

ModelArts

AI Gallery (Old Version)

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1 AI Gallery

AI Gallery is a ModelArts-empowered developer ecosystem community. In this community, scientific research institutions, AI application developers, solution integrators, enterprises, and individual developers can share and purchase AI assets such as algorithms. This accelerates the development and implementation of AI assets and enables every participant in the AI development ecosystem to achieve business success.

AI Gallery provides , where you can share AI assets such as algorithms.

- **Algorithms:** Algorithms are shared.
You can share and subscribe to algorithms on the **Algorithms** page. You are allowed to search for algorithms, subscribe to assets, and use them on the ModelArts management console. Additionally, you can publish self-developed algorithms to AI Gallery and share them with other users.

AI Gallery Constraints

- Subscribing to an AI asset is to purchase the usage quota of it. This AI asset can be used based on the quota.
- Using AI assets consumes hardware resources. Huawei Cloud ModelArts charges you for the hardware resources based on the actual usage.
- If you do not want to display a published AI asset in the asset list, discontinue it. After an AI asset is discontinued, it is visible only to the publisher. Even if a subscribed AI asset has been discontinued, the subscribers can still use it based on the quota. This ensures the subscribers' rights and prevents problems caused by discontinuing operations.

2 Free Assets

AI Gallery provides AI assets that can be shared for free.

- Using **free assets** consumes hardware resources. Huawei Cloud ModelArts charges you for the hardware resources based on the actual usage.
The following types of assets can be shared and subscribed to for free: algorithms.

Use of Free Assets

- Before using a free asset, [create a Huawei Cloud account](#).
- To search for a published free asset, choose **My Gallery > My Assets** and a module, or search for it in **Asset Market**.
- **My Subscriptions** of AI Gallery displays free assets that you have subscribed to.

3 My Gallery

View your information and the AI assets you have published and subscribed to in **My Gallery**.

Table 3-1 My Gallery

Option	Function
My Assets > Algorithms	<p>Displays your published algorithms and algorithms that have been subscribed to.</p> <ul style="list-style-type: none">• My Publishes: View your published algorithms, such as the number of views, favorites, and subscriptions. Click Release, Discontinue, or Delete on the right to manage published algorithms. After an asset is discontinued, users who have subscribed to the asset can continue using it, but other users cannot view or subscribe to it. Discontinued assets can be released again. You can delete an asset that has no subscribers.• My Subscriptions: View your subscribed algorithms, such as the publisher, application console, and remaining quota. Click Cancel Subscription or Retrieve Subscription on the right to manage subscribed algorithms. After a subscription is canceled, the algorithm will not be available in Subscription on the ModelArts console. You can retrieve the subscription of an algorithm that has been unsubscribed from and continue to use the algorithm under the original quota constraints.
My Information	<p>View your information, including the account, profile photo, nickname, email, and description.</p> <ul style="list-style-type: none">• Click Edit to edit the nickname and description.• Click Change to change the profile photo.

4 Subscription & Use

4.1 Searching for and Adding an Asset to Favorites

In AI Gallery, various AI assets such as algorithms are shared. To quickly search for assets, AI Gallery provides multiple quick search methods and the function of adding assets to favorites.

Searching for an Asset

On the asset page, use the following search methods to quickly find the assets you want.

Figure 4-1 Searching for an asset

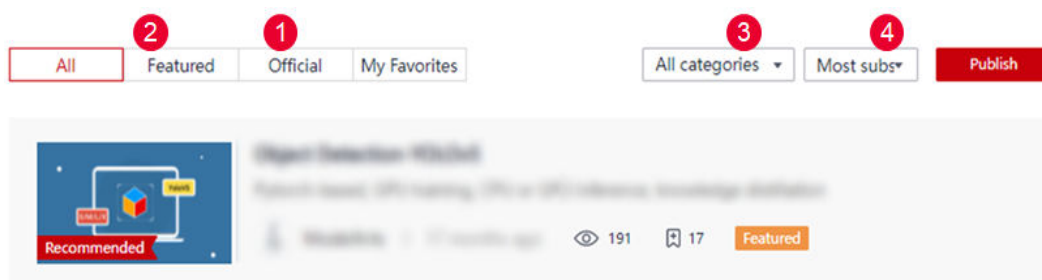


Table 4-1 Quick search


No.	Type	Search Mode	Supported AI Asset
1	Official assets released by Huawei Cloud	Click Official . All official assets released by Huawei Cloud are displayed and can be used for free.	Algorithms
2	Featured assets	Click Featured . All featured assets are displayed.	Algorithms


