# Dedicated Host

# User Guide

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| **Issue** | 01 |
| **Date** | 2025-08-28 |

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# Contents



# 1 DeH Management

## 1.1 Viewing the Details of a DeH

### Scenarios

You can view the basic information about a DeH, including the status, total resources, and usage, on the DeH console.

### Procedure

1. Log in to the **DeH console**.
2. Locate the target DeH and view the following information:
   - **Name**: DeH name
   - **Type**: DeH type
   - **AZ**: AZ where DeHs are located
   - **Auto Placement**: Whether **Auto Placement** is enabled.
   - **Status**: DeH status

**Table 1-1** Status

| Status | Description |
| --- | --- |
| Available | The DeH is running normally, and the instance can be started on the DeH. |
| Pending | The DeH cannot be used to deploy new instances because the host is being initialized. |
| Released | The DeH has been released and cannot be used. |

| Status | Description |
| --- | --- |
| Fault | The DeH is faulty, and new instances cannot be started on the DeH. The O&M personnel need to replace the DeH with a new one. |

- **vCPUs**: Total number of vCPUs and available vCPUs
- **Memory(GiB)**: Total memory and available memory
- **Sockets**: Number of physical CPU sockets
- **Cores**: Number of physical cores
- **Billing Mode**: How a DeH is billed.

### Related Operations

- **Changing the Name of a DeH**
- **Configuring Auto Placement for DeHs**

# 1.2 Changing the Name of a DeH

## Scenarios

You can change the name of a DeH on the management console.

## Procedure

1. Log in to the **DeH console**.
2. Click the name of the target DeH.
   The DeH details page is displayed.
3. Click  next to the DeH name.
   The name becomes editable.
4. Change the name and click  .
   If you do not want to change the name, click .

# 1.3 Configuring Auto Placement for DeHs

## Scenarios

You can enable or disable auto-placement for each DeH to control whether ECSs can be automatically allocated to a DeH.

## Procedure

1. Log in to the **DeH console**.

2. Click the name of the target DeH and enable or disable **Auto Placement**.

### Verification

Assume that you have two DeHs with **Auto Placement** enabled. The **vCPUs** and **Memory (GB)** values of DeH A are **83/100** and **167/232**, and those of DeH B are **100/100** and **232/232**. When creating an ECS, enable **Auto placement** for **DeH**. Then the system automatically creates the ECS on DeH B to balance the load among two DeHs.

## 1.4 Adjusting DeH Resource Quotas

### What Is Quota?

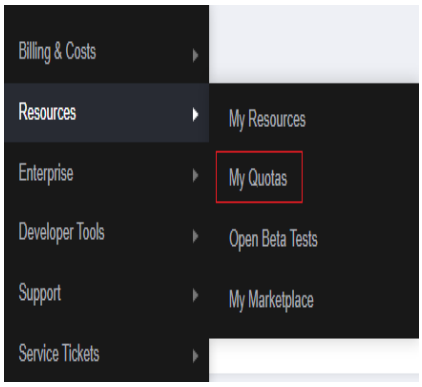
Quotas can limit the number or amount of resources available to users, such as the maximum number of ECS or EVS disks that can be created.

If the existing resource quota cannot meet your service requirements, you can apply for a higher quota.

### How Do I View My Quotas?

1. Log in to the **management console**.
2. Click in the upper left corner and select the desired region and project.
3. In the upper right corner of the page, choose **Resources** > **My Quotas**.
   The **Quotas** page is displayed.

   **Figure 1-1** My Quotas



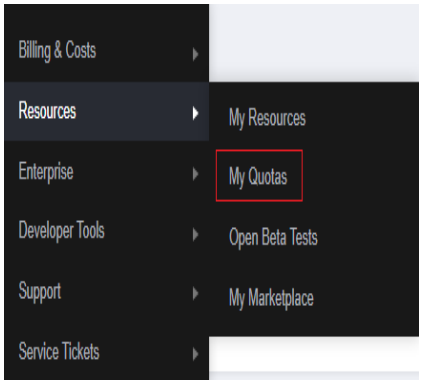

4. View the used and total quota of each type of resources on the displayed page.
   If a quota cannot meet service requirements, apply for a higher quota.

### How Do I Apply for a Higher Quota?

1. Log in to the **management console**.
2. In the upper right corner of the page, choose **Resources** > **My Quotas**.
   The **Quotas** page is displayed.

