

Dedicated Host

User Guide

Issue 06
Date 2023-12-25



Copyright © Huawei Cloud Computing Technologies Co., Ltd. 2024. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Cloud Computing Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are the property of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei Cloud and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Contents

| | |
|---|-----------|
| 1 Product Introduction..... | 1 |
| 1.1 Dedicated Host..... | 1 |
| 1.2 Application Scenarios..... | 2 |
| 1.3 Product Advantages..... | 2 |
| 1.4 Categories and Types..... | 3 |
| 1.4.1 Overview..... | 3 |
| 1.4.2 General-Purpose DeHs..... | 4 |
| 1.4.3 General Computing-Plus DeHs..... | 7 |
| 1.4.4 Memory-Optimized DeHs..... | 9 |
| 1.5 Lifecycle..... | 10 |
| 1.6 Basic Concepts..... | 10 |
| 1.7 Billing..... | 11 |
| 1.8 Permissions..... | 12 |
| 1.9 Constraints..... | 14 |
| 1.10 Differences Between ECSs in Resource Pools and ECSs on DeHs..... | 14 |
| 2 Getting Started..... | 16 |
| 2.1 Allocating DeHs..... | 16 |
| 2.2 Deploying ECSs on DeHs..... | 18 |
| 3 DeH Management..... | 19 |
| 3.1 Viewing the Details of a DeH..... | 19 |
| 3.2 Changing the Name of a DeH..... | 20 |
| 3.3 Configuring Auto Placement for DeHs..... | 20 |
| 3.4 Adjusting DeH Resource Quotas..... | 21 |
| 3.5 Releasing a DeH..... | 21 |
| 3.6 Releasing DeHs in Batches..... | 22 |
| 4 ECS Management..... | 23 |
| 4.1 Viewing the Details of ECSs on a DeH..... | 23 |
| 4.2 Managing an ECS on a DeH..... | 24 |
| 4.3 Managing the ECSs on a DeH in Batches..... | 24 |
| 4.4 Modifying the Specifications of an ECS on a DeH..... | 25 |
| 4.5 Migrating ECSs..... | 26 |
| 5 Tag Management..... | 28 |

| | |
|---|-----------|
| 6 Key Operations Recorded by CTS..... | 30 |
| 6.1 Key DeH Operations Recorded by CTS..... | 30 |
| 6.2 Viewing CTS Traces..... | 30 |
| 7 Managing Enterprise Projects..... | 32 |
| 8 Permission Management..... | 34 |
| 8.1 Creating a User and Granting Permissions..... | 34 |
| 8.2 Creating a Custom Policy..... | 35 |
| 9 FAQs..... | 37 |
| 9.1 DeH FAQs..... | 37 |
| 9.1.1 What Is DeH?..... | 37 |
| 9.1.2 When a DeH Is Needed?..... | 37 |
| 9.1.3 Can I Use DeHs Build Websites?..... | 37 |
| 9.1.4 Can I Allocate DeHs by Myself?..... | 37 |
| 9.1.5 What Hypervisor Is Used by DeHs?..... | 37 |
| 9.1.6 Does Each DeH Have a Unique ID?..... | 37 |
| 9.1.7 What Are the Differences Between DeHs and BMSs?..... | 38 |
| 9.1.8 What Are the Differences Between DeH and DeC?..... | 39 |
| 9.1.9 What Are the Differences Between DeHs and ECSs?..... | 39 |
| 9.1.10 How Can I Query the Number of Available Resources on a DeH?..... | 39 |
| 9.1.11 Does DeH Support Capacity Expansion?..... | 39 |
| 9.1.12 What Is BYOL?..... | 40 |
| 9.1.13 How Do I Bring My Own Licenses to a DeH?..... | 40 |
| 9.1.14 Can I Attach an EVS Disk to a DeH?..... | 40 |
| 9.1.15 Is There a Limit on the Number of DeHs That I Can Purchase?..... | 40 |
| 9.2 ECS FAQs..... | 40 |
| 9.2.1 What Are the Differences Between ECSs on DeHs and Those on Shared Hosts?..... | 40 |
| 9.2.2 What Are the Restrictions on Creating ECSs on a DeH?..... | 40 |
| 9.2.3 Can I Create ECSs of Different Flavors on a DeH?..... | 40 |
| 9.2.4 Can I Modify the Specifications of ECSs on DeHs?..... | 41 |
| 9.2.5 What Should I Do If I Fail to Create an ECS on a DeH?..... | 41 |
| 9.2.6 Can I Migrate ECSs in Resource Pools to DeHs?..... | 41 |
| 9.3 Billing FAQs..... | 41 |
| 9.3.1 Do I Need to Pay for ECSs Deployed on My DeHs?..... | 41 |
| 10 Change History..... | 42 |

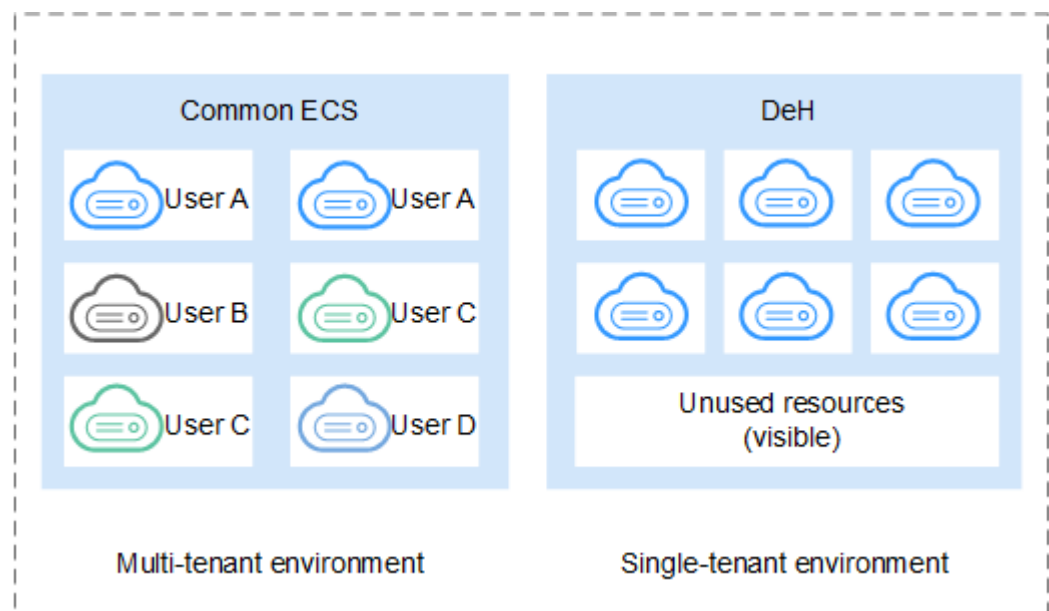
1 Product Introduction

1.1 Dedicated Host

A Dedicated Host (DeH) is a physical server fully dedicated for your use to ensure isolation, security, and performance for your ECSs. You can bring your own license (BYOL) to DeH to reduce the costs on software licenses and facilitate the independent management of ECSs.