No.	Type	Search Mode	Supported AI Asset
3	Assets by category	Click All categories , select a category, and click OK .	Algorithms
4	Assets by ranking	Click Most subscriptions to change a ranking mode.	Algorithms

Adding a Free Asset to Favorites

If you find a free asset that you are interested in, you can add it to **My Favorites** for quick search.

1. Click an asset. The asset details page is displayed.

2. On the asset details page, click  to add the asset to favorites. After the asset is added to favorites, you can quickly view it on the **My Favorites** tab page of the module the asset belongs to.

3. (Optional) To remove it from favorites, click  again.

4.2 Subscribing to Free Algorithms

In AI Gallery, you can search for and subscribe to free algorithms that meet service requirements, and use them to create training jobs.

NOTE

The algorithms shared in AI Gallery are free of charge, but the hardware resources used during the algorithm running will be billed on the management console based on the resource usage.

Procedure

1. Log in to AI Gallery.
2. Choose **Asset Market > Algorithms**. The **Algorithm** page is displayed, showing all shared algorithms.
3. Search for your required algorithm. For details, see [Searching for an Asset](#).
4. Click the algorithm to go to its details page.
 - On the details page, you can view the information of the algorithm, including its description, delivery, restrictions, versions, and comments.
 - Before using an algorithm, view the constraints for the target version on the **Version** tab, and then prepare data and resources based on the constraints.
 - For an algorithm with open source code, you can obtain the download address on the details page.

On the **Code** tab, click **Copy Download Link** on the right to obtain the code download address.

5. On the details page, click **Subscribe**.
 - If there are constraints on the algorithm, the **Constraints** page will be displayed. Confirm the information and click **Continue**.
 - If there are no constraints on the algorithm, the subscription is successful.

 **NOTE**

If you subscribe to an asset not released by Huawei Cloud, the **Note** page will be displayed. Then, read and agree to *Data Security and Privacy Risk* and *Service Agreement of AI Gallery*, and click **Continue** to proceed with the subscription.

After the algorithm is subscribed to, **Subscribe** on the details page is displayed as **Subscribed**. The subscribed asset is also displayed in **My Profile > My Algorithms > My Subscriptions**.

Using an Algorithm

1. Subscribed algorithms can be used on the ModelArts console, for example, to create a training job.

Method 1: Access the ModelArts console from the algorithm details page.

- a. On the algorithm details page, click **Access Console**.
- b. In the **Select Service Region** dialog box, select the service region where ModelArts is located and click **OK**. The **Subscription** page in **Algorithm Management** of the ModelArts console is displayed.

Method 2: Access the ModelArts console from My Gallery.

- a. In AI Gallery, choose **My Profile > My Algorithms**. The **My Algorithms** page is displayed.
 - b. Click **My Subscriptions**. The algorithms you have subscribed to are displayed.
 - c. Select the target algorithm from the list and click **ModelArts** on the right of **Application Console**.
 - d. In the **Select Service Region** dialog box, select the service region where ModelArts is located and click **OK**. The **Subscription** page in **Algorithm Management** of the ModelArts console is displayed.
2. On the **My subscription** tab, click the downward arrow on the left of the algorithm to show the algorithm details. In the version list, click **Create training job**. The training job creation page is displayed.

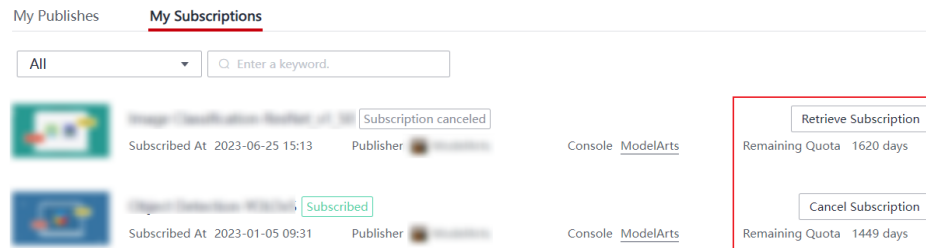
Canceling Subscription or Retrieving a Subscribed Algorithm

Cancel the subscription of an algorithm if it not required. After the subscription is canceled, the algorithm will not be available on the **My subscription** page in **Algorithm Management** of the ModelArts console. To use an unsubscribed algorithm, retrieve the subscription, and the algorithm will be available on the **My subscription** page again on the ModelArts console.