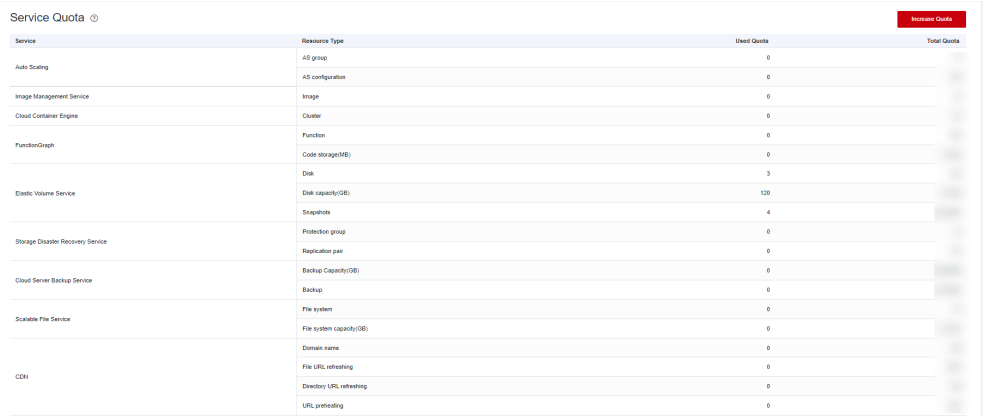
  

**Figure 1-2** My Quotas




3. Click **Increase Quota** in the upper right corner of the page.

**Figure 1-3** Increasing quota




4. On the **Create Service Ticket** page, configure parameters as required.

   In the **Problem Description** area, fill in the content and reason for adjustment.

5. After all necessary parameters are configured, select **I have read and agree to the Ticket Service Protocol and Privacy Statement** and click **Submit**.

# 1.5 Unsubscribing from a DeH

## Scenarios

If you do not want to use a DeH any longer, you can unsubscribe from it. Currently, you can unsubscribe from only one DeH at a time.

## Prerequisites

You have migrated all ECSs deployed on the DeH to the public resource pool. For details, see **Migrating ECSs**.

## Unsubscribing from a DeH in Billing Center

1. Log in to the management console and go to **Unsubscriptions**.

2. On the **Unsubscribe from In-Use Resources** tab page, locate the DeH in **Unsubscription Allowed** and click **Unsubscribe from Resource** in the **Operation** column.

   Once a DeH is unsubscribed from, ECSs on the DeH will be deleted immediately.

3. Specify the reason for unsubscription, check the actual refund, and click **Confirm**.

## Results

The unsubscribed DeH is not displayed in the DeH list.

# 2 ECS Management

## 2.1 Viewing the Details of ECSs on a DeH

### Scenarios

You can view the information about the ECSs running on each DeH on the management console.

### Procedure

1. Log in to the **DeH console**.
2. Click the name of the target DeH.

   The DeH details page is displayed.
3. On the **ECSs on the DeH** tab, view the following information about the ECSs on the DeH:
   - Name
   - Status
   - Specifications
   - Image
   - Private IP address
   - Elastic IP (EIP)

### Follow-up Operations

**Managing an ECS on a DeH**

## 2.2 Managing an ECS on a DeH

### Scenarios

You can start, stop, restart, or delete an ECS on a DeH on the management console.

### Procedure

1. Log in to the **DeH console**.
2. Click the name of the target DeH.

   The DeH details page is displayed.
3. On the **ECSs on the DeH** tab, locate the target ECS and select the target operation in the **Operation** column to manage the ECS. Alternatively, select the target ECS and select an operation above the ECS list.

   The operations are as follows:
   - **Modify Specifications**
   - **Start** (allowed only when ECSs are stopped)
   - **Stop** (allowed only when ECSs are running)
   - **Restart** (allowed only when ECSs are running)
   - **Delete**
   - **Reallocate ECS** (allowed only when ECSs are stopped)

### Related Operations

On the **ECSs on the DeH** tab page, you can also click **Buy** to create ECSs.

For details, see **Purchasing an ECS**.

NOTE

- When selecting an ECS type, pay attention to mapping between the ECS type and the DeH type. If no matched DeH resources exist, ECSs cannot be created.
- Currently, you can deploy only pay-per-use ECSs on DeHs.

## 2.3 Managing ECSs on a DeH in Batches

### Scenarios

You can start, stop, restart, or delete multiple ECSs on a DeH at a time on the management console.