Figure 1-1 shows the differences between DeHs and common ECSs.

Figure 1-1 Differences between DeHs and common ECSs



The physical resources of the DeH are not shared with others, while the physical resources of the ECS may be shared with others. You can obtain the detailed information on the DeH, such as sockets, physical cores, CPU type, and memory size. So, you can create ECSs of specified flavors based on the DeH flavor.

ECS Deployment Modes

When deploying an ECS, you can:

- Select a DeH to deploy ECSs.
Directly create ECSs on an existing DeH or select a DeH you want to deploy ECSs on when creating ECSs.
- Configure the system to automatically deploy ECSs on a DeH.
Enable **Auto Placement** for DeHs to let the system automatically deploy ECSs on the DeH with the highest available memory based on load balancing requirements.

You can use either of the above methods to deploy ECSs on a DeH. This helps you ensure isolation, security, and compliance for deployed applications, improves resource utilization, and optimizes the ECS performance.

1.2 Application Scenarios

- **Industries that have high requirements for regulation compliance and security**
You can exclusively use a physically isolated host to meet your high compliance and security requirements.
- **Tenants who want to use their own licenses**
If you have a licensed OS or software (licensed based on the number of physical sockets or the number of physical cores), you can bring your own license and migrate your services to the cloud platform.
- **Industries that are extremely sensitive to performance and stability**
DeH is ideal for service scenarios with higher requirements on server performance and stability such as finance, securities and gaming applications. DeH guarantees the stability of CPUs and network I/O, ensuring smooth running of applications.
- **Tenants who want to deploy resources independently and manage them flexibly**
You can create ECSs on a specified DeH and specify your ECS specifications based on the type of DeH you specified. You can migrate ECSs between DeHs or migrate ECSs from a public resource pool to a DeH.

1.3 Product Advantages

- **Cost-effectiveness:** DeH allows you to bring your own license (BYOL), such as licenses for Microsoft Windows Server, Microsoft SQL Server, and Microsoft Office, to reduce costs on license.
- **Security:** DeH isolates compute resources to prevent your workloads on DeHs from being affected by those of other tenants.
- **Legal compliance:** Physically isolated DeHs help you meet regulation compliance and surveillance requirements for your sensitive services.
- **Flexibility:** A DeH can be allocated within several minutes, allowing you to buy one at any time you want.

- Reliability: DeH provides 99.95% availability.

1.4 Categories and Types

1.4.1 Overview

The DeH category and type define the DeH configuration and determine the type and number of ECSs you can create on the DeH.

The DeH configuration includes the number of CPUs (sockets), number of physical cores, local storage, hardware configuration (CPU model and memory size), and number of vCPUs. Buy DeHs of desired specifications based on the site requirements.

The following DeH categories and types are supported:

- General-purpose DeHs
- General computing-plus DeHs
- Memory-optimized DeHs

NOTE

DeH categories here are for your quick glance only. For details about each DeH category, go to the specific topics.

Table 1-1 Specifications of general-purpose DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|--|-----------------|
| s3 | 2 | 22 | <ul style="list-style-type: none"> • CPU: Intel® Xeon® Skylake 6161 v5 (frequency: 2.20 GHz; turbo frequency: 3.00 GHz) • Memory: 320 GB (or 327,680 MB) | 144 |
| s6 | 2 | 26 | <ul style="list-style-type: none"> • CPU: Intel® Xeon® CascadedLake CPU (frequency: 2.6 GHz; turbo frequency: 3.5 GHz) • Memory: 516 GB (or 528,384 MB) | 264 |
| s6_pro | 2 | 26 | <ul style="list-style-type: none"> • CPU: Intel® Xeon® CascadedLake CPU (frequency: 2.6 GHz; turbo frequency: 3.5 GHz) • Memory: 702 GB (or 718,848 MB) | 264 |

Table 1-2 Specifications of general computing-plus DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|--|-----------------|
| c6 | 2 | 22 | <ul style="list-style-type: none">• CPU: Intel Cascade Lake 6266 (frequency: 3.00 GHz; turbo frequency: 3.40 GHz)• Memory: 148 GB (or 151,552 MB) | 74 |
| c6_pro | 2 | 22 | <ul style="list-style-type: none">• CPU: Intel Cascade Lake 6266 (frequency: 3.00 GHz; turbo frequency: 3.40 GHz)• Memory: 296 GB (or 303,104 MB) | 74 |

Table 1-3 Specifications of memory-optimized DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|--|-----------------|
| m6 | 2 | 22 | <ul style="list-style-type: none">• CPU: Intel Cascade Lake 6266 (frequency: 3.00 GHz; turbo frequency: 3.40 GHz)• Memory: 608 GB (or 622,592 MB) | 76 |

1.4.2 General-Purpose DeHs

Overview

General-purpose DeHs can accommodate ECSs with regular workloads and short-term workload surges. They use a CPU-unbound scheduling scheme. vCPUs are randomly allocated to idle CPU hyper threads based on the system loads. If traffic loads are light, the computing performance is high. However, if traffic loads are heavy, vCPUs of different ECSs compete for physical CPU resources, resulting in unstable computing performance.

Currently, only the s3, s6, and s6_pro DeH types equipped with the latest-generation Intel® Xeon® Skylake CPUs, providing better cost-effectiveness, are provided and can be used to deploy S3 and S6 ECSs.

DeH Specifications

Table 1-4 Specifications of s6 DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|---|-----------------|
| s6 | 2 | 26 | <ul style="list-style-type: none"> CPU: Intel® Xeon® CascadedLake CPU (frequency: 2.6 GHz; turbo frequency: 3.5 GHz) Memory: 516 GB (or 528,384 MB) | 264 |

Table 1-5 Specifications of s6_pro DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|---|-----------------|
| s6_pro | 2 | 26 | <ul style="list-style-type: none"> CPU: Intel® Xeon® CascadedLake CPU (frequency: 2.6 GHz; turbo frequency: 3.5 GHz) Memory: 702 GB (or 718,848 MB) | 264 |

Table 1-6 Specifications of s3 DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|--|-----------------|
| s3 | 2 | 22 | <ul style="list-style-type: none"> CPU: Intel® Xeon® Skylake 6161 v5 (frequency: 2.20 GHz; turbo frequency: 3.00 GHz) Memory: 320 GB (or 327,680 MB) | 144 |

 **NOTE**

Number of vCPUs = (Number of sockets x Number of cores x Number of single-core threads - CPU overheads) x CPU overcommitment ratio

