

**CodeArts**

# User Guide

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# Contents

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<b>1 Preparations.....</b>	<b>1</b>
1.1 Configuring CodeArts Console Permissions.....	1
1.1.1 CodeArts Console Permissions.....	1
1.1.2 Creating and Authorizing a User.....	8
1.1.3 Custom Policies.....	10
1.2 Purchasing CodeArts.....	10
1.3 Modifying Specifications.....	12
1.4 Creating a Project.....	13
1.5 Adding Project Members.....	16
1.5.1 Introduction.....	16
1.5.2 Adding IAM Users from Your Account.....	16
1.5.3 Adding Members from Another Project.....	18
1.5.4 Adding Members from Another Account.....	19
1.5.5 Adding Members from an Agency.....	22
1.5.6 Adding Members via Link.....	23
1.6 Managing Permissions.....	26
1.6.1 Managing Project Permissions.....	26
1.7 Managing Agent Pools.....	28
1.7.1 Creating an Agent Pool.....	29
1.7.2 Creating an Agent.....	32
1.8 Creating Service Endpoints.....	36
1.9 Managing Personal Settings.....	43
1.10 Other Operations.....	45
1.10.1 Managing Personal Work.....	45
1.10.2 Managing CodeArts Projects and Their Members.....	45

# 1 Preparations

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[Configuring CodeArts Console Permissions](#)

[Purchasing CodeArts](#)

[Modifying Specifications](#)

[Creating a Project](#)

[Adding Project Members](#)

[Managing Permissions](#)

[Managing Agent Pools](#)

[Creating Service Endpoints](#)

[Managing Personal Settings](#)

[Other Operations](#)

## 1.1 Configuring CodeArts Console Permissions

### 1.1.1 CodeArts Console Permissions

If you need to assign different permissions to employees in your enterprise to access your purchased CodeArts resources, IAM is a good choice for fine-grained permissions management. IAM provides identity authentication, permissions management, and access control, helping you secure access to your resources.

With IAM, you can use your account to create IAM users, and assign permissions to the users to control their access to specific resources. For example, some software developers in your enterprise need to use CodeArts resources but should not be allowed to perform any other high-risk operations, such as buying CodeArts resources. In this scenario, you can create IAM users for the software developers and grant them only the permissions required for viewing CodeArts resources.

If you do not require individual IAM users, skip this chapter.

IAM can be used free of charge. You pay only for the resources in your account. For more information about IAM, see [IAM Service Overview](#).

## CodeArts Console Permissions

By default, new IAM users do not have any permissions. You need to add them to one or more groups, and then add permissions policies or roles to these groups. The users inherit permissions from their groups and can then perform specified operations on cloud services.

CodeArts is a project-level service deployed and accessed in specific physical regions. To assign permissions to a user group, specify the scope as region-specific projects and select projects for the permissions to take effect. If **All projects** is selected, the permissions will take effect for the user group in all region-specific projects. When accessing CodeArts, the users need to switch to a region where they have been authorized.

CodeArts uses policies for fine-grained authorization.

- **Policies:** a type of fine-grained authorization mechanism that defines permissions required to perform operations on specific cloud resources under certain conditions. This mechanism allows for more flexible authorization. Policies allow you to meet requirements for more secure access control. For example, you can grant CodeArts users only the permissions for performing specific operations on the CodeArts console.

[Table 1-1](#) lists all system permissions of CodeArts.

**Table 1-1** System permissions of CodeArts

Policy	Description	Type
DevCloud Console FullAccess	Full permissions for the CodeArts console. Users with these permissions can buy CodeArts resources. <b>NOTE</b> If an IAM user wants to purchase CodeArts, they must also have one of the <b>BSS Administrator</b> , <b>BSS Finance</b> , and <b>BSS Operator</b> roles in addition to this policy.	System-defined policy
DevCloud Console ReadOnlyAccess	Full permissions for the CodeArts console. Users with these permissions can only view the usage of CodeArts resources.	System-defined policy

[Table 1-2](#) lists the common operations supported by each system-defined policy of CodeArts. Select a proper policy as required.

**Table 1-2** Common operations and system permissions

Console Operation	DevCloud Console FullAccess	DevCloud Console ReadOnlyAccess	Description
Check CodeArts Req resource usage	√	√	-
Subscribe to CodeArts Req with pay-per-use billing	√	×	Available soon
Unsubscribe from CodeArts Req with pay-per-use billing	√	×	Available soon
View CodeArts Req subscription records	√	√	Available soon
View CodeArts Req resources	√	√	-
Check CodeArts Repo resource usage	√	√	-
Subscribe to CodeArts Repo with pay-per-use billing	√	×	Available soon
Unsubscribe from CodeArts Repo with pay-per-use billing	√	×	Available soon
View CodeArts Repo subscription records	√	√	Available soon
View CodeArts Repo resources	√	√	-
Check CodeArts Check resource usage	√	√	-
Subscribe to CodeArts Check with pay-per-use billing	√	×	Available soon

Console Operation	DevCloud Console FullAccess	DevCloud Console ReadOnlyAccess	Description
Unsubscribe from CodeArts Check with pay-per-use billing	√	×	Available soon
View CodeArts Check subscription records	√	√	Available soon
View CodeArts Check resources	√	√	-
Check CodeArts Build resource usage	√	√	-
Subscribe to CodeArts Build with pay-per-use billing	√	×	Available soon
Unsubscribe from CodeArts Build with pay-per-use billing	√	×	Available soon
View CodeArts Build subscription records	√	√	Available soon
View CodeArts Build resources	√	√	-
Check CodeArts TestPlan – Test Management resource usage	√	√	-
Subscribe to CodeArts TestPlan – Test Management with pay-per-use billing	√	×	Available soon

Console Operation	DevCloud Console FullAccess	DevCloud Console ReadOnlyAccess	Description
Unsubscribe from CodeArts TestPlan – Test Management with pay-per-use billing	√	×	Available soon
View CodeArts TestPlan – Test Management subscription records	√	√	Available soon
View CodeArts TestPlan – Test Management resources	√	√	-
Subscribe to CodeArts TestPlan – APITest with pay-per-use billing	√	×	Available soon
Unsubscribe from CodeArts TestPlan – APITest with pay-per-use billing	√	×	Available soon
View CodeArts TestPlan – APITest subscription records	√	√	Available soon
View CodeArts TestPlan – APITest resources	√	√	-
Check CodeArts TestPlan – APITest resource usage	√	√	-
Check CodeArts Artifact resource usage	√	√	-
Subscribe to CodeArts Artifact with pay-per-use billing	√	×	Available soon



Console Operation	DevCloud Console FullAccess	DevCloud Console ReadOnlyAccess	Description
Unsubscribe from CodeArts Artifact with pay-per-use billing	√	×	Available soon
View CodeArts Artifact subscription records	√	√	Available soon
View CodeArts Artifact resources	√	√	-
Check CodeArts IDE Online resource usage	√	√	Available soon
Subscribe to CodeArts IDE Online with pay-per-use billing	√	×	Available soon
Unsubscribe from CodeArts IDE Online with pay-per-use billing	√	×	Available soon
View CodeArts IDE Online subscription records	√	√	Available soon
View CodeArts IDE Online resources	√	√	Available soon
Check CodeArts Classroom resource usage	√	√	Available soon
Subscribe to CodeArts Classroom with pay-per-use billing	√	×	Available soon
Unsubscribe from CodeArts Classroom with pay-per-use billing	√	×	Available soon

Console Operation	DevCloud Console FullAccess	DevCloud Console ReadOnlyAccess	Description
View CodeArts Classroom subscription records	√	√	Available soon
View CodeArts Classroom resources	√	√	Available soon
Buy the Agile and DevOps Training service	√	×	Available soon
View resources of the Agile and DevOps Training service	√	√	Available soon
Authorize an enterprise account	√	×	-
Cancel the authorization granted to an enterprise account	√	×	-
Accept or reject authorization to an enterprise account	√	×	-
View the authorization list	√	√	-
Purchase a pay-per-use package on the console	√	×	Available soon
View details of a pay-per-use package on the console	√	√	Available soon
Subscribe to a pay-per-use package	√	×	Available soon
Unsubscribe from a pay-per-use package	√	×	Available soon

Console Operation	DevCloud Console FullAccess	DevCloud Console ReadOnlyAccess	Description
View pay-per-use package subscription records	√	√	Available soon
Buy a CodeArts package	√	×	-
Change CodeArts package specifications	√	×	-
View CodeArts package resource details	√	√	-

The service names in permission policies may differ from those on the console. The mapping relationship between these names is shown in [Table 1-3](#).

