "Initial commit",
        "committed_date": "2021-12-06T09:24:50.000+08:00",
        "short_id": "2912b8f2",
        "committer_name": "repo"
      },
      "diverging_commit_counts": {
        "behind": 0,
        "ahead": 0
      }
    }
  ]
},
  "status": "success"
}
```

Status Codes

Status Code.	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.31 Obtaining the MR List of a Repository

Function

This API is used to obtain the MR list of a repository.

URI

```
GET /v2/repositories/{repository_id}/merge_request
```

Table 4-183 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Explanation: Repository short ID, which corresponds to Repository ID on the console. Constraints: Mandatory Range: 0-2147483647 Default value: None

Table 4-184 Query parameters

Parameter	Mandatory	Type	Description
state	No	String	Explanation: MR status. Constraints: None Range: The value can be any one of the following: opened: The MR is open. closed: The MR is closed. merged: The MR has been merged. locked: The MR is locked. all: MRs in any status. Default value: all: MRs in any status.
page	No	String	Explanation: Page number. Constraints: None Range: A positive integer Default value: 1

Parameter	Mandatory	Type	Description
per_page	No	Integer	Explanation: Number of records displayed on each page. Constraints: None Range: 0–2147483647 Default value: 20
search	No	String	Explanation: Character string contained in MR titles or descriptions. Constraints: None Range: Max. 100 characters. Default value: None

Request Parameters

Table 4-185 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-186 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	MergeResult object	Explanation: Response result.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-187 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.
message	String	Explanation: Error message. Range: None

Table 4-188 MergeResult

Parameter	Type	Description
closed	Double	Explanation: Number of closed MRs. Range: 0-2147483647

Parameter	Type	Description
merge_requests	Array of MergeRequestsItem objects	Explanation: MR list.
merged	Double	Explanation: Number of merged MRs. Range: 0–2147483647
opened	Double	Explanation: Number of open MRs. Range: 0–2147483647
total	Double	Explanation: Total number of MRs. Range: 0–2147483647

Table 4-189 MergeRequestsItem

Parameter	Type	Description
author	Author object	Explanation: MR author.
closed_at	String	Explanation: Time when an MR was closed.
created_at	String	Explanation: Time when an MR was created.
description	String	Explanation: MR description.
devcloud_source_branch	String	Explanation: MR source branch.
id	Double	Explanation: MR ID. Range: 0–2147483647

Parameter	Type	Description
iid	Double	Explanation: Sequence number of an MR in the current repository. Range: 0-2147483647
merge_request_assignee_list	Array of Author objects	Explanation: MR reviewer information.
merge_status	String	Explanation: Whether an MR can be merged. Range: can_be_merged: Yes cannot_be_merged: No unchecked: Not yet checked cannot_be_merged_recheck: No, and currently being checked
source_branch	String	Explanation: MR source branch name.
state	String	Explanation: MR status. Range: The value can be any one of the following: opened: The MR is open. closed: The MR is closed. merged: The MR has been merged. locked: The MR is locked.
target_branch	String	Explanation: MR target branch name.
title	String	Explanation: MR title.
updated_at	String	Explanation: Last update time of an MR.

Table 4-190 Author

Parameter	Type	Description
id	Double	Explanation: User ID.
name	String	Explanation: Username.
state	String	Explanation: User status.
username	String	Explanation: IAM user ID.
avatar_url	String	Explanation: Profile picture URL.
web_url	String	Explanation: Web URL.

Example Requests

```
GET https://{endpoint}/v2/repositories/907199/merge_request
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "total": 1,
    "merge_requests": [ {
      "iid": 1,
      "description": "merge \"branch123\" into \"master\"\\nCreate the dsadsad11 file",
      "created_at": "2021-12-08T16:34:49.000+08:00",
      "title": "tesafrds.",
      "source_branch": "branch123",
      "updated_at": "2021-12-08T16:39:24.000+08:00",
      "id": 6670,
      "state": "opened",
      "closed_at": "2021-12-08T16:34:50.000+08:00",
      "author": {
        "name": "repo",
        "id": 1234,
        "state": "active",
        "username": "e0c068bf68c44bfab87b763ff85da277"
      },
      "target_branch": "master",
      "merge_status": "can_be_merged",
      "devcloud_source_branch": "branch123",
      "merge_request_assignee_list": [ {
        "name": "Example account",
        "id": 3333,
        "state": "active",
        "username": "a618e34bd5704be3ae3395dfede06041"
      }
    ]
  }
}
```

```
    }, {  
      "name" : "Example account",  
      "id" : 6747,  
      "state" : "active",  
      "username" : "42dd0277cfb048dea856e4ee352e937d"  
    }  
  ],  
  "merged" : 0,  
  "closed" : 0,  
  "opened" : 1  
},  
"status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.32 Obtaining MR Details of a Repository

Function

This API is used to obtain MR details of a repository.

URI

GET /v2/repositories/{repository_id}/merge_request/{merge_request_id}

Table 4-191 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Explanation: Repository short ID. Constraints: Mandatory Range: 0-2147483647 Default value: None

Parameter	Mandatory	Type	Description
merge_request_id	Yes	Integer	Explanation: MR ID. Constraints: Mandatory Range: 0-2147483647 Default value: None

Request Parameters

Table 4-192 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1-100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-193 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	MergeInfoResult object	Explanation: Response result.

Parameter	Type	Description
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-194 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.
message	String	Explanation: Error message. Range: None

Table 4-195 MergeInfoResult

Parameter	Type	Description
approval_merge_request_approvers	Array of ApprovalMergeRequestApproversItem objects	Explanation: Scorer.
author	Author object	Explanation: Author.
closed_at	String	Explanation: Closing time.
created_at	String	Explanation: Creation time.
description	String	Explanation: MR description.
devcloud_source_branch	String	Explanation: Source branch.

Parameter	Type	Description
id	Double	Explanation: MR ID. Range: 0–2147483647
iid	Double	Explanation: Sequence number of an MR in the current repository. Range: 0–2147483647
is_source_branch_exist	Boolean	Explanation: Whether the source branch exists.
merge_request_assignee_list	Array of MergeRequestAssigneeList objects	Explanation: Reviewer.
merge_request_diff	MergeRequestDiff object	Explanation: Merge differences.
merge_status	String	Explanation: Whether an MR can be merged. Range: can_be_merged: Yes cannot_be_merged: No unchecked: Not yet checked cannot_be_merged_recheck: No, and currently being checked
source_branch	String	Explanation: Source branch.
state	String	Explanation: MR status. Range: The value can be any one of the following: opened: The MR is open. closed: The MR is closed. merged: The MR has been merged. locked: The MR is locked.
target_branch	String	Explanation: Target branch.

Parameter	Type	Description
title	String	Explanation: Title.
updated_at	String	Explanation: Update time.
merged_at	String	Explanation: Merging time.
merged_by	MergedByUser object	Explanation: Merger.
merge_request_related_work_items	Array of MergeRequestRelatedWorkItem objects	Explanation: Associated work items.

Table 4-196 ApprovalMergeRequestApproversItem

Parameter	Type	Description
id	Double	Explanation: User ID.
name	String	Explanation: Username.
nick_name	String	Explanation: User alias.
state	String	Explanation: User status.
username	String	Explanation: IAM user ID.

Table 4-197 Author

Parameter	Type	Description
id	Double	Explanation: User ID.
name	String	Explanation: Username.

Parameter	Type	Description
state	String	Explanation: User status.
username	String	Explanation: IAM user ID.
avatar_url	String	Explanation: Profile picture URL.
web_url	String	Explanation: Web URL.

Table 4-198 MergeRequestAssigneeListItem

Parameter	Type	Description
id	Double	Explanation: User ID.
name	String	Explanation: Username.
state	String	Explanation: User status.
username	String	Explanation: IAM user ID.

Table 4-199 MergeRequestDiff

Parameter	Type	Description
id	Double	Explanation: MR difference ID.
state	String	Explanation: MR status. Range: The value can be any one of the following: opened: The MR is open. closed: The MR is closed. merged: The MR has been merged. locked: The MR is locked.

Parameter	Type	Description
merge_request_id	Double	Explanation: MR ID. Range: 0-2147483647
created_at	String	Explanation: Creation time.
updated_at	String	Explanation: Update time.
base_commit_sha	String	Explanation: Base commit.
real_size	Double	Explanation: Actual size.
head_commit_sha	String	Explanation: Head commit.
start_commit_sha	String	Explanation: Start commit.
commits_count	Double	Explanation: Number of commits.
external_diff	String	Explanation: External differences.
external_diff_store	Double	Explanation: External storage differences.
stored_externally	Boolean	Explanation: Whether external storage exists.
added_lines	Double	Explanation: Number of new lines.
removed_lines	Double	Explanation: Number of deleted lines.

Table 4-200 MergedByUser

Parameter	Type	Description
id	Double	Explanation: User ID.

Parameter	Type	Description
name	String	Explanation: Username.
state	String	Explanation: User status.
username	String	Explanation: IAM user ID.
avatar_url	String	Explanation: Profile picture URL.
web_url	String	Explanation: Homepage URL.

Table 4-201 MergeRequestRelatedWorkItem

Parameter	Type	Description
id	Double	Explanation: Work item ID.
user_id	String	Explanation: User ID.
repo_id	Double	Explanation: Repository ID.
merge_request_id	Double	Explanation: MR ID.
target_branch	String	Explanation: Target branch
source_branch	String	Explanation: Source branch
merge_request_title	String	Explanation: MR title
merge_request_url	String	Explanation: MR URL

Parameter	Type	Description
merge_request_state	String	Explanation: MR status Range: The value can be any one of the following: opened: The MR is open. closed: The MR is closed. merged: The MR has been merged. locked: The MR is locked.
related_id	String	Explanation: Associated work item ID.
related_title	String	Explanation: Associated work item title
related_url	String	Explanation: Associated work item URL
result	Double	Explanation: Query result
create_at	String	Explanation: Creation time.
update_at	String	Explanation: Update time.

Example Requests

```
GET https://{endpoint}/v2/repositories/907199/merge_request/9011
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "iid": 1,
    "approval_merge_request_approvers": [ {
      "nick_name": "emily",
      "name": "emily",
      "id": 7513,
      "state": "optional",
      "username": "0c1de3e61c80d56b1f7dc01164788784"
    }, {
      "nick_name": "lmpstest02",
      "name": "lmpstest02",
      "id": 7745,
      "state": "optional",
      "username": "2ef8c2c835424e988ff33a8339ee1cb4"
    }
  ]
}
```

```
    } ],
    "description": "merge \"branch123\" into \"master\"\\nCreate the dsadsad11 file.",
    "created_at": "2021-12-08T16:34:49.000+08:00",
    "title": "tesafrrds.",
    "source_branch": "branch123",
    "updated_at": "2021-12-09T11:21:02.000+08:00",
    "id": 6670,
    "state": "opened",
    "closed_at": "2021-12-08T16:34:50.000+08:00",
    "author": {
      "name": "repo",
      "id": 6879,
      "state": "active",
      "username": "e0c068bf68c44bfab87b763ff85da277"
    },
    "is_source_branch_exist": true,
    "target_branch": "master",
    "merge_status": "unchecked",
    "merge_request_diff": {
      "merge_request_id": 6670,
      "head_commit_sha": "715fc146292edc31a588fbc74349a2b8d18dbc27",
      "updated_at": "2021-12-09T11:20:58.000+08:00",
      "start_commit_sha": "02f0482056d3b949699eb69683914466c84529af",
      "created_at": "2021-12-09T11:20:58.000+08:00",
      "base_commit_sha": "6e90282f6334433a9fe3be809a7c1eed1afbf10b",
      "commits_count": 2
    },
    "devcloud_source_branch": "branch123",
    "merge_request_assignee_list": [ {
      "name": "Flying snow in June",
      "id": 6743,
      "state": "active",
      "username": "a618e34bd5704be3ae3395dfede06041"
    }, {
      "name": "General administrator account",
      "id": 6747,
      "state": "active",
      "username": "42dd0277cfb048dea856e4ee352e937d"
    } ],
    "merged_at": "2023-08-14T20:51:51.000+08:00",
    "merged_by": {
      "id": "9124",
      "name": "CodeHub_beta_dev",
      "username": "c369c68f1ff84679b5a8ed904d8bff1c",
      "state": "active",
      "avatar_url": "",
      "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c"
    },
    "merge_request_related_work_items": [ {
      "id": 7343,
      "user_id": "9124",
      "repo_id": 2111746921,
      "merge_request_id": 20637,
      "target_branch": "master",
      "source_branch": "test123",
      "merge_request_url": "https://test.com/codehub/2111746921/18/mergedetail?source=test123&target=master",
      "merge_request_state": "opened",
      "related_id": "6437435",
      "related_title": "msm-0115-1000",
      "related_url": "https://test.com/projectman/scrum/e76c13e86364438d9183ca2f395371e1/task/detail/6437435",
      "result": 1,
      "create_at": "2023-09-18T20:29:59.000+08:00",
      "update_at": "2023-09-18T20:29:59.000+08:00"
    } ]
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.2.33 Obtaining the Repository IP Address Whitelist

Function

Obtain repository IP address whitelist.

URI

GET /v4/projects/{id}/trusted-ip-addresses

Table 4-202 Query parameters

Parameter	Mandatory	Type	Description
id	Yes	Integer	Repository ID.
offset	No	Integer	Page number.
limit	No	Integer	Number of data records on each page.

Request Parameters

Table 4-203 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-204 Response header

Parameter	Type	Description
X-Total	String	Total number of results of the current request.

Table 4-205 Response body parameters (array)

Parameter	Type	Description
id	String	Association result.
repository_id	Integer	Repository ID.
ip_range	String	IP address segment.
ip_type	Integer	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP Address.
ip_end	String	End IP Address.
view_flag	Integer	Whether to allow access to the repository.
download_flag	Integer	Whether to allow code download.
upload_flag	Integer	Whether to allow code commit.
remark	String	Remarks.
created_at	String	Creation time.
updated_at	String	Update time.
order_flag	Integer	Sorting order.

Table 4-206 Error

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

```
GET https://{endpoint}/v4/projects/{id}/trusted-ip-addresses
```

Example Responses

Status code: 200

```
OK
[
  {
    "id": 19324,
    "repository_id": 2111897848,
    "ip_range": "255.255.255.255",
    "ip_start": "255.255.255.255",
    "ip_end": "255.255.255.255",
    "created_at": "Jul 22, 2024 2:42:46 PM",
    "updated_at": "Jul 22, 2024 2:42:46 PM",
    "ip_type": 3,
    "view_flag": 1,
    "download_flag": 1,
    "upload_flag": 1,
    "order_flag": 0
  },
  {
    "id": 19325,
    "repository_id": 2111897848,
    "ip_range": "1:1:1:1:1:1:1",
    "ip_start": "1:1:1:1:1:1:1",
    "ip_end": "1:1:1:1:1:1:1",
    "created_at": "Jul 22, 2024 2:42:46 PM",
    "updated_at": "Jul 22, 2024 2:42:46 PM",
    "ip_type": 0,
    "view_flag": 1,
    "download_flag": 1,
    "upload_flag": 1,
    "order_flag": 0
  }
]
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.2.34 Adding the Repository IP Address Whitelist

Function

Add the repository IP address whitelist.

URI

POST /v4/projects/{id}/trusted-ip-addresses

Table 4-207 Query parameters

Parameter	Mandatory	Type	Description
id	Yes	Integer	Repository ID.

Request Parameters

Table 4-208 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Request body

Table 4-209 Request body parameters

Parameter	Type	Description
ip_type	String	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP address.
ip_end	String	End IP Address.
view_flag	String	Whether to allow access to the repository.
download_flag	String	Whether to allow code download.
upload_flag	String	Whether to allow code commit.
remark	String	Remarks.

Response Parameters

Status code: 200

Table 4-210 Response body parameters (array)

Parameter	Type	Description
id	String	Association result.
repository_id	Integer	Repository ID.
ip_range	String	IP address segment.
ip_type	Integer	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP address.
ip_end	String	End IP Address.
view_flag	Integer	Whether to allow access to the repository.
download_flag	Integer	Whether to allow code download.
upload_flag	Integer	Whether to allow code commit.
remark	String	Remarks.
created_at	String	Creation time.
updated_at	String	Update time.
order_flag	Integer	Sorting order.

Table 4-211 Error

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

```
POST https://{endpoint}/v4/projects/{id}/trusted-ip-addresses
```

Example Responses

Status code: 200

```
OK
{
  "id": "61366",
  "remark": "test12123",
  "ip_range": "1.0.0.1",
  "ip_type": 0,
  "ip_start": "1.0.0.1",
  "ip_end": "1.0.0.1",
  "view_flag": 0,
```

```
"download_flag": 0,  
"upload_flag": 0,  
"created_at": "Nov 7, 2024 9:52:01 PM",  
"updated_at": "Nov 7, 2024 9:52:01 PM",  
"order_flag": 1,  
"repository_id": 2111965777  
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.2.35 Modifying the Repository IP Address Whitelist

Function

Modify the repository IP address whitelist.

URI

PUT /v4/projects/{id}/trusted-ip-addresses/{ip_id}

Table 4-212 Query parameters

Parameter	Mandatory	Type	Description
id	Yes	Integer	Repository ID.
ip_id	Yes	Integer	IP address ID.

Request Parameters

Table 4-213 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Request Body

Table 4-214 Request body parameters

Parameter	Type	Description
ip_type	String	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP address.
ip_end	String	End IP Address.
view_flag	String	Whether to allow access to the repository.
download_flag	String	Whether to allow code download.
upload_flag	String	Whether to allow code commit.
remark	String	Remarks.

Response Parameters

Status code: 200**Table 4-215** Response body parameters (array)

Parameter	Type	Description
id	String	Association result.
repository_id	Integer	Repository ID.
ip_range	String	IP address segment.
ip_type	Integer	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP address.
ip_end	String	End IP Address.
view_flag	Integer	Whether to allow access to the repository.
download_flag	Integer	Whether to allow code download.
upload_flag	Integer	Whether to allow code commit.
remark	String	Remarks.
created_at	String	Creation time.
updated_at	String	Update time.

Parameter	Type	Description
order_flag	Integer	Sorting Files

Table 4-216 Error

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

```
PUT https://{endpoint}/v4/projects/{id}/trusted-ip-addresses/{ip_id}
```

Example Responses

Status code: 200

OK

```
{
  "id": "61366",
  "remark": "test12123",
  "ip_range": "1.0.0.1",
  "ip_type": 0,
  "ip_start": "1.0.0.1",
  "ip_end": "1.0.0.1",
  "view_flag": 0,
  "download_flag": 0,
  "upload_flag": 0,
  "created_at": "Nov 7, 2024 9:52:01 PM",
  "updated_at": "Nov 7, 2024 9:52:01 PM",
  "order_flag": 1,
  "repository_id": 2111965777
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.2.36 Deleting the Repository IP Address Whitelist

Function

Delete the repository IP address whitelist.

URI

DELETE /v4/projects/{id}/trusted-ip-addresses/{ip_id}

Table 4-217 Query parameters

Parameter	Mandatory	Type	Description
id	Yes	Integer	Repository ID.
ip_id	Yes	Integer	IP address ID.

Request Parameters

Table 4-218 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-219 Response body parameters (array)

Parameter	Type	Description
status	String	Association result.

Table 4-220 Error

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v4/projects/{id}/trusted-ip-addresses/{ip_id}
```

Example Responses

Status code: 200

```
OK
{
  status: success
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.2.37 Obtaining the Changes of an MR

Function

Obtain the changes of an MR.

URI

```
GET /v2/repositories/{repository_id}/merge-requests/{merge_request_iid}/changes
```

Table 4-221 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Repository short ID.
merge_request_iid	Yes	Integer	Repository IID of the MR.

