

Tag Management Service

Best Practices

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Contents

1 Principles for Naming Tags.....	1
2 Quickly Categorizing and Querying Resources Using Tags.....	3
2.1 Scenario.....	3
2.2 Adding Tags to ECSs by Department and Type.....	3
2.3 Quickly Querying Resources Using Existing Tags.....	5
2.4 Quickly Marking Cloud Resources Using Predefined Tags.....	5
2.5 Adding Tags for Resources in an Enterprise Project.....	7

1 Principles for Naming Tags

Principles

For enterprises that have migrated to the cloud, they typically have to manage hundreds of thousands or millions of resources within one account and the total resources are keeping increasing. If these resources are classified manually, it is not only difficult but inefficient. To tackle this issue, a cloud service that can enable automatic cloud management is required.

Huawei Cloud provides you with TMS to enable you to classify and group resources by using tags. You can tag resources by their attributes, such as by department, region, or project.

Use standardized tag names

Classifying resources by using standardized tag names can facilitate automatic and efficient cloud management.

A standardized tag name should meet the following requirements:

- Use a consistent case, such as lower case or upper case, for all tag keys and values.
- If Chinese characters are used in a tag name, you are advised to limit the characters to six to avoid exceeding the upper limit.

Use consistent and concise tag names

You are advised to use only one name for the same attribute. For example, if the word "purpose" has been used to indicate resource utility, you should avoid using other words, such as "use" or "object", to indicate resource utility.

At the same time, a name can only be used for one attribute.

Plan and predefine tags in advance

When you are planning to create resources, plan and predefine their tags in parallel, especially tag keys. Then you can use the predefined tags to classify your resources.

Avoid containing privacy information

A tag name should avoid containing enterprise privacy information, such as names of confidential projects, project revenue information, phone numbers, or email addresses.

Samples

The following table lists some tag naming samples. You are advised to use lowercase letters for all tag keys and values.

Category	Key	Value
Organizational structure	headquarters subcompany department team group	Corresponding names
Service architecture	product module service microservice	Corresponding names
Roles	role user	network administrator audit administrator operational administrator development personnel test personnel
Purpose	purpose	Corresponding utility
Project and environment	project task environment	Project-related values
Cost attribution	costcenter businessunit	Department-related costs
Order	order	Order ID

2 Quickly Categorizing and Querying Resources Using Tags

2.1 Scenario

This document is written based on Huawei Cloud Tag Management Service (TMS) practices. An example is given to help you quickly classify a large number of cloud resources and query the target resources.

A company has purchased a batch of public cloud resources, including Elastic Cloud Servers (ECSs) and Elastic Volume Service (EVS) disks. It wants to

- Categorize resources by department and type.
- Find the frequently used general-computing ECSs that are located in the CN-Hong Kong region and belong to the O&M department.
- Quickly and accurately tag a batch of ECSs that are migrated to Huawei Cloud.

Although each service console supports tags, you need to switch the service consoles and regions to tag resources, which is inefficient and cannot meet the company's requirements.

TMS provides the cross-service and cross-region tag search function and supports visualized tag editing and batch tag management, addressing the resource management difficulties.

2.2 Adding Tags to ECSs by Department and Type

On the TMS console, you can implement custom classification of cloud resources by tagging them. Take the 15 ECSs in the CN-Hong Kong region as an example. Add the following two groups of tags to them.

Table 2-1 ECS example tags

ECS Quantity	Tag (Key/Value)	
1 to 5	Type/Computing-accelerated	Department/ Development-Dept
6 to 10	Type/Memory-intensive	Department/ Operation_and_mainten ance-Dept
11 to 15	Type/General-computing	Department/Test-Dept

1. Log in to the management console.
2. Under **Management & Governance**, select **Tag Management Service**.
3. Choose **Resource Tags**.
4. Specify the resource search criteria.
 - Region: **CN-Hong Kong**
 - Set **Resource Type** to **ECS-ECS**.
5. Click **Search**.
15 ECSs in the **CN-Hong Kong** region are displayed in the **Search Result** area.
6. Select five computing-accelerated ECSs.
7. Click **Manage Tag** in the upper left corner of the tag list.
8. In the **Add Tag** area, enter tag keys and tag values.
Add tags based on [Table 2-1](#).
9. Click **OK**.
The tags are added. Tag other 10 ECSs in the same way.

You can repeat the preceding steps to add department or other tags to resources like EVS disks to classify them. [Table 2-2](#) lists the EVS disk tags.