**Table 1-3** Service name mapping

Service Name in Permission Policies	Service Name on the Console
DevCloud	CodeArts
ProjectMan	CodeArts Req
CodeHub	CodeArts Repo
CodeCheck	CodeArts Check
CloudBuild	CodeArts Build
CloudDeploy	CodeArts Deploy
CloudArtifact	CodeArts Artifact
CloudTest	CodeArts TestPlan
CloudPipeline	CodeArts Pipeline

## 1.1.2 Creating and Authorizing a User

You can use [Identity and Access Management](#) (IAM) to implement fine-grained permissions control for your CodeArts console. With IAM, you can:

- Use your account to create IAM users for employees based on the organizational structure of your enterprise. Each IAM user has their own security credentials for accessing CodeArts resources.
- Assign only the permissions required for users to perform a specific task.

If your account does not require individual IAM users, skip this section.

This section describes the procedure for granting permissions (see [Figure 1-1](#)).

## Prerequisites

Learn about the permissions supported by CodeArts and choose permissions according to your requirements. For the permissions of other services, see [System Permissions](#).

## Process

**Figure 1-1** Process for granting CodeArts console permissions



1. **Create a user group and assign permissions.**  
Create a user group on the IAM console, and attach the **DevCloud Console ReadOnlyAccess** policy to the group.
2. **Create an IAM user and add it to a group.**  
Create a user on the IAM console and add the user to the group created in 1.
3. **Log in** and verify permissions.  
Log in to the console as the created user and switch to the region for which the user is authorized to verify permissions.  
Choose **CodeArts** in **Service List**, and then choose **Enterprise Account Authorization** in the navigation pane. Click **Authorize Enterprise Account**, and enter an account ID. If a message is displayed indicating that you cannot

access the page, the **DevCloud Console ReadOnlyAccess** policy has already taken effect.

### 1.1.3 Custom Policies

You can customize policies to supplement system-defined policies of CodeArts.

You can create custom policies using one of the following methods:

- Visual editor: Select cloud services, actions, resources, and request conditions. You do not need to have knowledge of the policy syntax.
- JSON: Create a policy in the JSON format from scratch or based on an existing policy.

For details, see [Creating a Custom Policy](#). This section contains examples of common custom policies in CodeArts.

#### CodeArts Custom Policy Examples

- Example 1: Authorize users to purchase CodeArts on the console

```
{
  "Version": "1.1",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "devcloud:monthlyPackage:subscribe"
      ]
    }
  ]
}
```

- Example 2: Define actions for multiple services in a policy

A custom policy can contain the actions of multiple services that are of the global or project-level type. The following is an example policy containing actions of multiple services:

```
{
  "Version": "1.1",
  "Statement": [
    {
      "Action": [
        "devcloud:*:listResourceDetail",
        "ecs:cloudServers:delete"
      ],
      "Effect": "Allow"
    }
  ]
}
```

## 1.2 Purchasing CodeArts

### Prerequisites

To perform this operation, you must have any of the following permissions:

- **Tenant Administrator**
- **DevCloud Console FullAccess** and **BSS Administrator**

- **DevCloud Console FullAccess** and **BSS Finance**
- **DevCloud Console FullAccess** and **BSS Operator**
- Custom policies that contain all permissions in **DevCloud Console FullAccess** as well as the **bss:order:view**, **bss:order:pay**, and **bss:order:update** permissions.

## Purchasing a CodeArts Package

CodeArts uses yearly/monthly billing, and provides the free, basic, professional, and enterprise edition packages to meet the requirements of different user scales. For details about these packages, see [Package Overview](#).

**Step 1** Go to the [Buy CodeArts](#) page.

**Step 2** Set the region, edition, number of users, required duration, and auto-renewal, agree to the agreement, and click **Next**.

### NOTE

- You are advised to select the nearest region based on your physical region where your services are located to reduce network latency. The purchased package takes effect only in the corresponding region and cannot be used across regions.
- The number of users and required duration in the Free edition are fixed and cannot be changed.

**Step 3** Confirm the order content. If you need to modify it, click **Previous**. If the content is correct, click **Pay**.

**Step 4** Follow the prompts to complete the payment.

**Step 5** Check the package purchase record back on the CodeArts console.

If the purchase fails, rectify the fault by referring to [Billing FAQs](#).

----End

## Purchasing Resource Extension

CodeArts provides parallel job extension for multiple services. For details, see [Resource Extension](#).

**Step 1** Go to the [Buy CodeArts Resource Extension](#) page.

**Step 2** Set the region, product, type, required duration, and auto-renewal, agree to the agreement, and click **Next**.

### NOTE

- The configuration items for the selected product and type are displayed. Select the configuration items you need.
- Select a region where you have purchased CodeArts Basic or higher edition, or you cannot purchase resource extensions.

**Step 3** Confirm the order content. If you need to modify it, click **Previous**. If the content is correct, click **Pay**.

**Step 4** Follow the prompts to complete the payment.

- Step 5** Check the resource extension purchase record back on the CodeArts console.  
If the purchase fails, rectify the fault by referring to [Billing FAQs](#).

----End

## Purchasing a Value-added Feature

CodeArts provides value-added features such as CodeCheck enhanced package. For details, see [Value-added Features](#).

- Step 1** Go to the [CodeArts value-added feature purchase](#) page.
- Step 2** Set the region, product, quantity, required duration, and auto-renewal, agree to the agreement, and click **Next**.

### NOTE

- To purchase the CodeCheck enhanced package, select a region where you have purchased CodeArts Pro or Enterprise edition.

- Step 3** Confirm the order content. If you need to modify it, click **Previous**. If the content is correct, click **Pay**.

- Step 4** Follow the prompts to complete the payment.

- Step 5** Check the value-added feature purchase record back on the CodeArts console.  
If the purchase fails, rectify the fault by referring to [Billing FAQs](#).

----End

## 1.3 Modifying Specifications


### Prerequisites

To perform this operation, you must have any of the following permissions:

- **Tenant Administrator**
- **DevCloud Console FullAccess** and **BSS Administrator**
- **DevCloud Console FullAccess** and **BSS Finance**
- **DevCloud Console FullAccess** and **BSS Operator**
- Custom policies that contain all permissions in **DevCloud Console FullAccess** as well as **bss:order:view**, **bss:order:pay**, and **bss:order:update**.

### Modifying CodeArts Package Specifications

You can modify the specifications of your CodeArts package if needed. For details about the impact, see [Impact on Billing After Specification Change](#).

- Step 1** Log in to the [CodeArts console](#), click , and select a region.
- Step 2** Find the CodeArts package and click **Modify** in the **Operation** column.
- Step 3** Set the edition, number of users, and change type, agree to the agreement, and click **Next**.

 **NOTE**

- If your current edition is Free, only the edition can be changed.
- If you set **Change** to **When renewed**, specify the renewal duration.

**Step 4** Confirm the order content. If you need to modify it, click **Previous**. If the content is correct, click **Pay**.

**Step 5** Follow the prompts to complete the payment.

----End

## Modifying Resource Extension Configuration

The resource extensions of all supported services except CodeArts Build can be changed.

**Step 1** Log in to the [CodeArts console](#), click , and select a region.

**Step 2** Find the resource extension record, and click **Modify** in the **Operation** column.

**Step 3** Select a new configuration, set the change type, agree to the agreement, and click **Next**.

**Step 4** Confirm the order content. If you need to modify it, click **Previous**. If the content is correct, click **Pay**.

**Step 5** Follow the prompts to complete the payment.

----End

## 1.4 Creating a Project

### Scenario

In CodeArts, projects are the basis for using various services. Operations such as requirement planning, code management, build, and deployment must be performed in a CodeArts project.

CodeArts provides multiple preset project templates for different requirement management processes. This section uses the Scrum process as an example to describe how to create a CodeArts project. For more information about preset templates, see [Using a Project Template](#).

### Prerequisites

To create CodeArts projects, you must have either of the following permissions:

- **Tenant Administrator**. For details about how to grant the **Tenant Administrator** role to a user, see [Creating a User Group and Assigning Permissions](#).
- CodeArts project creator. For details about how to set a user as a project creator, see [Setting Project Creators](#).



## Setting Project Creators

To set CodeArts project creators, you must have the **Tenant Administrator** role.


**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the navigation bar, click the username  and choose **All Account Settings**.

**Step 3** Choose **General > Project Creators**.

**Step 4** Select **Only some members can create projects**. The member list is displayed.

**Step 5** Enable or disable the authorization by clicking . Unauthorized members cannot create projects.

----End

## Creating a CodeArts Project

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click **Create Project** and select **Scrum**.