### Procedure

1. Log in to the **DeH console**.
2. Click the name of the target DeH.

   The DeH details page is displayed.
3. On the **ECSs on the DeH** tab, select the target ECSs.

   You can concurrently select all ECSs on the current page by selecting the check box in the list header.

   NOTE

   Except the deletion operation, ECSs to be operated in batches must be in the same state.
4. Click the button above the list to manage ECSs in batches.

The operations are as follows:

- **Start** (allowed only when ECSs are stopped)
- **Stop** (allowed only when ECSs are running.)
- **Restart** (allowed only when ECSs are running)
- **Delete**

# 2.4 Modifying the Specifications of an ECS on a DeH

## Scenarios

When the specifications of ECSs on a DeH cannot meet your service requirements, you can modify the ECS specifications including the vCPUs and memory.

## Procedure

1. Log in to the **DeH console**.
2. Click the name of the target DeH.

   The DeH details page is displayed.
3. On the **ECSs on the DeH** tab, view the status of the target ECS.
4. Only the specifications of a stopped ECS can be modified. If the ECS is not stopped, click **More** and select **Stop** in the **Operation** column.
5. After the ECS status changes to **Stopped**, click **Modify Specifications** in the **Operation** column.

   The **Modify ECS Specifications** page is displayed. Modify the specifications by following the instructions described in **Elastic Cloud Server User Guide**.

# 2.5 Migrating ECSs

## Scenarios

ECSs can be migrated between DeHs or between a DeH and a public resource pool. You can:

- Migrate an ECS on a DeH to another DeH.
- Migrate an ECS on a DeH to a public resource pool.
- Migrate an ECS in a public resource pool to a DeH.

## Notes

Only a stopped ECS can be migrated.

## Procedure

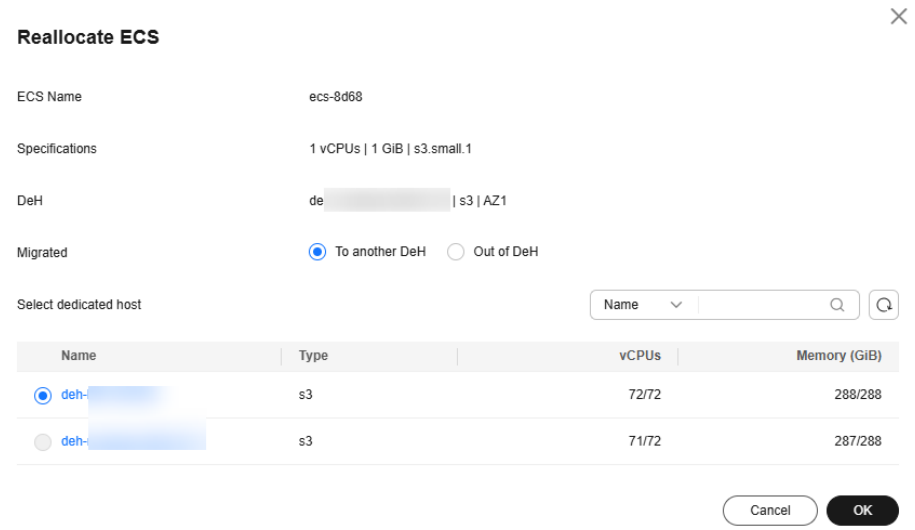
1. Log in to the **DeH console**.
2. Click the name of the target DeH.

   The DeH details page is displayed.

3. On the **ECSs on the DeH** tab, view the status of the ECS to be migrated.
4. Only the specifications of a stopped ECS can be modified. If the ECS is not stopped, click **More** and select **Stop** in the **Operation** column.
5. After the ECS status changes to **Stopped**, click **More** and select **Reallocate ECS** in the **Operation** column.

**Figure 2-1** Reallocate ECS




6. On the **Reallocate ECS** page, select the destination where you would like to migrate the ECS.
   - If you want to migrate the ECS to another DeH, set **Migrated** to **To another DeH**.
   - If you want to migrate the ECS from a DeH to a public resource pool, set **Migrated** to **Out of DeH**.
7. Click **OK**.

   NOTE

   The ECS status changes from **Resizing** to **Stopped** during migration.

# 3 Tag Management

Tags are identifiers of DeHs and can help you quickly identify your DeHs.

You can add a tag to a DeH when creating a DeH. Alternatively, you can add a tag to a DeH on the **Tags** tab of the DeH details page. A maximum of 10 tags can be added to a DeH.