Table 2-2 EVS example tags

EVS Disk Quantity	Tag (Key/Value)	
1 to 5	Type/Ultra-high I/O EVS Disks	Department/ Development-Dept
6 to 10	Type/High I/O EVS Disks	Department/Test-Dept
11 to 15	Type/Common I/O EVS Disks	Department/ Operation_and_mainten ance-Dept

2.3 Quickly Querying Resources Using Existing Tags

After tagging resources, you can use the TMS resource search function to quickly find out that the frequently used ECS type under department **Test-Dept** and in the **CN-Hong Kong** region is the general-computing ECS.

1. Log in to the management console.
2. Under **Management & Governance**, select **Tag Management Service**.
3. Choose **Resource Tags**.
4. Specify the resource search criteria.
 - Region: **CN-Hong Kong**
 - Set **Resource Type** to **ECS-ECS**.
 - Set **Tag** to **Type/General-computing** and **Department/Test-Dept**.
5. Click **Search**.

General-computing ECSs under department **Test-Dept** in the **CN-Hong Kong** region are displayed in the **Search Result** area.

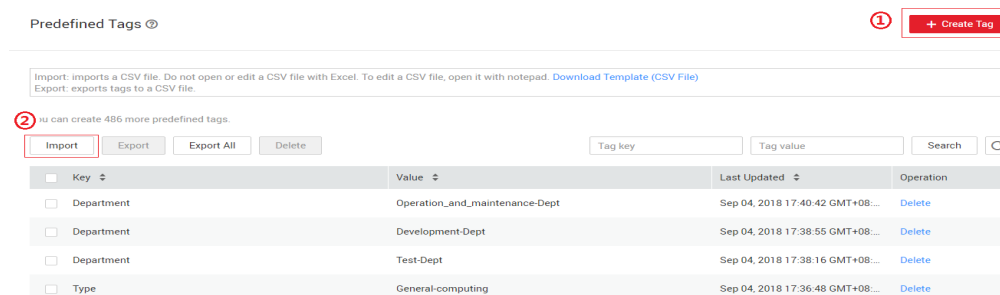
After a resource is queried, it is displayed in the search result. You can click the resource name to view its details or perform other operations.

2.4 Quickly Marking Cloud Resources Using Predefined Tags

When more cloud resources need to be created during resource migration or service expansion, resources can be directly associated with predefined tags. This avoids the errors and low efficiency in repeated creation of tags.

A batch of ECSs is to be migrated to Huawei Cloud. After the migration is complete, you can use either of the following methods to quickly and accurately add the tags mentioned in [Adding Tags to ECSs by Department and Type](#) to those resources.

Figure 2-1 Creating or importing predefined tags



- Create predefined tags.
 - a. Log in to the management console.
 - b. Under **Management & Governance**, select **Tag Management Service**.

- c. Choose **Predefined Tags**.
- d. Click **Create Tag**.
- e. In the **Create Tag** area, enter tag keys and tag values. You can add tags based on [Table 2-1](#).
- f. Click **OK**.
- Import predefined tags.
 - a. Log in to the management console.
 - b. Under **Management & Governance**, select **Tag Management Service**.
 - c. Choose **Predefined Tags**.
 - d. Click **Import** and select the target tag file.
 - e. Click **OK**.

The predefined tags are imported.

