Intelligent EdgeCloud

Getting Started

Issue 06

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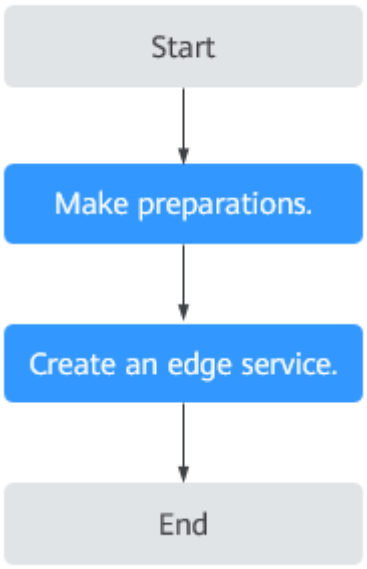
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1 Process Overview

Figure 1-1 shows how you can use IEC on the management console if you are new to it.

Figure 1-1 Process



1. **Make preparations**: Register a HUAWEI CLOUD account, complete real-name authentication, top up your account, and **apply for the permissions on provisioning IEC resources**.
2. **Create an edge service**: An edge service is a collection of edge instances that are created from the same image, have the same vCPU, memory, disk, and network specifications, and are distributed at the same geographic level based on the same distribution policy. For more information, see **Edge Network Overview**.

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2 Step 1: Make Preparations

Registering with HUAWEI CLOUD and Completing Real-Name Authentication

Skip this part if you already have a HUAWEI CLOUD account. If you do not have an account, perform the following steps to register one:

Step 1 Log in at the **HUAWEI CLOUD official website**, and click **Register** in the upper right corner.

Step 2 Complete the registration as prompted. For details, see **Registering with HUAWEI CLOUD**

If the registration is successful, the system automatically redirects you to your personal information page.

Step 3 Complete real-name authentication by following the instructions in **Real-Name Authentication**.

----End

Topping Up Your Account

Ensure that your HUAWEI CLOUD account has sufficient balance. For details, see **Topping Up an Account**.

Applying for Permissions

To use IEC, you need to **apply for the permissions on provisioning IEC resources** on the management console.

(Optional) Creating an IAM User and Granting IEC Permissions

Create IAM users and assign different permissions to these users to ensure security of your account and resources. Skip this part if you do not need to use IAM users.

For more information about IAM, see **IAM Users**.

For details about IEC permissions, see **Permissions Management**.

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For details about how to create an IAM user and grant permissions to the user, see **Example Process**.

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3 Step 2: Create an Edge Service

Scenarios

After you **make all preparations**, you can create **edge services** based on your requirements.

This step guides you through the process of creating an edge service on the IEC console. To create an edge service by calling APIs, see the *Intelligent EdgeCloud API Reference*.

Prerequisites

- You have registered with HUAWEI CLOUD, completed real-name authentication, and topped up your account. Your application for the permissions on provisioning IEC resources has been approved. For details, see **Make Preparations**.
- You have **created a VPC**. For details about edge networks, see **Edge Network Overview**.
- You have **created a security group** and **configured security group rules**. For more information, see **Edge Network**.
  - To allow an edge instance to be pinged, **add an inbound security group rule to allow the ICMP protocol**.
  - To remotely log in to a Linux edge instance through SSH, **allow access to port 22 in the inbound direction of the security group**.
- (Optional) You have created an IEC private image. For details, see **Edge Images**.

Constraints and Limitations

- By default, you can use one HUAWEI CLOUD account to create a maximum of 10 edge services. If you want to create more edge services, increase the quota by referring to **Quota Adjustment**.
- By default, you can use one HUAWEI CLOUD account to create a maximum of 50 edge instances. If you want to create more edge instances, increase the quota by referring to **Quota Adjustment**. You can create a maximum of 10 instances at a single location at a time. If you need to create more instances at this location, expand the edge service after it is created.