A tag consists of a tag key and a tag value. **Table 3-1** lists the naming requirements for keys and values.

**Table 3-1** Tag naming requirements

| Parameter | Requirement | Example Value |
| --- | --- | --- |
| Tag key | • Cannot be left blank.<br>• Must be unique for a specific DeH.<br>• Contains a maximum of 36 characters.<br>• Only letters, digits, hyphens (-), underscores (_), and Unicode characters are allowed. | Organization |
| Tag value | • Contains a maximum of 43 characters.<br>• Only letters, digits, hyphens (-), underscores (_), and Unicode characters are allowed. | Apache |

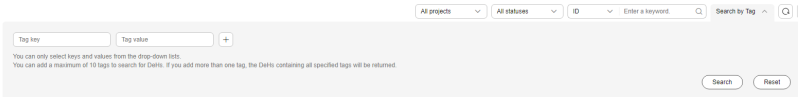
## Searching for DeHs

On the **Dedicated Host** page, you can search for the desired DeHs by tag key and tag value.

1. Log in to the **DeH console**.
2. In the upper right corner of the DeH list, click **Search by Tag** to show the search page.

**Figure 3-1** Searching for DeHs by tag




3. Enter the tag key and tag value of the target DeH. Click **Search**.

   The system automatically searches for your desired DeHs.

4. Click  to add a tag.

   You can add multiple tags to search for DeHs. The system will display DeHs that match all tags.

5. Click **Search**.

   The system searches for DeHs based on tag keys or tag values.

# 4 Audit Using CTS

## 4.1 Key Operations Supported by CTS

### Scenarios

Cloud Trace Service (CTS) records user operations performed on DeHs and related resources for further query, auditing, and backtracking.

### Prerequisites

CTS has been enabled.

### Key DeH Operations Recorded by CTS

**Table 4-1** DeH operations that can be recorded by CTS

| Operation | Resource Type | Trace Name |
| --- | --- | --- |
| Creating a DeH | dedicatedHosts | createDedicatedHosts |
| Updating a DeH | dedicatedHosts | updateDedicatedHosts |
| Deleting a DeH | dedicatedHosts | releaseDedicatedHosts |

## 4.2 Viewing Traces

### Scenarios

Cloud Trace Service (CTS) records operations performed on cloud service resources. A record contains information such as the user who performed the operation, IP address, operation content, and returned response message. These records facilitate security auditing, issue tracking, and resource locating. They also help you plan and use resources, and identify high-risk or non-compliant operations.

## What Is a Trace?

A trace is an operation log for a cloud service resource, tracked and stored by CTS. Traces record operations such as adding, modifying, or deleting cloud service resources. You can view them to identify who performed operations and when for detailed tracking.

## What Is a Management Tracker and Data Tracker?

A management tracker identifies and associates with all your cloud services, recording all user operations. It records management traces, which are operations performed by users on cloud service resources, such as their creation, modification, and deletion.

A data tracker records details of user operations on data in OBS buckets. It records data traces reported by OBS, detailing user operations on data in OBS buckets, including uploads and downloads.

## Constraints

- Before the organization function is enabled, you can query the traces of a single account on the CTS console. After the organization function is enabled, you can only view multi-account traces on the **Trace List** page of each account, or in the OBS bucket or the **CTS/system** log stream configured for the management tracker with the organization function enabled. For details about organization trackers, see **Organization Trackers**.
- You can only query operation records of the last seven days on the CTS console. They are automatically deleted upon expiration and cannot be manually deleted. To store them for longer than seven days, configure transfer to Object Storage Service (OBS) or Log Tank Service (LTS) so that you can view them in OBS buckets or LTS log groups.
- After creating, modifying, or deleting a cloud service resource, you can query management traces on the CTS console 1 minute later and query data traces 5 minutes later.

## Prerequisites

1. **Register with Huawei Cloud and complete real-name authentication.**

   If you already have a Huawei Cloud account, skip this step. If you do not have one, do as follows:

   a. Log in to the **Huawei Cloud official website**, and click **Sign Up** in the upper right corner.

   b. Complete the registration as prompted. For details, see **Registering with Huawei Cloud**.

      Your personal information page is displayed after the registration completes.

   c. Complete individual or enterprise real-name authentication by referring to **Real-Name Authentication**.