 **NOTE**

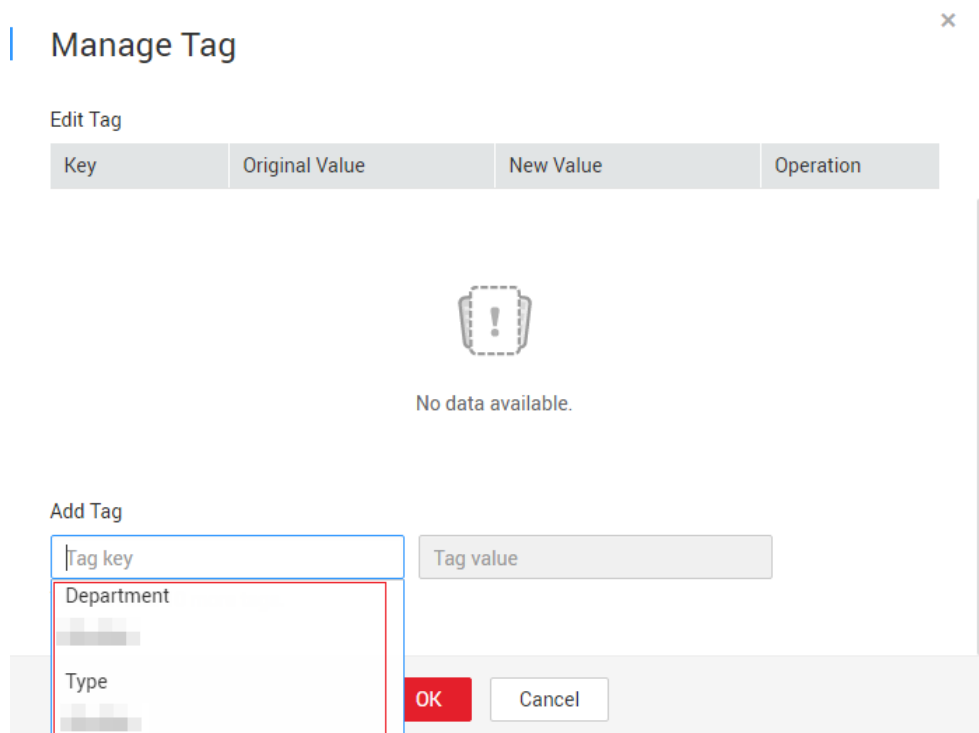
This function only supports CSV files in UTF-8 format. The tag style in the file must be the same as that in the TMS import template.

The created or imported predefined tags are displayed in the predefined tag list.

You can add predefined tags to the newly migrated ECSs on either the TMS or ECS console.

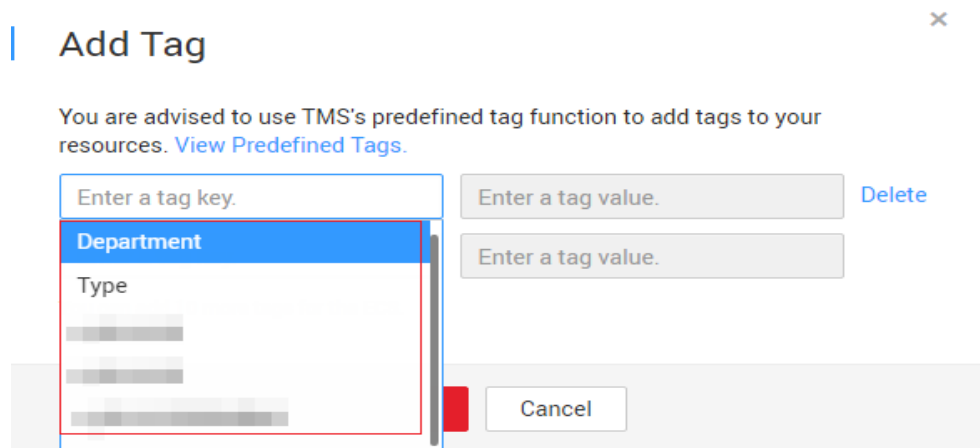
- TMS console

Figure 2-2 Adding tags on the TMS console



- ECS console

Figure 2-3 Adding tags on the ECS console



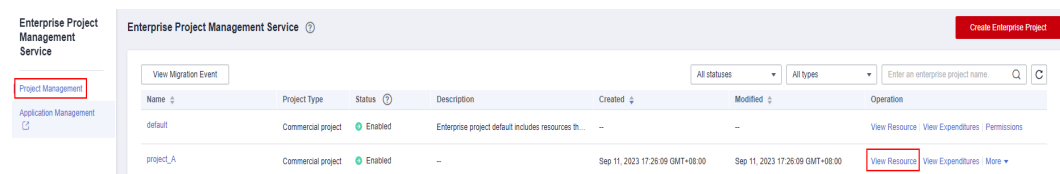
When tagging the newly migrated ECSs on the TMS or ECS console, you can select predefined tags from the drop-down list to associate them with resources. This avoids the errors and low efficiency caused by manual input. After a resource is associated with a predefined tag, the resource can be quickly queried by tag. For details, see section [Quickly Querying Resources Using Existing Tags](#).

2.5 Adding Tags for Resources in an Enterprise Project

On the EPS console, you can add tags for resources in an enterprise project.

- Step 1** Sign in with the management console.
- Step 2** Choose **Management & Governance** > **Enterprise Project Management Service** to go to the EPS console.
- Step 3** On the **Enterprise Project Management Service** page, click **View Resource** in the **Operation** column of an enterprise project. The enterprise project details are displayed. You can specify the search options in the **Resources** tab to view resources as needed.