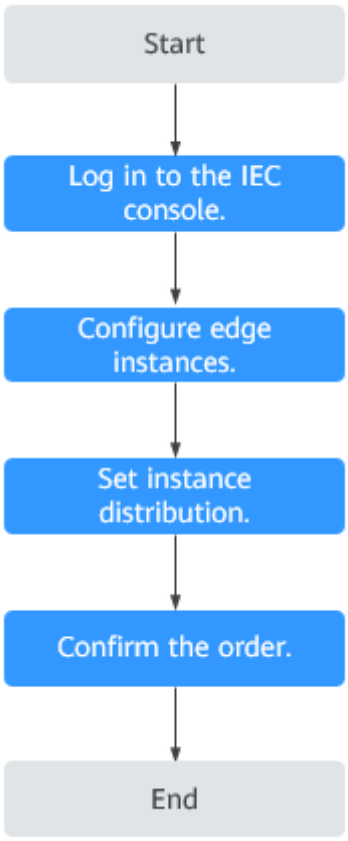
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- By default, you can use one HUAWEI CLOUD account to create instances at a maximum of 10 locations when creating an edge service. To create instances at more locations for the same edge service, you can expand the edge service to add more instances at these locations after the edge service is created.

Procedure

Figure 3-1 shows the process of creating an edge service.

Figure 3-1 Creating an edge service



Step 2.1 Log In to the IEC Console

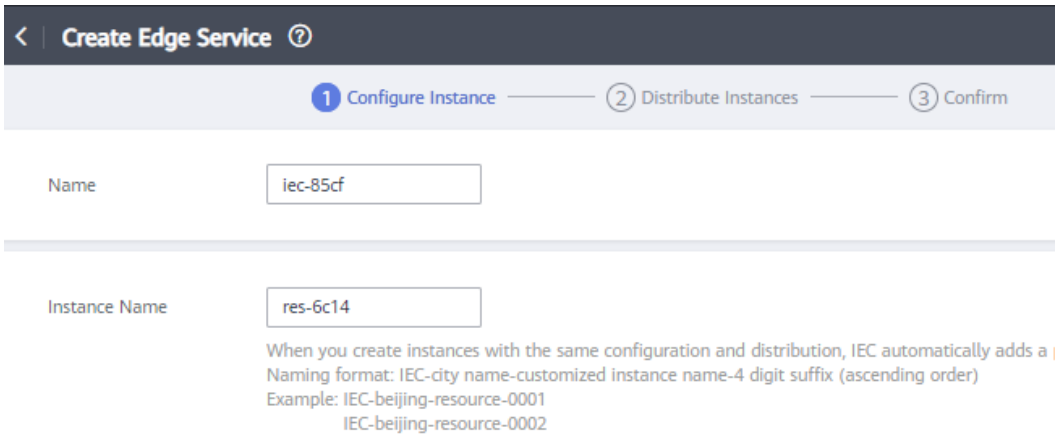
Step 1 Log in to the management console.

Step 2 Hover on the left menu to display **Service List**. Under **Content Delivery & Edge Computing**, select **Intelligent EdgeCloud**.

Step 3 On the displayed IEC console, click **Create Edge Service**.

The **Instance Configuration** page is displayed.

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----End

Step 2.2 Configure Edge Instances

Configure the parameters based on **Table 3-1** and click **Next: Distribute Instances**.

Table 3-1 Parameter description

Parameter	Description	Example Value
Name	Enter a name that is easy to identify for the edge service. The name can contain 1 to 32 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.	Live transcoding_Suzhou