If there is no project on the homepage, click **Select** on the **Scrum** card.

**Step 3** Set the project information and click **OK**.

**Table 1-4** Creating a project

Parameter	Mandatory	Description
Work Template	Yes	Select a built-in or custom template. For details about how to configure a work template, see <a href="#">Configuring Common Settings</a> .
Name	Yes	Enter a maximum of 128 characters.
Project Code	No	Enter a maximum of 200 characters, including digits, letters, hyphens (-), and underscores (_).
Description	No	Enter a maximum of 1,024 characters.

**Step 4** Check the project information.

----End

## Follow-up Operations

After you [create a CodeArts project](#), members with the edit permission on the project can choose **Settings > General** in the navigation pane and perform the following operations.

**Table 1-5** Managing a CodeArts project

Operation	Procedure	Remarks
Modifying basic information	<ol style="list-style-type: none"><li>1. Choose <b>Basic Information</b>.</li><li>2. Modify the project name, code, description, and enterprise project as required, and click <b>Save</b>. The modified information is displayed.</li></ol>	-
Transferring the project creator	<ol style="list-style-type: none"><li>1. Choose <b>Basic Information</b>.</li><li>2. Select the member to transfer the project to from the <b>Creator</b> drop-down list, and click <b>Save</b>. The new creator is displayed.</li></ol>	If the project creator is deleted from IAM, the project ownership is automatically transferred to the project manager. If the project creator is also the project manager, the project ownership is transferred to the administrator account.
Archiving the project	<ol style="list-style-type: none"><li>1. Choose <b>Basic Information</b>.</li><li>2. Click <b>Archive</b>. Then the button changes to <b>Unarchive</b>.</li></ol>	<ul style="list-style-type: none"><li>• Archived projects are read-only to all members. The members cannot add, delete, or modify work items.</li><li>• Members of archived projects are still counted.</li></ul>
Deleting the project	<ol style="list-style-type: none"><li>1. Choose <b>Basic Information</b>.</li><li>2. Click <b>Delete Project</b>, enter the project name, and click <b>Delete</b>. The deleted project is no longer displayed on the homepage.</li></ol>	<ul style="list-style-type: none"><li>• Deleting a project will also delete its code repositories, check tasks, build tasks, and test cases.</li><li>• Deleted data cannot be recovered. Exercise caution when performing this operation.</li></ul>

Operation	Procedure	Remarks
Managing service menus	<ol style="list-style-type: none"><li>1. Choose <b>Services</b>.</li><li>2. Select the menus to display.</li><li>3. Refresh the page. The updated menus are displayed in the navigation pane.</li></ol>	-

## 1.5 Adding Project Members

### 1.5.1 Introduction

CodeArts allows you to add members to a project in the following ways:

- Adding members: The project administrator can add members from different sources:
  - [Adding IAM Users from Your Account](#)
  - [Adding Members from Another Project](#)
  - [Adding Members from Another Account](#)
  - [Adding Members from an Agency](#)
- **Inviting users via link:** A project member shares the project QR code or link with other users. The users can scan the QR code or visit the link to apply to join the project.

### 1.5.2 Adding IAM Users from Your Account

#### Scenario

You can create multiple IAM users in your account, and then add them as project members in CodeArts.

#### Prerequisites

- A CodeArts project is available, and you have the member settings permission for the project.
- You have created an IAM user. If there is no IAM user, create one by referring to [Creating an IAM User](#).

#### Adding IAM Users as Project Members

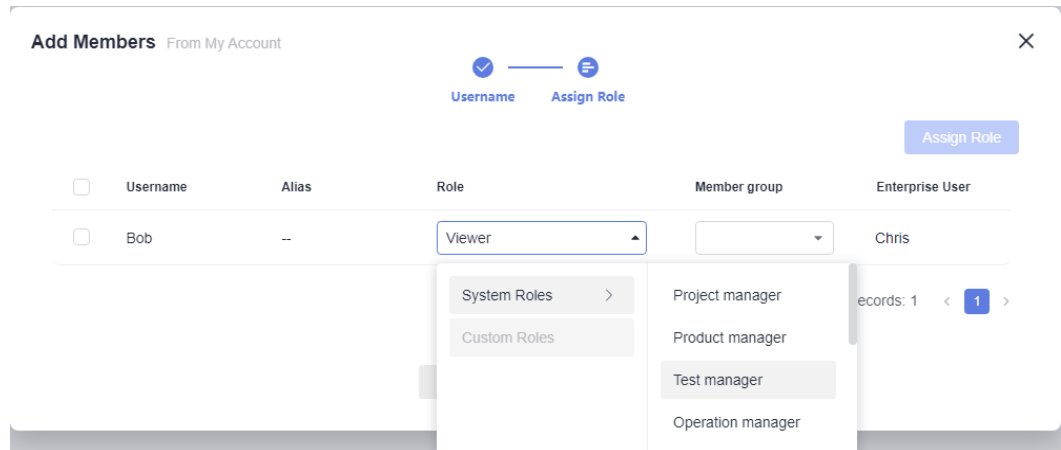
**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Click the target project name to access the project.

- Step 3** In the navigation pane, choose **Settings > Members**.
- Step 4** Choose **Member View**, and then choose **Add Members > From My Account**.
- Step 5** Select users and click **Next**.
- Step 6** Click the **Role** drop-down list, select a role for each user, and click **Save**.

**Figure 1-2** Adding users from your enterprise





- Step 7** Check the new members in the member list.


----End

## Follow-up Operations

If you have the member settings permission, you can go to a project, choose **Settings > Members**, and perform the following operations.

**Table 1-6** Managing CodeArts project members

Operation	Procedure
Changing member roles	<ol style="list-style-type: none"> <li>On the <b>Member View</b> tab, locate the target member and click  in the <b>Operation</b> column.</li> <li>Select desired roles and click <b>OK</b>. The modified information is displayed.</li> </ol>
Removing members from a project	<ol style="list-style-type: none"> <li>On the <b>Member View</b> tab, locate the target member and click  in the <b>Operation</b> column.</li> <li>In the displayed dialog box, enter <b>YES</b> and click <b>OK</b>. The deleted member is no longer displayed in the list.</li> </ol>
Exporting members	On the <b>Member View</b> tab, click <b>Export Members</b> .

Operation	Procedure
Grouping members	<ol style="list-style-type: none"><li>1. On the <b>Member Groups</b> tab, click <b>Create Member Group</b>.</li><li>2. Configure the following information and click <b>Save</b>.<ul style="list-style-type: none"><li>• <b>Member Group Name:</b> Enter a maximum of 30 characters, including letters, digits, and underscores (_).</li><li>• <b>Description:</b> Enter a maximum of 256 characters, including letters, digits, spaces, commas (,), periods (.), parentheses (()), and brackets ([]).</li></ul>The new member group is displayed in the list.</li><li>3. Click  in the <b>Operation</b> column.</li><li>4. On the member list tab, click <b>Adding a Project Member</b>.</li><li>5. Select project members and click <b>Save</b>.</li></ol>
Viewing project members by role	On the <b>Role View</b> tab, click a role name. The members with this role in the project are displayed.

## 1.5.3 Adding Members from Another Project

### Scenario

If members of project A need to join project B, add these members by selecting **Users from Other Projects** in project B.

### Prerequisites

You have at least two projects that meet the following requirements:

- One of the projects has members.
- You have the member settings permission to the other project (the project for which you want to add members).

### Adding Users from Another Project

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

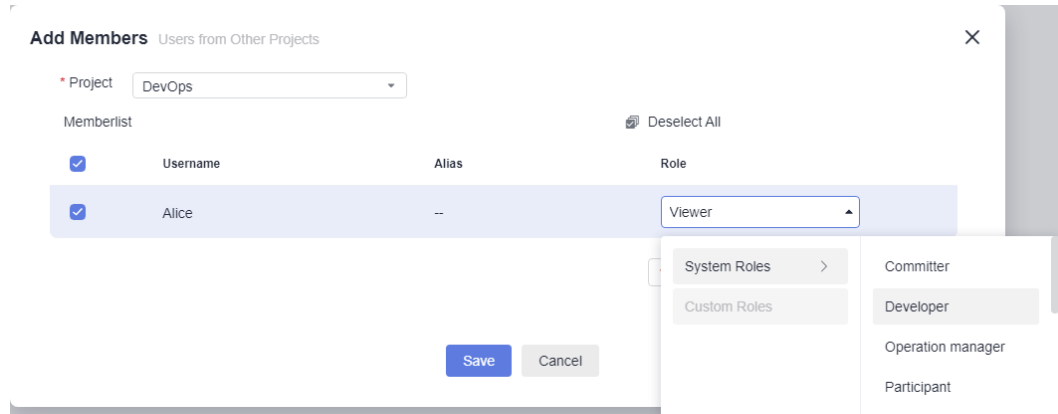
**Step 2** Click the target project name to access the project.