1. In AI Gallery, choose **My Profile > My Algorithms**. The **My Algorithms** page is displayed.
2. Click the **My Subscriptions** tab.
 - **Cancel Subscription**: This option is available only for subscribed assets.

- Click **Cancel Subscription** on the right of the target asset. In the dialog box that is displayed, confirm the information and click **OK**.
- **Retrieve Subscription:** This option is available only for subscriptions that have been canceled.
- Click **Retrieve Subscription** on the right of the target asset.

Figure 4-2 Canceling or retrieving a subscription



4.3 Subscribing to a Workflow

In AI Gallery, search for and subscribe to workflows. After a subscribed workflow is imported to ModelArts through AI Gallery, the workflow can be used on the ModelArts console.

Procedure

1. Log in to AI Gallery.
2. Switch to the workflow page, on which all shared workflows are displayed.
3. Search for your desired workflow. For details, see [Searching for and Adding an Asset to Favorites](#).
4. Click the target workflow to go to the details page.
On the details page, you can view the information of the workflow.
5. Click **Subscribe**.
After the workflow is subscribed to, **Subscribe** on the details page is displayed as **Subscribed**. The subscribed asset is also displayed in .

Using a Workflow

Subscribed workflows can be imported to and used on the ModelArts console.

1. Import a subscribed workflow to the ModelArts console.
Method 1: Access the ModelArts console from the workflow details page.
On the workflow details page, click **Run**. In the dialog box that appears, configure parameters in [Figure 4-3](#) and click **Import** to go to the workflow details page on the ModelArts console.

Figure 4-3 Importing a free workflow

Import Workflow from AI Gallery

Asset Name: object detection workflow for auto-exeml

Asset Version: 1.0.0

Workflow Name: workflow_f45a

Region: [Blank]

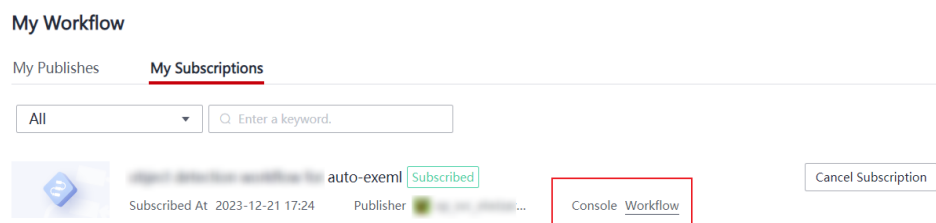
Workspace: default

Buttons: Import, No

Method 2: Access the ModelArts console from My Gallery.

- In AI Gallery, choose . The **My Workflows** page is displayed.
- Click **My Subscriptions**. The workflows you have subscribed to are displayed.
- Select the workflow to be imported from the list and click **Workflow** next to **Console**.

Figure 4-4 Accessing the console



- In the displayed dialog box, configure parameters in **Figure 4-5** and click **Import** to go to the workflow details page on the ModelArts console.

Figure 4-5 Importing a free workflow

Import Workflow from AI Gallery

Asset Name	object detection workflow for auto-exeml
Asset Version	1.0.0
Workflow Name	workflow_f45a
Region	
Workspace	default

2. On the ModelArts console, use the workflow imported from AI Gallery. In the navigation pane of the ModelArts console, choose **Workflow(Beta)**. In the workflow list, locate the workflow imported from AI Gallery and click **Configure** in the **Operation** column to access the workflow.

Canceling or Retrieving the Subscription of a Workflow

Cancel the subscription of a workflow if it not required. To use an unsubscribed workflow, click **Retrieve Subscription** to restore the canceled subscription.