- s6 DeHs
vCPUs = (2 x 26 x 2 - 16) x 3 = 264
- s6_pro DeHs
vCPUs = (2 x 26 x 2 - 16) x 3 = 264
- s3 DeHs
vCPUs = (2 x 22 x 2 - 16) x 2 = 144

ECSs Allowed on DeHs

Table 1-7 ECS flavors allowed on s6 DeHs

| ECS Flavor | vCPUs | Memory (GiB) |
|--------------|-------|--------------|
| s6.small.1 | 1 | 1 |
| s6.medium.2 | 1 | 2 |
| s6.large.2 | 2 | 4 |
| s6.xlarge.2 | 4 | 8 |
| s6.2xlarge.2 | 8 | 16 |

Table 1-8 ECS flavors allowed on s6_pro DeHs

| ECS Flavor | vCPUs | Memory (GiB) |
|--------------|-------|--------------|
| s6.small.1 | 1 | 1 |
| s6.medium.2 | 1 | 2 |
| s6.large.2 | 2 | 4 |
| s6.xlarge.2 | 4 | 8 |
| s6.2xlarge.2 | 8 | 16 |
| s6.medium.4 | 1 | 4 |
| s6.large.4 | 2 | 8 |
| s6.xlarge.4 | 4 | 16 |
| s6.2xlarge.4 | 8 | 32 |

Table 1-9 ECS flavors allowed on s3 DeHs

| ECS Flavor | vCPUs | Memory (GiB) | Maximum Number of ECSs on a DeH |
|--------------|-------|--------------|---------------------------------|
| s3.medium.4 | 1 | 4 | 144 |
| s3.large.2 | 2 | 4 | 72 |
| s3.large.4 | 2 | 8 | 72 |
| s3.xlarge.2 | 4 | 8 | 36 |
| s3.xlarge.4 | 4 | 16 | 36 |
| s3.2xlarge.2 | 8 | 16 | 18 |
| s3.2xlarge.4 | 8 | 32 | 18 |
| s3.4xlarge.2 | 16 | 32 | 9 |
| s3.4xlarge.4 | 16 | 64 | 9 |

1.4.3 General Computing-Plus DeHs

Overview

Compared with general computing DeHs, general computing-plus DeHs provide dedicated vCPUs, featuring powerful performance. In addition, the DeHs use latest-generation network acceleration engines and Data Plane Development Kit (DPDK) to provide higher network performance, meeting requirements in different scenarios.

General computing-plus DeHs include only c6 and c6_pro DeHs.

- c6 and c6_pro DeHs can house C6 ECSs.

DeH Specifications

Table 1-10 Specifications of c6 DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|---|-----------------|
| c6 | 2 | 22 | <ul style="list-style-type: none"> • CPU: Intel Cascade Lake 6266 (frequency: 3.00 GHz; turbo frequency: 3.40 GHz) • Memory: 148 GB (or 151,552 MB) | 74 |

Table 1-11 Specifications of c6_pro DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|---|-----------------|
| c6_pro | 2 | 22 | <ul style="list-style-type: none"> CPU: Intel Cascade Lake 6266 (frequency: 3.00 GHz; turbo frequency: 3.40 GHz) Memory: 296 GB (or 303,104 MB) | 74 |

ECSs Allowed on DeHs

Table 1-12 ECS flavors allowed on c6 DeHs

| ECS Flavor | vCPUs | Memory (GiB) | Maximum Number of ECSs on a DeH |
|---------------|-------|--------------|---------------------------------|
| c6.large.2 | 2 | 4 | 37 |
| c6.xlarge.2 | 4 | 8 | 18 |
| c6.2xlarge.2 | 8 | 16 | 8 |
| c6.3xlarge.2 | 12 | 24 | 6 |
| c6.4xlarge.2 | 16 | 32 | 4 |
| c6.6xlarge.2 | 24 | 48 | 3 |
| c6.8xlarge.2 | 32 | 64 | 2 |
| c6.16xlarge.2 | 64 | 128 | 1 |

Table 1-13 ECS flavors allowed on c6_pro DeHs

| ECS Flavor | vCPUs | Memory (GiB) | Maximum Number of ECSs on a DeH |
|--------------|-------|--------------|---------------------------------|
| c6.large.4 | 2 | 8 | 37 |
| c6.xlarge.4 | 4 | 16 | 18 |
| c6.2xlarge.4 | 8 | 32 | 8 |
| c6.3xlarge.4 | 12 | 48 | 6 |
| c6.4xlarge.4 | 16 | 64 | 4 |
| c6.6xlarge.4 | 24 | 96 | 3 |

| ECS Flavor | vCPUs | Memory (GiB) | Maximum Number of ECSs on a DeH |
|---------------|-------|--------------|---------------------------------|
| c6.8xlarge.4 | 32 | 128 | 2 |
| c6.16xlarge.4 | 64 | 256 | 1 |

1.4.4 Memory-Optimized DeHs

Overview

Memory-optimized DeHs are designed for processing large-scale data sets in the memory. They use the latest Intel Xeon Skylake CPUs, network acceleration engines, and Data Plane Development Kit (DPDK) to provide higher network performance. They provide a maximum of 512 GB DDR4 memory for high-memory computing applications.

DeH Specifications

Table 1-14 Specifications of m6 DeHs

| Flavor Type | Number of CPUs (Sockets) | Number of Physical Cores | Hardware Specifications | Number of vCPUs |
|-------------|--------------------------|--------------------------|--|-----------------|
| m6 | 2 | 22 | <ul style="list-style-type: none">CPU: Intel Cascade Lake 6266 (frequency: 3.00 GHz; turbo frequency: 3.40 GHz)Memory: 608 GB (or 622,592 MB) | 76 |

NOTE

Number of vCPUs = (Number of sockets x Number of cores x Number of single-core threads - CPU overheads) x CPU overcommitment ratio

- m6 DeHs
 $vCPUs = (2 \times 22 \times 2 - 12) \times 1 = 76$

ECSs Allowed on DeHs

Table 1-15 ECS flavors allowed on m6 DeHs

| Flavor Name | vCPUs | Memory (GiB) | Maximum Number of ECSs on a DeH |
|---------------|-------|--------------|---------------------------------|
| m6.large.8 | 2 | 16 | 37 |
| m6.xlarge.8 | 4 | 32 | 18 |
| m6.2xlarge.8 | 8 | 64 | 8 |
| m6.3xlarge.8 | 12 | 96 | 6 |
| m6.4xlarge.8 | 16 | 128 | 4 |
| m6.6xlarge.8 | 24 | 192 | 3 |
| m6.8xlarge.8 | 32 | 256 | 2 |
| m6.16xlarge.8 | 64 | 512 | 1 |

1.5 Lifecycle

A DeH has different statuses throughout its lifecycle.