2. **Grant permissions for users.**

   If you log in to the console using a Huawei Cloud account, skip this step.

If you log in to the console as an IAM user, first contact your CTS administrator (account owner or a user in the **admin** user group) to obtain the **CTS FullAccess** permissions. For details, see **Assigning Permissions to an IAM User**.

## Viewing Traces

After you enable CTS and the management tracker is created, CTS starts recording operations on cloud resources. After a data tracker is created, CTS starts recording user operations on data in OBS buckets. CTS retains operation records of the latest seven days.

This section describes how to query and export operation records of the last seven days on the CTS console.

## Viewing Real-Time Traces in the Trace List of the New Edition

**Step 1** Log in to the **CTS console**.

**Step 2** In the navigation pane, choose **Trace List**.

**Step 3** In the time range drop-down list above the trace list, select a desired query time range: **Last 1 hour**, **Last 1 day**, or **Last 1 week**. You can also select **Custom** to specify a custom time range within the last seven days.

**Step 4** The search box above the trace list supports advanced queries. Combine one or more filters to refine your search.

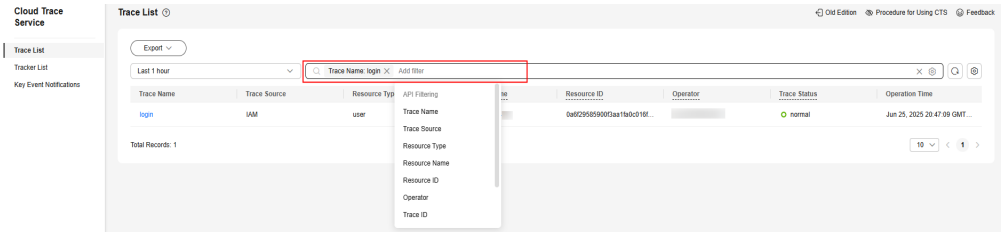
**Table 4-2** Trace filtering parameters

| Parameter | Description |
| --- | --- |
| Trace Name | Name of a trace.<br>The entered value is case-sensitive and requires an exact match. Fuzzy matching is not supported.<br>For details about the operations that can be audited for each cloud service, see **Supported Services and Operations**.<br>Example: **updateAlarm** |
| Trace Source | Cloud service name abbreviation.<br>The entered value is case-sensitive and requires an exact match. Fuzzy matching is not supported.<br>Example: **IAM** |
| Resource Name | Name of a cloud resource involved in a trace.<br>The entered value is case-sensitive and requires an exact match. Fuzzy matching is not supported.<br>If the cloud resource involved in the trace does not have a resource name or the corresponding API operation does not involve the resource name parameter, leave this field empty.<br>Example: **ecs-name** |

| Parameter | Description |
| --- | --- |
| Resource ID | ID of a cloud resource involved in a trace.<br>The entered value is case-sensitive and requires an exact match. Fuzzy matching is not supported.<br>Leave this field empty if the resource has no resource ID or if resource creation failed.<br>Example: *{VM ID}* |
| Trace ID | Value of the **trace_id** parameter for a trace reported to CTS.<br>The entered value requires an exact match. Fuzzy matching is not supported.<br>Example: **01d18a1b-56ee-11f0-ac81-******1e229** |
| Resource Type | Type of a resource involved in a trace.<br>The entered value is case-sensitive and requires an exact match. Fuzzy matching is not supported.<br>For details about the resource types of each cloud service, see **Supported Services and Operations**.<br>Example: **user** |
| Operator | User who triggers a trace.<br>Select one or more operators from the drop-down list.<br>If the value of **trace_type** in a trace is **SystemAction**, the operation is triggered by the service and the trace's operator may be empty.<br>For details about the relationship between IAM identities and operators and the operator username format, see **Relationship Between IAM Identities and Operators**. |
| Trace Status | Select one of the following options from the drop-down list:<br>• **normal**: The operation succeeded.<br>• **warning**: The operation failed.<br>• **incident**: The operation caused a fault that is more serious than a normal failure, for example, causing other faults. |
| Enterprise Project ID | ID of the enterprise project to which a resource belongs.<br>To check enterprise project IDs, go to the Enterprise Project Management Service (EPS) console and choose **Project Management** in the navigation pane.<br>Example: **b305ea24-c930-4922-b4b9-******1eb2** |
| Access Key | Temporary or permanent access key ID.<br>To check access key IDs, hover over your username in the upper right corner of the console and select **My Credentials** from the pop-up list. On the displayed page, choose **Access Keys** in the navigation pane.<br>Example: **HSTAB47V9V*******TLN9** |




**Step 5** On the **Trace List** page, you can also export and refresh the trace list, and customize columns to display.

- Enter any keyword in the search box and press **Enter** to filter desired traces.
- Click **Export** to export all traces in the query result as an .xlsx file. The file can contain up to 5,000 records.
- Click to view the latest information about traces.
- Click to customize the information to be displayed in the trace list. If **Auto wrapping** is enabled ( ), excess text will move down to the next line; otherwise, the text will be truncated. By default, this function is disabled.