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Parameter	Description	Example Value
Instance Name	Enter a name that is easy to identify. ● The name can contain 1 to 48 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed. ● If you create more than one edge instance in an edge service, the system will automatically add a prefix and a suffix to the instance name to differentiate instances. Naming format: IEC-*[city abbreviation]-[name]-xxxx* (ascending order) Example: **IEC-BJ-resource-0001**, **IEC-BJ-resource-0002**, and **IEC-BJ-resource-0003** Policy for processing special characters in city names: – Spaces will be deleted. For example, **wu han** is changed to **wuhan**. – Apostrophes (') or backticks (`) will be replaced by underscores (_). For example, **xi'an** is changed to **xi_an**. – Phonetic symbols will be deleted. For example, **ürümqi** is changed to **urumqi**. **NOTE** ● If the city name has an abbreviation, the abbreviation will be used preferentially. If the city name does not have an abbreviation, the first four letters of the city name will be used. ● If there is more than one edge site in a city, the system will add serial numbers to the city name in the format of *[city abbreviation]* + *[serial number]*, for example, **BJ01**.	resource
Instance Name Prefix	This option is enabled by default. If you disable this option, instances will be named in the format of *[name]-xxxx* (ascending order), and the instance name can contain a maximum of 59 characters.	N/A
Specifications	Select the edge instance type and specifications. ● General computing (S6) ● Memory-optimized (M6) ● General computing-plus (C6 and C6s) ● AI-accelerated (AI1) ● GPU-accelerated (G5r and PI2) ● Disk-intensive (D3i)	AI-accelerated | ai1.xlarge.4 | 4 vCPUS | 16 GB

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Parameter	Description	Example Value
Image Type/ Image	Select a public or private image that you want to use to create edge instances. For image details, see **Edge Image Overview**.	Public image Public-ai1-Standard
System Disk/Data Disk	By default, **High I/O** is selected. Select a disk type and set the disk capacity based on service requirements.	System Disk: High I/O, 100 GB Data Disk: High I/O, 120 GB
Edge VPC	Select the VPC where the edge instances will reside. If no VPCs are available, **Create a VPC**.	vpc-001(172.16.0.0/16)
Extension NIC	Specify whether to bind extension NICs to edge instances. If you select **None**, the system will create only the primary NIC. If you specify the quantity of extension NICs, go to the edge instance details page to **add a NIC** after you create the edge service.	1
Bind EIP	Specify whether you want to bind an EIP to each edge instance. • If you enable this option, the system will automatically bind an EIP to each edge instance. • If you disable this option, manually assign an EIP and bind it to each edge instance after you create the edge service. For details, see **Assigning an EIP**. If you do not bind an EIP to an edge instance, the edge instance can access the Internet.	N/A
Security Group	Select one or more security groups for the edge instances. If no option is available, **create a security group** and **configure security rules**.	Security_Group_001

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Parameter	Description	Example Value
Login Mode	You can **log in to an edge instance** using any of the following methods: • **Password**: A username and its initial password will be used for edge instance authentication. If edge instances run Linux, use username **root** and its initial password to log in. If edge instances run Windows, use username **Administrator** and its initial password to log in. **Password** can be used for both public and private images. Passwords must meet the following complexity requirements: – Must contain 8 to 26 characters. – Must contain at least three of the following character types: uppercase letters, lowercase letters, digits, and special characters !@$%^-_=+[{}]:,./? – Cannot contain the username or the username backwards. • **Key pair**: A key pair will be used for edge instance authentication. You can select an existing key pair or **create a key pair**. **Key pair** is recommended because it is more secure than **Password**. If you select **Password**, ensure that the password meets complexity requirements to prevent malicious attacks. If you use an existing key pair, make sure that you have saved the key file locally. Otherwise, you will not be able to log in to the edge instance. • **Inherit password from image**: The password of the selected image will be used for login. This method is used only for private images. To use this method, ensure that you have set a password for the image.	N/A

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Parameter	Description	Example Value
Advanced Settings	To use the functions listed in **Advanced Settings**, click **Configure now**. **IAM Agency**: Entrust a cloud service to perform professional and efficient O&M on IEC resources. If you have created an agency in IAM, select the agency from the drop-down list. If no agency has been created, click **Create Agency** to go to the IAM console to create one. Select **ECS_BMS** for **Cloud Service** when you create the agency For details, see **Cloud Service Delegation**. If you need an agency after you have created the edge service, you can select an edge instance contained in the edge service, click the instance name to go to the **Summary** page, and select an agency in the **Agency Details** area.	Select **Configure now**. Select **IECAgency01**.

Step 2.3 Set Instance Distribution

Before setting instance distribution, you need to understand the concepts of edge sites and edge locations and as well as their **relationships**.

Configure the parameters based on **Table 3-2** and click **Next: Confirm Order**.