5 Publish & Share

5.1 Publishing a Free Algorithm

In AI Gallery, you can share your algorithms with others for free.

Prerequisites

- You have created an algorithm in **Algorithm Management** on the ModelArts console. For details about how to create an algorithm, see [Creating an Algorithm](#).

NOTE

When creating an algorithm, ensure that the names of files and folders in the OBS bucket where the algorithm code is stored are unique. Otherwise, the algorithm may fail to be published. If the algorithm is published, the code fails to be [opened](#).

Publishing an Algorithm

1. On the AI Gallery home page, go to the **Algorithm** page.
2. Click **Publish**. The **Publish in AI Gallery** is displayed.
3. Configure parameters and click **Publish**.
 - Publishing a new version
 - i. Set **Publish Mode** to **Create Asset**.
 - ii. Enter an item title which will be displayed in AI Gallery.
 - iii. **Source** defaults to **ModelArts**.
 - iv. Select a ModelArts region. Select a ModelArts region for using this asset.
 - v. Click **Select** on the right of **Algorithm Name**, select the algorithm you want to publish, and click **Confirm**.
 - vi. Enter the asset version in the *x.x.x* format.
 - vii. Set **Visible To**.

Options:

 - **Public**: indicates that all users who use AI Gallery can view and use this asset.

- **Specific users:** indicates that only specified users can view and use this asset.
 - **Only to me:** indicates that only the current account can view and use this asset.
- viii. Set **Duration Limit**.
- Set the free duration of the asset. This function is disabled by default, that is, subscribers can use the asset without duration limit. When this function is enabled, set the free duration of the asset and whether to renew the subscription after the asset expires.
- Updating an existing version
 - i. Set **Publish Mode** to **Add asset version**.
 - ii. Select an existing asset name from the **Item Title** drop-down list.
 - iii. **Source** defaults to **ModelArts**.
 - iv. Select a ModelArts region.
 - v. Click **Select** on the right of **Algorithm Name**, select the target algorithm, and click **Confirm**.
 - vi. Enter a new version number in the **Offering Version** text box.
4. Read and agree to *Agreement for Publishing Digital Contents on Huawei Cloud AI Gallery* and *Service Agreement of AI Gallery*.
5. Click **Publish**.

 **NOTE**

When you publish an asset imported using a container image, the backend performs asset security scanning. If the scanning detects any security issue, the asset will fail to be published and you will receive an email.

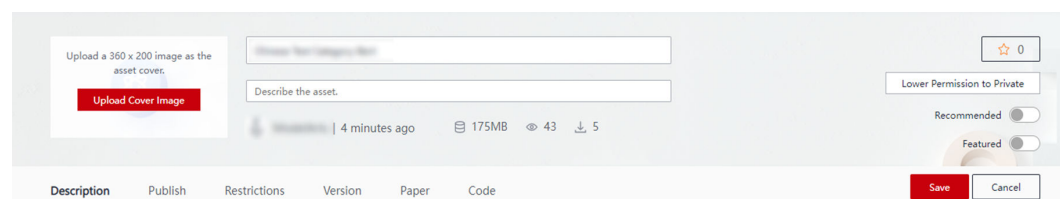
Editing Asset Details

After an asset is published, you can modify the title, cover, and description of the asset on the details page to attract attentions.

Modifying the cover and titles

1. On the details page of the published asset, click **Edit** on the right, upload a new cover, and edit the titles.
2. After editing is complete, click **Save**. The cover and titles are automatically synchronized. You can view the modification on the asset details page.