**Step 6** (Optional) On the **Trace List** page of the new edition, click **Old Edition** in the upper right corner to switch to the **Trace List** page of the old edition.

**----End**

## Viewing Traces in the Trace List of the Old Edition

**Step 1** Log in to the **CTS console**.

**Step 2** In the navigation pane, choose **Trace List**.

**Step 3** Each time you log in to the CTS console, the new edition is displayed by default. Click **Old Edition** in the upper right corner to switch to the trace list of the old edition.

**Step 4** In the upper right corner of the page, set a desired query time range: **Last 1 hour**, **Last 1 day**, or **Last 1 week**. You can also click **Customize** to specify a custom time range within the last seven days.

**Step 5** Set filters to search for your desired traces.

**Table 4-3** Trace filtering parameters

| Parameter | Description |
| --- | --- |
| Trace Type | Select **Management** or **Data**.<br>• Management traces record operations performed by users on cloud service resources, including creation, modification, and deletion.<br>• Data traces are reported by OBS and record operations performed on data in OBS buckets, including uploads and downloads. |

| Parameter | Description |
| --- | --- |
| Trace Source | Select the name of the cloud service that triggers a trace from the drop-down list. |
| Resource type | Select the type of the resource involved in a trace from the drop-down list.<br>For details about the resource types of each cloud service, see **Supported Services and Operations**. |
| Operator | User who triggers a trace.<br>Select one or more operators from the drop-down list.<br>If the value of **trace_type** in a trace is **SystemAction**, the operation is triggered by the service and the trace's operator may be empty.<br>For details about the relationship between IAM identities and operators and the operator username format, see **Relationship Between IAM Identities and Operators**. |
| Trace Status | Select one of the following options:<br>• **Normal**: The operation succeeded.<br>• **Warning**: The operation failed.<br>• **Incident**: The operation caused a fault that is more serious than a normal failure, for example, causing other faults. |

**Step 6** Click **Query**.

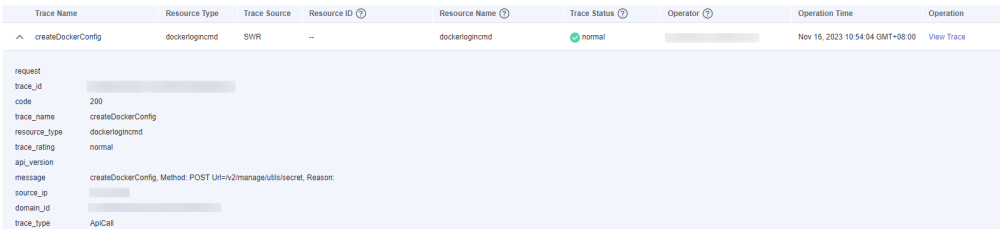
**Step 7** On the **Trace List** page, you can also export and refresh the trace list.

- Click **Export** to export all traces in the query result as a CSV file. The file can contain up to 5,000 records.
- Click to view the latest information about traces.