Request Parameters

Table 4-222 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-223 Query parameters

Parameter	Mandatory	Type	Description
file_path	No	String	File path.
ignore_whites pace_change	No	Boolean	Whether to ignore spaces.
force_encode	No	Boolean	Whether to require transcoding.
view	No	String	View (optional value: simple)
commit_id	No	String	Commit ID.

Response Parameters

Status code: 200**Table 4-224** Response body parameters

Parameter	Type	Description
result	Result object	Response result.
status	String	Response status.

Status code: 400**Table 4-225** Response body parameters

Parameter	Type	Description
error	Error object	Response error.

Parameter	Type	Description
status	String	Response status.

Table 4-226 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-227 Result

Parameter	Type	Description
id	Integer	MR ID.
iid	Integer	MR IID.
project_id	Integer	Repository ID.
title	String	Title.
description	String	Description
state	String	MR status.
created_at	String	Creation time.
updated_at	String	Update time.
target_branch	String	Target branch.
source_branch	String	Source branch.
user_notes_count	Integer	Number of reviews.
upvotes	Integer	Added scores.
downvotes	Integer	Reduced scores.
author	UserDto object	Author.
source_project_id	Integer	Source repository ID.
target_project_id	Integer	Target repository ID.
labels	Array of strings	Tag.

Parameter	Type	Description
work_in_progress	Boolean	WIP or not.
merge_when_pipeline_succeeds	Boolean	Whether to automatically merge the request when the pipeline is successful.
merge_status	String	Merge status.
sha	String	sha
should_remove_source_branch	Boolean	Whether to delete the source branch.
force_remove_source_branch	Boolean	Whether to delete the source branch.
web_url	String	Web page links.
time_stats	TimeStats object	Time required.
squash	Boolean	Whether it is a squash.
merge_request_type	String	MR type.
subscribed	Boolean	Whether to subscribe to the data.
changes_count	String	Changed quantity.
diff_refs	DiffRefs object	SHA value.
user	User object	Users.
added_lines	Integer	Added lines.
removed_lines	Integer	Reduced lines.
changes	Array of Changes	Changed files.

Table 4-228 UserDto

Parameter	Type	Description
id	Double	User ID.
name	String	Username.

Parameter	Type	Description
state	String	User status.
username	String	User lamId.
name_cn	String	Name in Chinese.

Table 4-229 TimeStats

Parameter	Type	Description
total_time_spent	Integer	Total required time.

Table 4-230 DiffRefs

Parameter	Type	Description
base_sha	String	Basic SHA.
head_sha	String	Target SHA.
start_sha	String	Source SHA.

Table 4-231 User

Parameter	Type	Description
can_merge	Boolean	Whether it can be merged.

Table 4-232 Change

Parameter	Type	Description
new_path	String	New path.
old_path	String	Original path.
a_mode	String	Mode a.
b_mode	String	Mode b.
file_path	String	File path.
new_file	Boolean	Whether to add a file.
renamed_file	Boolean	Whether to rename a file.

Parameter	Type	Description
deleted_file	Boolean	Whether to delete a file.
diff	String	Difference.
binary	Boolean	Whether a file is binary.
too_large	Boolean	Whether the file is oversized.
collapsed	Boolean	Whether to compress.
added_lines	Integer	Added lines.
removed_lines	Integer	Reduced lines.
content_sha	String	SHA value of the content.
submodule	Boolean	Sub-module or not.
expanded	Boolean	Expand or not.
diff_refs	DiffRefs object	SHA value.
mode_change d	Boolean	Whether to change the mode.
file_type	String	File type.

Example Requests

```
GET https://{endpoint}/v2/repositories/456156/merge-requests/1/changes?view=simple
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "id": 42466,
    "iid": 2,
    "project_id": 892155,
    "title": "Create a file 111",
    "description": "merge \"1\" into \"master\"\nCreate a file 111",
    "state": "opened",
    "created_at": "2024-03-24T11:29:56.000+08:00",
    "updated_at": "2024-04-10T17:34:06.000+08:00",
    "target_branch": "master",
    "source_branch": "1",
    "user_notes_count": 2,
    "upvotes": 0,
    "downvotes": 0,
    "author": {
      "id": 6916,
      "name": "Online_L0_CodeHub",
      "username": "5cb39fe67a2b465283c1463a87274980",
      "state": "active",
      "name_cn": "Online_L0_CodeHub"
    }
  },
}
```

```
"source_project_id": 892155,
"target_project_id": 892155,
"labels": [],
"work_in_progress": false,
"merge_when_pipeline_succeeds": false,
"merge_status": "can_be_merged",
"sha": "43b573473948e13934379993943ac5deea7cd391",
"should_remove_source_branch": false,
"force_remove_source_branch": false,
"web_url": "https://test.com/dcf7e8cde4474a4e8219921f564c32d6/test_no_readme/merge_requests/2",
"time_stats": {
  "total_time_spent": 0
},
"squash": false,
"merge_request_type": "MergeRequest",
"subscribed": true,
"changes_count": "1",
"diff_refs": {
  "base_sha": "ca4cf1a049e286032b25e1604f44f2969818b3f5",
  "head_sha": "43b573473948e13934379993943ac5deea7cd391",
  "start_sha": "ca4cf1a049e286032b25e1604f44f2969818b3f5"
},
"user": {
  "can_merge": true
},
"added_lines": 5,
"removed_lines": 0,
"changes": [
  {
    "old_path": "111",
    "new_path": "111",
    "a_mode": "0",
    "b_mode": "100644",
    "file_path": "111",
    "new_file": true,
    "renamed_file": false,
    "deleted_file": false,
    "diff": "@@ -0,0 +1,5 @@\n+1\n+2\n+3\n+4\n+5\n\\ No newline at end of file\n",
    "binary": false,
    "too_large": false,
    "collapsed": false,
    "added_lines": 5,
    "removed_lines": 0,
    "content_sha": "43b573473948e13934379993943ac5deea7cd391",
    "submodule": false,
    "expanded": true,
    "diff_refs": {
      "base_sha": "ca4cf1a049e286032b25e1604f44f2969818b3f5",
      "head_sha": "43b573473948e13934379993943ac5deea7cd391",
      "start_sha": "ca4cf1a049e286032b25e1604f44f2969818b3f5"
    },
    "mode_changed": true,
    "file_type": "text_type"
  }
],
},
"status": "success"
}
```

Status code: 400

Bad Request

```
{
  "error": {
    "code": "CH.010001",
    "message": "Invalid parameter"
  },
  "status": "failed"
}
```

Status Code

Status Code	Description
200	OK
400	Bad Request

Error code.

See [Error Codes](#).

4.2.38 Associating a Repository with a Member Group

Function

Associate a repository with a member group.

URI

POST /v4/{project_id}/repositories/{repository_id}/user-group/{user_group_id}

Table 4-233 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
repository_id	Yes	Integer	Repository ID.
user_group_id	Yes	String	Member group ID.

Request Parameters

Table 4-234 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-235 Response body parameters

Parameter	Type	Description
status	String	Association result.

Status code: 401

Table 4-236 Response body parameters

Parameter	Type	Description
error_msg	String	Response error information.
error_code	String	Response error code.

Example Requests

```
POST https://{endpoint}/v4/{project_id}/repositories/{repository_id}/user-group/{user_group_id}
```

Example Responses

Status code: 201

```
OK
{
  "status": "success"
}
```

Status code: 401

```
Unauthorized
{
  "error_code": "DEV.00000003"
  "error_msg": "Authentication information expired"
}
```

Status Code

Status Code	Description
201	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.2.39 Locking a Repository Based on the Repository Short ID

Function

Lock a repository based on the repository short ID.

URI

POST /v4/{project_id}/repositories/{repository_id}/lock

Table 4-237 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
repository_id	Yes	String	Repository ID.

Request Parameters

Table 4-238 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 201

Table 4-239 Response body parameters

Parameter	Type	Description
locked	Boolean	Lock status.

Status code: 400

Table 4-240 Response body parameters

Parameter	Type	Description
error_msg	String	Response error.
error_code	String	Response error code.

Example Requests

```
POST https://{endpoint}/v4/{project_id}/repositories/{repository_id}/lock
```

Example Responses

Status code: 201

OK

```
{  
  "locked": true  
}
```

Status code: 401

Unauthorized

```
{  
  "error_code": "DEV.00000003"  
  "error_msg": "Authentication information expired"  
}
```

Status Code

Status Code	Description
201	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.2.40 Unlocking a Repository Based on the Repository Short ID

Function

Unlock a repository based on the repository short ID.

URI

```
POST /v4/{project_id}/repositories/{repository_id}/unlock
```

Table 4-241 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
repository_id	Yes	Integer	Repository ID.

Request Parameters

Table 4-242 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 201

Table 4-243 Response body parameters

Parameter	Type	Description
locked	Boolean	Whether the repository is locked.

Status code: 401

Table 4-244 Response body parameters

Parameter	Type	Description
error_msg	String	Response error information.
error_code	String	Response error code.

Example Requests

```
POST https://{endpoint}/v4/{project_id}/repositories/{repository_id}/unlock
```

Example Responses

Status code: 201

```
OK
{
  "locked": false
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "DEV.00000003"
  "error_msg": "Authentication information expired"
}
```

Status Code

Status Code	Description
201	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.2.41 Approving an MR

Function

Approve an MR.

URI

PUT /v2/repositories/{repository_id}/merge-requests/{merge_request_id}/approval

Table 4-245 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Repository short ID.
merge_request_id	Yes	Integer	Repository IID of the MR.

Table 4-246 Request body parameters

Parameter	Mandatory	Type	Description
action_type	Yes	String	Review type. The values can be approve , reject , and reset .

Request Parameters

Table 4-247 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-248 Response body parameters

Parameter	Type	Description
result	Result object	Response result.
status	String	Response status.

Status code: 400

Table 4-249 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
status	String	Response status.

Table 4-250 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-251 Result

Parameter	Type	Description
id	Integer	Approver ID.
name	String	Approver name.
username	String	Approver username.
email	String	Email.
state	String	Approval status.
updated_at	String	Update time.
avatar_url	String	Link address.

Example Requests

```
PUT https://{endpoint}/v2/repositories/11111886/merge-requests/1/approval
{
  "action_type": "approval"
}
```

Example Responses

Status code: 200

```
OK
{
  "id": 94895,
  "name": "ming",
  "username": "m012345",
  "email": "",
  "state": "reject",
  "updated_at": "2024-08-16T15:25:57.208+08:00",
  "avatar_url": ""
}
```

Status code: 400

Bad Request

```
{
  "error": {
    "code": "CH.010001",
    "message": "Invalid parameter"
  },
}
```

```
"status": "failed"  
}
```

Status Code

Status Code	Description
200	OK
400	Bad Request

Error code.

See [Error Codes](#).

4.2.42 Obtaining Associated Work Item Information

Function

Obtain information about associated work items.

URI

GET /v2/repositories/{repository_uuid}/related-commits

Table 4-252 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Repository long ID.
type	No	Integer	Associated work item type.
search	No	String	Keyword for search.
page	No	Integer	Page number.
per_page	No	Integer	Number of records on each page.

Request Parameters

Table 4-253 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200**Table 4-254** Response body parameters

Parameter	Type	Description
error	Object Error	Response error.
result	Object RelatedCommitListVo	Associated work item list.
status	String	Response status.

Table 4-255 Response error parameters

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-256 RelatedCommitListVo response parameters

Parameter	Type	Description
total	Integer	Number of returned results.
list	Array RelatedCommitVo	Array of the returned results.

Table 4-257 RelatedCommitVo response parameters

Parameter	Type	Description
id	String	Primary key ID.
iam_id	String	User ID.
user_name	String	Username.
repository_id	String	Repository ID.
type	String	Type.
user_id	String	User ID.
branch_name	String	Branch name.
commit_id	String	Commit ID
commit_shortl d	String	Commit short ID
commit_msg	String	Commit message.
commit_url	String	Commit URL.
commit_type	String	Commit type.
related_id	String	Work item ID.
create_at	String	Creation time.
update_at	String	Update time.
related_url	String	Work item URL
message	String	Description

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_uuid}/related-commits
```

Example Responses

Status code: 200

OK

```
{
  "result": [{
    "id": "1",
    "iamId": "66666",
    "userName": "test",
    "repositoryId": "8",
    "type": "commit",
    "userId": "6776",
    "branchName": "master",
    "commitId": "1",
    "commitShortId": "1",
    "commitMsg": "1",
    "commitUrl": ""
```



```
"commitType": "",
"relatedId": "",
"relatedUrl": "",
"message": "",
"createdAt": "",
"updatedAt": ""
}},
"status": "success"
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.2.43 Obtaining Reviewer Information Based on the Repo Short ID and Merge Request Short ID

Function

Obtain the reviewer information based on the repository short ID and merge request short ID.

URI

GET/v2/repositories/{repository_id}/merge-requests/{merge_request_iid}/approval-reviewers

Table 4-258 Query parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Explanation: Repository short ID. Constraints: Mandatory Range: 0-2147483647 Default value: None

Parameter	Mandatory	Type	Description
merge_request_id	Yes	Integer	Explanation: Short ID of a merge request. Constraints: Mandatory Range: 0-2147483647 Default value: None
page	No	Integer	Explanation: Number of records on each page. Range: Minimum value: 1 Maximum value: 100 Default value: 100
per_page	No	Integer	Explanation: Number of records on each page. Range: Minimum value: 1 Maximum value: 100 Default value: 20

Request Parameters

Table 4-259 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-260 Response body parameters

Parameter	Type	Description
result	MergeRequestApprovalReviewersDto object	Explanation: Reviewer information.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-261 MergeRequestApprovalReviewersDto

Parameter	Type	Description
approval_merge_request_reviewers	Array of ApprovalUserDto objects	Explanation: Reviewer list

Table 4-262 ApprovalUserDto

Parameter	Type	Description
id	Integer	Explanation: Auto-increment primary key
username	String	Explanation: Username.
name	String	Explanation: Name
nick_name	String	Explanation: Alias
state	String	Explanation: Review status

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_id}/merge-requests/{merge_request_iid}/approval-reviewers
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "approval_merge_request_reviewers": [{
      "id": 453613,
      "name": "test",
      "username": "test",
      "state": "required",
      "nick_name": "test"
    }]
  },
  "status": "success"
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.2.44 Obtaining the List of Changed Files

Function

Obtains the list of changed files.

URI

GET /v2/repositories/{repository_id}/merge-requests/{merge_request_id}/changes-trees

Table 4-263 Query parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Explanation: Repository short ID. Constraints: Mandatory Range: 0-2147483647 Default value: None
merge_request_id	No	Integer	Explanation: Short ID of the merge request. Constraints: Mandatory Range: 0-2147483647 Default value: None
view	No	String	Explanation: Short ID of the merge request. Constraints: None Range: simple Default value: None

Parameter	Mandatory	Type	Description
commit_id	No	String	Explanation: Commit ID Constraints: None Range: None Default value: None

Request Parameters

Table 4-264 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-265 Response body parameters

Parameter	Type	Description
error	Object Error	Response error.
result	MergeChangesTreesDto object	Explanation: Response result.

Parameter	Type	Description
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-266 Response error parameters

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">• CH.10000. The system is busy. Try again later.
message	String	Explanation: Error message returned when the API fails to be called. Range: <ul style="list-style-type: none">• The system is busy. Try again later.

Table 4-267 MergeChangesTreesDto

Parameter	Type	Description
tree	MergeChangesTrees objects	Explanation: File tree.

Table 4-268 MergeChangesTrees

Parameter	Type	Description
title	String	Explanation: Segment path.
level	Integer	Explanation: Path level.

Parameter	Type	Description
file_path	String	Explanation: Full path of the current level.
file_type	String	Explanation: File type

Example Requests

GET https://{endpoint}/v2/repositories/{repository_id}/merge-requests/{merge_request_iid}/changes-trees

Example Response

Status code: 200

OK

```
{
  "result": {
    "tree": [{
      "title": "qwdasasdfasd",
      "level": 1,
      "file_path": "qwdasasdfasd",
      "file_type": "file"
    }]
  },
  "status": "success"
}
```

Status code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.3 Tenant

4.3.1 Obtaining the IP Address Whitelist of a Tenant

Function

Obtain the IP address whitelist of a tenant.

URI

GET /v4/tenant/trusted-ip-addresses

Table 4-269 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Page number.
limit	No	Integer	Number of data records on each page.

Request Parameters

Table 4-270 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-271 Response header

Parameter	Type	Description
X-Total	String	Total number of results of the current request.

Table 4-272 Response body parameters (array)

Parameter	Type	Description
id	String	Association result.
user_id	Integer	User ID.
domain_id	String	Tenant ID.
ip_range	String	IP address segment.
ip_type	Integer	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP address.

Parameter	Type	Description
ip_end	String	End IP Address.
view_flag	Integer	Whether to allow access to the repository.
download_flag	Integer	Whether to allow code download.
upload_flag	Integer	Whether to allow code commit.
remark	String	Remarks.
created_at	String	Creation time.
updated_at	String	Update time.
order_flag	Integer	Sorting order.

Table 4-273 Error

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

```
GET https://{endpoint}/v4/tenant/trusted-ip-addresses
```

Example Responses

Status code: 200

OK

```
[
  {
    "id": "58119",
    "remark": "",
    "ip_range": "2.2.2.5",
    "ip_type": 0,
    "ip_start": "2.2.2.5",
    "ip_end": "2.2.2.5",
    "view_flag": 1,
    "download_flag": 1,
    "upload_flag": 1,
    "created_at": "Nov 6, 2024 4:58:05 PM",
    "updated_at": "Nov 6, 2024 4:58:05 PM",
    "order_flag": 1,
    "user_id": 7574,
    "domain_id": "*****"
  }
]
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.3.2 Adding a Tenant IP Address Whitelist

Function

Add a tenant IP address whitelist.

URI

POST /v4/tenant/trusted-ip-addresses

Request Parameters

Table 4-274 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Request Body

Table 4-275 Request body parameters

Parameter	Type	Description
ip_type	String	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP address.
ip_end	String	End IP Address.

Parameter	Type	Description
view_flag	String	Whether to allow access to the repository.
download_flag	String	Whether to allow code download.
upload_flag	String	Whether to allow code commit.
remark	String	Remarks.

Response Parameters

Status code: 200

Table 4-276 Response body parameters

Parameter	Type	Description
id	String	Association result.
user_id	Integer	User ID.
domain_id	String	Tenant ID.
ip_range	String	IP address segment.
ip_type	Integer	Response error.
ip_start	String	Start IP address.
ip_end	String	End IP Address.
view_flag	Integer	Whether to allow access to the repository.
download_flag	Integer	Whether to allow code download.
upload_flag	Integer	Whether to allow code commit.
remark	String	Remarks.
created_at	String	Creation time.
updated_at	String	Update time.
order_flag	Integer	Sorting order.

Table 4-277 Error

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Requests

POST https://{endpoint}/v4/tenant/setting/trusted-ip-addresses

Example Responses

Status code: 200

```
OK
{
  "id": "58119",
  "remark": "",
  "ip_range": "2.2.2.5",
  "ip_type": 0,
  "ip_start": "2.2.2.5",
  "ip_end": "2.2.2.5",
  "view_flag": 1,
  "download_flag": 1,
  "upload_flag": 1,
  "created_at": "Nov 6, 2024 4:58:05 PM",
  "updated_at": "Nov 6, 2024 4:58:05 PM",
  "order_flag": 1,
  "user_id": 7574,
  "domain_id": "*****"
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.3.3 Modifying a Tenant IP Address Whitelist

Function

Modify a tenant IP address whitelist.