Figure 5-1 Modifying the cover and titles



Selecting categories


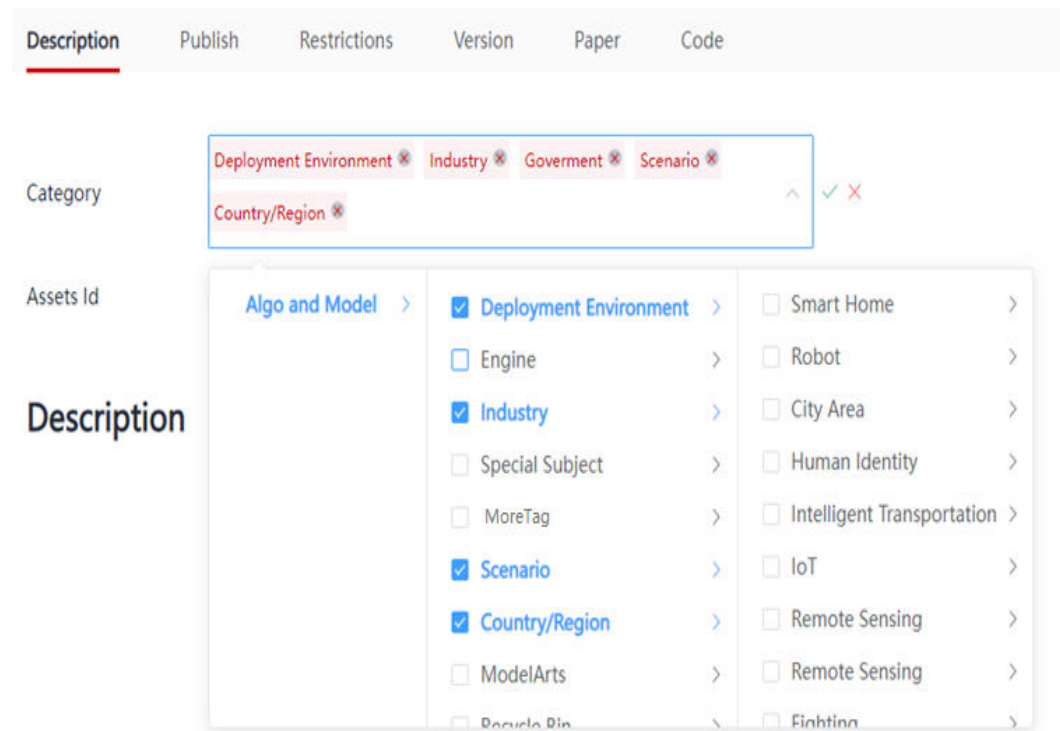
1. Click  on the right of **Category**. In the displayed edit box, select categories from the drop-down list.
2. Click the check mark on the right of the edit box.
The saved categories will be used as filter criteria on the asset search page.

Figure 5-2 Adding categories



Editing the description

1. Click **Edit** on the right and enter the asset description in the text box, including but not limited to the background, introduction, usage method, and constraints. You can edit content in Markdown format.
2. After the editing is complete, click **Save**.

Editing restrictions

You can modify the access policy and maximum duration of your published assets.

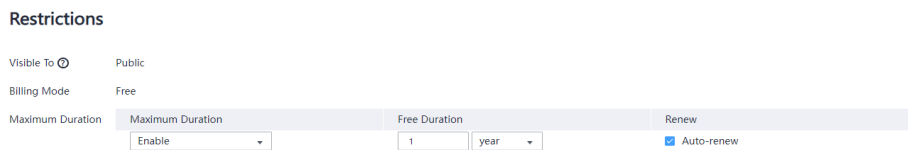
1. Click the **Restrictions** tab and click **Edit** in the upper right corner.
 - Select the access policy from the drop-down list on the right of **Visible To**.
 - **Public**: indicates that all users who use AI Gallery can view and use this asset.
 - **Specific users**: indicates that only specified users can view and use this asset.
 - **Only to me**: indicates that only the current account can view and use this asset.

 **NOTE**

Only permissions higher than the one set when you published your asset are allowed.

- **Maximum Duration** can be disabled or enabled. When this function is enabled, set the duration of the asset and whether to renew the subscription after the asset expires.
2. Click **Save**.

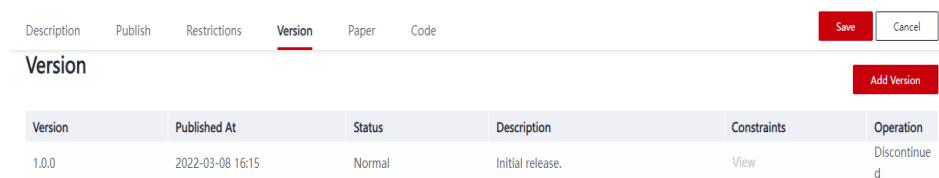
Figure 5-3 Editing restrictions



Editing versions

1. Click the **Version** tab and click **Edit** in the upper right corner.
2. On this page, modify the version description or click **Discontinue** in the **Operation** column of the target version to discontinue it. You can only discontinue a released asset that has two or more versions.
3. Click **Add Version** on the right of the **Version** area. The **Publish in AI Gallery** is displayed. Add an asset version by referring to [Updating an existing version](#).
4. After editing is complete, click **Save** in the upper right corner.

