Dedicated Host

User Guide

Issue   09
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Contents

1 DeH Management

1.1 Querying DeHs

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 management console.

2. Click in the upper left corner and select the desired region and project.

3. Under **Compute**, click **Dedicated Host**.
   The **Dedicated Host** page is displayed.

4. 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
   - **vCPUs**: Total number of vCPUs and available vCPUs
   - **Memory**: Total memory and available memory
   - **Sockets**: Number of physical CPU sockets
   - **Cores**: Number of physical cores.
   - Billing mode

Related Operations

- **Changing Names of DeHs**
- **Configuring Auto Placement for DeHs**

1.2 Changing Names of DeHs

Scenarios

Change names of DeHs on the management console.

Procedure

1. Log in to the management console.

2. Click ⊙ in the upper left corner and select the desired region and project.

3. Under **Compute**, click **Dedicated Host**.
    The **Dedicated Host** page is displayed.

4. Click the name of the target DeH.
    The DeH details page is displayed.

5. Change the name and click ✔.
    If you do not want to change the name, click ✘.

6. Click ✎ next to the DeH name.
    The name becomes editable.

1.3 Configuring Auto Placement for DeHs

Scenarios

You can configure the auto placement function for each DeH to allow the system to automatically place ECSs on the DeH.

Procedure

1. Log in to the management console.

2. Click ⊙ in the upper left corner and select the desired region and project.

3. Under **Compute**, click **Dedicated Host**.
    The **Dedicated Host** page is displayed.

4. 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, select **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 ECSs 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 **Service Quota** 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 **Service Quota** 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**.

Procedure

1. Log in to the management console.

2. Go to the **Unsubscriptions** page.

3. Click the **Active Resources** tab.

4. Select the target resources and click **Unsubscribe from Resources**.

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

5. The **Unsubscribe** page is displayed.

6. Select the reason for the unsubscription, check the resources to be unsubscribed from, select "I understand a handling fee will be charged for this unsubscription.", and click **Confirm**.

7. The **Confirm** page is displayed.

8. Click **Yes**.

Results

The unsubscribed DeH is not displayed in the DeH list.

2 ECS Management

2.1 Querying ECSs on a DeH

Scenarios

Query information about the ECSs running on each DeH on the management console.

Procedure

1. Log in to the management console.

2. Click ⊙ in the upper left corner and select the desired region and project.

3. Under **Compute**, click **Dedicated Host**.

    The **Dedicated Host** page is displayed.

4. Click the DeH to be queried.

    The DeH details page is displayed.

5. 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 Address (EIP)

Follow-up Operations

Managing ECSs on a DeH

2.2 Managing ECSs on a DeH

Scenarios

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

Procedure

1. Log in to the management console.

2. Click ⦿ in the upper left corner and select the desired region and project.

3. Under **Compute**, click **Dedicated Host**.

   The **Dedicated Host** page is displayed.

4. Click the name of the target DeH.

   The DeH details page is displayed.

5. On the **ECSs on the DeH** tab, locate the target ECS and select the target option in the **Operation** column to manage the ECS. Alternatively, select the target ECSs and select an operation above the ECS list.

   The options are as follows:
   – **Modify Specifications** (allowed only when ECSs are stopped)
   – **Start** (allowed only when ECSs are stopped)
   – **Stop** (allowed only when ECSs are running)
   – **Restart** (allowed only when ECSs are running)
   – **Delete** (If **Permanently delete** is selected, the ECSs will be deleted permanently. If **Permanently delete** is not selected, the ECSs are temporarily stored in the recycle bin. ECSs in the recycle bin still occupy the quotas.)

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 the 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 management console.

2. Click [icon] in the upper left corner and select the desired region and project.

3. Under **Compute**, click **Dedicated Host**.

   The **Dedicated Host** page is displayed.

4. Click the name of the target DeH.

   The DeH details page is displayed.

5. On the **ECSs on the DeH** tab, select the target ECSs.

   You can select multiple ECSs by selecting the check box before the ECS name.

   ☐ **NOTE**

   > Except the deletion operation, ECSs to be operated in batches must be in the same state.

6. Click the button above the list to manage ECSs in batches.

   The options 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** (If **Permanently delete** is selected, the ECSs will be deleted permanently. If **Permanently delete** is not selected, the ECSs are temporarily stored in the recycle bin. ECSs in the recycle bin still occupy the quotas.)

2.4 Modifying Specifications of ECSs on DeHs

Scenarios

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

Procedure

1. Log in to the management console.

2. Click [icon] in the upper left corner and select the desired region and project.

3. Under **Compute**, click **Dedicated Host**.

   The **Dedicated Host** page is displayed.

4. Click the name of the target DeH.

   The DeH details page is displayed.

5. On the **ECSs on the DeH** tab, query the status of the target ECS.

6. 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.

7. 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.