URI

PUT /v4/tenant/trusted-ip-addresses/{ip_id}

Table 4-278 Query parameters

Parameter	Mandatory	Type	Description
ip_id	Yes	Integer	IP address ID.

Response Parameters

Status code: 200

Table 4-279 Response body parameters

Parameter	Type	Description
ip_type	Integer	Format type. The value can be a specified IP address, IP address segment, or CIDR block.
ip_start	String	Start IP address.
ip_end	String	End IP Address.
view_flag	Integer	Whether to allow access to the repository.
download_flag	Integer	Whether to allow code download.
upload_flag	Integer	Whether to allow code commit.
remark	String	Remarks.

Table 4-280 Error

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

```
PUT https://{endpoint}/v4/tenant/trusted-ip-addresses/{ip_id}
```

Example Responses

Status code: 200

```
OK
{
  "id": "58119",
  "remark": "",
  "ip_range": "2.2.2.5",
  "ip_type": 0,
  "ip_start": "2.2.2.5",
```

```
"ip_end": "2.2.2.5",
"view_flag": 1,
"download_flag": 1,
"upload_flag": 1,
"created_at": "Nov 6, 2024 4:58:05 PM",
"updated_at": "Nov 6, 2024 4:58:05 PM",
"order_flag": 1,
"user_id": 7574,
"domain_id": "*****"
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.3.4 Deleting a Tenant IP Address Whitelist

Function

Delete a tenant IP address whitelist.

URI

DELETE /v4/tenant/trusted-ip-addresses/{ip_id}

Table 4-281 Query parameters

Parameter	Mandatory	Type	Description
ip_id	No	Integer	IP address ID.

Request Parameters

Table 4-282 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-283 Response body parameters (array)

Parameter	Type	Description
status	String	Success information.

Table 4-284 Error

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v4/tenant/trusted-ip-addresses/{ip_id}
```

Example Responses

Status code: 200

```
OK
{
  status: success
}
```

Status Code

Status Code	Description
200	OK

Error code.

See [Error Codes](#).

4.4 Group

4.4.1 Creating a Repository Group

Function

Create a repository group.

URI

POST /v4/{project_id}/groups

Table 4-285 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Table 4-286 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name
parent_id	No	Integer	Parent repository group ID. If this parameter is left blank, a repository group is created under the project by default.
visibility	Yes	String	Repository visibility. The value can be private or public .
description	No	String	Description

Request Parameters

Table 4-287 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 201

Table 4-288 Response body parameters

Parameter	Type	Description
description	String	Description of repository group.
full_path	String	Repository group full name.
id	Integer	Repository group ID.
name	String	Error code.
visibility	String	Repository visibility. The value can be private or public .

Status code: 401**Table 4-289** Response body parameters

Parameter	Type	Description
error_code	String	Response error.
error_msg	String	Response error.

Example Requests

```
POST https://{endpoint}/v4/{project_id}/groups
```

Example Responses

Status code: 201

OK

```
{
  "description": "groupDescription"
  "full_path": "41bcec7bf2c84efea690e987ca98ee40 / g22-8"
  "id": 2111667253
  "name": "groupName"
  "visibility": private
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "DEV.00000003",
  "error_msg": "Authentication information expired"
}
```

Status Code

Status Code	Description
201	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.4.2 Deleting a Repository Group

Function

Delete a repository group.

URI

DELETE /v4/{project_id}/groups/{group_id}

Table 4-290 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	Integer	Repository group ID.

Request Parameters

Table 4-291 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 202

Table 4-292 Response body parameters

Parameter	Type	Description
Group test1group1test2 was scheduled for deletion.	string	Repository group full name. test1 indicates the first level, and test2 indicates the second level of the repository group. The returned result varies with the actual situation.

Status code: 401**Table 4-293** Response body parameters

Parameter	Type	Description
error_code	String	Response error code.
error_msg	String	Response error information.

Example Requests

```
DELETE https://{endpoint}/v4/{project_id}/groups/{group_id}
```

Example Responses

Status code: 202

```
OK
{
  "Group \u0027group1\u0027 was scheduled for deletion."
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "DEV.00000003",
  "error_msg": "Authentication information expired"
}
```

Status Code

Status Code	Description
202	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.4.3 Querying Repository Groups with Create Permission in a Project

Function

Query repository groups with the create permission in a project.

URI

GET /v4/{project_id}/manageable-groups

Table 4-294 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
scope	No	String	Resource type. This value can be group (repository group) or repository .
offset	No	Integer	Offset.
limit	No	Integer	Limit.

Request Parameters

Table 4-295 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-296 Response body parameters

Parameter	Type	Description
full_name	String	Repository group full name.
id	Integer	Repository group ID.
name	String	Repository group name.

Status code: 401**Table 4-297** Response body parameters

Parameter	Type	Description
error_code	String	Response status code.
error_msg	String	Response error information.

Example Requests

```
GET https://{endpoint}/v4/{project_id}/manageable-groups
```

Example Responses

Status code: 200

```
OK
{
  [
    {
      "full_name": " TG2 / dmz1",
      "id": 2111688350,
      "name": "dmz1"
    }
  ]
}
```

Status code: 401

```
Unauthorized
{
  "error_code": "DEV.00000003"
  "error_msg": "Authentication information expired"
}
```

Status Code

Status Code	Description
200	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.4.4 Obtaining Repository Group Information

Function

Obtain repository group information.

URI

GET /v4/{project_id}/groups/{group_id}

Table 4-298 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	Integer	Repository group ID.

Request Parameters

Table 4-299 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-300 Response body parameters

Parameter	Type	Description
creator_id	Integer	Creator ID.
project_id	String	Project ID.
created_at	String	Creation time.

Parameter	Type	Description
description	String	Description
full_name	String	Repository group full name.
ancestor_ids	Array Integer	Repository group path ID.
ancestor_names	Array String	Repository group path name.
id	Integer	Repository group ID.
members_count	Integer	Number of repository group members.
name	String	Repository group name.
repository_count	Integer	Number of repositories.
star_count	Integer	Followed count.
starred	Boolean	Followed or not.
subgroup_count	Integer	Number of sub-groups.
visibility	String	Repository visibility. The value can be private or public .
sum	GroupSumDto	Number of MRs in the open state.

Table 4-301 GroupSumDto parameter in the response body

Parameter	Type	Description
open_merge_requests_count	integer	Number of MRs in the open state.

Status code: 401**Table 4-302** Response body parameters

Parameter	Type	Description
error_code	String	Response status code.
error_msg	String	Response error information.

Example Requests

```
GET https://{endpoint}/v4/{project_id}/groups/{group_id}
```

Example Responses

Status code: 200

OK

```
{
  creator_id: 9125
  project_id: 1a92b5c48d914f11893ca983d01a1d33
  description: ""
  full_name: 1a92b5c48d914f11893ca983d01a1d33 / q / 1 / 2
  ancestor_ids:
    - 2111665683
    - 2111665684
    - 2111665685
  ancestor_names:
    - q
    - '1'
    - '2'
  id: 2111665685
  members_count: 2
  name: '2'
  repository_count: 1
  star_count: 0
  starred: false
  subgroup_count: 0
  visibility: private
  sum:
    open_merge_requests_count: 0
}
```

Status code: 401

Unauthorized

```
{
  "error_code": "DEV.00000003"
  "error_msg": "Authentication information expired"
}
```

Status Code

Status Code	Description
200	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.4.5 Associating a Repository Group with a Member Group

Function

Associate a repository group with a member group.

URI

POST /v4/{project_id}/groups/{group_id}/user-group/{user_group_id}

Table 4-303 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
group_id	Yes	Integer	Repository group ID.
user_group_id	Yes	String	Member group ID.

Request Parameters

Table 4-304 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 201

Table 4-305 Response body parameters

Parameter	Type	Description
success	Array MemberBase Dto	Associated members.
failure	Array FailureForBatc hCreateGroup MembersDto	Members that fail to be associated.

Table 4-306 MemberBaseDto parameter in the response body

Parameter	Type	Description
id	String	User ID.
name	String	Member name.
iam_id	String	iam_id

Table 4-307 FailureForBatchCreateGroupMembersDto parameter in the response body

Parameter	Type	Description
iam_id	String	User ID.
message	Array String	Failure cause.

Status code: 401**Table 4-308** Response body parameters

Parameter	Type	Description
error_code	String	Response status code.
error_msg	String	Response error information.

Example Requests

```
POST https://{endpoint}/v4/{project_id}/groups/{group_id}/user-group/{user_group_id}
```

Example Responses

Status code: 201

```
OK
{
  "success": [
    {
      "id": "10091",
      "name": "paas_codeartsrepo_f30041672_01",
      "iam_id": "4a7049ad346d43419328a37b93b38ad4"
    },
    {
      "id": "9443",
      "name": "CodeHub_fudehua_gray",
      "iam_id": "4a7049ad346d43419328a37b93b38ad4"
    }
  ],
  "failure": []
}
```

Status code: 401

```
Unauthorized
{
  "error_code": "DEV.00000003"
}
```

```
"error_msg": "Authentication information expired"  
}
```

Status Code

Status Code	Description
201	OK
401	Unauthorized

Error code.

See [Error Codes](#).

4.5 Project (V2)

4.5.1 Querying All Repositories of a User

Function

This API is used to obtain all repository information of a user.

URI

GET /v2/projects/repositories

Table 4-309 Query parameters

Parameter	Mandatory	Type	Description
page_index	No	Integer	Explanation: Page index. Range: Minimum value: 1 Maximum value: 2147483647 Default value: 1

Parameter	Mandatory	Type	Description
page_size	No	Integer	Explanation: Number of records on each page. Range: Minimum value: 1 Maximum value: 100 Default value: 100
search	No	String	Explanation: Search keyword. Range: 1–512 characters. Default value: Empty.

Request Parameters

Table 4-310 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-311 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error. Range: None
result	RepoListInfo V2 object	Explanation: Response result. Range: None
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-312 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">● CH.080002
message	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">● CH.080002: Invalid parameter.

Table 4-313 RepoListInfoV2

Parameter	Type	Description
repositories	Array of RepoInfoV2 objects	Explanation: Repository list.

Parameter	Type	Description
total	Integer	Explanation: Total number of repositories. Range: 0-2147483647

Table 4-314 RepoInfoV2

Parameter	Type	Description
created_at	String	Explanation: Creation time. Constraints: Format: yyyy-MM-dd HH:mm:ss
creator_name	String	Explanation: Name of the creator. Range: 128 digits and letters.
domain_name	String	Explanation: Tenant name of the creator. Range: 128 digits and letters.
group_name	String	Explanation: Repository group name (the segment between the domain name and repository name in a clone address). Example: Demo00228 in git@repo.alpha.devcloud.test.com:Demo00228/testword.git Range: 2-255 characters.
https_url	String	Explanation: HTTPS repository address. Range: Max. 2,000 characters.
iam_user_uid	String	Explanation: IAM user ID. Range: 32 digits and letters.

Parameter	Type	Description
is_owner	Integer	Explanation: Whether the user is the repository creator. Range: 1: Yes 0: No
lfs_size	String	Explanation: Repository LFS capacity. Constraints: Measured in MB or GB, with two decimal places.
project_is_deleted	String	Explanation: Whether the project has been deleted. Range: false: No true: Yes
project_uuid	String	Explanation: Project ID. For details, see Obtaining a Project ID . Range: 32 digits and letters.
repository_id	Integer	Explanation: Repository ID. Range: 0-2147483647
repository_name	String	Explanation: Repository name. Range: 2-255 characters.
repository_size	String	Explanation: Total repository capacity = Repository LFS capacity + Git repository capacity. Constraints: Measured in MB or GB, with two decimal places.

Parameter	Type	Description
repository_uuid	String	Explanation: Repo UUID, which is returned by the CreateRepository API. Constraints: 32 digits and letters.
ssh_url	String	Explanation: SSH repository address. Range: Max. 2,000 characters.
star	Boolean	Explanation: Whether you have followed the repository. Range: false: No true: Yes
status	Integer	Explanation: Repository status. Range: 0: The repository has been created. 1: The repository is being created. 2: The creation failed. 3: The repository is frozen. 4: The repository is closed.
updated_at	String	Explanation: Update time. Constraints: Format: yyyy-MM-dd HH:mm:ss
userRole	Integer	Explanation: Your role in the repository. Constraints: 20: Read-only member 30: Common member 40: Administrator
visibility_level	Integer	Explanation: Repository visibility. Range: 0: Private repository 20: Public repository

Parameter	Type	Description
web_url	String	Explanation: Web URL, which redirects you to the repository details page. Range: Max. 2,000 characters.

Example Requests

```
GET https://{endpoint}/v2/projects/repositories
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "total" : 29,
    "repositories" : {
      "repository_uuid" : "0bf1e7ceb5b341318cb72b42901abe54",
      "repository_id" : 468564,
      "repository_name" : "test",
      "ssh_url" : "git@repo.alpha.devcloud.test.com:test_new00001/test.git",
      "https_url" : "https://repo.alpha.devcloud.test.com/test_new00001/test.git",
      "group_name" : "test_new00001",
      "web_url" : "https://alpha.devcloud.test.com/repo/468564/home",
      "visibility_level" : 0,
      "created_at" : "2019-10-15 11:00:11",
      "updated_at" : "2019-10-15 11:00:11",
      "repository_size" : "0.05M",
      "lfs_size" : "0.00M",
      "creator_name" : "repo",
      "domain_name" : "repo",
      "star" : true,
      "status" : 0,
      "is_owner" : 1,
      "iam_user_uuid" : "a618e34bd5704be3ae3395dfede06041",
      "project_uuid" : "dc19b3ca6f334ce894a1ec467689797d",
      "project_is_deleted" : "false",
      "userRole" : null
    }
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.5.2 Creating a Project and Repository

Function

After a project is created, the parameters for creating a repository group are generated in the background, including the repository name, template ID, whether to import project members, and home project.

URI

POST /v2/projects/repositories

Request Parameters

Table 4-315 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-316 Request body parameters

Parameter	Mandatory	Type	Description
import_members	No	Integer	Explanation: Whether to import project members. Constraints: None Range: <ul style="list-style-type: none">• 0: No• 1: Yes Default value: 0
project_name	Yes	String	Explanation: Project name. Constraints: Mandatory Range: Start with a letter and use only letters, digits, hyphens (-), and underscores (_). Default value: None
repo_name	Yes	String	Explanation: Repository name. Constraints: Mandatory Range: <ul style="list-style-type: none">• Start with a letter, digit, or underscore (_), and use letters, digits, hyphens (-), underscores (_), and periods (.). Do not end with .git, .atom, or a period (.).• 1-256 characters. Default value: 0

Parameter	Mandatory	Type	Description
type	No	String	Explanation: Project type, such as scrum . Constraints: None Range: Default value: 0
visibility_level	No	Integer	Explanation: Repository visibility. Constraints: None Range: <ul style="list-style-type: none">• Private: Only repository members can read, write, and access the repository. Value: 0.• Public:<ol style="list-style-type: none">1. For project members: Project members can view and search for the repository in the repository list of the project and repository group. Value: 10.2. For tenant members: Tenant members can view and search for the repository in the repository list of the project and repository group. Value: 10.3. For all visitors: All visitors can view and search for the repository in the repository list of the project and repository group. Value: 20. Default value: 0

Parameter	Mandatory	Type	Description
external_project_info	No	ExternalKey Message object	Explanation: Third-party service information. Constraints: None

Table 4-317 ExternalKeyMessage

Parameter	Mandatory	Type	Description
external_key_message	No	String	Explanation: Key information stored by third parties in CodeArts Repo. Constraints: None Range: Character string. Default value: None
external_service	No	String	Explanation: External service name. Constraints: None Range: Character string. Default value: None

Response Parameters

Status code: 200

Table 4-318 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error.
result	ProjectRepository object	Explanation: Response result.

Parameter	Type	Description
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">• success: The API call is successful.• fail: The API call failed.

Table 4-319 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: See Error Codes .
message	String	Explanation: Error message. Range: Character string.

Table 4-320 ProjectRepository

Parameter	Type	Description
projectUuid	String	Explanation: Project ID. For details, see Obtaining a Project ID . Range: 32 characters.
repositoryUuid	String	Explanation: Repository UUID. Range: 32 characters.

Example Requests

```
POST https://{endpoint}/v2/projects/repositories
{
  "project_name": "testworld",
  "repo_name": "demotest1",
  "import_members": "0",
  "visibility_level": "20",
```

```
"type" : "normal"  
}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : {  
    "repositoryUuid" : "02637c34ba954ab5bd37ff9537fe05b4",  
    "projectUuid" : "1aeda7a6070d4119b7d8b45e5641599b"  
  },  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.5.3 Creating a Project and Forking a Repository

Function

After a repository is created, parameters transferred to the fork repository include the repository name, whether to import project members, and home project.

URI

POST /v2/projects/repositories/fork

Request Parameters

Table 4-321 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-322 Request body parameters

Parameter	Mandatory	Type	Description
import_members	No	Integer	Explanation: Whether to import project members. Range: <ul style="list-style-type: none">• 0: No• 1: Yes
project_name	Yes	String	Explanation: Project name. Range: Start with a letter and use only letters, digits, hyphens (-), and underscores (_).
repo_name	Yes	String	Explanation: Repository name. Range: Start with a letter and use only letters, digits, hyphens (-), and underscores (_). Minimum length: 2 Maximum length: 128

Parameter	Mandatory	Type	Description
template_id	Yes	String	Explanation: ID of the template to use.
type	No	String	Explanation: Project type, such as scrum .
visibility_level	No	Integer	Explanation: Repository visibility. Constraints: None Range: <ul style="list-style-type: none">• Private: Only repository members can read, write, and access the repository. Value: 0.• Public:<ol style="list-style-type: none">1. For project members: Project members can view and search for the repository in the repository list of the project and repository group. Value: 10.2. For tenant members: Tenant members can view and search for the repository in the repository list of the project and repository group. Value: 10.3. For all visitors: All visitors can view and search for the repository in the repository list of the project and repository group. Value: 20. Default value: 0
external_project_info	No	ExternalKey Message object	Explanation: Third-party service information.

Table 4-323 ExternalKeyMessage

Parameter	Mandatory	Type	Description
external_key_message	No	String	Explanation: Key information stored by third parties in CodeArts Repo.
external_service	No	String	Explanation: External service name.

Response Parameters

Status code: 200

Table 4-324 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error.
result	ProjectRepository object	Explanation: Response result.
status	String	Explanation: Response status.

Table 4-325 Error

Parameter	Type	Description
code	String	Explanation: Error code.
message	String	Explanation: Error message.

Table 4-326 ProjectRepository

Parameter	Type	Description
projectUuid	String	Explanation: Project ID. For details, see Obtaining a Project ID . Range: Minimum length: 32 Maximum length: 32
repositoryUuid	String	Explanation: Repository UUID. Range: Minimum length: 32 Maximum length: 32

Example Requests

```
POST https://{endpoint}/v2/projects/{project_uuid}/repositories/fork
{
  "project_name" : "testworld",
  "repo_name" : "demotest1",
  "template_id" : 453489,
  "import_members" : 0,
  "visibility_level" : 20,
  "type" : "normal"
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "repositoryUuid" : "9a780fd55cd64333b668ba26132629d2",
    "projectUuid" : "278a03286efe45c6b788122bfc166976"
  },
  "status" : "success"
}
```

Status Codes

Status Codes	Description
200	OK

Error Codes

See [Error Codes](#).

4.5.4 Querying All Repositories in a Project

Function

This API is used to obtain the repository list. Fuzzy query is supported: If the **project UUID** is not specified, fuzzy search by repository name or project name is supported. Otherwise, only fuzzy search by repository name is supported.