Table 1-16 DeH statuses

| Status | Attribute | Description |
|---------|--------------|---|
| Normal | Stable | The DeH is running properly for you to deploy your ECSs. |
| Faulty | Faulty | The DeH is faulty and cannot provide services. Contact the customer service. |
| Deleted | Intermediate | The DeH is deleted. The resources on the DeH console will be removed within a few minutes. |

1.6 Basic Concepts

Before using a DeH, you need to understand the following basic concepts.

| Glossary | Description |
|------------------------|--|
| BYOL | BYOL indicates the Bring Your Own License mode. If you have an OS or a software license (a license whose certified items include number of physical sockets and physical cores), you can migrate your services to the cloud platform and continue to use your existing licenses. |
| Region | A region indicates the physical location of the data center where a DeH is located. |
| Availability zone (AZ) | A physical region where resources use independent power supply and networks. AZs are physically isolated but interconnected through an internal network. To enhance application availability, you are advised to create instances in different AZs. |
| DeH flavor | A DeH flavor specifies the DeH attributes, including the number of CPUs on the physical server (the number of sockets), number of physical cores, CPU model, memory size, and number of vCPUs. |

1.7 Billing

Billing Items

You need to pay for:

- DeH and ECS services
 - DeH: all resources of the DeH, including CPUs, memory, and local disks.
 - Dedicated ECS: EIPs and bandwidths. Dedicated ECSs created on the DeH are free of charge.
- Associated services (You can purchase resources as required and pay for only what you use. After your DeH expires, you need to release the associated resources to avoid unnecessary expenses.):
 - Elastic IP (EIP): EIP is billed by the number of EIP addresses you purchased.
 - Bandwidth: Public network bandwidth is billed by traffic or bandwidth.
 - Elastic Volume Service (EVS): You can select EVS disks of multiple specifications based on your requirements.

Billing Mode

1. Billing method : A DeH is billed on a pay-as-you-go basis, that is, you are billed for usage duration by the hour.
2. Billing unit: DeHs are billed based on the number of physical servers. If you need to purchase or expand your DeH, select at least one physical server at a time.

1.8 Permissions

Background

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

With IAM, you can use your account to create IAM users for your employees, and grant permissions to the users to control their access to specific resource types. For example, some software developers in your enterprise need to use DeH but should not be allowed to delete other DeH resources or perform any other high-risk operations. In this scenario, you can create IAM users for the software developers and grant them only the permissions required for using DeH resources.

If your account does not require individual IAM users for permissions management, you can skip this section.

IAM can be used free of charge. You pay only for the resources in your account. For more information about IAM, see Identity and Access Management User Guide.

DeH Permissions

New IAM users do not have any permissions assigned by default. You need to first add them to one or more groups and attach policies or roles to these groups. The users then inherit permissions from the groups and can perform specified operations on cloud services based on the permissions they have been assigned.

DeH is a project-level service deployed in specific physical regions. When you grant DeH permissions to a user group, set **Scope to Region-specific projects** and then select projects for the permissions to take effect. If you select **All projects**, the permissions will take effect for the user group in all region-specific projects. When accessing DeH, the users need to switch to a region where they have been authorized to use this service.

You can grant users permissions by using roles and policies.

- **Roles:** A type of coarse-grained authorization mechanism that defines permissions related to users responsibilities. Only a limited number of service-level roles for authorization are available. If one role has a dependency role required for accessing DeH, assign both roles to the users. Roles are not ideal for fine-grained authorization and secure access control.
- **Policies:** A fine-grained authorization mechanism that defines permissions required to perform operations on specific cloud resources under certain conditions. This mechanism allows for more flexible policy-based authorization, meeting requirements for secure access control. For example, the account administrator can allow IAM users to perform specified management operations on a type of DeH resources.

Table 1-17 describes all system permissions of DeH.

Table 1-17 DeH system permissions

| Role/Policy Name | Description | Category |
|--------------------|---|-----------------------|
| DeH FullAccess | DeH administrator, who has all permissions of DeH | System-defined policy |
| DeH ReadOnlyAccess | Read-only permission on DeHs. Users with this permission can only query DeHs. | System-defined policy |

Table 1-18 lists the common operations supported by each system-defined permission of DeH. Select the permissions as needed.

Table 1-18 Common operations supported by each system-defined policy or role

| Operation | DeH FullAccess | DeH ReadOnlyAccess |
|---|----------------|--------------------|
| DeHs | √ | x |
| Releasing DeHs | √ | x |
| Querying DeHs | √ | √ |
| Querying Details of a DeH | √ | √ |
| Modifying DeH Attributes | √ | x |
| Querying Available DeH Types | √ | √ |
| Querying DeH Resource Types | √ | √ |
| Querying DeH Resource Type Details | √ | √ |
| Querying Available DeH Types | √ | √ |
| Querying DeH Resource Types | √ | √ |
| Querying the AZ to Which a DeH Resource Type Is Bound | √ | √ |
| Querying the Flavor to Which a DeH Resource Type Is Bound | √ | √ |

| Operation | DeH FullAccess | DeH ReadOnlyAccess |
|---------------------------------------|----------------|--------------------|
| Querying the Tenant Quota | √ | √ |
| Creating a DeH Tag | √ | x |
| Deleting a DeH Tag | √ | x |
| Querying Tags of a DeH | √ | √ |
| Querying DeH Tags Created by a Tenant | √ | √ |
| Querying DeHs by Tag | √ | √ |
| Querying ECSs on a DeH | √ | √ |

1.9 Constraints

- ECSs automatically created by Auto Scaling (AS) will not be dispatched to DeHs, while ECSs created on DeHs can be manually added to AS groups.
- Special ECSs, such as those with local disks or GPUs, cannot be migrated between DeHs or between the public resource pool and DeHs.

1.10 Differences Between ECSs in Resource Pools and ECSs on DeHs

ECSs in resource pools and ECSs on DeHs have almost the same functions except those listed in [Table 1-19](#).

Table 1-19 Differences between ECSs in resource pools and ECSs on DeHs

| Item | ECSs in Resources Pools | ECSs on DeHs |
|---------------|---|--|
| Billing items | The total price is determined by the ECS type, specifications (including vCPUs and memory), usage duration, and the number of purchased ECSs. | No additional fees are needed for ECSs on your DeHs. The compute resources used by ECSs on DeHs are free. |
| ECS flavors | Multiple ECS types are supported. For details, see the <i>Elastic Cloud Server User Guide</i> . | The ECSs running on DeHs vary. |

| Item | ECSs in Resources Pools | ECSs on DeHs |
|---------------|---|--|
| Auto recovery | Supported NOTE The ECS supports automatic failover. If the physical server accommodating the ECS becomes faulty, the ECS can be automatically migrated to a properly running physical server, ensuring service continuity. | Supported NOTE If a DeH becomes faulty, the system will select an unprovisioned server as the backup DeH and automatically migrate the ECSs from the faulty DeH to the new DeH, ensuring high service availability. |

2 Getting Started

2.1 Allocating DeHs

Scenarios

You will allocate a DeH for the first time or allocate more DeHs as required.