**Step 3** In the navigation pane, choose **Settings > Members**.

**Step 4** Choose **Member View**, choose **Add Members**, and add users from another project.

- Step 5** In the displayed dialog box, select a project from the **Project** drop-down list. Members of the selected project are displayed.
- Step 6** Select users, select a role from the **Role** drop-down list for each user, and click **Save**.

**Figure 1-3** Adding users from another project



- Step 7** Check the new members in the member list.

----End

## 1.5.4 Adding Members from Another Account

### Scenario

When enterprises A and B collaborate on a project, enterprise A can add IAM users in the account of enterprise B as members.

- There are two accounts: **A** and **B**. IAM user **a** of account **A** has created CodeArts project **X** and wants to invite IAM user **b** of account **B** to become a member of project **X**.
- The operations in this section will be performed on the CodeArts console and homepage.
  - CodeArts console: Account **A** authorizes account **B**. Account **B** then accepts the authorization.
  - CodeArts homepage: Account **A** goes to project **X** and adds an IAM user of account **B**.

### Prerequisites


- Project **X** has been created in account A. User **a** has the member setting permission in this project.
- The authorized account (**B**) and authorizing account (**A**) must be from the same site.
- The account (**B**) of the invited user (**b**) has accepted the authorization from account **A**. For details, see [Authorizing an Enterprise Account on the CodeArts Console](#) and [Accepting Authorization from Another Enterprise Account on the CodeArts Console](#).

- To authorize an account by using an agency ID, the account (B) to invite must have an agency whose delegated object is IAM Identity Center. If there is no such agency, perform the following steps to create one:
  - a. [Create a user](#)
  - b. [Create a permission set](#)
  - c. [Associate an account with users/groups and permission sets](#)

## Authorizing an Enterprise Account on the CodeArts Console

The following operations are performed by account A.

To authorize other enterprise accounts, you must have the **Tenant Administrator** role or the **DevCloud Console FullAccess** policy.

- Step 1** Log in to the [CodeArts console](#), click , and select a region.
- Step 2** In the navigation pane, choose **Enterprise Account Authorization**.
- Step 3** Click the **Granted Authorizations** tab, and then click **Authorize Enterprise Account**.
- Step 4** Enter the ID of the target enterprise account, and click **Invite**.

### NOTE

The enterprise account ID can be obtained on the **My Credentials** page.

1. Log in to the management console, hover over the username in the upper right corner, and choose **My Credentials** from the drop-down list.
2. On the **API Credentials** page, obtain the value of **Account ID**.

- Step 5** Check the authorization record.
  - If the target account needs to manually accept the authorization, the record status becomes **Pending**.
  - When the authorization is accepted (either manually or automatically), the record status changes to **Enabled**. To delete the record, click **Cancel Authorization**.
  - If the invitation is rejected, the record status changes to **Rejected**. You can click **Re-authorize** to try again.

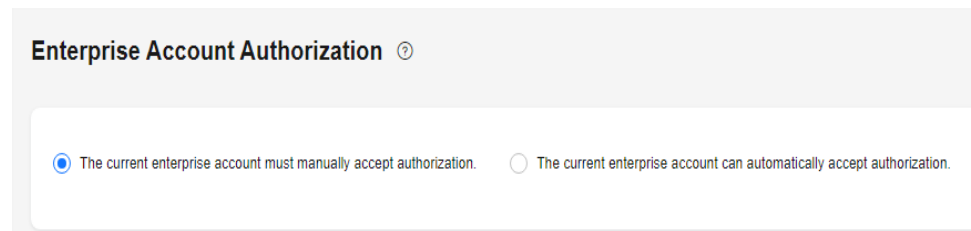
----End

## Accepting Authorization from Another Enterprise Account on the CodeArts Console

The following operations are performed by account B.


The invited account can automatically or manually accept the authorization on the CodeArts console.

**Figure 1-4** Changing the authorization mode




To change the authorization mode and manually accept authorizations, you must have the **Tenant Administrator** role or the **DevCloud Console FullAccess** policy.

To manually accept an authorization, perform the following steps:

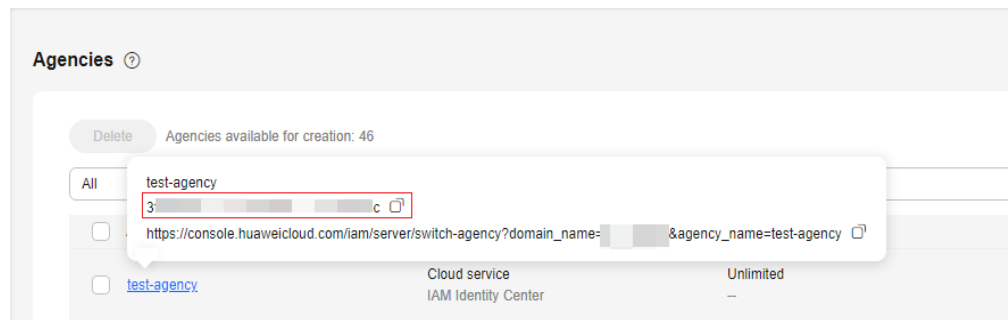
- Step 1** Log in to the [CodeArts console](#), click , and select a region.
  - Step 2** In the navigation pane, choose **Enterprise Account Authorization**.
  - Step 3** Click the **Received Authorizations** tab. The received authorization is in the **Pending** state.
  - Step 4** Accept or reject the authorization.
    - **Accept:** In the displayed dialog box, click **OK**. The status changes to **Enabled**. To delete the authorization, click **Exit**.
    - **Reject:** In the displayed dialog box, click **OK**. The status changes to **Rejected**.
- End

## Adding Users from Another Enterprise in a CodeArts Project

The following operations are performed by account A.

- Step 1** Go to the CodeArts homepage.
  1. Log in to the [CodeArts console](#), click , and select a region.
  2. Click **Access Service**.
- Step 2** Click the target project name to access the project.
- Step 3** In the navigation pane, choose **Settings > Members**.
- Step 4** Choose **Member View**, click **Add Members > From Another Account**.
- Step 5** In the displayed dialog box, select the account of the users to invite, specify the invitation mode, enter the ID, and click **Invite**.
  - **User ID:** ID of a user to invite, which can be obtained from the **My Credentials** page. For details, see [API Credentials](#).
  - **Agency ID:** ID of an agency created in the invited account. The ID can be obtained from the **Agencies** page in IAM.



**Figure 1-5** Obtaining an agency ID

**Step 6** Check the new members in the member list.

----End

## 1.5.5 Adding Members from an Agency

Huawei Cloud **IAM Identity Center** works with the Organizations service to provide unified identity management and access control across accounts.

In CodeArts, you can add users created and authorized in IAM Identity Center as project members.

### Prerequisites

- A CodeArts project is available, and you have the member settings permission for the project.
- An agency whose delegated object is IAM Identity Center exists. If there is no such agency, perform the following steps to create one:
  - a. [Create a user](#)
  - b. [Create a permission set](#)
  - c. [Associate an account with users/groups and permission sets](#)

### Procedure

**Step 1** Go to the CodeArts homepage.

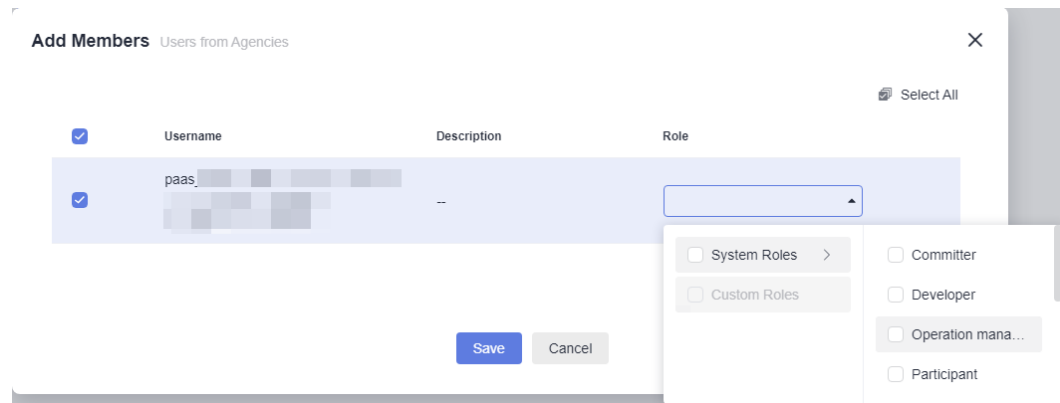
1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Click the target project name to access the project.