URI

GET /v2/projects/{project_uuid}/repositories

Table 4-327 Path parameters

Parameter	Mandatory	Type	Description
project_uuid	Yes	String	Explanation: Project ID. For details, see Obtaining a Project ID . Constraints: Mandatory Range: 32 characters. Default value: None

Table 4-328 Query parameters

Parameter	Mandatory	Type	Description
page_index	No	Integer	Explanation: Page index, starting from 1. Constraints: None Range: 1-2,147,483,647 Default value: 1

Parameter	Mandatory	Type	Description
page_size	No	Integer	Explanation: Number of records on each page. Constraints: None Range: 1-100 Default value: 20
search	No	String	Explanation: Search keyword. Constraints: None Range: Character string. Default value: None

Request Parameters

Table 4-329 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1-100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-330 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error.
result	RepoListInfo V2 object	Explanation: Response result.
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">• success: The API call is successful.• fail: The API call failed.

Table 4-331 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: See Error Codes .
message	String	Explanation: Error message. Range: Character string.

Table 4-332 RepoListInfoV2

Parameter	Type	Description
repositories	Array of RepoInfoV2 objects	Explanation: Repository list.
total	Integer	Explanation: Total number of repositories. Range: 1-2147483647

Table 4-333 RepoInfoV2

Parameter	Type	Description
created_at	String	Explanation: Creation time. Range: Character string.
creator_name	String	Explanation: Username of the creator. If the user is a tenant, the username is the same as the tenant name. Range: Character string.
domain_name	String	Explanation: Tenant name of the creator. Range: Character string.
group_name	String	Explanation: Repository group name (the segment between the domain name and repository name in a clone address). Example: Demo00228 in git@repo.alpha.devcloud.test.com:Demo00228/testword.git Range: Character string.
https_url	String	Explanation: URL for cloning a repository using HTTPS. Range: Character string.
iam_user_uid	String	Explanation: IAM user UUID. Range: Character string.
is_owner	Integer	Explanation: Whether the current user is the repository creator. Range: <ul style="list-style-type: none">● 1: Yes● 0: No

Parameter	Type	Description
lfs_size	String	Explanation: Repository LFS capacity in MB. If the capacity is greater than 1,024 MB, the unit is GB. Range: Character string.
project_is_deleted	String	Explanation: Whether the project has been deleted. Range: Character string.
project_uuid	String	Explanation: Project ID. For details, see Obtaining a Project ID . Range: Character string.
repository_id	Integer	Explanation: Repository primary key ID. Range: 1-2147483647
repository_name	String	Explanation: Repository name. Range: Character string.
repository_size	String	Explanation: Total repository capacity = Repository LFS capacity + Git repository capacity. The unit is MB. If the capacity is greater than 1,024 MB, the unit is GB. Range: Character string.
repository_uuid	String	Explanation: Repo UUID, which is returned by the CreateRepository API. Range: Character string.
ssh_url	String	Explanation: URL for cloning a repository in SSH mode. Range: Character string.

Parameter	Type	Description
star	Boolean	Explanation: Whether you have followed the repository. Range: <ul style="list-style-type: none">● true: Yes● false: No
status	Integer	Explanation: Repository status. Range: <ul style="list-style-type: none">● 0: The repository has been created.● 1: The repository is being created.● 2: The creation failed.● 3: The repository is frozen.● 4: The repository is closed.
updated_at	String	Explanation: Update time. Range: Character string.
userRole	Integer	Explanation: Your permissions for the repository. Range: <ul style="list-style-type: none">● 20: Read-only member● 30: Common member● 40: Administrator
visibility_level	Integer	Explanation: Visibility. Range: <ul style="list-style-type: none">● 0: Private repository● 20: Public repository
web_url	String	Explanation: Web URL, which redirects you to the repository details page. Range: Character string.

Example Requests

```
GET https://{endpoint}/v2/projects/{project_uuid}/repositories
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "total": 14,
    "repositories": {
      "repository_uuid": "d0457f74cc5b43d989ded7248f71b4e5",
      "repository_id": 468480,
      "repository_name": "CreatRepository_2qD5i",
      "ssh_url": "git@repo.test.com:Demo00228/CreatRepository_2qD5i.git",
      "https_url": "https://test.com/Demo00228/CreatRepository_2qD5i.git",
      "group_name": "Demo00228",
      "web_url": "https://test.com/repo/468480/home",
      "visibility_level": 0,
      "created_at": "2019-10-15 09:40:26",
      "updated_at": "2019-10-15 09:40:26",
      "repository_size": "0.06M",
      "lfs_size": "0.00M",
      "creator_name": "repo",
      "domain_name": "repo",
      "star": false,
      "status": 0,
      "is_owner": 1,
      "iam_user_uuid": "a618e34bd5704be3ae3395dfede06041",
      "project_uuid": "4838955a48e2492bbe44b31bc4c272f6",
      "project_is_deleted": "false",
      "userRole": null
    }
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error codes

See [Error Codes](#).

4.5.5 Associating Branches with Work Items

Function

This API is used to associate work items with a branch.

URI

POST /v2/projects/issues

Request Parameters

Table 4-334 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-335 Request body parameters

Parameter	Mandatory	Type	Description
branch	Yes	String	Branch name.
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
related_id	Yes	Array of strings	Work item set
repo_id	Yes	String	Repository ID.

Response Parameters

Status code: 200**Table 4-336** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
status	String	Response status.

Table 4-337 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
POST https://{endpoint}/v2/projects/issues
{
  "project_id": "a6142fa102b740988fe45cc40254d61c",
  "branch": "unionsdk",
  "repo_id": "2111616668",
  "related_id": [ "5561081" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.6 RepoMember

4.6.1 Obtaining All Member Records in a Repository

Function

This API is used to obtain the repository member list. You can search for a member by keyword.

URI

GET /v1/repositories/{repository_uuid}/members

Table 4-338 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Explanation: Repository UUID returned by the CreateRepository API. Constraints: Mandatory Range: 32 digits and letters. Default value: None

Table 4-339 Query Parameters

Parameter	Mandatory	Type	Description
page_index	No	Integer	Explanation: Page number. Constraints: None Range: Digits Default value: None
page_size	No	Integer	Explanation: Number of records displayed on each page. Constraints: None Range: Digits Default value: None

Parameter	Mandatory	Type	Description
subject	No	String	Explanation: Keyword for fuzzy match, such as username, alias, and tenant name. Constraints: None Range: 128 characters. Default value: None

Request Parameters

Table 4-340 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-341 Response body parameters

Parameter	Type	Description
error	Error object	Response error.

Parameter	Type	Description
result	RepositoryMemberList object	Response result.
status	String	Response status.

Table 4-342 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-343 RepositoryMemberList

Parameter	Type	Description
total	Integer	Total number of repository members.
users	Array of RepositoryMember objects	Repository member list.

Table 4-344 RepositoryMember

Parameter	Type	Description
description	String	Repository member description.
domain_id	String	Tenant ID. Minimum length: 8 Maximum length: 32
domain_name	String	Tenant name.
email	String	Email address.
enabled	String	Whether a member is available.
name	String	Username.
role	Integer	Repository user permission: 30 : Common member. 40 : Administrator.

Parameter	Type	Description
user_id	String	User ID. Minimum length: 4 Maximum length: 32

Example Requests

```
GET https://{endpoint}/v1/repositories/{repository_uuid}/members
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "total": 2,
    "users": [ {
      "user_id": "5836",
      "name": "repo",
      "domain_name": "repo",
      "description": null,
      "enabled": null,
      "role": 40,
      "domain_id": "159b65b41ead484d8ddff250a4731781",
      "email": null
    }, {
      "user_id": "6057",
      "name": "repo",
      "domain_name": "repo",
      "description": null,
      "enabled": null,
      "role": 30,
      "domain_id": "159b65b41ead484d8ddff250a4731781",
      "email": null
    }
  ]
},
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.6.2 Adding a Repository Member

Function

This API is used to add a repository member.

URI

POST /v1/repositories/{repository_uuid}/members

Table 4-345 Path parameters

Parameter	Mandatory	Type	Description
repository_uuid	Yes	String	Explanation: Repository UUID returned by the CreateRepository API. Constraints: Mandatory Range: 32 digits and letters. Default value: None

Request Parameters

Table 4-346 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: None Default value: None

Table 4-347 Request body parameters

Parameter	Mandatory	Type	Description
users	No	Array of RepoMemberInfo objects	Information list of added users.

Table 4-348 RepoMemberInfo

Parameter	Mandatory	Type	Description
domain_id	No	String	Explanation: Tenant ID. Constraints: None Range: Minimum length: 8 Maximum length: 32 Default value: None
domain_name	No	String	Explanation: Tenant name. Constraints: None Range: None Default value: None
id	Yes	String	Explanation: ID of the added user. Constraints: Mandatory Range: Minimum length: 4 Maximum length: 32 Default value: None

Parameter	Mandatory	Type	Description
name	Yes	String	Explanation: Added username. Constraints: Mandatory Range: None Default value: None
role	Yes	Integer	Explanation: User permissions. Constraints: Mandatory Range: 20: Viewer. 30: Common member. 40: Administrator. Default value: None

Response Parameters

Status code: 200

Table 4-349 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Array of CreateRepoMemberResult objects	Response result.
status	String	Response status.

Table 4-350 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-351 CreateRepoMemberResult

Parameter	Type	Description
id	String	User ID. Minimum length: 32 Maximum length: 32
message	String	Information of the added repository member.
name	String	Username.
status	String	Status of the added repository member.

Example Requests

```
POST https://{endpoint}/v1/repositories/{repository_uuid}/members
{
  "users" : [ {
    "id" : "87b3dc2019f04ee788cb635eb26154ca",
    "role" : 30,
    "name" : "repo"
  } ]
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "id" : "87b3dc2019f04ee788cb635eb26154ca",
    "name" : null,
    "message" : "add user success",
    "status" : "success"
  },
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.6.3 Setting a Role for a Member in the Repository

Function

This API is used to assign repository operation permissions to repository members.

URI

PUT /v1/repositories/{repository_uuid}/members/{member_id}

Table 4-352 Path parameters

Parameter	Mandatory	Type	Description
member_id	Yes	String	User ID.
repository_uuid	Yes	String	Repository UUID returned by the CreateRepository API.

Request Parameters

Table 4-353 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-354 Request body parameters

Parameter	Mandatory	Type	Description
role	Yes	Integer	Repository member permission: 20 : Read-only member. 30 : Common member. 40 : Administrator. Enumerated values: <ul style="list-style-type: none">• 20• 30• 40

Response Parameters

Status code: 200

Table 4-355 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Object	Response result.
status	String	Response status.

Table 4-356 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
PUT https://{endpoint}/v1/repositories/{repository_uuid}/members/{member_id}
{
  "role" : "40"
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : {},
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.6.4 Deleting a Repository Member

Function

This API is used to delete a repository member.

URI

DELETE /v1/repositories/{repository_uuid}/members/{member_id}

Table 4-357 Path parameters

Parameter	Mandatory	Type	Description
member_id	Yes	String	Repository member ID.
repository_uuid	Yes	String	Repository UUID returned by the CreateRepository API.

Request Parameters

Table 4-358 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-359 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Object	Response result.
status	String	Response status.

Table 4-360 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
DELETE https://{endpoint}/v1/repositories/{repository_uuid}/members/{member_id}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : {},  
  "status" : "success"  
}
```

Status Codes

Status Codes	Description
200	OK

Error Codes

See [Error Codes](#).

4.7 Commit

4.7.1 Querying a Commit Message of a Repository

Function

This API is used to obtain a commit message by the repository short ID. The list of all commits in a path can be queried by the file path.

URI

```
GET /v2/projects/{repo_id}/repository/commits
```

Table 4-361 Path parameters

Parameter	Mandatory	Type	Description
repo_id	Yes	Integer	Explanation: Repository short ID. Constraints: Mandatory Range: 0-2147483647 Default value: None

Table 4-362 Query Parameters

Parameter	Mandatory	Type	Description
ref_name	No	String	Explanation: Branch or tag name of a repository. If this parameter is left blank, the default branch is queried. Constraints: None Range: Minimum length: 1 Maximum length: 200 Default value: Default branch.
since	No	String	Explanation: Date after which the commit operation is performed or on the current day. The format is YYYY-MM-DDTHH:MM:SSZ. Constraints: None Range: None Default value: None

Parameter	Mandatory	Type	Description
until	No	String	Explanation: Date after which the commit operation is performed or on the current day. The format is YYYY-MM-DDTHH:MM:SSZ. Constraints: None Range: None Default value: None
path	No	String	Explanation: File path. Constraints: None Range: None Default value: None
all	No	Boolean	Explanation: Whether to search for each commit in a repository. Constraints: None Range: None Default value: None
with_stats	No	Boolean	Explanation: Whether statistics about each commit are added to the response. Constraints: None Range: None Default value: None

Parameter	Mandatory	Type	Description
page	No	Integer	Explanation: Page index. Constraints: None Range: Minimum value: 1 Maximum value: 2147483647 Default value: 1
per_page	No	Integer	Explanation: Record number on each page. Constraints: None Range: Minimum value: 1 Maximum value: 100 Default value: 100

Request Parameters

Table 4-363 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-364 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	Array of CommitInfo objects	Explanation: Response result.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-365 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.
message	String	Explanation: Error message. Range: None

Table 4-366 CommitInfo

Parameter	Type	Description
id	String	Explanation: SHA ID of a commit.
short_id	String	Explanation: Short SHA ID of a commit.
title	String	Explanation: Commit title.

Parameter	Type	Description
author_name	String	Explanation: Author.
author_email	String	Explanation: Author email.
committer_name	String	Explanation: Committer.
committer_email	String	Explanation: Committer email.
created_at	String	Explanation: Creation time.
message	String	Explanation: Commit message.
parent_ids	Array of strings	Explanation: Parent commit ID.
committed_date	String	Explanation: Commit time.
authored_date	String	Explanation: Author commit time.

Example Requests

```
GET https://{endpoint}/v2/projects/859341/repository/commits
```

Example Responses

Status code: 200

OK

```
{
  "result": [ {
    "id": "85a0a9d5c6e43bc9c3e443ac01f789e24eeef02b",
    "title": "some commit message",
    "message": "some commit message",
    "short_id": "85a0a9d5",
    "author_name": "repo",
    "author_email": null,
    "committer_name": "repo",
    "committer_email": null,
    "created_at": "2021-09-26T03:44:51.000Z",
    "parent_ids": [ "5c114bb316dff4d4a046e09a5c44c816f2433140" ],
    "committed_date": "2021-09-26T03:44:51.000Z",
    "authored_date": null
  }, {
    "id": "5c114bb316dff4d4a046e09a5c44c816f2433140",
    "title": " Update README.md",
```

```
"message" : "Update README.md",
"short_id" : "5c114bb3",
"author_name" : "repo",
"author_email" : null,
"committer_name" : "repo",
"committer_email" : null,
"created_at" : "2021-08-26T12:02:58.000Z",
"parent_ids" : [ "646fc72bd87eb02e1e84bf3b82179c7f6d22c2c2" ],
"committed_date" : "2021-08-26T12:02:58.000Z",
"authored_date" : null
}],
"status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.7.2 Creating a Commit

Function

This API is used to commit multiple files in different directories at a time. If the directory does not exist, the system automatically creates a directory. The forcible overwrite option is supported. When the forcible overwrite flag is set to **true**, the conflict is ignored and the configuration is forcibly committed.

URI

POST /v2/projects/{repo_id}/repository/commits

Table 4-367 Path parameters

Parameter	Mandatory	Type	Description
repo_id	Yes	Integer	Explanation: Repository short ID. Constraints: Mandatory Range: 0-2147483647 Default value: None

Request Parameters

Table 4-368 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-369 Request body parameters

Parameter	Mandatory	Type	Description
branch	Yes	String	Explanation: Target branch. Constraints: Mandatory Range: Minimum length: 1 Maximum length: 200 Default value: None
commit_message	Yes	String	Explanation: Commit message. Constraints: Mandatory Range: Minimum length: 0 characters Maximum length: 2,000 characters Default value: None

Parameter	Mandatory	Type	Description
start_branch	No	String	Explanation: Name of the new branch. Constraints: None Range: Minimum length: 1 Maximum length: 200 Default value: None
actions	Yes	Array of CommitAction objects	Explanation: Commit processing list. Constraints: None Range: Minimum length: 1 Maximum length: 100 characters Default value: None
author_email	No	String	Explanation: Committer email address.
author_name	No	String	Explanation: Committer name
stats	No	Boolean	Explanation: Whether to include commit statistics. The default value is true .
force	No	Boolean	Explanation: Whether to overwrite the target branch. When the value is true , overwrite the target branch with a new commit based on start_branch.

Table 4-370 CommitAction

Parameter	Mandatory	Type	Description
action	Yes	String	Explanation: Operations to be performed: create, delete, move, update, and chmod. Constraints: Mandatory Range: create, delete, move, update, chmod Default value: None
file_path	Yes	String	Explanation: Complete path of the file. For example, lib/class.rb . Constraints: Mandatory Range: None Default value: None
previous_path	No	String	Explanation: Original full path of the file to be moved. For example, lib/class1.rb . This parameter is valid only when the move operation is performed. Constraints: None Range: None Default value: None

Parameter	Mandatory	Type	Description
content	No	String	Explanation: File content. This parameter is mandatory for the create and update operations. A move operation that does not specify content retains the existing file content, and any other value of the content overwrites the file content. Constraints: None Range: None Default value: None
encoding	No	String	Explanation: File encoding: text and base64 . The default value is text . Constraints: None Range: None Default value: None
last_commit_id	No	String	Explanation: Last known commit ID. This parameter is valid only when the update, move, or delete operation is performed. Constraints: None Range: None Default value: None

Parameter	Mandatory	Type	Description
execute_filemode	No	Boolean	Explanation: Enable or disable the execution mode of a file. This parameter is valid only when the chmod operation is executed. Constraints: None Range: None Default value: None

Response Parameters

Status code: 200

Table 4-371 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	CreateCommitResponseBody object	Explanation: Response result.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-372 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.

Parameter	Type	Description
message	String	Explanation: Error message. Range: None

Table 4-373 CreateCommitResponseBody

Parameter	Type	Description
id	String	Explanation: SHA ID of a commit.
short_id	String	Explanation: Short SHA ID of a commit.
title	String	Explanation: Commit title.
author_name	String	Explanation: Author.
author_email	String	Explanation: Author email.
committer_name	String	Explanation: Committer.
committer_email	String	Explanation: Committer email.
created_at	String	Explanation: Creation time.
message	String	Explanation: Commit message.
parent_ids	Array of strings	Explanation: Parent commit ID.
committed_date	String	Explanation: Commit time.
authored_date	String	Explanation: Author commit time.
stats	stats object	Explanation: Statistics.

Table 4-374 stats

Parameter	Type	Description
additions	Integer	Explanation: Number of lines added in changes.
deletions	Integer	Explanation: Number of lines deleted in changes.
total	Integer	Explanation: Total number of changed lines.

Example Requests

```
POST https://{endpoint}/v2/projects/859341/repository/commits
```

```
{
  "branch": "master",
  "commit_message": "some commit message",
  "actions": [ {
    "action": "create",
    "file_path": "test001.txt",
    "content": "some content"
  } ]
}
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "id": "85a0a9d5c6e43bc9c3e443ac01f789e24eeef02b",
    "title": "some commit message",
    "message": "some commit message",
    "short_id": "85a0a9d5",
    "author_name": "repo",
    "author_email": null,
    "committer_name": "repo",
    "committer_email": null,
    "created_at": "2021-09-26T03:44:51.000Z",
    "parent_ids": [ "5c114bb316dff4d4a046e09a5c44c816f2433140" ],
    "committed_date": "2021-09-26T03:44:51.000Z",
    "authored_date": null,
    "stats": {
      "additions": 1,
      "deletions": 0,
      "total": 1
    }
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.7.3 Querying a Specific Commit of a Repository

Function

This API is used to obtain a specific commit by commit ID, branch name, or tag name.