Figure 5-4 Editing versions



Editing the paper

1. On the **Paper** tab, click **Edit** in the upper right corner, and enter the paper name and URL in the text box. You can click the URL to view the paper details.
2. After editing is complete, click **Save**.

Editing code

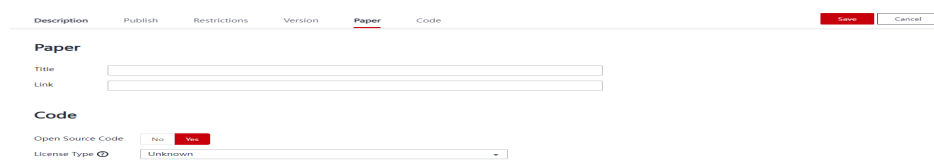
1. On the **Code** tab, click **Edit** in the upper right corner to determine whether to open the code.

 **NOTE**

If you discontinue an algorithm whose code is not open, the subscribers can continue using the algorithm before the subscription expires. After the algorithm is released again with its code open, the algorithm that has been discontinued is not displayed on the home page. You can choose **My Gallery > My Assets > Algorithms > My Subscriptions** and click the algorithm name to preview the code.

2. If the code is open, set the license type.
You can click the exclamation mark (!) next to a license type to view license details.
3. After editing is complete, click **Save**.

Figure 5-5 Editing the code



Discontinuing an Algorithm

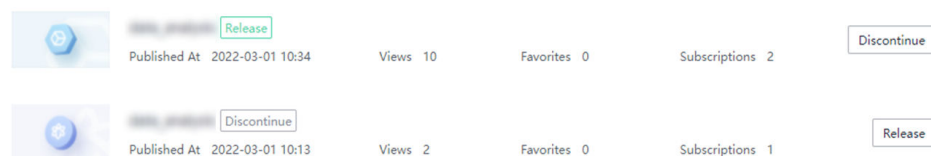
To discontinue a shared asset from AI Gallery, perform the following operations:

1. In AI Gallery, choose . The **My Algorithms** page is displayed.
2. On the **My Algorithms > Published Algorithms** page, click **Discontinue** on the right of the target asset. In the dialog box that is displayed, confirm the asset information and click **OK**.

 **NOTE**

After an asset is discontinued, users who have subscribed to the asset can continue using it within the duration, but other users cannot view or subscribe to it.

Figure 5-6 Discontinuing an asset



After the asset is discontinued, **Discontinue** in the **Operation** column changes to **Release**. You can click **Release** to share a discontinued asset to AI Gallery.

5.2 Publishing a Free Model

In Gallery, you can share the models you developed on ModelArts with others who can use them for free.

Prerequisites

- You have created a model in **AI Application Management** on the ModelArts console. For details about how to create or publish a model on the **AI Application Management** page, see [Introduction to AI Application Management](#). Both models imported from container images and trained models can be published to AI Gallery.

Procedure

1. On the AI Gallery home page, choose **Asset Hub > Model**.
2. Click **Publish**. The **Publish in AI Gallery** is displayed.

Publishing ModelArts models

- Publishing a new version
 - i. Set **Publish Mode** to **Create Asset**.
 - ii. Enter an item title which will be displayed in AI Gallery.
 - iii. Set **Source** to **ModelArts**.
 - iv. Set **ModelArts Region**.
Select a ModelArts region for using this asset.
 - v. Set **AI Application Name**.
Select a model from **AI Application Management** on the ModelArts console. Both models imported from container images and trained models can be published to AI Gallery.
 - vi. Enter the asset version in the *x.x.x* format.
 - vii. Set **Visible To**.
Options:
Public: indicates that all users who use AI Gallery can view and use this asset.
Specific users: indicates that only specified users can view and use this asset.
Only to me: indicates that only the current account can view and use this asset.
 - viii. Set **Duration Limit**.
Set the free duration of the asset. This function is disabled by default, that is, subscribers can use the asset without duration limit. When this function is enabled, set the free duration of the asset and whether to renew the subscription after the asset expires.
- Updating an existing version
 - i. Set **Publish Mode** to **Add asset version**.
 - ii. Select an existing asset name from the **Item Title** drop-down list. You can search for asset names.
 - iii. Set **ModelArts Region**.
Select a ModelArts region for using this asset.
 - iv. Set **AI Application Name**.
Select a model from **AI Application Management** on the ModelArts console.