Figure 2-4 Viewing resources



- Step 4** Specify search options.
 1. Select one or more regions.
 2. Select one or more services.

Select one or more resource types.

To view all resources of an enterprise project, select **All** for both the **Region** and **Service** options.

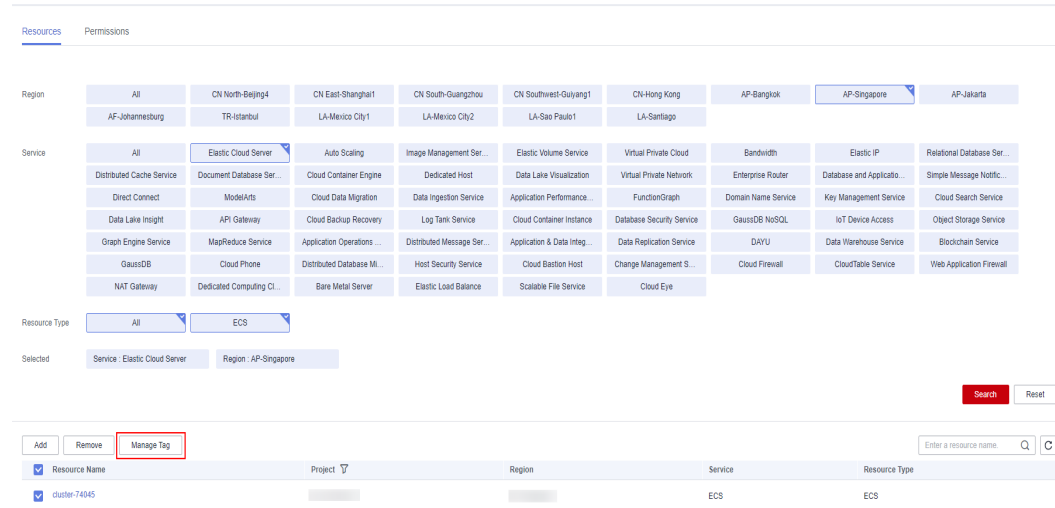
- Step 5** Click **Search**.

The resources that meet the filter criteria will be displayed in a table at the bottom of the page.

Step 6 Select target resources and click **Manage Tag**.

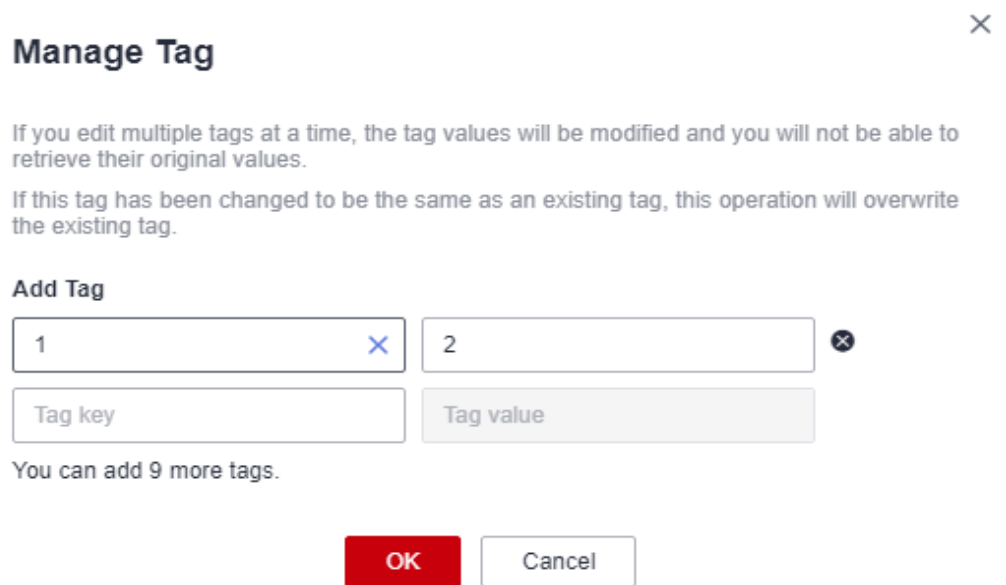
You can select one or more resources to add tags.

Figure 2-5 Managing tags



Step 7 Configure tag keys and values.

Figure 2-6 Adding tags



Step 8 Click **OK**.

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