URI

GET /v2/projects/{repo_id}/repository/commits/{sha}

Table 4-375 Path parameters

Parameter	Mandatory	Type	Description
repo_id	Yes	Integer	Repository short ID.
sha	Yes	String	Commit ID, which is the branch or tag name of the repository.

Table 4-376 Query Parameters

Parameter	Mandatory	Type	Description
stats	No	Boolean	It includes commit statistics. The default value is true .

Request Parameters

Table 4-377 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200**Table 4-378** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	SpecificCommitInfo object	Response result.
status	String	Response status.

Table 4-379 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-380 SpecificCommitInfo

Parameter	Type	Description
id	String	SHA ID of a commit.
short_id	String	Short SHA ID of a commit.
title	String	Commit title.
author_name	String	Author.

Parameter	Type	Description
author_email	String	Author email.
committer_name	String	Committer.
committer_email	String	Committer email.
created_at	String	Creation time.
message	String	Commit message.
parent_ids	Array of strings	Parent commit ID.
committed_date	String	Commit time.
authored_date	String	Author commit time.
stats	stats object	Number of changed lines.
last_pipeline	last_pipeline object	Pipeline information.

Table 4-381 stats

Parameter	Type	Description
additions	Integer	Number of lines added in changes.
deletions	Integer	Number of lines deleted in changes.
total	Integer	Total number of changed lines.

Table 4-382 last_pipeline

Parameter	Type	Description
id	Integer	Pipeline ID.
sha	String	SHA ID of a commit.
ref	String	Branch name.
status	String	Pipeline status.
web_url	String	Pipeline URL.

Example Requests

```
GET https://{endpoint}/v2/projects/859341/repository/commits/master
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "id": "85a0a9d5c6e43bc9c3e443ac01f789e24eeef02b",
    "title": "some commit message",
    "message": "some commit message",
    "short_id": "85a0a9d5",
    "author_name": "repo",
    "author_email": null,
    "committer_name": "repo",
    "committer_email": null,
    "created_at": "2021-09-26T03:44:51.000Z",
    "parent_ids": [ "5c114bb316dff4d4a046e09a5c44c816f2433140" ],
    "committed_date": "2021-09-26T03:44:51.000Z",
    "authored_date": null,
    "stats": {
      "additions": 1,
      "deletions": 0,
      "total": 1
    },
    "last_pipeline": {
      "id": 292811,
      "sha": "2202af08836f0afd762d1b151d15ac510b974bdf",
      "ref": "master",
      "status": "running",
      "web_url": "https://test.com/Pipeline_Beta_sdc00001/202107171926/pipelines/292811"
    }
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.7.4 Querying the Commit Difference Information of a Repository

Function

This API is used to query commit difference information by commit ID.

URI

GET /v2/projects/{repo_id}/repository/commits/{sha}/diff

Table 4-383 Path parameters

Parameter	Mandatory	Type	Description
repo_id	Yes	Integer	Explanation: Repository short ID. Constraints: Mandatory Range: 0-2147483647 Default value: None
sha	Yes	String	Explanation: Commit ID, which is the branch or tag name of the repository. Constraints: Mandatory Range: Minimum length: 40 characters Maximum length: 40 characters Default value: None

Request Parameters

Table 4-384 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200**Table 4-385** Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	Array of DiffCommitInfo objects	Explanation: Response result.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-386 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.
message	String	Explanation: Error message. Range: None

Table 4-387 DiffCommitInfo

Parameter	Type	Description
old_path	String	Explanation: Old file path.
new_path	String	Explanation: New file path.
a_mode	String	Explanation: Old file mode.
b_mode	String	Explanation: New file mode.
new_file	Boolean	Explanation: Whether to add files during the modification.
renamed_file	Boolean	Explanation: Whether to rename a file during the modification.
deleted_file	Boolean	Explanation: Whether to delete files during the modification.
diff	Boolean	Difference information.

Example Requests

```
GET https://{endpoint}/v2/projects/859341/repository/commits/master/diff
```

Example Responses

Status code: 200

OK

```
{
  "result": [ {
    "diff": "@@ -1,4 +1,7 @@\ny_mr_0721\n+\n+[CloudIDE Executed successfully](./image/screenshot.PNG)
\n+\n edwwd\n # css \n **hhrh**",
    "old_path": "README.md",
    "new_path": "README.md",
    "a_mode": "100644",
    "b_mode": "100644",
    "new_file": false,
    "renamed_file": false,
    "deleted_file": false
  } ],
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.8 File

4.8.1 Querying a Files in a Repository

Function

This API is used to obtain information about a file in a repository, such as the name, size, and content. Note that the file content is encoded using Base64.

URI

GET /v2/projects/{repo_id}/repository/files

Table 4-388 Path parameters

Parameter	Mandatory	Type	Description
repo_id	Yes	Integer	Repository short ID.

Table 4-389 Query Parameters

Parameter	Mandatory	Type	Description
file_path	Yes	String	Complete path of the file.
ref	Yes	String	Commit ID, which is the branch or tag name of the repository.

Request Parameters

Table 4-390 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-391 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	FileContentInfo object	File details.
status	String	Response status.

Table 4-392 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-393 FileContentInfo

Parameter	Type	Description
file_name	String	File name.
file_path	String	File path.
size	Integer	File size.
encoding	String	File encoding.
content_sha256	String	SHA256-encoded file content.
ref	String	Branch name.
blob_id	String	blob sha
commit_id	String	SHA ID of a commit.
last_commit_id	String	SHA ID of the last commit.
content	String	Base64-encoded file content.

Example Requests

```
GET https://{endpoint}/v2/projects/859341/repository/files?README.md&ref=master
```

Example Responses

Status code: 200

OK

```
{
  "result" : {
    "size" : {
      "size" : 9,
      "encoding" : "base64",
      "ref" : "master",
      "content" : "NDU0NTQ1NDQ1",
      "file_name" : "README.md",
      "file_path" : "README.md",
      "content_sha256" : "e16f4f6c41a79d120484774a625bea8a3c3dcb655aa7c7e793ac48639dc63944",
      "blob_id" : "3325fa3142fd66fedc8c3a5218b417f561e0ea2f",
      "commit_id" : "a772945ec2765e322cc83e0f467f394effa22cf3",
      "last_commit_id" : "a772945ec2765e322cc83e0f467f394effa22cf3"
    },
    "status" : "success"
  }
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.9 User

4.9.1 Verifying HTTPS Account and Password

Function

This API is used to check whether the username and password entered when you upload or download code using HTTPS are valid.

URI

POST /v2/user/{iam_user_uuid}/validate-https-info

Table 4-394 Path parameters

Parameter	Mandatory	Type	Description
iam_user_uuid	Yes	String	Explanation: iamId Range: 32 digits and letters.

Request Parameters

Table 4-395 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-396 Request body parameters

Parameter	Mandatory	Type	Description
pwd	Yes	String	Explanation: HTTPS password. Constraints: 8–32 characters. The password must contain at least three types of the following characters: digits, uppercase letters, lowercase letters, and special characters. It cannot be the same as the username or the username spelled backwards.

Response Parameters

Status code: 200

Table 4-397 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error. Range: None
result	String	Explanation: Response result. Range: verificationPassed: The password is correct.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-398 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">• CH.080002• CH.010112• CH.010008
message	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">• Incorrect password format.• User does not exist.• Invalid password.

Example Requests

```
POST https://{endpoint}/v2/user/{iam_user_uuid}/validate-https-info
{
  "pwd" : "XXX"
}
```

Example Responses

Status code: 200

OK

```
{
  "result" : "verificationPassed",
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.10 Webhook

4.10.1 Querying a Webhook of a Specified Repository

Function

This API is used to obtain a webhook of a specified repository.

URI

GET /v1/repositories/{group_name}/{repository_name}/hooks

Table 4-399 Path parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Explanation: Project ID (the segment between the domain name and repository name in a clone address. Example: 2bc940921d964b86951950f5de1axxxx in git@repo.alpha.devcloud.intest.com:2bc940921d964b86951950f5de1axxxx/testword.git). Constraints: None Range: 32 digits and letters. Default value: None
repository_name	Yes	String	Explanation: Repository name. Constraints: None Range: 2–255 characters, including letters, digits, underscores (_), hyphens (-), periods (.). Default value: None

Table 4-400 Query parameters

Parameter	Mandatory	Type	Description
hook_id	No	String	Explanation: Webhook ID. Constraints: None Range: 0-2147483647 Default value: None

Request Parameters

Table 4-401 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1-100,000 characters. Default value: None

Response Parameters

Status code: 200

Table 4-402 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error. Range: None

Parameter	Type	Description
result	RepoListHook object	Explanation: Response result. Range: None
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-403 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">• CH.010117: The specified repository does not exist. Check the request parameters.• CH.051020: Failed to query the repository webhook. Check the webhook ID.
message	String	Explanation: Error message returned when the API fails to be called.

Table 4-404 RepoListHook

Parameter	Type	Description
hooks	Array of RepoHook objects	Repository webhook list.

Table 4-405 RepoHook

Parameter	Type	Description
id	Integer	Webhook ID.
project_id	Integer	Repository ID.

Parameter	Type	Description
created_at	String	Time when the webhook was created.
enable_ssl_verification	Boolean	Whether to use SSL authentication.
push_events	Boolean	Whether to trigger push_events.
tag_push_events	Boolean	Whether to trigger tag_push_events.
repository_update_events	Boolean	Whether to trigger repository_update_events.
merge_requests_events	Boolean	Whether to trigger merge_requests_events.
issues_events	Boolean	Whether to trigger issues_events.
note_events	Boolean	Whether to trigger note_events.
pipeline_events	Boolean	Whether to trigger pipeline_events.
wiki_page_events	Boolean	Whether to trigger wiki_page_events.

Example Requests

```
GET https://{endpoint}/v1/repositories/{group_name}/{repository_name}/hooks
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "hooks": [ {
      "id": 2111600786,
      "project_id": 2111615967,
      "created_at": "2021-11-09 16:35:15",
      "enable_ssl_verification": false,
      "push_events": true,
      "tag_push_events": false,
      "repository_update_events": false,
      "merge_requests_events": false,
      "issues_events": false,
      "note_events": false,
      "pipeline_events": false,
      "wiki_page_events": false
    } ]
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.10.2 Adding a Webhook to a Specified Repository

Function

This API is used to add a webhook for a specified repository.

URI

POST /v1/repositories/{group_name}/{repository_name}/hooks

Table 4-406 Path parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Repository group name (the segment between the domain name and repository name in a clone address. Example: Demo00228 in git@repo.alpha.devcloud.intest.com:Demo00228/testword.git).
repository_name	Yes	String	Repository name.

Request Parameters

Table 4-407 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Table 4-408 Request body parameters

Parameter	Mandatory	Type	Description
hook_url	Yes	String	Trigger URL.
service	Yes	String	Event source.
token	No	String	Security token.
hook_events	Yes	Array of strings	Trigger events.

Response Parameters

Status code: 200

Table 4-409 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	RepoHook object	Response result.
status	String	Response status.

Table 4-410 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-411 RepoHook

Parameter	Type	Description
build_events	Boolean	Whether to trigger build_events.
created_at	String	Repository statistics creation time.
enable_ssl_verification	Boolean	Whether to use SSL authentication.
id	Integer	Hook ID.

Parameter	Type	Description
issues_events	Boolean	Whether to trigger issues_events.
merge_requests_events	Boolean	Whether to trigger merge_requests_events.
note_events	Boolean	Whether to trigger note_events.
pipeline_events	Boolean	Whether to trigger pipeline_events.
project_id	Integer	Repository ID.
push_events	Boolean	Whether to trigger push_events.
repository_update_events	Boolean	Whether to trigger repository_update_events.
tag_push_events	Boolean	Whether to trigger tag_push_events.
wiki_page_events	Boolean	Whether to trigger wiki_page_events.

Example Requests

```
POST https://{endpoint}/v1/repositories/{group_name}/{repository_name}/hooks
{
  "service": 11,
  "token": "test",
  "hook_url": "https://alpha.devcloud.intest.com/",
  "hook_events": [ "push_events" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "id": 5609,
    "project_id": 453489,
    "created_at": "2019-10-23 17:29:56",
    "enable_ssl_verification": false,
    "push_events": true,
    "tag_push_events": false,
    "repository_update_events": false,
    "merge_requests_events": false,
    "issues_events": false,
    "note_events": false,
    "pipeline_events": false,
    "wiki_page_events": false,
    "build_events": null
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.10.3 Deleting a Webhook of a Specified Repository

Function

This API is used to delete a webhook of a specified repository.

URI

DELETE /v1/repositories/{group_name}/{repository_name}/hooks/{hook_id}

Table 4-412 Path parameters

Parameter	Mandatory	Type	Description
group_name	Yes	String	Repository group name (the segment between the domain name and repository name in a clone address. Example: Demo00228 in git@repo.alpha.devcloud.intest.com:Demo00228/testword.git).
hook_id	Yes	Integer	ID of a hook to be deleted from a specified repository.
repository_name	Yes	String	Repository name.

Request Parameters

Table 4-413 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-414 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Object	Response result.
status	String	Response status.

Table 4-415 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
null
DELETE https://{endpoint}/v1/repositories/{group_name}/{repository_name}/hooks/{hook_id}
```

Example Responses

Status code: 200

OK

```
{
  "result" : "",
  "status" : "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.11 Project

4.11.1 Obtaining the List of Repositories that Can be Set to Public under a Project

Function

This API is used to obtain the list of repositories that can be set to public under a project.

URI

GET /v2/projects/{project_uuid}/repositories/template-status

Table 4-416 Path parameters

Parameter	Mandatory	Type	Description
project_uuid	Yes	String	Project ID. For details, see Obtaining a Project ID .

Table 4-417 Query parameters

Parameter	Mandatory	Type	Description
page_no	No	Integer	Page number.
page_size	No	Integer	Number of data records on each page.

Request Parameters

Table 4-418 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200**Table 4-419** Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	TemplateListInfo object	Response result.
status	String	Response status.

Table 4-420 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-421 TemplateListInfo

Parameter	Type	Description
repos	Array of DevstarRepoInfo objects	Repository list.
total_count	Integer	Total number of repositories.

Table 4-422 DevstarRepoInfo

Parameter	Type	Description
uuid	String	Repository UUID.
repo_id	String	Repository ID.
repo_name	String	Repository name.
ssh_url	String	Repository SSH address.
code_url	String	Repository HTTPS address.
detail_url	String	Repository preview address.

Example Requests

```
GET https://{endpoint}/v2/projects/{project_uuid}/repositories/template-status
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "repos": [ {
      "uuid": "36f532939c4b4e2191c10f5353ccf34c",
      "repo_id": 487773,
      "repo_name": "DDDDDDDD",
      "ssh_url": "git@repo.alpha.devcloud.inhuawei.com:CHEN_TEST00001/DDDDDDDD.git",
      "code_url": "https://repo.alpha.devcloud.inhuawei.com/CHEN_TEST00001/DDDDDDDD.git",
      "detail_url": "https://alpha.devcloud.inhuawei.com/repo/487773/home"
    } ],
    "total_count": 100
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.11.2 Obtaining Information About All Repositories in a Project

Function

This API is used to obtain the repository list. Fuzzy query is supported: If the *project_id* is not specified, fuzzy search by repository name or project name is supported. Otherwise, only fuzzy search by repository name is supported.

URI

GET /v1/projects/{project_uuid}/repositories

Table 4-423 Path parameters

Parameter	Mandatory	Type	Description
project_uuid	Yes	String	Project ID. For details, see Obtaining a Project ID .

Table 4-424 Query parameters

Parameter	Mandatory	Type	Description
page_index	No	Integer	Page index, starting from 1.
page_size	No	Integer	Record number on each page.
search	No	String	Search keyword.

Request Parameters

Table 4-425 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-426 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	RepoListInfo object	Response result.
status	String	Response status.

Table 4-427 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Table 4-428 RepoListInfo

Parameter	Type	Description
repositories	Array of RepoInfo objects	Repository list.
total	Integer	Total number of repositories.

Table 4-429 RepoInfo

Parameter	Type	Description
createAt	String	Creation time.
groupName	String	Repository group name (the segment between the domain name and repository name in a clone address. Example: Demo00228 in git@repo.alpha.devcloud.inhuawei.com:Demo00228/testword.git).
httpUrl	String	HTTPS URL.
id	String	Repository UUID returned by the CreateRepository API. Minimum length: 32 Maximum length: 32

Parameter	Type	Description
name	String	Repository name. Minimum length: 2 Maximum length: 128
projectId	String	Project ID. For details, see Obtaining a Project ID . Minimum length: 32 Maximum length: 32
projectIsDelete	String	Whether the project is deleted.
repold	String	Repository primary key ID. Minimum length: 1 Maximum length: 40
sshUrl	String	SSH URL.
visibilityLevel	Integer	Visibility. 0 : Private. 20 : Public.
webUrl	String	Web URL access path.

Example Requests

```
GET https://{endpoint}/v1/projects/{project_uuid}/repositories
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "total": 1,
    "repositories": [ {
      "id": "d0457f74cc5b43d989ded7248f71b4e5",
      "repold": "468480",
      "name": "CreatRepository_2qD5i",
      "sshUrl": "git@repo.alpha.devcloud.inhuawei.com:Demo00228/CreatRepository_2qD5i.git",
      "httpUrl": "https://repo.alpha.devcloud.inhuawei.com/Demo00228/CreatRepository_2qD5i.git",
      "groupName": "Demo00228",
      "webUrl": "https://alpha.devcloud.inhuawei.com/repo/468480/home",
      "visibilityLevel": 0,
      "createAt": "2019-10-15 09:40:26",
      "projectId": "4838955a48e2492bbe44b31bc4c272f6",
      "projectIsDelete": "false"
    } ],
    "status": "success"
  }
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.11.3 Verifying a Repository Name of a Specified Project

Function

This API is used to check whether the repo name exists in the project and is usually invoked for verification before a repo is created.

URI

GET /v1/projects/{project_uuid}/repositories/validation/{repository_name}

Table 4-430 Path parameters

Parameter	Mandatory	Type	Description
project_uuid	Yes	String	Project ID. For details, see Obtaining a Project ID .
repository_name	Yes	String	Repository name.

Request Parameters

Table 4-431 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 4-432 Response body parameters

Parameter	Type	Description
error	Error object	Response error.
result	Boolean	Explanation Check whether the repo exists. Range: <ul style="list-style-type: none">• true: The repo does not exist and the name is available.• flase: The repo exists, and the name cannot be used.
status	String	Response status.

Table 4-433 Error

Parameter	Type	Description
code	String	Error code.
message	String	Error message.