Procedure


1. Log in to the management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, click **Dedicated Host**.
The **Dedicated Host** page is displayed.
4. Click **Allocate DeH**.
The **Allocate DeH** page is displayed.
5. Configure the DeH parameters.

Table 2-1 Parameter description

| Parameter | Description |
|-----------|--|
| Region | A region is a geographic area where your DeHs are located. Select the region closest to your services to reduce the latency and improve the download speed. |
| AZ | An AZ is a physical region where resources use independent power supply and networks. AZs are physically isolated but interconnected through an internal network. To enhance application availability, create DeHs in different AZs. |

| Parameter | Description |
|---------------------------|---|
| DeH Category and DeH Type | <p>For details about the available DeH categories and types, see Overview.</p> <p>NOTE Pay attention to the following when configuring the DeH type:</p> <ul style="list-style-type: none">• The DeH type determines the flavors and quantity of ECSs that can run on the DeH.• The Supported ECS Flavors area shows the ECS flavors supported by the DeH type. You can create an ECS of the listed flavor only after the DeH is created successfully. |
| Auto Placement | <p>When Auto Placement is disabled for a DeH, new ECSs with auto placement selected will not be created on the DeH. When Auto Placement is enabled for a DeH, new ECS with auto placement selected may be created on the DeH.</p> <p>During ECS creation, you can still manually select DeHs with auto placement disabled to create ECSs on them.</p> |
| Tag | <p>Tags are identifiers of DeHs. Adding tags to DeHs helps you better identify and manage your DeHs. You can add a maximum of 10 tags to a DeH.</p> <p>For details about tag operations, see Tag Management.</p> |
| DeH Name | <p>You can specify the DeH name, which contains a maximum of 64 characters, including only letters, digits, underscores (_), periods (.), and hyphens (-).</p> |
| Quantity | <p>When you allocate multiple DeHs, the system will add a suffix to each DeH name, for example, my_DeH-001 and my_DeH-002.</p> |

6. Click **Allocate Now**.
7. Confirm the configuration information, and click **Allocate Now**.

Results

You can view the newly created DeH on the **Dedicated Host** page. If the DeH is not displayed immediately, refresh the page and wait for a while. If the status of the DeH changes to Available, you can use the DeH.

Follow-up Operations

After a DeH is provisioned, you can perform the following operations as needed:

- [Deploying ECSs on DeHs](#)
- [Migrating ECSs to DeHs](#)

2.2 Deploying ECSs on DeHs

Scenarios


You can create ECSs of the supported flavors on your DeHs.

Prerequisites

Before creating an ECS on a DeH, ensure that you have:

- Allocated a DeH.
- Created a security group in the target region and added security group rules that meet your service requirements if you do not use the default security group.
- Created a key pair in the target region if you select the key pair login mode when creating an ECS.

Procedure

1. Log in to the management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, click **Dedicated Host**.
The **Dedicated Host** page is displayed.
4. In the list of DeHs, locate the DeH on which an ECS will be located and click **Create ECS** in the **Operation** column.

The **Create ECS** page is displayed.

For details, see Elastic Cloud Server User Guide.

NOTE

- To create an ECS without specifying a DeH, click **Create ECS** in the upper right corner of the page. Ensure that the auto placement function is enabled for at least one DeH.
- 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.

Results

Click **Back to ECS List** and wait until the ECS is created. You can view information about the newly created ECS, including the name/ID, specifications, and IP address.


3 DeH Management

3.1 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 management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, 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(GiB)**: Total memory and available memory
 - **Sockets**: Number of physical CPU sockets
 - **Cores**: Number of physical cores

Related Operations





- [Changing the Name of a DeH](#)
- [Configuring Auto Placement for DeHs](#)

3.2 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 management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, 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.

3.3 Configuring Auto Placement for DeHs

Scenarios

You can enable or disable auto placement for each DeH to allow or prohibit the system to automatically allocate ECSs on a 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 **Computing**, 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, enable **Auto placement** for **DeH**. Then the system automatically creates the ECS on DeH B to balance the load among two DeHs.


3.4 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. In the upper right corner of the page, click  .
The **Service Quota** page is displayed.
3. 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?

The system does not support online quota adjustment.

If you need to adjust a quota, contact the operations administrator.

3.5 Releasing a DeH


Scenarios

You can release a DeH if it is no longer used. Charging for the released DeHs will be stopped.

Prerequisites

Before releasing a DeH, ensure that the DeH is in the **Normal** or **Faulty** status and there are no ECSs on it. Otherwise, you cannot release 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 **Computing**, click **Dedicated Host**.
The **Dedicated Host** page is displayed.
4. In the list of DeHs, locate the DeH to be released and click **Release** in the **Operation** column.
The **Release DeH** dialog box is displayed.

5. Click **Yes**.

Results

The released DeHs are not displayed in the DeH list.


3.6 Releasing DeHs in Batches

Scenarios

You can batch release the DeHs that are no longer used. Charging for the released DeHs will be stopped.

If you want to release multiple DeHs at a time, use the batch release method.

Procedure

1. Log in to the management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, click **Dedicated Host**.
The **Dedicated Host** page is displayed.
4. In the list of DeHs, select one or more target DeHs.
You can concurrently select all DeHs on the current page by selecting the check box in the list header.
5. Click **Release** in the upper left corner of the list.
The **Release DeH** dialog box is displayed.
6. Click **Yes**.

Results

The released DeHs are not displayed in the DeH list.


4 ECS Management

4.1 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 management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, 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 an ECS on a DeH](#)

4.2 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 management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, 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 ECS 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**
- Create

Related Operations

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

For details, see Elastic Cloud Server User Guide.

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.

4.3 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  in the upper left corner and select the desired region and project.
3. Under **Computing**, 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 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.


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)
 - Create

4.4 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 management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, 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, view 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*.

4.5 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.

NOTE

Operations in this scenario need to be performed on the ECS console. For details, see *Migrating an ECS in the Elastic Cloud Server User Guide*.

Notes

Only a stopped ECS can be migrated.