**Step 8** In the **Tampered or Not** column of a trace, check whether the trace is tampered with.

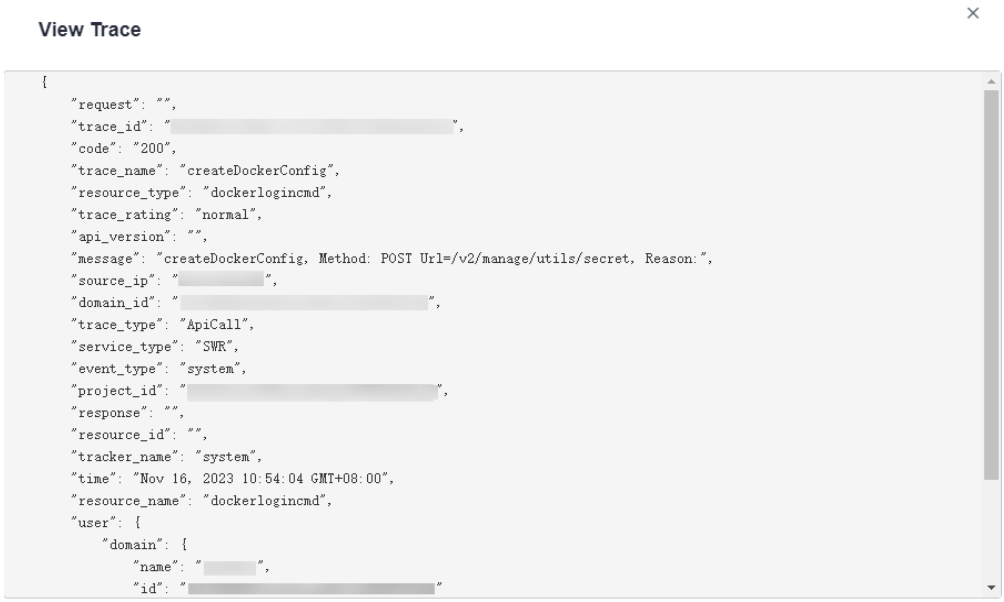
- If no, **No** is displayed.
- If yes, **Yes** is displayed.

**Step 9** Click on the left of a trace to expand its details.




**Step 10** Click **View Trace** in the **Operation** column. The trace details are displayed.




**Step 11** (Optional) On the **Trace List** page of the old edition, click **New Edition** in the upper right corner to switch to the **Trace List** page of the new edition.

**----End**

## Helpful Links

- For details about the key fields in the trace structure, see **Trace Structure** and **Example Traces**.
- You can use the following examples to learn how to query a specific trace:
  - Use CTS to audit Elastic Volume Service (EVS) creation and deletion operations from the last two weeks. For details, see **Security Auditing**.
  - Use CTS to locate a fault or creation failure for an Elastic Cloud Server (ECS). For details, see **Fault Locating**.
  - Use CTS to check all operation records for an ECS. For details, see **Resource Tracking**.

# 5 Managing Enterprise Projects

An enterprise project helps you centrally manage your DeH resources and users by project.

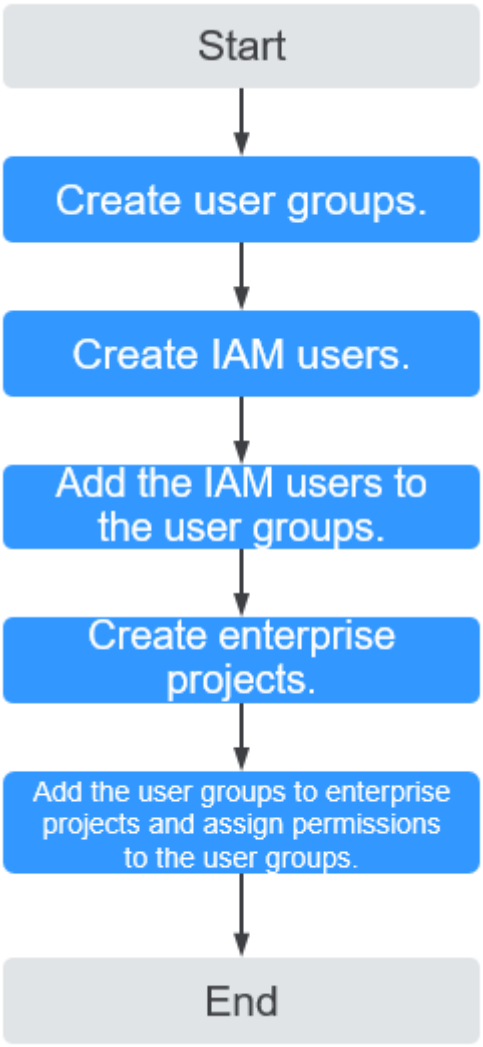
DeH supports enterprise project management. You can grant different personnel different permissions to manage different DeHs.

## Creating an Enterprise Project and Assigning Permissions

Before using enterprise project to manage DeHs, you need to create an enterprise project and complete authorization by referring to **Figure 5-1**. For details, see **Enterprise Management User Guide**.