Example Requests

```
GET https://{endpoint}/v1/projects/{project_uuid}/repositories/validation/{repository_name}
```

Example Responses

Status code: 200

OK

```
{  
  "result" : true,  
  "status" : "success"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.12 Repository Management (V2)

4.12.1 Creating a Branch

Function

This API is used to create a branch in a specified repository based on the repository ID.

URI

POST /v2/repositories/{repository_id}/branches

Table 4-434 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Explanation: Repository short ID. Constraints: Mandatory Range: 0-2147483647 Default value: None

Request Parameters

Table 4-435 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the IAM API used to obtain a user token. The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-436 Request body parameters

Parameter	Mandatory	Type	Description
branch_name	Yes	String	Explanation: Branch name. Constraints: Mandatory Range: Minimum length: 1 Maximum length: 200 Default value: None
ref	Yes	String	Explanation: Source branch name. Constraints: Mandatory Range: Minimum length: 1 Maximum length: 200 Default value: None

Response Parameters

Status code: 200

Table 4-437 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	AddProtectResponse object	Explanation: Response result.
status	String	Explanation: Response status of the API. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-438 Error

Parameter	Type	Description
code	String	Explanation: Error code. Range: Max. 100 characters in the error code format.
message	String	Explanation: Error message. Range: None

Table 4-439 AddProtectResponse

Parameter	Type	Description
name	String	Explanation: Branch name.
commit	CommitRepoV2 object	Explanation: Commit message.
protected	Boolean	Explanation: Whether to protect it.

Parameter	Type	Description
developers_can_push	Boolean	Explanation: Whether a developer can commit.
developers_can_merge	Boolean	Explanation: Whether a developer can merge.
master_can_push	Boolean	Explanation: Whether an administrator can commit.
master_can_merge	Boolean	Explanation: Whether an administrator can merge.
no_one_can_push	Boolean	Explanation: No one can commit.
no_one_can_merge	Boolean	Explanation: No one can merge.
in_an_opened_merge_request	Boolean	Explanation: Whether it is in an open MR.

Table 4-440 CommitRepoV2

Parameter	Type	Description
id	String	Explanation: SHA ID of a commit.
short_id	String	Explanation: Short SHA ID of a commit.
created_at	String	Explanation: Creation time.
title	String	Explanation: Commit title.
parent_ids	Array of strings	Explanation: Parent commit ID.
message	String	Explanation: Commit message.
author_name	String	Explanation: Author.

Parameter	Type	Description
committer_name	String	Explanation: Committer.
committed_date	String	Explanation: Commit time.

Example Requests

```
{
  "ref": "master",
  "branch_name": "test"
}
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "name": "master",
    "commit": {
      "id": "3b68902cf0eb7de3d5c8757e4a990bc3fe0af349",
      "short_id": "3b68902c",
      "title": "Create a File",
      "created_at": "2022-03-08T03:14:39.000Z",
      "parent_ids": [ "08618c900a4048aae7e4cd88913d3d521eae02eb" ],
      "message": "Create a file",
      "author_name": "repo",
      "committer_name": "repo",
      "committed_date": "2022-03-08T03:14:39.000Z"
    },
    "protected": true,
    "developers_can_push": false,
    "developers_can_merge": false,
    "master_can_push": false,
    "master_can_merge": false,
    "no_one_can_push": true,
    "no_one_can_merge": true,
    "in_an_opened_merge_request": false
  },
  "status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

4.13 Review

4.13.1 Creating an MR Review

Function

This API is used to create an MR review comment.

URI

POST /v2/repositories/{repository_id}/merge_requests/{merge_request_iid}/discussions

Table 4-441 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Explanation: Repository ID. Constraints: Mandatory Range: Minimum value: 1 Maximum value: 2147483647
merge_request_iid	Yes	Integer	Explanation: MR IID (MR sequence number in the repository). Constraints: Mandatory Range: Minimum value: 1 Maximum value: 2147483647

Request Parameters

Table 4-442 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-443 Request body parameters

Parameter	Mandatory	Type	Description
body	Yes	String	Explanation: Review comment. Constraints: Mandatory Range: Maximum length: 8,000 characters. Characters: Unicode \u0000 to \uffff. Special characters, such as emojis and uncommon characters, are not supported. Blank: The value cannot be null, an empty string, or only spaces.

Parameter	Mandatory	Type	Description
severity	No	String	Explanation: Severity. Non-suggestion reviews cannot be resolved by the assignee, MR creator, or committer. Range: Not passed or not an enumerated value. The default value is suggestion . <ul style="list-style-type: none">• suggestion• minor• major• fatal
assignee_id	No	String	Explanation: Assigner ID. The value can be a user ID or username. Range: Max. 255 characters.
review_categories	No	String	Explanation: Review comment type. Constraints: Only the configured types can be used. To configure a review type, choose Settings > Policy Settings > Review Comments .
review_modules	No	String	Explanation: Review comment module. Constraints: Only the configured modules can be used. To configure a review type, choose Settings > Policy Settings > Review Comments .
proposer_id	No	String	Explanation: Reviewer ID. The value can be a user ID or username. Range: Max. 255 characters.

Parameter	Mandatory	Type	Description
position	No	PositionDto object	Explanation: Code location information to associate the comment with. Range: None
lineTypes	No	String	Explanation: Mode in which the comment is provided. Range: <ul style="list-style-type: none">● new: On the right of the file comparison result.● old: On the left of the file comparison result.

Table 4-444 PositionDto

Parameter	Mandatory	Type	Description
base_sha	No	String	Explanation: Base commit node of the source branch. Range: 40 digits and letters.
start_sha	No	String	Explanation: Latest commit node of the target branch. Range: 40 digits and letters.
head_sha	No	String	Explanation: Latest commit node of the source branch. Range: 40 digits and letters.
old_path	No	String	Explanation: Old file path. Range: None

Parameter	Mandatory	Type	Description
new_path	No	String	Explanation: New file path. Range: None
position_type	No	String	Explanation: Change type. Range: None Default value: text
old_line	No	Integer	Explanation: Line number before change. If the value is less than or equal to 0 or is null, the line is new and displayed in green on the right for comparison. Range: -1 to 2147483647 or null
new_line	No	Integer	Explanation: New line No. If the value is less than or equal to 0 or is null, the line is deleted and displayed in red on the left for comparison. Range: -1 to 2147483647 or null

Response Parameters

Status code: 200

Table 4-445 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.

Parameter	Type	Description
result	MergeRequestDiscussionDto object	Explanation: Review comment information. Range: None
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-446 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">● CH.10000. The system is busy. Try again later.
message	String	Explanation: Error message returned when the API fails to be called. Range: <ul style="list-style-type: none">● The system is busy. Try again later.

Table 4-447 MergeRequestDiscussionDto

Parameter	Type	Description
id	String	Explanation: ID shared by the main comment and reply, which is generally called discussion_id . Range: 40 digits and letters.

Parameter	Type	Description
individual_note	Boolean	Explanation: Whether the comment is individual and does not need resolution by others. Range: <ul style="list-style-type: none">• true: Yes• false: No
notes	Array of NoteDto objects	Explanation: Main comment and reply list. The first one is the main comment. (This API is used to create a main comment. Therefore, there is only one comment.) Range: None
project_id	Integer	Explanation: Repository ID. Range: Minimum value: 1 Maximum value: 2147483647
noteable_type	String	Explanation: Comment type. Range: <ul style="list-style-type: none">• MergeRequest: Comment for MR (When you select a commit under an MR and add a review comment, the comment is still of the MergeRequest type).• Commit: Comment for code or a specific commit.
commit_id	String	Explanation: Associated commit ID: SHA value of a commit. This field applies when noteable_type is set to Commit . Range: 40 digits and letters.
project_full_path	String	Explanation: Repository path. Range: None

Parameter	Type	Description
a_mode	String	Explanation: Mode of an associated file before the change. If the file is new, the value is 0 . Range: File permissions supported by Git, for example, 100644 , 100755 , 120000 , and 160000 .
b_mode	String	Explanation: Mode of an associated file after the change. If the file is deleted, the value is 0 . Range: File permissions supported by Git, for example, 100644 , 100755 , 120000 , and 160000 .
deleted_file	Boolean	Explanation: Whether an associated file is deleted. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
new_file	Boolean	Explanation: Whether an associated file is new. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
resolved	Boolean	Explanation: Whether the review comment has been resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
archived	Boolean	Explanation: Whether the review comment has been archived. Archived comments cannot be edited, deleted, replied, or resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No

Parameter	Type	Description
review_categories	String	Explanation: Comment type key. The values of review_categories , review_categories_cn , and review_categories_en must match. Range: None
review_categories_cn	String	Explanation: Comment type in Chinese. The values of review_categories and review_categories_cn must match. Range: None
review_categories_en	String	Explanation: Comment type in English. The values of review_categories and review_categories_en must match. Range: None
review_modules	String	Explanation: Review comment module. Range: None
severity	String	Explanation: Review comment severity key. Range: <ul style="list-style-type: none">● suggestion● minor● major● fatal
severity_cn	String	Explanation: Severity in Chinese. Range: <ul style="list-style-type: none">● Suggestion● Minor● Major● Fatal

Parameter	Type	Description
severity_en	String	Explanation: Severity in English. Range: <ul style="list-style-type: none">• Suggestion• Minor• Major• Fatal
assignee	UserBasicDto object	Explanation: Assignee details. Range: None
proposer	UserBasicDto object	Explanation: Proposer details. Range: None
merge_request_version_params	MergeRequestVersionParamsDto object	Explanation: MR version details. Range: None
diff_file	String	Explanation: File path change. Range: None
added_lines	Integer	Explanation: Number of new lines. Range: Minimum value: 0 Maximum value: 2147483647
removed_lines	Integer	Explanation: Number of deleted lines. Range: Minimum value: 0 Maximum value: 2147483647

Table 4-448 NoteDto

Parameter	Type	Description
id	Integer	Explanation: Comment ID, which is not shared by the main comment and replies. Range: Minimum value: 1 Maximum value: 2147483647
type	String	Explanation: Note type. Range: <ul style="list-style-type: none">• DiffNote: A comment that needs to be resolved on the file change page.• MergeRequestNote: A comment that needs to be resolved on the details page.• null: A comment that does not need to be resolved on the details page.
body	String	Explanation: Review comment content. Range: Maximum length: 8,000 characters. Characters: Unicode \u0000 to \uffff. Special characters, such as emojis and uncommon characters, are not supported. Blank: The value cannot be null, an empty string, or only spaces.
attachment	String	Explanation: Attachment. (This field has been discarded.) Range: None
author	UserBasicDto object	Explanation: Author details. Range: None
created_at	String	Explanation: Creation time. Constraints: Format: yyyy-MM-ddTHH:mm:ss.SSS+08:00

Parameter	Type	Description
updated_at	String	Explanation: Update time. Constraints: Format: yyyy-MM-ddTHH:mm:ss.SSS+08:00
system	Boolean	Explanation: Whether the comment is generated by the system. Range: <ul style="list-style-type: none">● true: Yes. The comment is created by the system.● false: No. The comment is created by a user.
noteable_id	Integer	Explanation: MR ID. Range: Minimum value: 1 Maximum value: 2147483647
noteable_type	String	Explanation: Comment type. Range: <ul style="list-style-type: none">● MergeRequest: Comment for MR or CR (When you select a commit under an MR or CR and add a review comment, the comment is still of the MergeRequest type).● Commit: Comment for code or a specific commit.
commit_id	String	Explanation: Associated commit ID: SHA value of a commit. This field applies when noteable_type is set to Commit . Range: 40 digits and letters.
resolvable	Boolean	Explanation: Whether the comment needs to be resolved. Range: <ul style="list-style-type: none">● true: Yes● false or null: No

Parameter	Type	Description
is_reply	Boolean	Explanation: Whether the comment is a reply. Range: <ul style="list-style-type: none">• true: Yes. The comment is a reply.• false: No. The comment is a main comment.
resolved_by	UserBasicDto object	Explanation: Comment resolver. Range: None
noteable_iid	Integer	Explanation: MR IID, indicating the sequence number of the MR in the repository. Range: Minimum value: 1 Maximum value: 2147483647
discussion_id	String	Explanation: Review comment ID, which is shared by the main comment and replies. Range: 40 digits and letters.
project	String	Explanation: Project path. Range: None
diff_file	String	Explanation: File path change. Range: None
diff	String	Explanation: File content change. Range: None

Parameter	Type	Description
archived	Boolean	Explanation: Whether the review comment has been archived. Archived comments cannot be edited, deleted, replied, or resolved. Range: <ul style="list-style-type: none">● true: Yes● false or null: No
review_categories	String	Explanation: Comment type key. The values of review_categories , review_categories_cn , and review_categories_en must match. Range: None
review_categories_cn	String	Explanation: Comment type in Chinese. The values of review_categories and review_categories_cn must match. Range: None
review_categories_en	String	Explanation: Comment type in English. The values of review_categories and review_categories_en must match. Range: None
review_modules	String	Explanation: Review comment module. Range: None
severity	String	Explanation: Severity. Non-suggestion reviews cannot be resolved by the assignee, MR creator, or committer. Range: <ul style="list-style-type: none">● suggestion● minor● major● fatal

Parameter	Type	Description
severity_cn	String	Explanation: Severity in Chinese. Range: <ul style="list-style-type: none">• Suggestion• Minor• Major• Fatal
severity_en	String	Explanation: Severity in English. Range: <ul style="list-style-type: none">• Suggestion• Minor• Major• Fatal
file_path	String	Explanation: File path. (This field has been discarded.) Range: None
line	String	Explanation: Line number. (This field has been discarded.) Range: None
assignee	UserBasicDto object	Explanation: Assignee details. Range: None
proposer	UserBasicDto object	Explanation: Reviewer details. Range: None
position	PositionDto object	Explanation: Code location information to associate the comment with. Range: None

Parameter	Type	Description
resolved	Boolean	Explanation: Whether the review comment has been resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
is_outdated	Boolean	Explanation: Whether the review comment is for the latest commit. Range: <ul style="list-style-type: none">• true: Yes• false or null: No

Table 4-449 PositionDto

Parameter	Type	Description
base_sha	String	Explanation: Base commit node of the source branch. Range: 40 digits and letters.
start_sha	String	Explanation: Latest commit node of the source branch. Range: 40 digits and letters.
head_sha	String	Explanation: Latest commit node of the target branch. Range: 40 digits and letters.
old_path	String	Explanation: Old file path. Range: None
new_path	String	Explanation: New file path. Range: None

Parameter	Type	Description
position_type	String	Explanation: Change type. Range: None Default value: text
old_line	Integer	Explanation: Line number before change. If the value is less than or equal to 0 or is null, the line is new and displayed in green on the right for comparison. Range: -1 to 2147483647 or null
new_line	Integer	Explanation: New line No. If the value is less than or equal to 0 or is null, the line is deleted and displayed in red on the left for comparison. Range: -1 to 2147483647 or null

Table 4-450 UserBasicDto

Parameter	Type	Description
id	Integer	Explanation: User ID. Range: Minimum value: 1 Maximum value: 2147483647
name	String	Explanation: Name. Range: Max. 255 characters.
username	String	Explanation: Username. Range: Max. 255 characters.

Parameter	Type	Description
state	String	Explanation: Status. Range: Max. 255 characters.
avatar_url	String	Explanation: URL for obtaining the profile picture. Range: None
avatar_path	String	Explanation: Path for obtaining the profile picture. Range: None
email	String	Explanation: Email address. Range: None
name_cn	String	Explanation: Chinese name. Constraints: The value is the same as that of username . This field has been discarded. Range: None
web_url	String	Explanation: Homepage URL. Range: None
nick_name	String	Explanation: Alias. Range: None
tenant_name	String	Explanation: Tenant name. Range: None

Table 4-451 MergeRequestVersionParamsDto

Parameter	Type	Description
diff_id	Integer	Explanation: Each MR version has a unique diff_id . (In this API, the MR version is the latest.) Range: Minimum value: 1 Maximum value: 2147483647
start_sha	String	Explanation: Latest commit node of the target branch. Range: 40 digits and letters.
commit_id	String	Explanation: Associated commit ID: SHA value of a commit. This field applies when noteable_type is set to Commit . Range: 40 digits and letters.