Procedure


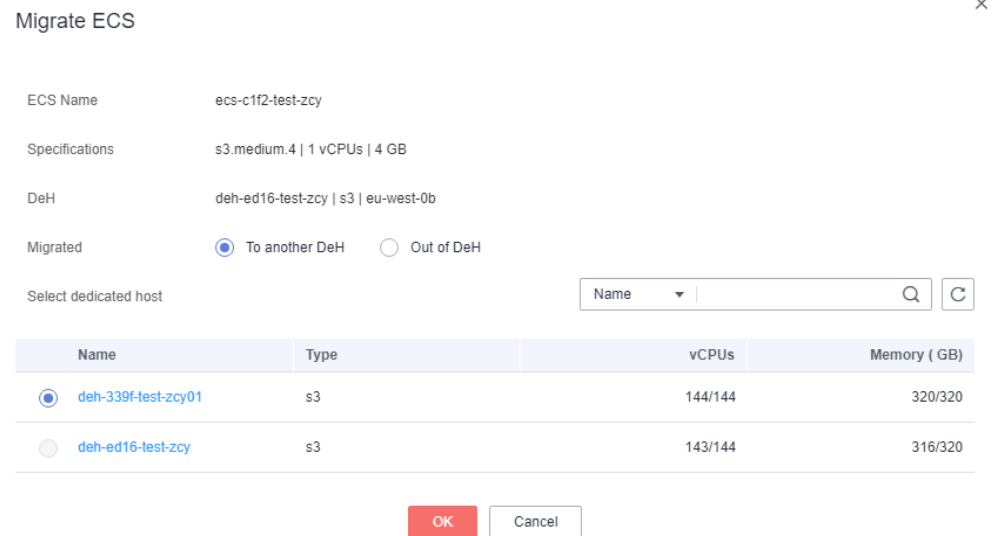
1. Log in to the management console.
2. Click  in the upper left corner and select the desired region and project.
3. Under **Computing**, click **Dedicated Host**.
The **Dedicated Host** page is displayed.
4. Click the name of the target DeH.
The DeH details page is displayed.
5. On the **ECSs on the DeH** tab, view 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 4-1 Migrate ECS



- 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**.
- Click **OK**.

 **NOTE**

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

5 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 5-1](#) lists the naming requirements for keys and values.

Table 5-1 Tag naming requirements

| Parameter | Requirement | Example Value |
|-----------|--|---------------|
| Tag key | <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• 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 **Computing**, click **Dedicated Host**.
The **Dedicated Host** page is displayed.
3. In the upper right corner of the DeH list, click **Search by Tag** to show the search page.

Figure 5-1 Searching for DeHs by tag

The screenshot shows a search interface for Dedicated Hosts (DeHs) by tag. At the top, there are two dropdown menus: 'All statuses' and 'Name', followed by a search icon and a 'Search by Tag' button with an upward arrow and a refresh icon. Below this is a section with two input fields: 'Tag key' and 'Tag value', with a '+' button between them. A note below the input fields reads: 'You can only select keys and values from the drop-down lists. You can add a maximum of 10 tags to search for DeHs. If you add more than one tag, the DeHs containing all specified tags will be returned.' At the bottom right of this section are 'Search' and 'Reset' buttons.

4. Enter the tag key and tag value of the target DeH. Click **Search**.
The system automatically searches for your desired DeHs.
5. Click  to add a tag.
You can add multiple tags to search for 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.

6 Key Operations Recorded by CTS

Cloud Trace Service (CTS) is a log audit intended for cloud security. It allows you to collect, store, and query cloud resource operation records and use these records for security analysis, compliance auditing, resource tracking, and fault locating.


6.1 Key DeH Operations Recorded by CTS


[Table 6-1](#) describes the DeH operations that can be recorded by CTS.

Table 6-1 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 |

6.2 Viewing CTS Traces

1. Log in to the management console.
2. Click  in the upper left corner and select the desired region and project.
3. Click **Service List** and select **Cloud Trace Service** under **Management & Deployment**.
4. Choose **Trace List** in the navigation pane on the left.
5. Use filters to query traces. The following four filters are available:
 - **Trace Type, Trace Source, Resource Type, and Search By**
Select a filter from the drop-down list.
When you select **Resource ID** for **Search By**, you also need to select or enter a resource ID.
 - **Operator**: Select a specific operator (at user level rather than tenant level).

- **Trace Status:** Available options include **All trace statuses, normal, warning, and incident**. You can only select one of them.
 - **Time range:** In the upper right corner of the page, you can query traces in the last one hour, last one day, last one week, or within a customized period.
6. Click  on the left of the record to be queried to extend its details.
 7. Locate a trace and click **View Trace** in the **Operation** column.
For details about the key fields in the CTS trace structure, see the *Cloud Trace Service User Guide*.

7 Managing Enterprise Projects

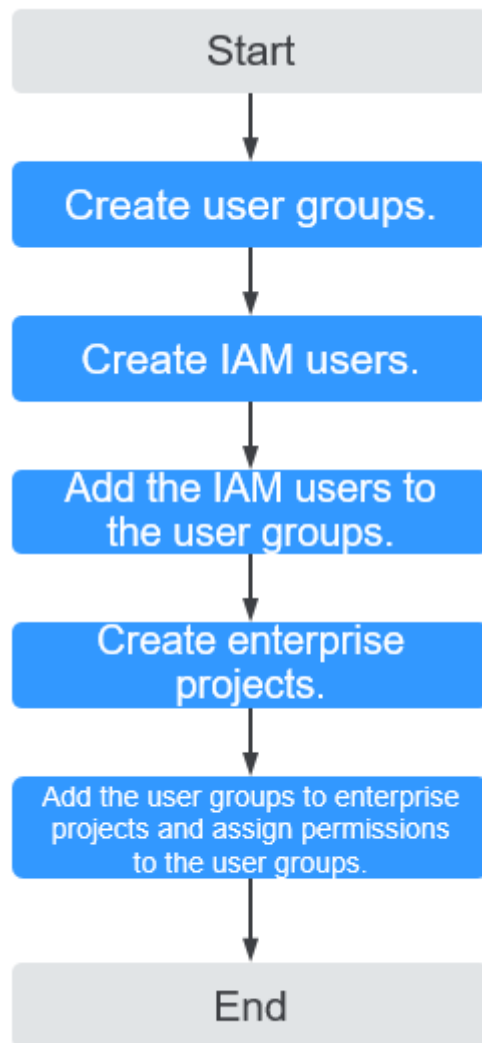
An enterprise project helps you centrally manage your DeH resources and users by project.

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 7-1](#).

Figure 7-1 Creating an enterprise project and assigning permissions



Using Enterprise Project to Manage DeHs

- Select an enterprise project when purchasing a DeH. For details, see [Allocating DeHs](#).
- On the **Enterprise Project Management** page, you can add existing DeHs to an enterprise project.

8 Permission Management

8.1 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 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.

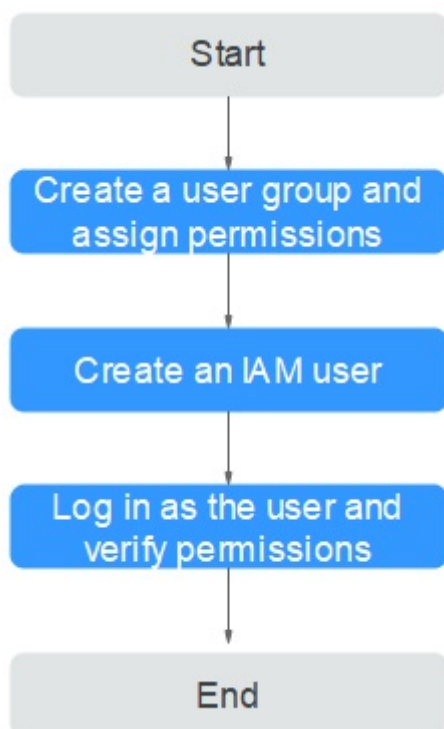
This section describes the procedure for granting permissions (see [Figure 8-1](#)).