Both models imported from container images and trained models can be published to AI Gallery.

- v. Enter a new version number in the **Offering Version** text box.
3. Read and agree to *Agreement for Publishing Digital Contents on Huawei Cloud AI Gallery* and *Service Agreement of AI Gallery*.
4. Click **Publish**.

NOTE

When you publish an asset imported using a container image, the backend performs asset security scanning. If the scanning detects any security issue, the asset will fail to be published and you will receive an email.

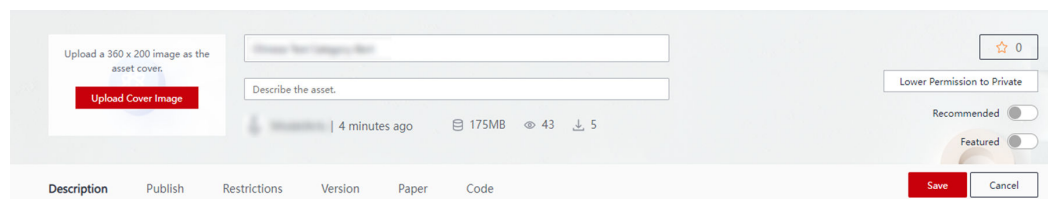
Editing Asset Details

After an asset is published, you can modify the title, cover, and description of the asset on the details page to attract attentions.

Modifying the cover and titles

1. On the details page of the published asset, click **Edit** on the right, upload a new cover, and edit the titles.
2. After the editing is complete, click **Save**. The cover and titles are automatically synchronized. You can view the modification on the asset details page.

Figure 5-7 Modifying the cover and titles



Selecting categories


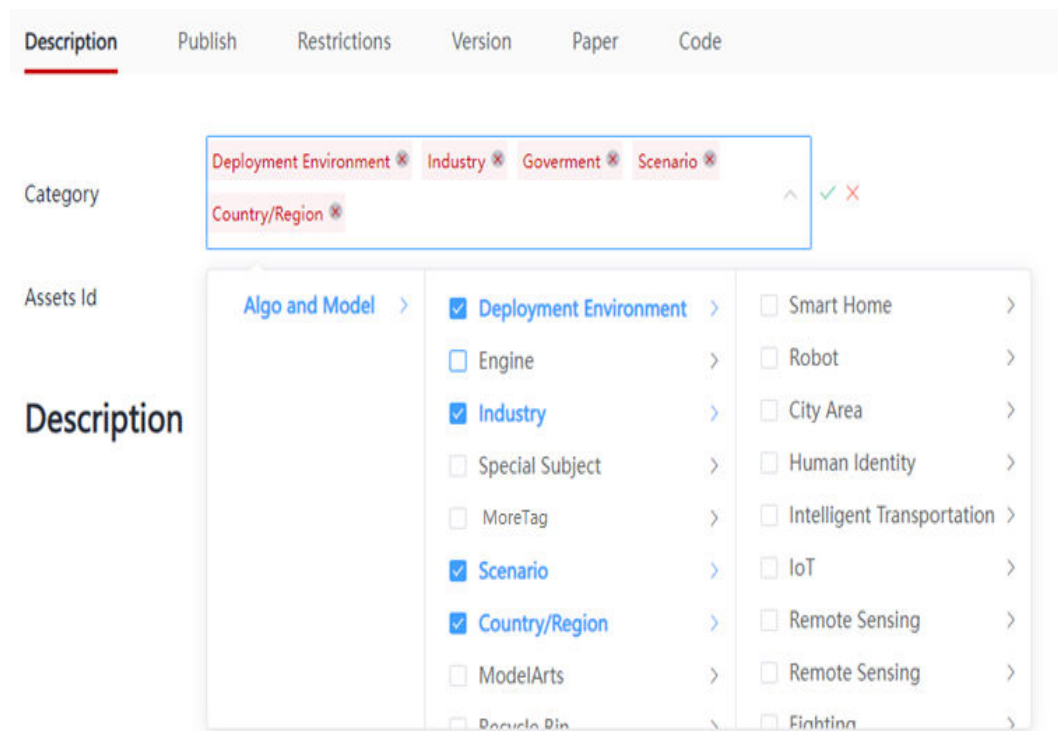
1. Click  on the right of **Category**. In the displayed edit box, select categories from the drop-down list.
2. Click the check mark on the right of the edit box.
The saved categories will be used as filter criteria on the asset search page.