Example Requests

POST https://{endpoint}/v2/repositories/{repository_id}/merge_requests/{merge_request_iid}/discussions

```
{
  "body": "Review comment",
  "lineTypes": "new",
  "position": {
    "base_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
    "start_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
    "head_sha": "53c75fa88dc4e7d0b68d108b7f1ee0a5c4564f44",
    "position_type": "text",
    "new_path": "a.txt",
    "old_path": "a.txt",
    "new_line": 1,
    "old_line": -1
  },
  "assignee_id": 9124,
  "proposer_id": null,
  "severity": "suggestion",
  "review_modules": "Module",
  "review_categories": "Type"
}
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "id": "996f57b8fdd5e62678b16f0ea4f91688405fa72f",
  }
}
```

```
"individual_note": false,
"notes": [
  {
    "id": 2111974336,
    "type": "DiffNote",
    "body": "Review comment",
    "author": {
      "id": 9124,
      "name": "CodeHub_beta_dev",
      "username": "c369c68f1ff84679b5a8ed904d8bff1c",
      "state": "active",
      "avatar_url": "",
      "email": "liujian@example.com",
      "name_cn": "CodeHub_beta_dev",
      "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
      "nick_name": "Alias",
      "tenant_name": "devcloud_codehub_l00314597_01"
    },
    "created_at": "2024-07-29T22:01:37.000+08:00",
    "updated_at": "2024-07-29T22:01:37.000+08:00",
    "system": false,
    "noteable_id": 38517,
    "noteable_type": "MergeRequest",
    "resolvable": true,
    "is_reply": false,
    "noteable_iid": 18,
    "discussion_id": "996f57b8fdd5e62678b16f0ea4f91688405fa72f",
    "project": "sl_test00006/mr_test",
    "diff_file": "a.txt",
    "diff": "@@ -0,0 +1,0 @@\n+1\r\n",
    "archived": false,
    "review_categories": "Type",
    "review_categories_cn": "Type",
    "review_categories_en": "Type",
    "review_modules": "Module",
    "severity": "suggestion",
    "severity_cn": "Suggestion",
    "severity_en": "Suggestion",
    "assignee": {
      "id": 9124,
      "name": "CodeHub_beta_dev",
      "username": "c369c68f1ff84679b5a8ed904d8bff1c",
      "state": "active",
      "avatar_url": "",
      "email": "liujian@example.com",
      "name_cn": "CodeHub_beta_dev",
      "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
      "nick_name": "Alias",
      "tenant_name": "devcloud_codehub_l00314597_01"
    },
    "proposer": {
      "id": 9124,
      "name": "CodeHub_beta_dev",
      "username": "c369c68f1ff84679b5a8ed904d8bff1c",
      "state": "active",
      "avatar_url": "",
      "email": "liujian@example.com",
      "name_cn": "CodeHub_beta_dev",
      "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
      "nick_name": "Alias",
      "tenant_name": "devcloud_codehub_l00314597_01"
    },
    "position": {
      "base_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
      "start_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
      "head_sha": "53c75fa88dc4e7d0b68d108b7f1ee0a5c4564f44",
      "old_path": "a.txt",
      "new_path": "a.txt",
      "position_type": "text",
```

```
        "new_line": 1
      },
      "resolved": false,
      "is_outdated": false
    }
  ],
  "project_id": 2111704470,
  "noteable_type": "MergeRequest",
  "project_full_path": "sll_test00006/mr_test",
  "a_mode": "0",
  "b_mode": "100644",
  "deleted_file": false,
  "new_file": true,
  "resolved": false,
  "archived": false,
  "review_categories": "Type",

  "review_categories_en": "Type",
  "review_modules": "Module",
  "severity": "suggestion",

  "severity_en": "Suggestion",
  "assignee": {
    "id": 9124,
    "name": "CodeHub_beta_dev",
    "username": "c369c68f1ff84679b5a8ed904d8bff1c",
    "state": "active",
    "avatar_url": "",
    "email": "liujian@example.com",
    "name_cn": "CodeHub_beta_dev",
    "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
    "nick_name": "Alias",
    "tenant_name": "devcloud_codehub_l00314597_01"
  },
  "proposer": {
    "id": 9124,
    "name": "CodeHub_beta_dev",
    "username": "c369c68f1ff84679b5a8ed904d8bff1c",
    "state": "active",
    "avatar_url": "",
    "email": "liujian@example.com",
    "name_cn": "CodeHub_beta_dev",
    "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
    "nick_name": "Alias",
    "tenant_name": "devcloud_codehub_l00314597_01"
  },
  "merge_request_version_params": {},
  "diff_file": "@@ -0,0 +1,0 @@\n+1\r\n",
  "added_lines": 2,
  "removed_lines": 0
},
"status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

Status Code	Error Code	Error Message	Description	Measure
400	CH.00401999	'body': The body is out of max length (8000 characters).	The review comment exceeds 8,000 characters.	Reduce the content.
400	CH.00401015	String cannot contain emoticons or uncommon characters	Only Unicode characters from \u0000 to \uffff can be used. Special characters, such as emojis and uncommon characters, are not supported.	Delete the special characters.
405	CH.00406019	The current MR/CR is not allowed to be reviewed after being merged, change the settings to enable this operation	The MR or CR has been merged. No more review comments can be added.	Choose Settings > Policy Settings > Merge Requests , and select Allow code review and comment for merged or closed MRs .
404	CH.00406026	MR/CR extend not found	No additional MR/CR information is found in the database.	Refresh the page and try again.
400	CH.00406029	The current MR/CR is in merging process, can not add new review	The MR/CR is being merged.	Try again later.

4.13.2 Obtaining a Review List

Function

This API is used to obtain a review list.

URI

GET /v2/repositories/{repository_id}/merge_requests/{merge_request_id}/discussions

Table 4-452 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	String	Explanation: Repository ID. Constraints: Mandatory Range: Minimum value: 1 Maximum value: 214748364
merge_request_id	Yes	Integer	Explanation: MR IID (MR sequence number in the repository). Constraints: Mandatory Range: Minimum value: 1 Maximum value: 2147483647

Table 4-453 Query parameters

Parameter	Mandatory	Type	Description
type	No	String	Explanation: Review comment type. Range: <ul style="list-style-type: none">• user: Review comments created by a user.• system: Review comments created by the system.
unresolved	No	String	Explanation: Whether to return unresolved reviews. Range: <ul style="list-style-type: none">• true: Yes• false: No

Parameter	Mandatory	Type	Description
view	No	String	Explanation: Whether to return basic or detailed information. Range: <ul style="list-style-type: none">• basic: Return basic information.• simple: Return detailed information.
author_id	No	String	Explanation: A user ID or username for filtering review comments created by a user. Range: Max. 255 characters.
page	No	Integer	Explanation: Number of the page whose review comments will be returned. Range: Minimum value: 1 Maximum value: 2147483647 Default value: 1
per_page	No	Integer	Explanation: Pagination parameter, which indicates the number of comments displayed on each page. Range: Minimum value: 1 Maximum value: 100 Default value: 20

Request Parameters

None.

Response Parameters

Status code: 200

Table 4-454 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	Array of MergeRequestDiscussion Dto object	Explanation: Review comment information. Range: None
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">• success: The API call is successful.• failed: The API call failed.

Table 4-455 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">• CH.10000. The system is busy. Try again later.
message	String	Explanation: Error message returned when the API fails to be called. Range: <ul style="list-style-type: none">• The system is busy. Try again later.

Table 4-456 MergeRequestDiscussionDto

Parameter	Type	Description
id	String	Explanation: ID shared by the main comment and reply, which is generally called discussion_id . Range: 40 digits and letters.

Parameter	Type	Description
individual_note	Boolean	Explanation: Whether the comment is individual and does not need resolution by others. Range: <ul style="list-style-type: none">• true: Yes• false: No
notes	Array of NoteDto objects	Explanation: Main comment and reply list. The first one is the main comment. (This API is used to create a main comment. Therefore, there is only one comment.) Range: None
project_id	Integer	Explanation: Repository ID. Range: Minimum value: 1 Maximum value: 2147483647
noteable_type	String	Explanation: Comment type. Range: <ul style="list-style-type: none">• MergeRequest: Comment for MR (When you select a commit under an MR and add a review comment, the comment is still of the MergeRequest type).• Commit: Comment for code or a specific commit.
commit_id	String	Explanation: Associated commit ID: SHA value of a commit. This field applies when noteable_type is set to Commit . Range: 40 digits and letters.
project_full_path	String	Explanation: Repository path. Range: None

Parameter	Type	Description
a_mode	String	Explanation: Mode of an associated file before the change. If the file is new, the value is 0 . Range: File permissions supported by Git, for example, 100644 , 100755 , 120000 , and 160000 .
b_mode	String	Explanation: Mode of an associated file after the change. If the file is deleted, the value is 0 . Range: File permissions supported by Git, for example, 100644 , 100755 , 120000 , and 160000 .
deleted_file	Boolean	Explanation: Whether an associated file is deleted. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
new_file	Boolean	Explanation: Whether an associated file is new. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
resolved	Boolean	Explanation: Whether the review comment has been resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
archived	Boolean	Explanation: Whether the review comment has been archived. Archived comments cannot be edited, deleted, replied, or resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No

Parameter	Type	Description
review_categories	String	Explanation: Comment type key. The values of review_categories and review_categories_cn / review_categories_en must match. Range: None
review_categories_cn	String	Explanation: Comment type in Chinese. The values of review_categories and review_categories_cn must match. Range: None
review_categories_en	String	Explanation: Comment type in English. The values of review_categories and review_categories_en must match. Range: None
review_modules	String	Explanation: Review comment module. Range: None
severity	String	Explanation: Review comment severity key. Range: <ul style="list-style-type: none">● suggestion● minor● major● fatal
severity_cn	String	Explanation: Severity in Chinese. Range: <ul style="list-style-type: none">● Suggestion● Minor● Major● Fatal

Parameter	Type	Description
severity_en	String	Explanation: Severity in English. Range: <ul style="list-style-type: none">• Suggestion• Minor• Major• Fatal
assignee	UserBasicDto object	Explanation: Assignee details. Range: None
proposer	UserBasicDto object	Explanation: Reviewer details. Range: None
merge_request_version_params	MergeRequestVersionParamsDto object	Explanation: MR version details. Range: None
diff_file	String	Explanation: File path change. Range: None
added_lines	Integer	Explanation: Number of new lines. Range: Minimum value: 0 Maximum value: 2147483647
removed_lines	Integer	Explanation: Number of deleted lines. Range: Minimum value: 0 Maximum value: 2147483647

Table 4-457 NoteDto

Parameter	Type	Description
id	Integer	Explanation: Comment ID, which is not shared by the main comment and replies. Range: Minimum value: 1 Maximum value: 2147483647
type	String	Explanation: Note type. Range: <ul style="list-style-type: none">• DiffNote: A comment that needs to be resolved on the file change page.• MergeRequestNote: A comment that needs to be resolved on the details page.• null: A comment that does not need to be resolved on the details page.
body	String	Explanation: Review comment content. Range: Maximum length: 8,000 characters. Characters: Unicode \u0000 to \uffff. Special characters, such as emojis and uncommon characters, are not supported. Blank: The value cannot be null, an empty string, or only spaces.
attachment	String	Explanation: Attachment. (This field has been discarded.) Range: None
author	UserBasicDto object	Explanation: Author details. Range: None
created_at	String	Explanation: Creation time. Constraints: Format: yyyy-MM-ddTHH:mm:ss.SSS+08:00

Parameter	Type	Description
updated_at	String	Explanation: Update time. Constraints: Format: yyyy-MM-ddTHH:mm:ss.SSS+08:00
system	Boolean	Explanation: Whether the comment is generated by the system. Range: <ul style="list-style-type: none">● true: Yes. The comment is created by the system.● false: No. The comment is created by a user.
noteable_id	Integer	Explanation: MR ID. Range: Minimum value: 1 Maximum value: 2147483647
noteable_type	String	Explanation: Comment type. Range: <ul style="list-style-type: none">● MergeRequest: Comment for MR or CR (When you select a commit under an MR or CR and add a review comment, the comment is still of the MergeRequest type).● Commit: Comment for code or a specific commit.
commit_id	String	Explanation: Associated commit ID: SHA value of a commit. This field applies when noteable_type is set to Commit . Range: 40 digits and letters.
resolvable	Boolean	Explanation: Whether the comment needs to be resolved. Range: <ul style="list-style-type: none">● true: Yes● false or null: No

Parameter	Type	Description
is_reply	Boolean	Explanation: Whether the comment is a reply. Range: <ul style="list-style-type: none">• true: Yes. The comment is a reply.• false: No. The comment is a main comment.
resolved_by	UserBasicDto object	Explanation: Comment resolver. Range: None
noteable_iid	Integer	Explanation: MR IID, indicating the sequence number of the MR in the repository. Range: Minimum value: 1 Maximum value: 2147483647
discussion_id	String	Explanation: Review comment ID, which is shared by the main comment and replies. Range: 40 digits and letters.
project	String	Explanation: Project path. Range: None
diff_file	String	Explanation: File path change. Range: None
diff	String	Explanation: File content change. Range: None

Parameter	Type	Description
archived	Boolean	Explanation: Whether the review comment has been archived. Archived comments cannot be edited, deleted, replied, or resolved. Range: <ul style="list-style-type: none">● true: Yes● false or null: No
review_categories	String	Explanation: Comment type key. The values of review_categories , review_categories_cn , and review_categories_en must match. Range: None
review_categories_cn	String	Explanation: Comment type in Chinese. The values of review_categories and review_categories_cn must match. Range: None
review_categories_en	String	Explanation: Comment type in English. The values of review_categories and review_categories_en must match. Range: None
review_modules	String	Explanation: Review comment module. Range: None
severity	String	Explanation: Severity. Non-suggestion reviews cannot be resolved by the assignee, MR creator, or committer. Range: <ul style="list-style-type: none">● suggestion● minor● major● fatal

Parameter	Type	Description
severity_cn	String	Explanation: Severity in Chinese. Range: <ul style="list-style-type: none">• Suggestion• Minor• Major• Fatal
severity_en	String	Explanation: Severity in English. Range: <ul style="list-style-type: none">• Suggestion• Minor• Major• Fatal
file_path	String	Explanation: File path. (This field has been discarded.) Range: None
line	String	Explanation: Line number. (This field has been discarded.) Range: None
assignee	UserBasicDto object	Explanation: Assignee details. Range: None
proposer	UserBasicDto object	Explanation: Reviewer details. Range: None
position	PositionDto object	Explanation: Code location information to associate the comment with. Range: None

Parameter	Type	Description
resolved	Boolean	Explanation: Whether the review comment has been resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
is_outdated	Boolean	Explanation: Whether the review comment is for the latest commit. Range: <ul style="list-style-type: none">• true: Yes• false or null: No

Table 4-458 PositionDto

Parameter	Type	Description
base_sha	String	Explanation: Base commit node of the source branch. Range: 40 digits and letters.
start_sha	String	Explanation: Latest commit node of the source branch. Range: 40 digits and letters.
head_sha	String	Explanation: Latest commit node of the target branch. Range: 40 digits and letters.
old_path	String	Explanation: Old file path. Range: None
new_path	String	Explanation: New file path. Range: None

Parameter	Type	Description
position_type	String	Explanation: Change type. Range: None Default value: text
old_line	Integer	Explanation: Line number before change. If the value is less than or equal to 0 or is null, the line is new and displayed in green on the right for comparison. Range: -1 to 2147483647 or null
new_line	Integer	Explanation: New line No. If the value is less than or equal to 0 or is null, the line is deleted and displayed in red on the left for comparison. Range: -1 to 2147483647 or null

Table 4-459 UserBasicDto

Parameter	Type	Description
id	Integer	Explanation: User ID. Range: Minimum value: 1 Maximum value: 2147483647
name	String	Explanation: Name. Range: Max. 255 characters.
username	String	Explanation: Username. Range: Max. 255 characters.

Parameter	Type	Description
state	String	Explanation: Status. Range: Max. 255 characters.
avatar_url	String	Explanation: URL for obtaining the profile picture. Range: None
avatar_path	String	Explanation: Path for obtaining the profile picture. Range: None
email	String	Explanation: Email address. Range: None
name_cn	String	Explanation: Chinese name. Constraints: The value is the same as that of username . This field has been discarded. Range: None
web_url	String	Explanation: Homepage URL. Range: None
nick_name	String	Explanation: Alias. Range: None
tenant_name	String	Explanation: Tenant name. Range: None

Table 4-460 MergeRequestVersionParamsDto

Parameter	Type	Description
diff_id	Integer	Explanation: Each MR version has a unique diff_id . (In this API, the MR version is the latest.) Range: Minimum value: 1 Maximum value: 2147483647
start_sha	String	Explanation: Latest commit node of the target branch. Range: 40 digits and letters.
commit_id	String	Explanation: Associated commit ID: SHA value of a commit. This field applies when noteable_type is set to Commit . Range: 40 digits and letters.

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_id}/merge_requests/{merge_request_iid}/discussions?
type=user&page=1&per_page=20&unresolved=&view=basic
```

Example Responses

Status code: 200

OK

```
{
  "result": [
    {
      "id": "996f57b8fdd5e62678b16f0ea4f91688405fa72f",
      "individual_note": false,
      "notes": [
        {
          "id": 2111974336,
          "type": "DiffNote",
          "body": "Review comment",
          "author": {
            "id": 9124,
            "name": "CodeHub_beta_dev",
            "username": "c369c68f1ff84679b5a8ed904d8bff1c",
            "state": "active",
            "avatar_url": "",
            "email": "liujian@example.com",
            "name_cn": "CodeHub_beta_dev",
            "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
            "nick_name": "Alias",
            "tenant_name": "devcloud_codehub_l00314597_01"
          }
        }
      ]
    }
  ]
}
```

```
"created_at": "2024-07-29T22:01:37.000+08:00",
"updated_at": "2024-07-29T22:01:37.000+08:00",
"system": false,
"resolvable": true,
"is_reply": false,
"discussion_id": "996f57b8fdd5e62678b16f0ea4f91688405fa72f",
"archived": false,
"review_categories": "Type",
"review_categories_cn": "Type",
"review_categories_en": "Type",
"review_modules": "Module",
"severity": "suggestion",
"severity_cn": "Suggestion",
"severity_en": "Suggestion",
"assignee": {
  "id": 9124,
  "name": "CodeHub_beta_dev",
  "username": "c369c68f1ff84679b5a8ed904d8bff1c",
  "state": "active",
  "avatar_url": "",
  "email": "liujian@example.com",
  "name_cn": "CodeHub_beta_dev",
  "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
  "nick_name": "Alias",
  "tenant_name": "devcloud_codehub_l00314597_01"
},
"proposer": {
  "id": 9124,
  "name": "CodeHub_beta_dev",
  "username": "c369c68f1ff84679b5a8ed904d8bff1c",
  "state": "active",
  "avatar_url": "",
  "email": "liujian@example.com",
  "name_cn": "CodeHub_beta_dev",
  "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
  "nick_name": "Alias",
  "tenant_name": "devcloud_codehub_l00314597_01"
},
"position": {
  "base_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
  "start_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
  "head_sha": "53c75fa88dc4e7d0b68d108b7f1ee0a5c4564f44",
  "old_path": "a.txt",
  "new_path": "a.txt",
  "position_type": "text",
  "new_line": 1
},
"resolved": false
}
],
"project_id": 2111704470,
"noteable_type": "MergeRequest",
"project_full_path": "sll_test00006/mr_test",
"a_mode": "0",
"b_mode": "100644",
"deleted_file": false,
"new_file": true,
"resolved": false,
"archived": false,
"review_categories": "Type",
"review_categories_cn": "Type",
"review_categories_en": "Type",
"review_modules": "Module",
"severity": "suggestion",
"severity_cn": "Suggestion",
"severity_en": "Suggestion",
"assignee": {
  "id": 9124,
  "name": "CodeHub_beta_dev",
```



```
    "username": "c369c68f1ff84679b5a8ed904d8bff1c",
    "state": "active",
    "avatar_url": "",
    "email": "liujian@example.com",
    "name_cn": "CodeHub_beta_dev",
    "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
    "nick_name": "Alias",
    "tenant_name": "devcloud_codehub_l00314597_01"
  },
  "proposer": {
    "id": 9124,
    "name": "CodeHub_beta_dev",
    "username": "c369c68f1ff84679b5a8ed904d8bff1c",
    "state": "active",
    "avatar_url": "",
    "email": "liujian@example.com",
    "name_cn": "CodeHub_beta_dev",
    "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
    "nick_name": "Alias",
    "tenant_name": "devcloud_codehub_l00314597_01"
  },
  "merge_request_version_params": {}
},
"status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error codes

Status Code	Error Code	Error Message	Description	Measure
404	CH.00406001	MergeRequest Not Found	MR information is not found.	Refresh the MR page and try again.

4.13.3 Replying to an MR Review

Function

This API is used to reply to an MR review.

URI

POST /v2/repositories/{repository_id}/merge_requests/{merge_request_id}/discussions/{discussion_id}/notes

Table 4-461 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Explanation: Repository ID. Constraints: Mandatory Range: Minimum value: 1 Maximum value: 2147483647
merge_request_id	Yes	Integer	Explanation: MR IID (MR sequence number in the repository). Constraints: Mandatory Range: Minimum value: 1 Maximum value: 2147483647
discussion_id	Yes	String	Comment ID

Request Parameters

Table 4-462 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Table 4-463 Request body parameters

Parameter	Mandatory	Type	Description
body	Yes	String	Explanation: Review comment content. Constraints: Mandatory Range: Maximum length: 8,000 characters. Characters: Unicode \u0000 to \uffff. Special characters, such as emojis and uncommon characters, are not supported. Blank: The value cannot be null, an empty string, or only spaces.

Response Parameters

Status code: 200

Table 4-464 Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	NoteDto object	Explanation: Review comment information. Range: None
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-465 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">• CH.10000. The system is busy. Try again later.
message	String	Explanation: Error message returned when the API fails to be called. Range: <ul style="list-style-type: none">• The system is busy. Try again later.

Table 4-466 NoteDto

Parameter	Type	Description
id	Integer	Explanation: Comment ID, which is not shared by the main comment and replies. Range: Minimum value: 1 Maximum value: 2147483647
type	String	Explanation: Note type. Range: <ul style="list-style-type: none">• DiffNote: A comment that needs to be resolved on the file change page.• MergeRequestNote: A comment that needs to be resolved on the details page.• null: A comment that does not need to be resolved on the details page.

Parameter	Type	Description
body	String	Explanation: Review comment content. Range: Maximum length: 8,000 characters. Characters: Unicode \u0000 to \uffff. Special characters, such as emojis and uncommon characters, are not supported. Blank: The value cannot be null, an empty string, or only spaces.
attachment	String	Explanation: Attachment. (This field has been discarded.) Range: None
author	UserBasicDto object	Explanation: Author details. Range: None
created_at	String	Explanation: Creation time. Constraints: Format: yyyy-MM-ddTHH:mm:ss.SSS+08:00
updated_at	String	Explanation: Update time. Constraints: Format: yyyy-MM-ddTHH:mm:ss.SSS+08:00
system	Boolean	Explanation: Whether the comment is generated by the system. Range: <ul style="list-style-type: none">● true: Yes. The comment is created by the system.● false: No. The comment is created by a user.
noteable_id	Integer	Explanation: MR ID. Range: Minimum value: 1 Maximum value: 2147483647

Parameter	Type	Description
noteable_type	String	Explanation: Comment type. Range: <ul style="list-style-type: none">• MergeRequest: Comment for MR or CR (When you select a commit under an MR or CR and add a review comment, the comment is still of the MergeRequest type).• Commit: Comment for code or a specific commit.
commit_id	String	Explanation: Associated commit ID: SHA value of a commit. This field applies when noteable_type is set to Commit . Range: 40 digits and letters.
resolvable	Boolean	Explanation: Whether the comment needs to be resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
is_reply	Boolean	Explanation: Whether the comment is a reply. Range: <ul style="list-style-type: none">• true: Yes. The comment is a reply.• false: No. The comment is a main comment.
resolved_by	UserBasicDto object	Explanation: Comment resolver. Range: None
noteable_iid	Integer	Explanation: MR IID, indicating the sequence number of the MR in the repository. Range: Minimum value: 1 Maximum value: 2147483647

Parameter	Type	Description
discussion_id	String	Explanation: Review comment ID, which is shared by the main comment and replies. Range: 40 digits and letters.
project	String	Explanation: Project path. Range: None
diff_file	String	Explanation: File path change. Range: None
diff	String	Explanation: File content change. Range: None
archived	Boolean	Explanation: Whether the review comment has been archived. Archived comments cannot be edited, deleted, replied, or resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
review_categories	String	Explanation: Comment type key. The values of review_categories and review_categories_cn / review_categories_en must match. Range: None
review_categories_cn	String	Explanation: Comment type in Chinese. The values of review_categories and review_categories_cn must match. Range: None

Parameter	Type	Description
review_categories_en	String	Explanation: Comment type in English. The values of review_categories and review_categories_en must match. Range: None
review_modules	String	Explanation: Review comment module. Range: None
severity	String	Explanation: Severity. Non-suggestion reviews cannot be resolved by the assignee, MR creator, or committer. Range: <ul style="list-style-type: none">● suggestion● minor● major● fatal
severity_cn	String	Explanation: Severity in Chinese. Range: <ul style="list-style-type: none">● Suggestion● Minor● Major● Fatal
severity_en	String	Explanation: Severity in English. Range: <ul style="list-style-type: none">● Suggestion● Minor● Major● Fatal
file_path	String	Explanation: File path. (This field has been discarded.) Range: None

Parameter	Type	Description
line	String	Explanation: Line number. (This field has been discarded.) Range: None
assignee	UserBasicDto object	Explanation: Assignee details. Range: None
proposer	UserBasicDto object	Explanation: Reviewer details. Range: None
position	PositionDto object	Explanation: Code location information to associate the comment with. Range: None
resolved	Boolean	Explanation: Whether the review comment has been resolved. Range: <ul style="list-style-type: none">• true: Yes• false or null: No
is_outdated	Boolean	Explanation: Whether the review comment is for the latest commit. Range: <ul style="list-style-type: none">• true: Yes• false or null: No

Table 4-467 UserBasicDto

Parameter	Type	Description
id	Integer	Explanation: User ID. Range: Minimum value: 1 Maximum value: 2147483647
name	String	Explanation: Name. Range: Max. 255 characters.
username	String	Explanation: Username. Range: Max. 255 characters.
state	String	Explanation: Status. Range: Max. 255 characters.
avatar_url	String	Explanation: URL for obtaining the profile picture. Range: None
avatar_path	String	Explanation: Path for obtaining the profile picture. Range: None
email	String	Explanation: Email address. Range: None
name_cn	String	Explanation: Chinese name. Constraints: The value is the same as that of username . This field has been discarded. Range: None

Parameter	Type	Description
web_url	String	Explanation: Homepage URL. Range: None
nick_name	String	Explanation: Alias. Range: None
tenant_name	String	Explanation: Tenant name. Range: None

Table 4-468 PositionDto

Parameter	Type	Description
base_sha	String	Explanation: Base commit node of the source branch. Range: 40 digits and letters.
start_sha	String	Explanation: Latest commit node of the source branch. Range: 40 digits and letters.
head_sha	String	Explanation: Latest commit node of the target branch. Range: 40 digits and letters.
old_path	String	Explanation: Old file path. Range: None
new_path	String	Explanation: New file path. Range: None

Parameter	Type	Description
position_type	String	Explanation: Change type. Range: None Default value: text
old_line	Integer	Explanation: Line number before change. If the value is less than or equal to 0 or is null, the line is new and displayed in green on the right for comparison. Range: -1 to 2147483647 or null
new_line	Integer	Explanation: New line No. If the value is less than or equal to 0 or is null, the line is deleted and displayed in red on the left for comparison. Range: -1 to 2147483647 or null

Example Requests