**Step 3** In the navigation pane, choose **Settings > Members**.

**Step 4** Click the **Member View** tab, choose **Add Members**, and import users from an agency.

**Step 5** In the displayed dialog box, select agencies, select a role for each agency, and click **Save**.

**Figure 1-6** Adding users from an agency

**Step 6** Check the new members in the member list.

----End

## 1.5.6 Adding Members via Link

### Scenario

If you want to add a user to your project but you do not have the member settings permission, you can share your project QR code or link with the user.

The user can scan the QR code or visit the link to apply to join your project. After another member who has the member settings permission approves the application, the user becomes a member of this project.

### Prerequisites

- The invited user can log in to Huawei Cloud.
- If the invited user belongs to another account, the account must have accepted your authorization. For details, see [Adding Members from Another Account](#).

### Sharing an Invitation QR Code or Link

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

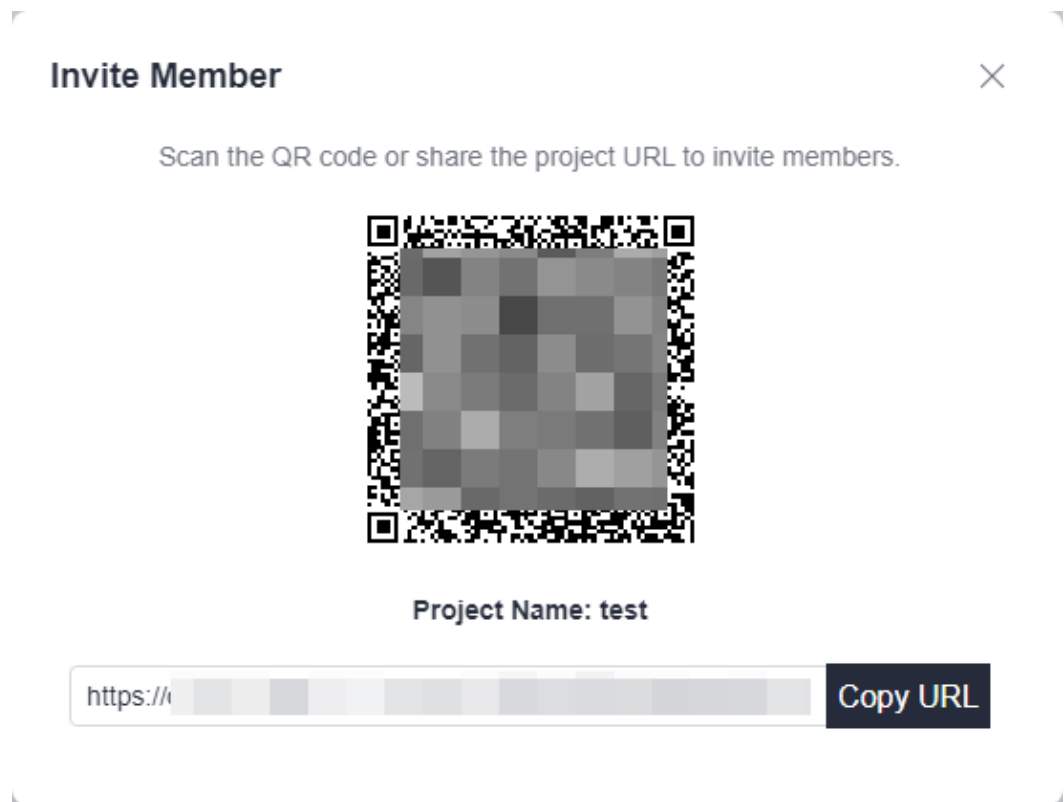
**Step 2** Click the target project name to access the project.

**Step 3** In the navigation pane, choose **Settings > Members**.

**Step 4** Choose **Member View**, and invite users via link.

**Step 5** Share the QR code or link in the dialog box with the invited user.

**Figure 1-7** Inviting members



----End

## Applying to Join a Project

- Step 1** Visit the shared link or scan the QR code.
- Step 2** On the displayed web page, enter your login information to log in to CodeArts.
- Step 3** Enter your reason (no more than 128 characters) for joining the project and submit the application.

**Figure 1-8** Joining a project

**Step 4** Wait for the application to be approved.

- If the application needs to be reviewed, a message is displayed indicating that it will be reviewed by the administrator.
  - If the application is approved, you become a member of the project, and the project page is automatically displayed.
  - If the application is rejected, refresh the page, and you can join the project again.
- If the project does not need to be reviewed, you automatically become a member of the project, and the project page is automatically displayed.

----End

## Reviewing an Application for Joining a Project

Members with the member settings permission can review applications for joining a project through a link.

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > Members**.

**Step 4** Choose **Pending Review**. The application list is displayed.

**Step 5** Click **Agree** or **Reject**. Approved users are displayed on the **Member View** tab.

----End

## 1.6 Managing Permissions

### 1.6.1 Managing Project Permissions

#### Scenario

CodeArts provides role-based access control (RBAC). New users do not have any permissions assigned by default. You need to first add them to one or more projects and then assign roles to these users. The users can perform specified operations on cloud services based on the permissions they have been assigned.

CodeArts has multiple built-in system roles. You can also create custom roles with desired permissions for CodeArts Req, CodeArts Repo, CodeArts Check, CodeArts Build, CodeArts Artifact, CodeArts Deploy, CodeArts TestPlan, and CodeArts Pipeline.

#### Modifying Permissions of a System Role

Ensure that you have permission to assign permissions in the project.

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name to access the project.

**Step 3** In the navigation pane, choose **Settings > Permissions**.

**Step 4** In the role list, click a role name.

**Step 5** Click a service name. The role's permissions for the service are displayed.

**Step 6** Click **Edit**, modify the permissions, and click **Save**.

#### NOTE

- Permissions of the project administrator role cannot be edited.
- The general permissions of the project manager role cannot be edited.

**Step 7** Check the updated permissions.

----End

#### Creating a Role

Ensure that you have permission to assign permissions in the project.

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > Permissions**.

**Step 4** Click + next to **Role**.

**Step 5** In the displayed dialog box, configure the following information and click **OK**.



**Table 1-7** Creating a role

Parameter	Mandatory	Description
Role Name	Yes	<ul style="list-style-type: none"><li>Do not use the name of a system role.</li><li>Enter a maximum of 30 characters, including letters, digits, spaces, and the following special characters: () [] - _ ~. &amp; &lt;&gt; {}</li></ul>
Copy Role	No	Copy an existing role from a project of the same type.

**Step 6** Check the new role under **Custom Roles**.

You can perform the following operations on the new role.

**Table 1-8** Managing a custom role

Operation	Description
Editing the role's permissions	See <a href="#">Modifying Permissions of a System Role</a> .
Modifying the role name	<ol style="list-style-type: none"><li>Click  next to the role name and choose <b>Modify Role Name</b>.</li><li>Enter a new name and click <b>OK</b>. The updated role name is displayed.</li></ol>
Deleting the role	<ol style="list-style-type: none"><li>Click  next to the role name and choose <b>Delete Role</b>.</li><li>Enter <b>YES</b> and click <b>OK</b>. The role is no longer displayed on the page.</li></ol>


----End

## Managing Permission Templates

When multiple projects require the same permission settings, you can configure permissions for one of the projects, and save the settings as a permission template to reuse in other projects.

### NOTE


- Permission templates can be reused only between projects of the same type.
- Each tenant can create a maximum of 20 permission templates.

- Creating a Permission Template
  - a. Go to the CodeArts homepage.
    - i. Log in to the [CodeArts console](#), click , and select a region.
    - ii. Click **Access Service**.
  - b. On the CodeArts homepage, click a project name.
  - c. In the navigation pane, choose **Settings > Permissions**.
  - d. Click **Save as Template**.
  - e. In the displayed dialog box, configure the following information and click **OK**.

**Table 1-9** Saving permission settings as a template

Parameter	Mandatory	Description
Name	Yes	Enter a maximum of 64 characters, including letters and digits.
Description	No	Enter a maximum of 256 characters, including letters, digits, spaces, and these special characters: , . () []

- f. Save the settings. Click the username on the navigation bar and choose **All Account Settings**.
  - g. Choose **General > Permission Template**. The saved permission template is displayed.