Figure 5-8 Adding categories



Editing the description

1. Click **Edit** on the right and enter the asset description in the text box, including but not limited to the background, introduction, usage method, and constraints. You can edit content in Markdown format.
2. After the editing is complete, click **Save**.

Editing restrictions

You can modify the access policy and duration limit of your published assets.

1. Click the **Restrictions** tab and click **Edit** in the upper right corner.
 - Select the access policy from the drop-down list on the right of **Visible To**.
 - **Public**: indicates that all users who use AI Gallery can view and use this asset.
 - **Specific users**: indicates that only specified users can view and use this asset.
 - **Only to me**: indicates that only the current account can view and use this asset.

NOTE

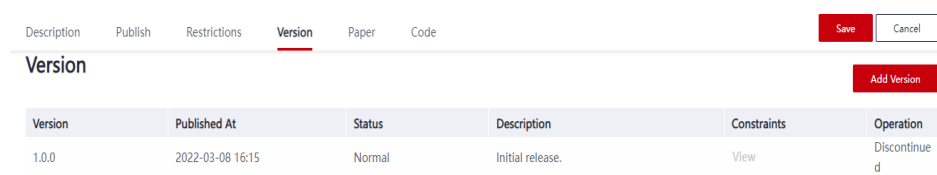
- Only permissions higher than the one set when you published your asset are allowed. Therefore, if a public model is created, **Visible To** cannot be modified.
- You can manually enable **Maximum Duration**. When this function is enabled, set the free duration of the asset and whether to renew the subscription after the asset expires.

2. Click **Save**.

Editing versions

1. Click the **Version** tab and click **Edit** in the upper right corner.
2. On this page, modify the version description or click **Discontinue** in the **Operation** column of the target version to discontinue it. You can only discontinue a released asset that has two or more versions.
3. Click **Add Version** on the right of the **Version** area. The **Publish in AI Gallery** is displayed. Add an asset version by referring to [Updating an existing version](#).
4. After editing is complete, click **Save** in the upper right corner.

Figure 5-9 Editing versions



Discontinuing a Free Model

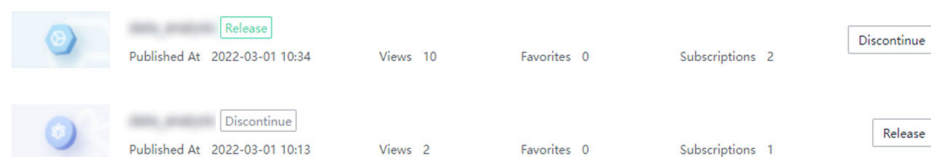
To discontinue a shared asset from AI Gallery, perform the following operations:

1. On the **AI Gallery** page, choose **My Gallery > My Assets > Models**.
2. On the **My Publishes** tab, click **Discontinue** on the right of the target asset. In the dialog box that is displayed, confirm the asset information and click **OK**.

NOTE

After an asset is discontinued, users who have subscribed to the asset can continue using it within the duration, but other users cannot view or subscribe to it.

Figure 5-10 Discontinuing an asset



After the asset is discontinued, **Discontinue** in the **Operation** column changes to **Release**. You can click **Release** to share a discontinued asset to AI Gallery.

6 Change History

Date	Description
2022-05-25	Supported workflow subscription. For details, see Subscribing to a Workflow .
2022-03-30	First released <i>AI Gallery User Guide</i> .