```
POST https://{endpoint}/v2/repositories/{repository_id}/merge_requests/{merge_request_iid}/discussions/{discussion_id}/notes
{
  "body": "Reply content"
}
```

Example Responses

Status code: 200

OK

```
{
  "result": {
    "id": 2111974340,
    "type": "DiffNote",
    "body": "Reply content",
    "author": {
      "id": 9124,
      "name": "CodeHub_beta_dev",
      "username": "c369c68f1ff84679b5a8ed904d8bff1c",
      "state": "active",
      "avatar_url": "",
      "email": "liujian@example.com",
      "name_cn": "CodeHub_beta_dev",
      "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
```

```
    "nick_name": "Alias",
    "tenant_name": "devcloud_codehub_l00314597_01"
  },
  "created_at": "2024-07-30T10:47:54.000+08:00",
  "updated_at": "2024-07-30T10:47:54.000+08:00",
  "system": false,
  "noteable_id": 38517,
  "noteable_type": "MergeRequest",
  "resolvable": true,
  "is_reply": true,
  "noteable_iid": 18,
  "discussion_id": "996f57b8fdd5e62678b16f0ea4f91688405fa72f",
  "project": "sll_test00006/mr_test",
  "diff_file": "a.txt",
  "diff": "@@ -0,0 +1,0 @@\n+1\n",
  "archived": false,
  "review_categories": "Type",
  "review_categories_cn": "Type",
  "review_categories_en": "Type",
  "review_modules": "Module",
  "severity": "suggestion",
  "severity_cn": "Suggestion",
  "severity_en": "Suggestion",
  "assignee": {
    "id": 9124,
    "name": "CodeHub_beta_dev",
    "username": "c369c68f1ff84679b5a8ed904d8bff1c",
    "state": "active",
    "avatar_url": "",
    "email": "liujian@example.com",
    "name_cn": "CodeHub_beta_dev",
    "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
    "nick_name": "Alias",
    "tenant_name": "devcloud_codehub_l00314597_01"
  },
  "proposer": {
    "id": 9124,
    "name": "CodeHub_beta_dev",
    "username": "c369c68f1ff84679b5a8ed904d8bff1c",
    "state": "active",
    "avatar_url": "",
    "email": "liujian@example.com",
    "name_cn": "CodeHub_beta_dev",
    "web_url": "https://test.com/c369c68f1ff84679b5a8ed904d8bff1c",
    "nick_name": "Alias",
    "tenant_name": "devcloud_codehub_l00314597_01"
  },
  "position": {
    "base_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
    "start_sha": "a9ce1513d5185d5fe2bac52c597f204ce695c4be",
    "head_sha": "53c75fa88dc4e7d0b68d108b7f1ee0a5c4564f44",
    "old_path": "a.txt",
    "new_path": "a.txt",
    "position_type": "text",
    "new_line": 1
  },
  "resolved": false,
  "is_outdated": false
},
"status": "success"
}
```

Status Codes

Status Code	Description
200	OK

Error codes

Status Code	Error Code	Error Message	Description	Measure
400	CH.0 0401 999	'body': The body is out of max length (8000 characters).	The review comment exceeds 8,000 characters.	Reduce the content.
400	CH.0 0401 015	String cannot contain emoticons or uncommon characters	Only Unicode characters from \u0000 to \uffff can be used. Special characters, such as emojis and uncommon characters, are not supported.	Delete the special characters.
404	CH.0 0406 001	MergeRequest Not Found	MR information is not found.	Refresh the MR page and try again.
404	CH.0 0406 048	note not found by notelid	No review comment is found for the associated repository_id , merge_request_iid , and discussion_id .	Check and modify the input parameters .
404	CH.0 0406 049	incorrect type of note	No review comment is found for the associated repository_id , merge_request_iid , and discussion_id .	Check and modify the input parameters .
404	CH.0 0406 050	note does not belong to this commit or merge request	No review comment is found for the associated repository_id , merge_request_iid , and discussion_id .	Check and modify the input parameters .

Status Code	Error Code	Error Message	Description	Measure
405	CH.00406019	The current merge mergequest is not allowed to be reviewed after being merged, change the settings to enable this operation	Adding comments to merged MRs is not allowed.	Modify the MR settings.

4.13.4 Obtaining Review Settings

Function

This API is used to obtain review settings.

URI

GET /v2/repositories/{repository_id}/review_setting

Table 4-469 Path parameters

Parameter	Mandatory	Type	Description
repository_id	Yes	Integer	Explanation: Repository ID. Constraints: Mandatory Range: Minimum value: 1 Maximum value: 2147483647

Request Parameters

Table 4-470 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Explanation: User token. It can be obtained by calling the corresponding IAM API . The value of X-Subject-Token in the response header is the user token. Constraints: Mandatory Range: 1–100,000 characters. Default value: None

Response Parameters

Status code: 200**Table 4-471** Response body parameters

Parameter	Type	Description
error	Error object	Explanation: Response error code.
result	ReviewSettingDto object	Explanation: Review comment information. Range: None
status	String	Explanation: Response status. Range: <ul style="list-style-type: none">● success: The API call is successful.● failed: The API call failed.

Table 4-472 Error

Parameter	Type	Description
code	String	Explanation: Error code returned when the API fails to be called. Range: <ul style="list-style-type: none">• CH.10000. The system is busy. Try again later.
message	String	Explanation: Error message returned when the API fails to be called. Range: <ul style="list-style-type: none">• The system is busy. Try again later.

Table 4-473 ReviewSettingDto

Parameter	Type	Description
categories_and_modules_enabled	Boolean	Explanation: Whether to enable review comment types and modules. Range: <ul style="list-style-type: none">• true: Yes• false: No
secondary_category_enabled	Boolean	Explanation: Whether to enable preset review comment types. Range: <ul style="list-style-type: none">• true: Yes• false: No. You can select desired types or add custom ones.
primary_categories	Array of CategoryDto objects	Explanation: Selected types. Range: None
review_default_categories	Array of strings	Explanation: Keys of selected types. Range: None

Parameter	Type	Description
review_customized_categories	Array of strings	Explanation: Custom types. Range: Max.: 20. Max. length each: 200 characters. Characters: Unicode \u0000 to \uffff. Special characters, such as emojis and uncommon characters, are not supported. Blank: The value cannot be null, an empty string, or only spaces.
review_modules	Array of strings	Explanation: Review comment module. Range: Max.: 20. Ma. length each: 200 characters. Characters: Unicode \u0000 to \uffff. Special characters, such as emojis and uncommon characters, are not supported. Blank: The value cannot be null, an empty string, or only spaces.
source_id	Integer	Explanation: Repository ID. Range: Minimum value: 1 Maximum value: 2147483647
source_type	String	Explanation: Project type. Currently, only one project type is supported. Range: <ul style="list-style-type: none">Project
source_path	String	Explanation: Repository path. Range: None
secondary_category_type	String	Explanation: Preset review comment type (discarded field). Range: HiCode

Parameter	Type	Description
secondary_categories	Array of CategoryDto objects	Explanation: Preset review comment. Range: None

Table 4-474 CategoryDto

Parameter	Type	Description
key	String	Explanation: Key of a preset review comment type. Range: None
name_zh	String	Explanation: Name of a preset review comment type in Chinese. Range: None
name_en	String	Explanation: Name of a preset review comment type in English. Range: None
sub_categories	Array of CategoryDto objects	Explanation: Subtype of a preset review comment type. Range: None

Example Requests

```
GET https://{endpoint}/v2/repositories/{repository_id}/review_setting
```

Example Responses

Status code: 200

OK

```
{  
  "result": {  
    "categories_and_modules_enabled": true,  
    "secondary_category_enabled": false,  
    "primary_categories": [  

```

```
{
  "key": "realize",
  "name_zh": "Algorithm",
  "name_en": "Algorithm"
},
"review_default_categories": [
  "realize"
],
"review_customized_categories": [
  "Type"
],
"review_modules": [
  "Module"
],
"source_id": 2111704470,
"source_type": "Project",
"source_path": "sl_test00006/mr_test"
},
"status": "success"
}
```

Status Codes

Status Code	Description
200	OK

5 Application Examples

5.1 Example 1: Querying All Repositories of a User

Scenario

This section uses a CodeArts user as an example to guide you how to use an API to query the code repository list.

For details on how to call APIs, see [Making an API Request](#).

Prerequisites

You have enabled CodeArts Repo on the console.

Approach

This API is used to query the list of all repositories of the current user based on the user token.

Querying All Repositories of a User

- API information:

URI: GET v2/projects/repositories

- Request example:

GET https://codehub-ext.ap-southeast-3.myhuaweicloud.com/v2/projects/repositories

- Response example:

```
{
  "result": {
    "total": 40,
    "repositories": [
      {
        "star": false,
        "status": 5,
        "userRole": null,
        "repository_uuid": "25c88b23d4dc400fa7b3e2a152e4d53c",
        "repository_id": 522140,
        "repository_name": "1111111111111111",
        "ssh_url": "git@codehub.test.com:testzqxq00001/1111111111111111.git",
        "https_url": "https://test.com/testzqxq00001/1111111111111111.git",
      }
    ]
  }
}
```

```
"group_name": "testxq00001",
"web_url": "https://test.com/codehub/522140/home",
"visibility_level": 0,
"created_at": "2020-07-22 10:45:56",
"updated_at": "2020-07-22 10:45:56",
"repository_size": "0.16M",
"lfs_size": "0.00M",
"creator_name": "devcloud_codehub_l00314597_01",
"domain_name": "devcloud_codehub_l00314597_01",
"is_owner": 1,
"iam_user_uuid": "a618e34bd5704be3ae3395dfede06041",
"project_uuid": "a689e057c2304abfa35d4ff65630a90a",
"project_is_deleted": "false"
}
]
},
"status": "success"}
```

6 Appendix

6.1 Status Codes

Table 6-1 Status Codes

Status Code	Message	Description
100	Continue	The client should continue with its request. This interim response is used to inform the client that the initial part of the request has been received and has not yet been rejected by the server.
101	Switching Protocols	The protocol should be switched only when it is advantageous to do so. For example, the current HTTP protocol is switched to a later version.
201	Created	The request has been fulfilled and resulted in a new resource being created.
202	Accepted	The request has been accepted for processing, but the processing has not been completed.
203	Non-Authoritative Information	The server successfully processed the request, but is returning information that may be from another source.
204	NoContent	The server has successfully processed the request, but does not return any response. The status code is returned in response to an HTTP OPTIONS request.
205	Reset Content	The server has fulfilled the request.

Status Code	Message	Description
206	Partial Content	The server has fulfilled the partial GET request for the resource.
300	Multiple Choices	The response contains a list of resource characteristics and addresses from which a user terminal (such as a browser) can choose the most appropriate one.
301	Moved Permanently	This and all future requests have been permanently moved to the given URI indicated in this response.
302	Found	The requested resource has been temporarily moved.
303	See Other	Use GET and POST requests to view the information.
304	Not Modified	The requested resource has not been modified. When the server returns this status code, no resource is returned.
305	Use Proxy	The requested resource is available only through a proxy.
306	Unused	This HTTP status code is no longer used.
400	BadRequest	Invalid request. The client should modify the request instead of re-initiating it.
401	Unauthorized	The authentication information provided by the client is incorrect or invalid.
402	Payment Required	Reserved request.
403	Forbidden	Request rejected. The server has received the request and understood it, but refuses to respond to it. The client should not repeat the request without modifications.
404	NotFound	The requested resource cannot be found. The client should modify the request instead of re-initiating it.
405	MethodNotAllowed	The method specified in the request is not allowed for the requested resource. The client should modify the request instead of re-initiating it.

Status Code	Message	Description
406	Not Acceptable	The server cannot implement the request based on the content characteristics of the request.
407	Proxy Authentication Required	This code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The server timed out waiting for the request. The client may re-initiate the request without modifications at any time later.
409	Conflict	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.
410	Gone	The requested resource cannot be found. This status code indicates that the requested resource has been deleted permanently.
411	Length Required	The server refused to process the request because the request does not specify the length of its content.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The server refuses to process a request because the request is too large. The server may disable the connection to prevent the client from sending requests consecutively. If the server temporarily cannot process the request, the response will contain a Retry-After header field.
414	Request-URI Too Large	The request URI is too long for the server to process.
415	Unsupported Media Type	The server does not support the media type in the request.
416	Requested range not satisfiable	The requested range is invalid.
417	Expectation Failed	The server fails to meet the requirements of the Expect request header field.
422	UnprocessableEntity	The request is well-formed but is unable to respond due to semantic errors.

Status Code	Message	Description
429	TooManyRequests	The client sends too many requests to the server within a given time, exceeding the client's access frequency limit or beyond the server's processing capability. In this case, the client should repeat requests after the time specified in the Retry-After header of the response expires.
500	InternalServerError	The server is able to receive the request but it cannot understand the request.
501	Not Implemented	The server does not support the requested function, and therefore cannot implement the request.
502	Bad Gateway	The server acting as a gateway or proxy receives an invalid response from a remote server.
503	ServiceUnavailable	The requested service is invalid. The client should modify the request instead of re-initiating it.
504	ServerTimeout	The server could not return a timely response. The response will reach the client only if the request carries a timeout parameter.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

6.2 Error Codes

If an error occurs in API calling and no result is returned, you can locate the cause based on the error code of each API. The returned message body contains the specific error code and error information.

Error Response Body Format

If an error occurs during API calling, an error code and the corresponding error message will be displayed. The following shows an error response body:

```
{
  "error": {
    "code": "DEV.CH.10001",
    "message": "Param invalid"
  },
  "status": "failed"
}
```

In the response body, **error_code** is an error code, and **error_msg** provides information about the error.

If an error code starting with **APIGW** is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Code	Error Message	Description	Measure
400	CH.010001	Invalid parameter value format.	Param invalid	Check parameters.
401	CH.080401	You do not have the permission to access the resource.	No Permission	Check the repository role and permission of a user.
403	CH.080403	Access denied.	Forbidden	Check the request path.
404	CH.000404	Resource unavailable.	Not Found	Check whether the resource ID or resource name is correct.
500	CH.000001	Unknown error.	Unknown error	System error. Please wait.
504	CH.080504	Request timed out.	Gateway Timeout	Check the network.

6.3 Obtaining a Project ID

Obtaining a Project ID by Calling an API

A project ID can also be obtained by calling a specific API. For details, see [Querying Project Information Based on the Specified Criteria](#).

The API for obtaining a project ID is **GET https://{Endpoint}/v3/projects/**. **{Endpoint}** indicates the endpoint of IAM, which can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

In the following example, **id** indicates a project ID.

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "ap-southeast-3",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
      },
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",
      "enabled": true
    }
  ]
}
```

```
  ],  
  "links": {  
    "next": null,  
    "previous": null,  
    "self": "https://www.example.com/v3/projects"  
  }  
}
```

Obtaining a Project ID from the Console

A project ID is required for some URLs when an API is called. To obtain a project ID, perform the following operations:

1. Log in to the management console.
2. Click the username and select **My Credentials** from the drop-down list
On the displayed **API Credentials** page, view project IDs in the project list.

If there are multiple projects in one region, expand **Region** and obtain subproject IDs from the **Project ID** column.

6.4 Obtaining an Account ID

An account ID is required for some URLs when an API is called. To obtain an account ID, perform the following operations:

1. Log in to the management console.
2. Point to the username and choose **My Credentials** from the drop-down list.
On the displayed **API Credentials** page, view **Account ID**.