Prerequisites

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

Authorization Process

Figure 8-1 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.

8.2 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 section "Creating a Custom Policy" in *Identity and Access Management User Guide*. 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"
    }
  ]
}
```


9 FAQs

9.1 DeH FAQs

9.1.1 What Is DeH?

A Dedicated Host (DeH) is a physical server fully dedicated for your use to ensure isolation, security, and performance for your ECSs. You can bring your own license (BYOL) to DeH to reduce the costs on software licenses and facilitate the independent management of ECSs.

9.1.2 When a DeH Is Needed?

When your services demand high compliance, security, or performance, you can purchase a DeH and deploy the service on it. For more information, see [Application Scenarios](#).

9.1.3 Can I Use DeHs Build Websites?

You can use ECSs or the ECSs created on DeHs to build websites.

9.1.4 Can I Allocate DeHs by Myself?

Yes. You can allocate DeHs on the management console. For more information, see [Allocating DeHs](#).

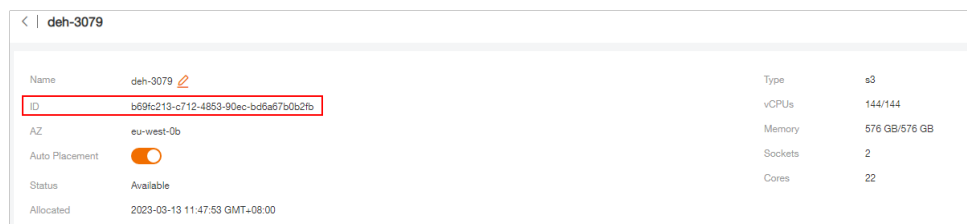
9.1.5 What Hypervisor Is Used by DeHs?

DeHs use KVM. Only KVM ECSs can be deployed on the DeHs.

9.1.6 Does Each DeH Have a Unique ID?

Yes. Each DeH has a unique ID.

Figure 9-1 DeH ID



9.1.7 What Are the Differences Between DeHs and BMSs?

Bare metal servers and dedicated hosts are physically-isolated servers dedicated to individual tenants. Their differences are as follows:

- DeH: A dedicated host is fully exclusive for your ECSs, but cannot be directly used for running workloads. You can deploy ECSs for running workloads on a dedicated host.
- BMS: A BMS is used as a physical server and can be directly used for running your services.

Figure 9-2 Differences between DeHs and BMSs

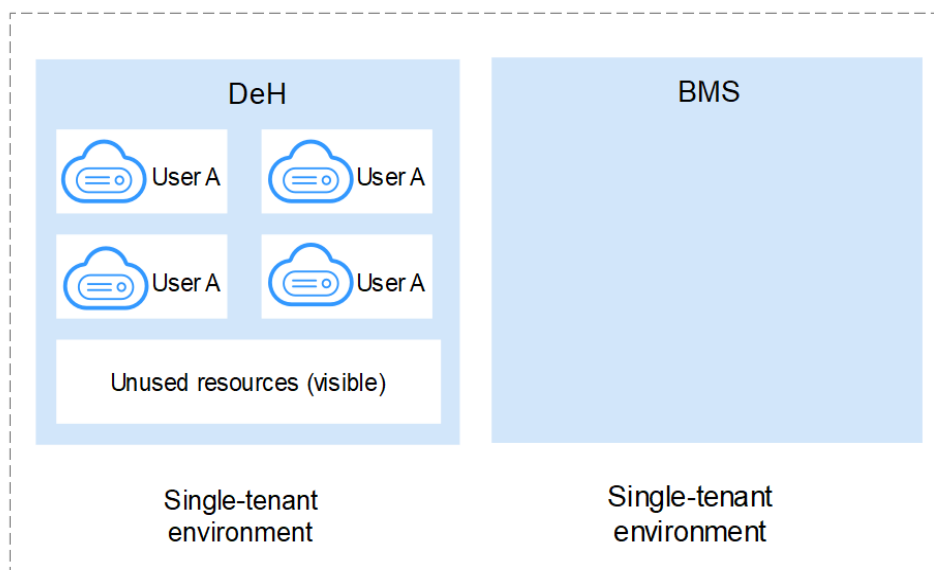


Table 9-1 Differences between DeHs and BMSs

| Item | DeH | BMS |
|--------------------------|--|-------------------------|
| Virtualization provided | Yes | No |
| Usage | Used to accommodate ECSs | Used as a whole server |
| Supported specifications | Specifications of physical servers running DeHs and supported ECS specifications | Only BMS specifications |

| Item | DeH | BMS |
|------------------|------------|-----------------|
| Supported images | ECS images | Only BMS images |

9.1.8 What Are the Differences Between DeH and DeC?

- Scenarios**
 DeC provides a complete resource isolation solution by using dedicated services, such as Dedicated Distributed Storage Service (DSS) Dedicated Enterprise Storage Service (DESS), and Bare Metal Server (BMS).
 DeH provides only isolated compute hosts, which are more flexible and suitable for customers who demand computing resource isolation and flexibility.
- Functions**
 You need to apply for an independent DeC account before requesting DeC resources. DeC resources and public ECSs work in different VPCs. You cannot migrate public ECSs to a DeC or ECSs in a DeC to a public resource pool.
 ECSs created on a DeH and ECSs in the public resource pool share the same VPC. So, you can migrate a stopped ECS between a DeH and a resource pool.

9.1.9 What Are the Differences Between DeHs and ECSs?

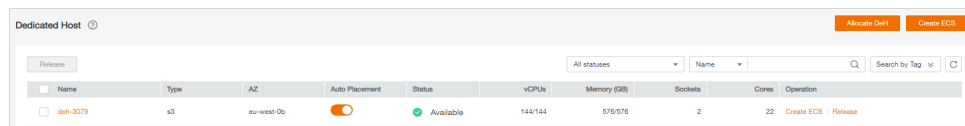
DeHs are dedicated physical servers where the virtualization environment is deployed and are fully dedicated for your use. Your DeHs are physically isolated from those of other users. After creating a DeH, you can create ECSs on the DeH as well as plan physical server resources.

Common ECSs allow multiple users to share physical server resources.

9.1.10 How Can I Query the Number of Available Resources on a DeH?

You can view the total and available resources (vCPUs and memory) of each DeH on the DeH console.

Figure 9-3 Querying available resources of a DeH



9.1.11 Does DeH Support Capacity Expansion?

No. The hardware configuration of a DeH is planned based on the specifications and quantity of ECSs to be provisioned. If the current DeH capacity cannot meet your service requirements, you can buy more DeHs based on your service requirements.

9.1.12 What Is BYOL?

If you have a licensed OS or software (licensed based on the number of physical sockets or the number of physical cores), you can bring your own license and migrate your services to the cloud platform.

9.1.13 How Do I Bring My Own Licenses to a DeH?

To use your own licenses on a DeH, do as follows:

1. Check whether the license terms and conditions allow you to use the software license on DeHs. Contact the software license provider to confirm whether your existing license can be used on the DeHs. If yes, go to the next step.