Users with the **Tenant Administrator** role can edit and delete permission templates.
- Using Permission Templates in a Project
    - a. Go to the CodeArts homepage.
      - i. Log in to the [CodeArts console](#), click , and select a region.
      - ii. Click **Access Service**.
    - b. On the CodeArts homepage, click a project name.
    - c. In the navigation pane, choose **Settings > Permissions**.
    - d. On the **Permissions** tab, click the **Select Template** drop-down list and select a template.
    - e. Click **OK**.
    - f. Check the updated role permissions.

## 1.7 Managing Agent Pools

## 1.7.1 Creating an Agent Pool

### Scenario

You can use built-in or custom executors to perform check, build, deployment, pipeline, and API test tasks in CodeArts.

Agent pools are used to connect custom executors. You can add your own execution resources to an agent pool so that you can use them to execute tasks. Agent pools help improve efficiency and remove dependency on public execution resources.

### Creating an Agent Pool

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Click the username  on the navigation bar and choose **All Account Settings**.

**Step 3** Choose **Agent Pool > Agent Pool**.

**Step 4** Click **Create Pool**.

**Step 5** Configure the agent pool and click **Save**.

**Table 1-10** Creating an agent pool

Configuration Item	Mandatory	Description
Pool Name	Yes	Enter a maximum of 50 characters, including digits, letters, periods (.), underscores (_), and hyphens (-).
Pool Type	Yes	Supported pool types: <ul style="list-style-type: none"><li>• <b>LINUX</b>: Tasks are executed on a Linux VM.</li><li>• <b>LINUX_DOCKER</b>: A Linux Docker container is started and tasks are executed in the container.</li><li>• <b>WINDOWS</b>: Tasks are executed on a Windows VM.</li><li>• <b>MAC</b>: The agent registration command is run on a MAC host.</li></ul>
Description	No	Enter a maximum of 1,024 characters.



Configuration Item	Mandatory	Description
This pool can be used by all users of the current account.	No	If this parameter is selected, all users of the current account can use the pool.

**Step 6** View the new record after the creation is successful.

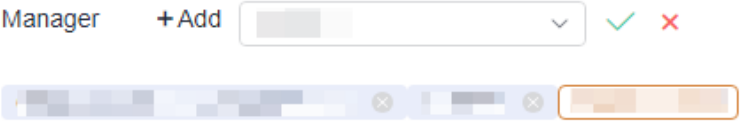

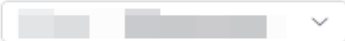
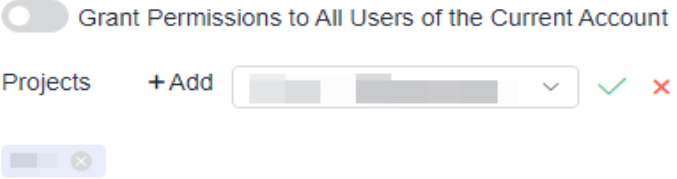
----End

## Follow-up Operations

After **creating an agent pool**, you can perform the following management operations on it.

**Table 1-11** Managing an agent pool

Operation	Description
Viewing agent pool details	Click the <b>Pool Details</b> tab, and view the detailed information, including the owner, pool type, creation time, and description.

Operation	Description
<p>Managing agent pool permissions</p>	<p>Click the <b>Permissions</b> tab, and manage the permissions for using the agent pool.</p> <ul style="list-style-type: none"> <li>• Specifying managers: Managers have full permissions for an agent pool, including viewing, using, configuring, and modifying the agent pool. <ul style="list-style-type: none"> <li>- Click <b>Add</b> next to <b>Manager</b>, select a user from the drop-down list, and click ✓.</li> <li>- To cancel the manager role of a user, click ✕ next to the username.</li> </ul> <p><b>Permissions</b> (View, Use and Edit the Pool)</p>  </li> <li>• Specifying users: Users can view the pool details, operation records, and agent list, and use agents in the pool to execute tasks. <ul style="list-style-type: none"> <li>- Click the switch  to grant the user role to all users in your account.</li> <li>- Click <b>Add</b> next to <b>Projects</b>, select a project name from the drop-down list box, and click ✓ to set all members in the selected project as agent pool users.</li> <li>- To cancel the authorization for members in a project, click ✕ next to the project name.</li> </ul> <p><b>User</b> (View and Use the Pool)</p> <p><input checked="" type="checkbox"/> Grant Permissions to All Users of the Current Account</p> <p>Projects    +Add        ✓ ✕</p>  </li> </ul>
<p>Viewing agent pool operation records</p>	<p>Click the <b>Operation Records</b> tab, and view the operation records.</p>

Operation	Description
Setting notification rules	<p>Click the <b>Notify</b> tab, and configure notifications for different operations. You can determine whether to send service updates or emails to permission managers when the following operations are triggered:</p> <ul style="list-style-type: none"><li>• Create agent</li><li>• Delete agent</li><li>• Disable agent</li><li>• Enable agent</li><li>• Bring agent offline</li><li>• Bring agent online</li></ul>

## 1.7.2 Creating an Agent

### Scenario

An agent is installed on a host and registered with CodeArts. It is used for code check and build tasks as a custom executor.

#### NOTE

- Install only one agent on a host. If multiple agents are installed, some of them may go offline during task execution.
- Each agent executes only one task at a time.

### Prerequisites

- You have the owner or administrator permission for the target agent pool.

#### NOTE

If you create an agent in the **LA-Sao Paulo1** and **LA-Santiago** regions as an IAM Identity Center user ([a user created in the IAM Identity Center](#)), use the AK/SK of an IAM user who has at least the administrator permission.

- **An agent pool has been created.**
- A host that meets the following requirements is available:
  - Specifications: 4 vCPUs | 8 GiB or above, disk space > 80 GiB
  - Java 8 and Git are installed. If the agent pool type is LINUX\_DOCKER, Docker must also be installed.

#### NOTE

- If you use a Linux host, you can choose auto agent installation, or manually install the agent using the **root** account.
- If you use a Windows or macOS host, manually install the agent on it using the system administrator account.
- If you use a Windows host, install 64-bit Java 8.
- The host can access the public network.

## Creating an Agent

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Click the username  on the navigation bar and choose **All Account Settings**.

**Step 3** Choose **Agent Pool > Agent Pool**.

**Step 4** Find the target agent pool in the agent pool list and click its name to display the **Agents** tab.

**Step 5** Click **Create Agent**.

**Step 6** Configure parameters as required.

1. Configure the network environment for the host.

**Table 1-12** Configuration 1

Configuration Item	Description
Install a JDK automatically	<p>The host must have a Java 8 (or later) environment. After this function is enabled, JDK is automatically installed in the <code>/usr/local</code> directory of the host. If this function is disabled, you need to install it manually. <a href="#">Learn how to install Java 8</a>.</p> <p><b>NOTE</b> This configuration item is displayed only when the agent pool type is <b>LINUX</b> or <b>LINUX_DOCKER</b>.</p>
Install Git automatically	<p>The host must have a Git environment. After this function is enabled, Git is automatically installed on the host. If this function is disabled, you need to install it manually. <a href="#">Learn how to install Git</a>.</p> <p><b>NOTE</b> This configuration item is displayed only when the agent pool type is <b>LINUX</b> or <b>LINUX_DOCKER</b>.</p>
Install Docker automatically	<p>The host must have a Docker environment. After this function is enabled, Docker is automatically installed in the <code>/usr/bin</code> directory of the host. After the installation is complete, the service is automatically registered and the Docker service is started. If this function is disabled, you need to install it manually. <a href="#">Learn how to install Docker</a>.</p> <p><b>NOTE</b> This configuration item is displayed only when the agent pool type is <b>LINUX</b> or <b>LINUX_DOCKER</b>.</p>

Configuration Item	Description
Restart Without Re-registration	<p>If this feature is enabled, the agent process will be automatically registered as a Linux system service that resumes when the host restarts. You do not need to create a new agent process.</p> <p><b>NOTE</b> This configuration item is displayed only when the agent pool type is <b>LINUX</b> or <b>LINUX_DOCKER</b>.</p>

2. Configure authentication information.

**Table 1-13** Configuration 2

Configuration Item	Description
AK	<p>Access key ID.</p> <p>Obtain the value from the access key file downloaded by referring to <a href="#">Obtaining an AK/SK</a>.</p>
SK	<p>Secret access key.</p> <p>Obtain the value from the access key file downloaded by referring to <a href="#">Obtaining an AK/SK</a>.</p>
Agent Name	<p>Agents with the same name cannot be installed on the same host.</p> <p>Set this parameter based on the site requirements. To facilitate management, it is recommended that the name be clear and associated with the agent IP address, such as <b>10.10.10.10-agent-01</b>.</p>
Agent Workspace	<p>The working directory where the agent runs on the host and the workspace where tasks are executed. Different agents of the same host cannot use the same agent workspace.</p> <p>For easy management, specify a data disk. Example:</p> <ul style="list-style-type: none"><li>- Linux: <b>/opt/cloud/agent01</b></li><li>- Windows: <b>C:/opt/cloud/agent01</b></li><li>- macOS: <b>/opt/cloud/agent01</b></li></ul>

 **NOTE**

To ensure successful installation, do not use temporary AK/SK.