**Figure 5-1** Creating an enterprise project and assigning permissions




## Using Enterprise Project to Manage DeHs

- Select an enterprise project when purchasing a DeH. For details, see **Buying DeHs**.
- On the **Enterprise Project Management** page, you can add existing DeHs to an enterprise project. For details, see **Adding Resources to an Enterprise Project**.

NOTE

You can remove DeHs from an enterprise project. For details, see **Removing Resources from an Enterprise Project**.

# 6 Permission Management

## 6.1 Creating a User and Granting Permissions

Use **IAM** to implement fine-grained permissions control over your DeHs. With IAM, you can:

- Create IAM users for employees based on your enterprise's organizational structure. Each IAM user will have their own security credentials for accessing DeH resources.
- Grant only the permissions required for users to perform a specific task.
- Use IAM to entrust an account or cloud service to perform efficient O&M on your DeH resources.

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

This section describes the procedure for granting permissions (see **Figure 6-1**).

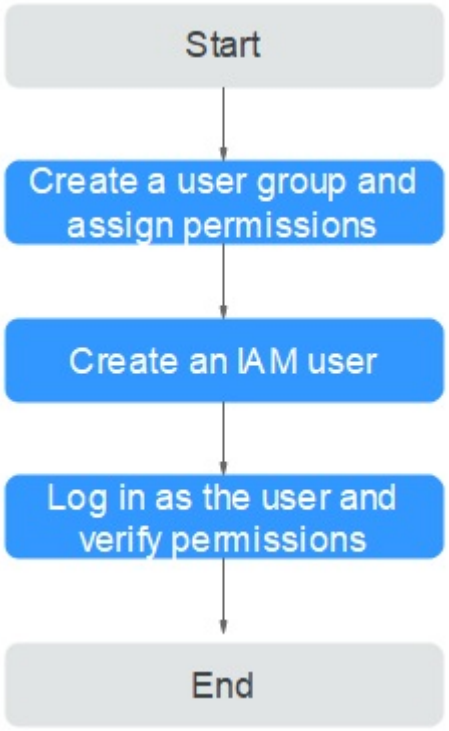
### Prerequisites

Learn about the permissions (see **Permission Management**) supported by DeH and choose policies or roles according to your requirements.

### Authorization Process

**Figure 6-1** Process for granting DeH permissions




1. **Create a user group and assign permissions**.

   Create a user group on the IAM console and assign the DeHReadOnlyAccess permission to the group.

2. **Create a user and add the user to the user group**.

   Create a user on the IAM console and add the user to the group created in **1**.

3. **Log in as the IAM user** and verify permissions.

   Log in to the management console using the created user, and verify that the user only has read permissions for DeH.

   - Click **Service List** and find **Dedicated Host**. On the displayed page, click **Buy DeH** in the upper right corner. If you cannot buy a DeH (after the DeH ReadOnlyAccess permission is assigned), it indicates that the DeH ReadOnlyAccess permission has already taken effect.
   - Choose any other service in the **Service List** (assume that there is only the ECS Viewer policy). If a message appears indicating that you have insufficient permissions to access the service, the DeH ReadOnlyAccess policy has already taken effect.

## 6.2 Creating a Custom Policy

Custom policies can be created to supplement the system-defined policies of DeH.

You can create custom policies in either of the following ways:

- Visual editor: Select cloud services, actions, resources, and request conditions. This does not require knowledge of policy syntax.
- JSON: Edit JSON policies from scratch or based on an existing policy.

For details, see **Creating a Custom Policy**. The following section contains examples of common DeH custom policies.

## Example Custom DeH Policies

- Example 1: Authorize users to purchase and release DeHs.

```
{
    "Version": "1.1",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "deh:dedicatedHosts:create",
                "deh:dedicatedHosts:create"
            ]
        }
    ]
}
```

- Example 2: Deny the DeH release request.

  A deny policy must be used together with other policies. If the permissions assigned to a user contain both "Allow" and "Deny", the "Deny" permission takes precedence over the "Allow" permission.

  If you assign the DeH FullAccess system policy to a user but do not want the user to have the permission to release DeHs, you can create a policy to deny the release of DeHs and grant both the DeH FullAccess policy and the created policy to the user. In this case, the "Deny" policy takes precedence and the user can perform all operations except DeH release. The following is an example of a deny policy:

```
{
    "Version": "1.1",
    "Statement": [
        {
            "Action": [
                "deh:dedicatedHosts:delete"
            ],
            "Effect": "Deny"
        }
    ]
}
```