- An ECS created on a DeH can be migrated to another DeH.
- An ECS created on a DeH can be migrated to a public resource pool.
- An ECS deployed in a public resource pool can be migrated to a DeH.
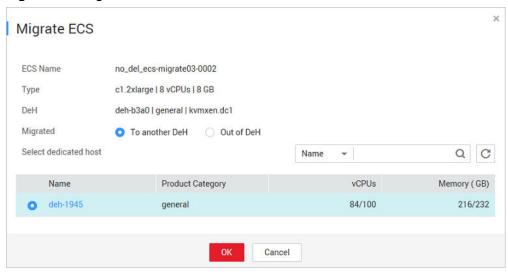
Notes

Only a stopped ECS can be migrated.

Procedure

1. Log in to the management console.
2. Click ⊙ in the upper left corner and select the desired region and project.
3. Under **Compute**, click **Dedicated Host**.
   The **Dedicated Host** page is displayed.
4. Click the name of the target DeH.
   The DeH details page is displayed.
5. On the **ECSs on the DeH** tab, query the status of the ECS to be migrated.
6. Only a stopped ECS can be migrated. If the ECS is not stopped, click **More** and select **Stop** in the **Operation** column.
7. After the ECS status changes to **Stopped**, click **More** and select **Migrate ECS** in the **Operation** column.

Figure 2-1 Migrate ECS

8. On the **Migrate 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**.

9. Click **OK**.

    📖 NOTE

    The ECS status changes from **Resizing** to **Stopped** during ECS 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 during the DeH creation. 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. - Must be unique for a specific DeH. - Contains a maximum of 36 characters. - Contains only digits, letters, hyphens (-), and underscores (_).	Organization
Tag value	- Contains a maximum of 43 characters. - Contains only digits, letters, hyphens (-), and underscores (_).	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 management console.

2. Under **Compute**, click **Dedicated Host**.

3. 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

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

   The system automatically searches for your desired DeHs.

5. Click [+] to add a tag.

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

6. Click **Search**.

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

4 Managing Enterprise Projects

An enterprise project is a way of managing cloud resources where cloud resources and members are centrally managed 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 4-1**. For details, see **Enterprise Management User Guide**.
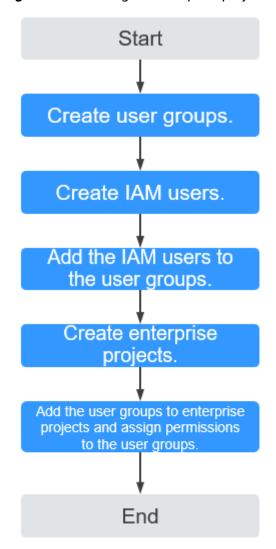
Figure 4-1 Creating an enterprise project and assigning permissions

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**.

5 Permission Management

5.1 Creating a User and Granting Permissions

This section describes how to use **Identity and Access Management (IAM)** to implement fine-grained permissions control for your DeH resources. 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 a Huawei cloud account or cloud service to perform efficient O&M on your DeH resources.

If your Huawei cloud account does not require individual IAM users, skip over this section.
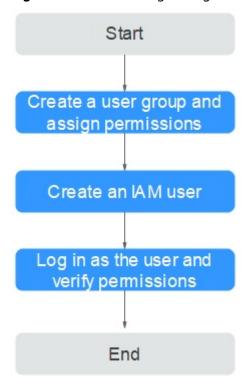
This section describes the procedure for granting permissions (see **Figure 5-1**).

Prerequisites

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

Authorization Process

Figure 5-1 Process for granting DeH permissions

1. **Creating a User Group and Assigning Permissions**

    Create a user group on the IAM console, and assign the DeH ReadOnlyAccess permission to the group.

2. **Creating a User and Adding the User to a User 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 management console using the created user, and verify that the user only has read permissions for DeH.

    –   Click **Service List** and choose **Computing** > **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), the DeH ReadOnlyAccess permission has already taken effect.

    –   Choose any other service in the **Service List**. If a message appears indicating that you have insufficient permissions to access the service, the DeH ReadOnlyAccess policy has already taken effect.

5.2 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"
        }
    ]
}
```

6 Change History

Changes between document issues are cumulative. The latest document issue contains all changes made in previous issues.

Released On	Description
2023-07-13	This issue is the ninth official release. DeH supports the enterprise project function. Added **Managing Enterprise Projects**.
2022-04-20	This issue is the eighth official release. Added **Is There a Limit on the Minimum or Maximum Number of DeHs That Can Be Purchased?**
2022-04-08	This issue is the seventh official release. Added **Can I Attach an EVS Disk to a DeH?**
2021-12-29	This issue is the sixth official release. Added: **How Can I Query the Number of Available Resources on a DeH?** **Can I Create ECSs of Different Flavors on a DeH?**
2021-12-08	This issue is the fifth official release. Updated the description about how to use BMS in: **What Are the Differences Between DeHs and BMSs?**
2021-10-28	This issue is the fourth official release. Added: **Permission Management**

Released On	Description
2021-07-16	This issue is the third official release. Modified the following content: Changed **Management & Deployment** to **Management & Governance** and **Computing** to **Compute** based on the latest console product catalog.
2019-07-30	This issue is the second official release. Added: **Tag Management**
2019-04-10	This issue is the first official release.