Table 3-2 Parameter description

Parameter	Description	Example Value
Geographic Level	IEC has one or more sites in each city where the lines of one or more carriers are deployed. You can choose to deploy edge instances at one site or multiple adjacent sites that are grouped based on the locations of these sites. There are three geographic levels for distributing edge instance at the sites: **City**, **Province**, and **Region**.	Region

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Parameter	Description	Example Value
Distribution Policy	• **Centralized**: The system intelligently schedules multiple edge instances at the same site at the distribution level you select, so that these instances are close to one another. • **Dispersed**: The system intelligently schedules multiple edge instances at different sites at the distribution level you select, making them as dispersed as possible.	Centralized
Location and Quantity	Select the specific locations where your workloads will run and the carrier lines (or carriers), as well as the quantity of edge instances you require at the locations. Each location has one or more sites with the lines of different carriers deployed. • **Location**: indicates a specific city, province, or region, and the carrier line (or carrier). If you have enabled **Bind EIP**, you can view carrier lines and select one based on your requirements. – **City**: Select one or more cities and a carrier line for each city. The system will schedule the instances at the sites with the selected carrier line deployed in each city. – **Province**: Select one or more provinces and a carrier for each province. The system will schedule the instances at the sites with the lines of the selected carrier deployed in each province. – **Region**: Select one or more regions and a carrier for each region. The system will schedule the instances at the sites with the lines of the selected carrier deployed in each region. • **Quantity**: Set the number of edge instances you require at each location.	East China | China Mobile 3 East China | China Unicom 5

To learn more about instance distribution, see **Distributing Instances**.

Distribute edge instances based on your service distribution needs, latency requirements, and edge sites provided by IEC.

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Step 2.4 Confirm the Order

Step 1 Check whether the edge instance configuration and distribution meet your service requirements.

Step 2 Confirm the price.

Step 3 Click **Buy Now**.

If you need to modify the information, click **Previous**.

----End

Follow-up Operations

- Viewing an edge service

  You can view information about the edge services you create on the **Edge Services** page.

  For details, see **Viewing an Edge Service**.

- Viewing an edge instance

  On the **Edge Services** page, locate the edge service that the edge instance you want to view belongs to, and click **View Edge Instance** in the **Operation** column. You can also click the edge service name to go to the details page and view the edge instance information.

  For details, see **Viewing an Edge Instance**.

- Logging in to an edge instance

  For details, see **Logging In to an Edge Instance**.

- Deploying workloads on edge instances

  When an edge service and edge instances contained the edge service are running properly, you can deploy your workloads on the instances you choose.

- Monitoring

  Server monitoring: View the performance metrics and running status of your edge instances.

  Viewing bandwidth and EIP monitoring data: View the metrics and alarms generated for bandwidths and EIPs at any time.

- Expanding an edge service

  For details, see **Expanding an Edge Service**.

- Deleting an edge service

  For details, see **Deleting an Edge Service**.

- Viewing task details

  If an edge service fails to be created, expanded, or deleted, you can view the task details to learn about the failure cause and rectify the fault accordingly.

  In the edge service list, locate the edge service, click **More** in the **Operation** column, and select **View Task Details**.

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A Change History

Released On	Description
2022-04-07	This issue is the sixth official release. Added the description of edge instance names in section "Creating an Edge Service."
2021-09-13	This issue is the fifth official release, which incorporates the following changes: Added the agency-related content in section "Step 2: Create an Edge Service."
2021-07-01	This issue is the fourth official release, which incorporates the following changes: ● Added a description about the instance name prefix. ● Added two ECS types: general computing S6 and memory-optimized M6.
2021-06-08	This issue is the third official release, which incorporates the following changes: ● Optimized **Follow-up Operations** in section "Step 2 Create an Edge Service". ● Modified the descriptions of some parameters in section "Step 2 Create an Edge Service".
2021-01-30	This issue is the second official release, which incorporates the following changes: Added information about how to select a carrier line in section "Step 2: Create an Edge Service".
2020-10-30	This issue is the first official release.

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