3. Generate a command.

Set the parameters, agree to the statements, and click **Generate Command**. The command for installing the agent is automatically generated in the command box.

Click **Copy Command**.

**Step 7** Log in to the host and run the copied installation command.

- Linux host: Log in using the **root** account and then run the installation command.
- Windows host: Log in as the administrator, open Git Bash, and then run the installation command.
- macOS host: Log in using the **root** account and then run the installation command.

If the following message is displayed, the installation is complete.

**Figure 1-9** Successful installation

```
[2022-07-04 16:52:57] [INFO] End Install Octopus Agent, Agent output logs have been printed to [ /opt/octopus-agent/logs/octopus-agent.log ]
```

**Step 8** Return to the **Agents** tab and close the dialog box.



After 10 to 30 seconds, refresh the page and check the **Status** column. If the status becomes **Idle**, the installation is successful.


----End

## Follow-up Operations

After [creating agents](#), you can perform the following operations on them.

**Table 1-14** Managing agents

Operation	Description
Viewing the agent list	<p>On the <b>Agents</b> tab, view the agent status, memory usage, and available disk space.</p> <p>There are five states:</p> <ul style="list-style-type: none"> <li>• <b>Running</b>: The agent is running tasks.</li> <li>• <b>Idle</b>: The agent is connected but not running any task.</li> <li>• <b>Disabled</b>: The agent is connected but cannot run tasks.</li> <li>• <b>Offline</b>: The agent is disconnected. Log in to reconnect, or delete if no longer needed.</li> <li>• <b>Deleting</b>: The agent is being deleted.</li> </ul>
Enabling/ Disabling an agent	<p>On the <b>Agents</b> tab, click  in the <b>Operation</b> column of the target agent to disable it. The status changes to <b>Disabled</b>. To enable the agent, click . The status changes to <b>Idle</b>.</p>

Operation	Description
Deleting an agent	<ul style="list-style-type: none"><li>Deleting a single agent: On the <b>Agents</b> tab, click  in the <b>Operation</b> column of the target agent to delete it.</li><li>Deleting multiple agents: On the <b>Agents</b> tab, select the target agents and click <b>Batch Delete</b>.</li></ul> <p><b>NOTE</b></p> <ul style="list-style-type: none"><li>Agents in the <b>Running</b> state cannot be deleted.</li></ul>

## 1.8 Creating Service Endpoints

### Scenario

A service endpoint is an extension of CodeArts. It enables CodeArts to connect to third-party services.

For example, when your CodeArts tasks need to obtain project source code from a third-party GitHub repository or need to run with Jenkins, you can create an endpoint to connect to each service.

The following table lists the endpoints supported by CodeArts.

**Table 1-15** Service endpoints

Type	Scenario
Docker repository	Connects to a Docker image repository to obtain images for CodeArts Deploy.
Jenkins	Connects to Jenkins to execute Jenkins tasks in pipelines.
Kubernetes	Connects to a Kubernetes cluster to deliver deployment tasks.
nexus repository	Connects to a third-party private Maven repository to obtain file information for build tasks.
Git repository	Connects to a third-party Git repository to obtain branch information for CodeArts Pipeline and CodeArts Build.
GitHub	Connects to a GitHub account to obtain its repository and branch information for CodeArts Pipeline and CodeArts Build.
IAM user	Delegates your AK/SK to an IAM user so that the user can obtain a token to perform tasks that require higher permissions.

Type	Scenario
CodeArts Repo HTTPS	Authorizes CodeArts to download code, create branches, merge branches, and commit code in CodeArts Repo repositories. Currently, it is used for change-triggered pipelines and related extensions.
GitLab	Connects to a GitLab repository to obtain branch information for CodeArts Pipeline and CodeArts Build.

## Prerequisites

- You have the endpoint edit permission for the target CodeArts project.
- The third-party service to connect can be accessed from the public network without restrictions.

## Creating a Docker Repository Service Endpoint

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Click the target project name to access the project.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **Docker repository** from the drop-down list.

**Step 5** Configure the following information and click **Confirm**.

**Table 1-16** Creating a Docker repository service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
Repository Address	Yes	Address of the Docker repository to connect. HTTP and HTTPS addresses are supported.
Username	Yes	Username of the Docker repository to connect. Enter a maximum of 256 characters.
Password	Yes	Password of the Docker repository to connect. Enter a maximum of 256 characters.

**Step 6** Check the new service endpoint.

----End



## Creating a Jenkins Service Endpoint

### NOTE

Currently, Jenkins service endpoints are not supported in **LA-Santiago** and **TR-Istanbul**.

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **Jenkins** from the drop-down list.

**Step 5** Configure the following information and click **Confirm**.

**Table 1-17** Creating a Jenkins service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
Server URL	Yes	Address of the Jenkins service to connect. The address can be in format " <a href="#">http://ip:Port</a> " or " <a href="#">https://ip:Port</a> ".
Username	Yes	Username of the Jenkins service to connect. Enter a maximum of 300 characters.
Password	Yes	Password of the Jenkins service to connect. Enter a maximum of 300 characters.

**Step 6** Check the new service endpoint.

----End

## Creating a Kubernetes Service Endpoint

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **Kubernetes** from the drop-down list.

**Step 5** Configure the following information and click **Verify and Confirm**.

**Table 1-18** Creating a Kubernetes service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
Kubernetes URL	Yes	Server address of the cluster to connect. Obtain it by searching for <b>server</b> in <b>kubeconfig.json</b> .
Kubeconfig	Yes	Content of the cluster's <b>kubeconfig.json</b> file.

**Step 6** Check the new service endpoint.

----End

## Creating a Nexus Repository Service Endpoint

### NOTE

Currently, Nexus repository service endpoints are not supported in **LA-Santiago** and **TR-Istanbul**.

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **nexus repository** from the drop-down list.

**Step 5** Configure the following information and click **Confirm**.

**Table 1-19** Creating a Nexus repository service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
Repository Address	Yes	Address of the Nexus repository to connect. HTTP and HTTPS addresses are supported.
Username	Yes	Username of the Nexus repository to connect. Enter a maximum of 300 characters.
Password	Yes	Password of the Nexus repository to connect. Enter a maximum of 300 characters.

**Step 6** Check the new service endpoint.

----End

## Creating a Git Service Endpoint

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **Git repository** from the drop-down list.

**Step 5** Configure the following information and click **Confirm**.

**Table 1-20** Creating a Git service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
Git Repository URL	Yes	HTTPS address of the Git repository to connect.
Username	No	Username of the Git repository to connect. Enter a maximum of 300 characters.
Password or Access Token	No	Password of the Git repository to connect. Enter a maximum of 300 characters.

**Step 6** Check the new service endpoint.

----End

## Creating a GitHub Service Endpoint

### NOTE

Currently, GitHub service endpoints are not supported in **LA-Santiago**.

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **GitHub** from the drop-down list.

**Step 5** Configure the following information and click **Authorize and Confirm**.

**Table 1-21** Creating a GitHub service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
Authentication Mode	Yes	Two authentication modes are supported: <ul style="list-style-type: none"><li>• <b>OAuth</b>: After clicking <b>Authorize and Confirm</b>, log in to GitHub for manual authorization.</li><li>• <b>Access token</b>: Enter your access token obtained in GitHub. For details, see <a href="#">GitHub official website</a>.</li></ul>

**Step 6** Check the new service endpoint.

----End

## Creating an IAM User Service Endpoint

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **IAM user** from the drop-down list.

**Step 5** Configure the following information and click **Confirm**.

**Table 1-22** Creating an IAM user service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
Access Key Id	Yes	AK obtained on the <b>My Credentials</b> page. For details, see <a href="#">Access Keys</a> .

Parameter	Mandatory	Description
Secret Access Key	Yes	SK obtained on the <b>My Credentials</b> page. For details, see <a href="#">Access Keys</a> .

**Step 6** Check the new service endpoint.

----End

## Creating a CodeArts Repo HTTPS Service Endpoint

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **CodeArts Repo HTTPS** from the drop-down list.