2. Submit a review form to your software license provider. You can obtain the values of DeH parameters, such as vCPUs, memory size, sockets, and physical cores, from on the DeH console.

9.1.14 Can I Attach an EVS Disk to a DeH?

No. But you can attach EVS disks to the ECSs on a DeH.

9.1.15 Is There a Limit on the Number of DeHs That I Can Purchase?

You can purchase one or more DeHs.

The maximum number of DeHs that can be purchased is limited. You can [view the quota](#) to learn about the maximum number of DeHs that you can purchase. To increase the quota, you can [apply for a higher quota](#).

9.2 ECS FAQs

9.2.1 What Are the Differences Between ECSs on DeHs and Those on Shared Hosts?

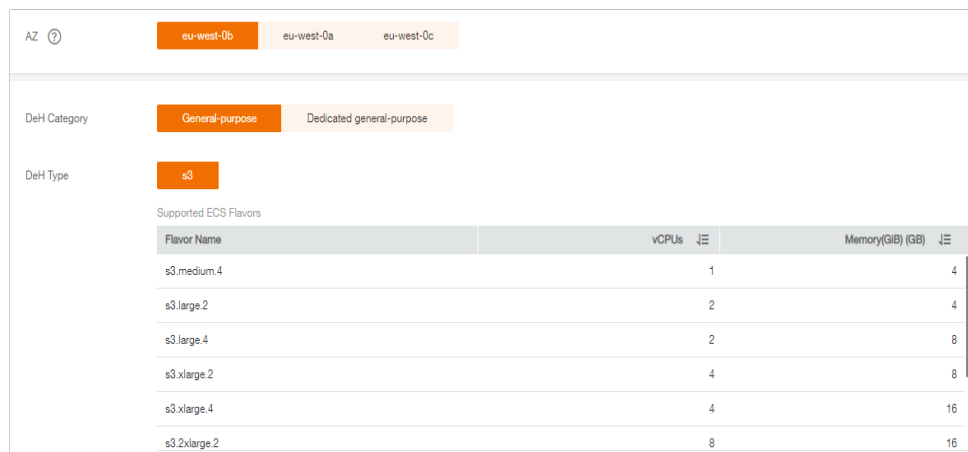
ECSs on DeHs provide better computing performance and stability than those on shared hosts because resources are exclusively used by the ECSs on DeHs.

9.2.2 What Are the Restrictions on Creating ECSs on a DeH?

The ECS flavors are determined by the DeH type. For more information, see [Categories and Types](#).

9.2.3 Can I Create ECSs of Different Flavors on a DeH?

Yes. You can create ECSs of different type and flavors on a DeH.

Figure 9-4 ECS flavors allowed on DeH

| Flavor Name | vCPUs | Memory(GiB) (GB) |
|--------------|-------|------------------|
| s3.medium.4 | 1 | 4 |
| s3.large.2 | 2 | 4 |
| s3.large.4 | 2 | 8 |
| s3.xlarge.2 | 4 | 8 |
| s3.xlarge.4 | 4 | 16 |
| s3.2xlarge.2 | 8 | 16 |

9.2.4 Can I Modify the Specifications of ECSs on DeHs?

Yes. You can modify specifications of ECSs on DeHs by performing the operations described in [Modifying Specifications of ECSs on DeHs](#).

9.2.5 What Should I Do If I Fail to Create an ECS on a DeH?

The following may cause the failure in creating an ECS on a DeH:

- The ECS flavor you selected is not supported by your DeH.
To avoid this, select an ECS flavor that is supported by your DeH. For the ECS flavors supported by each DeH type, see [Overview](#).
- Your DeH resources are insufficient.
You can check whether the remaining vCPU resources and memory size of your DeH are sufficient for creating an ECS with the specifications you selected. If the resources are insufficient, you need to apply for more DeH resources or delete some ECSs from your DeH.

9.2.6 Can I Migrate ECSs in Resource Pools to DeHs?

Yes. You can migrate your ECSs between DeHs and public resource pools or between DeHs.

9.3 Billing FAQs

9.3.1 Do I Need to Pay for ECSs Deployed on My DeHs?

No fees are needed for ECSs on your DeHs. However, if your ECSs have EVS disks attached or EIPs bound, you need to pay for the EVS disks and EIPs you used.

10 Change History

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

| Released On | Description |
|-------------|--|
| 2023-12-25 | This issue is the sixth official release. Modified the following content: Added s6 and s6_pro DeHs in Overview and General-Purpose DeHs . Added: Billing |

| Released On | Description |
|-------------|--|
| 2023-04-20 | <p>This issue is the fifth official release.</p> <p>Added:</p> <ul style="list-style-type: none"> ● Permissions ● Managing Enterprise Projects ● Permission Management ● Creating a User and Granting Permissions ● Creating a Custom Policy ● What Hypervisor Is Used by DeHs? ● What Are the Differences Between DeHs and BMSs? ● What Are the Differences Between DeH and DeC? ● Does DeH Support Capacity Expansion? ● How Do I Bring My Own Licenses to a DeH? ● Is There a Limit on the Number of DeHs That I Can Purchase? ● Billing FAQs ● Do I Need to Pay for ECSs Deployed on My DeHs? ● What Are the Restrictions on Creating ECSs on a DeH? ● Can I Create ECSs of Different Flavors on a DeH? ● Can I Modify the Specifications of ECSs on DeHs? <p>Modified:</p> <p>Added the billing item comparison in Differences Between ECSs in Resource Pools and ECSs on DeHs.</p> |
| 2022-03-22 | <p>This issue is the fourth official release.</p> <p>Added c6_pro DeHs.</p> <p>Updated:</p> <ul style="list-style-type: none"> ● Overview ● General Computing-Plus DeHs |
| 2022-01-21 | <p>This issue is the third official release.</p> <p>Added c6 DeHs.</p> <ul style="list-style-type: none"> ● Added General Computing-Plus DeHs. ● Updated Overview. |

| Released On | Description |
|-------------|---|
| 2021-06-29 | This issue is the second official release. Added the following sections: When a DeH Is Needed? Can I Use DeHs Build Websites? Can I Allocate DeHs by Myself? Does Each DeH Have a Unique ID? |
| 2020-12-11 | This issue is the first official release. |