**Step 5** Configure the following information and click **Confirm**.

**Table 1-23** Creating a CodeArts Repo HTTPS service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
CodeArts Repo URL	Yes	HTTPS address of the CodeArts Repo repository to connect. Go to the target repository, and click <b>Clone/Download</b> . Click <b>Clone with HTTPS</b> , and obtain the repository address.
Username	No	HTTPS username of the CodeArts Repo repository to connect. Click the username on the navigation bar and choose <b>This Account Settings</b> . Obtain the username on the <b>Repo &gt; HTTPS Password</b> page.
Password	No	HTTPS password of the CodeArts Repo repository to connect. Click the username on the navigation bar and choose <b>This Account Settings</b> . Obtain the password on the <b>Repo &gt; HTTPS Password</b> page.

**Step 6** Check the new service endpoint.

----End

## Creating a GitLab Repository Service Endpoint

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the CodeArts homepage, click a project name.

**Step 3** In the navigation pane, choose **Settings > General > Service Endpoints**.

**Step 4** Click **Create Endpoint** and choose **GitLab repository** from the drop-down list.

**Step 5** Configure the following information and click **Confirm**.

**Table 1-24** Creating a GitLab repository service endpoint

Parameter	Mandatory	Description
Service Endpoint Name	Yes	Enter a maximum of 256 characters, including letters, digits, hyphens (-), underscores (_), periods (.), and spaces.
GitLab URL	Yes	HTTPS address of the GitLab repository to connect.
Username	No	Username of the GitLab repository to connect.
Access Token	No	Access token for the GitLab repository to connect. For details, see <a href="#">GitLab official website</a> .

**Step 6** Check the new service endpoint.

----End

## 1.9 Managing Personal Settings

After logging in to CodeArts, you can customize your personal settings based on preferences.


### Setting the Theme and Layout

CodeArts provides four themes (infinite, impression, deep, and galaxy) and four layouts (classic, modern, waterfall, and wide).

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.

2. Click **Access Service**.

**Step 2** Click the username  on the navigation bar and choose **Preferences**.

**Step 3** Select the desired theme and layout.

----End

## Setting an Alias

You can only set an alias for yourself. The alias will be visible to all project members.

When you set a work item handler, aliases are displayed by default, or usernames are displayed for users without an alias.

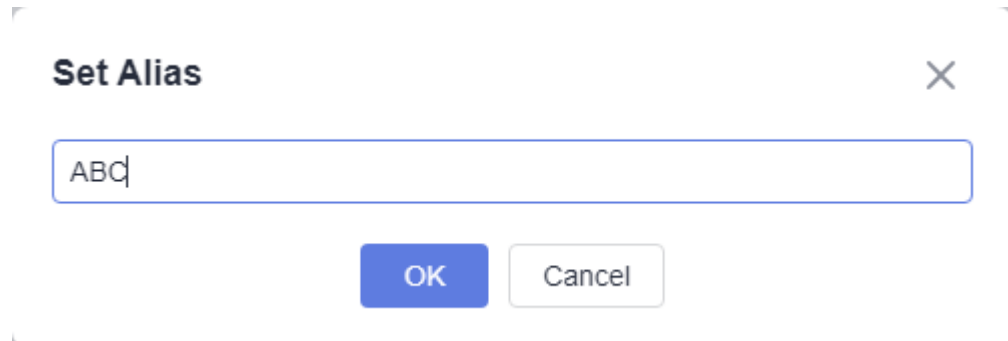
**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Click the username  on the navigation bar and click  next to the username.

**Step 3** In the displayed dialog box, enter an alias and click **OK**.

**Figure 1-10** Setting an alias



**Step 4** Refresh the page. The new alias is displayed in the upper right corner.


----End

## Setting Notifications

Configure whether to receive notifications about CodeArts services on the **Notifications** page.

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Click the username  on the navigation bar and choose **This Account Settings**.

**Step 3** On the displayed **Notifications** page, enable or disable **Do-Not-Disturb**.

To set the period, click **Edit Settings**. In the displayed dialog box, enter the start and end time, and click **OK**. The updated period is displayed.

----End

## 1.10 Other Operations

### 1.10.1 Managing Personal Work

CodeArts provides the workspace feature for you to manage your work.

#### Procedure

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** Choose **Workspace** on the navigation bar, and view and edit the following information.

**Table 1-25** Workspace

Tab	Description
My Work Items	Displays the work items for which you are the handler in joined Scrum and IPD projects. Click a work item title to view and edit the details.
My Files	Displays all files you have uploaded. Click a file name to preview the content. If a file is encrypted or has too many pages, download it to view the content.
My Tests	Displays all test cases for which you are the handler in all joined projects. Click a case ID to view and edit the details.

----End

### 1.10.2 Managing CodeArts Projects and Their Members

#### Scenario

In CodeArts, only the members of a project can view the project details, such as work items, test cases, and build and deployment tasks. If an IAM user does not add the administrator as a member when creating a project, the project will be invisible to the administrator after they log in to the homepage.



The administrator can view all the projects and members under their account on the **Projects and Members** page and perform necessary operations there.

## Prerequisites

To remove members from the **Project Members** tab, ensure that you have been assigned the **Tenant Administrator** role.

## Procedure

**Step 1** Go to the CodeArts homepage.

1. Log in to the [CodeArts console](#), click , and select a region.
2. Click **Access Service**.

**Step 2** On the navigation bar, click the username  and choose **All Account Settings**.

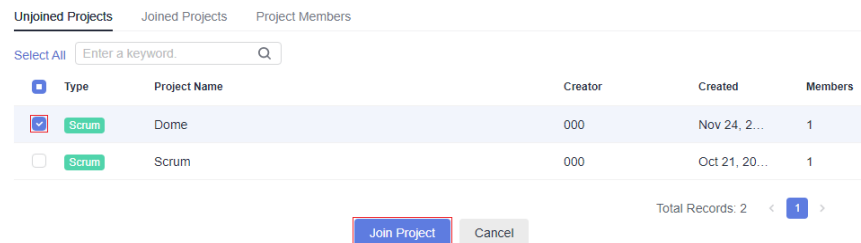
**Step 3** Choose **General > Projects and Members**.

**Step 4** Select the desired tab.

- On the **Unjoined Projects** tab, view the projects created by IAM users who have not added the administrator as a member.

To view details of projects, select them and click **Join Project**.


**Figure 1-11** Unjoined Projects tab



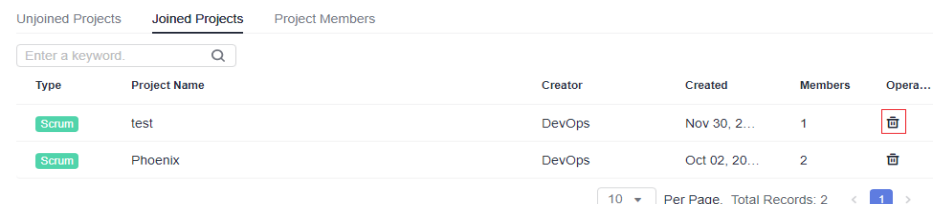
Type	Project Name	Creator	Created	Members
<input checked="" type="checkbox"/> Scrum	Dome	000	Nov 24, 2...	1
<input type="checkbox"/> Scrum	Scrum	000	Oct 21, 20...	1



Total Records: 2 < 1 >

[Join Project](#) [Cancel](#)

- On the **Joined Projects** tab, view the projects where you are a member. To delete a project, click  in the same row.


**Figure 1-12** Joined Projects tab



Type	Project Name	Creator	Created	Members	Opera...
Scrum	test	DevOps	Nov 30, 2...	1	
Scrum	Phoenix	DevOps	Oct 02, 20...	2	

10 Per Page, Total Records: 2 < 1 >

- On the **Project Members** tab, view all projects (both joined and unjoined) and the members of each project.

To remove a member from a project, click .

To remove multiple members, select them and click **Batch Remove**.

Figure 1-13 Project Members

<input type="checkbox"/>	Username	Alias	Enterprise Account	Project Name	Type	Project Creator	Last Accessed	Enabled/Disa...	Operation
<input type="checkbox"/>	DevOps	--	DevOps	project_01	Scrum	DevOps	Jul 17, 2024	Enabled	<a href="#">⌵</a>
<input checked="" type="checkbox"/>	test001	--	DevOps	Demo	Scrum	DevOps	Aug 09, 2024	Enabled	<a href="#">⌵</a>
<input checked="" type="checkbox"/>	test002	--	DevOps	Release-Demo	Scrum	DevOps	Jun 25, 2024	Enabled	<a href="#">⌵</a>

50 Per Page, Total Records: 3 < 1 >

----End